



WELCOME TO Durga Engineering Corporation

We durga engineering corporation established in 1985 approach you as one of the leading manufacturers of HSS slitting saws, circular knives, metal slotting cutters, bore type milling cutters etc.

Mfrs.of: All Type Of Gear Hov Cutters & Spl. Hobs

Durga Engineering Corporation. D222 Focal Point Patiala - 147001 India



ptibrand@gmail.com www.ptibrand.com

1







About Us

Durga Engineering Corporation

We are a renowned brand in the field of HSS slitting saws and knives, trusted by industries worldwide. With a strong presence in India through our network of dealers and traders, we have also gained recognition from machine manufacturers and government enterprises. Our brand value is consistently growing. In recent years, we have expanded our operations to international markets, supplying our high-quality products to the USA, China, Russia, Italy, the European Union, the UAE, Africa, Sri Lanka, Bangladesh, Nepal, and Germany.

Our HSS slitting saws and knives are known for their exceptional quality and precision. They are widely sought after in various industries due to their ability to cut and slit with accuracy, even in challenging conditions. Our tools can withstand high temperatures when cutting hard stainless steel and offer high cutting resistance with minimal friction. We are committed to delivering excellence and meeting the diverse needs of our customers, ensuring their productivity and satisfaction.

Slitting saw DIN 1837 A







Materials: steel, cast, non-ferrous metals, plasticApplication: recommended for slotting fragile and hard materials which make short chips, suitable for cutting thin-walled profilesMachine: metal processing machinesCharacteristic:

- · Circular saw blades for metal with fine teeth
- hollow ground with a flange, standardly produced without driving pin holes and without a keyway
- tooth form A (by request AW)
- cutting edge is very sharp
- chip clearance is reduced and it can't remove longer chips away from cutting area efficiently
- tolerances and hollow ground according DIN 1840

High quality slitting saw 1837 A, designed especialy for high performance. Slitting saws produced in Europe – Czech Republic. Circular saw blades for metal DIN 1837 A with fine teeth and A tooth form are recommended for slotting fragile and hard materials. A tooth form is suitable especially for thin saw blades with tooth pitch from 0,8 mm to 3,0 mm. Cutting edge is very sharp. Chip clearance is reduced and it cannot remove longer chips away from the cutting area efficiently. In standard modification the slitting saw blades are made with hollow ground and with a flange. They can be ordered with driving pin holes or with a keyway and AW tooth form (the tooth form A with alternate chamfering).

HSS – circular saw	blades	for metal DIN	1837A –	fine teeth
--------------------	--------	---------------	---------	------------

315 40
40
200
200
160
160
160

Small Slitting saws in imperial sizes according norms ASA teeth AFTe i.e. with fine pitch as to DIN 1837 Toothform A. Used for shallow cutting and cut-off operations. Hollow ground on both sides to prevent binding.

D (mm)	3/4	Ψ.	1 1/4	1 1/2	2'
dH7 (mm)	1/4	1/4	3/8	3/8	3/8
B (mm)	number of teeth				
0,006	40	50	60	72	100
0,008	40	50	60	72	100

0,1	40	50	60	72	100
0,01	40	50	60	72	100
0,012	40	50	60	72	100
1/6 4	40	50	60	72	100
0,02	40	50	60	72	100
0,025	40	50	60	72	100
1/3 2	40	50	60	72	100
3/6 4	40	50	60	72	100
1/1 6	40	50	60	72	100
5/6 4	40	50	60	72	100
3/3 2	40	50	60	72	100
7/6 4	40	50	60	72	100
1/8	40	50	60	72	100
5/3 2				72	100
3/1 6				72	100
7/3 2					100
1/4					100

Small Slitting saws in imperial sizes according norms ASA teeth AFTe i.e. with fine pitch as to DIN 1837 Toothform A. Used for shallow cutting and cut-off operations. Hollow ground on both sides to prevent binding.

D (mm)	2 1/2	3'	3 1/2	4"	4'	4 1/2*	4 1/2'	5'	6"	6*	7'	7'	8'	8'	10'
dH7 (mm)	17	1'	1'	17	1'	1 1/4'	1'	1'	1 1/4'	1 1/4'	1'	1 1/4'	1'	1 1/4'	1'
B (mm)	number of teeth														
1/6 4	62	74	100		100										
1/3 2	62	74	88	100	100			124	150						
3/6 4	62	74		100				124	150						
1/1 6	62	74	88	100	100			124	150		176	176	200		250

5/6 4		74	100										
3/3 2	62	74	100			112	124	150					
7/6 4			100										
1/8	62	74	100	100	112		124	150	150		200	200	250
5/3 2	62	74	100				124						
3/1 6		74	100				124	150	150				
7/3 2		74								176			
1/4	62	74	100				124	150	150				

Slitting saws range is \emptyset 20 mm – \emptyset 315 mm with thicknesses ranging 0,2 mm – 6 mm in variable designs with tooth forms: A – B – BW. All standard saws are available ground only but they are also available with VAPO or P.V.D. (Physical Vapour Deposition) coated execution. The above-mentioned examples of slitting saws are only a small overview of our production posibilities.We are ready to produce also different tools according to your documentation like prismatic cutters, gear milling cutters, profile cutters, shell end mills cutters, side and face milling cutters, halfcircle milling cutters convex, half circle milling cutters concave, corner rounding milling cutters, single angle milling cutters, double angle milling cutters , HSS Side Chip Clearance Saws straight teeth, Slitting saw, M2 Side Chip Clearance Saws staggered tooth, HSS Side and Face Cutters straight teeth, HSS Side and Face Cutters staggered teeth.

Slitting saw DIN 1838 B







Materials: steel, cast, non-ferrous metalsApplication: recommended for slotting and cutting materials which make longer chips, suitable for cutting thick-walled profiles (wall over 2 mm)Machine: metal processing machinesCharacteristic:

- HSS circular slitting saw blades with rough teeth
- hollow ground with a flange, standardly produced without driving pin holes and without a keyway
- tooth form B (by request BW)
- compared to type A chip clearance is reduced, which allows to remove chips away from cutting area efficiently
- tolerances and hollow ground according DIN 1840

High quality slitting saw DIN 1838 B, designed especially for high performance. Slitting saws produced in Europe – Czech Republic.Circular saw blades for metal DIN 1838 B with rough teeth and teeth form B are recommended especially for cutting-off steels. In comparison with A tooth form they have much bigger chip clearance and they enable bigger cut. In standard modification the saw blades are made with hollow ground and with a flange. They can be ordered with BW tooth form (B tooth form with alternate chamfering).

HSS – circula	rsa	w blades	for meta	al DIN	183	7A – fine	teeth	۱						
D (mm)	20	25	32	10	50	63	80	100	1	25	160	200	250	315
dH7 (mm)	5	8	8 1	0	13	16	22	22	2	2	32	32	32	40
B (mm)	nun	nber of teet	h											
0,50 mm		48	64	64		80								
0,60 mm		48	48	64		80	80							
0,80 mm		40	48	64		64	80							
1,00 mm		40	48	48		64	80		80					
1,20 mm		40	40	48		64	80		100					
1,60 mm		32	40	48		48	64		80		80	100		
2,00 mm		32	40	40		48	64		64		80	100		
2,50 mm		32	32	40		48	64		64		80	80		100
3,00 mm		24	32	40		40	48		64		64	80		100
4,00 mm		24	32	32		40	48		48		64	80		80
5,00 mm		24	24	32		40	40		48		64	64		80
6,00 mm		20	24	32		32	40		48		48	64		80

HSS slitting saws coarse with Coarse Pitch as to DIN 1838 Toothform B. Used for medium deep cutting and cut-off operations. Hollow ground on both sides to prevent binding.

D (mm)	2 1/2	3.	3 1/2	4*	4'	4 1/2*	5'	5'	6.	6.	7'	7'	8'	8'	10"	10"	12'	12'
dH7 (mm)	1"	1'	1'	1'	1 1/4 *	1'	1"	1'	1 1/4'	1 1/4 *	1'	1 1/4	1"	1 1/4 *	1*	1 1/4 *	1*	1 1/4 *
B (mm)	number of teeth																	
1/6 4	26	30																
1/3 2	26	30	32	36		38	40		44	44								
3/6 4	26	30	32	36		38	40		44									

1/1 6	26	30	32	36	36	38	40	40	44	44	48		52	52	62	62		
5/6 4	26	30	32	36	36		40		44		48	48	52	52	62			
3/3 2	26	30	32	36		38	40	40	44	44	48	48	52	52	62	62		
7/6 4	26	30	32	36					44									
1/8	26	30	32	36	36		40	40	44	44	48	48	52	52	62	62	70	70
5/3 2		30	32	36			40		44	44	48		52		62			
3/1 6	26	30	32	36			40		44	44	48		52	52	62		70	
7/3 2		30	32	36	36		40		44		48		52		62			
1/4	26	30	32	36			40		44	44		48	52	52	62			

Slitting saw DIN 1838 C







Materials: steel, cast, non-ferrous metals, plasticApplication: recommended for slotting and cutting materials which make longer chips, suitable for cutting thick-walled profiles (wall over 2 mm)Machine: metal processing machines Characteristic:

- · HSS circular saw blades with rough teeth
- hollow ground with a flange, standardly produced without driving pin holes and without a keyway
- C tooth form consists of roughing teeth and finishing teeth
- the roughing tooth is chamfered from both sides and in its cutting part it is 0,15-0,30 mm wider than the finishing one; the chips are cut into three parts and that's why their chip removing is much more efficient
- hollow ground according DIN 1840

High quality slitting saw 1838 C, designed especialy for high performance. Slitting saws produced in Europe – Czech Republic.The tooth consists of roughing tooth and finishing tooth. The roughing tooth is chamfered from both sides and in its cutting part is 0,15 – 0,30 mm bigger than the finishing one. Chips are cut into three parts and that's why their chip removing is much more efficient. Perfect breaking prevents from blocking cutting area and it avoids poor tool life or even tool breakage due to the tooth clogging. It is recommended for cutting solid materials.

HSS-circular	saw b	lades f	or met	al DIN	1838	C – coι	irse tee	th					
D (mm)	20	25	32	40	50	63	80	100	125	160	200	250	315
dH7 (mm)	5	8	8	10	13	16	22	22	22	32	32	32	40
B (mm)	numbe	er of teet	h										
1,00 mm	40	48	48	64	80	80							
1,20 mm	40	40	48	64	64	80	100						
1,60 mm	32	40	48	48	64	80	80	100					
2,00 mm	32	40	40	48	64	64	80	100					
2,50 mm	32	32	40	48	64	64	80	80	100				
3,00 mm	24	32	40	40	48	64	64	80	100				
4,00 mm	24	32	32	40	48	48	64	80	80				
5,00 mm	24	24	32	40	40	48	64	64	80				
6,00 mm	20	24	32	32	40	48	48	64	80				

HSS slitting saws coarse with Coarse Pitch as to DIN 1838 Toothform B. Used for medium deep cutting and cut-off operations. Hollow ground on both sides to prevent binding.

D (mm)	2 1/2	3*	3 1/2	4*	4*	4 1/2*	5*	5*	6"	6'	7*	7'	8*	8'	10"	10"	12"	12"
dH7 (mm)	1*	1"	1*	1*	1 1/4 *	1"	1"	1"	1 1/4 *	1 1/4*	1"	1 1/4 *	1*	1 1/4 *	1"	1 1/4 *	1*	1 1/4 *
B (mm)	number of teeth																	
1/6 4	26	30																
1/3 2	26	30	32	36		38	40		44	44								
3/6 4	26	30	32	36		38	40		44									
1/1 6	26	30	32	36	36	38	40	40	44	44	48		52	52	62	62		
5/6 4	26	30	32	36	36		40		44		48	48	52	52	62			
3/3 2	26	30	32	36		38	40	40	44	44	48	48	52	52	62	62		
7/6 4	26	30	32	36					44									
1/8	26	30	32	36	36		40	40	44	44	48	48	52	52	62	62	70	70

5/3 2		30	32	36		40	44	44	48		52		62		
3/1 6	26	30	32	36		40	44	44	48		52	52	62	70	
7/3 2		30	32	36	36	40	44		48		52		62		
1/4	26	30	32	36		40	44	44		48	52	52	62		

HSS TUBE/Pipe Cutting Saws



For the tube-cutting machines GF and AXXAIR, circular saw blades manufactured of HSS/Dmo5 and primarily HSS/Emo5 (alloyed with cobalt) are appropriate. They work well for cutting tubes made of any material. For cutting stainless steel tubes, standard adjustment is made to the tooth geometry. They can be produced using teeth geometry for unalloyed steel, copper, brass, and aluminium. The hollow ground, flange, and tooth form BW are used to make the saw blades. Surface coating is not a standard alteration, however buying coating is an option.

Our slitting saws have thicknesses ranging from 0,2 mm to 10 mm and varied designs with the following tooth forms: A, B, and BW. Their range is 50 mm to 450 mm. Although all basic saws are readily available in VAPO or without any coating,

Pipe wall thickness		Saw blade Ø	
1.2 – 2.5 mm	.047" – .098"	63 mm	2.480"
1.5 – 6.0 mm	.059" – .236"	68 mm	2.677"
2.0 – 5.5 mm	.079"217"	63 mm	2.480"
2.5 – 7.0 mm	.098" – .276"	68 mm	2.677"
5.0 – 12.0 mm	.197" – .472"	80 mm	2.953"
6.0 – 15.0 mm	.236" – .591"	100 mm	3.937"
0.6 – 1.2 mm	.024"047"	63 mm	2.480"
1.0 – 1.6 mm	.039" – .063"	68 mm	2.667"

Saw Blade

1.0 – 3.0 mm	.039" – .118"	63 mm	2.480"
1.2 – 2.5 mm	.047" – .098"	63 mm	2.480"
1.2 – 2.5 mm	.047"098"	68 mm	2.667"
1.2 – 2.5 mm	.047" – .098"	100 mm	3.937"
1.2 – 3.0 mm	.047" – .118"	83 mm	3.268"
1.2 – 2.5 mm	.059" – .098"	80 mm	3.150"
2.5 – 5.5 mm	.098" – .217"	63 mm	2.480"
2.5 – 5.5 mm	.098" – .217"	100 mm	3.937"
2.5 – 7.0 mm	.098" – .276"	68 mm	2.667"
2.5 – 7.0 mm	.098"276"	80 mm	3.150"
6.0 – 10.0 mm	.236"394"	80 mm	2.953"
6.0 – 15.0 mm	.236"591"	100 mm	3.937"
1.2 – 2.5 mm	.047"098"	80 mm	3.150"
1.2 – 2.5 mm	.047" – .098"	63 mm	2.480"
2.5 – 7.0 mm	.098"276"	68 mm	2.667"
1.2 – 2.5 mm	.047" – .098"	63 mm	2.480"

Saw blades with additional pinhole

Pipe wall thickness Sav		Saw blade Ø	Saw blade Ø		
	1.2 – 2.5 mm	.047"098"	63 mm	2.480"	
	1.2 – 2.5 mm	.047"098"	68 mm	2.677"	
	1.5 – 2.5 mm	.059"098"	80 mm	3.150"	
	2.5 – 7.0 mm	.098"276"	68 mm	2.677"	

HSS Screw Slotting cutters



HSS/Dmo5 circular saw blades are used to cut slots for the screw knobs. These saw blades have tooth type A and are taper ground without an undercut. Although ordering with VAPO or other PVD coatings is an option, the standard modification is without a surface coating.

Circular saw blades for screw-slotting saws														
Diameter	Thickness/ Teeth Nr., Tooth form BW													
(mm) (mm)	(mm)	0,7	0,8	0,9	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	2,0
80	22	48	48	48	48	48	48	48	48	48	48	48	48	48
100	22	64	64	64	64	64	64	64	64	64	64	64	64	64
125	22	64	64	64	64	64	64	64	64	64	64	64	64	64

HSS screw slotting saws in imperial sizes according norms ASA teeth AFTe. Used mainly for slotting screw heads. They are hollow ground for shallow cuts. Not recommended for deep cuts

D (mm)	1 3/4	2 1/4	2 3/4
dH7 (mm)	5/8	5/8	1'
B (mm)	number of teeth		
0,006	90	60	72
0,008	90	60	72
0,001	90	60	72

0,008	90	60	72
0,001	90	60	72
0,012	90	60	72
0,014	90	60	72
0,016	90	60	72
0,018	90	60	72
0,02	90	60	72
0,023	90	60	72
0,025	90	60	72
0,028	90	60	72
0,032	90	60	72
0,035	90	60	72
0,036			72
0,04	90	60	72
0,045	90	60	72
0,051	90	60	72
0,057	90	60	72
0,064	90	60	72
0,072			72
0,075	90	60	72
0,081	90	60	72
0,091	90	60	72
0,102	90	60	72
0,114	90	60	72
0,128			72
0,144			72
0,162			72
0,182			

HSS PISTON RING CUTTERS



HSS steel grades M35 and M42 are used to make the saw blades. It is feasible to PVD coat.

The spring-loaded piston-to-cylinder wall seal is provided by the piston ring, an expandable and adjustable metal split ring (against the cylinder wall). This metal split piston ring, which normally comes in a set of several, fits around a piston (into a groove on the outer diameter of a piston) and closes the space between the piston and the cylinder wall to ensure a tight fit.

A primary purpose of a piston ringFor heat transfer from the piston to the cylinder, a piston ring's primary purpose is to ensure a tight fit (seal the combustion chamber) in the engine cylinders.

DIAMETER AVAILABLE FROM 100 MM TO 150 MMIN THICKNESS FROM 1MM TO 2.5 MM

SLITTERS AND SPACERS

The slitting knives are mostly used for cutting and packing machines for sheet metal plate, strip, leather, aluminium foil and films. High quality cutting tool steel 9CrSi, SKD, SKH, T10, 6CrW2Si, Cr12MoV, LD, D2, H13, and W18Cr4V is used to make the material. After a flawless vacuum heat treatment process,

homogeneous hardness, and systematic precision machining. Making The slitting knives' characteristics include a smooth, sharp cut and resistance to edge wear. They are compatible with all types of slitting units.

The most crucial component of the cutting tool is the slitting knives, which need to be machined with extreme precision. With an ultra-precision flat grinding machine, an unique grinding technique, and stringent quality control,

SPARKBLADES assure that all completed products meet thickness and parallelism tolerance standards.Knife holders, Stripper Rings&Spacers, and other components are included in a complete rotary slitting system. The major purpose is to maintain the width of the slitting knives and to change the horizontal clearance between the top and bottom blades. The thickness is typically between 0.8mm and 150mm, and the hardness must be HRC45 or higher. Moreover, the spacers' thickness tolerance must be kept to a maximum of 0.005 millimetres. Inner and outer cylindrical surfaces have been processed to turn black. significantly enhance anti-rust performance

We can supply the following components:

- Rotary Slitter Knives
- Stripper Rings&Spacers
- Knife holder

CIRULAR KNIVES AND BLADES

JOB OF THE MATEERIALS



Rubber, leather, paper, isolation materials and plastics, non-ferrous metals and steel.

Our rotary knives can be coated with PVD coatings (such as TIN, TICN, or TIALN) or with teflon depending on the many uses for which they are intended. Our circular knives are heat-treated to hardness 56-64 HRC in standard modification. Our circular knives range in size from 20 mm to 600 mm (e.g. production of tinned vegetables or circular knives for cutting of deep-frozen products like fish, circular knives for meat etc.) These knives are round and made of stainless steel.

Due to the fact that these industrial knives are only produced upon request, it is crucial to include the following information in client queries or orders: The circular knife's diameter The circular knife's thickness, central bore diameter, driving pin hole diameter, number, and pitch, as well as the type of material that should be used for the blade's body, its cutting edge variant, its cutting geometry, its cutting edge length, and the material that it should be used to cut with.

The typical modification does not disrupt the industrial knife's cutting edge. It can have teeth like those seen on HSS circular saw blades for metal cutting, or it can have very particular tooth shapes. It is possible to create circular knives without teeth, as well as circular knives with grooves or ripples on the cutting edge. Depending on the type of material that the industrial knife is cutting, these blades' cutting edges change. The specific edge variations we make for our industrial knives are displayed in the following table.

Α	industrial knives sided blade with undercut
В	square edge
С	single bevel blunt
D	single bevel sharp
Е	double single bevel
F	double bevel blunt
G	double bevel sharp
Н	double double bevel

Standard steel for the manufacture of blades:			
DIN 1.3343	(HSS-Dmo5)		
DIN 1.3243	(HSS-Emo5)		
DIN 1.2379	(K 110)		
DIN 1.2067	(100 Cr6)		
DIN 1.2080	(X210Cr12)		
DIN 1.4034	(X40Cr13)		
DIN 1.4112	(X90CrVMo18)		

Top Slitter Knives

Rotary Slitter Knife For Paper Cutting



PROPERTIES:

- 1. SHAPE : CIRCULAR DIAMETRE AVAILABLE IN 105 MM ,80 MM
- 2. BORE : ID AVIALABLE IN 65MM , 70MM, 75 MM, 80 MM
- 3. THICKNESS COMES IN 1.2 MM AND 1.5 MM
- 4. KEY WAY : HALF ROUND
- 5. IDENTIFIED BEND ON SURFACE FOR HIGHER EDGE CUTTING

HSS Core Cutter

Core Cutters



WE MANUFACTURE CORE CUTTERS AS PER FOLLOWS"-

- 1. RANGE STARTS FROM 50 MM DIAMETRE TO 450 MM DIAMETRE
- 2. THICKNESS CAN BE MADE FROM 0.5MM TO 6 MM
- 3. ID AS PER REQUIREMENT
- 4. STEEL GRADE HSS M2, HSS M35, D2 , SPRING STEEL.

Typical Industries include:

- Circular knives for Automotive
- Circular knives for Converting
- Circular knives for Food procesing
- Circular knives for Paper
- Circular knives for Packaging
- Circular knives for Plastics
- Circular knives for Printing
- Circular knives for Rubber
- Circular knives for Floor and Wall
- Circular knives for Coverings

Cashew Cutter

Hss M2 Grade Cashew Cutter Blade



We have developled a market leadership in the field of cashew cutting blade. we believe in delievering best quality food grade cashew cutter. our cashew cutter is made from hss m2 grade steel for better output and long product life. its edges are finished in a way that the job done without any aer and tear.

HSS Side And Face Cutters



Side and Face Cutters are designed with cutting teeth on its side as well as its circumference. They are made in varying diameters and widths depending on the application.

In face milling, only the top of the cutting tool does the milling action. However, in peripheral milling, the sides of the workpiece are involved too. Face milling can be done on machines with horizontal and vertical spindles while peripheral milling is limited to only machines with horizontal

HSS side and face milling cutter, DIN 138/885, with straight toothing for milling deep slots, cutting-off or cutting to length of steel and cast materials as well as short-chipping non-ferrous metals.

BASIC PARAMETERS:-

TYPE: (TYPE A STAGGERED TEETH & TYPE B STRAIGTH TEETH) Diameter RANGE: 50mm to 300mm, 2inches to 12inches. Thickness RANGE: 4MM to 50 mm. Material: M-2, M35, M42.

Side and Face Milling Cutters According DIN 885A Cobalt 5% with Coarse Tooth Pitch:

Diameter	Thickness	Hole	Teeth Nr.
50	3	16	12
50	4	16	12
50	5	16	12
50	6	16	12
50	8	16	12
50	10	16	12
63	3	22	12
63	4	22	12
63	5	22	12
63	б	22	12
63	8	22	12
63	10	22	12
63	12	22	12
63	14	22	12
63	16	22	12
63	18	22	12
80	3	27	14
80	4	27	14
80	5	27	14
80	6	27	14
80	8	27	14
80	10	27	14

80	12	27	14
80	14	27	14
80	16	27	14
80	18	27	14
80	20	27	14
100	3	32	14
100	4	32	14
100	5	32	14
100	6	32	14
100	8	32	14
100	10	32	14
100	12	32	14
100	14	32	14
100	16	32	14
100	18	32	14
100	20	32	14
100	25	32	14
125	4	32	16
125	5	32	16
125	6	32	16
125	8	32	16
125	10	32	16
125	12	32	16

125	14	32	16
125	16	32	16
125	18	32	16
125	20	32	16
125	25	32	16
125	28	32	16
160	6	40	18
160	8	40	18
160	10	40	18
160	12	40	18
160	14	40	18
160	16	40	18
160	18	40	18
160	20	40	18
160	25	40	18
160	32	40	18
200	8	40	24
200	10	40	24
200	12	40	24
200	14	40	24
200	16	40	24
200	18	40	24
200	20	40	24

200	25	4	24
200	32	40	24

Recomended Aplication for Side and Face Milling Cutters According DIN 885A Cobalt 5% with Coarse Tooth Pitch	Strenght	HSSE / HSS Co5 Recomended cutting speed
Free-cutting steels, general construction steels	≤600 MPa	37,5
General construction steels, steel castings	≤850 MPa	32,5
Cast iron	≤ 240 HB	30
Copper-zinc alloys, copper-tin alloys	≤800 MPa	60 - 100
Aluminium, Aluminium cast alloys Si	≤ 500 MPa	160 - 250

Side and Face milling Cutters According DIN 885A Cobalt 5% with Fine Tooth Pitch:

Diameter	Thickness	Hole	Teeth Nr.
50	4	16	16
50	5	16	16
50	6	16	16
50	8	16	16
50	10	16	16
63	4	16	18
63	5	22	18
63	6	22	18
63	8	22	18
63	10	22	18
63	12	22	18

63	14	22	18
63	16	22	18
80	4	27	20
80	5	27	20
80	6	27	20
80	8	27	20
80	10	27	18
80	12	27	18
80	14	27	18
80	16	27	18
80	18	27	18
80	20	27	18
100	4	32	20
100	5	32	20
100	6	32	20
100	8	32	20
100	10	32	20
100	12	32	20
100	14	32	20
100	16	32	20
100	18	32	20
100	20	32	20
100	25	32	20

125	5	32	24
125	6	32	24
125	8	32	24
125	10	32	22
125	12	32	22
125	14	32	22
125	16	32	22
125	18	32	22
125	20	32	22
125	25	32	22
125	28	32	22
160	6	40	26
160	8	40	26
160	10	40	26
160	12	40	26
160	14	40	26
160	16	40	26
160	18	40	26
160	20	40	26
160	25	40	26
160	32	40	26
200	8	40	32
200	10	40	32

200	12	40	32
200	14	40	32
200	16	40	32
200	18	40	32
200	20	40	38
200	25	40	38
200	32	40	38
250	8	40	38
250	10	40	38
250	12	40	38

Recomended Aplication for Side and Face Milling Cutters according DIN 885A Cobalt 5% with Fine Tooth Pitch	Strenght	HSSE / HSS Co5 Recomended cutting speed
Free-cutting steels, general construction steels	≤ 600 MPa	37,5
General construction steels, steel castings	≤ 850 MPa	32,5
Heat treatable steels	≤ 900 MPa	25
Tool steels high alloyed	≤ 1100 MPa	18
Cast iron	≤ 240 HB	30
Cast iron	> 240 HB	22
Corrosion- and acid-proof steels	≤ 850 MPa	10
Copper-zinc alloys, copper-tin alloys	≤ 800 MPa	60 - 100

HSS Angle Milling Cutters

Angular milling (or angle milling) involves removing portions of material from a workpiece to form the desired product. However, unlike conventional milling, angular milling creates flat surfaces that aren't parallel (or perpendicular) to the axis of the cutting tool

A 45 degree cutter is the general purpose choice for face milling. It generates well balanced radial and axial cutting forces which is less demanding on the machine power. HOWEVER IT CAN BE MADE IN VARIOUS ANGLES AND DEGREES.





Angle Milling Cutters

Angle Type: Single Angle, Double Angle, Equal Angle, Double Unequal Angle Degree Range : 10 Deg To 90 Deg Diameter Range: 50mm To 300mm, 2inches To 12inches. Thickness Range: 6 Mm To 50 Mm. Material: M-2, M35, M42.

Dimensions	Hole H7	Teeth number		Angle
95 x 2,0 mm	32	60	left	45° or 60°
95 x 2,0 mm	32	60	right	45° or 60°
95 x 2,0 mm	20	70	left	45° or 60°
95 x 2,0 mm	20	70	right	45° or 60°
98 x 2,0 mm	32	60	left	45° or 60°
98 x 2,0 mm	32	60	right	45° or 60°
103 x 2,1 mm	32	60	left	45° or 60°
103 x 2,1 mm	32	60	right	45° or 60°
155 x 3,0 mm	32	68	left	45° or 60°
155 x 3,0 mm	32	68	right	45° or 60°

Side angle	Diameter	Thickness	Hole	Radius	Teeth Nr.
20°	63	6	16	1	14
20°	100	10	27	1,5	18
25°	63	6	22	1	14
25°	80	10	22	1	16
25°	100	14	27	1,5	18
25°	125	18	27	2	20
25°	160	22	32	2,5	22
30°	63	8	22	1	14
30°	100	14	27	1,5	18

Side angle	Diameter	Thickness	Hole	Teeth Nr. HSS M2	Teeth Nr. Cobalt 5%
45°	40	10	10	14	14
45°	50	13	13	16	16
45°	63	18	16	18	16
45°	80	22	22	20	18
45°	100	28	27	22	20
45°	125	36	32	24	
45°	160	45	40	28	
50°	40	13	10	14	14
50°	50	16	13	16	16
50°	63	20	16	18	16
50°	80	25	22	20	18
50°	100	32	27	22	20
50°	125	40	32	24	
50°	160	50	40	28	
55°	40	13	10	14	
55°	50	6	13	16	
55°	63	20	16	18	
55°	80	25	22	20	
55°	100	32	27	22	
55°	125	40	32	24	
60°	40	13	10	14	14
60°	50	16	13	16	16

60°	63	20	16	18	16
60°	80	25	22	20	18
60°	100	32	27	22	20
60°	125	40	32	26	
60°	160	50	40	28	

Top angle	Diameter	Thickness	Hole	Teeth Nr. HSS M2	Teeth Nr. Cobalt 5%
45°	50	8	16	22	16
45°	63	10	22	24	16
45°	80	12	27	26	20
45°	100	18	32	28	20
60°	50	10	16	18	16
60°	63	14	22	20	16
60°	80	18	27	22	18
60°	100	25	32	24	20
90°	50	14	16	16	16
90°	63	20	22	18	16
90°	80	22	27	20	18
90°	100	32	32	24	20
120°	50	14	16	16	16
120°	63	20	22	16	16
120°	80	25	27	20	20
120°	100	36	32	24	24

Hss Shell End Mill Cutters

An industrial milling application often involves the use of a shell end mill as a cutting tool. In terms of geometry, use, and manufacturing, it is different from a drift drill. An end mill, on the other hand, can cut in almost all directions while a drill mill can only cut in the axial direction.



Diameter RANGE: 40mm to 200MM. LENGTH RANGE: 40MM to 200 mm. Material: M-2, M35, M42.



QUALITY IS NOT EXPENSIVE ITS PRICELESS



Improvising cutting solutions for below sectors:

- 1. Metal industries.
- 2. Upvc/pvc industries.
- 3. Cloth industries.
- 4. Paper industries.
- 5. Machine manufacturers.
- 6. Leather industries.
- 7. Food and agriculture industries.

Office Address Durga Engineering Corporation. D222 Focal Point Patiala – 147001 India

Email Address ptibrand@gmail.com







Social Links



customercaresalvin

