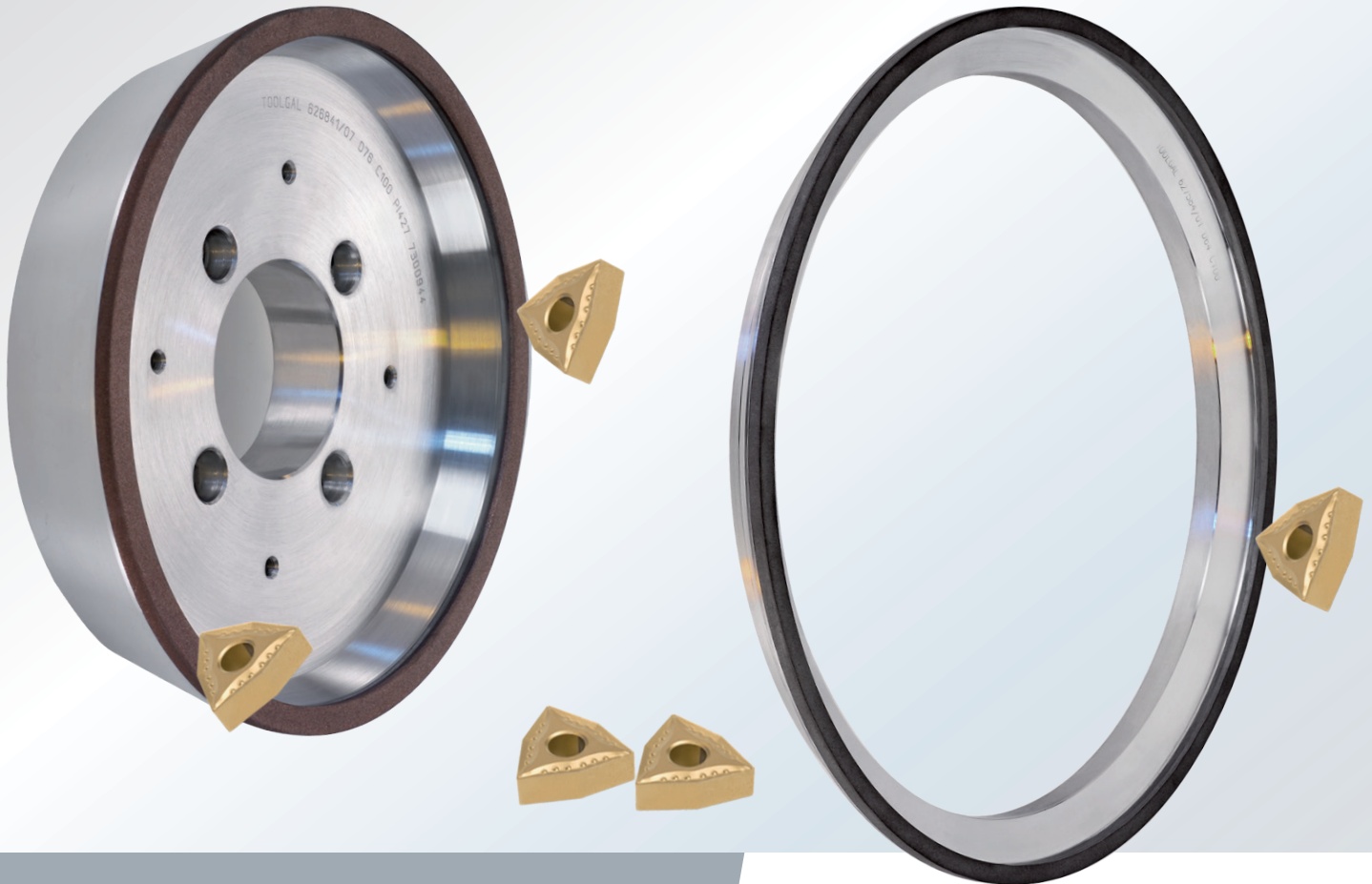




TOOLGAL
Innovative Diamond Tools

PERIPHERAL GRINDING OF INSERTS



Diamond Wheels for Peripheral Grinding of inserts, must be of a high level of geometrical accuracy, with ability of significant material removal.

Toolgal wheels with its CB4 or PI bond, are matching these conditions and furthermore, they have long life time and long intervals between dressing.

TOOLGAL is able to produce various geometrical wheels to suit ALL popular machines, such as AGATHON, WENDT, WAIDA, etc'.

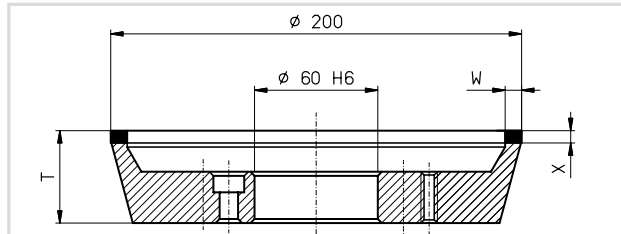
TOOLGAL bonds gives the wheel long life.

TOOLGAL bonds gives the producer long intervals between dressing.

TOOLGAL bonds gives your inserts excellent finishing with less than 5 microns of chipping on the edge & radius.

Toolgal Standard Range for Peripheral Tungsten Carbide Insert Grinding

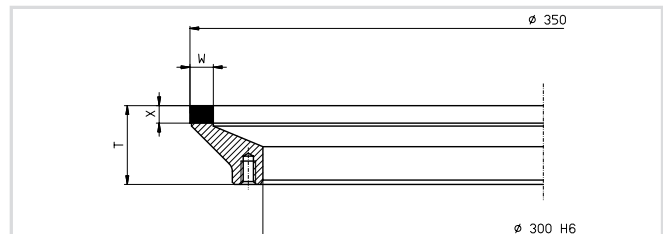
Workpiece	Bond	Grit size
Standard tungsten carbide inserts	CB or PI -High performance resin bond	D35-D54
Polished tungsten carbide inserts	CB or PI -High performance resin bond	D15-D35



Shape 11A2B

Machine: WAIDA

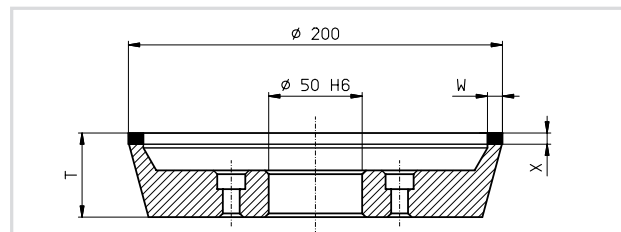
D	W	X	T	H
200	6, 8, 10, 12	6	45	60



Shape 12A2JT

Machine: AGATHON 350

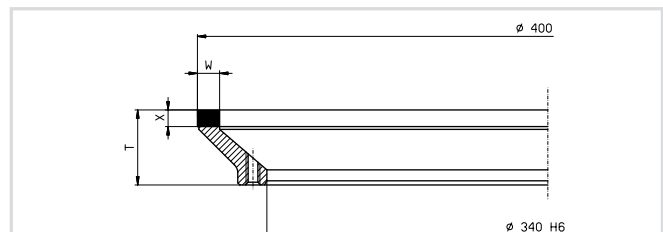
D	W	X	T	H
350	6, 8, 10, 12, 15	6	27	300



Shape 11A2B

Machines: EWAG, COBRON

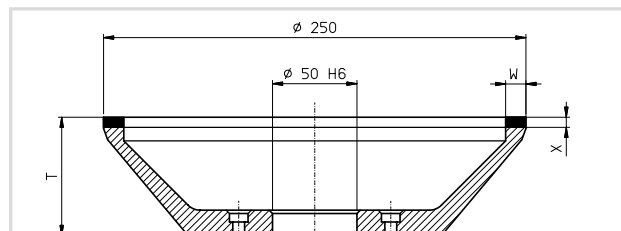
D	W	X	T	H
200	6, 8, 10, 12	6	60	50



Shape 12A2JT

Machine: AGATHON 400 PENTA

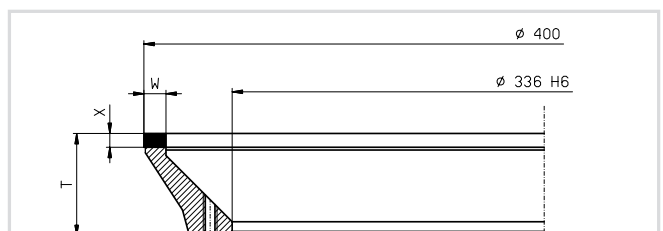
D	W	X	T	H
400	6, 8, 10, 12, 15	6	28	340



Shape 11A2B

Machines: EWAG, COBRON

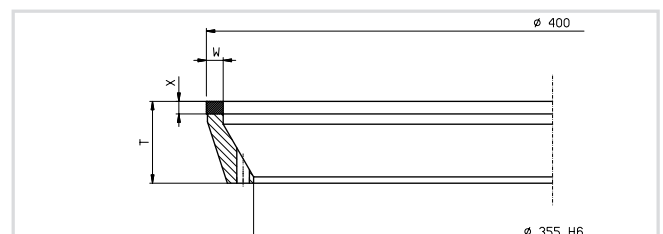
D	W	X	T	H
200	6, 8, 10, 12	6	70	50



Shape 11A2H

Machine: WENDT WAC 735 CENTRO

D	W	X	T	H
400	6, 8, 10, 12, 15	6	39	336




Shape 11A2H

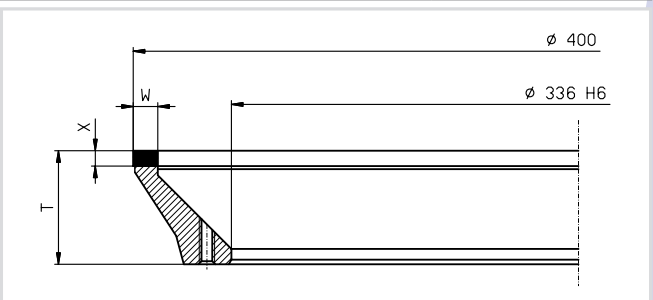
Machine: WENDT WAC 735 QUATTRO

D	W	X	T	H
400	6, 8, 10, 12, 15	6	39	355

Case Study - Insert grinding for grooving, parting, recessing and chamfering

Parameter				
Workpiece	WC INSERT			
Machine	WENDT CENTRO 735			
Coolant	Grinding Oil			
Grinding Wheel	FEPA shape	Consetration	Grit Size μm	Bond Type
	11A2H 400x12x6,H336	C125	D54	PI449
Grinding Parameters				
Cutting Speed [M/s]	18			
Liniar Feed rate [mm/min]	12			
Liniar Depth Of cut [mm]	2.5 x 5 teeth			
Rotational Feed rate [Deg/min]	2400			
Rotational Depth Of cut [mm]	0.1			
Dressing intervals	2			
Num of pieces per Wheel	20300			
Dressing Wheel	WA 240F8V			
Surface Finish	Less then Ra 0.3 μm			






Shape 11A2H

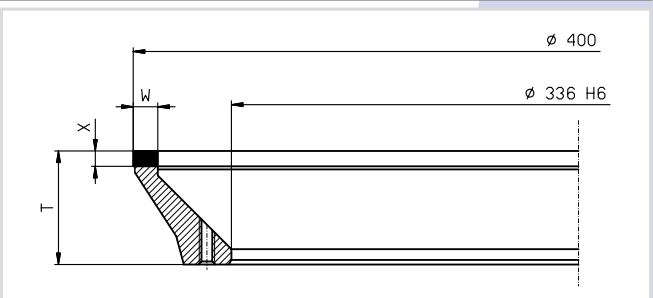
Machine: WENDT WAC 735 CENTRO

D	W	X	T	H
400	6, 8, 10, 12,15	6	39	336

Case Study - Insert grinding for machining aluminum, titanium and magnesium

Parameter				
Workpiece	WC INSERT			
Machine	WENDT CENTRO 735			
Coolant	Grinding Oil			
Grinding Wheel	FEPA shape	Consetration	Grit Size μm	Bond Type
	11A2H 400x12x6,H336	C100	D25	PI449
Grinding Parameters				
Cutting Speed [M/s]	18			
Liniar Feed rate [mm/min]	12			
Liniar Depth Of cut [mm]	3 overall			
Rotational Feed rate [Deg/min]	2400			
Rotational Depth Of cut [mm]	0.1			
Dressing intervals	1			
Num of pieces per Wheel	-			
Dressing Wheel	WA320F8V			
Surface Finish	Less then 5 μm cheaping			





Shape 11A2H

Machine: WENDT WAC 735 CENTRO

D	W	X	T	H
400	6, 8, 10, 12,15	6	39	336

Case Study - Insert grinding For Threads

Parameter				
Workpiece	WC INSERT			
Machine	EWAMATIC LINE			
Coolant	Grinding Oil			
Grinding Wheel	FEPA shape	Consetration	Grit Size μm	Bond Type
	11C175 2x12x12,H50	C100	D46	PI449



Grinding Parameters	
Cutting Speed [M/s]	20
Liniar Feed rate [mm/min]	Side : 10 , Face:1.5
Liniar Depth Of cut [mm]	Side : 1.5 , Face:0.5
Rotational Feed rate [Deg/min]	-
Rotational Depth Of cut [mm]	-
Dressing intervals	10
Num of pieces per Wheel	over 5000
Dressing Wheel	GC120J7V
Surface Finish	Less then Ra 0.15 μm



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