



2 Flute End Mills (Slot Drills)

Threaded Shank

Used for milling keyways and slots. Bright finish. Flute type: 30° helix. Manufactured to BS 122: Part 4: 1980.

Tolerances as below

Short Series S210T

EXTENDED
RANGE

HSS

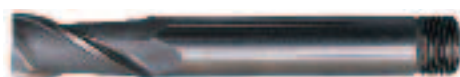


Dia. (mm)	Flute Length	Overall Length	Shank Dia.	Order Code SHR-061	Price/1 RND
1.50	3.0	47.0	6.0	-5600A	95.10
2.00	4.0	48.0	6.0	-5601B	136.10
2.50	5.0	49.0	6.0	-5602C	161.00
3.00	5.0	49.0	6.0	-5603D	124.20
3.50	6.0	50.0	6.0	-5604E	139.40
4.00	7.0	51.0	6.0	-5605F	69.00
4.50	7.0	51.0	6.0	-5606G	182.60
5.00	8.0	52.0	6.0	-5607H	70.30
5.50	8.0	52.0	6.0	-5608J	196.70
6.00	8.0	52.0	6.0	-5609K	71.80
6.50	10.0	60.0	10.0	-5610L	196.70
7.00	10.0	60.0	10.0	-5611M	94.30
7.50	10.0	60.0	10.0	-5612N	204.20
8.00	11.0	61.0	10.0	-5613P	103.60
8.50	11.0	61.0	10.0	-5614Q	216.00
9.00	11.0	61.0	10.0	-5615R	106.20
9.50	11.0	61.0	10.0	-5616S	221.40
10.00	13.0	63.0	10.0	-5617T	103.70
10.50	13.0	70.0	12.0	-5618V	227.20
11.00	13.0	70.0	12.0	-5619W	244.70
11.50	13.0	70.0	12.0	-5620X	251.10
12.00	16.0	73.0	12.0	-5621Y	125.10
13.00	16.0	73.0	12.0	-5622Z	153.10
14.00	16.0	73.0	12.0	-5624A	153.10
15.00	16.0	73.0	16.0	-5625B	179.50
16.00	19.0	79.0	16.0	-5626C	179.80
17.00	19.0	79.0	16.0	-5627D	194.10
18.00	19.0	79.0	16.0	-5628E	209.70
19.00	19.0	79.0	16.0	-5629F	252.70
20.00	22.0	82.0	16.0	-5630G	243.30
25.00	26.0	102.0	25.0	-5635M	654.90
30.00	26.0	102.0	25.0	-5640S	1005.70
32.00	32.0	112.0	25.0	-5641T	1386.10
34.00	32.0	112.0	25.0	-5643W	1188.00

Long Series 5230T

EXTENDED
RANGE

HSS



Dia. (mm)	Flute Length	Overall Length	Shank Dia.	Order Code SHR-061	Price/1 RND
2.00	3.0	51.0	6.0	-5800A	266.30
2.50	6.5	54.0	6.0	-5801B	266.30
3.00	11.0	60.5	6.0	-5802C	98.10
3.50	12.5	66.5	6.0	-5803D	266.30
4.00	12.5	66.5	6.0	-5804E	94.50
4.50	12.5	66.5	6.0	-5805F	266.30
5.00	12.5	70.0	6.0	-5806G	96.40
5.50	16.0	76.0	6.0	-5807H	96.40
6.00	16.0	76.0	6.0	-5808J	94.00
6.50	16.0	76.0	10.0	-5809K	203.40
7.00	16.0	76.0	10.0	-5810L	131.10
7.50	16.0	76.0	10.0	-5811M	336.70
8.00	19.0	79.5	10.0	-5812N	127.00
8.50	22.0	82.5	10.0	-5813P	87.20
9.00	22.0	82.5	10.0	-5814Q	109.20
9.50	22.0	82.5	10.0	-5815D	347.00
10.00	22.0	82.5	10.0	-5815R	200.30
11.00	22.0	89.0	12.0	-5816S	174.00
12.00	25.5	95.0	12.0	-5817T	168.60
13.00	25.5	95.0	12.0	-5818V	255.30
14.00	28.5	101.5	12.0	-5819W	200.10
15.00	31.5	108.0	16.0	-5820X	263.20
16.00	31.5	108.0	16.0	-5821Y	236.40
17.00	35.0	114.5	16.0	-5822Z	324.60
18.00	35.0	114.5	16.0	-5824A	285.00
19.00	38.0	120.5	16.0	-5825B	423.40
20.00	38.0	120.5	16.0	-5826C	361.50
25.00	44.5	159.0	25.0	-5829F	663.20
30.00	51.0	159.0	25.0	-5832J	959.60
32.00	51.0	159.0	25.0	-5833K	1010.90

Multi Flute End Mills

Threaded Shank

Used for diesinking, slot milling and profile milling. Bright finish. Flute type: 30° helix. Manufactured to BS 122: Part 4: 1980.

Tolerances as below

Short Series E410T

NEW

HSS



Dia. (mm)	Flute Length	Overall Length	Shank Dia.	Order Code SHR-061	Price/1 RND
4 Flute					
2.00	4.0	51.0	6.0	-5100A	197.60
2.50	6.5	51.0	6.0	-5101B	121.50
3.00	9.5	54.0	6.0	-5102C	117.90
3.50	12.5	57.0	6.0	-5103D	113.20
4.00	12.5	57.0	6.0	-5104E	87.60
4.50	12.5	57.0	6.0	-5105F	97.50
5.00	16.0	60.5	6.0	-5106G	85.00
5.50	16.0	60.5	6.0	-5107H	84.50
6.00	16.0	60.5	6.0	-5108J	76.20
6.50	16.0	60.5	10.0	-5109K	80.80
7.00	15.0	60.5	10.0	-5110L	87.60
7.50	18.0	63.5	10.0	-5111M	70.40
8.00	18.0	63.5	10.0	-5112N	90.20
8.50	21.0	66.5	10.0	-5113P	92.30
9.00	21.0	66.5	10.0	-5114Q	88.10
9.50	21.0	66.5	10.0	-5115R	109.50
10.00	21.0	66.5	10.0	-5116S	92.30
10.50	19.0	66.5	12.0	-5117T	172.10
11.00	19.0	66.5	12.0	-5118V	156.40
11.50	22.5	70.0	12.0	-5119W	159.00
12.00	24.0	70.0	12.0	-5120X	166.90
13.00	24.5	70.0	16.0	-5121Y	176.80
14.00	28.5	73.5	16.0	-5122N	220.50
15.00	26.5	77.0	16.0	-5123A	212.70
16.00	26.5	80.0	16.0	-5124B	208.60
17.00	32.0	80.0	16.0	-5125C	256.00
18.00	35.0	88.0	16.0	-5126D	254.90
19.00	38.0	83.5	16.0	-5127E	245.00
20.00	38.0	83.5	16.0	-5128F	275.30
6 Flute					
25.00	41.5	101.5	25.0	-5133L	487.40
30.00	46.0	104.5	25.0	-5136P	1358.50
32.00	46.0	108.0	25.0	-5137Q	858.00

Long Series E430T

NEW

HSS



Dia. (mm)	Flute Length	Overall Length	Shank Dia.	Order Code SHR-061	Price/1 RND
4 Flute					
3.00	19.0	63.5	6.0	-5401A	220.50
3.50	25.5	70.0	6.0	-5402B	220.50
4.00	25.5	70.0	6.0	-5403C	220.50
4.50	31.5	70.0	6.0	-5404D	271.30
5.00	31.5	76.0	6.0	-5405E	220.50
5.50	31.5	76.0	6.0	-5406F	220.50
6.00	35.0	76.0	6.0	-5407G	220.50
6.50	34.0	79.5	10.0	-5408H	220.50
7.00	34.0	79.5	10.0	-5409J	220.50
7.50	34.0	79.5	10.0	-5410K	220.50
8.00	34.0	79.5	10.0	-5411L	214.10
8.50	37.0	82.5	10.0	-5412M	214.10
9.00	37.0	82.5	10.0	-5413N	214.10
10.00	37.0	82.5	10.0	-5414P	214.10
11.00	41.5	89.0	12.0	-5415Q	254.30
12.00	49.5	95.0	12.0	-5416R	254.30
13.00	50.0	95.0	12.0	-5417S	311.10
14.00	57.0	101.5	12.0	-5418T	408.20
15.00	58.5	108.5	16.0	-5419V	420.20
16.00	58.5	108.5	16.0	-5420W	420.90
17.00	67.0	115.0	16.0	-5421X	431.00
18.00	70.0	115.0	16.0	-5422Y	608.40
19.00	76.0	121.5	16.0	-5423N	608.40
20.00	76.0	121.5	16.0	-5424A	579.50
6 Flute					
25.00	100.0	157.0	25.0	-5427D	1084.30
32.00	100.0	159.0	25.0	-5431H	1211.80

Ball Nose 2 Flute End Mills (Slot Drills)



Threaded Shank

Used for diesinking, slot milling and profile milling. Bright finish. Flute type: 30° helix. Manufactured to BS 122: Part 4: 1980.

Tolerances as below

Short Series B210T

NEW

HSS



Dia. (mm)	Flute Length	Overall Length	Shank Dia.	Order Code SHR-061	Price/1 RND
2.00	3.0	49.0	6.0	-5950A	151.90
2.50	4.5	51.0	6.0	-5951B	125.80
3.00	7.0	51.0	6.0	-5952C	232.10
4.00	9.5	52.5	6.0	-5953D	237.30
5.00	9.5	52.5	6.0	-5954E	237.30
6.00	11.0	56.5	6.0	-5955F	237.30
6.50	11.0	56.5	6.0	-5955R	242.30
7.00	11.0	58.5	10.0	-5956G	137.40
8.00	12.5	58.5	10.0	-5957H	220.40
9.00	14.5	58.5	10.0	-5958J	147.80
10.00	14.5	60.5	10.0	-5959K	251.90
11.00	17.5	65.0	12.0	-5960L	198.90
12.00	19.0	66.5	12.0	-5961M	293.60
13.00	19.0	66.5	12.0	-5962N	301.40
14.00	22.0	68.5	12.0	-5963P	261.50
15.00	22.0	72.0	16.0	-5964Q	288.50
16.00	22.0	72.0	16.0	-5965R	490.50
17.00	24.0	73.0	16.0	-5966S	581.10
18.00	24.0	74.0	16.0	-5967T	609.30
19.00	25.5	77.0	16.0	-5968V	651.70
20.00	25.5	77.0	16.0	-5969W	535.10
25.00	28.5	97.0	25.0	-5972Z	623.90
30.00	30.0	93.5	25.0	-5976C	1291.50

Long Series Type B230T

NEW

HSS



Dia. (mm)	Flute Length	Overall Length	Shank Dia.	Order Code SHR-061	Price/1 RND
3.00	11.0	60.5	6.0	-5935A	213.40
4.00	12.5	66.5	6.0	-5935M	183.90
5.00	12.5	70.0	6.0	-5936B	182.70
6.00	16.0	76.0	6.0	-5936N	253.60
7.00	16.0	76.0	10.0	-5937C	96.80
8.00	19.0	79.5	10.0	-5937P	190.10
9.00	22.0	82.5	10.0	-5938D	163.20
10.00	22.0	82.5	10.0	-5938Q	173.10
11.00	22.0	89.0	12.0	-5939E	160.30
12.00	25.5	95.0	12.0	-5939R	271.50
13.00	25.5	95.0	12.0	-5940F	853.80
14.00	28.5	101.5	12.0	-5940S	428.80
15.00	31.5	108.0	16.0	-5941G	428.80
16.00	31.5	108.0	16.0	-5941T	428.80
18.00	35.0	114.5	16.0	-5942V	458.70
20.00	38.0	120.5	16.0	-5943W	558.30
25.00	44.5	159.0	25.0	-5945L	864.60
30.00	85.0	158.0	25.0	-5946M	879.50

SHANK MILLING CUTTERS

HSS-Co

Threaded Shank
Slot Drills

Flute helix 30°.
Manufactured to BS 122:4
Short Series

HSS-Co



Dia. (mm)	Flute Length	Overall Length	Shank Dia.	Order Code SHR-061	Price/1 RND
1.50	2.5	48.5	6.0	-5664A	107.80
2.00	3.0	49.0	6.0	-5665B	88.90
2.50	4.5	51.0	6.0	-5666C	91.50
3.00	7.0	51.0	6.0	-5667D	87.50
3.50	7.5	52.5	6.0	-5668E	135.40
4.00	9.5	52.5	6.0	-5669F	115.40
4.50	9.5	52.5	6.0	-5670G	95.50
5.00	9.5	52.5	6.0	-5671H	82.20
5.50	11.0	55.5	6.0	-5672J	135.40
6.00	11.0	56.5	6.0	-5673K	88.80
6.50	11.0	58.5	10.0	-5674A	113.90
7.00	11.0	58.5	10.0	-5674L	106.80
7.50	11.0	58.5	10.0	-5675B	194.20
8.00	12.5	59.5	10.0	-5675M	111.80
8.50	14.5	60.5	10.0	-5676C	194.30
9.00	14.5	60.5	10.0	-5676N	130.80
9.50	14.5	60.5	10.0	-5677D	237.90
10.00	14.5	60.5	10.0	-5677P	134.90
10.50	17.5	65.0	12.0	-5678E	340.80
11.00	17.5	65.0	12.0	-5678Q	160.50
12.00	19.0	66.5	12.0	-5679R	148.80
13.00	19.0	66.5	12.0	-5680G	181.50
14.00	22.0	68.5	12.0	-5680S	192.80
15.00	22.0	72.0	16.0	-5681H	231.10
16.00	22.0	72.0	16.0	-5681T	214.90
17.00	24.0	72.0	16.0	-5682J	269.20
18.00	24.0	72.0	16.0	-5682V	249.60
19.00	25.5	77.0	16.0	-5683K	332.70
20.00	25.5	77.0	16.0	-5683W	315.50
25.00	27.0	95.0	25.0	-5686A	591.40
30.00	30.0	93.5	25.0	-5688C	815.40

Long Series Type S231T

NEW



Dia. (mm)	Flute Length	Overall Length	Shank Dia.	Order Code SHR-061	Price/1 RND
2.00	3.0	51.0	6.0	-5853A	188.50
3.00	11.0	60.5	6.0	-5855C	149.90
4.00	12.5	66.5	6.0	-5857E	149.50
5.00	12.5	70.0	6.0	-5859G	149.90
6.00	16.0	76.0	6.0	-5861J	179.80
6.50	16.0	76.0	10.0	-5861S	556.60
7.00	16.0	76.0	10.0	-5862A	154.90
8.00	19.0	79.5	10.0	-5862K	176.90
9.00	22.0	82.5	10.0	-5863B	222.90
10.00	22.0	82.5	10.0	-5863L	222.90
11.00	22.0	82.5	12.0	-5863V	345.00
12.00	25.5	95.0	12.0	-5864M	320.00
14.00	28.5	101.5	12.0	-5865N	260.30
15.00	31.5	108.0	16.0	-5865X	563.30
16.00	31.5	108.0	16.0	-5866P	259.50
18.00	35.0	114.5	16.0	-5867Q	597.70
20.00	38.0	120.5	16.0	-5868R	429.60

Threaded Shank Slot Drills 3 Flute

Bright finish. Flute helix 30°. Manufactured to BS 122: Part 4:
1980.

HSS-Co

Regular Series Type 5321T

EXTENDED
RANGE

Dia. (mm)	Flute Length	Overall Length	Shank Dia.	Order Code SHR-061	Price/1 RND
3.00	9.5	54.0	6.0	-6021A	186.00
3.50	12.5	57.0	6.0	-6021C	186.00
4.00	12.5	57.0	6.0	-6021E	186.00
4.50	12.5	57.0	6.0	-6021G	194.30
5.00	16.0	60.5	6.0	-6021J	201.50
5.50	16.0	60.5	6.0	-6021L	252.30
6.00	16.0	60.5	6.0	-6021N	186.00
8.00	19.0	63.5	10.0	-6021Q	178.60
10.00	22.0	66.5	10.0	-6021S	227.70
12.00	25.5	71.5	12.0	-6021V	281.60
14.00	28.5	74.5	12.0	-6021X	325.10
16.00	32.0	80.0	16.0	-6021Z	339.10
18.00	35.0	83.5	16.0	-6022B	420.00
20.00	38.0	90.0	16.0	-6022D	483.50
25.00	43.0	108.0	25.0	-6022K	896.60
30.00	46.0	108.0	25.0	-6022R	1111.10
32.00	49.0	109.5	25.0	-6022T	1046.40

Threaded Shank End Mills

Used for profile milling and producing open slots.
Bright finish. Flute helix 30°.
Manufactured to BS 122 : Part 4 : 1980.

Regular Series Type E411T



Dia. (mm)	Flute Length	Overall Length	Shank Dia.	Order Code SHR-061	Price/1 RND
2 Flute					
1.50	2.5	51.0	6.0	-5184Y	233.90
4 Flute					
2.00	4.0	51.0	6.0	-5185A	172.60
2.50	6.5	51.0	6.0	-5186B	172.50
3.00	9.5	54.0	6.0	-5187C	172.50
4.00	12.5	57.0	6.0	-5189E	205.90
5.00	16.0	60.5	6.0	-5191G	205.90
6.00	16.0	60.5	6.0	-5193J	135.40
6.50	16.0	60.5	10.0	-5193R	292.50
7.00	15.0	60.5	10.0	-5193X	165.40
7.50	18.0	63.5	10.0	-5194C	230.10
8.00	18.0	63.5	10.0	-5194K	127.40
8.50	21.0	66.5	10.0	-5194S	292.50
9.00	21.0	66.5	10.0	-5194Y	165.40
9.50	21.0	66.5	10.0	-5195D	165.40
10.00	21.0	66.5	10.0	-5195L	176.10
11.00	19.0	66.5	12.0	-5195Z	352.80
12.00	24.0	70.0	12.0	-5196M	352.80
13.00	24.5	70.0	12.0	-5197F	352.80
14.00	28.5	73.5	12.0	-5197N	389.70
15.00	26.5	77.0	16.0	-5198G	440.10
16.00	26.5	80.0	16.0	-5198P	440.10
17.00	32.0	80.0	16.0	-5199H	548.70
18.00	35.0	88.0	16.0	-5199Q	548.70
19.00	38.0	83.5	16.0	-5200J	548.70
20.00	38.0	84.5	16.0	-5200R	548.70
6 Flute					
22.00	41.5	98.5	25.0	-5201S	1109.10
25.00	41.5	101.5	25.0	-5202T	964.40
30.00	46.0	104.5	25.0	-5204W	1386.00
32.00	46.0	108.0	25.0	-5205X	1493.70

Regular Series Type E411T

NEW



Dia. (mm)	Flute Length	Overall Length	Shank Dia.	Order Code SHR-061	Price/1 RND
4 Flute					
3/32"	1/4"	2"	1/4"	-5158B	98.60
1/8"	3/8"	2 1/8"	1/4"	-5159C	135.60
5/32"	1/2"	2 1/4"	1/4"	-5160D	282.60
3/16"	1/2"	2 1/4"	1/4"	-5161E	98.60
1/4"	5/8"	2 3/8"	1/4"	-5163G	142.90
5/16"	23/32"	2 1/2"	3/8"	-5165J	282.60
3/8"	27/32"	2 5/8"	3/8"	-5166K	183.00
7/16"	3/4"	2 5/8"	1/2"	-5167L	344.10
1/2"	15/16"	2 3/4"	1/2"	-5168M	215.30
9/16"	1 1/8"	2 7/8"	1/2"	-5169N	391.00
5/8"	1 1/16"	3 1/32"	5/8"	-5170P	189.30
3/4"	1 1/2"	3 3/32"	5/8"	-5172R	417.10

Dia. (mm)	Flute Length	Overall Length	Shank Dia.	Order Code SHR-061	Price/1 RND
6 Flute					
1"	1 11/16"	4"	1"	-5176W	906.50

Long Series Type E431T

NEW



Dia. (mm)	Flute Length	Overall Length	Shank Dia.	Order Code SHR-061	Price/1 RND
4 Flute					
3.00	19.0	63.5	6.0	-5473A	41.60
4.00	25.5	70.0	6.0	-5475C	45.40
5.00	31.5	76.0	6.0	-5477E	127.50
6.00	31.5	76.0	6.0	-5479G	125.30
8.00	34.0	79.5	10.0	-5480H	131.80
10.00	37.0	82.5	10.0	-5481J	300.30
12.00	49.5	95.0	12.0	-5482K	290.60
14.00	57.0	101.5	12.0	-5483L	528.20
16.00	58.5	108.5	16.0	-5484M	528.20
18.00	70.0	115.0	16.0	-5485N	743.10
20.00	76.0	121.5	16.0	-5486P	747.40
6 Flute					
25.00	100.0	157.0	25.0	-5488R	990.40

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR

SWISS+TECH**HSS-Co 8% Threaded Shank
Slot Drills 2 Flute****HSS-Co 8%****TiCN****TiAlN**

Centre cutting. Threaded shank to **DIN 1835D**.
Cutting diameter to **e8**.
Shank diameter to **h6**.

HSS-Co 8% Uncoated

For general production machining.

HSS-Co 8% TiCN Coated

Extends cutter tool life and improves work material surface finish.

HSS-Co 8% TiAlN Coated

Dissipates and resists heat, reduces surface friction coupled with high surface hardness.

**EXTENDED
RANGE****Series 28****Short Series** Dimensions to **DIN 327**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	Weight per 10	SDH-2TS HSS-Co 8%		SDN-2TS TiCN Coated		SDL-2TS TiAlN Coated	
					Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
2.00	4.0	6.0	48.0	102g	-2802A	79.60	-	-	-	-
2.50	5.0	6.0	49.0	102g	-2802L	82.00	-	-	-	-
3.00	5.0	6.0	49.0	102g	-2803A	78.40	-2833A	107.50	-	-
3.50	6.0	6.0	50.0	102g	-2803L	103.30	-	-	-	-
4.00	7.0	6.0	51.0	105g	-2804A	103.30	-2834A	92.20	-2864A	103.00
4.50	7.0	6.0	51.0	108g	-2804L	85.50	-	-	-	-
5.00	8.0	6.0	52.0	110g	-2805A	73.60	-2835A	92.20	-	-
5.50	8.0	6.0	52.0	110g	-2805L	79.60	-	-	-	-
6.00	8.0	6.0	52.0	110g	-2806A	79.60	-2836A	92.20	-2866A	103.00
7.00	10.0	10.0	60.0	380g	-2807A	95.70	-	-	-	-
8.00	11.0	10.0	61.0	338g	-2808A	100.10	-	-	-	-
9.00	11.0	10.0	61.0	353g	-2809A	117.20	-	-	-	-
10.00	13.0	10.0	63.0	369g	-2810A	120.10	-2840A	129.50	-	-
11.00	13.0	12.0	70.0	456g	-2811A	143.80	-	-	-	-
12.00	16.0	12.0	73.0	600g	-2812A	133.30	-	-	-	-
13.00	16.0	12.0	73.0	608g	-2813A	162.60	-	-	-	-
14.00	16.0	12.0	73.0	631g	-2814A	172.70	-	-	-	-
15.00	16.0	16.0	73.0	640g	-2815A	207.00	-	-	-	-
16.00	19.0	16.0	79.0	1134g	-2816A	192.50	-	-	-	-
18.00	19.0	16.0	79.0	1200g	-2818A	223.60	-	-	-	-
20.00	22.0	20.0	88.0	1900g	-2820A	282.60	-	-	-	-
22.00	22.0	20.0	88.0	1902g	-2822A	467.70	-	-	-	-
25.00	26.0	25.0	102.0	3538g	-2825A	529.70	-	-	-	-

NEW**Series 29****Regular Series** Dimensions to **DIN 844**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	Weight per 10	SDH-2TR HSS-Co 8%		SDN-2TR TiCN Coated		SDL-2TR TiAlN Coated	
					Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
4.00	11.0	6.0	55.0	107g	-	-	-2934A	109.20	-	-
5.00	13.0	6.0	57.0	110g	-2905A	104.60	-	-	-	-
6.00	13.0	6.0	57.0	120g	-2906A	103.40	-2936A	131.60	-2966A	120.00
12.00	26.0	12.0	83.0	652g	-2912A	191.80	-	-	-	-
20.00	38.0	20.0	104.0	2104g	-2920A	379.00	-	-	-	-
22.00	38.0	20.0	104.0	2280g	-	-	-2952A	520.90	-	-

NEW**Series 30****Long Series** Dimensions to **DIN 844**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	Weight per 10	SDH-2TL HSS-Co 8%		SDN-2TL TiCN Coated	
					Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
8.00	19.0	10.0	88.0	368g	-	-	-3038A	232.10
10.00	22.0	10.0	95.0	404g	-	-	-3040A	181.40

SWISS+TECH**HSS-Co 8% Threaded
Shank Slot Drills 3 Flute**

Centre cutting. Threaded shank to **DIN 1835D**.
Cutting diameter to **e8**.
Shank diameter to **h6**.

HSS-Co 8%**TiCN****TiAlN****HSS-Co 8% Uncoated**

For general production machining.

HSS-Co 8% TiCN Coated

Extends cutter tool life and improves work material surface finish.

HSS-Co 8% TiAlN Coated

Dissipates and resists heat, reduces surface friction coupled with high surface hardness.

**Series 32****Short Series** Dimensions to **DIN 327**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	Weight each	SDH-3TS HSS-Co 8%		SDN-3TS TiCN Coated		SDL-3TS TiAlN Coated	
					Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
3.00	5.0	6.0	49.0	10g	-3203A	99.20	-3233A	119.90	-	-
4.00	7.0	6.0	51.0	10g	-3204A	94.70	-3234A	119.90	-	-
5.00	8.0	6.0	52.0	10g	-3205A	95.60	-3235A	119.90	-3265A	142.70
6.00	8.0	6.0	61.0	11g	-3206A	95.60	-3236A	124.50	-3266A	141.20
8.00	11.0	10.0	63.0	34g	-3208A	141.60	-3238A	177.10	-3268A	215.50
10.00	13.0	10.0	73.0	37g	-3210A	129.50	-3240A	271.10	-3270A	223.10
12.00	16.0	12.0	73.0	62g	-3212A	180.60	-3242A	238.70	-3272A	274.20
14.00	16.0	12.0	79.0	62g	-3214A	203.40	-	-	-	-
16.00	19.0	16.0	88.0	104g	-3216A	253.00	-	-	-3276A	353.60
20.00	22.0	20.0	88.0	187g	-3220A	366.70	-	-	-3280A	550.80
22.00	22.0	20.0	88.0	195g	-3222A	396.50	-	-	-	-

Series 33**Regular Series** Dimensions to **DIN 844**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	Weight each	SDH-3TR HSS-Co 8%		SDN-3TR TiCN Coated		SDL-3TR TiAlN Coated	
					Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
3.00	8.0	6.0	52.0	10g	-3303A	112.40	-3333A	155.40	-	-
4.00	11.0	6.0	55.0	10g	-3304A	112.80	-3334A	149.30	-3364A	156.30
5.00	13.0	6.0	57.0	10g	-3305A	123.00	-3335A	152.30	-3365A	190.20
6.00	13.0	6.0	57.0	12g	-3306A	112.40	-3336A	158.40	-3366A	171.00
7.00	16.0	10.0	66.0	-	-3307A	112.40	-	-	-	-
8.00	19.0	10.0	69.0	36g	-3308A	160.40	-3338A	208.90	-3368A	236.80
9.00	19.0	10.0	69.0	-	-3309A	160.40	-	-	-	-
10.00	22.0	10.0	72.0	40g	-3310A	155.80	-3340A	206.40	-3370A	257.00
11.00	22.0	12.0	79.0	-	-3311A	213.00	-	-	-	-
12.00	26.0	12.0	83.0	66g	-3312A	213.00	-3342A	289.80	-3372A	310.10
13.00	26.0	12.0	83.0	-	-3313A	223.10	-	-	-	-
14.00	26.0	12.0	83.0	68g	-3314A	223.10	-3344A	323.30	-3374A	332.40
16.00	32.0	16.0	92.0	121g	-3316A	298.50	-3346A	390.00	-3376A	399.60
20.00	38.0	20.0	104.0	206g	-3320A	440.00	-3350A	354.10	-3380A	640.80
22.00	38.0	20.0	104.0	219g	-3322A	455.80	-	-	-	-
25.00	45.0	25.0	121.0	364g	-3325A	672.20	-	-	-	-

Series 34**Long Series** Dimensions to **DIN 844**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	Weight each	SDH-3TL HSS-Co 8%		SDN-3TL TiCN Coated		SDL-3TL TiAlN Coated	
					Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
3.00	12.0	6.0	65.0	10g	-3403A	159.90	-3433A	178.60	-	-
4.00	19.0	6.0	63.0	11g	-3404A	146.30	-3434A	181.60	-3464A	232.20
5.00	24.0	6.0	68.0	13g	-3405A	146.30	-	-	-3465A	232.20
6.00	24.0	6.0	68.0	14g	-3406A	146.30	-3436A	178.60	-3466A	178.00
8.00	38.0	10.0	88.0	40g	-3408A	213.00	-3438A	286.40	-3468A	286.80
10.00	45.0	10.0	95.0	49g	-3410A	220.00	-3440A	266.60	-3470A	300.00
12.00	53.0	12.0	110.0	79g	-3412A	284.30	-3442A	372.80	-3472A	409.30
14.00	53.0	12.0	110.0	85g	-3414A	328.30	-3444A	382.90	-	-
16.00	63.0	16.0	123.0	142g	-3416A	266.10	-3446A	520.50	-3476A	535.60
20.00	75.0	20.0	141.0	259g	-3420A	604.00	-3450A	726.90	-3480A	755.60
25.00	90.0	25.0	166.0	480g	-3425A	917.00	-	-	-	-

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR

SWISS+TECH**HSS-Co 8% Threaded Shank
End Mills 4 & 6 Flute****HSS-Co 8%****TiCN****TiAlN**

Centre cutting.
Threaded shank to **DIN 1835D**.
Shank cutting diameter to +0.04 -0.0.

**EXTENDED
RANGE****HSS-Co 8% Uncoated**

For general production machining.

HSS-Co 8% TiCN Coated

Extends cutter tool life and improves work material surface finish.

HSS-Co 8% TiAlN Coated

Dissipates and resists heat, reduces surface friction coupled with high surface hardness.

**Series 36****Regular Series** Dimensions to **DIN 844**

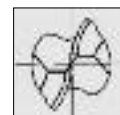
Diameter (mm)	Flute Length	Shank Diameter	Overall Length	No. of Flutes	Weight per 10	EMH-4TR HSS-Co 8%		EMN-4TR TiCN Coated		EML-4TR TiAlN Coated	
						Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
2.00	7.0	6.0	51.0	4	108g	-3602A	137.00	-	-	-3662A	162.00
3.00	8.0	6.0	52.0	4	111g	-3603A	137.00	-3633A	127.50	-3663A	162.00
4.00	11.0	6.0	55.0	4	114g	-3604A	137.00	-3634A	151.20	-3664A	162.00
5.00	13.0	6.0	57.0	4	126g	-3605A	137.00	-3635A	151.20	-3665A	162.00
6.00	13.0	6.0	57.0	4	133g	-3606A	137.00	-3636A	130.40	-3666A	156.90
7.00	16.0	10.0	66.0	4	340g	-3607A	232.50	-3637A	192.60	-3667A	226.80
8.00	19.0	10.0	69.0	4	375g	-3608A	232.50	-3638A	202.00	-3668A	226.80
10.00	22.0	10.0	72.0	4	423g	-3610A	254.30	-3640A	202.00	-3670A	226.80
12.00	26.0	12.0	83.0	4	688g	-3612A	290.90	-3642A	293.80	-3672A	306.80
14.00	26.0	12.0	83.0	4	728g	-3614A	354.90	-3644A	320.80	-3674A	347.80
16.00	32.0	16.0	92.0	4	1220g	-3616A	392.30	-3646A	393.20	-3676A	374.80
18.00	32.0	16.0	92.0	4	1534g	-3618A	496.00	-3648A	468.80	-3678A	515.20
20.00	38.0	20.0	104.0	4	2114g	-3620A	603.20	-3650A	492.70	-3680A	632.60
25.00	45.0	25.0	121.0	6	2668g	-3625A ⁽¹⁾	1077.80	-3655A	963.40	-	-

⁽¹⁾ EMH-6TR HSS-Co 8%⁽²⁾ EMN-6TR TiCN Coated**Series 37****Long Series** Dimensions to **DIN 844**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	No. of Flutes	Weight per 5	EMH-4TL HSS-Co 8%		EMN-4TL TiCN Coated		EML-4TL TiAlN Coated	
						Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
4.00	19.0	6.0	63.0	4	61g	-3704A	224.30	-	-	-	-
5.00	24.0	6.0	68.0	4	67g	-3705A	224.30	-	-	-	-
6.00	24.0	6.0	68.0	4	74g	-3706A	232.50	-3736A	185.80	-3766A	146.10
8.00	38.0	10.0	88.0	4	215g	-3708A	264.60	-3738A	249.50	-	-
10.00	45.0	10.0	95.0	4	260g	-3710A	288.70	-3740A	283.00	-	-
12.00	53.0	12.0	110.0	4	408g	-3712A	336.70	-3742A	369.40	-3772A	390.20
14.00	53.0	12.0	110.0	4	471g	-3714A	664.80	-	-	-	-
16.00	63.0	16.0	123.0	4	806g	-3716A	521.10	-	-	-	-
20.00	75.0	20.0	141.0	4	1433g	-3720A	769.70	-	-	-3780A	844.70
25.00	90.0	25.0	166.0	4	-	-3725A	923.60	-	-	-	-

HSS-Co 8% Threaded Shank Ball Nosed Slot Drills 2 Flute

Centre cutting.
Threaded shank to **DIN 1835D**.
Cutting diameter to **e8**.
Shank diameter to **h6**.

NEW**Series 39****Short Series** Dimensions to **DIN 327**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	Weight per 5	SBH-2TS HSS-Co 8%		SBN-2TS TiCN Coated		SBL-2TS TiAlN Coated	
					Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
2.00	5.0	6.0	49.0	52g	-3902A	236.60	-	-	-3962A	265.00
3.00	5.0	6.0	49.0	54g	-3903A	239.80	-3933A	259.00	-3963A	268.50
4.00	7.0	6.0	51.0	55g	-3904A	251.70	-3934A	271.80	-	-
5.00	8.0	6.0	52.0	58g	-3905A	261.40	-3935A	282.30	-	-
6.00	8.0	6.0	52.0	60g	-3906A	272.90	-3936A	294.70	-3966A	306.50
8.00	11.0	10.0	61.0	170g	-3908A	284.10	-	-	-3968A	318.20
9.00	13.0	10.0	63.0	184g	-3909A	285.20	-	-	-3969A	319.40
10.00	13.0	10.0	63.0	188g	-3910A	289.70	-3940A	312.90	-3970A	325.40
12.00	16.0	12.0	73.0	306g	-3912A	337.60	-	-	-3972A	377.40
16.00	19.0	16.0	79.0	535g	-3916A	564.00	-3946A	609.10	-	-
20.00	22.0	20.0	88.0	944g	-3920A	615.30	-	-	-	-

Series 40**Long Series** Dimensions to **DIN 844**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	Weight each	SBH-2TL HSS-Co 8%		SBN-2TL TiCN Coated		SBL-2TL TiAlN Coated	
					Order Code SWT-163	Offer Price/1	Order Code SWT-163	Offer Price/1	Order Code SWT-163	Offer Price/1
3.00	8.0	6.0	56.0	10g	-4003A	189.00	-	-	-	-
4.00	11.0	6.0	63.0	11g	-4004A	189.00	-	-	-	-
5.00	13.0	6.0	68.0	14g	-4005A	189.00	-	-	-	-
6.00	13.0	6.0	68.0	15g	-4006A	596.40	-	-	-	-
8.00	19.0	10.0	88.0	44g	-4008A	745.50	-	-	-	-
10.00	22.0	10.0	95.0	55g	-4010A	801.30	-	-	-	-
12.00	26.0	12.0	110.0	85g	-4012A	1130.50	-	-	-	-



HSS-Co 5% Threaded Shank Coarse Pitch Roughing Cutters

Knuckle Form

For use when heavy metal removal and good surface finish are required. Bright finish.

Flute type: 25° spiral, roughing truncated.

Shank diameter to **js14**.

Metric Tolerances		Inch Tolerances	
Diameter	± 0.127mm	Diameter	± 0.005"

NEW

COARSE PITCH HSS-Co 5%



Standard Series K412T

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Number of Flutes	Weight each	Order Code SHR-061	Price/1 RND
6.00	16.0	60.5	6.0	3	26g	-6701A	120.00
8.00	18.0	63.5	10.0	3	66g	-6702B	244.50
9.00	25.0	68.0	9.0	4	35g	-6703C	309.30
10.00	21.0	66.5	10.0	3	85g	-6705E	280.20
12.00	24.0	70.0	12.0	4	116g	-6708H	276.90
14.00	28.5	73.0	12.0	4	131g	-6710K	337.10
16.00	26.0	77.0	16.0	4	212g	-6714P	454.50
18.00	35.0	80.0	16.0	4	282g	-6716R	402.60
20.00	38.0	83.5	25.0	4	300g	-6717S	525.90
25.00	44.5	101.5	25.0	5	332g	-6722Y	710.60
30.00	46.0	104.5	25.0	6	418g	-6729E	1224.80
32.00	50.0	108.0	25.0	6	450g	-6731G	1147.20

HSS-EV Threaded Shank Coarse Pitch Ripper Cutters

Industrial quality for shaping and forming metal components. 4 flute ripper cutters. Manufactured from sintered HSS-EV extra vanadium steel. Knuckle form, **h8** tolerance, standard length. Shank to **DIN 1835B**.

COARSE PITCH HSS-EV



Regular Series

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Number of Flutes	Weight each	Order Code SHR-061	Price/1 RND
8.00	19.0	69.0	10.0	4	35g	-2541B	174.30
10.00	22.0	72.0	10.0	4	37g	-2542C	191.10
12.00	26.0	83.0	12.0	4	71g	-2543D	233.20
16.00	32.0	92.0	16.0	4	131g	-2544E	297.20
20.00	38.0	104.0	20.0	4	228g	-2545F	338.80
25.00	45.0	121.0	25.0	4	407g	-2546G	405.20

SHANK MILLING CUTTERS

HSS-EV Threaded Shank Fine Pitch Ripper Cutters

4 flute ripper cutters. Manufactured from sintered HSS-EV extra vanadium steel.

Knuckle form, **h8** tolerance.

Standard length.

Dimensions to **DIN 844**.

Shank to **DIN 1835D**.

FINE PITCH HSS-EV



Regular Series

Dia. (mm)	Flute Length	Overall Length	Shank Dia.	No. of Flutes	Weight each	Order Code SHR-061	Price/1 RND
6.00	15.0	58.0	6.0	4	13g	-2600A	161.90
8.00	20.0	70.0	10.0	4	36g	-2601B	174.30
10.00	28.0	75.0	10.0	4	36g	-2602C	191.10
12.00	33.0	85.0	12.0	4	71g	-2603D	233.20
16.00	38.0	90.0	16.0	4	131g	-2604E	297.20
20.00	47.0	110.0	20.0	4	228g	-2605F	338.80
25.00	52.0	125.0	25.0	4	401g	-2606G	405.20

HSS-EV TiCN Coated Screwed Shank Fine Pitch Ripper Cutters

4 flute ripper cutters. Manufactured from sintered HSS-EV extra vanadium steel.

Knuckle form, **h8** tolerance.

Dimensions to **DIN 844**.

Shank to **DIN 1835B**.

FINE PITCH

NEW

HSS-EV TiCN



Regular Series

Dia. (mm)	Flute Length	Overall Length	Shank Dia.	No. of Flutes	Weight each	Order Code SHR-061	Price/1 RND
8.00	20.0	70.0	10.0	4	35g	-2801B	195.20
10.00	28.0	75.0	10.0	4	37g	-2802C	214.00
12.00	33.0	85.0	12.0	4	71g	-2803D	261.20
16.00	38.0	90.0	16.0	4	131g	-2804E	332.80
20.00	47.0	110.0	20.0	4	228g	-2805F	379.50
25.00	52.0	125.0	25.0	4	407g	-2806G	453.80

HSS-Co 5% Threaded Shank Coarse Pitch Roughing Cutters

Knuckle Form

For use when high metal removal rates area required. Bright finish.

Flute type: 25° spiral,

oughing truncated.

Shank diameter to **js14**.

NEW

COARSE PITCH HSS-Co 5%



Long Series Type K432T

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Number of Flutes	Weight each	Order Code SHR-061	Price/1 RND
7.00	37.0	80.0	8.0	4	39g	-6757G	263.20
10.00	37.0	82.5	10.0	3	44g	-6760A	319.20
12.00	49.5	95.0	12.0	4	69g	-6763D	394.80
16.00	58.5	108.5	16.0	4	139g	-6769K	611.80
18.00	70.0	115.0	16.0	4	145g	-6771M	738.80
20.00	76.0	121.5	16.0	4	187g	-6773P	843.00
25.00	100.0	157.0	25.0	5	427g	-6779W	1122.30

SWISS+TECH

HSS-Co 8% Threaded Shank Coarse Pitch Roughing End Mills

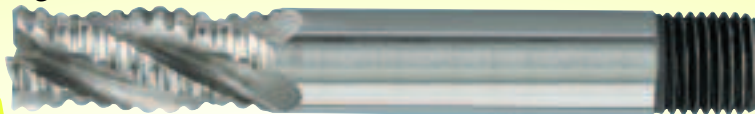
HSS-Co 8%

TiCN

TiAlN

Centre cutting.
Threaded shank to **DIN 1835D**.
Cutting diameter to **js12**.
Shank diameter to **h6**.

NEW



Series 42

Regular Series Dimensions to DIN 844

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	No of Flutes	Weight each	RCH-4TR HSS-Co 8%		RCN-4TR TiCN Coated		RCL-4TR TiAlN Coated	
						Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
8.00	19.0	10.0	69.0	3	36g	-4208A ⁽¹⁾	207.60	-	-	-	-
10.00	22.0	10.0	72.0	4	42g	-	-	-4240A	291.40	-	-
12.00	26.0	12.0	83.0	4	68g	-	-	-4242A	341.20	-	-
16.00	32.0	16.0	92.0	4	128g	-	-	-	-	-4276A	500.20

⁽¹⁾ RCH-3TR HSS Co 8% ⁽²⁾ RCN-3TR TiCN Coated ⁽³⁾ RCL-3TR TiAlN Coated ⁽⁴⁾ RCH-5TR HSS Co 8% ⁽⁵⁾ RCN-5TR TiCN Coated ⁽⁶⁾ RCL-5TR TiAlN Coated

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR



Centre cutting. Weldon shank to DIN 1835B.
Cutting diameter to e8. Shank diameter to h6.

HSS-Co 8% Uncoated

For general production machining.

HSS-Co 8% TiCN Coated

Extends cutter tool life and improves work material surface finish.

HSS-Co 8% TiAlN Coated

Dissipates and resists heat, reduces surface friction coupled with high surface hardness.

**Series 01**

Short Series Dimensions to DIN 327



Diameter (mm)	Flute Length	Shank Diameter	Overall Length	Weight per 10	SDH-2WS HSS-Co 8%		SDN-2WS TiCN Coated		SDL-2WS TiAlN Coated	
					Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
2.00	4.0	6.0	48.0	104g	-0102A	110.00	-0132A	145.20	-0162A	163.20
2.50	5.0	6.0	49.0	108g	-0102L	110.00	-0132L	145.20	-	-
3.00	5.0	6.0	49.0	110g	-0103A	110.00	-0133A	145.20	-0163A	163.20
3.50	6.0	6.0	50.0	111g	-0103L	110.00	-	-	-	-
4.00	7.0	6.0	51.0	112g	-0104A	110.00	-0134A	145.20	-0164A	163.20
4.50	7.0	6.0	51.0	114g	-0104L	110.00	-0134L	145.20	-	-
5.00	8.0	6.0	52.0	117g	-0105A	110.00	-0135A	145.20	-0165A	163.20
6.00	8.0	6.0	52.0	121g	-0106A	110.00	-0136A	145.20	-0166A	163.20
7.00	10.0	10.0	60.0	336g	-0107A	157.30	-0137A	204.50	-	-
8.00	11.0	10.0	61.0	345g	-0108A	157.30	-0138A	204.50	-0168A	249.30
9.00	11.0	10.0	61.0	355g	-0109A	157.30	-0139A	214.10	-0169A	257.60
10.00	13.0	13.0	63.0	476g	-0110A	157.30	-0140A	202.70	-0170A	257.60
11.00	13.0	12.0	70.0	587g	-0111A	209.80	-0141A	272.00	-	-
12.00	16.0	12.0	73.0	613g	-0112A	209.80	-0142A	276.70	-0172A	328.20
13.00	16.0	12.0	73.0	616g	-0113A	238.00	-0143A	324.80	-0173A	340.70
14.00	16.0	12.0	73.0	615g	-0114A	238.00	-0144A	324.80	-0174A	344.20
15.00	16.0	12.0	73.0	654g	-0115A	267.80	-0145A	342.40	-	-
16.00	19.0	16.0	79.0	1025g	-0116A	281.60	-0146A	386.90	-0176A	413.10
18.00	19.0	16.0	79.0	1086g	-0118A	349.10	-	-	-	-
20.00	22.0	20.0	88.0	1423g	-0120A	416.00	-0150A	578.60	-0180A	659.80
25.00	26.0	25.0	102.0	3366g	-	-	-0155A	1090.60	-	-

Series 02

Regular Series Dimensions to DIN 844



Diameter (mm)	Flute Length	Shank Diameter	Overall Length	Weight per 10	SDH-2WR HSS-Co 8%		SDN-2WR TiCN Coated		SDL-2WR TiAlN Coated	
					Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
2.00	7.0	6.0	51.0	108g	-0202A	137.00	-	-	-	-
3.00	8.0	6.0	52.0	108g	-0203A	137.00	-0233A	172.80	-	-
4.00	11.0	6.0	55.0	114g	-0204A	137.00	-0234A	172.80	-	-
5.00	13.0	6.0	57.0	121g	-0205A	137.00	-0235A	176.40	-	-
6.00	13.0	6.0	57.0	150g	-0206A	137.00	-0236A	176.40	-0266A	190.10
8.00	19.0	10.0	69.0	361g	-0208A	185.40	-0238A	231.90	-	-
10.00	22.0	10.0	72.0	402g	-0210A	185.40	-0240A	238.50	-	-
12.00	26.0	12.0	83.0	652g	-0212A	247.50	-0242A	329.20	-	-
14.00	26.0	12.0	83.0	710g	-0214A	271.50	-	-	-	-
16.00	32.0	16.0	92.0	950g	-0216A	331.10	-0246A	451.40	-	-
20.00	38.0	20.0	104.0	2114g	-0220A	490.00	-	-	-	-
25.00	45.0	25.0	121.0	2400g	-0225A	786.10	-	-	-	-

Series 03

Long Series Dimensions to DIN 844



Diameter (mm)	Flute Length	Shank Diameter	Overall Length	Weight per 10	SDH-2WL HSS-Co 8%		SDN-2WL TiCN Coated		SDL-2WL TiAlN Coated	
					Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
2.00	7.0	6.0	54.0	110g	-0302A	151.20	-	-	-0362A	204.50
3.00	8.0	6.0	56.0	116g	-0303A	151.20	-0333A	190.70	-0363A	204.50
4.00	11.0	6.0	63.0	120g	-0304A	151.20	-0334A	190.70	-0364A	204.50
5.00	13.0	6.0	68.0	136g	-0305A	151.20	-0335A	190.70	-	-
6.00	13.0	6.0	68.0	153g	-0306A	151.20	-0336A	190.70	-0366A	204.50
8.00	19.0	10.0	88.0	442g	-0308A	212.80	-0338A	281.10	-0368A	310.90
10.00	22.0	10.0	95.0	528g	-0310A	212.80	-0340A	287.40	-0370A	312.60
12.00	26.0	12.0	110.0	736g	-0312A	281.60	-0342A	380.10	-0372A	406.00
16.00	32.0	16.0	123.0	1734g	-0316A	395.10	-	-	-0376A	548.10
20.00	38.0	20.0	141.0	3064g	-0320A	582.70	-	-	-0380A	885.60

SWISS+TECH**HSS-Co 8% Weldon Shank
Slot Drills 3 Flute**

Centre cutting. Weldon shank to **DIN 1835B**.
Cutting diameter to **e8**.
Shank diameter to **h6**.

HSS-Co 8%**TiCN****TiALN****HSS-Co 8% Uncoated**

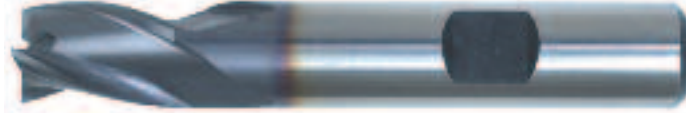
For general production machining.

HSS-Co 8% TiCN Coated

Extends cutter tool life and improves work material surface finish.

HSS-Co 8% TiALN Coated

Dissipates and resists heat, reduces surface friction coupled with high surface hardness.

**Series 05****Short Series** Dimensions to **DIN 327**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	Weight per 10	SDH-3WS HSS-Co 8%		SDN-3WS TiCN Coated		SDL-3WS TiALN Coated	
					Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
2.00	4.0	6.0	48.0	107g	-0502A	110.00	-0532A	145.20	-0562A	163.20
3.00	5.0	6.0	49.0	109g	-0503A	110.00	-0533A	145.20	-0563A	163.20
4.00	7.0	6.0	51.0	112g	-0504A	110.00	-0534A	145.20	-0564A	163.20
5.00	8.0	6.0	52.0	117g	-0505A	110.00	-0535A	145.20	-0565A	163.20
6.00	8.0	6.0	52.0	123g	-0506A	110.00	-0536A	145.20	-0566A	163.20
7.00	10.0	10.0	60.0	339g	-0507A	157.30	-0537A	204.50	-	-
8.00	11.0	10.0	61.0	353g	-0508A	157.30	-0538A	204.50	-0568A	249.30
9.00	11.0	10.0	61.0	355g	-0509A	157.30	-	-	-	157.30
10.00	13.0	10.0	63.0	382g	-0510A	157.30	-0540A	204.50	-0570A	257.60
12.00	16.0	12.0	73.0	617g	-0512A	208.70	-0542A	276.00	-0572A	316.90
14.00	16.0	12.0	73.0	688g	-0514A	230.70	-0544A	329.60	-0574A	608.50
16.00	19.0	16.0	79.0	1220g	-0516A	281.60	-0546A	386.90	-0576A	413.10
20.00	22.0	20.0	88.0	1894g	-0520A	416.00	-0550A	578.60	-0580A	659.80
25.00	26.0	25.0	102.0	3388g	-0525A	957.50	-	-	-0585A	728.50

**Series 06****Regular Series** Dimensions to **DIN 844**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	Weight per 10	SDH-3WR HSS-Co 8%		SDN-3WR TiCN Coated		SDL-3WR TiALN Coated	
					Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
3.00	8.0	6.0	52.0	111g	-0603A	137.00	-0633A	172.80	-0663A	190.10
4.00	11.0	6.0	55.0	114g	-0604A	137.00	-0634A	172.80	-0664A	190.10
5.00	13.0	6.0	57.0	129g	-0605A	137.00	-0635A	176.40	-0665A	190.10
6.00	13.0	6.0	57.0	128g	-0606A	137.00	-0636A	176.40	-0666A	190.10
7.00	16.0	10.0	66.0	340g	-	-	-0637A	231.90	-	-
8.00	19.0	10.0	69.0	368g	-0608A	185.40	-0638A	231.90	-0668A	276.70
9.00	19.0	10.0	69.0	-	-0609A	185.40	-0639A	238.50	-	-
10.00	22.0	10.0	72.0	404g	-0610A	185.40	-0640A	238.50	-0670A	286.40
11.00	22.0	12.0	79.0	-	-0611A	246.90	-0641A	329.20	-	-
12.00	26.0	12.0	83.0	666g	-0612A	246.90	-0642A	328.70	-0672A	359.30
13.00	26.0	12.0	83.0	-	-0613A	271.50	-	-	-	-
14.00	26.0	12.0	83.0	710g	-0614A	271.50	-0644A	359.80	-0674A	396.90
16.00	32.0	16.0	92.0	950g	-0616A	331.10	-0646A	451.40	-0676A	466.90
18.00	32.0	16.0	92.0	-	-0618A	331.10	-	-	-	-
20.00	38.0	20.0	104.0	2114g	-0620A	490.00	-0650A	655.10	-0680A	741.80
25.00	45.0	25.0	121.0	2400g	-0625A	786.10	-	-	-	-

**Series 07****Long Series** Dimensions to **DIN 844**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	Weight per 5	SDH-3WL HSS-Co 8%		SDN-3WL TiCN Coated		SDL-3WL TiALN Coated	
					Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
3.00	12.0	6.0	56.0	49g	-0703A	177.70	-0733A	216.90	-0763A	230.70
4.00	19.0	6.0	63.0	59g	-0704A	177.70	-0734A	216.90	-0764A	230.70
5.00	24.0	6.0	68.0	69g	-0705A	177.70	-0735A	216.90	-0765A	230.70
6.00	24.0	6.0	68.0	72g	-0706A	177.70	-0736A	216.90	-0766A	230.70
8.00	38.0	10.0	88.0	206g	-0708A	249.70	-0738A	318.00	-0768A	349.10
10.00	45.0	10.0	95.0	245g	-0710A	249.70	-0740A	324.00	-0770A	350.10
12.00	53.0	12.0	110.0	379g	-0712A	332.30	-0742A	431.00	-0772A	454.90
14.00	53.0	12.0	110.0	420g	-0714A	380.10	-0744A	859.20	-0774A	510.50
16.00	63.0	16.0	123.0	746g	-0716A	464.60	-0746A	601.80	-0776A	617.40
20.00	75.0	20.0	141.0	1314g	-0720A	685.50	-0750A	876.40	-0780A	989.80
22.00	75.0	20.0	141.0	1425g	-0722A	638.80	-	-	-	-
25.00	90.0	25.0	166.0	2415g	-0725A	1099.20	-	-	-0785A	1582.60

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR

SWISS+TECH**HSS-Co 8% Weldon Shank
End Mills 4 & 6 Flute****HSS-Co 8%****TiCN****TiAlN**Centre cutting. Weldon shank to **DIN 1835B**.

Shank cutting diameter

3 - 6mm to +0.04 -0.0.

8 - 20mm to +0.05 -0.0.

HSS-Co 8% Uncoated

For general production machining.

HSS-Co 8% TiCN Coated

Extends cutter tool life and improves work material surface finish.

HSS-Co 8% TiAlN Coated

Dissipates and resists heat, reduces surface friction coupled with high surface hardness.

**Series 09****Regular Series** Dimensions to **DIN 844**

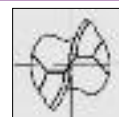
Diameter (mm)	Flute Length	Shank Diameter	Overall Length	No. of Flutes	Weight per 10	EMH-4WR HSS-Co 8%		EMN-4WR TiCN Coated		EML-4WR TiAlN Coated	
						Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
2.00	7.0	6.0	51.0	4	108g	-0902A	137.00	-0932A	172.80	-0962A	190.10
3.00	8.0	6.0	52.0	4	111g	-0903A	137.00	-0933A	172.80	-0963A	190.10
4.00	11.0	6.0	55.0	4	117g	-0904A	137.00	-0934A	172.80	-0964A	190.10
5.00	13.0	6.0	57.0	4	126g	-0905A	137.00	-0935A	176.40	-0965A	190.10
6.00	13.0	6.0	57.0	4	133g	-0906A	137.00	-0936A	176.40	-0966A	190.10
7.00	16.0	10.0	66.0	4	332g	-0907A	185.40	-0937A	231.90	-	-
8.00	19.0	10.0	69.0	4	375g	-0908A	185.40	-0938A	231.90	-0968A	276.70
9.00	19.0	10.0	69.0	4	-	-0909A	185.40	-	-	-	-
10.00	22.0	10.0	72.0	4	423g	-0910A	185.40	-0940A	238.50	-0970A	286.40
11.00	22.0	12.0	79.0	4	-	-0911A	258.70	-	-	-	-
12.00	26.0	12.0	83.0	4	688g	-0912A	258.70	-0942A	340.70	-0972A	370.20
13.00	26.0	12.0	83.0	4	-	-0913A	285.20	-	-	-	-
14.00	26.0	12.0	83.0	4	725g	-0914A	285.20	-	-	-0974A	410.10
15.00	26.0	12.0	83.0	4	-	-0915A	348.60	-	-	-	-
16.00	32.0	16.0	92.0	4	1037g	-0916A	348.60	-0946A	466.90	-0976A	484.20
17.00	32.0	16.0	92.0	4	-	-0917A	348.60	-	-	-	-
18.00	32.0	16.0	92.0	4	1390g	-0918A	431.00	-	-	-0978A	594.20
19.00	32.0	16.0	92.0	4	-	-0919A	431.00	-	-	-	-
20.00	38.0	20.0	104.0	4	2114g	-0920A	513.50	-0950A	679.70	-0980A	766.30
25.00	45.0	25.0	121.0	6	2400g	-0925A ⁽¹⁾	824.30	-0955A ⁽²⁾	1063.30	-0985A ⁽³⁾	1121.80

⁽¹⁾ EMH-6WR HSS-Co 8%⁽²⁾ EMN-6WR TiCN Coated⁽³⁾ EML-6WR TiAlN Coated**Series 10****Long Series** Dimensions to **DIN 844**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	No. of Flutes	Weight per 5	EMH-4WL HSS-Co 8%		EMN-4WL TiCN Coated		EML-4WL TiAlN Coated	
						Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
3.00	12.0	6.0	56.0	4	55g	-1003A	177.70	-1033A	216.90	-1063A	230.70
4.00	19.0	6.0	63.0	4	61g	-1004A	177.70	-1034A	216.90	-1064A	230.70
5.00	24.0	6.0	68.0	4	67g	-1005A	177.70	-1035A	216.90	-1065A	230.70
6.00	24.0	6.0	68.0	4	74g	-1006A	177.70	-1036A	216.90	-1066A	230.70
8.00	38.0	10.0	88.0	4	215g	-1008A	249.70	-1038A	318.00	-1068A	349.10
10.00	45.0	10.0	95.0	4	260g	-1010A	249.70	-1040A	324.00	-1070A	350.10
12.00	53.0	12.0	110.0	4	408g	-1012A	349.10	-1042A	447.80	-1072A	472.20
14.00	53.0	12.0	110.0	4	471g	-1014A	399.20	-1044A	514.80	-1074A	528.30
16.00	63.0	16.0	123.0	4	806g	-1016A	487.20	-1046A	625.30	-1076A	640.20
20.00	75.0	20.0	141.0	4	1433g	-1020A	720.20	-1050A	918.70	-1080A	1023.90

HSS-Co 8% Weldon Shank Ball Nose Slot Drills 2 Flute**HSS-Co 8%****TiCN****TiAlN**

Centre cutting.

Weldon shank to **DIN 1835B**.Cutting diameter to **e8**.Shank diameter to **h6**.**Series 11****Short Series** Dimensions to **DIN 327**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	Weight per 5	SBH-2WS HSS-Co 8%		SBN-2WS TiCN Coated		SBL-2WS TiAlN Coated	
					Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
2.00	5.0	6.0	49.0	52g	-1102A	174.70	-1132A	218.70	-	-
3.00	5.0	6.0	49.0	54g	-1103A	174.70	-	-	-	-
4.00	7.0	6.0	51.0	55g	-1104A	174.70	-1134A	219.90	-	-
5.00	8.0	6.0	52.0	58g	-1105A	174.70	-	-	-	-
6.00	8.0	6.0	52.0	60g	-1106A	174.70	-1136A	223.60	-1166A	227.80
8.00	11.0	10.0	61.0	170g	-1108A	221.20	-1138A	268.30	-	-
10.00	13.0	10.0	63.0	188g	-1110A	221.20	-1140A	268.30	-	-
12.00	16.0	12.0	73.0	306g	-1112A	289.90	-1142A	358.70	-	-
16.00	19.0	16.0	79.0	535g	-1116A	378.40	-1146A	482.40	-	-
20.00	22.0	20.0	88.0	944g	-1120A	534.30	-	-	-	-

SWISS+TECH**HSS-Co 8% Weldon Shank Ball
Nose Slot Drills 2 Flute**

Centre cutting. Weldon shank to **DIN 1835B**.
Cutting diameter to **e8**.
Shank diameter to **h6**.

HSS-Co 8% TiCN TiAlN**HSS-Co 8% Uncoated**

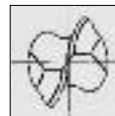
For general production machining.

HSS-Co 8% TiCN Coated

Extends cutter tool life and improves work material surface finish.

HSS-Co 8% TiAlN Coated

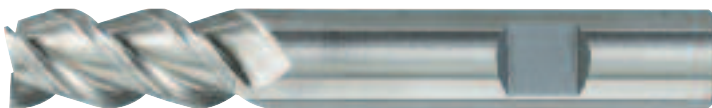
Dissipates and resists heat, reduces surface friction coupled with high surface hardness.

**Series 12****Long Series** Dimensions to **DIN 844**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	Weight per 5	SBH-2WL HSS-Co 8%		SBN-2WL TiCN Coated		SBL-2WL TiAlN Coated	
					Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
3.00	8.0	6.0	56.0	55g	-1203A	215.90	-	-	-	-
4.00	11.0	6.0	63.0	60g	-1204A	215.90	-	-	-	-
5.00	13.0	6.0	68.0	70g	-	-	-1235A	255.90	-	-
6.00	13.0	6.0	68.0	75g	-1206A	215.90	-1236A	255.90	-	-
8.00	19.0	10.0	88.0	110g	-1208A	276.70	-	-	-	-
10.00	22.0	10.0	95.0	277g	-1210A	276.70	-1240A	352.10	-	-
12.00	26.0	12.0	110.0	435g	-1212A	362.80	-1242A	461.50	-	-

HSS-Co 8% Weldon Shank 50° High Helix End Mills 3 Flute

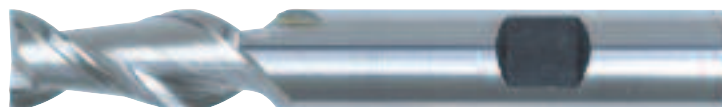
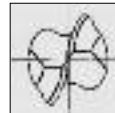
Centre cutting.
Weldon shank to **DIN 1835B**.
Cutting diameter to **e8**.
Shank diameter to **h6**.

HSS-Co 8% TiCN TiAlN**EXTENDED
RANGE****Series 13****Regular Series** Dimensions to **DIN 844**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	No. of Flutes	Weight per 5	EHH-3WR HSS-Co 8%		EHN-3WR TiCN Coated		EHL-3WR TiAlN Coated	
						Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
6.00	13.0	6.0	57.0	3	54g	-1306A	205.00	-1336A	185.60	-1366A	162.30
8.00	19.0	10.0	69.0	3	186g	-1308A	277.30	-	-	-	-
10.00	22.0	10.0	72.0	3	225g	-1310A	277.30	-	-	-	-
12.00	26.0	12.0	83.0	3	340g	-1312A	368.90	-	-	-	-
16.00	32.0	16.0	92.0	3	619g	-1316A	497.90	-	-	-1376A	777.80
20.00	38.0	20.0	104.0	3	1079g	-1320A	734.70	-	-	-1380A	814.00

**HSS-Co 8% Weldon Shank 42° High Helix
Slot Drills 2 Flute For Aluminium**

Centre cutting.
Weldon shank to **DIN 1835B**.
Shank cutting diameter to +0.04 -0.0.

HSS-Co 8% TiCN TiAlN**Series 15****Regular Length** Dimensions to **DIN 844**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	Weight per 5	SHH-2WR HSS-Co 8%		SHN-2WR TiCN Coated		SHL-2WR TiAlN Coated	
					Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
3.00	8.0	6.0	52.0	55g	-1503A	177.70	-	-	-	-
4.00	11.0	6.0	55.0	56g	-1504A	177.70	-1534A	177.30	-	-
5.00	13.0	6.0	57.0	60g	-1505A	177.70	-	-	-	-
6.00	13.0	6.0	57.0	62g	-1506A	177.70	-	-	-	-
8.00	19.0	10.0	69.0	175g	-1508A	241.40	-	-	-	-
10.00	22.0	10.0	72.0	190g	-1510A	241.40	-	-	-	-
12.00	26.0	12.0	83.0	326g	-1512A	319.90	-	-	-	-
16.00	32.0	16.0	92.0	603g	-1516A	432.30	-	-	-	-
18.00	32.0	16.0	92.0	663g	-1518A	533.80	-	-	-	-
20.00	38.0	20.0	104.0	1054g	-1520A	637.00	-	-	-	-

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR

SWISS+TECH**HSS-Co 8% Weldon Shank Coarse Pitch Ripper Cutters****HSS-Co 8%****TiCN****TiAlN**

Centre cutting.
Weldon shank to **DIN 1835B**.
Cutting diameter to **js12**.
Shank diameter to **h6**.

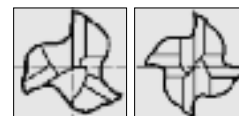
**Series 17****Regular Series** Dimensions to **DIN 844**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	No. of Flutes	Weight per 10	RCH-4WR HSS-Co 8%		RCN-4WR TiCN Coated		RCL-4WR TiAlN Coated	
						Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
6.00	13.0	6.0	57.0	3	129g	-1706A ⁽¹⁾	293.60	-1736A ⁽²⁾	333.70	-	-
8.00	19.0	10.0	69.0	3	311g	-1708A ⁽¹⁾	312.60	-1738A ⁽²⁾	360.40	-1768A ⁽³⁾	567.90
10.00	22.0	10.0	72.0	4	337g	-1710A	312.60	-1740A	366.40	-1770A	653.20
12.00	26.0	12.0	83.0	4	690g	-1712A	348.60	-1742A	431.00	-1772A	686.10
16.00	32.0	16.0	92.0	4	1280g	-1716A	496.80	-1746A	615.10	-1776A	915.10
20.00	38.0	20.0	104.0	4	2224g	-1720A	599.60	-1750A	766.30	-1780A	1152.90
25.00	45.0	25.0	121.0	5	4074g	-1725A ⁽⁴⁾	916.40	-1755A ⁽⁵⁾	728.90	-1785A ⁽⁶⁾	1715.70

⁽¹⁾ RCH-3WL HSS-Co 8% ⁽²⁾ RCN-3WL TiCN Coated ⁽³⁾ RCL-3WL TiAlN Coated ⁽⁴⁾ RCH-5WL HSS-Co 8% ⁽⁵⁾ RCN-5WL TiCN Coated ⁽⁶⁾ RCL-5WL TiAlN Coated

HSS-Co 8% Weldon Shank Coarse Pitch Ripper Cutters

Centre cutting. Weldon shank to **DIN 1835B**. Cutting diameter to **js12**.
Shank diameter to **h6**.

HSS-Co 8%**TiCN****TiAlN****Series 18****Long Series** Dimensions to **DIN 844**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	No. of Flutes	Weight Per 5	RCH-4WL HSS-Co 8%		RCN-4WL TiCN Coated		RCL-4WL TiAlN Coated	
						Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
6.00	24.0	6.0	68.0	3	70g	-	-	-1836A ⁽²⁾	418.30	-	-
8.00	38.0	10.0	88.0	3	215g	-1808A ⁽¹⁾	410.10	-1838A ⁽²⁾	479.40	-	-
10.00	45.0	10.0	95.0	4	259g	-1810A	410.10	-1840A	485.40	-	-
12.00	53.0	12.0	110.0	4	401g	-1812A	474.10	-1842A	572.00	-	-
16.00	63.0	16.0	123.0	4	804g	-1816A	695.20	-1846A	833.20	-	-
20.00	75.0	20.0	141.0	4	1132g	-1820A	868.90	-1850A	1066.90	-	-
25.00	90.0	25.0	166.0	5	2627g	-1825A ⁽⁴⁾	1326.80	-	-	-	-

⁽¹⁾ RCH-3WL HSS-Co 8% ⁽²⁾ RCN-3WL TiCN Coated ⁽³⁾ RCL-3WL TiAlN Coated ⁽⁴⁾ RCH-5WL HSS-Co 8% ⁽⁵⁾ RCN-5WL TiCN Coated

HSS-Co 8% Weldon Shank Coarse Pitch 37° High Helix for Aluminium Roughing End Mills 3 Flute

Centre cutting.
Weldon shank to **DIN 1835B**.
Shank diameter to **h6**.

HSS-Co 8%**TiN****EXTENDED
RANGE****Series 20****Regular Length** Dimensions to **DIN 844**

Diameter (mm)	Flute Length	Shank Dia.	Overall Length	Weight each	RHH-3WR HSS-Co 8%		RHN-3WR TiN	
					Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
6.00	13.0	6.0	57.0	12g	-2006A	411.30	-	-
8.00	19.0	10.0	69.0	36g	-2008A	438.10	-	-
10.00	22.0	10.0	72.0	40g	-2010A	438.10	-	-
12.00	26.0	12.0	83.0	67g	-2012A	487.20	-2032A	543.80
16.00	32.0	16.0	93.0	124g	-2016A	694.70	-	-
20.00	38.0	20.0	104.0	215g	-2020A	840.30	-	-

HSS-Co 8% Weldon Shank Coarse Pitch 37° High Helix for Aluminium Roughing End Mills 3 Flute

Centre cutting. Weldon shank to **DIN 1835B**.
Shank diameter to **h6**.

HSS-Co 8%**TiN****Series 21****Long Series** Dimensions to **DIN 844**

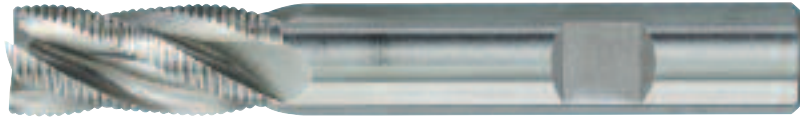
Diameter (mm)	Flute Length	Shank Dia.	Overall Length	Weight each	RHH-3WL HSS-Co 8%		RHN-3WR TiN	
					Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
10.00	45.0	10.0	95.0	49g	-2110A	574.40	-	-
12.00	53.0	12.0	110.0	78g	-2112A	663.40	-	-
20.00	75.0	20.0	141.0	263g	-2120A	1216.30	-	-

SHANK MILLING CUTTERS**SWISS+TECH****HSS-Co 8% Weldon Shank
Fine Pitch Ripper Cutters**

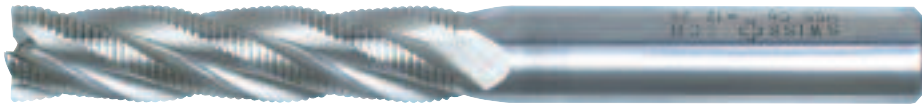
Centre cutting.
Weldon shank to **DIN 1835B**.
Cutting diameter to **js12**.
Shank diameter to **h6**.

HSS-Co 8% TiCN TiAlN

HSS-Co 8% Uncoated	For general production machining.
HSS-Co 8% TiCN Coated	Extends cutter tool life and improves work material surface finish.
HSS-Co 8% TiAlN Coated	Dissipates and resists heat, reduces surface friction coupled with high surface hardness.

**Series 25****Regular Series** Dimensions to **DIN 844**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	No of Flutes	Weight per 5	RFH-4WR HSS-Co 8%		RFN-4WR TiCN Coated		RFL-4WR TiAlN Coated	
						Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
6.00	13.0	6.0	57.0	3	65g	-2506A ⁽¹⁾	322.90	-2536A ⁽²⁾	362.30	-2566A ⁽³⁾	525.50
8.00	19.0	10.0	69.0	3	186g	-2508A ⁽¹⁾	343.70	-2538A ⁽²⁾	391.50	-2568A ⁽³⁾	595.20
10.00	22.0	10.0	72.0	4	212g	-2510A	343.70	-2540A	397.90	-2570A	602.40
12.00	26.0	12.0	83.0	4	356g	-2512A	382.50	-2542A	465.10	-2572A	671.20
14.00						-		-2544A	465.10	-	
16.00	32.0	16.0	92.0	4	642g	-2516A	545.80	-2546A	664.70	-2576A	933.00
18.00						-		-2548A	664.70	-	
20.00	38.0	20.0	104.0	4	1123g	-2520A	659.80	-2550A	826.00	-2580A	1215.60
22.00						-	1215.60	-2552A	851.10	-	
25.00	45.0	25.0	121.0	5	1310g	-		-2555A ⁽⁵⁾	1246.70	-2585A ⁽⁶⁾	1769.00

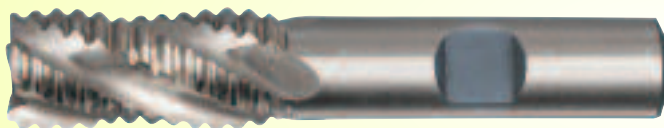
**Series 26****Long Series** Dimensions to **DIN 844**

Diameter (mm)	Flute Length	Shank Diameter	Overall Length	No of Flutes	Weight per 5	RFH-4WL HSS-Co 8%		RFN-4WL TiCN Coated		RFL-4WL TiAlN Coated	
						Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND	Order Code SWT-163	Price/1 RND
6.00	24.0	6.0	68.0	3	80g	-2606A ⁽¹⁾	416.70	-		-2666A ⁽³⁾	661.70
8.00	38.0	10.0	88.0	3	212g	-2608A ⁽¹⁾	451.90	-2638A ⁽²⁾	520.60	-2668A ⁽³⁾	758.40
10.00	45.0	10.0	95.0	4	264g	-2610A	451.90	-2640A	526.00	-2670A	760.20
12.00	53.0	12.0	110.0	4	408g	-2612A	521.10	-2642A	619.60	-2672A	885.60
16.00	63.0	16.0	123.0	4	790g	-2616A	763.70	-2646A	902.50	-2676A	1268.80
20.00	75.0	20.0	141.0	4	1411g	-2620A	955.60	-2650A	1154.10	-2680A	1699.80
25.00	90.0	25.0	166.0	5	2954g	-2625A ⁽⁴⁾	1460.10	-		-	

⁽¹⁾ RFH-3WL HSS Co 8% ⁽²⁾ RFN-3WL TiCN Coated ⁽³⁾ RFL-3WL TiAlN Coated ⁽⁴⁾ RFH-5WL HSS Co 8% ⁽⁵⁾ RFN-5WL TiCN Coated ⁽⁶⁾ RFL-5WL TiAlN Coated

**HSS-E Weldon Shank Coarse Pitch Ripper Cutters**

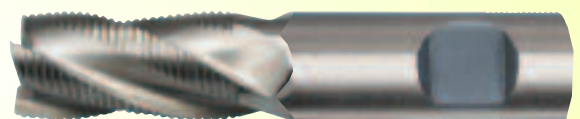
Industrial quality for shaping and forming metal components. 4 flute ripper cutters.
Manufactured from sintered HSS-E extra vanadium steel.
Knuckle form, **h8** tolerance, standard length.
Shank to **DIN 1835D**.

COARSE PITCH HSS-EV**Regular Series**

Dia. (mm)	Flute Length	Overall Length	Shank Dia.	No. of Flutes	Weight each	Order Code SHR-061	Price/1 RND
6.00	13.0	57.0	6.0	4	13g	-2560A	154.20
8.00	19.0	69.0	10.0	4	36g	-2561B	165.50
10.00	22.0	72.0	10.0	4	40g	-2562C	181.60
12.00	26.0	83.0	12.0	4	71g	-2563D	193.30
16.00	32.0	92.0	16.0	4	134g	-2564E	316.50
20.00	38.0	104.0	20.0	4	221g	-2565F	575.40
25.00	45.0	121.0	25.0	4	427g	-2566G	772.20

HSS-EV Weldon Shank Fine Pitch Ripper Cutters

4 flute ripper cutters. Manufactured from sintered HSS-EV extra vanadium steel.
Knuckle form. **h8** tolerance. Standard length.
Dimensions to **DIN 844**.
Shank to **DIN 1835D**.

FINE PITCH HSS-EV**Regular Series**

Dia. (mm)	Flute Length	Overall Length	Shank Dia.	No. of Flutes	Weight each	Order Code SHR-061	Price/1 RND
6.00	15.0	58.0	6.0	4	16g	-2620A	161.90
8.00	20.0	70.0	10.0	4	36g	-2621B	174.30
10.00	28.0	75.0	10.0	4	41g	-2622C	191.10
12.00	33.0	85.0	12.0	4	74g	-2623D	202.90
16.00	38.0	90.0	16.0	4	125g	-2624E	258.40
20.00	47.0	110.0	20.0	4	232g	-2625F	448.50
25.00	52.0	125.0	25.0	4	402g	-2625G	405.20

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Plain Shank Milling Cutters 2 Flute

Centre cutting, used for profile milling, milling keyways and producing open slots.

Surface treatment: bright finish.

Flute helix 30°. Dimensions to **DIN 844**.

Plain shank to **DIN 1835A**.

HSS-Co

EXTENDED RANGE



Regular Length

Dia. (mm)	Flute Length	Overall Length	Shank Dia.	Order Code SHR-061	Price/1 RND
3.00	8	52	6	-3803A	90.90
4.00	11	55	6	-3804B	85.30
5.00	13	57	6	-3805C	85.30
6.00	13	57	6	-3806D	85.30
7.00	16	66	10	-3807E	112.00
8.00	19	69	10	-3808F	115.20
10.00	22	72	10	-3810H	139.70
12.00	26	83	12	-3812K	154.00
14.00	26	83	16	-3814M	204.70
16.00	32	92	16	-3816P	223.50
18.00	32	92	16	-3818R	259.50
20.00	38	104	20	-3820S	330.70
22.00	38	104	20	-3822T	539.40
25.00	45	121	25	-3825V	770.00

EXTENDED RANGE



Long Series

Dia. (mm)	Flute Length	Overall Length	Shank Dia.	Order Code SHR-061	Price/1 RND
3.00	12	56	6	-3955C	161.90
4.00	19	63	6	-3957E	156.50
5.00	24	68	6	-3959G	172.40
6.00	24	68	6	-3961J	117.50
8.00	38	88	10	-3962K	213.00
10.00	45	95	10	-3963L	238.80
12.00	53	110	12	-3964M	255.10
14.00	53	110	12	-3965N	397.80
16.00	63	123	16	-3966P	315.30
20.00	75	141	20	-3968R	636.50

Plain Shank Milling Cutters 2 Flute Ball Nose

Centre cutting, used for profile milling, milling keyways and producing open slots.

Surface treatment: bright finish.

Flute helix 30°. Dimensions to **DIN 844**.

Plain shank to **DIN 1835A**.

NEW



Regular Length

Dia. (mm)	Flute Length	Overall Length	Shank Dia.	Order Code SHR-061	Price/1 RND
3.00	5	49	6	-3982C	161.90
4.00	7	51	6	-3984E	156.50
5.00	8	52	6	-3986G	172.40
6.00	8	52	6	-3988J	181.40
8.00	11	61	10	-3992N	213.00
10.00	13	63	10	-3996S	238.90
12.00	16	73	12	-3998V	255.10
14.00	16	73	12	-4000X	397.80
16.00	19	79	16	-4002Z	315.00
18.00	19	79	16	-4004B	480.50
20.00	22	88	20	-4006D	636.50
22.00	22	88	20	-4008F	720.90
25.00	26	102	25	-4011J	840.10

Plain Shank Milling Cutters 4 Flute

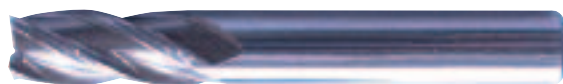
Centre cutting, used for profile milling, milling keyways and producing open slots.

Flute helix 30°. Dimensions to **DIN 844**.

Plain shank to **DIN 1835A**.



HSS-Co



Regular Length

Dia. (mm)	Flute Length	Overall Length	Shank Dia.	Order Code SHR-061	Price/1 RND
3.00	8	52	6	-3703A	103.90
3.50	11	55	6	-3703F	103.90
4.00	11	55	6	-3704B	103.90
4.50	13	57	6	-3704G	103.90
5.00	13	57	6	-3705C	103.90
5.50	13	57	6	-3705H	103.90
6.00	13	57	6	-3706D	103.90
6.50	19	69	10	-3706J	103.90
7.00	19	69	10	-3707E	134.10
7.50	19	69	10	-3707K	134.10
8.00	19	69	10	-3708F	133.30
8.50	22	72	10	-3708L	133.30
9.00	22	72	10	-3709Q	216.50
9.50	22	72	10	-3709W	216.50
10.00	22	72	10	-3710G	154.70
10.50	22	79	12	-3710N	154.70
11.00	22	79	12	-3711V	182.90
12.00	26	83	12	-3712H	187.80
13.00	26	83	12	-3713J	243.80
14.00	26	83	12	-3714J	243.80
15.00	32	92	16	-3715K	243.80
16.00	32	92	16	-3716L	265.90
17.00	32	92	16	-3717V	368.60
18.00	32	92	16	-3718M	308.60
19.00	32	92	16	-3719V	393.30
20.00	38	104	20	-3720N	393.30
22.00	38	104	20	-3722P	651.00
25.00	45	121	25	-3725R	724.60
26.00	45	121	25	-3726S	724.60
28.00	45	121	25	-3728V	810.90
30.00	45	121	25	-3730X	940.60



Long Series

Dia. (mm)	Flute Length	Overall Length	Shank Dia.	Order Code SHR-061	Price/1 RND
3.00	12	56	6	-3873A	170.10
4.00	19	63	6	-3875C	170.10
5.00	24	68	6	-3877E	183.40
6.00	24	68	6	-3879G	183.40
7.00	38	88	10	-3879M	181.20
8.00	38	88	10	-3880H	181.20
9.00	38	88	10	-3880V	274.00
10.00	45	95	10	-3881J	274.00
11.00	53	110	12	-3881P	274.00
12.00	53	110	12	-3882K	243.80
13.00	53	110	12	-3882Q	260.00
14.00	53	110	12	-3883K	436.00
15.00	63	123	16	-3883Q	343.00
16.00	63	123	16	-3884M	343.90
18.00	63	123	16	-3885N	522.80
20.00	75	141	20	-3886P	743.00
22.00	75	141	20	-3888Q	810.90
25.00	90	166	25	-3891T	915.80

**SEE ALSO:
2 Flute - Weldon**



Page 86

HSS-Co 8%
TiCN TiAlN

**SEE ALSO:
Multi-flute - Threaded**



Page 84

HSS-Co 8%
TiCN TiAlN

SWISS+TECH**Carbide Plain Shank
Milling Cutters**Centre cutting. To **Manufacturers Standards.****Series 45****2 Flute - Short Series** Dimensions to **DIN 6535 HA**

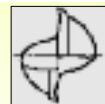
Diameter (mm)	Flute Length	Overall Length	Shank Diameter	Weight each	SDC-2PS Carbide		SDT-2PS TiCN Coated	
					Order Code SWT-161	Price/1 RND	Order Code SWT-161	Price/1 RND
2.00	8.0	32.0	2.0	3g	-4502A	276.70	-4532A	325.10
2.50	8.0	32.0	2.5	4g	-4502L	276.70	-	-
3.00	12.0	32.0	3.0	4g	-4503A	276.70	-	-
4.00	12.0	40.0	4.0	7g	-4504A	316.40	-	-
5.00	14.0	50.0	5.0	13g	-4505A	335.70	-	-
6.00	16.0	50.0	6.0	18g	-4506A	376.90	-4536A	425.20
7.00	20.0	60.0	7.0	37g	-4507A	481.50	-	-
8.00	20.0	60.0	8.0	37g	-4508A	602.60	-4538A	666.00
9.00	20.0	60.0	9.0	49g	-4509A	848.60	-	-
10.00	22.0	70.0	10.0	68g	-4510A	909.10	-4540A	972.50
12.00	22.0	70.0	12.0	90g	-4512A	1272.90	-	-
14.00	25.0	75.0	14.0	134g	-4514A	1735.80	-	-
16.00	25.0	75.0	16.0	172g	-4516A	2206.90	-	-
20.00	32.0	100.0	20.0	360g	-4520A	3683.60	-4550A	3907.30

**Series 48****3 Flute - Short Series**

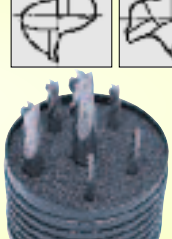
Diameter (mm)	Flute Length	Overall Length	Shank Diameter	Weight each	SDC-3PS Carbide		SDT-3PS TiCN Coated		SDL-3PS TiAlN Coated	
					Order Code SWT-161	Price/1 RND	Order Code SWT-161	Price/1 RND	Order Code SWT-161	Price/1 RND
1.00	4.0	40.5	4.0	7g	-4801A	334.70	-4831A	325.10	-	-
1.50	4.5	40.0	4.0	7g	-4801L	325.10	-4831L	325.10	-	-
2.00	8.0	32.0	2.0	3g	-4802A	276.70	-4832A	325.10	-4862A	220.50
2.50	8.0	32.0	2.5	3g	-4802L	303.20	-4832L	351.60	-	-
3.00	12.0	32.0	3.0	4g	-4803A	276.70	-4833A	325.10	-	-
3.50	12.0	32.0	3.5	4g	-4803L	347.80	-4833L	396.20	-	-
4.00	12.0	40.0	4.0	7g	-4804A	316.40	-4834A	364.50	-	-
4.50	12.0	50.0	4.5	11g	-4804L	368.10	-4834L	416.40	-	-
5.00	14.0	50.0	6.0	13g	-4805A	335.70	-4835A	383.90	-	-
5.50	16.0	50.0	6.0	16g	-4805L	335.70	-	-	-	-
6.00	16.0	50.0	6.0	18g	-4806A	376.90	-4836A	425.20	-	-
6.50	20.0	50.0	8.0	25g	-4806L	376.90	-	-	-4867L	421.00
7.00	20.0	50.0	8.0	50g	-4807A	481.50	-4837A	543.80	-	-
7.50	20.0	60.0	8.0	55g	-4807L	481.50	-	-	-	-
8.00	20.0	60.0	8.0	57g	-4808A	602.60	-4838A	666.00	-4868A	452.50
9.00	20.0	60.0	9.0	60g	-4809A	848.60	-	-	-4869A	950.40
10.00	22.0	60.0	10.0	71g	-4810A	909.10	-4840A	972.50	-	-
11.00	22.0	60.0	12.0	90g	-	-	-	-	-4871A	1036.30
12.00	22.0	60.0	12.0	100g	-4812A	1272.90	-4842A	1356.20	-4872A	921.60
14.00	25.0	70.0	14.0	133g	-4814A	1735.80	-	-	-	-
16.00	25.0	75.0	16.0	175g	-4816A	2206.90	-	-	-	-
20.00	32.0	100.0	20.0	367g	-4820A	3683.60	-	-	-	-

**Series 50****4 Flute - Short Series**

Diameter (mm)	Flute Length	Overall Length	Shank Diameter	Weight each	EMC-4PS Carbide		EMT-4PS TiCN Coated	
					Order Code SWT-161	Price/1 RND	Order Code SWT-161	Price/1 RND
2.00	8.0	32.0	2.0	3g	-5002A	276.70	-5032A	325.10
2.50	8.0	32.0	2.5	3g	-5002L	303.20	-5032L	325.10
3.00	12.0	32.0	3.0	4g	-5003A	276.70	-5033A	325.10
3.50	12.0	32.0	3.5	4g	-5003L	276.70	-	-
4.00	12.0	40.0	4.0	7g	-5004A	316.40	-5034A	364.50
5.00	14.0	50.0	5.0	14g	-5005A	335.70	-5035A	383.90
6.00	16.0	50.0	6.0	19g	-5006A	376.90	-5036A	425.20
6.50	20.0	50.0	8.0	25g	-5006L	376.90	-	-
7.00	20.0	60.0	7.0	49g	-5007A	481.50	-5037A	543.80
7.50	20.0	60.0	8.0	55g	-5007L	481.50	-	-
8.00	20.0	60.0	8.0	57g	-5008A	602.60	-5038A	666.00
9.00	20.0	60.0	9.0	60g	-5009A	626.70	-5039A	855.40
10.00	20.0	70.0	10.0	71g	-5010A	909.10	-5040A	972.50
11.00	22.0	60.0	12.0	90g	-5011A	945.40	-5041A	880.60
12.00	22.0	70.0	12.0	102g	-5012A	1272.90	-5042A	1356.20
14.00	25.0	75.0	14.0	184g	-5014A	1735.80	-5044A	1833.80
16.00	25.0	75.0	16.0	380g	-5016A	2206.90	-5046A	2338.70
20.00	32.0	100.0	20.0	892g	-5020A	3683.60	-5050A	3907.30
25.00	46.0	150.0	25.0	895g	-5025A	5681.40	-5055A	6043.80

6 Piece SetsDimensions to **DIN 844**. Cutting diameter to **js12**.
Shank diameter to **h6**.**Contents:** 3, 4, 5, 6, 8 and 10mm.**6
PIECES****CARBIDE**

Number of Flutes	Series Number	Order Code SWT-161	Price/1 RND
2	45	-4526A	1331.60
3	48	-4890A	1839.20
4	50	-5028A	1261.50

**PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR**


**Carbide Micrograin Plain Shank
Milling Cutters**

CARBIDE


2 Flute

For optimum performance and maximum swarf removal when plunging, slotting and routing in light alloys, brass, aluminium, non-ferrous and other soft materials.

Manufactured to **Works Standards**.

Diameter Metric	Tolerances		Diameter Inch	Tolerance	
	+	-		+	-
Over 1.00 ~ up to 6.00	0.000	0.050	Over 1/16" ~ up to 1/4"	0.000	0.002
Over 6.00 ~ up to 25.00	0.000	0.080	Over 1/4" ~ up to 1"	0.000	0.003


Regular Series - Metric

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
1.00	3.0	40.0	4.0	15g	-0020K	72.20
1.50	4.0	40.0	4.0	15g	-0030K	72.20
2.00	8.0	32.0	2.0	15g	-0040K	72.20
2.50	8.0	32.0	2.5	15g	-0050K	72.20
3.00	12.0	32.0	3.0	15g	-0060K	72.20
3.50	12.0	32.0	3.5	20g	-0070K	72.20
4.00	12.0	40.0	4.0	20g	-0080K	104.60
4.50	14.0	50.0	4.5	20g	-0090K	104.60
5.00	14.0	50.0	5.0	30g	-0100K	131.10
6.00	16.0	50.0	6.0	35g	-0120K	138.50
7.00	20.0	60.0	7.0	40g	-0140K	185.60
8.00	20.0	60.0	8.0	40g	-0160K	185.60
9.00	20.0	60.0	9.0	60g	-0180K	217.30
10.00	22.0	70.0	10.0	100g	-0200K	265.90
11.00	22.0	70.0	11.0	120g	-0220K	265.90
12.00	22.0	70.0	12.0	130g	-0240K	343.90
14.00	25.0	75.0	14.0	180g	-0280K	528.80
16.00	25.0	75.0	16.0	230g	-0320K	659.10
18.00	25.0	75.0	18.0	230g	-0360K	880.00
20.00	32.0	100.0	20.0	240g	-0400K	1061.90

Regular Series - Inch

Diameter (inch)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
3/32"	3/8"	1 1/2"	1/8"	10g	-0560K	148.50
1/8"	1/2"	1 1/2"	1/8"	10g	-0580K	148.50
11/64"	5/8"	2"	3/16"	20g	-0610K	199.40
3/16"	5/8"	2"	3/16"	20g	-0620K	199.40
1/4"	3/4"	2 1/2"	1/4"	30g	-0660K	268.90
5/16"	13/16"	2 1/2"	5/16"	45g	-0700K	373.50
3/8"	1"	2 1/2"	3/8"	60g	-0740K	454.20
1/2"	1"	3"	1/2"	165g	-0820K	775.70
3/4"	1 1/2"	4"	1"	640g	-0980K	1556.50

3 Flute

Centre cutting as standard. Offer a combination of advantages achieved with two and four flutes giving profile and peripheral milling capability in addition to slotting and plunging. Manufactured to **Works Standards**.

Regular Series - Metric

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
1.00	3.0	40.0	4.0	15g	-3020K	72.20
1.50	4.5	40.0	4.0	15g	-3030K	72.20
2.00	8.0	32.0	2.0	15g	-3040K	72.20
2.50	8.0	32.0	2.5	15g	-3050K	72.20
3.00	12.0	32.0	3.0	15g	-3060K	72.20
3.50	12.0	32.0	3.5	20g	-3070K	72.20
4.00	14.0	40.0	4.0	20g	-3080K	114.90
4.50	14.0	50.0	4.5	20g	-3090K	114.90
5.00	14.0	50.0	5.0	30g	-3100K	143.60
6.00	16.0	50.0	6.0	35g	-3120K	151.70
7.00	20.0	60.0	7.0	40g	-3140K	204.00
8.00	20.0	60.0	8.0	40g	-3160K	204.00
9.00	20.0	60.0	10.0	60g	-3180K	232.00
10.00	22.0	70.0	10.0	100g	-3200K	279.10
11.00	22.0	70.0	11.0	120g	-3220K	279.10
12.00	22.0	70.0	12.0	130g	-3240K	359.40
14.00	25.0	75.0	14.0	180g	-3280K	531.70
16.00	25.0	75.0	16.0	230g	-3320K	670.10
18.00	25.0	75.0	18.0	230g	-3360K	923.40
20.00	32.0	100.0	20.0	240g	-3400K	1078.80
25.00	38.0	150.0	25.0	640g	-3500K	3198.60

**EXTENDED
RANGE**

Regular Series - Inch

Diameter (inch)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
1/16"	3/16"	1 1/2"	1/8"	10g	-3540K	97.60
3/32"	9/32"	1 1/2"	1/8"	10g	-3560K	73.90
1/8"	3/8"	1 1/2"	1/8"	10g	-3580K	215.10
5/32"	1/2"	2"	3/16"	20g	-3600K	86.40
3/16"	5/8"	2"	3/16"	20g	-3620K	98.80
7/32"	5/8"	2 1/2"	1/4"	30g	-3640K	135.80
1/4"	3/4"	2 1/2"	1/4"	30g	-3660K	133.30
5/16"	13/16"	2 1/2"	5/16"	45g	-3700K	185.60
3/8"	1"	2 1/2"	3/8"	60g	-3740K	225.40
1/2"	1"	3"	1/2"	140g	-3820K	386.00
5/8"	1 1/4"	3 1/2"	5/8"	230g	-3900K	545.40

4 Flute

Centre cutting as standard. For maximum strength when milling harder materials where rapid swarf removal is not needed.

Four flute milling cutters have one of the strongest tooth structures available in solid cutters. Manufactured to **Works Standards**.

Regular Series - Metric

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
1.00	3.0	40.0	4.0	15g	-6020K	77.40
1.50	4.5	40.0	4.0	15g	-6030K	77.40
2.00	8.0	32.0	2.0	15g	-6040K	72.20
2.50	9.5	32.0	2.5	15g	-6050K	77.40
3.00	12.0	32.0	3.0	15g	-6060K	72.20
3.50	12.0	32.0	3.5	20g	-6070K	77.40
4.00	14.0	40.0	4.0	20g	-6080K	119.30
4.50	14.0	50.0	4.5	20g	-6090K	119.30
5.00	14.0	50.0	5.0	30g	-6100K	151.00
6.00	16.0	50.0	6.0	35g	-6120K	155.40
7.00	20.0	60.0	8.0	40g	-6140K	195.20
8.00	20.0	60.0	8.0	40g	-6160K	207.70
9.00	20.0	60.0	9.0	60g	-6180K	235.70
10.00	22.0	70.0	10.0	100g	-6200K	288.70
11.00	22.0	70.0	11.0	120g	-6220K	331.40
12.00	22.0	70.0	12.0	130g	-6240K	369.70
14.00	25.0	75.0	14.0	180g	-6280K	552.30
16.00	25.0	75.0	16.0	230g	-6320K	692.20
18.00	25.0	75.0	18.0	230g	-6360K	916.80
20.00	32.0	100.0	20.0	240g	-6400K	1100.90
25.00	38.0	100.0	25.0	640g	-6500K	1623.70

Regular Series - Inch

Diameter (inch)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
1/16"	3/16"	1 1/2"	1/8"	10g	-6540K	155.60
3/32"	3/8"	1 1/2"	1/8"	10g	-6560K	148.50
1/8"	1/2"	1 1/2"	1/8"	10g	-6580K	148.50
3/16"	5/8"	2"	3/16"	20g	-6620K	199.40
7/32"	5/8"	2 1/2"	1/4"	30g	-6640K	268.90
1/4"	3/4"	2 1/2"	1/4"	30g	-6660K	268.90
5/16"	13/16"	2 1/2"	5/16"	45g	-6700K	373.50
3/8"	1"	2 1/2"	3/8"	60g	-6740K	454.20
7/16"	1"	2 3/4"	7/16"	90g	-6780K	633.50
1/2"	1"	3"	1/2"	165g	-6820K	775.70



**Carbide Micrograin
Plain Shank Slot Drills****Long Series - 2 Flute**

For optimum performance and maximum swarf removal when plunging, slotting and routing in most materials including brass, aluminium, non-ferrous and other soft materials. Manufactured to **USCTi Standards**.

Diameter Metric	Tolerances		Diameter Inch	Tolerance	
	+	-		+	-
Over 1.00 ~ up to 6.00	0.000	0.050	Over 1/16" ~ up to 1/4"	0.000	0.002
Over 6.00 ~ up to 25.00	0.000	0.080	Over 1/4" ~ up to 1"	0.000	0.003

Long Series - 3 Flute**CARBIDE****Long Series - Metric**

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
3.00	25.0	75.0	3.0	15g	-4003K	288.20
4.00	25.0	75.0	4.0	20g	-4004K	312.00
5.00	25.0	75.0	6.0	30g	-4005K	339.30
6.00	25.0	75.0	6.0	35g	-4006K	454.20
8.00	25.0	75.0	8.0	40g	-4008K	678.30
10.00	38.0	100.0	10.0	100g	-4010K	878.50
12.00	50.0	100.0	12.0	130g	-4012K	1338.60
16.00	75.0	150.0	16.0	230g	-4016K	2398.10

CARBIDE**Long Series - 4 Flute****CARBIDE****Long Series - Metric**

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
3.00	20.0	60.0	3.0	15g	-1003K	78.10
4.00	20.0	60.0	4.0	20g	-1004K	131.90
5.00	25.0	75.0	5.0	30g	-1005K	169.40
6.00	30.0	75.0	6.0	35g	-1006K	183.40
8.00	30.0	75.0	8.0	40g	-1008K	238.60
10.00	40.0	100.0	10.0	100g	-1010K	360.90
12.00	45.0	100.0	12.0	130g	-1012K	525.80
16.00	65.0	150.0	16.0	230g	-1016K	952.20
20.00	65.0	150.0	16.0	240g	-1020K	1343.20

Long Series - Metric

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
3.00	20.0	60.0	3.0	15g	-9203K	87.70
4.00	20.0	60.0	4.0	20g	-9204K	151.70
5.00	25.0	75.0	5.0	30g	-9205K	195.90
6.00	30.0	75.0	6.0	35g	-9206K	212.90
8.00	30.0	75.0	8.0	40g	-9208K	268.80
10.00	40.0	100.0	10.0	100g	-9210K	394.00
12.00	45.0	100.0	12.0	130g	-9212K	578.80
16.00	65.0	150.0	16.0	230g	-9216K	967.60
20.00	65.0	150.0	20.0	240g	-9220K	1402.80

**Carbide Micrograin
Plain Shank Milling Cutters**

For optimum performance and maximum swarf removal when plunging, slotting and routing in light alloys, brass, aluminium, non-ferrous and other soft materials. Manufactured to **USCTi Standards**.

Two flute for maximum swarf clearance. Four flute for maximum rigidity.

(Three flute price/1 a combination of the advantages achieved with two and four flutes.)

CARBIDE**Regular Series****2 FLUTE****3 FLUTE****4 FLUTE**

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code SHR-161	Price/1 RND	Order Code SHR-161	Price/1 RND	Order Code SHR-161	Price/1 RND
2.00	6.3	38.0	3.0	15g	-0040K	68.20	-3040K	68.20	-6040K	68.20
3.00	12.0	38.0	3.0	15g	-0060K	68.20	-3060K	68.20	-6060K	68.20
4.00	14.0	50.0	4.0	20g	-0080K	98.80	-3080K	108.50	-6080K	112.70
4.50	16.0	50.0	5.0	25g	-0090K	130.90	-	-	-	-
5.00	16.0	50.0	5.0	30g	-0100K	130.80	-3100K	143.30	-6100K	146.80
6.00	19.0	50.0	6.0	35g	-0120K	123.80	-3120K	135.70	-6120K	142.60
7.00	19.0	63.0	8.0	40g	-0140K	175.30	-3140K	192.70	-6140K	184.30
8.00	20.0	63.0	8.0	40g	-0160K	175.30	-3160K	192.70	-6160K	203.80
9.00	22.0	75.0	10.0	60g	-0180K	205.20	-3180K	221.20	-6180K	222.60
10.00	22.0	75.0	10.0	100g	-0200K	251.10	-3200K	263.60	-6200K	272.70
12.00	25.0	75.0	12.0	130g	-0240K	324.80	-3240K	339.40	-6240K	349.20
14.00	32.0	89.0	14.0	180g	-0280K	499.40	-3280K	502.20	-6280K	521.60
16.00	32.0	89.0	16.0	230g	-0320K	622.50	-3320K	632.90	-6320K	653.80
20.00	38.0	100.0	20.0	240g	-0400K	1002.90	-3400K	1018.90	-6400K	1039.80

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR



CARBIDE

Carbide Micrograin Plain Shank Slot Drills 2 Flute Ball Nosed

For optimum performance and maximum swarf removal when plunging, slotting and routing in most materials including brass, aluminium, non-ferrous and other soft materials. Manufactured to **USCTi Standards**.

Tolerances		
Diameter Metric	Tolerance	
	+	-
Over 1.00 ~ up to 6.00	0.000	0.050
Over 6.00 ~ up to 25.00	0.000	0.080



Regular Series

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code SHR-161	Price/1 RND
2.00	4.0	38.0	3.0	10g	-1040K	166.00
3.00	6.0	38.0	3.0	10g	-1060K	166.00
4.00	8.0	50.0	4.0	15g	-1080K	222.30
5.00	10.0	50.0	6.0	25g	-1100K	245.20
6.00	12.0	50.0	6.0	25g	-1120K	320.70
7.00	19.0	63.0	8.0	45g	-1140K	303.20
8.00	20.0	63.0	8.0	55g	-1160K	452.50
10.00	22.0	75.0	10.0	90g	-1200K	620.10
12.00	25.0	75.0	12.0	120g	-1240K	682.70
16.00	32.0	89.0	16.0	250g	-1320K	1000.70
20.00	38.0	100.0	20.0	420g	-1400K	1593.90

Solid Carbide Micrograin Plain Shank End Mills 4 Flute Ball Nosed

For maximum strength when milling harder materials where rapid swarf removal is not needed. Four flute milling cutters have one of the strongest tooth structures available in solid cutters. Centre cutting as standard. Manufactured to **ANSI Standards**.

CARBIDE

Tolerances		
Diameter Metric	Tolerance	
	+	-
Over 1.00 ~ up to 6.00	0.000	0.050
Over 6.00 ~ up to 25.00	0.000	0.080



Regular Series

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code SHR-161	Price/1 RND
2.00	6.3	38.0	3.0	10g	-7040K	122.40
3.00	12.0	38.0	3.0	10g	-7060K	104.20
4.00	14.0	50.0	4.0	15g	-7080K	220.50
5.00	16.0	50.0	6.0	25g	-7100K	209.20
6.00	19.0	50.0	6.0	25g	-7120K	227.70
8.00	20.0	63.0	8.0	55g	-7160K	363.70
10.00	22.0	75.0	10.0	90g	-7200K	615.80
12.00	25.0	75.0	12.0	120g	-7240K	849.50
16.00	32.0	89.0	16.0	250g	-7320K	1000.70
20.00	38.0	100.0	20.0	420g	-7400K	1956.50



Carbide Plain Shank Slot Drills 2 Flute Ball Nosed

Centre cutting. To **Manufacturers Standards**.

Carbide Uncoated

For general production machining.

TiCN Coated

Extends cutter tool life and improves work material surface finish.



Series 53 Short Series

Diameter (mm)	Flute Length	Overall Length	Shank Diameter	Weight each	SBC-2PS Carbide		SBT-2PS TiCN Coated	
					Order Code SWT-161	Price/1 RND	Order Code SWT-161	Price/1 RND
2.00	4.0	48.0	6.0	17g	-5302A	472.50	-5332A	520.90
3.00	4.0	48.0	6.0	18g	-5303A	390.10	-5333A	438.30
4.00	6.0	50.0	6.0	19g	-5304A	412.10	-5334A	460.50
5.00	7.0	51.0	6.0	20g	-5305A	430.40	-5335A	478.80
6.00	7.0	51.0	6.0	20g	-5306A	472.50	-5336A	520.90
8.00	9.0	59.0	8.0	40g	-5308A	722.00	-5338A	784.70
10.00	10.0	60.0	10.0	63g	-5310A	1152.50	-5340A	1215.60
12.00	14.0	71.0	12.0	103g	-	-	-5342A	1588.20

Carbide Plain Shank End Mills 4 Flute Ball Nosed

Centre cutting. To **Manufacturers Standards**.
Cutting diameter to **h10**. Shank diameter to **h6**.

CARBIDE

TiCN



Series 56 Short Series

Diameter (mm)	Flute Length	Overall Length	Shank Diameter	Weight each	EBC-4PS Carbide		EBT-4PS TiCN Coated	
					Order Code SWT-161	Price/1 RND	Order Code SWT-161	Price/1 RND
2.00	4.0	48.0	3.0	17g	-5602A	614.10	-5632A	663.30
3.00	4.0	48.0	6.0	18g	-5603A	543.80	-5633A	593.10
4.00	6.0	50.0	6.0	19g	-5604A	565.60	-5634A	614.10
5.00	7.0	51.0	6.0	20g	-5605A	586.80	-5635A	635.20
6.00	7.0	51.0	6.0	21g	-5606A	628.10	-5636A	676.50
8.00	9.0	59.0	8.0	42g	-5608A	900.60	-5638A	963.80
10.00	10.0	60.0	10.0	65g	-5610A	1361.60	-5640A	1423.90
12.00	14.0	71.0	12.0	106g	-	-	-5642A	1828.30



Carbide Micrograin Plain Shank Slot Drills Ball Nosed

2 Flute

For optimum performance and maximum swarf removal when plunging, slotting and routing in most materials including brass, aluminium, non-ferrous and other soft materials.

Manufactured to **USCTI Standards**.

Diameter Metric	Tolerances		Diameter Inch	Tolerance	
	+	-		+	-
Over 1.00 ~ up to 6.00	0.000	0.050	Over 1/16" ~ up to 1/4"	0.000	0.002
Over 6.00 ~ up to 25.00	0.000	0.080	Over 1/4" ~ up to 1"	0.000	0.003

Regular Series - 2 Flute - Metric

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
2.00	6.0	38.0	3.0	10g	-1040K	201.90
3.00	7.0	57.0	6.0	10g	-1060K	279.40
4.00	8.0	57.0	6.0	15g	-1080K	270.70
5.00	10.0	57.0	6.0	25g	-1100K	291.80
6.00	10.0	57.0	6.0	25g	-1120K	329.40
7.00	19.0	63.0	8.0	45g	-1140K	464.80
8.00	16.0	63.0	8.0	55g	-1160K	464.80
10.00	19.0	75.0	10.0	90g	-1200K	636.80
12.00	22.0	83.0	12.0	120g	-1240K	903.90
16.00	26.0	92.0	16.0	250g	-1320K	1447.70
20.00	32.0	104.0	20.0	420g	-1400K	2506.30

Long Series - Metric

Diameter (mm)	Flute Length	Overall Length	Shank Diameter	Order Code KEN-161	Price/1 RND
3.00	30.0	75.0	3.0	-1930K	925.00
4.00	30.0	75.0	4.0	-1940K	1027.80
5.00	40.0	100.0	5.0	-1950K	1145.60
6.00	50.0	150.0	6.0	-1960K	1227.10

3 Flute

Offer a combination of advantages achieved with two and four flutes giving profile and peripheral milling capability in addition to slotting and plunging. Chatter is also significantly reduced. Centre cutting as standard. Manufactured to **ANSI Standards**.

CARBIDE

Regular Series - 3 Flute

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
2.00	6.0	38.0	3.0	15g	-4040K	201.90
3.00	10.0	38.0	3.0	15g	-4060K	279.40
4.00	14.0	50.0	4.0	20g	-4080K	270.70
5.00	16.0	50.0	6.0	30g	-4100K	134.60
6.00	19.0	50.0	6.0	35g	-4120K	329.40
8.00	20.0	63.0	8.0	40g	-4160K	464.80
10.00	22.0	75.0	10.0	100g	-4200K	636.80
12.00	25.0	75.0	12.0	130g	-4240K	903.90

Long Series - 3 Flute - Metric

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
3.00	25.0	75.0	3.0	15g	-4930K	375.10
4.00	25.0	75.0	4.0	15g	-4940K	406.00
5.00	25.0	75.0	5.0	30g	-4950K	510.50
6.00	25.0	75.0	6.0	30g	-4960K	772.10

4 Flute Four flute milling cutters have one of the strongest tooth structures available in solid cutters. Centre cutting as standard. Manufactured to **ANSI Standards**.

CARBIDE

EXTENDED
RANGE

Regular Series - 4 Flute - Metric

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
2.0	6.3	38.0	3.0	10g	-7040K	201.90
3.0	12.0	38.0	3.0	10g	-7060K	279.40
4.0	14.0	50.0	4.0	15g	-7080K	270.70
5.0	16.0	50.0	6.0	25g	-7100K	291.80
6.0	19.0	50.0	6.0	25g	-7120K	329.40

Long Series - 4 Flute - Metric

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
3.00	25.0	75.0	3.0	15g	-7930K	186.00
4.00	25.0	75.0	4.0	25g	-7940K	192.20
5.00	25.0	75.0	5.0	30g	-7950K	225.00
6.00	25.0	75.0	6.0	30g	-7960K	383.60



Regular Series - 2 Flute - Inch

Diameter (inch)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
1/16"	1/8"	1 1/2"	1/8"	10g	-1540K	108.80
1/8"	1/2"	1 1/2"	1/8"	10g	-1580K	103.40
3/16"	5/8"	2"	3/16"	15g	-1620K	143.40
1/4"	3/4"	2 1/2"	1/4"	35g	-1660K	213.10
1/2"	1"	3"	1/2"	140g	-1820K	540.30

Long Series - Metric Continued

Diameter (mm)	Flute Length	Overall Length	Shank Diameter	Order Code KEN-161	Price/1 RND
8.00	50.0	150.0	8.0	-1980K	1351.10
10.00	60.0	150.0	10.0	-1990K	2152.80
12.00	50.0	150.0	15.0	-2000K	3083.20
16.00	75.0	150.0	16.0	-2010K	6491.00



Regular Series - 3 Flute - Inch

Diameter (inch)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
1/8"	3/8"	1 1/2"	1/8"	10g	-4580K	104.40
1/4"	3/4"	2 1/2"	1/4"	30g	-4660K	214.10
3/8"	1"	2 1/2"	3/8"	60g	-4740K	362.50

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
8.00	25.0	75.0	8.0	40g	-4980K	1153.50
10.00	38.0	100.0	10.0	100g	-4990K	1317.60
12.00	50.0	100.0	12.0	130g	-4992K	2008.50



Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
7.0	19.0	63.0	8.0	45g	-7140K	464.80
8.0	20.0	63.0	8.0	55g	-7160K	464.80
10.0	22.0	75.0	10.0	90g	-7200K	636.80
12.0	25.0	75.0	12.0	120g	-7240K	903.90
16.0	32.0	89.0	16.0	250g	-7320K	3396.90

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
10.00	38.0	100.0	10.0	100g	-7990K	657.50
12.00	50.0	100.0	12.0	130g	-7992K	875.00
16.00	75.0	150.0	16.0	230g	-7996K	1531.10

GROUP 061 SHANK MILLING CUTTERS

KENNEDY
QUALITY IN EVERY NOSE DESIGN

CARBIDE

Solid Carbide Micrograin Plain Shank Slot Drills Double Ended

2 Flute

For maximum strength when milling harder materials where rapid swarf removal is not needed. Manufactured to **ANSI Standards**.



Double Ended - Regular Series - Metric

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
2.00	4.0	38.0	3.0	10g	-2040K	245.20
3.00	6.0	38.0	3.0	10g	-2060K	245.20
4.00	8.0	50.0	4.0	15g	-2080K	349.50
5.00	10.0	63.0	5.0	20g	-2100K	406.00
6.00	12.0	63.0	6.0	30g	-2120K	460.50
8.00	12.0	63.0	8.0	50g	-2160K	630.80

Solid Carbide Micrograin Plain Shank End Mills Double Ended

4 Flute

For maximum strength when milling harder materials where rapid swarf removal is not needed. Four flute milling cutters have one of the strongest tooth structures available in solid cutters. Centre cutting. Manufactured to **ANSI Standards**.

CARBIDE



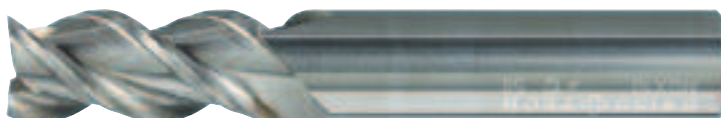
4 Flute - Regular Series - Metric

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
2.00	4.0	38.0	3.0	10g	-8040K	245.20
3.00	6.0	38.0	3.0	10g	-8060K	245.20
4.00	8.0	50.0	4.0	15g	-8080K	349.50
5.00	10.0	63.0	5.0	20g	-8100K	406.00
6.00	12.0	63.0	6.0	30g	-8120K	460.50
7.00	12.0	63.0	8.0	45g	-8140K	630.80
8.00	12.0	63.0	8.0	50g	-8160K	630.80
10.00	14.0	75.0	10.0	80g	-8200K	955.80
12.00	16.0	75.0	12.0	120g	-8240K	1148.30

Carbide Plain Shank Slot Drills 3 Flute High Helix

Centre cutting.
To **Manufacturers Standards**.

NEW



Series 58 Regular Series

Diameter (mm)	Flute Length	Overall Length	Shank Diameter	Weight each
8.00	19.0	60.0	6.0	37g
10.00	22.0	60.0	10.0	66g
16.00	25.0	75.0	16.0	361g

Carbide Plain Shank Al-Karb Ultrafine Micrograin Milling Cutters Slot Drills for Aluminium

2 Flute

Centre cutting as standard. An advanced tool geometry designed for cutting aluminium and other non-metallic, non-ferrous materials requiring high machining rates. Al-Karb cutters will out-perform conventional end mills on these materials as the flute design allows maximum chip removal.

NEW



Short Series - Metric

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
3.00	8.0	57.0	6.0	15g	-9700K	141.60
4.00	11.0	57.0	6.0	15g	-9720K	141.20
5.00	13.0	57.0	6.0	30g	-9740K	141.60
6.00	13.0	57.0	6.0	35g	-9750K	131.60
8.00	19.0	63.0	8.0	40g	-9760K	249.90
10.00	22.0	72.0	10.0	100g	-9770K	344.50
12.00	26.0	83.0	12.0	130g	-9780K	475.30
16.00	26.0	83.0	14.0	230g	-9790K	779.50

Carbide Plain Shank 60° High Helix End Mills

3 Flute

Suitable for the high speed machining of titanium inconel, stainless steel and steel alloys.

Cutting diameter to **h10**.

Shank diameter to **h6**.

Dimensions to **DIN**.

NEW

CARBIDE



Short Series

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	Weight each	Order Code KEN-161	Price/1 RND
6.00	13.0	57.0	6.0	35g	-5060K	232.50
8.00	19.0	69.0	8.0	40g	-5080K	259.90
10.00	22.0	72.0	10.0	100g	-5100K	366.10
12.00	26.0	83.0	12.0	130g	-5120K	409.30

CARBIDE

TiCN



SWISS+TECHThe combination of **HSS-E PM** and **TiALN**

produces a cutter that is ideally suited to dry and semi dry machining of:

- Materials up to 45 HRC.
- Stainless steels
- Aerospace alloys.

HSS-E PM HSS-E PM is a sintered powder metallurgy HSS that combines the toughness associated with HSS-Co and the hardness benefits of carbide.

- Up to 25% higher cutting speed than HSS/HSS-Co. cutters.
- Up to 125% higher feed rates.
- Up to 100% longer cutter life.
- Reduced manufacturing costs.
- Improved productivity.
- Lower coolant usage and disposal costs.

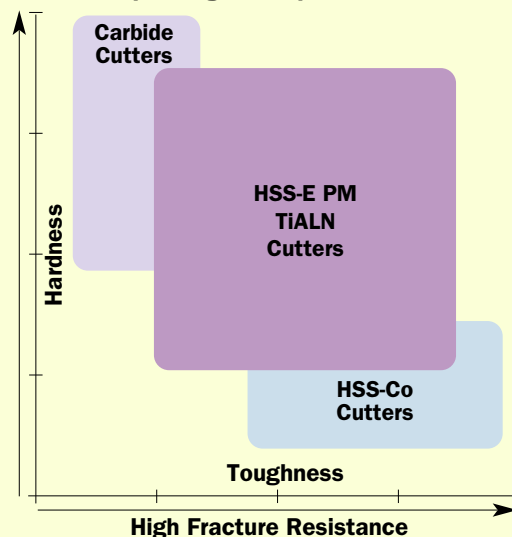
TiALN TiALN is a multi-layer coating capable of operating at higher speed and feed.

- Protects cutting edge under extreme conditions.
- Surface hardness 3000HV.
- Surface coefficient against steel 0.4.
- Thickness of coating 3 - 4µm.
- Maximum working temperature 800°C.
- Re-coating service also available.

HSS-E PM Cutters TiALN Coated

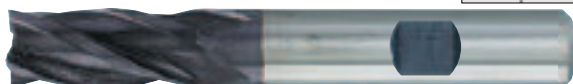
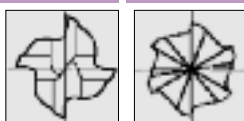
Toughness & Hardness, the Best of Both . . .

High Wear Resistance - Fast Cutting -
Sharper Edges - Improved Finish



Weldon Shank HSS-E PM TiALN Coated 45° High Helix Milling Cutters

Centre cutting.
Weldon shank to **DIN 1835B**.
Cutting diameter to **k10**.
Shank diameter to **h6**.

HSS-E PM TiALN

Series 90

Regular Series Dimensions to DIN 844

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	No. of Flutes	EHP-4WR PM Coated	
					Order Code SWT-165	Price/1 RND
6.00	13.0	57.0	6.0	4	-9006A	231.40
8.00	19.0	69.0	10.0	4	-9008A	315.50
10.00	22.0	72.0	10.0	4	-9010A	331.60
12.00	26.0	83.0	12.0	4	-9012A	531.70
16.00	32.0	93.0	16.0	6	-9016A	758.70
20.00	38.0	104.0	20.0	6	-9020A	1265.70
25.00	45.0	121.0	25.0	6	-9025A ⁽¹⁾	2082.60

⁽¹⁾ RFP-6WR PM Coated

Weldon Shank HSS-E PM TiALN Coated High Helix Cutters

Centre cutting.
Weldon shank to **DIN 1835B**.
Cutting diameter to **k10**.
Shank diameter to **h6**.

HSS-E PM TiALN

Series 92

Long Series Dimensions to DIN 844

Diameter (mm)	Flute Length	Overall Length	Shank Dia.	No. of Flutes	EHP-4WL PM Coated	
					Order Code SWT-165	Price/1 RND
6.00	24.0	68.0	6.0	4	-9206A	268.80
8.00	38.0	78.0	10.0	4	-9208A	390.70
10.00	45.0	95.0	10.0	4	-9210A	464.80
12.00	53.0	110.0	12.0	4	-9212A	744.30
16.00	45.0	100.0	16.0	6	-9216A	1061.90
20.00	58.0	122.0	20.0	6	-9220A	1769.70
25.00	90.0	166.0	25.0	6	-9225A ⁽¹⁾	2625.30

⁽¹⁾ EHP-6WL PM Coated

Weldon Shank HSS-E PM TiALN Coated Fine Pitch Ripper Cutters

Centre cutting. Shank to **DIN 1835B**. Cutting diameter to **js12**. Shank diameter to **h6**.

HSS-E PM TiALN

Series 96

Long Series Dimensions to DIN 844

Diameter (mm)	Flute Length	Overall Length	Shank Diameter	Number of Flutes	RFP-4WL PM Coated	
					Order Code SWT-165	Price/1 RND
6.00	24.0	68.0	6.0	4	-9606A	500.30
8.00	38.0	88.0	10.0	4	-9608A	700.20
10.00	45.0	95.0	10.0	5	-9610A	774.90
12.00	53.0	110.0	12.0	5	-9612A	1056.70
16.00	63.0	123.0	16.0	5	-9616A	1675.80
20.00	75.0	141.0	20.0	5	-9620A	2306.20
25.00	90.0	166.0	25.0	6	-9625A ⁽¹⁾	3674.60

⁽¹⁾ RFP-6WL PM Coated

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SWISS+TECH

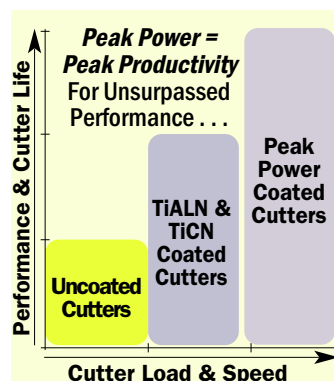
Peak Power Coated Cutters



PEAK POWER The latest addition of the Swiss+Tech range. Manufactured from premium High Speed Steel using the latest in Powdered Metallurgy, these cutters will produce a Powerful Milling performance when cutting difficult materials - even at high speeds.

- Designed to provide strength and rigidity
- Excellent geometry gives optimised cutting and minimises vibration at high speeds
- The range is further enhanced by the Peak Power coating
- Reduced manufacturing costs
- Greater wear resistance and hot-hardness than conventional TiAlN or TiCN coatings
- Suited to dry cutting applications
- Higher oxidation resistance

This coating results in the tools withstanding the high thermal loads associated with high speed applications.



HSS-E PM Coated 3 Flute End Mills

Centre cutting. Weldon shank to DIN 1835B. Shank diameter to h6. Dimensions to DIN 844.

NEW

PEAK POWER



Series 93 Regular

Diameter (mm)	Flute Length	Overall Length	Shank Diameter	Peak Power Coated	
				Order Code SWT-165	Offer Price/1
2.00	4.0	48.0	6.0	-9302A	210.20
3.00	5.0	49.0	6.0	-9303A	210.20
4.00	7.0	51.0	6.0	-9304A	210.20
5.00	8.0	52.0	6.0	-9305A	176.00
6.00	8.0	52.0	6.0	-9306A	228.10
8.00	11.0	61.0	10.0	-9308A	334.80
10.00	13.0	63.0	10.0	-9310A	269.80
12.00	16.0	73.0	12.0	-9312A	453.60
16.00	19.0	79.0	16.0	-9316A	572.80
20.00	22.0	88.0	20.0	-9320A	1114.50

HSS-E PM Coated 4 Flute End Mills

Centre cutting. Weldon shank to DIN 1835B. Shank diameter to h6. Dimensions to DIN 844.

HSS-E PM

PEAK POWER



Series 95 Regular

Diameter (mm)	Flute Length	Overall Length	Shank Diameter	Peak Power Coated	
				Order Code SWT-165	Offer Price/1
3.00	8.0	52.0	6.0	-9503A	261.60
4.00	11.0	55.0	6.0	-9504A	261.60
5.00	13.0	57.0	6.0	-9505A	261.60
6.00	13.0	57.0	6.0	-9506A	261.60
8.00	19.0	69.0	6.0	-9508A	393.80
10.00	22.0	72.0	10.0	-9510A	407.70
12.00	26.0	83.0	12.0	-9512A	541.30
14.00	26.0	83.0	12.0	-9514A	603.40
16.00	32.0	92.0	16.0	-9516A	716.10
20.00	38.0	104.0	20.0	-9520A	1164.90

HSS-E PM Fine Pitch Ripper Cutters

45° high helix, fine pitch, centre cutting. Weldon shank to DIN 1835B. Shank diameter to h6. Dimensions to DIN 844.

HSS-E PM

PEAK POWER



Series 98 Regular

Diameter (mm)	Flute Length	Overall Length	Shank Diameter	Peak Power Coated	
				Order Code SWT-165	Offer Price/1
5.00	13.0	57.0	6.0	-9805A	308.10
6.00	13.0	57.0	6.0	-9806A	308.10
8.00	19.0	69.0	10.0	-9808A	413.10
10.00	22.0	72.0	10.0	-9810A	454.50
12.00	26.0	83.0	12.0	-9812A	517.20
16.00	32.0	92.0	16.0	-9816A	767.10

HSS-E PM Coated 2 Flute Slot Drills

NEW

HSS-E PM

PEAK POWER

Centre cutting. Weldon shank to DIN 1835B. Shank diameter to h6. Dimensions to DIN 844.



Series 91 Regular

Diameter (mm)	Flute Length	Overall Length	Shank Diameter	Peak Power Coated	
				Order Code SWT-165	Offer Price/1
2.00	4.0	47.0	6.0	-9102A	178.70
3.00	5.0	49.0	6.0	-9103A	178.70
4.00	7.0	51.0	6.0	-9104A	178.70
5.00	8.0	52.0	6.0	-9105A	192.90
6.00	8.0	52.0	6.0	-9106A	208.40
8.00	11.0	61.0	10.0	-9108A	252.80
10.00	13.0	63.0	10.0	-9110A	276.10
12.00	16.0	73.0	12.0	-9112A	334.80
14.00	16.0	73.0	12.0	-9114A	415.80
16.00	19.0	79.0	16.0	-9116A	486.80
20.00	22.0	88.0	20.0	-9120A	947.30

HSS-E PM Coated Fine Pitch Ripper

HSS-E PM

PEAK POWER

Centre cutting. Weldon shank to DIN 1835B. Cutting diameter to js12. Shank diameter to h6. Dimensions to DIN 844.



Series 94 Regular

Diameter (mm)	Flute Length	Overall Length	Shank Diameter	No. of Flutes	Peak Power Coated	
					Order Code SWT-165	Offer Price/1 RND
6.00	13.0	57.0	6.0	3	-9406A	412.10
8.00	19.0	69.0	10.0	3	-9408A	538.60
10.00	22.0	72.0	10.0	4	-9410A	600.70
12.00	26.0	83.0	12.0	4	-9412A	800.20
14.00	26.0	83.0	12.0	4	-9414A	872.20
16.00	32.0	94.0	16.0	4	-9416A	1255.00
18.00	32.0	94.0	16.0	4	-9418A	1367.30
20.00	38.0	104.0	20.0	4	-9420A	1710.20
22.00	38.0	104.0	20.0	4	-9422A	1863.00
25.00	45.0	121.0	25.0	5	-9425A	2576.60

HSS-E PM Coated 2 Flute Ball Nosed Slot Drills

HSS-E PM

PEAK POWER

Centre cutting. Weldon shank to DIN 1835B. Shank diameter to h6. Dimensions to DIN 844.



Series 97 Regular

Diameter (mm)	Flute Length	Overall Length	Shank Diameter	Peak Power Coated	
				Order Code SWT-165	Offer Price/1
3.00	5.0	49.0	6.0	-9703A	297.30
4.00	7.0	51.0	6.0	-9704A	326.70
5.00	8.0	52.0	6.0	-9705A	359.00
6.00	8.0	52.0	6.0	-9706A	394.50
8.00	11.0	61.0	10.0	-9708A	429.30
10.00	13.0	63.0	10.0	-9710A	468.00
12.00	16.0	73.0	12.0	-9712A	524.10
16.00	19.0	79.0	16.0	-9716A	729.50

HSS-E PM Coated Coarse Pitch Ripper Cutters

HSS-E PM

PEAK POWER

Centre cutting. Weldon shank to DIN 1835B. Shank diameter to h6. Dimensions to DIN 844.



Series 99 Regular

Diameter (mm)	Flute Length	Overall Length	Shank Diameter	No. of Flutes	Peak Power Coated	
					Order Code SWT-165	Offer Price/1
6.00	13.0	57.0	6.0	3	-9906A	279.00
8.00	19.0	69.0	10.0	3	-9908A	375.70
10.00	22.0	72.0	10.0	4	-9910A	322.50
12.00	26.0	83.0	12.0	4	-9912A	448.30
16.00	32.0	92.0	16.0	4	-9916A	623.60
20.00	38.0	104.0	20.0	4	-9920A	957.10

SWISS+TECH

**HSS-E PM 2 Flute Slot Drill
Peak Power Set**

Weldon Shank - 7 Piece Set
Centre cutting.
To **Manufacturers Standards**.
Weldon shank to **DIN 1835B**.
Shank diameter to **h6**.
Dimensions to **DIN 844**.

Contents: 3, 4, 5, 6,
8, 10 and 12mm.

NEW

HSS-E PM

PEAK POWER



**7
PIECES**



Series 91

Number of Pieces	Contents	Order Code SWT-165	Price/1 RND
7	3, 4, 5, 6, 8, 10, & 12mm	-9150A	1813.40

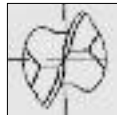
**HSS-E PM 2 Flute Ball Nose
Slot Drill Peak Power Set**

Weldon Shank - 7 Piece Set
Centre cutting.
To **Manufacturers Standards**.
Weldon shank to **DIN 1835B**.
Shank diameter to **h6**.
Dimensions to **DIN 844**.

Contents: 3, 4, 5, 6,
8, 10 and 12mm.

HSS-E PM

PEAK POWER



**7
PIECES**



Series 97

Number of Pieces	Contents	Order Code SWT-165	Price/1 RND
7	3, 4, 5, 6, 8, 10 & 12mm	-9750A	2107.80

**HSS-E PM High Helix Fine Pitch
Ripper Peak Power Set**

Weldon Shank - 6 Piece Set
Centre cutting.
To **Manufacturers Standards**.
Weldon shank to **DIN 1835B**.
Shank diameter to **h6**.
Dimensions to **DIN 844**.

Contents: 5, 6, 8,
10, 12 and 16mm.

HSS-E PM

PEAK POWER



**6
PIECES**



Series 98

Number of Pieces	Contents	Order Code SWT-165	Price/1 RND
6	5, 6, 8, 10, 12 and 16mm	-9850A	6279.40

**HSS-E PM Coarse Pitch Ripper
Peak Power Set**

Weldon Shank - 5 Piece Set
Centre cutting.
To **Manufacturers Standards**.
Weldon shank to **DIN 1835B**.
Shank diameter to **h6**.
Dimensions to **DIN 844**.

Contents: 8, 10, 12,
16 and 20mm.

HSS-E PM

PEAK POWER



**5
PIECES**



Series 99

Number of Pieces	Contents	Order Code SWT-165	Price/1 RND
5	8, 10, 12, 16 & 20mm	-9950A	11667.40

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR

SWISS+TECH



Carbide Cutters Q-Coat Coated

Q-Coat

has been specifically developed to give carbide cutters the 'edge' when faced with severe machining conditions.

- Materials up to 66HRC.
- Dry Cutting.
- Die and Mould Machining
- Improved Productivity.
- Reduced coolant usage and disposal.
- Up to 100% longer cutter life.
- Reduced manufacturing costs.

A multi-layer coating capable of operating at higher speed and feed.

- Excellent oxidation resistance.
- High speed machining.
- Surface hardness 3300HV.
- Surface coefficient against steel 0.25.
- Thickness of coating 3 - 5µm.
- Maximum working temperature 850°C.
- Re-coating service also available.

Carbide Plain Shank Slot Drills 2 Flute

Centre cutting.

To **Manufacturers Standards**.

Cutting diameter to **h10**. Shank diameter to **h6**.

SDQ-2PS Carbide Q-Coat.

CARBIDE

Q-Coat



Series 60 Short Series Dimensions to DIN 844

Diameter (mm)	Flute Length	Overall Length	Shank Diameter	SDQ-2PS Carbide Q-Coat	
				Order Code SWT-165	Offer Price/1
1.00	2.5	45.0	4.0	-6001A	334.80
2.00	6.0	45.0	4.0	-6002A	297.50
3.00	8.0	45.0	6.0	-6003A	521.50
4.00	11.0	45.0	6.0	-6004A	521.50
5.00	13.0	50.0	6.0	-6005A	521.50
6.00	13.0	50.0	6.0	-6006A	521.50
7.00	16.0	60.0	8.0	-6007A	521.50
8.00	19.0	60.0	8.0	-6008A	667.70
9.00	19.0	70.0	8.0	-6009A	775.70
10.00	22.0	70.0	10.0	-6010A	987.90
12.00	26.0	75.0	12.0	-6012A	1355.00
16.00	32.0	100.0	16.0	-6016A	2248.50
20.00	38.0	104.0	20.0	-6020A	3079.10

Carbide Plain Shank Slot Drills 2 Flute

Centre cutting. To **Manufacturers Standards**.

Cutting diameter to **h10**. Shank diameter to **h6**.

SDQ-2PS Carbide Q-Coat.

CARBIDE

Q-Coat

NEW

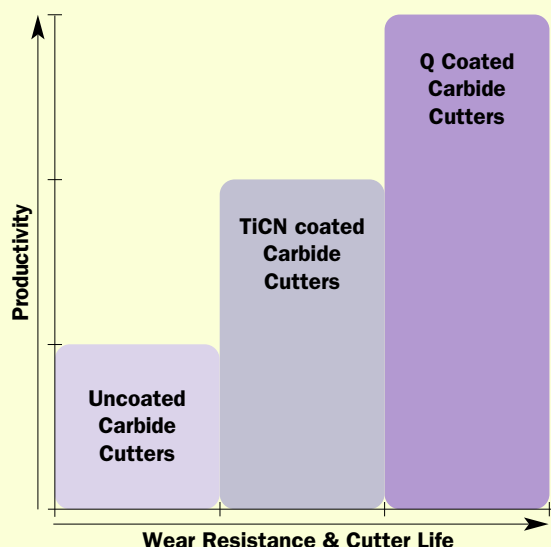


Series 62 Long Series Dimensions to DIN 844

Diameter (mm)	Flute Length	Overall Length	Shank Diameter	SDQ-2PL Carbide Q-Coat	
				Order Code SWT-165	Offer Price/1
3.00	12.0	50.0	6.0	-6203A	516.90
4.00	15.0	50.0	6.0	-6204A	516.90
5.00	20.0	60.0	6.0	-6205A	516.90
6.00	20.0	60.0	6.0	-6206A	508.50
8.00	25.0	70.0	8.0	-6208A	661.70
10.00	30.0	90.0	10.0	-6210A	979.70
12.00	30.0	90.0	12.0	-6212A	1322.00
16.00	50.0	110.0	16.0	-6216A	2506.80
20.00	55.0	110.0	20.0	-6220A	4156.30

A Step Beyond Carbide . . .

For Extreme Conditions - High Cutting Speeds



Carbide Plain Shank End Mills 4 Flute

Centre cutting.

To **Manufacturers Standards**.

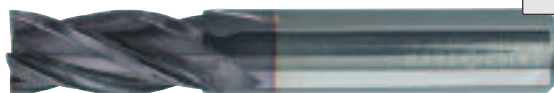
Cutting diameter to **h10**.

Shank diameter to **h6**.

EMQ-4PS/L Carbide Q-Coat.

CARBIDE

Q-Coat



Series 66 Short Series Dimensions to DIN 844

Diameter (mm)	Flute Length	Overall Length	Shank Diameter	EMQ-4PS Carbide Q-Coat	
				Order Code SWT-165	Offer Price/1
2.00	6.0	40.0	4.0	-6602A	381.00
3.00	8.0	45.0	6.0	-6603A	521.50
4.00	11.0	45.0	6.0	-6604A	521.50
5.00	13.0	50.0	6.0	-6605A	521.50
6.00	13.0	50.0	6.0	-6606A	521.50
7.00	16.0	60.0	8.0	-6607A	587.50
8.00	19.0	60.0	8.0	-6608A	667.70
9.00	19.0	70.0	10.0	-6609A	946.10
10.00	22.0	70.0	10.0	-6610A	987.90
11.00	22.0	75.0	12.0	-6611A	1185.90
12.00	26.0	75.0	12.0	-6612A	1355.00
14.00	26.0	85.0	14.0	-6614A	1932.20
16.00	32.0	100.0	16.0	-6616A	2248.50
18.00	32.0	100.0	18.0	-6618A	2554.20
20.00	38.0	105.0	20.0	-6620A	3727.00
25.00	45.0	120.0	25.0	-6625A	3949.60

Carbide Plain Shank End Mills 4 Flute

Centre cutting. To **Manufacturers Standards**.

Cutting diameter to **h10**. Shank diameter to **h6**.

EMQ-4PS/L Carbide Q-Coat.

CARBIDE

Q-Coat



Series 68 Long Series Dimensions to DIN 844

Diameter (mm)	Flute Length	Overall Length	Shank Diameter	EMQ-4PL Carbide Q-Coat	
				Order Code SWT-165	Offer Price/1
3.00	12.0	50.0	6.0	-6803A	625.40
4.00	15.0	50.0	6.0	-6804A	625.40
5.00	20.0	60.0	6.0	-6805A	625.40
6.00	20.0	60.0	6.0	-6806A	625.40
8.00	25.0	70.0	8.0	-6808A	800.90
10.00	30.0	90.0	10.0	-6810A	1184.90
12.00	30.0	90.0	12.0	-6812A	1627.30
16.00	50.0	110.0	16.0	-6816A	3036.30
20.00	55.0	110.0	20.0	-6820A	5573.50

SWISS+TECH**Carbide Plain Shank Slot Drills 2 Flute Ball Nose**

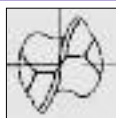
Centre cutting.
To **Manufacturers Standards**.
Cutting diameter to **e8**.
Shank diameter to **h6**.
Carbide Q-Coat.

CARBIDE**Q-Coat****Series 73 Long Reach**

Dia. (mm)	Shank Dia	Length of Cut	Length Below Shank	Overall Length	Neck Dia.	Carbide Q-Coat	
						Order Code SWT-165	Price/1 RND
0.60	4.0	0.9	6.0	35.0	0.55	-7302A	871.60
1.50	4.0	2.3	20.0	55.0	1.39	-7310A	688.10

Carbide Plain Shank Slot Drills 2 Flute Ball Nose

Centre cutting.
To **Manufacturers Standards**.
Cutting diameter to **h10**.
Shank diameter to **h6**.
Carbide Q-Coat.

CARBIDE**Q-Coat****Series 75 Regular Neck**

Dia. (mm)	Shank Dia.	Length of Cut	Length Below Shank	Overall Length	Neck Dia	Carbide Q-Coat	
						Order Code SWT-165	Price/1 RND
0.80	4.0	1.2	2.0	45.0	0.75	-7508A	487.30
1.00	4.0	1.5	3.0	45.0	0.97	-7510A	624.80
1.50	4.0	2.3	6.0	45.0	1.47	-7514A	624.80

Carbide Plain Shank Slot Drills Ball Nosed 2 Flute

Centre cutting.
To **Manufacturers Standards**.
Cutting diameter to **e8**.
Shank diameter to **h6**.
SBQ-2PR Carbide Q-Coat.

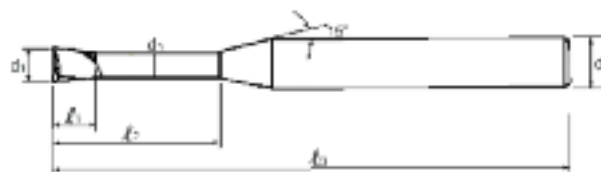
CARBIDE**Q-Coat****Series 78 Regular Length**

Diameter (mm)	Flute Length	Overall Length	Shank Diameter	SBQ-2PR Carbide Q-Coat	
				Order Code SWT-165	Price/1 RND
2.00	5.0	50.0	6.0	-7802A	497.10
2.50	6.0	60.0	6.0	-7802L	525.30
3.00	8.0	60.0	6.0	-7803A	497.10
4.00	8.0	70.0	6.0	-7804A	517.80
5.00	10.0	80.0	6.0	-7805A	537.00
6.00	12.0	90.0	6.0	-7806A	579.40
8.00	14.0	100.0	8.0	-7808A	906.70
10.00	18.0	100.0	10.0	-7810A	1446.40
12.00	22.0	110.0	12.0	-7812A	1846.30
16.00	30.0	140.0	16.0	-7816A	3068.80

Dia. (mm)	Shank Dia	Length of Cut	Length Below Shank	Overall Length	Neck Dia.	Carbide Q-Coat	
						Order Code SWT-165	Price/1 RND
2.00	4.0	3.0	16.0	50.0	1.91	-7318A	624.80
2.00	4.0	3.0	20.0	55.0	1.89	-7320A	666.60

Carbide Plain Shank Slot Drills 2 Flute

Centre cutting.
To **Manufacturers Standards**.
Cutting diameter to **h10**.
Shank diameter to **h6**.
Carbide Q-Coat.

CARBIDE**Q-Coat****Series 74 Long Reach**

Dia. (mm)	Shank Dia. (d2)	Length of Cut (L1)	Length Below Shank (L2)	Overall Length (L3)	Neck Dia. (d3)	Carbide Q-Coat	
						Order Code SWT-165	Price/1 RND
0.50	4.0	0.7	6.0	45.0	0.45	-7402A	581.60
0.60	4.0	0.9	4.0	45.0	0.55	-7404A	581.60
0.80	4.0	1.2	4.0	45.0	0.75	-7408A	362.80
1.00	4.0	1.5	8.0	45.0	0.95	-7412A	473.10
1.00	4.0	1.5	10.0	45.0	0.95	-7414A	473.10
1.20	4.0	1.8	12.0	45.0	1.13	-7416A	501.20
1.50	4.0	2.3	16.0	50.0	1.41	-7418A	528.30
2.00	4.0	3.0	14.0	50.0	1.93	-7420A	452.50
2.00	4.0	3.0	20.0	55.0	1.89	-7422A	487.80
2.50	4.0	3.7	20.0	60.0	2.40	-7424A	351.20
3.00	6.0	4.5	14.0	50.0	2.85	-7426A	687.90
3.00	6.0	4.5	25.0	65.0	2.85	-7428A	687.90

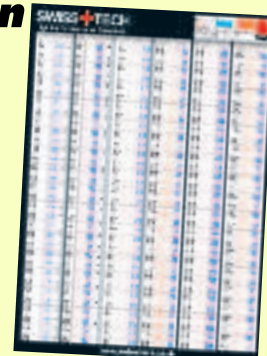
FREE**SWISS+TECH**

**Decimal Conversion
Wall Chart
(A2 Size)**

**AVAILABLE
ON REQUEST**

CAT-849-2189A

Contact your local
branch or
representative.



SWISS+TECH

**Carbide Plain Shank End
Mills Ball Nosed 4 Flute**

Centre cutting.
To **Manufacturers Standards**.
Cutting diameter to **e8**.
Shank diameter to **h6**.
EBQ-4PR Carbide Q-Coat.

CARBIDE Q-Coat



Series 80 - Regular Length Dimensions to **DIN 844**

EBQ-4PR Q-Coat					
Diameter (mm)	Flute Length	Overall Length	Shank Diameter	Order Code SWT-165	Price/1 RND
2.00	5.0	50.0	6.0	-8002A	654.00
3.00	8.0	60.0	6.0	-8003A	654.00
4.00	8.0	70.0	6.0	-8004A	675.60
5.00	10.0	80.0	6.0	-8005A	697.00
6.00	12.0	90.0	6.0	-8006A	739.30
8.00	14.0	100.0	8.0	-8008A	1089.00
10.00	18.0	100.0	10.0	-8010A	1676.20
12.00	22.0	110.0	12.0	-8012A	2107.80
16.00	30.0	140.0	16.0	-8016A	3465.40

**Carbide Plain Shank Corner Radius
Slot Drills 2 Flute**

Centre cutting.
To **Manufacturers Standards**.
Cutting diameter to **e8**.
Shank diameter to **h6**.
SCQ-2PR Carbide Q-Coat.

CARBIDE Q-Coat



Series 85 Regular Series Dimensions to **DIN 844**

SCQ-2PR Carbide Q-Coat					
Diameter x Corner Radius (mm)	Flute Length	Overall Length	Shank Diameter	Order Code SWT-165	Price/1 RND
6.00 x 0.5	20	60	6	-8504K	756.60
6.00 x 1.0	20	60	6	-8505K	756.60
8.00 x 0.5	25	70	8	-8506K	969.50
8.00 x 1.0	25	70	8	-8507K	969.50
8.00 x 1.5	25	70	8	-8508K	1057.60
8.00 x 2.0	25	70	8	-8509K	1057.60
10.00 x 0.5	30	90	10	-8510K	1433.70
10.00 x 1.0	30	90	10	-8511K	1433.70
10.00 x 1.5	30	90	10	-8512K	1565.60
10.00 x 2.0	30	90	10	-8513K	1565.60
12.00 x 1.0	30	90	12	-8515K	1967.20
12.00 x 1.5	30	90	12	-8516K	2145.70
12.00 x 2.0	30	90	12	-8517K	2145.70

**Carbide Plain Shank Corner Radius
End Mills 4 Flute**

Centre cutting.
To **Manufacturers Standards**.
Cutting diameter to **e8**. Shank diameter to **h6**.
ECQ-4PR Carbide Q-Coat.

CARBIDE Q-Coat



Series 86 Regular Length

ECQ-4PR Q-Coat					
Diameter x Corner Radius (mm)	Flute Length	Overall Length	Shank Diameter	Order Code SWT-165	Price/1 RND
6.00 x 0.5	20.0	60.0	6.0	-8604K	756.60
6.00 x 1.0	20.0	60.0	6.0	-8605K	756.60
8.00 x 0.5	25.0	70.0	8.0	-8606K	969.50
8.00 x 1.0	25.0	70.0	8.0	-8607K	969.50
8.00 x 1.5	25.0	70.0	8.0	-8608K	1057.60
8.00 x 2.0	25.0	70.0	8.0	-8609K	1057.60
10.00 x 0.5	30.0	90.0	10.0	-8610K	1433.70
10.00 x 1.0	30.0	90.0	10.0	-8611K	1433.70
10.00 x 1.5	30.0	90.0	10.0	-8612K	1565.60
10.00 x 2.0	30.0	90.0	10.0	-8613K	1565.60
12.00 x 0.5	30.0	90.0	12.0	-8614K	1967.20
12.00 x 1.0	30.0	90.0	12.0	-8615K	1967.20
12.00 x 1.5	30.0	90.0	12.0	-8616K	2145.70

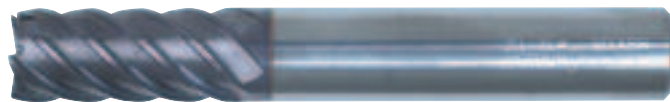
Carbide Plain Shank End Mills High Helix

Centre cutting.
To **Manufacturers Standards**.
Cutting diameter to **e8**.
Shank diameter to **h6**.
EHQ-6*PR Carbide Q-Coat.

CARBIDE Q-Coat



*Number varies according to the number of flutes.



Series 72 Regular Length

EHQ-6PR Carbide Q-Coat						
Diameter (mm)	Flute Length	Overall Length	Shank Diameter	No. of Flutes	Order Code SWT-165	Price/1 RND
3.00	8.0	57.0	6.0	4.0	-7203A	464.50
4.00	11.0	57.0	6.0	4.0	-7204A	442.50
6.00	13.0	57.0	6.0	6.0	-7206A	610.00
8.00	19.0	63.0	8.0	6.0	-7208A	772.90
10.00	22.0	72.0	10.0	6.0	-7210A	1157.10
12.00	26.0	83.0	12.0	6.0	-7212A	1574.00
16.00	32.0	92.0	16.0	6.0	-7216A	2646.90
20.00	38.0	104.0	20.0	8.0	-7220A	3885.70

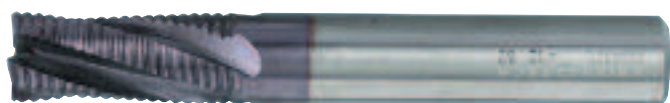
Carbide Plain Shank Ripper Fine Pitch

Centre cutting.
To **Manufacturers Standards**.
Cutting diameter to **e8**.
Shank diameter to **h6**.
RFQ-3*PR Carbide Q-Coat.

CARBIDE Q-Coat

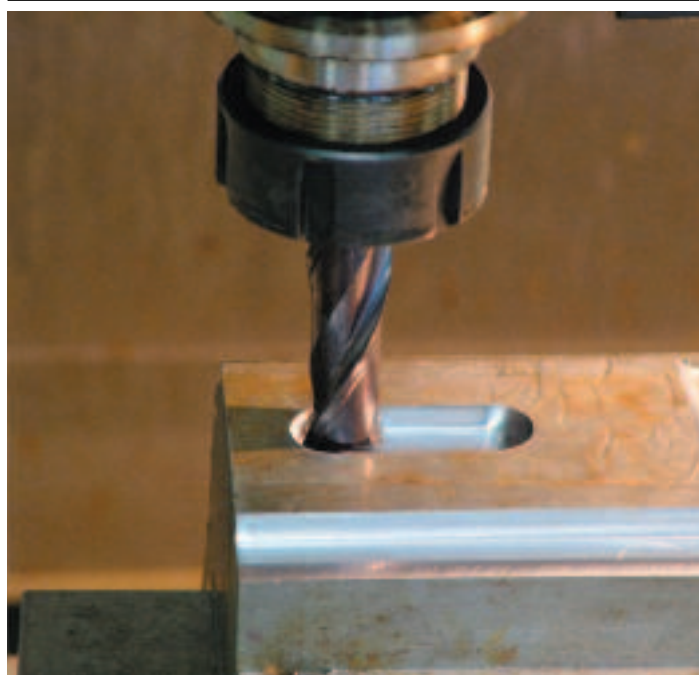


*Number varies according to the number of flutes.



Series 82 - Regular Length Dimensions to **DIN 844**

RFQ-3PR Q-Coat						
Diameter (mm)	Flute Length	Overall Length	Shank Diameter	Number of Flutes	Order Code SWT-165	Price/1 RND
6.00	16.0	57.0	6.0	3.0	-8206A	693.70
8.00	16.0	63.0	8.0	3.0	-8208A	811.60
10.00	22.0	72.0	10.0	4.0	-8210A	1212.30
12.00	26.0	83.0	12.0	4.0	-8212A	1556.90
16.00	32.0	92.0	16.0	4.0	-8216A	2535.20
20.00	38.0	104.0	20.0	4.0	-8220A	4082.00



**HSS-Co 5% KC3 3* Flute
Throwaway Milling Cutters****NEW**

Suitable for slot drilling and end milling. Cutters are held in adaptors/chucks by the action of a set screw which locates on the shank flat giving quick and easy cutter change.

*Except: 1mm cutters, 2mm and 1/16" ball nose cutters all of which have two flutes.

Diameter		Tolerances		Diameter		Tolerances	
Metric		+ -		Inch		+ -	
Over 1.00 ~ up to 3.00		0.013	0.033	Over 1/16" ~ up to 1/4"		0.0005	0.0013
Over 3.00 ~ up to 6.00		0.020	0.020				

Short Series**HSS-Co 5%**

Shank Diameter: 1.00 ~ 6.00 = 6.00mm, 7.00 ~ 10.00 = 10.00mm

Diameter (mm)	Flute Length	Overall Length	Chuck Clearance	Weight each	Order Code KEN-062	Price/1 RND
1.00	2.0	24.5	8.5	10g	-0010K	117.30
1.50	2.5	24.5	8.5	10g	-0020K	87.50
2.00	3.0	25.5	9.5	10g	-0040K	83.60
2.50	4.0	26.0	10.5	10g	-0060K	49.00
3.00	4.5	28.0	11.0	10g	-0080K	83.60
3.50	5.5	30.0	12.0	10g	-0100K	46.90
4.00	6.5	32.5	12.5	10g	-0120K	83.60
5.00	7.5	36.0	13.5	10g	-0160K	83.60
5.50	7.5	36.0	13.5	10g	-0190K	96.30
6.00	9.5	36.0	15.0	10g	-0200K	83.60
8.00	11.0	47.5	19.7	30g	-0240K	113.20
10.00	13.0	51.5	20.5	35g	-0280K	112.70

Shank Diameter: 1/4"

Diameter (inch)	Flute Length	Overall Length	Chuck Clearance	Weight each	Order Code KEN-062	Price/1 RND
1/16"	3/32"	31/32"	11/32"	10g	-0540K	55.70
3/32"	5/32"	1 1/16"	25/64"	10g	-0560K	49.00
1/8"	3/16"	1 3/32"	7/16"	10g	-0580K	48.60
3/16"	9/32"	1 11/32"	17/32"	10g	-0620K	46.90
1/4"	3/8"	1 13/32"	19/32"	15g	-0660K	48.60

Set Contents: short series 1, 2, 3, 4, 5 and 6mm, long series 2, 3, 4, 5 and 6mm.

Number of Pieces	Weight each	Order Code KEN-062	Price/1 RND
11	100g	-9000K	642.10

Long Series**HSS-Co 5%**

Diameter (mm)	Flute Length	Overall Length	Chuck Clearance	Weight each	Order Code KEN-062	Price/1 RND
1.50	4.0	28.0	10.0	10g	-1020K	61.50
2.00	4.5	29.0	11.0	10g	-1040K	52.30
2.50	6.5	32.0	12.5	10g	-1060K	52.30
3.00	7.5	34.0	14.5	10g	-1080K	52.30
3.50	8.5	36.5	15.0	10g	-1100K	52.30
4.00	9.5	39.0	16.0	10g	-1120K	52.80
4.50	11.0	42.0	17.5	10g	-1140K	52.30
5.00	12.5	44.5	17.5	10g	-1160K	52.30
5.50	14.5	46.0	19.0	10g	-1180K	52.30
6.00	16.0	44.5	20.5	10g	-1200K	52.30
8.00	19.0	55.5	27.9	30g	-1240K	90.50
10.00	22.5	61.5	31.6	40g	-1280K	89.70

Diameter (inch)	Flute Length	Overall Length	Chuck Clearance	Weight each	Order Code KEN-062	Price/1 RND
1/16"	5/32"	1 3/32"	13/32"	10g	-1540K	61.10
3/32"	1/4"	1 1/4"	1/2"	10g	-1560K	53.20
1/8"	5/16"	1 11/32"	9/16"	10g	-1580K	52.30
5/32"	3/8"	1 17/32"	5/8"	10g	-1600K	87.20
3/16"	7/16"	1 21/32"	11/16"	10g	-1620K	115.40
7/32"	1/2"	1 3/4"	11/16"	12g	-1640K	52.80
1/4"	5/8"	1 3/4"	13/16"	12g	-1660K	52.30

Ball Nose**HSS-Co 5%**

Diameter (mm)	Flute Length	Overall Length	Chuck Clearance	Weight each	Order Code KEN-062	Price/1 RND
2.00	3.0	31.5	11.0	10g	-2040K	59.80
3.00	7.5	34.0	14.5	10g	-2080K	68.10
4.00	9.5	39.0	16.0	10g	-2120K	68.10
5.00	12.5	44.5	17.5	11g	-2160K	71.00
6.00	16.0	44.5	20.5	11g	-2200K	60.60

**HSS-Co 5% TiN KC3 Coated
Throwaway Milling Cutters****NEW**

TiN-Coated to allow elevated cutting speeds and help to extend tool life.

HSS-Co 5%**TiN****Short Series**

Diameter (mm)	Flute Length	Overall Length	Chuck Clearance	Weight each	Order Code KEN-062	Price/1 RND
1.00	2.0	24.5	8.5	10g	-3010K	121.40
1.50	2.5	24.5	8.5	10g	-3020K	105.00
2.00	3.0	25.5	9.5	10g	-3040K	91.70
2.50	4.0	26.0	10.5	10g	-3060K	158.80
3.00	4.5	28.0	11.0	10g	-3080K	95.50
3.50	5.5	30.0	12.0	10g	-3100K	91.70
4.00	6.5	32.5	12.5	10g	-3120K	93.00
5.00	7.5	36.0	13.5	10g	-3160K	95.50
6.00	9.5	36.0	15.0	10g	-3200K	95.50

Long Series**HSS-Co 5%****TiN**

Diameter (mm)	Flute Length	Overall Length	Chuck Clearance	Weight each	Order Code KEN-062	Price/1 RND
1.50	4.0	28.0	10.0	10g	-4020K	110.00
2.00	4.5	29.0	11.0	10g	-4040K	94.90
2.50	6.5	32.0	12.5	10g	-4060K	100.60
3.00	7.5	34.0	14.5	10g	-4080K	100.60
3.50	8.5	36.5	15.0	10g	-4100K	94.20
4.00	9.5	39.0	16.0	10g	-4120K	94.90
4.50	11.0	42.0	17.5	10g	-4140K	284.00
5.00	12.5	44.5	17.5	10g	-4160K	99.30
5.50	14.5	46.0	19.0	10g	-4180K	135.40
6.00	16.0	44.5	20.5	10g	-4200K	100.60

HSS-Co 5% TiCN-Coated Throwaway Milling Cutters

With a micro hardness of 3000HV and a maximum working temperature of 400°C, giving them a better resistance to abrasive wear than TiN coated cutters.

HSS-Co 5%**TiCN****Short Series**

Diameter (mm)	Flute Length	Overall Length	Chuck Clearance	Weight each	Order Code KEN-062	Price/1 RND
1.00	2.0	24.5	8.5	10g	-5010K	115.80
1.50	2.5	24.5	8.5	10g	-5020K	102.40
2.00	3.0	25.5	9.5	10g	-5040K	89.80
2.50	4.0	26.0	10.5	10g	-5060K	329.40
3.00	4.5	28.0	11.0	10g	-5080K	95.50
3.50	5.5	30.0	12.0	10g	-5100K	329.40
4.00	6.5	32.5	12.5	10g	-5120K	95.50
5.00	7.5	36.0	13.5	10g	-5160K	95.50
6.00	9.5	36.0	15.0	10g	-5200K	95.50

Long Series**HSS-Co 5%****TiCN**

Diameter (mm)	Flute Length	Overall Length	Chuck Clearance	Weight each	Order Code KEN-062	Price/1 RND
1.50	4.0	28.0	10.0	10g	-6020K	340.10
2.00	4.5	29.0	11.0	10g	-6040K	96.80
2.50	6.5	32.0	12.5	10g	-6060K	96.80
3.00	7.5	34.0	14.5	10g	-6080K	96.80
3.50	8.5	36.5	15.0	10g	-6100K	100.60
4.00	9.5	39.0	16.0	10g	-6120K	100.60
4.50	11.0	42.0	17.5	10g	-6140K	100.60
5.00	12.5	44.5	17.5	10g	-6160K	100.60
5.50	14.5	46.0	19.0	10g	-6180K	100.60
6.00	16.0	44.5	20.5	10g	-6200K	100.60



**Straight Shank
Machine Reamers**

Left hand spiral flute, right hand cutting.
Manufactured to **BS 328-4**.

Diameter Metric	Tolerance	
	High +	Low -
up to 3.00	0.008	0.004
Over 3.00 ~ up to 6.00	0.010	0.005
Over 6.00 ~ up to 10.00	0.012	0.006
Over 10.00 ~ up to 18.00	0.015	0.008



HSS



Diameter (mm)	Flute Length	Overall Length	Weight each	Order Code SHR-065	Price/1 RND
1.50	21.0	44.0	3g	-2219X	449.50
2.00	25.0	50.0	3g	-2220A	360.90
2.50	29.0	58.0	3g	-2221B	346.10
3.00	31.0	62.0	3g	-2222C	277.50
3.50	33.0	66.0	4g	-2223D	257.60
4.00	38.0	76.0	5g	-2224E	217.30
4.50	41.0	81.0	6g	-2225F	247.00
5.00	44.0	87.0	8g	-2226G	229.90
5.50	47.0	93.0	12g	-2227H	271.90
6.00	47.0	93.0	18g	-2228J	271.90

Diameter (mm)	Flute Length	Overall Length	Weight each	Order Code SHR-065	Price/1 RND
7.00	54.0	107.0	17g	-2229K	302.10
8.00	58.0	115.0	20g	-2230L	305.30
9.00	62.0	124.0	31g	-2231M	384.30
10.00	66.0	133.0	55g	-2232N	331.10
11.00	71.0	142.0	69g	-2232R	466.10
12.00	76.0	152.0	87g	-2233P	387.00
13.00	78.0	152.0	97g	-2234Q	633.50
14.00	81.0	163.0	184g	-2235R	583.60
16.00	87.0	175.0	235g	-2236S	612.80

Cobalt Straight Shank Chucking Reamers

Manufactured to **DIN 212**.

Diameter Metric	Tolerances (to H7)	
	Tolerance +	Tolerance -
up to 5.50	0.004	0.000
Over 5.50	0.005	0.000

HSS-E



Diameter (mm)	Flute Length	Overall Length	Weight each	Order Code SHR-065	Price/1 RND
2.00	11.0	49.0	3g	-2655K	423.20
2.50	14.0	57.0	4g	-2657M	373.90
3.00	15.0	61.0	5g	-2659P	324.60
3.50	18.0	70.0	8g	-2661R	232.50
4.00	19.0	75.0	9g	-2662S	279.00
4.50	21.0	80.0	12g	-2663T	266.90
5.00	23.0	86.0	14g	-2664V	293.80
5.50	26.0	93.0	21g	-2665G	332.50
6.00	26.0	93.0	25g	-2665W	348.00
7.00	31.0	109.0	31g	-2666X	349.40
8.00	33.0	117.0	41g	-2667Y	391.40

Diameter (mm)	Flute Length	Overall Length	Weight each	Order Code SHR-065	Price/1 RND
9.00	36.0	125.0	56g	-2668Z	412.50
10.00	38.0	133.0	73g	-2669A	427.30
11.00	41.0	142.0	84g	-2670B	548.40
12.00	44.0	151.0	90g	-2671C	545.80
13.00	44.0	151.0	96g	-2672D	575.60
14.00	47.0	160.0	101g	-2673E	691.40
15.00	50.0	162.0	111g	-2674F	741.50
16.00	52.0	170.0	117g	-2675G	730.20
18.00	56.0	182.0	227g	-2677J	876.40
20.00	60.0	195.0	450g	-2679L	964.70

**Straight Shank
Parallel Hand Reamers**

Used to produce a close tolerance surface finish by hand in almost any environment i.e. on site or in a workshop.

Manufactured to **BS 328-4** and **DIN 206B**.

Diameter Metric	Tolerance	
	+	-
up to 3.00	0.008	0.007
Over 3.00 ~ up to 6.00	0.010	0.005
Over 6.00 ~ up to 10.00	0.012	0.006
Over 10.00 ~ up to 18.00	0.015	0.008
Over 18.00 ~ up to 30.00	0.017	0.009
Over 30.00 ~ up to 50.00	0.021	0.012

HSS



Diameter (mm)	Flute Length	Overall Length	Weight each	Order Code SHR-065	Price/1 RND
1.50	20.0	41.0	2g	-2100A	153.70
2.00	25.0	50.0	3g	-2103D	127.60
2.50	29.0	58.0	4g	-2105F	114.60
3.00	31.0	62.0	5g	-2107H	103.00
3.50	35.0	71.0	6g	-2109K	111.30
4.00	38.0	76.0	7g	-2110L	111.60
4.50	41.0	81.0	8g	-2111M	119.50
5.00	44.0	87.0	10g	-2112N	117.40
5.50	47.0	93.0	13g	-2113P	155.50
6.00	47.0	93.0	19g	-2114Q	151.40
6.50	50.0	100.0	23g	-2115R	165.60
7.00	54.0	107.0	26g	-2116S	167.00
7.50	54.0	107.0	30g	-2117T	172.20
8.00	58.0	115.0	38g	-2118V	164.40
8.50	58.0	115.0	43g	-2119W	183.80
9.00	62.0	124.0	56g	-2120X	185.40
9.50	62.0	124.0	59g	-2121Y	207.80
10.00	66.0	133.0	69g	-2122Z	198.50
10.50	66.0	133.0	78g	-2124A	239.70
11.00	71.0	142.0	91g	-2125B	241.00
11.50	71.0	142.0	100g	-2126C	263.20

Diameter (mm)	Flute Length	Overall Length	Weight each	Order Code SHR-065	Price/1 RND
12.00	76.0	152.0	114g	-2127D	256.00
12.50	76.0	152.0	121g	-2128E	296.30
13.00	76.0	152.0	133g	-2129F	296.30
13.50	81.0	163.0	163g	-2130G	311.70
14.00	81.0	163.0	163g	-2131H	311.70
14.50	90.0	162.0	190g	-2132J	513.00
15.00	81.0	163.0	187g	-2133K	366.80
15.50	87.0	175.0	212g	-2133Y	328.20
16.00	87.0	175.0	237g	-2134L	418.70
16.50	87.0	175.0	253g	-2134Z	374.60
17.00	87.0	175.0	269g	-2135M	426.60
17.50	93.0	188.0	294g	-2136A	381.70
18.00	93.0	188.0	319g	-2136N	448.00
19.00	93.0	188.0	336g	-2137P	483.80
20.00	100.0	201.0	348g	-2138Q	495.70
22.00	107.0	215.0	500g	-2140S	564.50
24.00	115.0	231.0	729g	-2142V	705.20
25.00	115.0	231.0	785g	-2143W	739.30
30.00	124.0	247.0	1200g	-2148B	949.70
40.00	152.0	305.0	2500g	-2158M	1569.40



Taper Shank Machine Reamers

Used to produce a close tolerance surface finish by enlarging pre-drilled holes to a finished size. 45° bevelled lead.
Manufactured to **BS 328-4**.

REAMERS - TAPER SHANK

GROUP
065



HSS

CUTTING TOOLS

Tolerances (to H7)			
Diameter Metric	Tolerance		
	+	-	
up to 3.00	0.008	0.004	
Over 3.00 ~ up to 6.00	0.010	0.005	
Over 6.00 ~ up to 10.00	0.012	0.006	
Over 10.00 ~ up to 18.00	0.015	0.008	
Over 18.00 ~ up to 30.00	0.017	0.009	
Over 30.00 ~ up to 50.00	0.021	0.012	
Over 50.00 ~ up to 80.00	0.025	0.014	
Over 80.00 ~ up to 120.00	0.029	0.016	



Diameter (mm)	Flute Length	Overall Length	Morse Taper	Weight each	Order Code SHR-065	Price/1 RND
3.00	33.0	112.0	1	52g	-2350A	186.80
3.50	35.0	115.0	1	52g	-2351B	356.20
4.00	38.0	117.0	1	52g	-2352C	185.10
4.50	41.0	120.0	1	55g	-2353D	199.10
5.00	44.0	124.0	1	56g	-2354E	194.90
5.50	47.0	127.0	1	56g	-2355F	208.60
6.00	47.0	127.0	1	58g	-2356G	203.10
6.50	50.0	130.0	1	59g	-2357H	215.80
7.00	54.0	134.0	1	64g	-2358J	194.70
7.50	54.0	134.0	1	66g	-2359K	201.70
8.00	58.0	138.0	1	67g	-2360L	190.80
8.50	58.0	138.0	1	70g	-2361M	196.50
9.00	62.0	142.0	1	72g	-2362N	196.50
9.50	62.0	142.0	1	76g	-2363P	201.70
10.00	66.0	144.0	1	79g	-2364Q	192.40
10.50	66.0	144.0	1	81g	-2365R	225.50
11.00	71.0	151.0	1	88g	-2366S	219.50
11.50	71.0	151.0	1	96g	-2367T	232.30
12.00	76.0	156.0	1	108g	-2368V	222.60
12.50	76.0	156.0	1	111g	-2369W	235.10
13.00	76.0	156.0	1	122g	-2370X	237.20
13.50	81.0	161.0	1	130g	-2371Y	307.40
14.00	81.0	163.0	1	126g	-2372Z	293.40
14.50	81.0	181.0	2	200g	-2374A	324.50
15.00	81.0	181.0	2	230g	-2375B	327.70
15.50	87.0	187.0	2	245g	-2376C	293.20
16.00	87.0	187.0	2	262g	-2377D	331.00
16.50	87.0	187.0	2	270g	-2378E	357.50

Diameter (mm)	Flute Length	Overall Length	Morse Taper	Weight each	Order Code SHR-065	Price/1 RND
17.00	87.0	187.0	2	273g	-2379F	357.50
17.50	93.0	193.0	2	292g	-2379R	398.40
18.00	93.0	193.0	2	305g	-2380G	380.10
18.50	93.0	193.0	2	317g	-2380S	422.80
19.00	93.0	193.0	2	323g	-2381H	403.30
19.50	100.0	200.0	2	324g	-2381T	427.90
20.00	100.0	200.0	2	350g	-2382J	423.60
21.00	100.0	200.0	2	365g	-2383K	468.80
21.50	107.0	207.0	2	392g	-2383W	419.50
22.00	107.0	207.0	2	419g	-2384L	512.00
23.00	107.0	207.0	2	467g	-2385M	535.50
23.50	107.0	207.0	2	577g	-2385Y	479.10
24.00	115.0	242.0	3	686g	-2386N	618.00
25.00	115.0	242.0	3	740g	-2387P	716.40
26.00	115.0	242.0	3	747g	-2388Q	740.30
27.00	124.0	251.0	3	901g	-2389R	835.80
28.00	124.0	251.0	3	884g	-2390S	866.40
30.00	124.0	251.0	3	990g	-2392V	971.00
32.00	133.0	293.0	4	1510g	-2394X	1205.40
33.00	133.0	293.0	4	1615g	-2395Y	1807.20
34.00	142.0	302.0	4	1726g	-2396Z	1446.70
35.00	142.0	302.0	4	1751g	-2398A	1473.10
38.00	152.0	312.0	4	2039g	-2401D	2552.70
39.00	170.0	320.0	4	2200g	-2402E	2588.70
40.00	152.0	312.0	4	2250g	-2403F	1848.20
45.00	163.0	323.0	4	2900g	-2408L	3598.50
50.00	174.0	334.0	4	3630g	-2413R	3057.30

Taper Shank Extra Length Machine Reamers

Used to produce a close tolerance surface finish in drilled holes to allow the fitting of hardened and ground taper pins in the building of jigs, fixtures and dies.
Manufactured to **BS 328-4**.

HSS



Diameter (mm)	Flute Length	Overall Length	Morse Taper	Weight each	Order Code SHR-064	Price/1 RND
6.00	124.0	203.0	1	80g	-2500A	1249.70
8.00	124.0	203.0	1	103g	-2502C	1165.50
10.00	124.0	203.0	1	114g	-2504E	1974.60
10.00	175.0	254.0	1	129g	-2505F	2440.10
12.00	124.0	203.0	1	132g	-2507H	2060.60

Diameter (mm)	Flute Length	Overall Length	Morse Taper	Weight each	Order Code SHR-064	Price/1 RND
12.00	175.0	254.0	1	188g	-2508J	2543.30
12.00	225.0	305.0	1	228g	-2509K	2764.70
16.00	154.0	254.0	2	361g	-2510L	2086.40
16.00	205.0	305.0	2	411g	-2511M	2229.90

Straight Shank Hand Taper Pin Reamers

Used to produce a close tolerance surface finish in taper holes to allow the fitting of hardened and ground taper pins in the building of jigs, fixtures and dies.
Manufactured to **BS 328-4** and **DIN 9A**.

HSS

Tolerances		
Diameter Metric	Tolerance	
	+	-
Over 1.50 ~ up to 5.00	0.075	0.000
Over 5.00 ~ up to 20.00	0.125	0.000



Diameter (mm)	Dia. Range min max	Flute Length	Overall Length	Weight each	Order Code SHR-065	Price/1 RND
1.50	1.4 2.40	37	57	4g	-2800A	444.70
2.00	1.9 2.86	48	68	4g	-2801B	392.40
2.50	2.4 3.36	48	68	5g	-2802C	392.40
3.00	2.9 4.06	58	80	7g	-2803D	340.10
4.00	3.9 5.26	38	93	9g	-2804E	366.30
5.00	4.9 6.36	73	100	48g	-2805F	392.40
6.00	5.9 8.00	105	135	38g	-2806G	444.70

Diameter (mm)	Dia. Range min max	Flute Length	Overall Length	Weight each	Order Code SHR-065	Price/1 RND
8.00	7.9 10.80	145	180	39g	-2807H	601.60
10.00	9.9 13.40	175	215	89g	-2808J	824.00
12.00	11.8 16.00	210	255	145g	-2809K	967.80
13.00	12.8 16.74	210	255	295g	-2810L	1177.10
14.00	13.8 17.74	210	255	355g	-2811M	1687.10
16.00	15.8 20.40	230	280	475g	-2812N	1935.60
20.00	19.8 24.80	250	310	814g	-2813P	3008.10

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR

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High speed steel slitting saws are hollow ground to give the clearance necessary for deep cutting.
Available in coarse and fine teeth, number of teeth specified below.
Supplied with keyways as standard.
Manufactured to **BS122**.



Metric

Diameter (mm)	Thickness	Bore	Teeth	Order Code SHR-072	Price/1 RND
25.00	0.50	8.0	64	-6025A	134.40
25.00	1.00	8.0	48	-6028D	29.90
25.00	1.60	8.0	40	-6030F	184.50
32.00	0.60	8.0	64	-6045Y	18.90
40.00	1.00	10.0	64	-6067X	187.90
40.00	1.60	10.0	64	-6069Z	209.70
50.00	2.00	13.0	64	-6098E	230.60
63.00	0.40	16.0	128	-6112V	190.70
63.00	1.00	16.0	100	-6121D	195.40
80.00	1.00	22.0	100	-6149K	230.60
80.00	2.00	22.0	80	-6155R	259.90
80.00	3.00	22.0	80	-6159W	290.50
100.00	1.00	22.0	128	-6176N	308.60

Inch

Diameter (Inch)	Thickness	Bore	Teeth	Order Code SHR-072	Price/1 RND
2 1/2"	1/64"	1"	62	-5008Z	173.00
2 1/2"	3/64"	1"	62	-5011G	186.60
2 1/2"	1/16"	1"	62	-5012H	60.20
2 1/2"	3/32"	1"	26	-5014E	79.30
3"	1/64"	1"	74	-5020G	194.70
3"	1/32"	1"	30	-5020L	208.20
3"	1/32"	1"	74	-5020Q	208.20
3"	3/64"	1"	74	-5021R	243.60
3"	1/16"	1"	30	-5022N	266.60
3"	1/16"	1"	74	-5022S	266.60
3"	5/64"	1"	30	-5023P	280.80
3"	5/64"	1"	74	-5023T	280.80
3"	3/32"	1"	74	-5024V	127.10
3"	1/8"	1"	30	-5026S	447.00
3"	1/8"	1"	74	-5026W	151.50
4"	1/64"	1"	100	-5034X	170.20
4"	1/32"	1"	36	-5035B	191.80
4"	1/32"	1"	100	-5035L	361.50
4"	3/64"	1"	100	-5036M	149.50
4"	1/16"	1"	36	-5037D	160.70
4"	1/16"	1"	100	-5037N	166.10
4"	5/64"	1"	36	-5038E	431.90
4"	5/64"	1"	100	-5038P	431.90
4"	3/32"	1"	100	-5039Q	431.90
4"	1/8"	1"	36	-5041H	319.20
4"	1/8"	1"	100	-5041S	258.60
4"	5/32"	1"	100	-5042T	263.60
5"	1/32"	1"	124	-5049A	420.40
5"	3/64"	1"	124	-5050B	441.40
5"	1/16"	1"	40	-5050S	491.00
5"	1/16"	1"	124	-5051C	227.10
5"	3/32"	1"	40	-5052V	594.70
5"	1/8"	1"	124	-5054F	753.50
6"	3/64"	1"	150	-5058M	632.80
6"	1/16"	1"	44	-5059B	663.90
6"	1/16"	1"	150	-5059N	377.30
6"	3/32"	1"	150	-5061K	405.50
6"	1/8"	1"	44	-5062E	657.90
6"	1/8"	1"	150	-5062R	470.70

Recommended for simple, low cost removal of broken screws, bolts etc, without damaging the threads of the component.



Extractor Number	Inch diameter for removing screws sized	Weight each	Order Code KEN-075	Price/1 RND
1	3/32 to 5/32	40g	-1010K	22.20
2	5/32 to 7/32	80g	-1020K	22.70
3	7/32 to 9/32	160g	-1030K	27.30
4	9/32 to 3/8	40g	-1040K	28.50
5	3/8 to 5/8	70g	-1050K	36.00
6	5/8 to 7/8	130g	-1060K	79.00
7	7/8 to 1 1/8	210g	-1070K	126.70
8	1 1/8 to 1 3/8	410g	-1080K	204.70
9	1 3/8 & above	690g	-1090K	302.90

Screw Extractor Sets

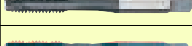
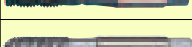
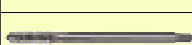
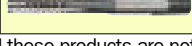
4 Piece Sizes: No. 2, 3, 4 and 5.

6 Piece Sizes: No. 1, 2, 3, 4, 5 and 6.



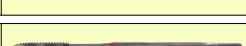
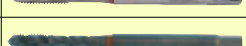
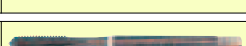
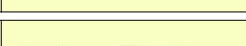
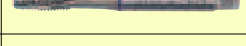
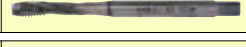
Number of Pieces	Weight each	Order Code KEN-075	Price/1 RND
4	130g	-1140K	111.70
6	250g	-1160K	215.30

HSS Hand Taps

ISO 529	SHERWOOD		METRIC COARSE	METRIC FINE	UNC	UNF	BSW	BSF	BA	BSP	BSPT	NPT NPTF	NPS NPSF
HSS Ground Thread For Hand & General Use	Taper-Second Plug		Page 110	Page 112	Page 114	Page 116	Page 117	Page 118	Page 119	Page 120	Page 121	Page 122	Page 122
	Sets of Three		Page 110	Page 112	Page 114	Page 116	Page 117	Page 118	Page 119	Page 120	Page 121	*	*
	Spiral Point/ Gun Nose		Page 111	Page 113	Page 115	Page 116	Page 117	Page 118	Page 119	Page 120	*	*	*
	Spiral Flute		Page 111	Page 113	Page 115	Page 116	Page 117	Page 118	Page 119	Page 120	*	*	*
	Fluteless		Page 111	*	Page 115	*	*	*	*	*	*	*	*
	Long Series		Page 111	*	*	*	*	*	*	*	*	*	*
	Dies		Page 110	Page 112	Page 114	Page 116	Page 117	Page 185	Page 119	Page 120	Page 121	Page 112	Page 112
	Die Nuts		Page 110	Page 112	Page 114	Page 116	Page 117	Page 185	*	Page 120	Page 121	Page 112	Page 112
	Left Hand Taps & Dies		Page 111	*	*	*	*	*	*	*	*	*	*

*Where indicated these products are not shown in this catalogue but can be supplied on request. Please contact your local branch for more information.

Production Taps

DIN 371/6	SWISS+TECH		METRIC COARSE	BSP
BLACK RING MULTI APPLICATION	Spiral Point For Through Holes		Page 124	-
	Spiral Flute For Blind Holes		Page 124	-
YELLOW RING FOR STEELS	Spiral Point For Through Holes		Page 125	Page 125
	Spiral Flute For Blind Holes		Page 125	Page 125
BLUE RING FOR STAINLESS	Spiral Point For Through Holes		Page 126	-
	Spiral Flute - BLF For Shorter Blind Holes		Page 126	-
	Spiral Flute - BLT For Deeper Blind Holes		Page 126	-
RED RING FOR ALLOY STEELS	Spiral Point For Through Holes		Page 125	-
	Spiral Flute For Blind Holes		Page 125	-
WHITE RING FOR CAST IRON	Straight Flute For Through Holes		Page 126	-
	Straight Flute For Blind Holes		Page 126	-
PURPLE RING FOR TITANIUM ALLOYS	Left Hand Spiral Flute For Through Holes		Page 127	-
	Spiral Flute For Blind Holes		Page 127	-
ORANGE RING FOR HI-TEMP ALLOYS	Spiral Point For Through Holes		Page 127	-
	Spiral Flute For Blind Holes		Page 127	-
GREEN RING FOR ALUMINIUM ALLOYS	Spiral Point For Through Holes		Page 128	-
	Spiral Flute For Blind Holes		Page 128	-
FOR BRASS/ALUMINIUM	Fluteless For Through & Blind Holes		Page 128	-



PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR


**Metric Coarse HSS
Ground Thread Taps**

Straight Flute Individual Sizes
ISO 529



(1) Diameter and pitch not mentioned in ISO.

Size - Pitch (mm)	Thread Length	Overall Length	Shank Diameter	Weight each	Taper	Second	Plug	Price/1 RND
					Order Code SHR-085	Order Code SHR-085	Order Code SHR-085	
M1.0 x 0.25	5.5	38.5	2.50	3g	-0100A	-0100B	-0100C	715.40
M1.4 x 0.30	7.0	40.0	2.50	3g	-0120A	-0120B	-0120C	280.80
M1.6 x 0.35	8.0	41.0	2.50	3g	-0130A	-0130B	-0130C	659.50
M2.0 x 0.40	8.0	41.0	2.50	3g	-0160A	-0160B	-0160C	117.40
M2.2 x 0.45	9.5	44.5	2.80	4g	-0180A	-0180B	-0180C	83.30
M2.5 x 0.45	9.5	44.5	2.80	4g	-0200A	-0200B	-0200C	73.60
M3.0 x 0.50	11.0	48.0	3.15	4g	-0230A	-0230B	-0230C	73.60
M3.0 x 0.60 ⁽¹⁾	14.5	48.0	3.15	4g	-0240A	-0240B	-0240C	73.60
M3.5 x 0.60	13.0	50.0	3.55	4g	-0260A	-0260B	-0260C	81.70
M4.0 x 0.70	13.0	53.0	4.00	6g	-0280A	-0280B	-0280C	54.50
M4.0 x 0.75 ⁽¹⁾	17.0	53.0	4.00	6g	-0290A	-0290B	-0290C	54.50
M4.5 x 0.75	12.0	53.0	4.50	6g	-0310A	-0310B	-0310C	57.30
M5.0 x 0.80	12.0	58.0	5.00	8g	-0330A	-0330B	-0330C	57.30
M5.0 x 0.90 ⁽¹⁾	12.0	58.0	5.00	6g	-0340A	-0340B	-0340C	57.30
M6.0 x 1.00	19.0	66.0	6.30	14g	-0370A	-0370B	-0370C	61.50
M7.0 x 1.00	17.0	66.0	7.10	21g	-0390A	-0390B	-0390C	87.10
M8.0 x 1.25	22.0	72.0	8.00	23g	-0410A	-0410B	-0410C	74.70
M9.0 x 1.25	22.0	72.0	9.00	32g	-0420A	-0420B	-0420C	134.50
M10.0 x 1.50	24.0	80.0	10.00	39g	-0450A	-0450B	-0450C	101.80
M11.0 x 1.50	20.0	85.0	8.00	41g	-0460A	-0460B	-0460C	164.80
M12.0 x 1.75	23.0	89.0	9.00	48g	-0480A	-0480B	-0480C	164.80
M14.0 x 2.00	25.0	95.0	11.20	76g	-0510A	-0510B	-0510C	185.00
M16.0 x 2.00	25.0	102.0	12.50	100g	-0530A	-0530B	-0530C	210.70
M18.0 x 2.50	30.0	112.0	14.00	133g	-0550A	-0550B	-0550C	260.00
M20.0 x 2.50	30.0	112.0	14.00	144g	-0570A	-0570B	-0570C	298.00
M22.0 x 2.50	30.0	118.0	16.00	194g	-0590A	-0590B	-0590C	377.90
M24.0 x 3.00	36.0	130.0	18.00	260g	-0610A	-0610B	-0610C	450.40
M27.0 x 3.00	36.0	135.0	20.00	256g	-0640A	-0640B	-0640C	671.60
M30.0 x 3.50	42.0	138.0	20.00	380g	-0660A	-0660B	-0660C	775.00
M33.0 x 3.50	42.0	151.0	22.40	512g	-0680A	-0680B	-	775.00
M36.0 x 4.00	48.0	162.0	25.00	646g	-0690A	-0690B	-0690C	1097.60
M39.0 x 4.00	48.0	170.0	28.00	700g	-0700A	-0700B	-0700C	881.30
M42.0 x 4.50	54.0	170.0	28.00	915g	-0710A	-0710B	-0710C	4254.00
M48.0 x 4.50	60.0	187.0	31.50	1340g	-	-0730B	-0730C	1532.30

Metric Coarse HSS Ground Thread Dies

BS 1127

For use in diestocks to produce external
screw threads.



Size - Pitch (mm)	Outside Diameter	Thickness	Weight each	Order Code SHR-086	Price/1 RND
M1.6 x 0.35	13/16"	1/4"	17g	-0090K	462.40
M2.0 x 0.40	13/16"	1/4"	13g	-0110K	201.10
M2.5 x 0.45	13/16"	1/4"	12g	-0130K	201.10
M3.0 x 0.50	13/16"	1/4"	14g	-0140K	201.10
M3.5 x 0.60	13/16"	1/4"	13g	-0150K	201.10
M4.0 x 0.70	13/16"	1/4"	13g	-0160K	201.10
M4.0 x 0.70	1"	3/8"	25g	-0410K	248.60
M5.0 x 0.80	1"	3/8"	24g	-0430K	263.60
M5.0 x 0.80	13/16"	1/4"	12g	-0180K	201.10
M6.0 x 1.00	13/16"	1/4"	12g	-0200K	201.10
M6.0 x 1.00	1"	3/8"	27g	-0440K	209.70
M6.0 x 1.00	15/16"	7/16"	54g	-0590K	371.90
M7.0 x 1.00	13/16"	1/4"	11g	-0210K	219.10
M8.0 x 1.25	1"	3/8"	27g	-0460K	209.70
M8.0 x 1.25	15/16"	7/16"	62g	-0610K	281.20
M8.0 x 1.25	1 1/2"	1 1/2"	85g	-0790K	156.10
M9.0 x 1.25	1"	3/8"	26g	-0470K	262.30
M9.0 x 1.25	15/16"	3/8"	26g	-0620K	58.50
M10.0 x 1.50	1"	3/8"	26g	-0480K	254.60
M10.0 x 1.50	15/16"	7/16"	51g	-0630K	281.20
M10.0 x 1.50	1 1/2"	1 1/2"	85g	-0810K	456.50
M11.0 x 1.50	15/16"	7/16"	54g	-0640K	337.40
M12.0 x 1.75	15/16"	7/16"	54g	-0650K	281.20
M12.0 x 1.75	1 1/2"	1 1/2"	78g	-0830K	337.90
M12.0 x 1.75	2"	5/8"	156g	-1020K	624.40
M14.0 x 2.00	15/16"	7/16"	50g	-0660K	371.90
M14.0 x 2.00	1 1/2"	1 1/2"	73g	-0840K	502.00
M14.0 x 2.00	2"	5/8"	167g	-1030K	688.20
M16.0 x 2.00	1 1/2"	1 1/2"	72g	-0850K	337.90
M16.0 x 2.00	2"	5/8"	167g	-1040K	523.70
M18.0 x 2.50	1 1/2"	1 1/2"	96g	-0860K	453.10
M18.0 x 2.50	2"	5/8"	160g	-1050K	577.00
M20.0 x 2.50	1 1/2"	1 1/2"	66g	-0870K	453.10
M20.0 x 2.50	2"	5/8"	160g	-1060K	523.70
M22.0 x 2.50	2"	5/8"	157g	-1070K	523.70
M24.0 x 3.00	2"	5/8"	152g	-1080K	523.70
M27.0 x 3.00	2"	5/8"	180g	-1090K	161.50
M30.0 x 3.50	3"	7/8"	471g	-1220K	1149.10
M36.0 x 4.00	3"	7/8"	-	-1240K	919.20

Metric Coarse HSS Ground Thread Die Nuts

BS 1127

For use with spanners to clean
and repair existing external
screw threads.

METRIC COARSE HSS



Size - Pitch (mm)	Outside Diameter	Thickness	Weight each	Order Code SHR-086	Price/1 RND
M3.0 x 0.50	0.71"	1/4"	11g	-1310K	254.60
M4.0 x 0.70	0.71"	1/4"	10g	-1330K	254.60
M5.0 x 0.80	0.71"	1/4"	11g	-1350K	254.60
M6.0 x 1.00	0.71"	1/4"	10g	-1360K	254.60
M7.0 x 1.00	0.82"	5/16"	16g	-1440K	650.20
M8.0 x 1.25	0.82"	5/16"	16g	-1450K	273.70
M9.0 x 1.25	0.92"	3/8"	25g	-1490K	812.20
M10.0 x 1.50	0.92"	3/8"	24g	-1500K	333.70
M11.0 x 1.50	1.01"	7/16"	-	-1540K	453.20
M12.0 x 1.75	1.10"	1/2"	36g	-1570K	430.60
M14.0 x 2.00	1.30"	5/8"	45g	-1600K	430.60
M16.0 x 2.00	1.30"	5/8"	48g	-1610K	602.40
M18.0 x 2.50	1.48"	1 1/16"	106g	-1640K	602.40
M20.0 x 2.50	1.48"	1 1/16"	140g	-1650K	602.40
M22.0 x 2.50	1.67"	13/16"	147g	-1690K	275.90
M24.0 x 3.00	2.05"	15/16"	274g	-1720K	955.20
M30.0 x 3.50	2.22"	1 1/16"	330g	-1760K	1543.00
M36.0 x 4.00	2.76"	1 1/4"	489g	-1790K	2113.70



Metric Coarse HSS Ground Thread Taps



Spiral Point/Gun Nose



METRIC COARSE HSS



Size - Pitch (mm)	Shank Dia.	A/F Square	Weight Each	Order Code SHR-085	Price/1 RND
M1.6 x 0.35	2.50	2.00	9g	-0130E	870.30
M2.0 x 0.40	2.50	2.00	9g	-0160E	117.40
M2.5 x 0.45	2.80	2.24	9g	-0200E	73.60
M3.0 x 0.50	3.15	2.50	12g	-0230E	73.60
M3.5 x 0.60	3.55	2.80	12g	-0260E	81.70
M4.0 x 0.70	4.00	3.15	18g	-0280E	54.50
M4.5 x 0.75	4.50	3.55	18g	-0310E	57.30
M5.0 x 0.80	5.00	4.00	18g	-0330E	57.30
M6.0 x 1.00	6.30	5.00	45g	-0370E	61.50
M7.0 x 1.00	7.10	5.60	54g	-0390E	87.10
M8.0 x 1.25	8.00	6.30	72g	-0410E	74.70
M10.0 x 1.50	10.00	8.00	120g	-0450E	101.80
M12.0 x 1.75	9.00	7.10	149g	-0480E	164.80
M14.0 x 2.00	11.20	9.00	233g	-0510E	185.00
M16.0 x 2.00	12.50	10.00	307g	-0530E	210.70
M18.0 x 2.50	14.00	11.20	427g	-0550E	260.00
M20.0 x 2.50	14.00	11.20	459g	-0570E	298.00
M22.0 x 2.50	16.00	12.50	599g	-0590E	377.90
M24.0 x 3.00	18.00	14.00	826g	-0610E	450.40

Straight Flute Long Series

Also Available in UNC/F and BSW/F Thread Forms

METRIC COARSE HSS



Size - Pitch (mm)	Thread Length	Overall Length	Shank Diameter	Weight Each	Taper		Second		Plug	
					Order Code	Price/1 RND	Order Code	Price/1 RND	Order Code	Price/1 RND
M3.0 x 0.50	11	66	2.24	5g	SHR-085		SHR-085		SHR-085	
M3.0 x 0.50	11	66	2.24	5g	-0230G	73.60	-0230H	73.60	-0230J	73.60
M4.0 x 0.70	13	73	3.15	9g	-0280G	54.50	-0280H	54.50	-0280J	54.50
M5.0 x 0.80	16	79	4.00	13g	-0330G	57.30	-0330H	57.30	-0330J	57.30
M6.0 x 1.00	19	89	4.50	16g	-0370G	61.50	-0370H	61.50	-0370J	61.50
M8.0 x 1.25	22	97	6.30	30g	-0410G	74.70	-0410H	74.70	-0410J	74.70
M10.0 x 1.50	24	108	8.00	48g	-0450G	101.80	-0450H	101.80	-0450J	101.80
M12.0 x 1.75	29	119	9.00	68g	-0480G	164.80	-0480H	164.80	-0480J	164.80
M14.0 x 2.00	30	127	11.20	102g	-0510G	129.20	-0510H	185.00	-0510J	129.20
M16.0 x 2.00	32	137	12.50	130g	-0530G	210.70	-0530H	210.70	-0530J	210.70
M20.0 x 2.50	37	149	14.00	198g	-	-	-0570H	298.00	-0570J	377.20
M24.0 x 3.00	45	172	18.00	151g	-0610G	420.70	-0610H	432.60	-0610J	427.90

Metric Coarse Left Hand Straight Flute Ground Thread Taps

ISO 529

LEFT HAND

NEW

METRIC COARSE HSS



Straight Flute Individual Sizes

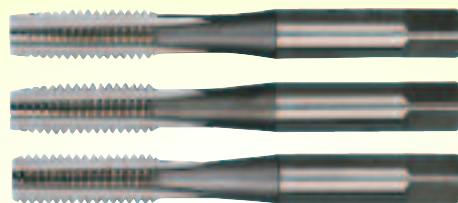


Size - Pitch (mm)	Taper Order Code SHR-087	Second Order Code SHR-087	Plug Order Code SHR-087	Price/1 RND
M3.0 x 0.50	-0230L	-0230M	-0230N	99.60
M4.0 x 0.70	-0280L	-0280M	-0280N	51.20
M5.0 x 0.80	-0330L	-0330M	-0330N	41.80
M6.0 x 1.00	-0370L	-0370M	-0370N	61.00
M8.0 x 1.25	-0410L	-0410M	-0410N	90.60
M10.0 x 1.50	-0450L	-0450M	-0450N	107.20
M12.0 x 1.75	-0480L	-0480M	-0480N	160.20
M14.0 x 2.00	-0510L	-0510M	-0510N	83.90
M16.0 x 2.00	-0530L	-0530M	-0530N	140.00
M20.0 x 2.50	-0570L	-0570M	-0570N	354.50

Sets of Three
1 each, taper,
second and plug lead.

LEFT HAND

METRIC COARSE HSS



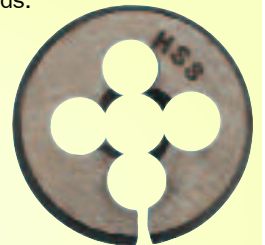
Square AF	Tap Drill Size	Set of 3 Order Code SHR-087	Price/1 RND
2.50	2.40	-0230P	4148.50
3.15	3.30	-0280P	3715.70
4.00	4.20	-0330P	3942.70
5.00	5.00	-0370P	4044.50
6.30	6.80	-0410P	4479.20
8.00	8.50	-0450P	5727.50
7.10	10.20	-0480P	8041.10
9.00	12.00	-0510P	9924.00
10.00	14.00	-0530P	12037.60
11.20	17.50	-0570P	1063.30

Metric HSS Left Hand Dies

BS 1127

For use in diestocks to produce external screw threads.

EXTENDED RANGE



LEFT HAND

METRIC COARSE HSS

Size - Pitch (mm)	Outside Diameter	Order Code SHR-087	Offer Price/1
M3.0 x 0.50	13/16"	-2320K	212.00
M4.0 x 0.70	13/16"	-2340K	212.00
M5.0 x 0.80	13/16"	-2360K	212.00
M6.0 x 1.00	13/16"	-2380K	446.10
M6.0 x 1.00	1"	-2530K	43.40
M8.0 x 1.25	1"	-2550K	43.40
M10.0 x 1.50	1"	-2570K	251.50
M12.0 x 1.75	1 5/16"	-2740K	368.50
M16.0 x 2.00	1 1/2"	-2970K	430.50

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR


**Metric Fine
HSS Ground Thread Taps**

ISO 529

Straight Flute Individual Sizes

(1) Diameter and pitch not mentioned in ISO.


**EXTENDED
RANGE**

Size - Pitch (mm)	Thread Length	Overall Length	Shank Diameter	Weight each	Taper	Second	Plug	Price/1 RND
					Order Code SHR-085	Order Code SHR-085	Order Code SHR-085	
Metric Fine								
M3.0 x 0.35	11.0	48.0	3.15	3g	-0220A	-0220B	-0220C	110.80
M3.5 x 0.35	13.0	50.0	3.55	4g	-0250A	-0250B	-0250C	61.90
M4.0 x 0.50	13.0	53.0	4.00	6g	-0270A	-0270B	-0270C	54.50
M5.0 x 0.50	16.0	58.0	5.00	9g	-0320A	-0320B	-0320C	57.30
M6.0 x 0.75	19.0	66.0	6.30	17g	-0360A	-0360B	-0360C	61.50
M8.0 x 1.00 ⁽¹⁾	19.0	72.0	8.00	21g	-0400A	-0400B	-0400C	87.10
M10.0 x 1.25 ⁽¹⁾	20.0	80.0	10.00	45g	-0440A	-0440B	-0440C	101.80
M12.0 x 1.25	29.0	89.0	9.00	46g	-0470A	-0470B	-0470C	164.80
M14.0 x 1.00	30.0	95.0	11.20	71g	-0485A	-0485B	-0485C	79.00
M14.0 x 1.50	30.0	95.0	11.20	76g	-0500A	-0500B	-0500C	185.00
M16.0 x 1.50	32.0	102.0	12.50	101g	-0520A	-0520B	-0520C	210.70
M18.0 x 1.50	45.0	95.0	14.00	132g	-0540A	-0540B	-0540C	260.00
M18.0 x 2.00	37.0	112.0	14.00	138g	-0545A	-0545B	-0545C	260.60
M20.0 x 1.50	37.0	112.0	14.00	144g	-0560A	-0560B	-0560C	298.00
M22.0 x 1.50	38.0	118.0	16.00	86g	-0580A	-0580B	-0580C	377.90
M24.0 x 2.00	45.0	130.0	18.00	250g	-0600A	-0600B	-0600C	450.40
M27.0 x 2.00	37.0	127.0	20.00	320g	-0630A	-0630B	-0630C	495.60
M30.0 x 1.50	37.0	127.0	20.00	398g	-0645A	-0645B	-0645C	671.60
M30.0 x 2.00	37.0	127.0	20.00	366g	-0650A	-0650B	-0650C	671.60
ISO Metric Special Pitch								
M2.0 x 0.45	8.0	41.0	2.50	3g	-0170A	-0170B	-0170C	117.40
M6.0 x 0.50	15.0	55.0	6.00	7g	-0355A	-0355B	-0355C	61.50
M8.0 x 0.50	15.0	55.0	6.20	27g	-	-	-0393C	95.30
M8.0 x 0.75	19.0	72.0	8.00	22g	-0395A	-0395B	-0395C	87.10
M10.0 x 0.75	20.0	80.0	10.00	36g	-0425A	-0425B	-0425C	134.50
M10.0 x 1.00 ⁽¹⁾	24.0	80.0	10.00	38g	-0430A	-0430B	-0430C	101.80
M12.0 x 1.00	29.0	89.0	9.00	44g	-0465A	-0465B	-0465C	78.50
M12.0 x 1.50	29.0	89.0	9.00	48g	-0475A	-0475B	-0475C	164.80
M14.0 x 1.25	30.0	95.0	11.20	72g	-0490A	-0490B	-0490C	79.90
M16.0 x 1.00	32.0	102.0	12.50	96g	-0515A	-0515B	-0515C	210.70
M18.0 x 1.00	37.0	112.0	14.00	130g	-0535A	-0535B	-0535C	162.40
M20.0 x 1.00	37.0	112.0	14.00	146g	-0555A	-0555B	-0555C	247.20
M20.0 x 2.00	37.0	112.0	14.00	132g	-0565A	-0565B	-0565C	215.80
M24.0 x 1.50	45.0	130.0	18.00	254g	-0595A	-0595B	-0595C	450.40
M25.0 x 1.50	45.0	130.0	18.00	260g	-0620A	-0620B	-0620C	450.40
M32.0 x 1.50	37.0	137.0	22.40	488g	-0670A	-0670B	-0670C	1659.00

**Left Hand
Also
Available**

METRIC FINE



HSS

Sets of Three

1 each, taper, second and plug lead.

Square AF	Tap Drill Size	Set of 3	Price/1 RND
		Order Code SHR-085	
Metric Fine			
2.50	2.65	-0220D	220.80
2.80	3.15	-0250D	220.80
3.15	3.50	-0270D	163.50
4.00	4.50	-0320D	171.80
5.00	5.20	-0360D	184.40
6.30	7.00	-0400D	184.40
8.00	8.80	-0440D	404.20
7.10	10.80	-0470D	494.30
9.00	13.00	-0485D	185.00
9.00	12.50	-0500D	185.00
10.00	14.50	-0520D	632.70
11.20	16.80	-0540D	260.00
11.20	16.00	-0545D	779.80
11.20	18.50	-0560D	893.90
12.50	20.50	-0580D	1102.40
14.00	22.50	-0600D	1351.10
16.00	25.00	-0630D	3946.70
16.00	28.50	-0645D	1959.60
16.00	28.00	-0650D	1959.60
ISO Metric Special Pitch			
2.00	1.55	-0170D	114.20
5.00	5.50	-0355D	184.40
-	-	-	-
6.34	7.20	-0395D	184.40
8.00	9.20	-0425D	404.20
8.00	9.00	-0430D	404.20
7.10	11.00	-0465D	494.30
7.10	10.50	-0475D	494.30
9.00	12.80	-0490D	555.00
10.00	15.00	-0515D	632.70
11.20	17.00	-0535D	779.80
11.20	19.00	-0555D	298.00
11.20	18.00	-0565D	893.90
14.00	22.50	-0595D	1351.10
14.00	23.50	-0620D	1351.10
18.00	-	-	-

**Metric Fine HSS Ground
Thread Dies**

BS 1127

For use in diestocks to produce
external screw threads.



METRIC FINE

HSS

Size - Pitch (mm)	Outside Diameter	Thickness	Weight each	Order Code SHR-086	Price/1 RND
Metric Fine					
M4.0 x 0.50	13/16"	1/4"	12g	-1930K	299.00
M5.0 x 0.50	13/16"	1/4"	12g	-1950K	299.00
M6.0 x 0.50	13/16"	1/4"	12g	-0190K	161.50
M6.0 x 0.75	13/16"	1/4"	12g	-1980K	299.00
M8.0 x 1.00	1"	3/8"	27g	-2040K	355.60
M10.0 x 1.25	1"	3/8"	25g	-2080K	355.60
M10.0 x 1.25	1 5/16"	7/16"	53g	-2130K	607.70
M12.0 x 1.25	1 5/16"	7/16"	53g	-2150K	524.50
M14.0 x 1.00	1 5/16"	7/16"	48g	-0655K	161.50
M14.0 x 1.50	1 5/16"	7/16"	49g	-2180K	524.50
M16.0 x 1.50	1 1/2"	1/2"	73g	-2220K	612.10
M18.0 x 1.00	2"	5/8"	82g	-1045K	161.50
M18.0 x 1.50	1 1/2"	1/2"	74g	-2230K	612.10
M20.0 x 1.50	1 1/2"	1/2"	66g	-2250K	576.10
M20.0 x 1.50	2"	5/8"	154g	-2330K	899.60
M22.0 x 1.50	2"	5/8"	178g	-2350K	899.60
M24.0 x 2.00	2"	5/8"	153g	-2380K	849.70
M30.0 x 2.00	3"	7/8"	260g	-1216K	161.50
ISO Metric Special Pitch					
M4.0 x 0.75	13/16"	1/4"	12g	-0165K	161.50
M4.5 x 0.75	13/16"	1/4"	12g	-0170K	23.00
M5.0 x 0.90	13/16"	1/4"	12g	-0185K	161.50
M8.0 x 0.75	1"	3/8"	27g	-2030K	456.90
M10.0 x 1.00	1"	3/8"	25g	-2070K	355.60
M12.0 x 1.00	1 5/16"	7/16"	50g	-2140K	524.50
M12.0 x 1.50	1 5/16"	7/16"	53g	-2160K	524.50
M14.0 x 1.25	1 5/16"	7/16"	48g	-2170K	524.50
M16.0 x 1.00	1 1/2"	1/2"	68g	-2210K	612.10
M20.0 x 1.00	1 1/2"	1/2"	64g	-2240K	578.00
M24.0 x 1.50	2"	5/8"	145g	-2370K	899.60
M25.0 x 1.50	2"	5/8"	145g	-2390K	899.60
M30.0 x 1.50	3"	7/8"	230g	-1215K	161.50

Metric Fine HSS Ground Thread Die Nuts

BS 1127

For use with spanners to clean and repair
existing external screw threads.

METRIC FINE

HSS



Group 582



Size - Pitch (mm)	Width	Thickness	Weight each	Order Code SHR-086	Price/1 RND
Metric Fine					
M3.0 x 0.35	0.71"	1/4"	10g	-2480K	904.80
M6.0 x 0.75	0.71"	1/4"	10g	-2550K	307.20
M8.0 x 1.00	0.82"	5/16"	16g	-2590K	439.70
M10.0 x 1.25	0.92"	3/8"	24g	-2640K	535.30
M12.0 x 1.25	1.10"	1/2"	46g	-2660K	645.80
M14.0 x 1.50	1.30"	5/8"	77g	-2770K	795.50
M16.0 x 1.50	1.30"	5/8"	71g	-2790K	795.50
M18.0 x 1.50	1.48"	11/16"	102g	-2810K	977.20
M20.0 x 1.50	1.48"	11/16"	92g	-2830K	977.20
M22.0 x 1.50	1.67"	13/16"	146g	-2860K	1114.00
M24.0 x 2.00	2.05"	15/16"	249g	-2890K	1531.90
ISO Metric Special Pitch					
M8.0 x 0.75				-2580K	48.90
M10.0 x 0.75	0.92"	3/8"	22g	-1495K	161.50
M10.0 x 1.00	0.92"	3/8"	22g	-2630K	535.30
M12.0 x 1.00	1.10"	1/2"	35g	-2650K	610.10
M12.0 x 1.50	1.10"	1/2"	52g	-2670K	610.10
M14.0 x 1.25	1.30"	5/8"	70g	-2760K	104.80
M16.0 x 1.00	1.30"	5/8"	70g	-2780K	138.70
M20.0 x 1.00	1.48"	11/16"	95g	-2820K	206.20
M20.0 x 2.00	1.48"	11/16"	99g	-2840K	719.70
M24.0 x 1.50	2.05"	15/16"		-2880K	382.40



Metric Fine HSS Ground Thread Taps

HSS

ISO 529

Spiral Point/Gun Nose

METRIC FINE

† = Metric Spark Plug
* = Metric Conduit



Size - Pitch (mm)	Shank Diameter	A/F Square	Weight each	Order Code SHR-085	Price/1 RND
Metric Fine					
M4.0 x 0.50	4.00	3.15	8g	-0270E	54.50
M5.0 x 0.50	5.00	4.00	10g	-0320E	57.30
M6.0 x 0.75	6.30	5.00	27g	-0360E	61.50
M8.0 x 1.00	8.00	6.30	23g	-0400E	87.10
M10.0 x 1.25	10.00	8.00	40g	-0440E	101.80
M12.0 x 1.25	9.00	7.10	48g	-0470E	164.80
M14.0 x 1.50	11.20	9.00	78g	-0500E	185.00
M16.0 x 1.50	12.50	10.00	82g	-0520E	210.70
M18.0 x 1.50	14.00	11.20	132g	-0540E	260.00
M20.0 x 1.50	14.00	11.20	159g	-0560E	667.60
M22.0 x 1.50	16.00	12.50	185g	-0580E	377.90
ISO Metric Special Pitch					
M10.0 x 1.00†	10.00	8.00	40g	-0430E	101.80
M12.0 x 1.50	9.00	7.10	40g	-0475E	164.80

Spiral Flute

† = Metric Spark Plug
* = Metric Conduit

METRIC FINE HSS



Size - Pitch (mm)	Shank Diameter	A/F Square	Weight each	Order Code SHR-085	Price/1 RND
Metric Fine					
M4.0 x 0.50	4.00	3.15	6g	-0270F	54.50
M5.0 x 0.50	5.00	4.00	10g	-0320F	57.30
M6.0 x 0.75	6.30	5.00	14g	-0360F	61.50
M8.0 x 1.00	8.00	6.30	22g	-0400F	87.10
M10.0 x 1.25	10.00	8.00	37g	-0440F	101.80
M12.0 x 1.25	9.00	7.10	47g	-0470F	164.80
M14.0 x 1.50	11.20	9.00	75g	-0500F	185.00
M16.0 x 1.50	12.50	10.00	82g	-0520F	210.70
M18.0 x 1.50†	14.00	11.00	148g	-0540F	260.00
M20.0 x 1.50*	14.00	11.20	131g	-0560F	298.00
M22.0 x 1.50	16.00	12.50	184g	-0580F	377.90
ISO Metric Special Pitch					
M6.0 x 0.50	6.30	5.00	14g	-0355F	61.50
M10.0 x 1.00†	10.00	8.00	38g	-0430F	101.80
M12.0 x 1.50	9.00	7.10	48g	-0475F	164.80
M14.0 x 1.25†	11.20	9.00		-0490F	322.60

HSS Ground Flute Tap & Drill Set

Industrial quality. Ground flute, blue finish.
Supplied in indexing metal cases.
Manufactured to BS328 : Part 1 : 1986, DIN 338N & ANSI B94 -11M.



METRIC COARSE

HSS

28
PIECES

METRIC Taps M3 ~ M12
+ Tapping Drills
2.5 ~ 10.2

28 Piece Tap & Drill Set
Taps (Taper, Second and Bottom)

M3 M4	M5 M6	M8 M10	M12
(mm) 2.5	3.3 4.2	5.0 6.8	8.5 10.2

Number of Pieces	Order Code SHR-025	Price/1 RND
28	-9960K	2731.00

Machine Tapping Speeds

Group	Materials Colour defines similar machineability	Hardness Brinell HB Rockwell HRC	Tensile Strength N/mm²	Cutting Speed M/min	Hole Type	Tap Type
Carbon	1.1 Mild Steel	<130	-	<400	15 - 20	Various Through Hole Blind Hole Straight Flute Spiral Point/ Gun Nose Spiral Flute
	1.2 Case Hardening & Structural Steel	<200	-	<700	15 - 20	
	1.3 Medium Carbon Steel	<260	<26	<850	15 - 20	
Alloy	1.4 Low Alloy Steel	<260	<26	<850	10 - 15	Through Hole Blind Hole Spiral Point/ Gun Nose Spiral Flute
	1.5 Medium to High Alloy Steel	260 - 340	26 - 36	850 - 1200	6 - 10	
	1.6 Heat Treated Steel	340 - 450	36 - 48	1200 - 1500	4 - 6	
Stainless Steels	2.1 Free Machining Stainless	<230	<20	<800	8 - 10	Through Hole Blind Hole Spiral Point/ Gun Nose Spiral Flute
	2.2 Medium Strength Austenitic Stainless	<290	<30	<1000	6 - 8	
	2.3 Difficult to Machine, Duplex Stainless	<340	<36	<1200	4 - 6	
Cast Iron	3.1 Grey Cast Iron - Soft	<180	-	-	18 - 25	Blind & Through Hole Straight Flute
	3.2 Grey Cast Iron - Hard	180 - 300	-	-	15 - 18	
	3.3 Malleable & Nodular Iron	<220	-	-	8 - 12	
Aluminium	3.4 Malleable & Nodular Iron - Hard	200 - 300	-	-	4 - 6	Through Hole Spiral Point/ Gun Nose
	7.1 Unalloyed Aluminium - Zinc - Magnesium	-	-	<150	20 - 25	Blind & Through Hole Fluteless
	7.2 Aluminium Alloy less than 5% Si	-	-	150 - 300	17 - 22	
	7.3 Aluminium Alloy 5% to 10% Si	-	-	200 - 500	15 - 20	
	7.4 Aluminium Alloy above 10% Si	-	-	200 - 500	12 - 15	Blind & Through Hole Straight Flute (for Cast Irons)

Power Requirements For Taps

Many factors are involved when considering power requirements for a particular application. Factors such as the choice of tap design, tapping drill size, depth of threaded hole, lubricant and tapping speed all play a part in determining these requirements.

To estimate the power requirements for varying percentage thread depths, the following general formula and constants may be used:

$$\text{Tapping Power (KW)} = \frac{C \times D \times p^2 \times N \times K}{10000}$$

$$\text{HP} = \text{KW} \times 1.341$$

Where **D** = Thread Diameter (mm)

P = Pitch (mm)

N = Spindle speed RPM

K = Material Factor Constant

C = A constant based on % thread depth, as follows:

C	% Thread Depth
0.231	60
0.326	75
0.433	80



**UNC (Unified Coarse)
HSS Ground Thread Taps**

ISO 529

**Left Hand
Also
Available**

NEW



Straight Flute Individual Sizes

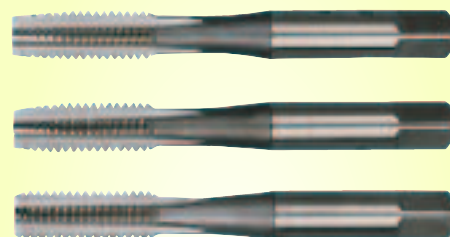
Size - Pitch	Thread Length	Overall Length	Shank Diameter	Weight each	Taper Order Code SHR-085	Second Order Code SHR-085	Plug Order Code SHR-085	Price/1 RND
No.1 x 64	8.0	41.0	2.50	3g	-0760A	-	-0760C	265.10
No.2 x 56	9.5	44.5	2.80	3g	-0770A	-0770B	-0770C	218.00
No.3 x 48	9.5	44.5	2.80	3g	-	-	-0780C	189.40
No.4 x 40	11.0	48.0	3.15	3g	-0790A	-0790B	-0790C	125.60
No.5 x 40	11.0	48.0	3.15	4g	-0800A	-0800B	-0800C	148.00
No.6 x 32	13.0	50.0	3.55	4g	-0810A	-0810B	-0810C	103.60
No.8 x 32	13.0	53.0	4.50	7g	-0820A	-0820B	-0820C	101.00
No.10 x 24	16.0	58.0	5.00	8g	-0830A	-0830B	-0830C	115.80
No.12 x 24	17.0	62.0	5.60	11g	-0840A	-0840B	-0840C	10.80
1/4" x 20	19.0	66.0	6.30	14g	-0850A	-0850B	-0850C	102.80
5/16" x 18	22.0	72.0	8.00	22g	-0860A	-0860B	-0860C	138.60
3/8" x 16	24.0	80.0	10.00	38g	-0870A	-0870B	-0870C	109.50
7/16" x 14	25.0	85.0	8.00	38g	-0880A	-0880B	-0880C	129.20
1/2" x 13	29.0	89.0	9.00	50g	-0890A	-0890B	-0890C	143.10
9/16" x 12	30.0	95.0	11.20	75g	-0900A	-0900B	-0900C	70.00
5/8" x 11	32.0	102.0	12.50	82g	-0910A	-0910B	-0910C	104.10
3/4" x 10	37.0	112.0	14.00	142g	-0920A	-0920B	-0920C	234.20
7/8" x 9	38.0	118.0	16.00	193g	-0930A	-0930B	-0930C	211.70
1" x 8	45.0	130.0	18.00	323g	-0940A	-0940B	-0940C	288.40
1 1/8" x 7	48.0	138.0	20.00	373g	-0950A	-0950B	-	332.30
1 1/4" x 7	51.0	151.0	22.40	478g	-0960A	-0960B	-0960C	1160.00
1 3/8" x 6	57.0	162.0	25.00	577g	-	-0970B	-	1328.90
1 1/2" x 6	60.0	170.0	28.00	782g	-0980A	-	-0980C	1587.80

Sets of Three

1 each, taper, second and plug lead.



UNC HSS



Square AF	Tap Drill Size	Order Code SHR-085	Price/1 RND
2.00	1.55	-0760D	795.50
2.24	1.85	-0770D	1495.30
2.24	2.10	-	-
2.50	2.35	-0790D	467.80
2.50	2.65	-0800D	434.60
2.80	2.85	-0810D	383.60
3.55	3.50	-0820D	373.80
4.00	3.90	-0830D	368.30
4.50	4.50	-0840D	300.50
5.00	5.10	-0850D	392.40
6.30	6.60	-0860D	511.30
8.00	8.00	-0870D	442.20
6.30	9.40	-0880D	506.80
7.10	10.80	-0890D	526.50
9.00	12.20	-0900D	720.80
10.00	13.50	-0910D	774.10
11.20	16.50	-0920D	935.40
12.50	19.50	-0930D	1627.00
14.00	22.25	-0940D	1854.50
16.00	25.00	-	-
18.00	28.00	-0960D	3557.70
20.00	30.75	-	-
22.40	34.00	-0980D	2100.20

**UNC (Unified Coarse)
HSS Ground Thread Dies**

BS 1127

For use in diestocks to produce external screw threads.

UNC HSS



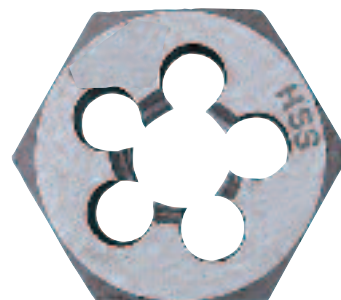
Size - Pitch	Outside Diameter	Thickness	Weight each	Order Code SHR-086	Price/1 RND
No.2 x 56	13/16"	1/4"	12g	-2980K	355.20
No.12 x 24	13/16"	1/4"	12g	-3050K	30.40
No.4 x 40	13/16"	1/4"	12g	-3000K	32.30
No.6 x 32	13/16"	1/4"	7g	-3020K	328.50
No.8 x 32	13/16"	1/4"	13g	-3030K	328.50
No.10 x 24	13/16"	1/4"	17g	-3040K	377.80
1/4" x 20	13/16"	3/8"	12g	-3060K	300.10
1/4" x 20	1"	3/8"	26g	-3220K	306.70
1/4" x 20	1 5/16"	7/16"	46g	-3340K	555.90
5/16" x 18	1"	3/8"	27g	-3230K	306.70
5/16" x 18	1 5/16"	7/16"	47g	-3350K	450.70
3/8" x 16	1"	3/8"	24g	-3240K	306.70
3/8" x 16	1 5/16"	7/16"	62g	-3360K	450.70
7/16" x 14	1"	3/8"	27g	-3250K	308.20
7/16" x 14	1 5/16"	7/16"	51g	-3370K	85.70
1/2" x 13	1 5/16"	7/16"	52g	-3380K	448.10
1/2" x 13	1 1/2"	1/2"	79g	-3480K	528.70
1/2" x 13	2"	5/8"	74g	-3620K	973.60
9/16" x 12	1 5/16"	7/16"	37g	-3390K	1056.70
9/16" x 12	1 1/2"	1/2"	71g	-3490K	111.20
5/8" x 11	1 1/2"	1/2"	71g	-3500K	525.50
3/4" x 10	1 1/2"	1/2"	70g	-3510K	525.50
7/8" x 9	2"	5/8"	149g	-3660K	275.90
1" x 8	2"	5/8"	157g	-3670K	784.80

**UNC (Unified Coarse)
HSS Ground Thread Die Nuts**

BS 1127

For use with spanners to clean and repair existing external screw threads.

UNC HSS



Size - Pitch	Width	Thickness	Weight each	Order Code SHR-086	Price/1 RND
1/4" x 20	0.71"	1/4"	13g	-3920K	299.20
5/16" x 18	0.82"	5/16"	12g	-3950K	352.30
3/8" x 16	0.92"	3/8"	11g	-3970K	405.30
7/16" x 14	1.01"	7/16"	33g	-3990K	560.20
1/2" x 13	1.10"	1/2"	45g	-4010K	491.10
1/2" x 13	1.10"	1/2"	44	-4020K	392.50
5/8" x 11	1.30"	5/8"	72g	-4040K	607.90
3/4" x 10	1.48"	1 1/16"	102g	-4070K	744.40
1" x 8	2.05"	1 5/16"	269g	-4110K	426.60



**UNC (Unified Coarse)
HSS Ground Thread Taps**

ISO 529

Spiral Point/Gun Nose

UNC HSS

**EXTENDED
RANGE**



Size - Pitch	Shank Dia.	A/F Square	Weight each	Order Code SHR-085	Price/1 RND
No.1 x 64	2.50	2.00	1g	-0760E	195.00
No.2 x 56	2.80	2.24	1g	-0770E	166.40
No.4 x 40	3.15	2.50	1g	-0790E	96.50
No.5 x 40	3.15	2.50	2g	-0800E	41.80
No.6 x 32	3.55	2.80	2g	-0810E	96.90
No.8 x 32	4.50	3.55	4g	-0820E	109.90
No.10 x 24	5.00	4.00	5g	-0830E	72.70
No.12 x 24	5.60	4.50	8g	-0840E	41.80
1/4" x 20	6.30	5.00	11g	-0850E	74.90
5/16" x 18	8.00	6.30	17g	-0860E	118.90
3/8" x 16	10.00	8.00	33g	-0870E	126.50
7/16" x 14	8.00	6.30	38g	-0880E	196.90
1/2" x 13	9.00	7.10	44g	-0890E	249.00
9/16" x 12	11.20	9.00	62g	-0900E	114.40
5/8" x 11	12.50	10.00	91g	-0910E	567.40
3/4" x 10	14.00	11.20	130g	-0920E	578.10
7/8" x 9	16.00	12.20	173g	-0930E	1350.40
1" x 8	18.00	14.00	294g	-0940E	1243.20

Fluteless

UNC HSS

NEW



Size - Pitch	Shank Diameter	Weight each	Order Code SHR-085	Price/1 RND
No.4 x 40	3.15	2g	-0790K	280.80
No.6 x 32	3.55	3g	-0810K	258.80
No.8 x 32	4.50	8g	-0820K	118.90
No.10 x 24	5.00	9g	-0830K	136.40
1/4" x 20	6.30	11g	-0850K	182.10
3/8" x 16	10.00	41g	-0870K	658.00

Spiral Flute

UNC HSS

**EXTENDED
RANGE**



Size - Pitch	Shank Dia.	A/F Square	Weight each	Order Code SHR-085	Price/1 RND
No.3 x 48	2.80	2.24	1g	-0780F	130.90
No.4 x 40	3.15	2.50	1g	-0790F	76.70
No.5 x 40	3.15	2.50	2g	-0800F	16.60
No.6 x 32	3.55	2.80	3g	-0810F	74.00
No.8 x 32	4.50	3.55	4g	-0820F	101.40
No.10 x 24	5.00	4.00	5g	-0830F	102.30
No.12 x 24	5.60	4.50	8g	-0840F	313.10
1/4" x 20	6.30	5.00	11g	-0850F	70.50
5/16" x 18	8.00	6.30	19g	-0860F	203.20
3/8" x 16	10.00	8.00	31g	-0870F	205.90
7/16" x 14	8.00	6.30	31g	-0880F	237.70
1/2" x 13	9.00	7.10	41g	-0890F	226.10
9/16" x 12	11.20	9.00	66g	-0900F	172.30
5/8" x 11	12.50	10.00	89g	-0910F	401.00
3/4" x 10	14.00	11.20	123g	-0920F	814.00
7/8" x 9	16.00	12.50	180g	-0930F	986.80
1" x 8	18.00	14.00	240g	-0940F	1115.90

FREE

**Tapping Drill
Wall Chart
(A2 Size)**

**AVAILABLE
ON REQUEST**

CAT-849-0938A

Contact your local
branch or representative.



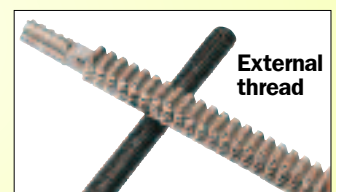
Thread Restoring Files

Restore internal and external threads by filing, where the use of taps and dies are impractical. The restorer file overlaps several good threads and files the damaged ones. Restore right and left hand, internal and external threads.

Long lasting, fast cutting teeth. Thread restoring files are available in ISO, Whit/BSF, UNF/UNC and BSP thread types.



**GROUP
620**



**External
thread**

Thread Type	Range	Weight each	Order Code SHR-017	Price/1 RND
ISO	.80 to 3mm	133g	-9020C	577.00
Whit/BSF	10 tpi to 24 tpi	132g	-9001A	577.00
UNF/UNC	11 tpi to 24 tpi	130g	-9010B	577.00
BSP	11 tpi to 28 tpi	127g	-9030D	577.00

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR



**UNF (Unified Fine)
HSS Ground Thread Taps**

ISO 529



Straight Flute Individual Sizes

Size - Pitch	Thread Length	Overall Length	Shank Diameter	Taper	Second	Plug	Price/1 RND
				Order Code SHR-085	Order Code SHR-085	Order Code SHR-085	
No.4 x 48	9.45	44.5	2.80	-1050A	-1050B	-	122.30
No.5 x 44	11.0	48.0	3.15	-1060A	-1060B	-1060C	122.30
No.6 x 40	13.0	50.0	3.55	-1070A	-1070B	-1070C	85.30
No.8 x 36	13.0	53.0	4.50	-1080A	-1080B	-1080C	125.60
No.10 x 32	16.0	58.0	5.00	-1090A	-1090B	-1090C	64.20
No.12 x 28	17.0	62.0	5.60	-1100A	-1100B	-1100C	84.40
1/4" x 28	19.0	66.0	6.30	-1110A	-1110B	-1110C	105.00
5/16" x 24	19.0	69.0	8.00	-1120A	-1120B	-1120C	101.40
3/8" x 24	20.0	76.0	10.00	-1130A	-1130B	-1130C	113.50
7/16" x 20	25.0	85.0	8.00	-1140A	-1140B	-1140C	104.50
1/2" x 20	29.0	89.0	9.00	-1150A	-1150B	-1150C	124.30
9/16" x 18	30.0	95.0	11.20	-1160A	-1160B	-1160C	106.80
5/8" x 18	32.0	102.0	12.50	-1170A	-1170B	-1170C	135.00
3/4" x 16	37.0	112.0	14.00	-1180A	-1180B	-1180C	179.90
7/8" x 14	38.0	118.0	16.00	-1190A	-1190B	-1190C	217.60
1" x 12	45.0	130.0	18.00	-1200A	-1200B	-1200C	322.50
1 1/8" x 12	37.0	127.0	20.00	-1210A	-	-	483.80
1 1/4" x 12	37.0	137.0	22.40	-1220A	-	-	617.00
1 3/8" x 12	39.0	144.0	25.00	-1230A	-1230B	-	731.90
1 1/2" x 12	39.0	149.0	28.00	-	-	-1240C	1587.80

**Left Hand
Also
Available**

**EXTENDED
RANGE**

Sets of Three
1 each, taper, second and plug lead.



HSS

UNF

Set of 3		Order Code SHR-085	Price/1 RND
Square AF	Tap Drill Size		
2.50	2.40	-1050D	366.80
2.50	2.70	-1060D	366.80
2.80	2.95	-1070D	255.70
3.55	3.50	-1080D	154.30
4.00	4.10	-1090D	280.50
4.50	4.70	-1100D	430.60
5.00	5.50	-1110D	402.80
6.30	6.90	-1120D	395.00
8.00	8.50	-1130D	455.50
6.30	9.90	-1140D	482.80
7.10	11.50	-1150D	588.40
9.00	12.90	-1160D	612.10
10.00	14.50	-1170D	782.50
11.20	17.50	-1180D	1063.30
12.50	20.50	-1190D	1610.70
14.00	23.25	-1200D	2077.10
16.00	26.50	-	-
18.00	29.50	-	-
20.00	32.75	-	-
22.40	36.00	-	-

UNF (Unified Fine) HSS Ground Thread Taps

Spiral Point/Gun Nose

UNF HSS

NEW



Size - Pitch	Shank Dia.	A/F Square	Weight each	Order Code SHR-085	Price/1 RND
No.5 x 44	3.15	2.50	3g	-1060E	99.70
No.6 x 40	3.55	2.80	5g	-1070E	98.10
No.8 x 36	4.50	3.55	7g	-1080E	125.60
No.10 x 32	5.00	4.00	7g	-1090E	103.20
No.12 x 28	5.60	4.50	11g	-1100E	102.30
1/4" x 28	6.30	5.00	15g	-1110E	91.10
5/16" x 24	8.00	6.30	23g	-1120E	111.30
3/8" x 24	10.00	8.00	37g	-1130E	148.00
7/16" x 20	8.00	6.30	33g	-1140E	204.60
1/2" x 20	9.00	7.10	52g	-1150E	182.10
9/16" x 18	11.20	9.00	71g	-1160E	96.90
5/8" x 18	12.50	10.00	100g	-1170E	362.00
3/4" x 16	14.00	11.20	156g	-1180E	583.50
7/8" x 14	16.00	12.50	185g	-1190E	817.20
1" x 12	18.00	14.00	222g	-1200E	1341.70

**UNF (Unified Fine)
HSS Ground Thread Dies**

ISO 529

For use in diestocks to produce external screw threads.



UNF (Unified Fine)

Size - Pitch	Outside Diameter	Thickness	Weight each	Order Code SHR-086	Price/1 RND
No.6 x 40	13/16"	1/4"	11g	-4280K	364.30
No.10 x 32	13/16"	1/4"	12g	-4300K	351.80
No.12 x 28	13/16"	1/4"	12g	-4310K	339.70
No.10 x 32	1"	3/8"	12g	-4470K	376.30
1/4" x 28	13/16"	1/4"	12g	-4320K	279.40
1/4" x 28	1"	3/8"	28g	-4490K	329.90
1/4" x 28	1 5/16"	7/16"	32g	-4620K	78.10
5/16" x 24	1"	3/8"	42g	-4500K	329.90
3/8" x 24	1"	3/8"	42g	-4510K	329.90
3/8" x 24	1 5/16"	7/16"	55g	-4640K	484.60
7/16" x 20	1"	3/8"	23g	-4520K	376.30
7/16" x 20	1 5/16"	7/16"	53g	-4650K	484.60
1/2" x 20	1 5/16"	7/16"	51g	-4660K	482.10
1/2" x 20	1 1/2"	1/2"	73g	-4780K	568.90
9/16" x 18	1 1/2"	1/2"	74g	-4790K	153.50
9/16" x 18	1 5/16"	7/16"	49g	-4670K	484.60
5/8" x 18	1 1/2"	1/2"	72g	-4800K	565.40
3/4" x 16	1 1/2"	1/2"	69g	-4810K	565.40
3/4" x 16	2"	5/8"	165g	-4970K	840.20
7/8" x 14	2"	5/8"	159g	-4980K	840.20
1" x 12	2"	5/8"	156g	-4990K	840.20

Spiral Flute

UNF HSS

NEW



Size - Pitch	Shank Dia.	A/F Square	Weight each	Order Code SHR-085	Price/1 RND
No.4 x 48	3.15	2.50	4g	-1050F	106.80
No.5 x 44	3.15	2.50	8g	-1060F	104.10
No.8 x 36	4.50	3.55	6g	-1070F	100.80
No.8 x 36	4.50	3.55	6g	-1080F	45.30
No.10 x 32	5.00	4.00	7g	-1090F	102.30
5/16" x 24	8.00	6.30	22g	-1120F	139.50
3/8" x 24	10.00	8.00	37g	-1130F	183.90
7/16" x 20	8.00	6.30	39g	-1140F	277.70
1/2" x 20	9.00	7.10	48g	-1150F	192.40
9/16" x 18	11.20	9.00	75g	-1160F	348.50
5/8" x 18	12.50	10.00	95g	-1170F	454.40
3/4" x 16	14.00	11.20	131g	-1180F	758.40
7/8" x 14	16.00	12.50	192g	-1190F	930.20
1" x 12	18.00	14.00	221g	-1200F	344.50

**UNF (Unified Fine)
HSS Ground Thread Die Nuts**

BS 1127

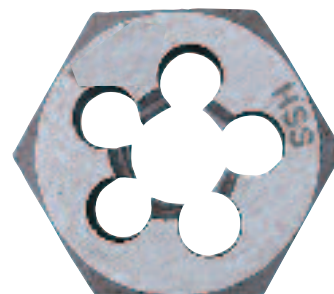
For use with spanners to clean and repair existing external screw threads.



Group 588



Group 582



UNF (Fine)

Size - Pitch	Width	Thickness	Weight each	Order Code SHR-086	Price/1 RND
1/4" x 28	0.71"	1/4"	10g	-5280K	339.90
5/16" x 24	0.82"	5/16"	20g	-5310K	396.70
3/8" x 24	0.92"	3/8"	24g	-5330K	456.90
7/16" x 20	1.10"	7/16"	33g	-5350K	690.20
1/2" x 20	1.10"	1/2"	44g	-5370K	552.50
9/16" x 18	1.30"	5/8"	76g	-5390K	685.50
5/8" x 18	1.30"	5/8"	72g	-5400K	681.50
3/4" x 16	1.48"	1 1/16"	101g	-5430K	837.50
7/8" x 14	1.67"	1 3/16"	148g	-5450K	957.50



BSW (British Standard Whitworth) HSS Ground Thread Taps

ISO 529

Left Hand
Also
Available



EXTENDED
RANGE

Straight Flute Individual Sizes

Size - Pitch	Thread Length	Overall Length	Shank Diameter	Weight each	Taper	Second	Plug	Price/1 RND
					Order Code SHR-085	Order Code SHR-085	Order Code SHR-085	
3/32" x 48	9.5	44.5	2.80	2g	-	-1310B	-1310C	301.90
1/8" x 40	16.0	48.0	3.15	1g	-1320A	-1320B	-1320C	125.60
5/32" x 32	13.0	53.0	4.00	4g	-1330A	-1330B	-1330C	179.10
3/16" x 24	16.0	58.0	5.00	8g	-1340A	-1340B	-1340C	71.40
7/32" x 24	17.0	62.0	5.60	9g	-1350A	-	-	118.30
1/4" x 20	19.0	66.0	6.30	14g	-1360A	-1360B	-1360C	112.20
5/16" x 18	22.0	72.0	8.00	23g	-1370A	-1370B	-1370C	95.10
3/8" x 16	24.0	80.0	10.00	38g	-1380A	-1380B	-1380C	94.20
7/16" x 14	25.0	85.0	8.00	37g	-1390A	-1390B	-1390C	133.70
1/2" x 12	29.0	89.0	9.00	49g	-1400A	-1400B	-1400C	109.50
9/16" x 12	30.0	95.0	11.20	67g	-1410A	-1410B	-1410C	237.30
5/8" x 11	32.0	102.0	12.50	98g	-1420A	-1420B	-1420C	208.60
3/4" x 10	37.0	112.0	14.00	143g	-1430A	-1430B	-1430C	148.50
7/8" x 9	38.0	118.0	16.00	195g	-1440A	-1440B	-1440C	218.90
1" x 8	45.0	130.0	18.00	269g	-1450A	-1450B	-1450C	304.60
1 1/8" x 7	51.0	151.0	22.40	473g	-1460A	-1460B	-1460C	872.30
1 1/4" x 7	51.0	151.0	22.40	473g	-	-	-1470C	1262.30
1 1/2" x 6	60.0	170.0	28.00	865g	-1480A	-1480B	-1480C	1568.80

HSS TAPS & DIES

Sets of Three

1 each, taper, second and plug lead.



HSS

BSW

Square AF	Tap Drill Size	Set of 3 Order Code SHR-085	Price/1 RND
2.24	1.90	-	-
2.50	2.55	-1320D	699.90
3.15	3.10	-1330D	537.80
4.00	3.70	-1340D	280.50
4.50	4.40	-	-
5.00	5.10	-1360D	384.90
6.30	6.50	-1370D	443.40
8.00	7.90	-1380D	537.00
6.30	9.30	-1390D	663.30
7.10	10.50	-1400D	668.80
9.00	12.10	-1410D	711.30
10.00	13.50	-1420D	911.40
11.20	16.25	-1430D	1159.10
12.50	19.25	-1440D	1568.10
14.00	22.00	-1450D	2163.80
16.00	24.75	-	-
18.00	28.00	-1470D	3974.70
22.40	33.50	-1480D	5978.80

BSW (British Standard Whitworth) HSS Ground Thread Taps

ISO 529

Spiral Point/Gun Nose

EXTENDED
RANGE

BSW

HSS



Size - Pitch	Shank Dia.	A/F Square	Weight each	Order Code SHR-085	Price/1 RND
1/8" x 40	3.15	2.50	3g	-1320E	70.50
5/32" x 32	4.00	3.15	3g	-1330E	89.90
3/16" x 24	5.00	4.00	8g	-1340E	103.60
1/4" x 20	6.30	5.00	15g	-1360E	101.40
5/16" x 18	8.00	6.30	23g	-1370E	119.80
3/8" x 16	10.00	8.00	38g	-1380E	159.70
7/16" x 14	8.00	6.30	25g	-1390E	189.80
1/2" x 12	9.00	7.10	49g	-1400E	264.20
5/8" x 11	12.50	10.00	62g	-1420E	445.80
3/4" x 10	14.00	11.20	85g	-1430E	524.30
7/8" x 9	16.00	12.50	113g	-1440E	952.30
1" x 8	18.00	14.00	221g	-1450E	331.50

Spiral Flute

BSW

HSS



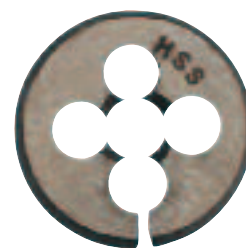
Size - Pitch	Shank Dia.	A/F Square	Weight each	Order Code SHR-085	Price/1 RND
1/8" x 40	3.15	2.50	2g	-1320F	97.00
3/16" x 24	5.00	4.00	6g	-1340F	109.00
1/4" x 20	6.30	5.00	14g	-1360F	107.20
5/16" x 18	8.00	6.30	26g	-1370F	162.00
3/8" x 16	10.00	8.00	37g	-1380F	215.80
7/16" x 14	8.00	6.30	21g	-1390F	526.10
1/2" x 12	9.00	7.10	46g	-1400F	343.10
5/8" x 11	12.50	10.00	60g	-1420F	344.90
3/4" x 10	14.00	11.20	75g	-1430F	508.60
7/8" x 9	16.00	15.50	107g	-1440F	929.20

BSW (British Standard Whitworth) HSS Ground Thread Dies

BSW

HSS

BS 1127

For use in diestocks to produce
external screw threads.

EXTENDED
RANGE

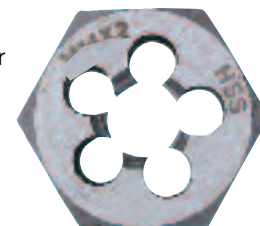
Size - Pitch	Outside Diameter	Thickness	Weight each	Order Code SHR-086	Price/1 RND
1/8" x 40	13/16"	1/4"	13g	-5600K	370.10
3/16" x 24	13/16"	1/4"	12g	-5620K	370.10
1/4" x 20	13/16"	1/4"	12g	-5640K	295.40
1/4" x 20	1"	3/8"	27g	-5730K	344.90
5/16" x 18	1"	3/8"	27g	-5740K	364.90
3/8" x 16	1"	3/8"	26g	-5750K	364.90
3/8" x 16	1 5/16"	7/16"	54g	-5810K	83.90
7/16" x 14	1 5/16"	7/16"	53g	-5820K	110.80
1/2" x 12	1 5/16"	7/16"	53g	-5830K	538.20
1/2" x 12	1 1/2"	1/2"	52g	-5940K	111.20
5/8" x 11	1 1/2"	1/2"	71g	-5960K	630.60
3/4" x 10	1 1/2"	1/2"	66g	-5980K	770.30
3/4" x 10	2"	5/8"	158g	-6120K	878.60
7/8" x 9	2"	5/8"	135g	-6140K	174.50
1" x 8	2"	5/8"	140g	-6160K	1275.00

BSW (British Standard Whitworth) HSS Ground Thread Die Nuts

BSW

HSS

BS 1127

For use with spanners to clean and repair
existing external screw threads.

EXTENDED
RANGE

Size - Pitch	Width	Thickness	Weight each	Order Code SHR-086	Price/1 RND
1/8" x 40	0.71"	1/4"	13g	-6450K	44.70
3/16" x 24	0.71"	1/4"	11g	-6470K	81.20
1/4" x 20	0.71"	1/4"	10g	-6490K	350.90
5/16" x 18	0.82"	5/16"	16g	-6570K	412.20
3/8" x 16	0.92"	3/8"	25g	-6590K	475.10
7/16" x 14	1.01"	7/16"	35g	-6610K	117.60
1/2" x 12	1.10"	1/2"	44g	-6630K	578.20
5/8" x 11	1.30"	5/8"	78g	-6660K	712.40
3/4" x 10	1.48"	1 1/16"	102g	-6700K	873.70
1" x 8	2.05"	1 5/16"	265g	-6780K	1442.30

FREE

Tapping Drill Wall Chart (A2 Size)

AVAILABLE
ON REQUEST
CAT-849-0938A

Contact your local branch
or representative.



PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR



**BSF (British Standard Fine)
HSS Ground Thread Taps**

ISO 529



**Left Hand
Also
Available**

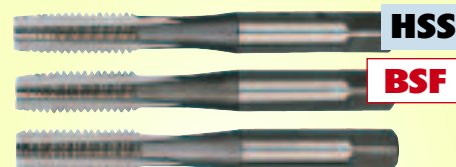
**EXTENDED
RANGE**

Straight Flute Individual Sizes

Size - Pitch	Thread Length	Overall Length	Shank Diameter	Weight each	Taper Order Code SHR-085	Second Order Code SHR-085	Plug Order Code SHR-085	Price/1 RND
3/16" x 32	16.0	58.0	5.0	8g	-1600A	-1600B	-1600C	71.40
1/4" x 26	19.0	66.0	6.3	14g	-1610A	-1610B	-1610C	101.40
5/16" x 22	22.0	72.0	8.0	23g	-1630A	-1630B	-1630C	103.20
3/8" x 20	24.0	80.0	10.0	38g	-1640A	-1640B	-1640C	138.60
7/16" x 18	25.0	85.0	8.0	24g	-1650A	-1650B	-1650C	250.80
1/2" x 16	29.0	89.0	9.0	30g	-1660A	-1660B	-1660C	92.90
5/8" x 14	32.0	102.0	12.5	60g	-	-1680B	-1680C	96.00
3/4" x 12	37.0	112.0	14.0	85g	-1690A	-1690B	-1690C	307.70
13/16" x 12	37.0	112.0	14.0	96g	-	-	-	-
7/8" x 11	38.0	118.0	16.0	187g	-1700A	-1700B	-1700C	765.20
1" x 10	45.0	130.0	18.0	266g	-1710A	-1710B	-1710C	543.30
1 1/4" x 9	51.0	151.0	22.4	300g	-1730A	-1730B	-1730C	1360.80
1 1/2" x 8	60.0	170.0	28.0	402g	-	-1740B	-1740C	1357.80
1 3/4" x 7	67.0	187.0	31.5	603g	-1750A	-1750B	-1750C	2567.40
2" x 7	70.0	200.0	35.5	710g	-1760A	-1760B	-1760C	4113.10

Sets of Three

1 each, taper, second and plug lead.

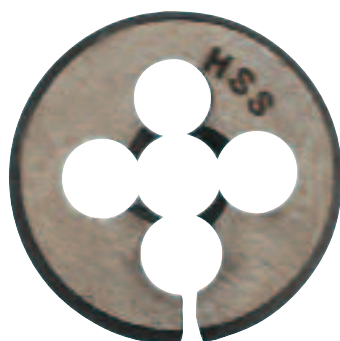
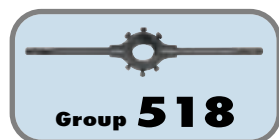


Square AF	Tap Drill Size	Set of 3 Order Code SHR-085	Price/1 RND
4.00	4.00	-1600D	434.70
5.00	5.30	-1610D	622.90
6.30	6.80	-1630D	625.20
8.00	8.30	-1640D	879.20
6.30	9.70	-1650D	608.80
7.10	11.10	-1660D	599.70
10.00	14.00	-1680D	1283.50
11.20	15.50	-1690D	1723.20
11.20	18.25	-	-
12.50	19.75	-1700D	1312.30
14.00	22.75	-1710D	1629.70
18.00	28.50	-1730D	3886.70
22.40	34.50	-	-
25.00	40.50	-	-
28.00	47.00	-	-

**BSF (British Standard Fine)
HSS Ground Thread Dies**

BS 1127

For use in diestocks to produce
external screw threads.



BSF HSS

Size - Pitch	Outside Diameter	Thickness	Weight each	Order Code SHR-086	Price/1 RND
3/16" x 32	13/16"	1/4"	12g	-6950K	443.40
1/4" x 26	13/16"	1/4"	12g	-6980K	320.20
1/4" x 26	1"	3/8"	27g	-7020K	377.30
5/16" x 22	1"	3/8"	27g	-7030K	377.30
3/8" x 20	1"	3/8"	26g	-7040K	377.30
3/8" x 20	1 5/16"	7/16"	51g	-7100K	556.00
7/16" x 18	1 5/16"	7/16"	56g	-7110K	556.00
1/2" x 16	1 5/16"	7/16"	54g	-7120K	556.00
5/8" x 14	1 1/2"	1/2"	73g	-7250K	821.20

**BSF (British Standard Fine)
HSS Ground Thread Taps**

ISO 529

Spiral Point/Gun Nose

NEW



Size - Pitch	Shank Dia.	A/F Square	Weight each	Order Code SHR-085	Price/1 RND
3/16" x 32	5.0	4.0	8g	-1600E	118.90
1/4" x 26	6.3	5.0	15g	-1610E	80.80
5/16" x 22	8.0	6.3	23g	-1630E	142.20
3/8" x 20	10.0	8.0	40g	-1640E	106.30
7/16" x 18	8.0	6.3	35g	-1650E	294.30
1/2" x 16	9.0	7.1	54g	-1660E	168.70
9/16" x 16	11.2	9.0	70g	-1670E	274.10
5/8" x 14	12.5	10.0	100g	-1680E	436.00
3/4" x 12	14.0	11.2	143g	-1690E	134.10
1" x 10	18.0	14.0	-	-1710E	1770.90

**BSF (British Standard Fine)
HSS Ground Thread Die Nuts**

BS 1127

For use with spanners to clean and repair existing external screw
threads.

**EXTENDED
RANGE**



BSF HSS

Size - Pitch	Width	Thickness	Weight each	Order Code SHR-086	Price/1 RND
1/4" x 26	0.71"	1/4"	10g	-7720K	301.90
3/8" x 20	0.92"	3/8"	24g	-7780K	71.80
1/2" x 16	1.10"	1/2"	48g	-7820K	143.10
5/8" x 14	1.30"	5/8"	78g	-7850K	113.10
3/4" x 12	1.48"	11/16"	108g	-7890K	196.90
7/8" x 11	1.67"	13/16"	149g	-7920K	258.40
1" x 10	2.05"	15/16"	274g	-7940K	387.50

**BSF (British Standard Fine)
HSS Ground Thread Taps**

ISO 529

Spiral Flute

NEW



Size - Pitch	Shank Dia.	A/F Square	Weight each	Order Code SHR-085	Price/1 RND
3/16" x 32	5.0	4.0	8g	-1600F	54.80
1/4" x 26	6.3	5.0	15g	-1610F	106.80
5/16" x 22	8.0	6.3	23g	-1630F	115.30
3/8" x 20	10.0	8.0	40g	-1640F	168.70
7/16" x 18	8.0	6.3	40g	-1650F	316.70
1/2" x 16	9.0	7.1	50g	-1660F	230.10
5/8" x 14	12.5	10.0	99g	-1680F	473.60
3/4" x 12	14.0	11.2	120g	-1690F	558.40

BA (British Association) HSS Ground Thread Taps

Left Hand
Also
Available



ISO 529 - 1975 (E)

Nominal Dia. of Tap		Maximum Deviation on Thread Length	
Over	Including		
-	5.5mm	+ 0.0	- 2.5
5.5mm	12.0mm	+ 0.0	- 3.2
12.0mm	39.0mm	+ 0.0	- 5.0
39.0mm	-	+ 0.0	- 6.5

EXTENDED
RANGE



Straight Flute Individual Sizes

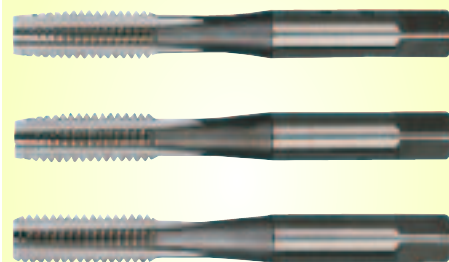
Size - Pitch	Shank Diameter	Weight each	Taper	Second	Plug	Price/1 RND
			Order Code SHR-085	Order Code SHR-085	Order Code SHR-085	
No.0 x 0.0394	6.30	14g	-1800A	-1800B	-1800C	48.00
No.2 x 0.0319	5.00	8g	-1820A	-1820B	-1820C	51.60
No.3 x 0.0287	4.50	7g	-1830A	-1830B	-1830C	154.30
No.4 x 0.0260	3.55	4g	-1840A	-1840B	-1840C	53.00
No.5 x 0.0232	3.15	4g	-1850A	-1850B	-1850C	69.60
No.6 x 0.0209	2.80	3g	-1860A	-1860B	-1860C	58.80
No.8 x 0.0169	2.80	3g	-1880A	-1880B	-1880C	84.80

HSS TAPS & DIES GROUP 085

Sets of Three

1 each, taper, second and plug lead.

BA HSS



Square AF	Tap Drill Size	Set of 3	Price/1 RND
		Order Code SHR-085	
5.00	5.10	-1800D	333.30
4.00	4.00	-1820D	224.80
3.55	3.40	-1830D	300.50
2.80	3.00	-1840D	224.80
2.50	2.65	-1850D	283.00
2.24	2.30	-1860D	253.80
2.24	1.80	-1880D	591.90

Spiral Point/Gun Nose

BA HSS

BA (British Association) HSS Ground Thread Dies

BA HSS

BS 1127

For use in diestocks to produce external screw threads.



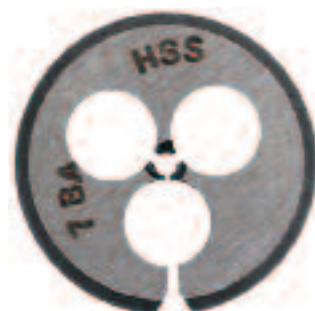
Size - Pitch	Shank Dia.	A/F Square	Weight each	Order Code SHR-085	Price/1 RND
No.0 x 0.0394	6.30	5.00	15g	-1800E	60.60
No.1 x 0.0354	5.60	4.50	11g	-1810E	70.50
No.2 x 0.0319	5.00	4.00	9g	-1820E	92.40
No.4 x 0.0260	3.55	2.80	4g	-1840E	95.10
No.5 x 0.0232	3.15	2.50	4g	-1850E	68.50
No.6 x 0.0209	2.80	2.24	3g	-1860E	93.30
No.8 x 0.0169	2.80	2.24	3g	-1880E	149.40

Spiral Flute

BA HSS



Size - Pitch	Shank Dia.	A/F Square	Weight each	Order Code SHR-085	Price/1 RND
No.0 x 0.0394	6.30	5.00	14g	-1800F	111.70
No.2 x 0.0319	5.00	4.00	6g	-1820F	101.00
No.3 x 0.0287	4.50	3.55	5g	-1830F	59.70
No.4 x 0.0260	3.55	2.80	4g	-1840F	96.50
No.5 x 0.0232	3.15	2.50	4g	-1850F	71.20
No.6 x 0.0209	2.80	2.24	3g	-1860F	102.80
No.8 x 0.0169	2.80	2.24	3g	-1880F	127.40



Pitch	Outside Diameter	Thickness	Weight each	Order Code SHR-086	Price/1 RND
No.6	13/16"	1/4"	11g	-8200K	389.80
No.5	13/16"	1/4"	10g	-8210K	61.20
No.4	13/16"	1/4"	12g	-8220K	389.80
No.2	13/16"	1/4"	12g	-8240K	389.80
No.1	13/16"	1/4"	13g	-8250K	70.20

Sherwood STD

Spray

400ml foam aerosol
penetrates and is able to
cling to normally inaccessible
areas and moving cutting
edges.



Sherwood STD Liquid (Poly Bottle)

Low odour liquid. Coats the cutting edge with a film of EP additives.

Sherwood STD Compound

Low melting point paste maintains a
continual lubricant feed
to the cutting edge.
Hand applied.
Suitable for the
most severe
cutting
operations.



Lubricant Type	Size	Order Code SHR-732	Price/1 RND
Liquid	500ml	-4020K	181.50
Liquid	5ltr	-4060K	1728.70
Compound	500g	-4040K	172.20

STD Tapping & Drilling

Non-Soluble Foam Lubricant

Foam aerosol penetrates and
is able to cling to normally
inaccessible areas and
moving cutting edges.
Can be used on yellow metals
without the risk of staining.



Lubricant Type	Size	Order Code SHR-732	Price/1 RND
Foam	400ml	-4210K	156.40

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR



**BSP(F) (British Standard Pipe Fitting)
HSS Ground Thread Taps**

**Left Hand
Also
Available**

ISO 529



Straight Flute Individual Sizes

Size - Pitch	Thread Length	Overall Length	Shank Diameter	Weight each	Taper	Second	Plug	Price/1 RND
					Order Code SHR-085	Order Code SHR-085	Order Code SHR-085	
1/8" x 28	15.0	59.0	8.0	26g	-2010A	-2010B	-2010C	168.70
1/4" x 19	19.0	67.0	10.0	47g	-2020A	-2020B	-2020C	203.60
3/8" x 19	21.0	75.0	12.5	75g	-2030A	-2030B	-2030C	316.90
1/2" x 14	26.0	87.0	16.0	137g	-2040A	-2040B	-2040C	437.70
5/8" x 14	26.0	91.0	18.0	191g	-2050A	-2050B	-2050C	478.90
3/4" x 14	28.0	96.0	20.0	228g	-2060A	-2060B	-2060C	601.40
7/8" x 14	29.0	102.0	22.4	228g	-2070A	-2070B	-	644.00
1" x 11	33.0	109.0	25.0	446g	-2080A	-2080B	-2080C	1076.70
1 1/4" x 11	36.0	119.0	31.5	775g	-2090A	-2090B	-2090C	957.10
1 1/2" x 11	37.0	125.0	35.5	1024g	-2100A	-2100B	-2100C	1589.70

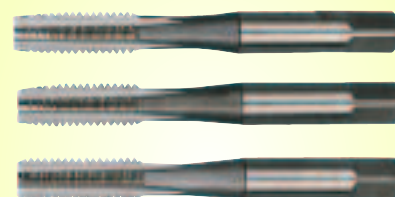
Sets of Three

1 each, taper, second and plug lead.



BSP

HSS



Square AF	Tap Drill Size	Set of 3	
		Order Code SHR-085	Price/1 RND
6.30	8.80	-2010D	506.80
8.00	11.80	-2020D	609.90
10.00	15.25	-2030D	949.90
12.50	19.00	-2040D	1313.30
14.00	21.00	-2050D	1740.50
16.00	24.50	-2060D	1804.10
18.00	28.25	-	-
20.00	30.75	-2080D	3229.10
25.00	39.50	-2090D	10246.50
28.00	45.00	-2100D	4006.40

**BSP(F) (British Standard Pipe Fine)
HSS Ground Thread Taps**

ISO 529

Spiral Point/Gun Nose

BSP

HSS



Size - Pitch	Shank Dia.	A/F Square	Weight each	Order Code SHR-085	Price/1 RND
1/8" x 28	8.0	6.3	24g	-2010E	384.70
1/4" x 19	10.0	8.0	51g	-2020E	426.20
3/8" x 19	12.5	10.0	85g	-2030E	711.70
1/2" x 14	16.0	12.5	143g	-2040E	970.60
3/4" x 14	20.0	16.0	250g	-2060E	1263.50

**BSP(F) (British Standard Pipe Fitting)
HSS Ground Thread Dies**

BS 1127

For use in diestocks to produce
external screw threads.

BSP

HSS



Size - Pitch	Outside Diameter	Thickness	Weight each	Order Code SHR-086	Price/1 RND
1/8" x 28	1"	3/8"	26g	-8620K	331.90
1/8" x 28	1 5/16"	7/16"	50g	-8640K	140.90
1/4" x 19	1 5/16"	7/16"	50g	-8650K	461.40
1/4" x 19	1 1/2"	1/2"	76g	-8690K	641.80
3/8" x 19	1 1/2"	1/2"	75g	-8700K	570.40
1/2" x 14	2"	5/8"	158g	-8760K	844.20
3/4" x 14	2"	5/8"	144g	-8780K	1065.50
1" x 11	2 1/4"	1 1/16"	174g	-8860K	1393.60

**BSP(F) (British Standard Pipe Fitting)
HSS Ground Thread Taps**

ISO 529

Spiral Flute

BSP

HSS



Size - Pitch	Shank Dia.	A/F Square	Weight each	Order Code SHR-085	Price/1 RND
1/8" x 28	8.0	6.3	24g	-2010F	409.50
1/4" x 19	10.0	8.0	51g	-2020F	453.10
3/8" x 19	12.5	10.0	85g	-2030F	735.10
1/2" x 14	16.0	12.5	143g	-2040F	1003.00
3/4" x 14	20.0	16.0	250g	-2060F	1659.10

**BSP(F) (British Standard Pipe Fitting)
HSS Ground Thread Die Nuts**

BS 1127

For use with spanners to clean and
repair existing external screw threads.

BSP

HSS

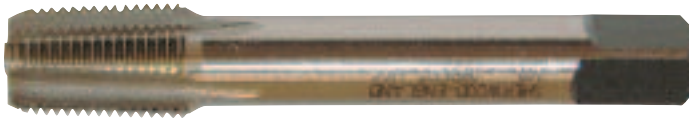


Size - Pitch	Width	Thickness	Weight each	Order Code SHR-086	Price/1 RND
1/8" x 28	0.92"	3/8"	23g	-8940K	503.10
1/4" x 19	1.10"	1/2"	43g	-8960K	608.80
3/8" x 19	1.30"	5/8"	80g	-8980K	748.10
1/2" x 14	1.67"	1 3/16"	161g	-9000K	1051.50
3/4" x 14	2.05"	1 5/16"	247g	-9040K	1892.90
1" x 11	2.58"	1 1/8"	428g	-9080K	688.80
1 1/4" x 11	2.76"	1 1/4"	619g	-9100K	820.60



**BSPT (British Standard Pipe Taper)
HSS Ground Thread Taps**

ISO 529
Straight Flute



R = With Reamer
NR = Without Reamer

Size - Pitch	Thread Length	Shank Diameter	Overall Length	Weight each	Square AF	Tap Drill Size R	Size NR	Taper Order Code SHR-085	Second Order Code SHR-085	Plug Order Code SHR-085	Price/1 RND
1/8" x 28	15.0	8.0	59.0	29g	6.30	8.00	8.40	-	-	-2200C	234.10
1/4" x 19	19.0	10.0	67.0	50g	8.00	10.80	11.20	-	-	-2210C	259.00
3/8" x 19	21.0	12.5	75.0	66g	10.00	14.25	14.75	-	-	-2220C	445.90
1/2" x 14	26.0	16.0	87.0	142g	12.50	17.75	18.25	-	-	-2230C	490.00
3/4" x 14	28.0	20.0	96.0	241g	16.00	23.00	23.75	-	-	-2240C	676.50
1" x 11	33.0	25.0	109.0	267g	20.00	29.00	30.00	-	-	-2250C	988.90



BSPT HSS

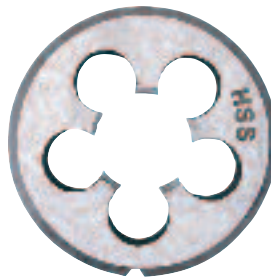
Left Hand Also Available

**BSPT (British Standard Pipe Taper)
HSS Ground Thread Dies**

ISO 2284

For use in diestocks to produce external screw threads.

BSPT HSS



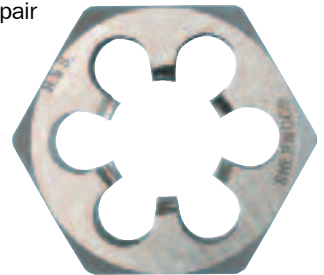
Size - Pitch	Outside Diameter	Thickness	Weight each	Order Code SHR-086	Price/1 RND
1/8" x 28	1"	3/8"	26g	-9150K	969.10
1/4" x 19	1 5/16"	7/16"	62g	-9170K	1329.50
3/8" x 19	1 1/2"	1 1/2"	75g	-9200K	1592.40
1/2" x 14	2"	5/8"	175g	-9230K	1938.80

**BSPT (British Standard Pipe Taper)
HSS Ground Thread Die Nuts**

BS 1127

For use with spanners to clean and repair existing external screw threads.

BSPT HSS



Size - Pitch	Width	Thickness	Weight each	Order Code SHR-086	Price/1 RND
1/4" x 19	1.10"	1/2"	43g	-9310K	1000.60
3/8" x 19	1.30"	5/8"	80g	-9320K	1597.90
1/2" x 14	1.67"	1 3/16"	142g	-9330K	1459.20

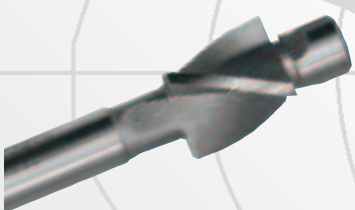


**THE COMPLETE RANGE
OF HSS TOOLING**

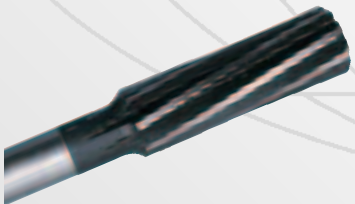
**Bore
Milling Cutters**



**Countersinks &
Counterbores**



**Hand & Machine
Reamers**



**Shank
Milling Cutters**



**Straight & Taper
Shank Drills**



**Hand &
Machine Taps**

Full Range of Sizes and Sets - Massive Stocks Available!
mm, inch, DIN, ISO, UN, BS, and ANSI Standards

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR



**NPT (National Pipe Taper)
HSS Ground Thread Taps**

ANSI 94.9

Straight Flute

**Left Hand
Also
Available**



Size - Pitch	Thread Length	Overall Length	Shank Diameter	Weight each	Taper	Second	Plug	Price/1 RND
					Order Code SHR-085	Order Code SHR-085	Order Code SHR-085	
1/16" x 27	1 1/16"	0.312	2 1/8"	20g	-	-	-3010C	307.40
1/8" x 27	3/4"	0.437	2 1/8"	50g	-3020A	-3020B	-3020C	228.60
1/4" x 18	1 1/16"	0.562	2 7/16"	70g	-	-3030B	-3030C	254.30
3/8" x 18	1 1/16"	0.700	2 9/16"	100g	-3040A	-3040B	-3040C	409.70
1/2" x 14	1 3/8"	0.687	3 1/8"	180g	-	-	-3050C	435.20
3/4" x 14	1 3/8"	0.906	3 1/4"	230g	-	-3060B	-3060C	551.50
1" x 11.5	1 3/4"	1.125	3 3/4"	420g	-3070A	-3070B	-3070C	1059.70
1 1/2" x 11.5	1 3/4"	1.500	4 1/2"	420g	-	-	-3090C	1910.40

Straight Flute Interrupted Thread
For reduced tapping friction.

INTERRUPTED HSS

Size - Pitch	Thread Length	Shank Diameter	Overall Length	Weight each	Order Code SHR-085	Price/1 RND
1/8" x 27	3/4"	0.437	2 1/8"	50g	-3210C	416.30
1/4" x 18	1 1/16"	0.562	2 7/16"	70g	-3220C	449.90
3/8" x 18	1 1/16"	0.700	2 9/16"	100g	-3230C	788.60
1/2" x 14	1 3/8"	0.687	3 1/8"	180g	-3240C	844.60

**NPT (National Pipe Taper)
HSS Ground Thread Die Nuts**

For use with spanners to clean and
repair existing external
screw threads.



NPT HSS

Size - Pitch	Width	Thickness	Weight each	Order Code SHR-086	Price/1 RND
1/4" x 18	1.10"	1/2"	51g	-9580K	1000.60
3/8" x 18	1.50"	5/8"	67g	-9590K	1202.20
1/2" x 14	1.67"	1 3/16"	147g	-9600K	1465.70
3/4" x 14	2.05"	1 5/16"	225g	-9610K	433.70

**NPT (National Pipe Taper)
HSS Ground Thread Dies**

For use in diestocks to produce external
screw threads.



NPT HSS

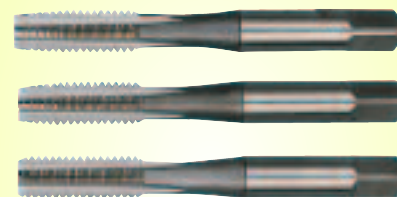
Size - Pitch	Outside Diameter	Thickness	Weight each	Order Code SHR-086	Price/1 RND
1/8" x 27	1 5/16"	7/16"	44g	-9400K	1004.90
1/4" x 18	1 5/16"	7/16"	69g	-9410K	1329.70
1/4" x 18	1 1/2"	1/2"	88g	-9430K	1592.40
3/8" x 18	1 1/2"	1/2"	80g	-9440K	1592.40
1/2" x 14	2"	5/8"	159g	-9470K	1938.80
3/4" x 14	2"	5/8"	189g	-9480K	1938.80

Sets of Three

1 each, taper, second and plug lead.



NPT HSS



R = With Reamer

NR = Without Reamer

Set of 3				
Square AF	Tap R	Drill Size NR	Order Code SHR-085	Price/1 RND
0.234	6.00	6.30	-3010D	910.40
0.328	8.40	8.70	-3020D	349.60
0.421	10.70	11.10	-3030D	323.70
0.531	14.25	14.50	-3040D	630.20
0.515	17.50	18.00	-	-
0.679	22.75	23.25	-	-
0.843	28.50	29.00	-3070D	3213.80
1.125	43.50	44.00	-	-

**NPTF (National Pipe Taper Fuel)
HSS Ground Thread Taps**

ANSI 94.9

Straight Flute

NPTF HSS



Size - Pitch	Thread Length	Shank Diameter	Overall Length	Weight each	Order Code SHR-085	Price/1 RND
Plug Lead						
1/16" x 27	1 1/16"	0.312	2 1/8"	20g	-3400C	250.10
1/8" x 27	3/4"	0.437	2 1/8"	50g	-3410C	222.10
1/4" x 18	1 1/16"	0.562	2 7/16"	91g	-3420C	231.10
1/2" x 14	1 3/8"	0.687	3 1/8"	205g	-3440C	493.60

**NPS (National Pipe Standard)
HSS Ground Thread Taps**

ANSI 94.9

Straight Flute

NPS HSS



Size - Pitch	Thread Length	Overall Length	Shank Diameter	Weight each	Order Code SHR-085	Price/1 RND
Plug Lead						
1/8" x 27	3/4"	2 1/8"	0.437	-	-2800C	149.80
1/2" x 14	1 3/8"	0.687	3 1/8"	123g	-2830C	491.10
3/4" x 14	1 3/8"	0.906	3 1/4"	-	-2840C	613.00

**NPSF (National Pipe Standard Fuel)
HSS Ground Thread Taps**

ANSI 94.9

Straight Flute

NPSF HSS



Size - Pitch	Thread Length	Overall Length	Shank Diameter	Weight each	Order Code SHR-085	Price/1 RND
Plug Lead						
1/8" x 27	3/4"	2 1/8"	0.437	45g	-2910C	700.50
1/2" x 14	1 3/8"	0.687	3 1/8"	-	-2940C	693.90
3/4" x 14	1 3/8"	0.906	3 1/4"	-	-2950C	902.40
1" x 11.5	1 3/4"	1.125	3 3/4"	-	-2960C	1620.30



Metric Threading Set



M2 - M16:

HSS Ground Thread

Taper and Second Taps:

M2 x 0.40, M3 x 0.50, M4 x 0.70, M5 x 0.80, M6 x 1.00, M8 x 1.25, M10 x 1.50 and M12 x 1.75.

Manufactured to **ISO 529**.

Bar Type Tap Wrenches: 1/16" - 1/4" and 3/16" - 1/2".

Tapping Drills to Suit: 1.6, 2.5, 3.3, 4.2, 5.0, 6.8, 8.5 and 10.2mm.

Made to **BS 328/DIN 338N**.

13/16" O/D Split Dies:

M2 x 0.40, M3 x 0.50, M4 x 0.70, M5 x 0.80 and M6 x 1.00.

1" O/D Split Dies:

M8 x 1.25 and M10 x 1.50. Manufactured to **BS 1127**.

Diestocks:

13/16" O/D and 1" O/D.

HSS Die Nuts: M12 x 1.75 and M16 x 2.00.

Manufactured to **BS 1127**.

**37
PIECES**



Range	Number of Pieces	Order Code	Price/1 RND
M2 - M16	37	SHR-086 -9990K	3348.40



Metric Threading Set



Metric M3 - M12

Comprehensive threading set containing machine ground HSS Taps and Dies in a metal box.

Contents:

O/D Split Dies: M3, M4, M5, M6, M8, M10 and M12.

Ground Thread Taps (1 of each, taper, second and plug lead): M3, M4, M5, M6, M8, M10 and M12.

Bar Type Tap Wrench:

M1 - M12 x 210mm.

Die Stock:

25 x 9 x 210mm.

Metric Thread Pitch Gauge.

Flat Bladed

Screwdriver: 6mm.

NEW

**32
PIECES**



Range	Number of Pieces	Order Code	Price/1 RND
M3 - M12	32	SEN-086 -9980K	1552.40

UNC Threading Set

No.10 - 3/4" UNC:

HSSGT Straight Flute Taps:

Taper:
No. 10 x 24, 1/4" x 20, 5/16" x 18, 3/8" x 16.

Second:

7/16" x 14, 1/2" x 13, 5/8" x 11, 3/4" x 10.

Plug:

No. 10 x 24, 1/4" x 20, 5/16" x 18, 3/8" x 16.

Bar Type Tap Wrenches:

1/16" - 1/4" and 1/4" - 3/4".

Tapping Drills to suit: HSS S/S.

3.90, 5.10, 6.60, 8.00, 9.40, 10.80mm

HSS 1" O/D Dies:

1/4" x 20, 5/16" x 18, 3/8" x 16.

Diestock:

1" O/D.

HSS Die Nuts:

7/16" x 14, 1/2" x 13, 5/8" x 11, 3/4" x 10.

Range	No. of Pcs	Order Code	Price/1 RND
10-3/4"UNC	28	SHR-086 -9994K	2992.70

UNC

**28
PIECES**

BSW Threading Set

3/16" - 3/4" BSW:

HSSGT Straight Flute Taps:

Taper: 3/16" x 24, 1/4" x 20, 5/16" x 18, 3/8" x 16.

Second: 7/16" x 14, 1/2" x 12, 5/8" x 11, 3/4" x 10.

Plug: 3/8" x 16, 5/16" x 18, 1/4" x 20, 3/16" x 24.

Bar Type Tap Wrenches:

1/4" - 3/4" and 1/16" - 1/4".

Tapping Drills to Suit: HSS S/S.

3.70, 5.10, 6.50, 7.90, 9.30, 10.50mm

HSS 1" O/D Dies:

1/4" x 2, 5/16" x 18 and 3/8" x 16.

Diestock: 1" O/D.

HSS Die Nuts:

7/16" x 14, 1/2" x 12, 5/8" x 11 and 3/4" x 10.

Range	No. of Pcs	Order Code	Price/1 RND
3/16-3/4"BSW	28	SHR-086 -9992K	2992.70

BSW

**28
PIECES**

BSF Threading Set

3/16" - 3/4" BSF:

HSSGT Straight Flute Taps:

Taper: 3/16" x 32, 1/4" x 26, 5/16" x 22, 3/8" x 20.

Second: 3/4" x 12, 7/16" x 18, 5/8" x 14, 1/2" x 16.

Plug: 3/16" x 32, 1/4" x 26, 5/16" x 22, 3/8" x 20.

Bar Type Tap Wrenches:

1/16" - 1/4" and 1/4" - 3/4".

Tapping Drills to Suit: HSS S/S.

4.00, 5.30, 6.80, 8.30, 9.70, 11.10mm

HSS 1" O/D Split Dies: 1/4" x 26, 5/16" x 22 and 3/8" x 20.

Diestock: 1" O/D.

HSS Die Nuts: 7/16" x 18, 1/2" x 16, 5/8" x 14 and 3/4" x 12.

Range	No. of Pcs	Order Code	Price/1 RND
3/16-3/4"BSF	28	SHR-086 -9991K	3441.60

BSF

**28
PIECES**

UNF Threading Set

No.10 - 3/4" UNF:

HSSGT Straight Flute Taps:

Taper:
No.10 x 32, 1/4" x 28, 5/16" x 24, 3/8" x 24.

Second:

3/4" x 16, 7/16" x 20, 5/8" x 18, 1/2" x 20.

Plug:

No.10 x 32, 1/4" x 28, 5/16" x 24, 3/8" x 24.

Bar Type Tap Wrenches:

1/16" - 1/4" and 1/4" - 3/4".

Tapping Drills to Suit: HSS S/S.

4.10, 5.50, 6.90, 8.50, 9.50, 11.50mm

HSS 1" O/D Dies:

1/4" x 28, 5/16" x 24, 3/8" x 24.

Diestock:

1" O/D.

HSS Die Nuts: 7/16" x 20, 1/2" x 20, 5/8" x 18, 3/4" x 16.

Range	No. of Pcs	Order Code	Price/1 RND
10-3/4"BSF	28	SHR-086 -9993K	2992.70

UNF

**28
PIECES**



UNC, UNF, BSW and BSF Sets

The unique general purpose properties of these taps guarantee high productivity by reducing the amount of time spent changing taps for different materials and at the same time reducing the number of taps required by the machine shop.

Swiss+Tech 'Black Ring' machine taps with their wide range of applications are the result of years of experience in metal cutting. Responsible for our developments were the following demands from our main customers:

- Increase of a tap's versatility.
- Reducing the confusing type variety.
- Reducing the storage costs for the tools.
- Reducing the tool changing times.

For general tapping applications. For production tapping of specific materials a specialist tap may be more suitable.

Manufactured to **DIN 371/376**.



Suitable for the following Material Groups

Group	Materials Colour defines similar machineability	Hardness		Tensile Strength N/mm ²	Tapping Speed M/min
		Brinell HB	Rockwell HRC		
1.1	Mild Steel	<130	-	<400	10 - 15
1.2	Case Hardening & Structural Steel	<200	-	<700	10 - 15
1.3	Medium Carbon Steel	<260	<26	<850	5 - 10
1.4	Low Alloy Steel	<260	<26	<850	4 - 8
2.1	Free Machining Stainless	<230	<20	<800	2 - 5
2.2	Medium Strength Austenitic Stainless	<260	<26	<850	2 - 5
7.1	Unalloyed Aluminium Zinc - Magnesium	-	-	<150	15 - 20
7.2	Aluminium Alloy less than 5% Si	-	-	150 - 300	15 - 20
7.3	Aluminium Alloy 5% to 10% Si	<230	<20	<800	5 - 10

Spiral Point/Gun Nose - HSS-E Bright Finish

For through holes.

Taper lead to **DIN form B**. Tapping tolerance to 6H.

SPIRAL POINT FOR THROUGH HOLES

HSS-E



ISO Metric

Size - Pitch (mm)	(d2) Shank Dia.	A/F Square	(I1) Overall Length	(I2) Thread Length	Weight each	Order Code SWT-185	Price/1 RND
M3 x 0.50	3.5	2.7	56	2.5	5g	-8509X	175.90
M4 x 0.70	4.5	3.4	63	3.3	8g	-8515X	211.50
M5 x 0.80	6.0	4.9	70	4.2	14g	-8518X	193.00
M6 x 1.00	6.0	4.9	80	5.0	18g	-8521X	198.80
M8 x 1.25	8.0	6.2	90	6.8	33g	-8527X	236.00
M10 x 1.50	10.0	8.0	100	8.5	56g	-8530X	283.30
M12 x 1.75	9.0	7.0	110	10.2	61g	-8533X	381.40
M16 x 2.00	12.0	9.0	110	14.0	100g	-8539X	579.70
M20 x 2.50	16.0	12.0	140	17.5	210g	-8542X	914.40

METRIC

HSS-E 'Black Ring' M3 - M8 Spiral Point/Gun Nose 5 Piece Tap Set

'Black Ring' machine taps for general tapping applications suitable for steels, low alloy steels, stainless steels and non-ferrous materials.

Manufactured to **DIN371/376**.

Tapping tolerance to 6H.

Spiral Point/Gun Nose - HSS-E Bright Finish

For through holes.

Taper lead to **DIN form B**.

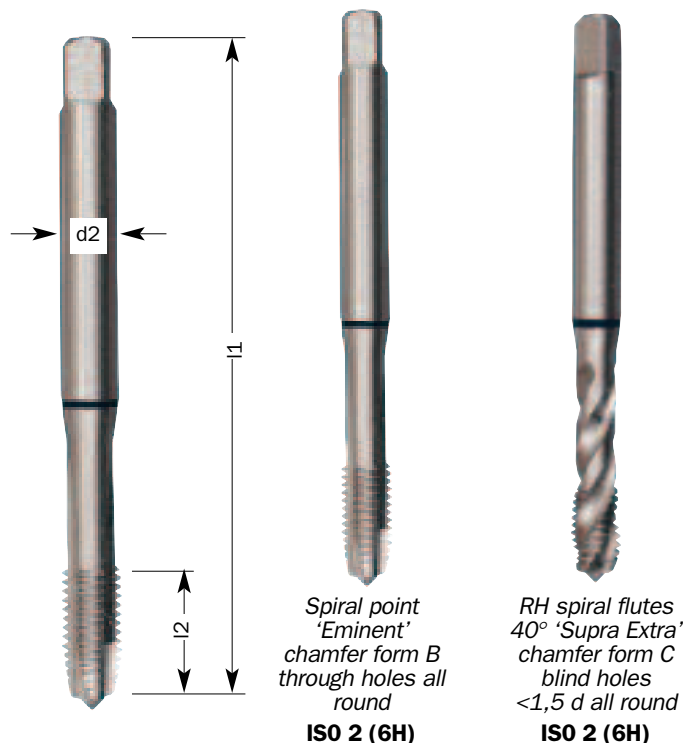
Contents:

Pitch sizes	Thread length
M3 x 0.5mm	2.5mm
M4 x 0.7mm	3.3mm
M5 x 0.8mm	4.2mm
M6 x 1.0mm	5.0mm
M8 x 1.25mm	6.8mm

Number of Pieces	Order Code SWT-185	Price/1 RND
5	-9900X	967.40



The tool geometry (with up to 138 parameters) has been developed and optimised during long-term tests in co operation with users for the different sections of structural steel, aluminum casting, machining steel, VA steels, heat-resistant steels and tool steels. Selected hard coatings increase the range of applications. The objective of developing Swiss+Tech's 'Black Ring' Taps was the realisation of narrower tolerances and more efficient cutting times for the thread production.



Spiral point
'Eminent'
chamfer form B
through holes all
round
ISO 2 (6H)

RH spiral flutes
40° 'Supra Extra'
chamfer form C
blind holes
<1,5 d all round
ISO 2 (6H)

Spiral Flute

For blind holes.

Taper lead to **DIN form C**.

Tapping tolerance to 6H.

SPIRAL FLUTE FOR BLIND HOLES

HSS-E



ISO Metric

Size - Pitch (mm)	(d2) Shank Dia.	A/F Square	(I1) Overall Length	(I2) Thread Length	Weight each	Order Code SWT-185	Price/1 RND
M3 x 0.50	3.5	2.7	56	2.5	5g	-8559X	189.50
M4 x 0.70	4.5	3.4	63	3.3	8g	-8565X	196.60
M5 x 0.80	6.0	4.9	70	4.2	14g	-8568X	202.90
M6 x 1.00	6.0	4.9	80	5.0	17g	-8571X	209.50
M8 x 1.25	8.0	6.2	90	6.8	31g	-8577X	271.50
M10 x 1.50	10.0	8.0	100	8.5	53g	-8580X	283.30
M12 x 1.75	9.0	7.0	110	10.2	57g	-8583X	381.40
M16 x 2.00	12.0	9.0	110	14.0	91g	-8589X	666.60
M20 x 2.50	16.0	12.0	140	17.5	195g	-8592X	914.40

METRIC

HSS-E 'Black Ring' M3 - M8 Spiral Flute 5 Piece Tap Set

'Black Ring' machine taps for general tapping applications suitable for steels, low alloy steels, stainless steels and non-ferrous materials.

Manufactured to **DIN371/376**.

Tapping tolerance to 6H.

Spiral Flute - HSS-E Bright Finish

For blind holes.

Taper lead to **DIN form C**.

Contents:

Pitch sizes	Thread length
M3 x 0.5mm	2.5mm
M4 x 0.7mm	3.3mm
M5 x 0.8mm	4.2mm
M6 x 1.0mm	5.0mm
M8 x 1.25mm	6.8mm

Number of Pieces	Order Code SWT-185	Price/1 RND
5	-9910X	967.40



SWISS+TECH **HSS 'Yellow Ring' Taps**

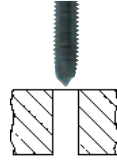
Manufactured to **DIN 371/376**



Suitable for the following Material Groups

Group	Materials	Brinell Hardness HB	Tensile Strength N/mm ²	Tapping Speed M/min
1.1	Mild soft steel & free machining non-alloy low carbon steel	up to 130	up to 400	10 - 20
1.2	Non-alloy case hardening, structural & low to medium carbon steel	up to 200	up to 700	10 - 15
1.3	Non-alloy, plain and medium carbon steel and castings	up to 260	up to 850	5 - 10

Spiral Point/Gun Nose - HSS-EV Oxidised Finish
For through holes.
Taper lead to **DIN form B**.
(3.5 x P to 5.5 x P).
Tapping tolerance to **6H**.



HSS-EV

SPIRAL POINT FOR THROUGH HOLES



ISO Metric Coarse

Size - Pitch (mm)	Overall Length	Thread Length	Shank Dia.	A/F Square	Weight each	Order Code SWT-185	Price/1 RND
M2.0 x 0.40	45.0	8.0	2.8	2.1	4g	-0003Y	191.10
M3.0 x 0.50	56.0	11.0	3.5	2.7	5g	-0009Y	171.10
M4.0 x 0.70	63.0	13.0	4.5	3.4	8g	-0015Y	176.40
M5.0 x 0.80	70.0	15.0	6.0	4.9	13g	-0018Y	183.50
M6.0 x 1.00	80.0	17.0	6.0	4.9	17g	-0021Y	183.50
M8.0 x 1.25	90.0	20.0	8.0	6.0	32g	-0027Y	219.50
M10.0 x 1.50	100.0	22.0	10.0	8.0	55g	-0030Y	263.10
M12.0 x 1.75	110.0	24.0	9.0	7.0	61g	-0033Y	327.50
M16.0 x 2.00	110.0	27.0	12.0	9.0	108g	-0039Y	466.20

BSP - British Standard Pipe DIN 5156



Size - Pitch	Overall Length	Thread Length	Shank Dia.	A/F Square	Weight each	Order Code SWT-185	Price/1 RND
1/8" x 28	90.0	20.0	7.0	5.5	16g	-0902Y	355.60
1/4" x 19	100.0	22.0	11.0	9.0	48g	-0904Y	574.10
3/8" x 19	100.0	22.0	12.0	9.0	69g	-0906Y	563.20

HSS 'Red Ring' Taps

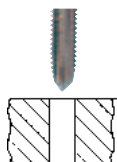
Manufactured to **DIN 371/376**



Suitable for the following Material Groups

Group	Materials	Brinell Hardness HB	Tensile Strength N/mm ²	Tapping Speed M/min
1.4	Generally low to medium alloy steel and castings	up to 260	up to 850	5 - 10
1.5	Medium to high alloy steel tool steel and steel castings	up to 340	up to 1200	4 - 8

Spiral Point/Gun Nose - HSS-Co Bright Finish
For through holes.
Taper lead to **DIN form B**.
(3.5 x P to 5.5 x P).
Tapping tolerance to **6HX**.



HSS-Co

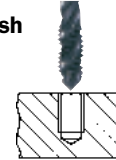
SPIRAL POINT FOR THROUGH HOLES



ISO Metric Coarse

Size - Pitch (mm)	Overall Length	Thread Length	Shank Dia.	A/F Square	Weight each	Order Code SWT-185	Price/1 RND
M2.0 x 0.40	45.0	8.0	2.8	2.1	4g	-1003R	265.50
M3.0 x 0.50	56.0	11.0	3.5	2.7	5g	-1009R	226.10
M4.0 x 0.70	63.0	13.0	4.5	3.4	8g	-1015R	228.40
M5.0 x 0.80	70.0	15.0	6.0	4.9	13g	-1018R	240.90
M6.0 x 1.00	80.0	17.0	6.0	4.9	17g	-1021R	251.80
M8.0 x 1.25	90.0	20.0	8.0	6.2	32g	-1027R	286.90
M10.0 x 1.50	100.0	22.0	10.0	8.0	58g	-1030R	349.50
M12.0 x 1.75	110.0	24.0	9.0	7.0	61g	-1033R	419.00
M16.0 x 2.00	110.0	27.0	12.0	9.0	108g	-1039R	652.70

Spiral Flute - HSS-EV Oxidised Finish
For blind holes.
Taper lead to **DIN form C** (3 x P).
Tapping tolerance: spiral flute to **6H**.



HSS-EV

SPIRAL FLUTE FOR BLIND HOLES



ISO Metric Coarse

Helix angle 40°. Tapping depth **2.5 x D**.

Size - Pitch (mm)	Overall Length	Thread Length	Shank Dia.	A/F Square	Weight each	Order Code SWT-185	Price/1 RND
M2.0 x 0.40	45.0	8.0	2.8	2.1	5g	-0503Y	223.60
M3.0 x 0.50	56.0	6.0	3.5	2.7	5g	-0509Y	188.90
M3.5 x 0.60	56.0	7.0	4.0	3.0	6g	-0512Y	333.10
M4.0 x 0.70	63.0	7.0	4.5	3.4	8g	-0515Y	188.90
M5.0 x 0.80	70.0	8.0	6.0	4.9	13g	-0518Y	192.50
M6.0 x 1.00	80.0	10.0	6.0	4.9	16g	-0521Y	197.90
M8.0 x 1.25	90.0	13.0	8.0	6.2	30g	-0527Y	237.90
M10.0 x 1.50	100.0	15.0	10.0	8.0	45g	-0530Y	278.70
M12.0 x 1.75	110.0	18.0	9.0	7.0	56g	-0533Y	362.80
M16.0 x 2.00	110.0	20.0	12.0	9.0	95g	-0539Y	497.90

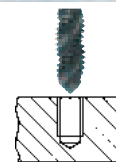
BSP - British Standard Pipe Bright Finish DIN 5156



Size - Pitch	Overall Length	Thread Length	Shank Dia.	A/F Square	Weight each	Order Code SWT-185	Price/1 RND
1/8" x 28	90.0	20.0	7.0	5.5	16g	-0932Y	404.90
1/4" x 19	100.0	22.0	11.0	9.0	48g	-0934Y	596.70
3/8" x 19	100.0	22.0	12.0	9.0	69g	-0936Y	633.90
1/2" x 14	125.0	25.0	16.0	12.0	152g	-0938Y	990.80
3/4" x 14	140.0	28.0	20.0	16.0	305g	-0942Y	1223.10

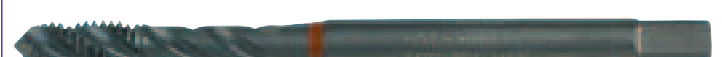


Spiral Flute - HSS-EV Oxidised Finish
For blind holes.
Taper lead to **DIN form C** (3 x P).
Tapping tolerance: spiral flute to **6H**.



HSS-EV

SPIRAL FLUTE FOR BLIND HOLES



ISO Metric Coarse

Helix angle 40°. Tapping depth **2.5 x D**.

Size - Pitch (mm)	Overall Length	Thread Length	Shank Dia.	A/F Square	Weight each	Order Code SWT-185	Price/1 RND
M2.0 x 0.40	45.0	3.0	2.8	2.1	5g	-1503R	289.90
M3.0 x 0.50	56.0	6.0	3.5	2.7	5g	-1509R	245.70
M4.0 x 0.70	63.0	7.0	4.5	3.4	8g	-1515R	245.70
M5.0 x 0.80	70.0	8.0	6.0	4.9	13g	-1518R	258.20
M6.0 x 1.00	80.0	10.0	6.0	4.9	16g	-1521R	268.30
M8.0 x 1.25	90.0	13.0	8.0	6.2	30g	-1527R	304.30
M10.0 x 1.50	100.0	15.0	10.0	8.0	45g	-1530R	366.40
M12.0 x 1.75	110.0	18.0	9.0	7.0	56g	-1533R	447.80
M16.0 x 2.00	110.0	20.0	12.0	9.0	95g	-1539R	711.10

GROUP 085 PRODUCTION TAPS

SWISS+TECH HSS 'Blue Ring' Taps

Manufactured to DIN 371/376

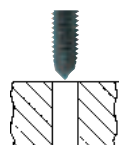
Suitable for the following Material Groups

Group	Materials	Brinell Hardness HB	Tensile Strength N/mm ²	Tapping Speed M/min
2.1	Soft and generally easy to machine ferritic & martensitic stainless steel and castings	up to 230	up to 800	4 - 6
2.2	Medium strength & reasonable to machine austenitic stainless steel and castings	up to 290	up to 1000	4 - 6
2.3	Hard & generally difficult to machine ferritic & austenitic stainless steel & castings	up to 340	up to 1200	3 - 6

Note: Fluteless taps may also be used on stainless steel. See 'Green Ring' FLUTELESS on page 128.

Spiral Point/Gun Nose - HSS-EV Oxidised Finish

For through holes. Taper lead to DIN form B (3.5 x P to 5.5 x P). Tapping tolerance to 6HX.



HSS-EV

SPIRAL POINT FOR THROUGH HOLES



ISO Metric Coarse

Size - Pitch (mm)	Overall Length	Thread Length	Shank Dia.	A/F Square	Weight each	Order Code SWT-185	Price/1 RND
M2.0 x 0.40	45.0	8.0	2.8	2.1	4g	-2003B	231.90
M3.0 x 0.50	56.0	11.0	3.5	2.7	5g	-2009B	184.60
M4.0 x 0.70	63.0	13.0	4.5	3.4	8g	-2015B	192.50
M5.0 x 0.80	70.0	15.0	6.0	4.9	13g	-2018B	202.70
M6.0 x 1.00	80.0	17.0	6.0	4.9	17g	-2021B	212.80
M8.0 x 1.25	90.0	20.0	8.0	6.0	32g	-2027B	234.90
M10.0 x 1.50	100.0	22.0	10.0	8.0	55g	-2030B	288.20
M12.0 x 1.75	110.0	24.0	9.0	7.0	61g	-2033B	366.40
M16.0 x 2.00	110.0	27.0	12.0	9.0	108g	-2039B	517.60

HSS 'White Ring' Taps

Manufactured to DIN 371/376

Suitable for the following Material Groups

Group	Materials	Brinell Hardness HB	Tensile Strength N/mm ²	Tapping Speed M/min
3.1	Grey cast iron Hardness soft to medium	up to 130	up to 400	8 - 12
3.2	Grey cast iron Hardness medium to hard	up to 200	up to 700	4 - 6

Straight Flute - HSS-EV Nitride Finish

For through holes. Taper lead to DIN form D (taper) (3.5 x P to 5 x P). Tapping tolerance to 6HX.

STRAIGHT FLUTE FOR THROUGH HOLES

METRIC COARSE

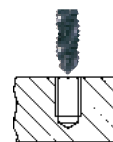


ISO Metric Coarse

Size - Pitch (mm)	Overall Length	Thread Length	Shank Dia.	A/F Square	Weight each	Order Code SWT-185	Price/1 RND
M2.0 x 0.40	45.0	8.0	2.8	2.1	14g	-3503W	197.90
M3.0 x 0.50	56.0	11.0	3.5	2.7	5g	-3509W	172.30
M4.0 x 0.70	63.0	13.0	4.5	3.4	8g	-3515W	178.80
M5.0 x 0.80	70.0	16.0	6.0	4.9	13g	-3518W	188.90
M6.0 x 1.00	80.0	17.0	6.0	4.9	17g	-3521W	188.90
M8.0 x 1.25	90.0	22.0	8.0	6.2	32g	-3527W	220.50
M10.0 x 1.50	100.0	24.0	10.0	8.0	55g	-3530W	264.20
M12.0 x 1.75	110.0	29.0	9.0	7.0	61g	-3533W	332.30

Spiral Flute (BLT) - HSS-EV Oxidised Finish

For deep blind holes. Taper lead to DIN form C (2 x P to 3 x P). Tapping tolerance to 6H.



SPIRAL FLUTE FOR BLIND HOLES

HSS-EV



'Biteless Taper' ISO Metric Coarse

Helix angle 45°

Size - Pitch (mm)	Overall Length	Thread Length	Shank Dia.	A/F Square	Weight each	Order Code SWT-185	Price/1 RND
M2.0 x 0.40	45.0	8.0	2.8	2.1	5g	-2503B	250.50
M3.0 x 0.50	56.0	6.0	3.5	2.7	5g	-2509B	212.80
M4.0 x 0.70	63.0	7.0	4.5	3.4	8g	-2515B	219.50
M5.0 x 0.80	70.0	8.0	6.0	4.9	13g	-2518B	222.30
M6.0 x 1.00	80.0	11.0	6.0	4.9	16g	-2521B	226.10
M8.0 x 1.25	90.0	13.0	8.0	6.2	30g	-2527B	264.20
M10.0 x 1.50	100.0	15.0	10.0	8.0	45g	-2530B	316.40
M12.0 x 1.75	110.0	18.0	9.0	7.0	56g	-2533B	392.80
M16.0 x 2.00	110.0	20.0	12.0	9.0	95g	-2539B	556.50

Spiral Flute (BLF) - HSS-EV Oxidised Finish

For shorter blind holes. Taper lead to DIN form C (3 x P). Tapping tolerance to 6H.

'Biteless Flat' ISO Metric Coarse

Helix angle 45°

Size - Pitch (mm)	Overall Length	Thread Length	Shank Dia.	A/F Square	Weight each	Order Code SWT-185	Price/1 RND
M3.0 x 0.50	56.0	6.0	3.5	2.7	5g	-3009B	255.10
M4.0 x 0.70	63.0	7.0	4.5	3.4	8g	-3015B	264.20
M5.0 x 0.80	70.0	8.0	6.0	4.9	13g	-3018B	267.30
M6.0 x 1.00	80.0	11.0	6.0	4.9	16g	-3021B	271.50
M8.0 x 1.25	90.0	13.0	8.0	6.2	30g	-3027B	316.40
M10.0 x 1.50	100.0	15.0	10.0	8.0	45g	-3030B	380.10
M12.0 x 1.75	110.0	18.0	9.0	7.0	56g	-3033B	471.00
M16.0 x 2.00	110.0	20.0	12.0	9.0	95g	-3039B	668.20

HSS-EV

Group	Materials	Brinell Hardness HB	Tensile Strength N/mm ²	Tapping Speed M/min
3.3	Malleable and nodular irons Hardness soft to medium	up to 220	up to 850	4 - 6
3.4	Malleable and nodular irons Hardness medium to hard	up to 300	up to 700	4 - 6

Straight Flute - HSS-EV Nitride Finish

For blind holes. Plug/bottoming lead to DIN form C (2 x P to 3 x P). Tapping tolerance to 6HX.

STRAIGHT FLUTE FOR BLIND HOLES

METRIC COARSE



ISO Metric Coarse

Size - Pitch (mm)	Overall Length	Thread Length	Shank Dia.	A/F Square	Weight each	Order Code SWT-185	Price/1 RND
M2.0 x 0.40	45.0	8.0	2.8	2.1	4g	-4003W	197.90
M2.5 x 0.45	50.0	9.0	2.8	2.1	4g	-4006W	148.20
M3.0 x 0.50	56.0	11.0	3.5	2.7	5g	-4009W	172.30
M4.0 x 0.70	63.0	13.0	4.5	3.4	8g	-4015W	178.80
M5.0 x 0.80	70.0	16.0	6.0	4.9	13g	-4018W	188.90
M6.0 x 1.00	80.0	19.0	6.0	4.9	17g	-4021W	188.90
M8.0 x 1.25	90.0	22.0	8.0	6.2	32g	-4027W	220.50
M10.0 x 1.50	100.0	24.0	10.0	8.0	58g	-4030W	264.20
M12.0 x 1.75	110.0	29.0	9.0	7.0	61g	-4033W	332.30
M14.0 x 2.00	110.0	30.0	11.0	9.0	78g	-4036W	380.10
M16.0 x 2.00	110.0	32.0	12.0	9.0	108g	-4039W	474.60

SWISS+TECH **HSS 'Purple Ring' Taps**

Suitable for the following Material Groups

Group	Materials	Brinell Hardness HB	Tensile Strength N/mm ²	Tapping Speed M/min
4.1	Titanium alloy (also pure nickel)	-		3 - 9

Right Hand Cutting - Left Hand Spiral Flute - HSS-PM Nitride Finish
For through holes. Left hand spiral.

Taper lead to **DIN form D** (3.5 x P to 5 x P).
Tapping tolerance to **6HX**.

LEFT HAND SPIRAL FLUTE FOR THROUGH HOLES

METRIC COARSE



ISO Metric Coarse Helix angle 15°.

Size - Pitch (mm)	Overall Length	Thread Length	Shank Dia.	A/F Square	Weight each	Order Code SWT-185	Price/1 RND
M3.0 x 0.50	56.0	11.0	3.5	2.7	5g	-4509P	321.00
M4.0 x 0.70	63.0	13.0	4.5	3.4	8g	-4515P	329.20
M5.0 x 0.80	70.0	16.0	6.0	4.9	14g	-4518P	344.20
M6.0 x 1.00	80.0	19.0	6.0	4.9	17g	-4521P	344.20
M8.0 x 1.25	90.0	22.0	8.0	6.2	32g	-4527P	410.10
M10.0 x 1.50	100.0	24.0	10.0	8.0	55g	-4530P	488.90
M12.0 x 1.75	110.0	29.0	9.0	7.0	63g	-4533P	612.70
M16.0 x 2.00	110.0	32.0	12.0	9.0	111g	-4539P	873.20

HSS 'Orange Ring' Taps

Suitable for the following Material Groups

Group	Materials	Brinell Hardness HB	Tensile Strength N/mm ²	Tapping Speed M/min
4.3	Titanium alloys of a hard and very hard to machine nature	-	up to 1250	3 - 6
5.1	Heat resistant super alloys including iron based high temperature alloys	-	up to 500	6 - 6

Spiral Point/Gun Nose - HSS-PM Nitride & Oxide Finish
For through holes.

Taper lead to **DIN form B** (3.5 x P to 5.5 x P).
Tapping tolerance to **6HX**.

SPIRAL POINT FOR THROUGH HOLES

METRIC COARSE



ISO Metric Coarse

Size - Pitch (mm)	Overall Length	Thread Length	Shank Dia.	A/F Square	Weight each	Order Code SWT-185	Price/1 RND
M3.0 x 0.50	56.0	11.0	3.5	2.7	5g	-5509N	313.70
M4.0 x 0.70	63.0	13.0	4.5	3.4	8g	-5515N	322.30
M5.0 x 0.80	70.0	16.0	6.0	4.9	13g	-5518N	336.60
M6.0 x 1.00	80.0	19.0	6.0	4.9	17g	-5521N	336.60
M8.0 x 1.25	90.0	22.0	8.0	6.2	32g	-5527N	401.60
M10.0 x 1.50	100.0	24.0	10.0	8.0	55g	-5530N	478.80
M12.0 x 1.75	110.0	29.0	9.0	7.0	61g	-5533N	598.30
M16.0 x 2.00	110.0	32.0	12.0	9.0	108g	-5539N	852.30



HSS-PM

Group	Materials	Brinell Hardness HB	Tensile Strength N/mm ²	Tapping Speed M/min
4.2	Titanium alloy medium and hard to machine	-	up to 900	6 - 9
4.3	Titanium alloys of a hard and very hard to machine nature	-	up to 1200	6 - 9

Spiral Flute - HSS-PM Nitride Finish
For blind holes. Taper lead to **DIN form B** (3 x P). Tapping tolerance to **6HX**.

SPIRAL FLUTE FOR BLIND HOLES

METRIC COARSE



ISO Metric Coarse Helix angle 15°. Tapping depth 2.5 x D.

Size - Pitch (mm)	Overall Length	Thread Length	Shank Dia.	A/F Square	Weight each	Order Code SWT-185	Price/1 RND
M3.0 x 0.50	56.0	5.0	3.5	2.7	5g	-5009P	321.00
M4.0 x 0.70	63.0	7.0	4.5	3.4	8g	-5015P	329.20
M5.0 x 0.80	70.0	9.0	6.0	4.9	14g	-5018P	344.20
M6.0 x 1.00	80.0	11.0	6.0	4.9	17g	-5021P	344.20
M8.0 x 1.25	90.0	12.0	8.0	6.2	32g	-5027P	410.10
M10.0 x 1.50	100.0	13.0	10.0	8.0	55g	-5030P	488.90
M12.0 x 1.75	110.0	15.0	9.0	7.0	63g	-5033P	612.70

HSS-PM

Group	Materials	Brinell Hardness HB	Tensile Strength N/mm ²	Tapping Speed M/min
5.2	Heat resistant super alloys, cobalt or nickel based medium to hard to machine	-	up to 900	3 - 6
5.3	Heat resistant super alloys, cobalt or nickel based hard to very hard to machine	-	up to 1200	3 - 6

Spiral Flute - HSS-PM Nitride & Oxide Finish
For blind holes. Taper lead to **DIN form C**.

This tap has the special chamfer lead of (3 x P).
Tapping tolerance: spiral flute to **6H**.

SPIRAL FLUTE FOR BLIND HOLES

METRIC COARSE



ISO Metric Coarse Helix angle 40°. Tapping depth 2.5 x D.

Size - Pitch (mm)	Overall Length	Thread Length	Shank Dia.	A/F Square	Weight each	Order Code SWT-185	Price/1 RND
M3.0 x 0.50	56.0	5.0	3.5	2.7	5g	-6009N	321.00
M4.0 x 0.70	63.0	7.0	4.5	3.4	9g	-6015N	329.20
M5.0 x 0.80	70.0	9.0	6.0	4.9	13g	-6018N	344.20
M6.0 x 1.00	80.0	11.0	6.0	4.9	16g	-6021N	310.40
M8.0 x 1.25	90.0	12.0	8.0	6.2	30g	-6027N	384.50
M10.0 x 1.50	100.0	13.0	10.0	8.0	51g	-6030N	488.90
M12.0 x 1.75	110.0	15.0	9.0	7.0	56g	-6033N	612.70
M14.0 x 2.00	110.0	18.0	11.0	9.0	63g	-6036N	705.20
M16.0 x 2.00	110.0	18.0	12.0	9.0	95g	-6039N	873.20

Manufactured to **DIN 371/376**

Suitable for the following Material Groups

Group	Materials	Brinell Hardness HB	Tensile Strength N/mm ²	Tapping Speed M/min
7.1	Unalloyed aluminium, magnesium and zinc	-	up to 150	20 - 30
7.2	Aluminium alloy less than 5% silicon magnesium & zinc alloys (long chip)	-	up to 1200	20 - 30

Spiral Point/Gun Nose - HSS-EV Nitride Finish

For through holes. Taper lead to **DIN form B**

(3.5 x P to 5.5 x P).

Tapping tolerance to **6HX**.

SPIRAL POINT FOR THROUGH HOLES

METRIC COARSE



ISO Metric Coarse

Size - Pitch (mm)	Overall Length	Thread Length	Shank Dia.	A/F Square	Weight each	Order Code SWT-185	Price/1 RND
M2.0 x 0.40	45.0	8.0	2.8	2.1	4g	-6503G	206.20
M3.0 x 0.50	56.0	11.0	3.5	2.7	5g	-6509G	133.40
M4.0 x 0.70	63.0	13.0	4.5	3.4	8g	-6515G	137.60
M5.0 x 0.80	70.0	16.0	6.0	4.9	13g	-6518G	164.50
M6.0 x 1.00	80.0	19.0	6.0	4.9	17g	-6521G	144.70
M8.0 x 1.25	90.0	22.0	8.0	6.2	32g	-6527G	190.00
M10.0 x 1.50	100.0	24.0	10.0	8.0	58g	-6530G	244.50
M12.0 x 1.75	110.0	29.0	9.0	7.0	61g	-6533G	327.50

HSS 'Green Ring' Fluteless Taps

Lubrication grooves are a feature of all taps of M3.0 and over. Manufactured to **DIN 371/376**.

HSS-EV **FLUTELESS**

Suitable for the following Material Groups

Group	Materials	Brinell Hardness HB	Tensile Strength N/mm ²	Tapping Speed M/min
6.1	Copper	-	up to 500	8 - 12
6.2	Brass (alpha - long chip)	-	up to 800	15 - 20

Fluteless - HSS-EV Bright Finish

For through and blind holes.

Taper lead to **DIN form B**

(3.5 x P to 5.5 x P). Tapping tolerance to **6H**.

FLUTELESS FOR THROUGH AND BLIND HOLES

METRIC COARSE



ISO Metric Coarse

Size - Pitch (mm)	Overall Length	Thread Length	Shank Dia.	A/F Square	Weight each	Order Code SWT-185	Price/1 RND
M2.0 x 0.40	45.0	8.0	2.8	2.1	4g	-7503G	236.80
M3.0 x 0.50	56.0	11.0	3.5	2.7	5g	-7509G	185.70
M4.0 x 0.70	63.0	13.0	4.5	3.4	8g	-7515G	214.10
M5.0 x 0.80	70.0	15.0	6.0	4.9	13g	-7518G	228.40
M6.0 x 1.00	80.0	17.0	6.0	4.9	17g	-7521G	233.80
M8.0 x 1.25	90.0	20.0	8.0	6.2	32g	-7527G	292.80
M10.0 x 1.50	100.0	22.0	10.0	8.0	58g	-7530G	374.30
M12.0 x 1.75	110.0	24.0	9.0	7.0	61g	-7533G	549.30

HSS-EV

Group	Materials	Brinell Hardness HB	Tensile Strength N/mm ²	Tapping Speed M/min
7.3	Aluminium alloy 5% to 10% silicon	-	up to 500	15 - 20
7.4	Aluminium alloy 5% to 10% silicon	-	up to 500	15 - 20

Spiral Flute - HSS-EV Nitride Finish

For blind holes. Taper lead to **DIN form C**

(2 x P to 3 x P). Tapping tolerance to **6H**.

SPIRAL FLUTE FOR BLIND HOLES

METRIC COARSE



ISO Metric Coarse Helix angle 45°. Tapping depth 2.5 x D.

Size - Pitch (mm)	Overall Length	Thread Length	Shank Dia.	A/F Square	Weight each	Order Code SWT-185	Price/1 RND
M2.0 x 0.40	45.0	8.0	2.8	2.1	5g	-7003G	200.40
M2.5 x 0.45	50.0	9.0	2.8	2.1	5g	-7006G	203.20
M3.0 x 0.50	56.0	11.0	3.5	2.7	5g	-7009G	188.90
M3.5 x 0.60	56.0	13.0	4.0	3.0	6g	-7012G	168.60
M4.0 x 0.70	63.0	13.0	4.5	3.4	8g	-7015G	188.90
M5.0 x 0.80	70.0	16.0	6.0	4.9	13g	-7018G	192.50
M6.0 x 1.00	80.0	19.0	6.0	4.9	16g	-7021G	197.90
M7.0 x 1.00	80.0	19.0	7.0	5.5	19g	-7024G	384.40
M8.0 x 1.25	90.0	22.0	8.0	6.2	30g	-7027G	237.90
M10.0 x 1.50	100.0	24.0	10.0	8.0	45g	-7030G	278.70
M12.0 x 1.75	110.0	29.0	9.0	7.0	56g	-7033G	362.80
M14.0 x 2.00	110.0	30.0	11.0	9.0	83g	-7036G	442.40
M16.0 x 2.00	110.0	32.0	12.0	9.0	95g	-7039G	497.90

Fluteless - HSS-EV (Tin Coated)

For through and blind holes.

Taper lead to **DIN form B**

(3.5 x P to 5.5 x P). Tapping tolerance to **6H**.

FLUTELESS FOR THROUGH AND BLIND HOLES

METRIC COARSE



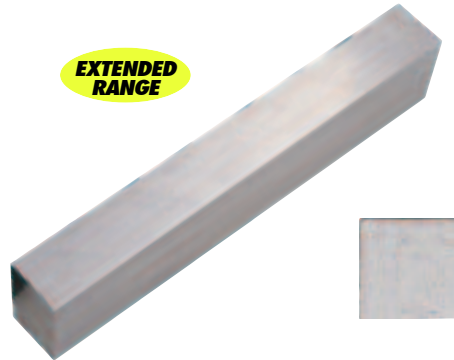
ISO Metric Coarse

Size - Pitch (mm)	Overall Length	Thread Length	Shank Dia.	A/F Square	Weight each	Order Code SWT-185	Price/1 RND
M2.0 x 0.40	45.0	8.0	2.8	2.1	4g	-8003G	353.30
M3.0 x 0.50	56.0	11.0	3.5	2.7	5g	-8009G	307.80
M4.0 x 0.70	63.0	13.0	4.5	3.4	8g	-8015G	337.10
M5.0 x 0.80	70.0	15.0	6.0	4.9	13g	-8018G	441.90
M6.0 x 1.00	80.0	17.0	6.0	4.9	17g	-8021G	446.00
M8.0 x 1.25	90.0	20.0	8.0	6.2	32g	-8027G	587.00
M10.0 x 1.50	100.0	22.0	10.0	8.0	58g	-8030G	698.80
M12.0 x 1.75	110.0	24.0	9.0	7.0	61g	-8033G	959.70

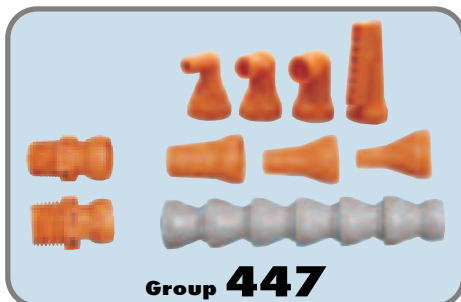
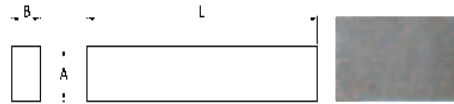
TOOLBITS & PARTING-OFF BLADES

KENNEDY
QUALITY INDUSTRIAL TOOLING**Toolbits****HSS**

Cut faster, 'stand up' longer and reduce costs. Square and rectangular toolbits supplied with 15° bevelled ends. Parting-off blades supplied with 2° side taper, 10° bevel (top and bottom).

**EXTENDED RANGE****HSS Square Inch**

A	L	Weight each	Order Code KEN-090	Price/1 RND
3/16"	2 1/2"	12g	-0040K	22.00
1/4"	2 1/2"	21g	-0050K	27.90
1/4"	3"	25g	-0060K	31.20
1/4"	4"	33g	-0070K	38.10
5/16"	2 1/2"	32g	-0100K	41.80
5/16"	3"	40g	-0110K	42.30
5/16"	4"	52g	-0130K	53.80
5/16"	6"	80g	-0140K	87.10
3/8"	3"	56g	-0160K	47.00
3/8"	4"	75g	-0180K	57.60
3/8"	6"	112g	-0190K	81.30
7/16"	4"	100g	-0220K	80.80
1/2"	3"	100g	-0250K	59.70
1/2"	4"	130g	-0270K	75.50
1/2"	6"	200g	-0280K	106.50
5/8"	4"	210g	-0300K	119.80
5/8"	6"	310g	-0330K	170.40
3/4"	4"	300g	-0350K	187.10
3/4"	5"	374g	-0360K	194.00
3/4"	6"	450g	-0370K	248.10
3/4"	8"	600g	-0380K	1160.40
1"	6"	800g	-0390K	414.40

**Group 732****Group 447****5% Cobalt Rectangular Inch****HSS-Co 5%**

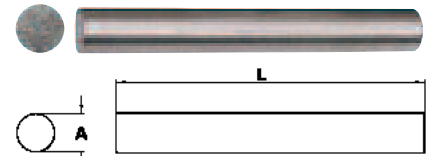
B x A	L	Weight each	Order Code KEN-090	Price/1 RND
3/16" - 1/2"	6"	72g	-5100K	187.40
1/4" - 3/8"	4"	50g	-5110K	103.30
1/4" - 1/2"	4"	70g	-5120K	130.70
5/16" - 1/2"	6"	120g	-5130K	223.80
3/8" - 1/2"	4"	100g	-5140K	158.90
3/8" - 1/2"	6"	150g	-5150K	236.60
3/8" - 5/8"	4"	125g	-5160K	201.50
3/8" - 5/8"	6"	190g	-5170K	299.60
3/8" - 3/4"	4"	150g	-5180K	558.50
3/8" - 3/4"	6"	230g	-5190K	390.60
3/8" - 1"	6"	300g	-5200K	552.80
1/2" - 5/8"	6"	240g	-5210K	379.10
1/2" - 3/4"	4"	200g	-5220K	290.70
1/2" - 3/4"	6"	315g	-5240K	434.60
1/2" - 1"	6"	390g	-5250K	641.80
5/8" - 3/4"	6"	370g	-5270K	692.10
5/8" - 1"	6"	490g	-5290K	836.00
3/4" - 1"	6"	500g	-5300K	579.00

5% Cobalt Square Metric**HSS-Co 5%**

A (mm)	L (mm)	Weight each	Order Code KEN-090	Price/1 RND
5.00	80.0	10g	-3500K	52.80
6.00	40.0	15g	-3600K	33.00
6.00	80.0	22g	-3610K	66.10
6.00	100.0	30g	-3620K	78.60
6.00	160.0	44g	-3640K	140.00
8.00	80.0	50g	-3670K	93.90
8.00	100.0	52g	-3680K	111.40
8.00	160.0	90g	-3700K	177.90
8.00	200.0	110g	-3710K	221.30
10.00	80.0	70g	-3730K	121.80
10.00	100.0	81g	-3740K	145.00
10.00	125.0	110g	-3750K	192.40
10.00	160.0	122g	-3760K	227.40
12.00	100.0	120g	-3800K	219.40
12.00	125.0	152g	-3810K	243.80
12.00	160.0	190g	-3820K	311.40
14.00	100.0	155g	-3860K	251.80
14.00	160.0	240g	-3880K	302.30
16.00	100.0	210g	-3920K	321.70
16.00	160.0	335g	-3925K	323.80
20.00	160.0	440g	-3930K	704.20
20.00	200.0	650g	-3940K	1083.00
25.00	160.0	760g	-3950K	1114.40
25.00	200.0	1010g	-3960K	752.10

5% Cobalt Square Inch**HSS-Co 5%**

A	L	Weight each	Order Code KEN-090	Price/1 RND
3/16"	2 1/2"	12g	-3020K	23.40
3/16"	3"	14g	-3030K	17.50
3/16"	4"	14g	-3040K	28.00
1/4"	2 1/2"	21g	-3050K	31.90
1/4"	3"	25g	-3060K	60.20
1/4"	4"	33g	-3070K	47.10
1/4"	6"	50g	-3080K	69.10
5/16"	2 1/2"	32g	-3100K	69.00
5/16"	3"	40g	-3110K	41.30
5/16"	4"	52g	-3130K	105.90
5/16"	6"	80g	-3140K	88.80
3/8"	3"	56g	-3160K	64.20
3/8"	4"	75g	-3180K	146.30
3/8"	6"	112g	-3190K	203.20
7/16"	4"	100g	-3220K	95.60
1/2"	3"	100g	-3250K	96.50
1/2"	4"	130g	-3270K	195.90
1/2"	6"	200g	-3280K	291.40
5/8"	4"	210g	-3300K	164.60
5/8"	6"	310g	-3330K	465.90
3/4"	4"	300g	-3350K	239.50
3/4"	6"	450g	-3370K	387.10
1"	6"	800g	-3390K	634.70

HSS Round Inch**HSS**

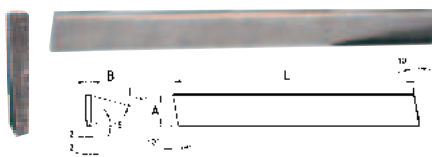
A	L	Weight each	Order Code KEN-090	Price/1 RND
3/16"	3"	11g	-1100K	26.50
1/4"	3"	20g	-1140K	33.20
1/4"	4"	27g	-1150K	39.00
5/16"	3"	31g	-1170K	45.80
5/16"	4"	42g	-1180K	53.00
3/8"	3"	45g	-1200K	36.80
3/8"	4"	60g	-1210K	57.60
1/2"	4"	110g	-1260K	74.50
1/2"	6"	160g	-1280K	107.60
5/8"	4"	170g	-1290K	119.80
5/8"	6"	250g	-1300K	185.70
3/4"	4"	240g	-1310K	163.00
3/4"	6"	360g	-1320K	248.10

5% Cobalt Round Inch**HSS-Co 5%**

A	L	Weight each	Order Code KEN-090	Price/1 RND
1/8"	3"	5g	-4010K	33.20
3/16"	3"	11g	-4100K	28.80
3/16"	4"	15g	-4110K	35.50
1/4"	2 1/2"	17g	-4120K	36.40
1/4"	3"	20g	-4140K	35.00
1/4"	4"	27g	-4150K	78.10
5/16"	3"	31g	-4170K	48.90
5/16"	4"	42g	-4180K	105.90
3/8"	3"	50g	-4200K	99.30
3/8"	4"	60g	-4210K	146.30
3/8"	6"	80g	-4230K	203.20
7/16"	3 1/2"	90g	-4250K	83.50
1/2"	4"	110g	-4260K	195.90
1/2"	6"	160g	-4280K	291.40
5/8"	4"	170g	-4290K	131.90
5/8"	6"	250g	-4300K	203.70
3/4"	4"	240g	-4310K	266.00
3/4"	6"	360g	-4320K	384.40
1"	8"	860g	-4380K	789.40

5% Cobalt Round Metric**HSS-Co 5%**

A (mm)	L (mm)	Weight each	Order Code KEN-090	Price/1 RND
4.00	80.0	8g	-4510K	57.00
5.00	80.0	12g	-4530K	60.00
6.00	80.0	18g	-4550K	63.10
6.00	100.0	24g	-4570K	92.20
8.00	80.0	31g	-4590K	89.70
8.00	100.0	40g	-4630K	130.80
8.00	125.0	60g	-4610K	84.40
8.00	160.0	63g	-4650K	154.70
10.00	80.0	50g	-4670K	65.50
10.00	100.0	65g	-4690K	170.50
10.00	125.0	90g	-4710K	192.40
12.00	63.0	65g	-4730K	62.40
12.00	80.0	70g	-4750K	99.60
12.00	100.0	94g	-4770K	257.80
12.00	125.0	125g	-4790K	145.80
12.00	160.0	141g	-4810K	311.40
14.00	125.0	190g	-4830K	161.50
16.00	125.0	160g	-4870K	227.50
16.00	160.0	250g	-4890K	239.50
20.00	100.0	260g	-4930K	231.60
20.00	160.0	390g	-4950K	416.70

5% Cobalt Parting-Off Inch**HSS-Co 5%**

B x A	L	Weight each	Order Code KEN-090	Price/1 RND
3/32" - 1/2"	4 1/2"	22g	-5410K	221.30
3/32" - 5/8"	5"	30g	-5430K	284.70
1/8" - 3/4"	6"	60g	-5450K	347.80
1/8" - 7/8"	7"	80g	-5470K	428.30
3/16" - 1"	8"	160g	-5490K	1252.20
3/16" - 1 1/8"	9"	200g	-5510K	838.50

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR