

# ATCO



## AMRAT TOOLS CORPORATION CARBIDE TOOLS

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### ISO 2

Cranked Turning And Facing Tool



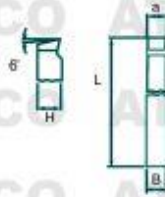
Right Hand Tool Shown



Catalogue code	Dimensions in mm		
	H	B	L
ISO2 R/L 1010	10	10	90
ISO2 R/L 1212	12	12	100
ISO2 R/L 1616	16	16	110
ISO2 R/L 2020	20	20	125
ISO2 R/L 2525	25	25	140
ISO2 R/L 3232	32	32	170
ISO2 R/L 4040	40	40	200
ISO2 R/L 1610	16	10	110
ISO2 R/L 2012	20	12	125
ISO2 R/L 2516	25	16	140
ISO2 R/L 3220	32	20	170
ISO2 R/L 4025	40	25	200
ISO2 R/L 5032	50	32	240

### ISO 4

Recessing Tool



Catalogue code	Dimensions in mm		
	H	B	L
ISO4 1010	10	10	90
ISO4 1212	12	12	100
ISO4 1616	16	16	110
ISO4 2020	20	20	125
ISO4 2525	25	25	140
ISO4 3232	32	32	170
ISO4 4040	40	40	200
ISO4 1610	16	10	110
ISO4 2012	20	12	125
ISO4 2516	25	16	140
ISO4 3220	32	20	170
ISO4 4025	40	25	200
ISO4 5032	50	32	240

### ISO 6

Cranked knife Tool



Right Hand Tool Shown



Catalogue code	Dimensions in mm		
	H	B	L
ISO6 R/L 1010	10	10	90
ISO6 R/L 1212	12	12	100
ISO6 R/L 1616	16	16	110
ISO6 R/L 2020	20	20	125
ISO6 R/L 2525	25	25	140
ISO6 R/L 3232	32	32	170
ISO6 R/L 4040	40	40	200
ISO6 R/L 1610	16	10	110
ISO6 R/L 2012	20	12	125
ISO6 R/L 2516	25	16	140
ISO6 R/L 3220	32	20	170
ISO6 R/L 4025	40	25	200
ISO6 R/L 5032	50	32	240

## GRADE SELECTION

### Machining Operations and Working Conditions

	<b>Finishing and light roughing of steel and steel castings</b> at high cutting speeds and moderate feeds under favourable working conditions. Suitable for copying and thread cutting.	<b>P 10</b> <b>P 01</b>
	<b>Light to medium roughing of steel and steel castings</b> at moderate cutting speeds and feeds under less favourable working conditions. Suitable for copying.	<b>P 20</b> <b>P 10</b>
	<b>Roughing to heavy roughing of steel and steel castings</b> at moderate to low cutting speeds and heavy feeds under unfavourable working conditions. Suitable for planing in modern machines. Excellent all-round grade for small workshops where various kinds of steel are machined.	<b>P 30</b> <b>P 20</b> <b>M 10</b> <b>M 20</b>
	<b>Roughing to heavy roughing of steel and steel castings</b> under particularly difficult working conditions. To be used at the biggest cutting depths and the heaviest feeds. Particularly well suited for planing. Can be used with high top rakes.	<b>P 40</b> <b>P 30</b> <b>M 30</b> <b>M 40</b>
	<b>Roughing and finishing of cast iron.</b> A particularly wear-resistant grade for machining of hard cast irons, very abrasive metals, plastics and other short chip materials.	<b>K 10</b> <b>K 20</b>
	<b>Roughing of cast iron.</b> General machining under unfavourable conditions of cast iron, copper, light alloys, etc. Very suitable for planing.	<b>K 20</b> <b>K 30</b>
<b>ATCO</b>	<i>When machining cast iron causing excessive cratering, P-grades may give the best result.</i>	

## GRINDING

DO'S	DON'T
1. Use Silicon Carbide (Green Grit) wheels for rough grinding and Diamond-impregnated wheels for finish grinding, Lapping and for grinding chip breakers. 2. <b>ATCO</b> Tipped Tools Should be sharpened as soon as they become dull (Flank wear not to exceed 0.5mm) and before cutting edges start to break down or crumble, or the faces begin to crater. 3. Traverse the <b>ATCO</b> Tool across the wheel face, to avoid over heating and grooving the wheel face; ensure the grinding is done towards the carbide tip so that the pressure is through the tip into the shank. 4. Maintain grinding wheels in open cutting condition by frequent dressing with a good diamond. 5. Allow sufficient coolant to flow continuously while wet grinding the <b>ATCO</b> Tools	1. Don't use ordinary (Aluminium oxide) grinding wheels for grinding <b>ATCO</b> Tipped tools. 2. Don't allow tool to worn out excessively as further use of a dull tool may result it to wear so rapidly that chipping of carbide tip becomes inevitable, moreover a large stock of carbide has to be removed to sharpen it which is uneconomical. 3. Don't rotate grinding wheels away from <b>ATCO</b> Tools which may cause the unsupported carbide grains to flake off from the cutting edges leaving minute irregularities. 4. Don't use worn and undressed wheels for grinding, otherwise it will cause cracks in the tips. 5. Don't supply irregular coolant in the form of spray or dropwise while wet grinding and don't cool the dry ground tools in water or any other coolant. This may cause cracks in the Tips.

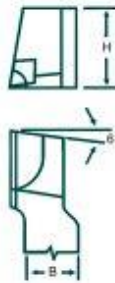


## BSS TOOLS

Cranked Knife Tools



RH Side Tool Shown



Catalogue code		Dimensions in mm		
RH	LH	B	H	L
2130	2131	3/8"	3/8"	3 1/2"
2132	2133	1/2"	1/2"	4"
2136	2137	5/8"	5/8"	5"
2140	2141	3/4"	3/4"	5 1/2"
2146	2147	1"	1"	6 1/2"

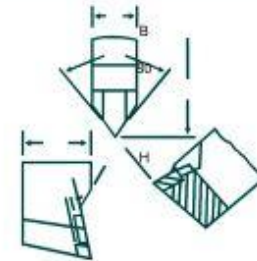
## BSS ST TOOLS



Catalogue code		Dimensions in mm		
RH	LH	B	H	L
2130	2131	3/8"	3/8"	3 1/2"
2132	2133	1/2"	1/2"	4"
2136	2137	5/8"	5/8"	5"
2140	2141	3/4"	3/4"	5 1/2"
2146	2147	1"	1"	6 1/2"

## SPL TOOLS

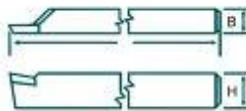
Straight Turning Tools



Catalogue code	Dimensions in mm		
	B	H	L
E8	3/8"	3/8"	3 1/2"
E10	1/2"	1/2"	4"
E12	3/4"	3/4"	5 1/2"
E16	3/4"	3/4"	5 1/2"
E16	1"	1"	6 1/2"
E20	1"	1"	6 1/2"
E25	1 1/4"	1 1/4"	8"

## SPL TOOLS

Special Grooving Tools

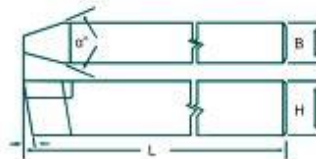


Catalogue code		Dimensions in mm		
		B	H	L
0162		1/2"	1/2"	4"
0166		5/8"	5/8"	5"
0170		3/4"	3/4"	5 1/2"
546		1/2"	1/2"	5"
547		3/4"	3/4"	5"

## SPL TOOLS

V-Groove Form Tools  
For Pulley Section

$\alpha = 34^\circ$   
36°  
38°



Catalogue code		Dimensions in mm		
		d	H	L
A SECTION		5/8"	5/8"	5"
B SECTION		3/4"	3/4"	5 1/2"
C SECTION		1"	1"	6 1/2"
D SECTION		1 1/4"	1 1/4"	8"

## Half Round Radius Tools



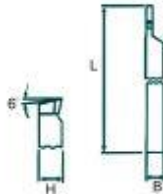
Half Round Radius Tools	
Tool/Tip Radius	Tool Size
R6	1212
R8	1616
R10	2020
R12	2525
R16	3232
R20	4040
R25	5050

### ISO 7

Parting Tool



Right Hand Tool Shown



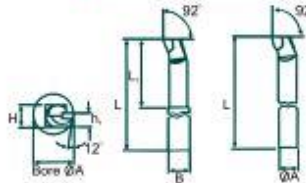
Catalogue code	Dimensions in mm		
	H	B	L
ISO7 R/L 1006	10	06	90
ISO7 R/L 1208	12	08	100
ISO7 R/L 1610	16	10	110
ISO7 R/L 2012	20	12	125
ISO7 R/L 2516	25	16	140
ISO7 R/L 3220	32	20	170
ISO7 R/L 4025	40	25	200
ISO7 R/L 5032	50	32	240

### ISO 8/9

Boring and Facing Bar



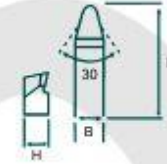
Right Hand Tool Shown



Catalogue code	Dimensions in mm		
	ØD/H/B	H1	L
ISO9 R 0808	8	5.9	125
ISO9 R 1010	10	7.5	150
ISO9 R 1616	12	9.1	180
ISO9 R 2020	16	12.3	210
ISO9 R 2525	20	15.5	250
ISO9 R 3232	25	19.5	300
ISO9 R 3232	32	25.1	355
ISO9 R 8 Ø	8	5.9	125
ISO9 R 10 Ø	10	7.5	150
ISO9 R 12 Ø	12	9.1	180
ISO9 R 16 Ø	16	12.3	210
ISO9 R 20 Ø	20	15.5	250
ISO9 R 25 Ø	25	19.5	300
ISO9 R 32 Ø	32	25.1	355

### SMS-113

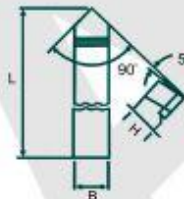
Straight, Round Nose Turning Tool



Catalogue code	Dimensions in mm		
	H	B	L
113-1010	10	10	90
113-1212	12	12	100
113-1616	16	16	110
113-2020	20	20	125
113-2525	25	25	140
113-3232	32	32	170
113-4040	40	40	200
113-1610	16	10	110
113-2012	20	12	125
113-2516	25	16	140
113-3220	32	20	170
113-4025	40	25	200
113-5032	50	32	240

### SMS 163

Heavy Turning and Grooving Tool



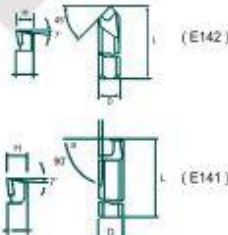
Catalogue code	Dimensions in mm		
	H	B	L
163-1010	10	10	90
163-1212	12	12	100
163-1616	16	16	110
163-2020	20	20	125
163-2525	25	25	140
163-3232	32	32	170
163-4040	40	40	200
163-5050	50	50	240

### E-141/142

Boring Tool



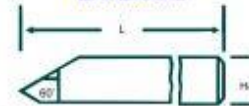
Right Hand Tool Shown



Catalogue code	Dimensions in mm		
	D	H	L
L/R- 141-10 Ø	10	8.5	50
L/R- 141-12 Ø	12	10.5	60
L/R- 141-16 Ø	16	14.0	90
L/R- 141-20 Ø	20	17.0	120
L/R- 141-1/4" dia. Ø	1/4	5.7	20
L/R- 141-3/8" dia. Ø	3/8	8.3	50
L/R- 141-1/2" dia. Ø	1/2	11.1	60
L/R- 141-5/8" dia. Ø	5/8	14.0	90
L/R- 141-3/4" dia. Ø	3/4	16.0	120

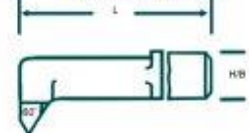
### THREADING TOOLS

EXTERNAL



Catalogue code	Dimensions in mm		
	H	B	L
165-1010	10	10	90
165-1212	12	12	100
165-1616	16	16	110
165-2020	20	20	125
165-2525	25	25	140

INTERNAL



Catalogue code	Dimensions in mm		
	H	B	L
166-1010	10	10	90
166-1212	12	12	100
166-1616	16	16	110
166-2020	20	20	125
166-2525	25	25	140