



# CARMET

## ***PARTING HOLDERS AND INSERTS***



**CUTTING TOOLS FOR LATHES AND MILLS**



The **CARMET** Parting System consists of the Atuca parting block, an adjustable blade, carbide insert and an extraction key.

The two piece parting block is designed for rigidity and easy secure clamping of the blade. It will also accommodate most competitors blades.

The blade is made of a high chrome steel for extra long life and rigidity. The tapered locking design securely holds the insert while the built in positive stop provides constant length and centre height. The positive stop also helps prevent the blade pocket from spreading. The insert is quickly removed with the ejector key for replacement.

The carbide inserts are available in two different grades. T-04 is a general purpose uncoated grade (P30-P40) most suitable for unstable conditions where speed and/or rigidity is a problem on most carbon steels and stainless steels.

MP91M is a multi-layered PVD coated grade (TiN-TiCN- $\text{Al}_2\text{O}_3$ ) in the P25 range. It is ideal for machining carbon steels, stainless steel and cast iron. First choice for most applications.

The parting blade and inserts are made in the USA.

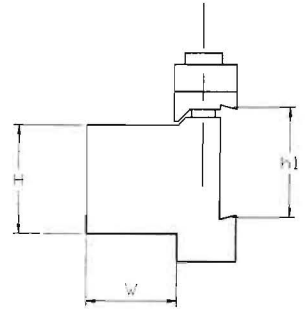
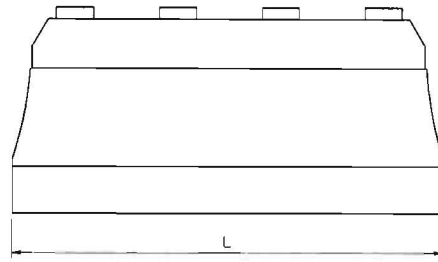
**ATUCA** brand parting blocks are manufactured in Australia by **CARMET** using the highest quality materials and the latest automatic and C.N.C. equipment.

A brief description of the process:

1. Starting with hot rolled and annealed high tensile steel the material is cut to length in an automatic bandsaw.
2. Jigged in automatic milling machine the material is machined to shape - every surface.
3. Jigged in C.N.C. machining centre, the block is precision machined for squareness and centre height. The top clamp is machined in the same manner.
4. The branding/numbering is then performed on a C.N.C. dot marking machine.
5. The next process is oil hardening and tempering (42 - 45 Rockwell C) of the block and the clamp.
6. The surface finish is then put on using a hot process. This black finish is not only for appearance, it also protects the tool from oxidation.
7. The last step is of course assembling of the tool, (clamp, high tensile screws) packaging and labelling.

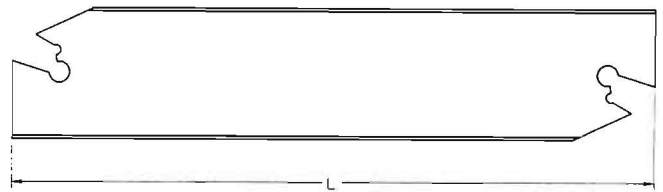
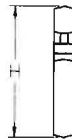


### PARTING BLOCK



PART NUMBER	H	W	L	h1
CGTBP 16-5	16	16	90	26
CGTBP 20-5	20	20	95	26
CGTBP 25-5	25	25	95	26
CGTBP 20-6	20	20	96	32
CGTBP 25-6	25	25	110	32
CGTBP 32-6	32	32	110	32

### PARTING BLADE



PART NUMBER	H	L	ACCEPTS INSERT	REC. MAX. DIAMETER
SGIH 26-2 PS H.D.	26	110	2MM	75MM
SGIH 26-3 PS H.D.	26	110	3MM	75MM
SGIH 26-4 PS H.D.	26	110	4MM	75MM
SGIH 26-5 PS H.D.	26	110	5MM	75MM
SGIH 26-6 PS H.D.	26	110	6MM	75MM
SGIH 32-2 PS H.D.	32	150	2MM	75MM
SGIH 32-3 PS H.D.	32	150	3MM	100MM
SGIH 32-4 PS H.D.	32	150	4MM	100MM
SGIH 32-5 PS H.D.	32	150	5MM	125MM
SGIH 32-6 PS H.D.	32	150	6MM	125MM



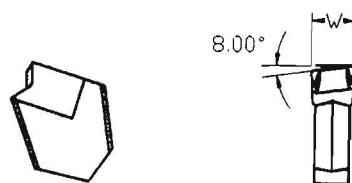


## PARTING INSERTS

PART NUMBER	W
CGTN-2 T-04	2.2MM
CGTN-2 MP91M	2.2MM
CGTN-3 T-04	3.1MM
CGTN-3 MP91M	3.1MM
CGTN-4 T-04	4.1MM
CGTN-4 MP91M	4.1MM
CGTN-5 T-04	5.1MM
CGTN-5 MP91M	5.1MM
CGTN-6 T-04	6.4MM
CGTN-6 MP91M	6.4MM
CGTR-3-8 MP91M	3.1MM
CGTR-4-8 MP91M	4.1MM



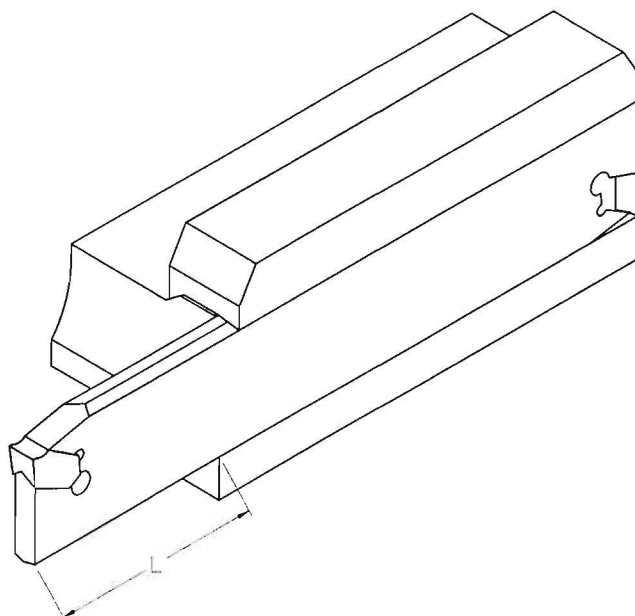
CGTN INSERT



CGTR INSERT

## RECOMMENDED MAXIMUM OVERHANG

BLADE	L
SGIH 26-2 PS H.D.	38MM
SGIH 26-3 PS H.D.	38MM
SGIH 26-4 PS H.D.	38MM
SGIH 26-5 PS H.D.	38MM
SGIH 26-6 PS H.D.	38MM
SGIH 32-2 PS H.D.	38MM
SGIH 32-3 PS H.D.	50MM
SGIH 32-4 PS H.D.	50MM
SGIH 32-5 PS H.D.	65MM
SGIH 32-6 PS H.D.	65MM



**ECONOMICAL SPEEDS FOR PARTING**

METRES PER MINUTE								
DIAMETER IN MILLIMETRES		12	18	26	38	58	85	120
	6	640	920	1400	2000	3200	4400	6400
	8	480	704	1040	1520	2400	3200	4800
	12	320	464	704	1040	1520	2400	3200
	16	240	352	528	768	1152	1680	2480
	20	192	280	424	608	920	1360	2000
	25	152	224	336	480	720	1080	1600
	32	120	176	264	384	576	840	1240
	40	96	144	208	304	456	672	1000
	50	76	112	168	240	368	535	784
	60	64	96	144	200	304	448	656
	80	48	72	104	152	232	336	496
	100	40	56	88	120	184	264	400
	150	24	36	56	80	124	176	264
	200	20	28	44	64	88	136	200
	300	12	20	28	40	60	88	132
REVOLUTIONS PER MINUTE								
MATERIAL		High Speed Steel		Uncoated Carbide		Coated Carbide		
Mild Steel		26m/m		85m/m		120m/m		
Medium Steel		18m/m		62m/m		85m/m		
High Tensile Steel		12m/m		38m/m		58m/m		
CERAMIC COATED CARBIDE - PLUS 25%								

**SAFETY PRECAUTIONS****WHEN USING CARBIDES & CERAMICS**

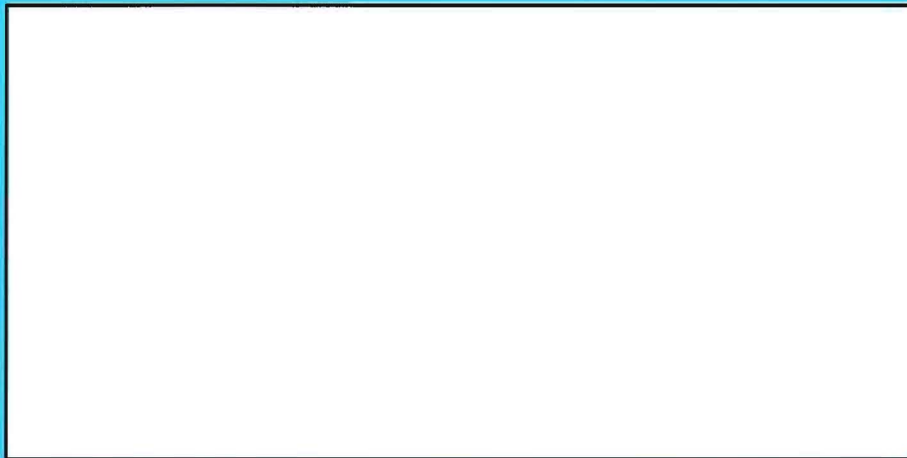
1. Wear safety glasses with side shields
2. Wear closed shoes with steel toe caps
3. Wear protective clothing
4. Keep protective enclosure on machine in place during machining
5. Make sure insert size and shape is adequate for the work being performed
6. Chip control is necessary to prevent a continuous chip
7. Use correct size tooling with minimum overhang
8. Overloading of inserts may result in fracture with detached fragments travelling at high velocity

9. Chips are very hot and have sharp edges and should not be removed by hand
10. Turn off machine whenever chips are removed or when cutting tools are changed
11. A slug may be ejected at high speed during drilling

**WHEN GRINDING CARBIDES**

1. Use adequate ventilation
2. Use suction equipment to maintain low dust levels
3. Wet grind where possible
4. Minimize prolonged skin contact
5. Wash hands thoroughly after handling





## ***PARTING HOLDERS AND INSERTS***