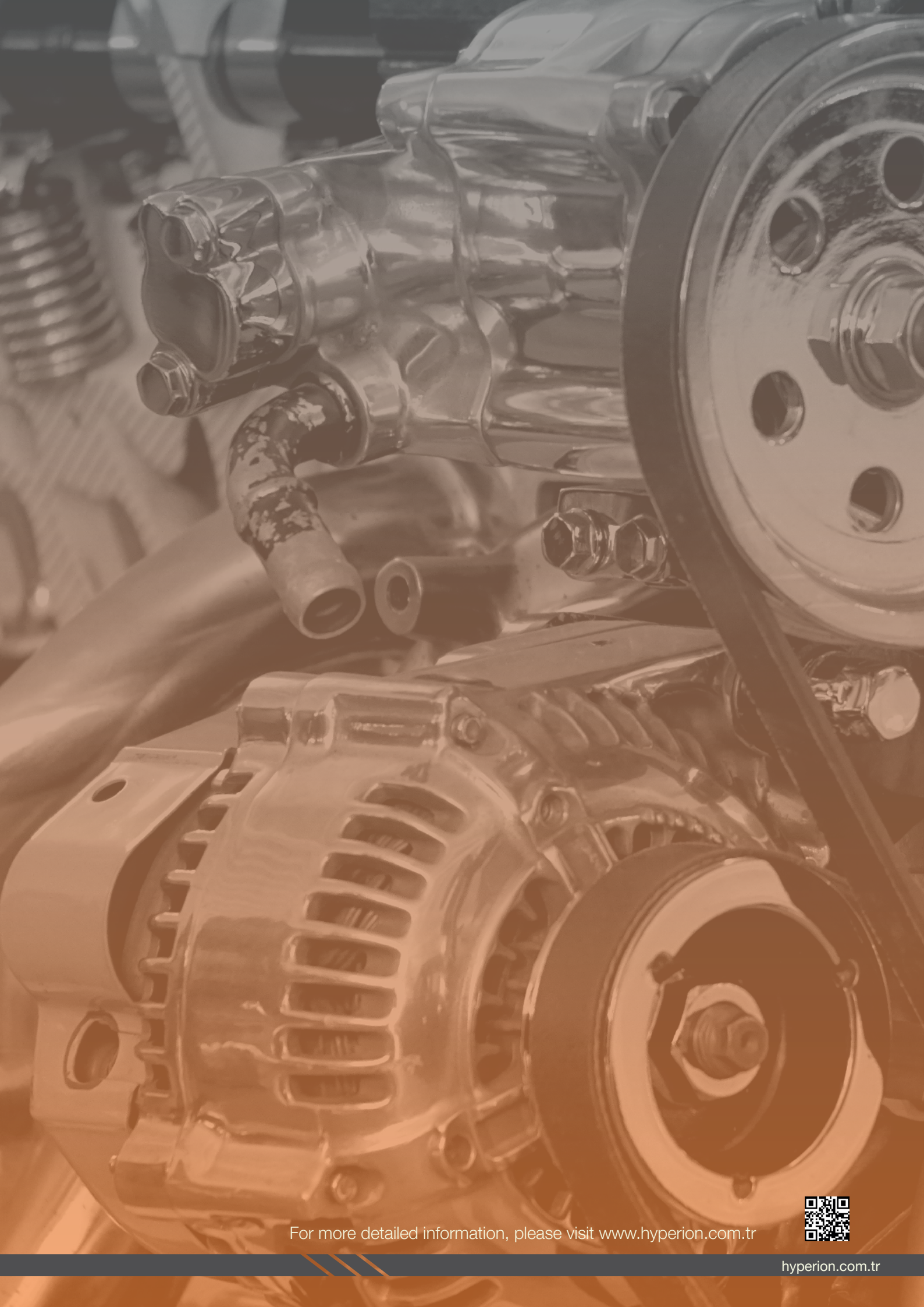
HYPERION

HIGH PERFORMANCE PRECISION TOOLS

GENERAL
CATALOGUE



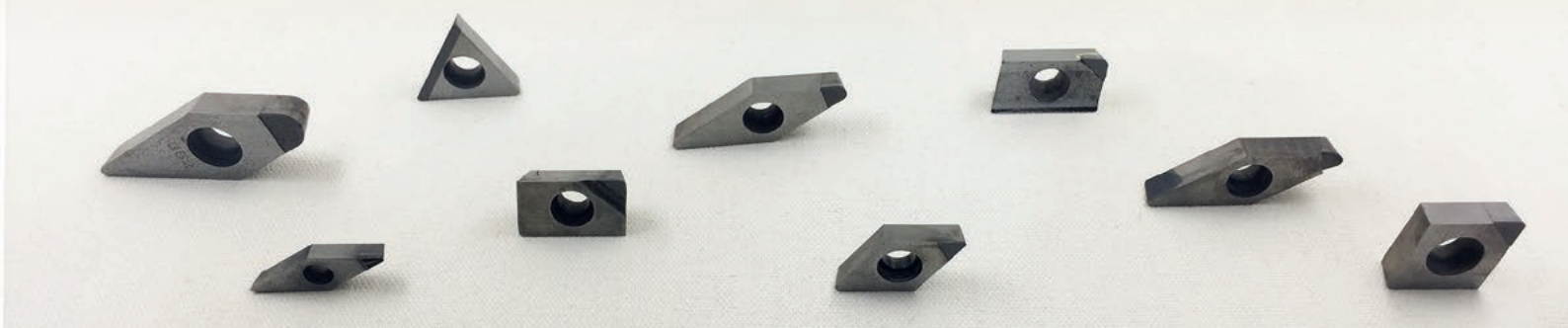
For more detailed information, please visit www.hyperion.com.tr

HYPERION

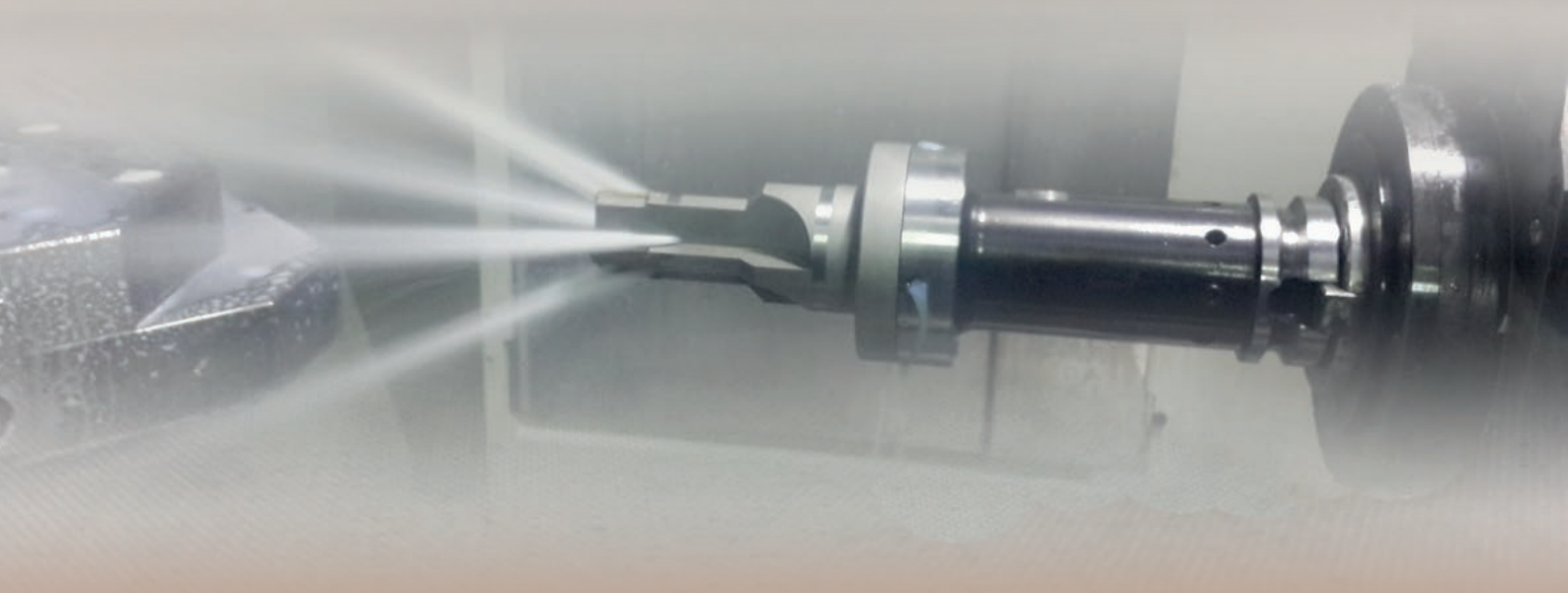
HIGH PERFORMANCE PRECISION TOOLS

From the dream to the truth...

The way you wish, the time you wish.



HIGH PERFORMANCE PRECISION TOOLS
WITH INNOVATIVE IDEAS AND DESIGN



HYPERION HIGH PERFORMANCE PRECISION TOOLS

Hyperion brand products and services have defined excellence in innovation, technology and customer service.

As we Hyperion; from turning to milling, solid end milling, holemaking, tapping and tooling systems; offering a wide range of PCD tool solutions. At Hyperion, our customers' desires are always important to us. please do not hesitate to contact us for products with different and special measures not in this catalog.

Printed in Turkey

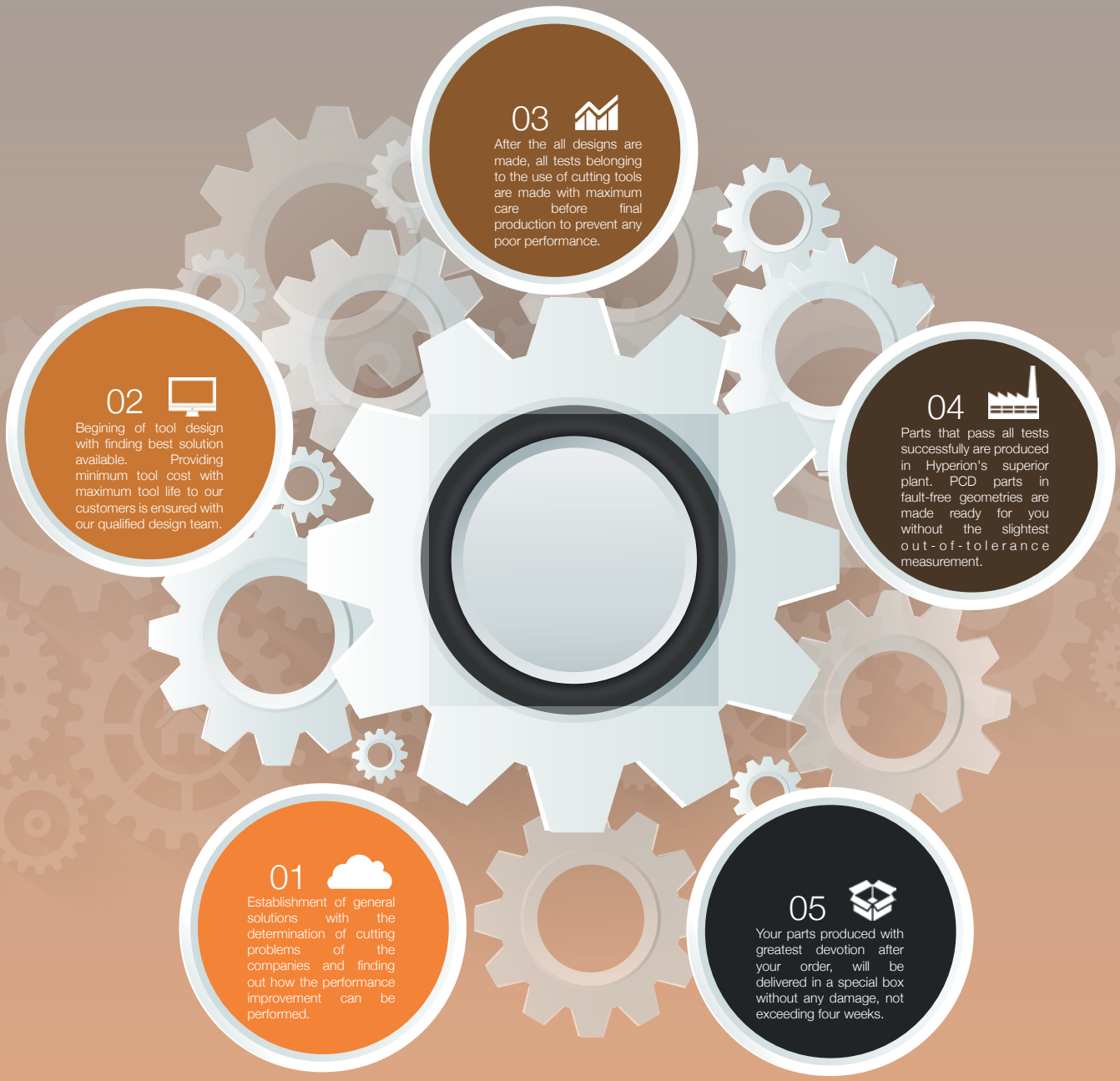
Hyperion High Performance Precision Tools

Kosuyolu Mh. Ali Nazima Sk. No:26 34718
Kadikoy / Istanbul

Tel: +90.216.909.72.64
+90.535.216.99.57
+90.535.622.09.69

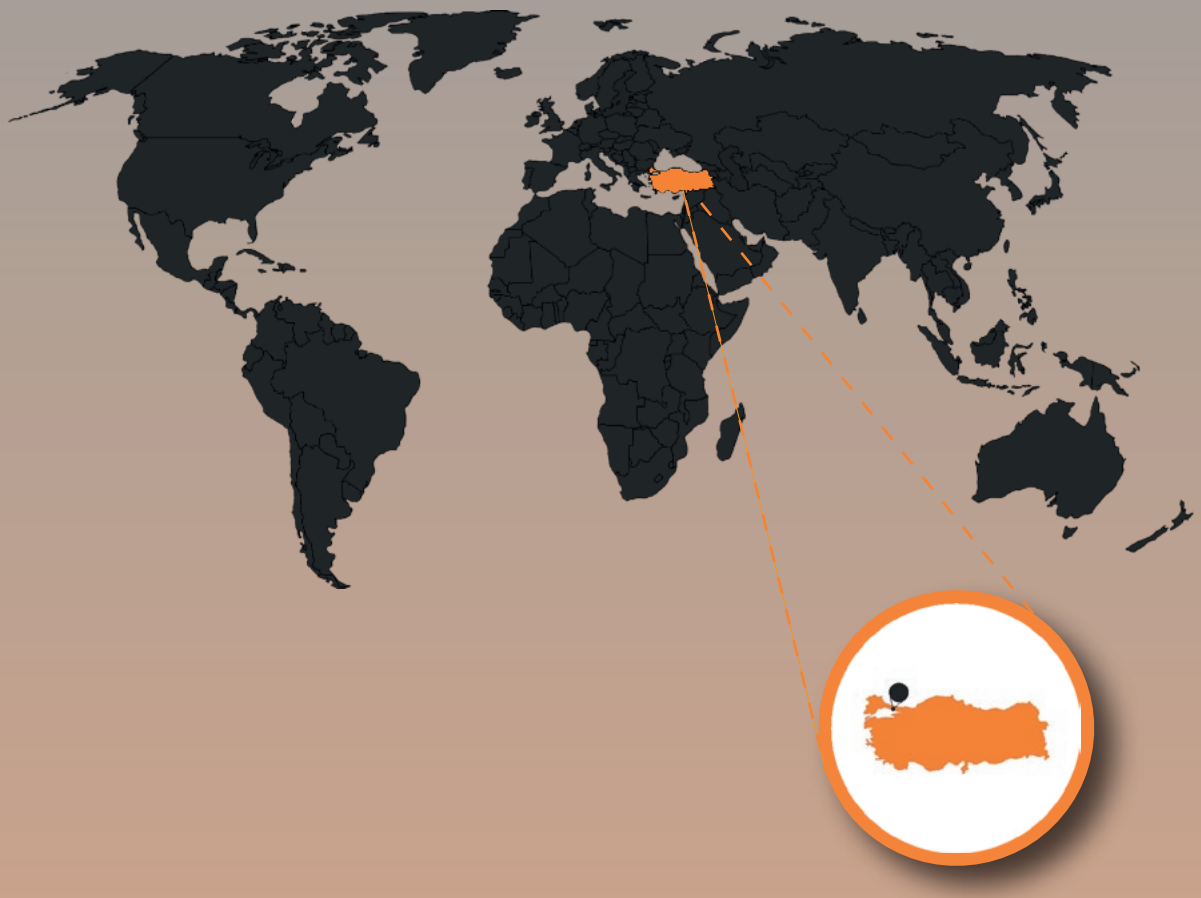
Internet: www.hyperion.com.tr
E-mail: sales@hyperion.com.tr

Our team consist of passionate and experienced people who love what they do and are always one step ahead.



TOUGH CHALLENGES
FLAWLESS RESULTS

Hyperion cutting tools can offer the most efficient solutions on PCD tools, thanks to its years of experience and valuable customers. Especially, our company which stands out with its solutions in automotive, defense and kitchenware industries, can be a partner of all companies using PCD special tools in general. Our support services are available when you need them to provide the Hyperion product support and information that you need to keep your business moving forward.



Hyperion Cutting Tool Company is a leader in the design of special indexable cutting tools for a complete range of metal removal applications. The development and production of special purpose tooling according to customer specific requirements is Hyperion Cutting Tools' primary skill. Increase productivity and reduce tooling costs in today's most challenging applications with machining solutions from Hyperion High Performance Precision Tooling systems.

We, as Hyperion employees, are responsible for achieving customer satisfaction by continually improving processes, products, deliveries and services to ensure they meet or exceed customer requirements. We strive for zero defects in everything we do while promoting a safe work environment for all employees at work and at home.

Hyperion products are supported by a confident and technical sales team backed by an extensive customer care policy.

INDEXABLE TOOLS

PCD ENDMILLS

PCD&CBN SPECIAL TOOLS

TURNING

In order to provide price / performance balance, which is the primary priority of today's applications, as Hyperion, we are here to meet your needs in a wide range of turning operations with PCD and CBN inserts.

Apart from our standard inserts you can find in this catalog, we can produce inserts of different sizes for your operations at any time.

TOOLS

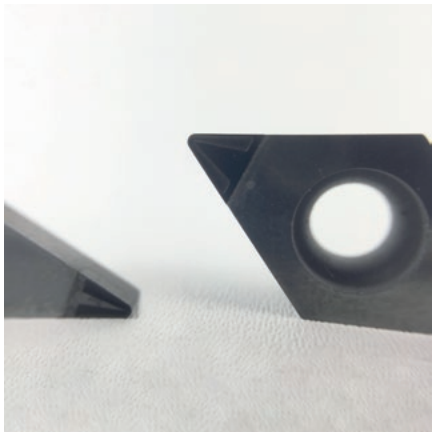
PCD TURNING TOOLS

As Hyperion, we are able to provide you with the most suitable inserts for your operations by using our extensive experience in PCD and CBN special tools, enabling you to complete your machining operations in the most efficient way.

You can perform your operations with Hyperion's full-edge PCD / CBN and full-surface PCD / CBN inserts as well as standard inserts for efficiency and low expense.

If you need different cutting angles, special corner radiuses / chamfers on the standard PCD / CBN inserts, or anything else, please do not hesitate to contact us.

Even if you need low quantities, we are there to meet the needs of our valued customers.



PCD is highly efficient in the processing of non-ferrous metals, especially aluminum, and fiber-reinforced composites. In materials such as aluminum, which produce long chips, chip breaker forms can break chips and produce short chips.

Chip breaker inserts are available in all products, if possible.

PCD Grades & Material Selection

Number	Code	Grain Size	Detail
1	HPCD 308	10	Material of General Purpose
2	HPCD 311	10	For Light, Middle Shock Resistance & Wear Resistance. Middle Silicon Content
3	HPCD 314	<1	Good Toughness and Wear Resistance
4	HPCD 352	3	For Super Finish Interrupted Machining
5	HPCD 360	30&2 Mixed	For Medium-Hard or Super-Hard Material Interrupted Machining

Work Material	Process	Cutting Speed (m/min)	First Choice
AlSi > %12 Si MMC	Turning/Boring	500	HPCD 360
	Milling	500-1000	HPCD 308
AlSi < %12 Si	Turning / Boring	500-1000	HPCD 308
	Milling	1500	HPCD 308
Carbides & Ceramics	Sintered	20-50	HPCD 360
	Green	100-200	HPCD 360
CGI & SGI	Turning / Boring	200	HPCD 360
	Milling	300	HPCD 360
Fibers & Composites	Turning / Boring	200-500	HPCD 360
	Milling / Routing	200-1000	HPCD 308
Titanium	Turning / Boring	100-200	HPCD 308
	Milling	200-400	HPCD 308
Bi-Metals	Milling	200-400	HPCD 360
Grey Iron	Turning / Boring / Reaming	300	HPCD 360

1	2	3	4	5	6	7
C	C	M	W	06	02	04

1	
INSERT SHAPE	
C	
D	
R	
S	
T	
V	
W	
X	SPECIAL SHAPE

2	
CLEARANCE ANGLE	
B	
C	
D	
E	
N	
P	
OTHER	OTHER

3			
PRECISION			
			
CODE	TOLERANCE		
	m	d	s
A	±0.005	±0.025	±0.025
C	±0.013	±0.025	±0.025
G	±0.025	±0.025	±0.013
M	±0.008	±0.005	±0.013
	±0.018	±0.013	
N	±0.008	±0.005	±0.025
	±0.018	±0.013	
U	±0.013	±0.008	±0.013
	±0.038	±0.025	

4	
CHIP BREAKER AND FIXING TYPE	
A	
G	
M	
N	
R	
T	
W	
X	SPECIAL

8	8	9	9	10	11
D	C	G	L	2	HPCD

5
CUTTING EDGE LENGTH






6	
THICKNESS	
1	1.59
2	2.38
3	3.18
T3	3.97
4	4.76
5	5.56
6	6.35
7	7.95
9	9.52

7	
CORNER RADIUS	
00	0
02	0.2
04	0.4
06	0.6
08	0.8
12	12
15	15
20	20
30	30
M0	ROUND INSERT

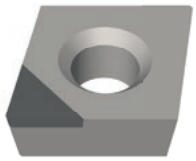
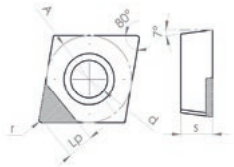
8	
CUTTING EDGE	
DC	CORNER
HE	HALF EDGE
FE	FULL EDGE
FE-R	FULL EDGE RIGHT
FE-L	FULL EDGE LEFT
FF	FULL FACE
S	SOLID

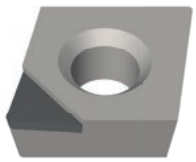
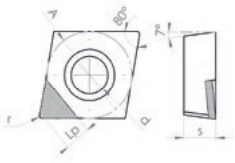
9	
RAKE ANGLE	
GL	0°
GA	3°
GB	5°
GC	10°
GD	15°
GX	OTHER

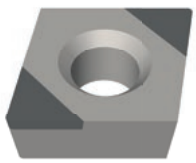
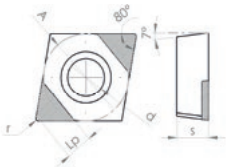
10
CUTTING EDGE NUMBER
1
2
3
4
6
8

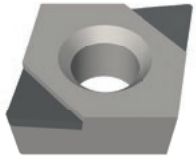
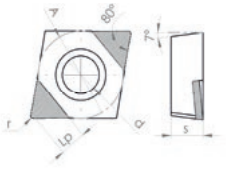
11	
MATERIAL	
HPCBN	CBN
HPCD	PCD

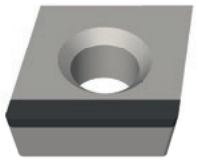
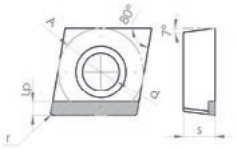
9
CHIP BREAKER (IF APPLICABLE)
CB

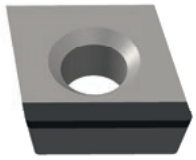
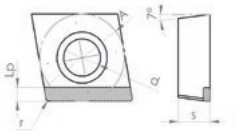
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		CCMW 060204 DC-GL HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		CCMW 060208 DC-GL HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		CCMW 09T304 DC-GL HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		CCMW 09T308 DC-GL HPCD	9,525	3,97	0,8	4,4	2,5-3,5
		CCMW 120404 DC-GL HPCD	12,7	4,76	0,4	5,5	2,5-3,5
		CCMW 120408 DC-GL HPCD	12,7	4,76	0,8	5,5	2,5-3,5
		CCMW 120412 DC-GL HPCD	12,7	4,76	1,2	5,5	2,5-3,5

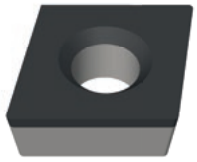
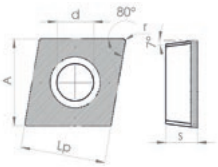
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		CCMW 060204 DC-GD HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		CCMW 060208 DC-GD HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		CCMW 09T304 DC-GD HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		CCMW 09T308 DC-GD HPCD	9,525	3,97	0,8	4,4	2,5-3,5
		CCMW 120404 DC-GD HPCD	12,7	4,76	0,4	5,5	2,5-3,5
		CCMW 120408 DC-GD HPCD	12,7	4,76	0,8	5,5	2,5-3,5
		CCMW 120412 DC-GD HPCD	12,7	4,76	1,2	5,5	2,5-3,5

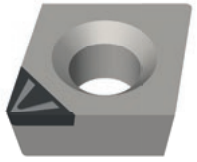
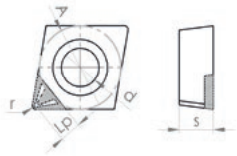
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		CCMW 060204 DC-GL-2 HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		CCMW 060208 DC-GL-2 HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		CCMW 09T304 DC-GL-2 HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		CCMW 09T308 DC-GL-2 HPCD	9,525	3,97	0,8	4,4	2,5-3,5
		CCMW 120404 DC-GL-2 HPCD	12,7	4,76	0,4	5,5	2,5-3,5
		CCMW 120408 DC-GL-2 HPCD	12,7	4,76	0,8	5,5	2,5-3,5
		CCMW 120412 DC-GL-2 HPCD	12,7	4,76	1,2	5,5	2,5-3,5

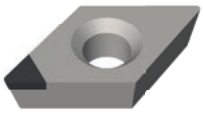
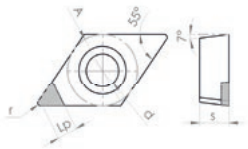
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		CCMW 060204 DC-GD-2 HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		CCMW 060208 DC-GD-2 HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		CCMW 09T304 DC-GD-2 HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		CCMW 09T308 DC-GD-2 HPCD	9,525	3,97	0,8	4,4	2,5-3,5
		CCMW 120404 DC-GD-2 HPCD	12,7	4,76	0,4	5,5	2,5-3,5
		CCMW 120408 DC-GD-2 HPCD	12,7	4,76	0,8	5,5	2,5-3,5
		CCMW 120412 DC-GD-2 HPCD	12,7	4,76	1,2	5,5	2,5-3,5

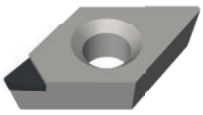
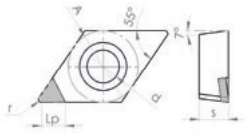
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		CCMW 060204 DC-FE-R HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		CCMW 060208 DC-FE-R HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		CCMW 09T304 DC-FE-R HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		CCMW 09T308 DC-FE-R HPCD	9,525	3,97	0,8	4,4	2,5-3,5
		CCMW 120404 DC-FE-R HPCD	12,7	4,76	0,4	5,5	2,5-3,5
		CCMW 120408 DC-FE-R HPCD	12,7	4,76	0,8	5,5	2,5-3,5
		CCMW 120412 DC-FE-R HPCD	12,7	4,76	1,2	5,5	2,5-3,5

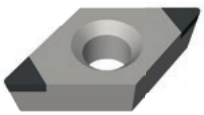
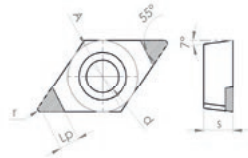
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		CCMW 060204 DC-FE-L HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		CCMW 060208 DC-FE-L HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		CCMW 09T304 DC-FE-L HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		CCMW 09T308 DC-FE-L HPCD	9,525	3,97	0,8	4,4	2,5-3,5
		CCMW 120404 DC-FE-L HPCD	12,7	4,76	0,4	5,5	2,5-3,5
		CCMW 120408 DC-FE-L HPCD	12,7	4,76	0,8	5,5	2,5-3,5
		CCMW 120412 DC-FE-L HPCD	12,7	4,76	1,2	5,5	2,5-3,5

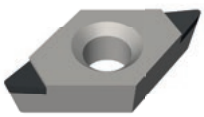
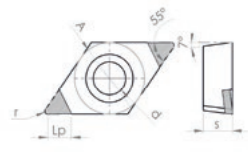
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		CCMW 060204 DC-FF HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		CCMW 060208 DC-FF HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		CCMW 09T304 DC-FF HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		CCMW 09T308 DC-FF HPCD	9,525	3,97	0,8	4,4	2,5-3,5
		CCMW 120404 DC-FF HPCD	12,7	4,76	0,4	5,5	2,5-3,5
		CCMW 120408 DC-FF HPCD	12,7	4,76	0,8	5,5	2,5-3,5
		CCMW 120412 DC-FF HPCD	12,7	4,76	1,2	5,5	2,5-3,5

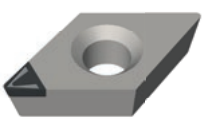
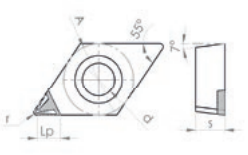
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		CCMW 060204 DC-CB HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		CCMW 060208 DC-CB HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		CCMW 09T304 DC-CB HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		CCMW 09T308 DC-CB HPCD	9,525	3,97	0,8	4,4	2,5-3,5
		CCMW 120404 DC-CB HPCD	12,7	4,76	0,4	5,5	2,5-3,5
		CCMW 120408 DC-CB HPCD	12,7	4,76	0,8	5,5	2,5-3,5
		CCMW 120412 DC-CB HPCD	12,7	4,76	1,2	5,5	2,5-3,5

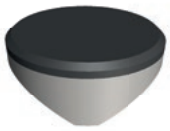
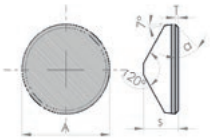
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		DCMW 070202 DC-GL HPCD	6,35	2,38	0,2	2,8	2,5-3,5
		DCMW 070204 DC-GL HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		DCMW 070208 DC-GL HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		DCMW 11T302 DC-GL HPCD	9,525	3,97	0,2	4,4	2,5-3,5
		DCMW 11T304 DC-GL HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		DCMW 11T308 DC-GL HPCD	9,525	3,97	0,8	4,4	2,5-3,5

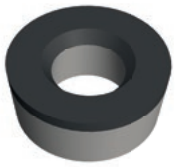
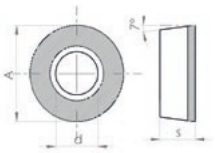
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		DCMW 070202 DC-GD HPCD	6,35	2,38	0,2	2,8	2,5-3,5
		DCMW 070204 DC-GD HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		DCMW 070208 DC-GD HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		DCMW 11T302 DC-GD HPCD	9,525	3,97	0,2	4,4	2,5-3,5
		DCMW 11T304 DC-GD HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		DCMW 11T308 DC-GD HPCD	9,525	3,97	0,8	4,4	2,5-3,5

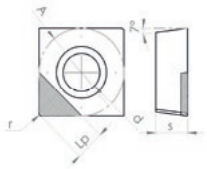
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		DCMW 070202 DC-GL-2 HPCD	6,35	2,38	0,2	2,8	2,5-3,5
		DCMW 070204 DC-GL-2 HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		DCMW 070208 DC-GL-2 HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		DCMW 11T302 DC-GL-2 HPCD	9,525	3,97	0,2	4,4	2,5-3,5
		DCMW 11T304 DC-GL-2 HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		DCMW 11T308 DC-GL-2 HPCD	9,525	3,97	0,8	4,4	2,5-3,5

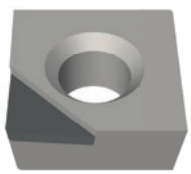
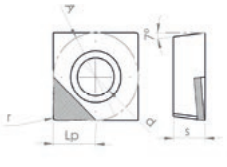
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		DCMW 070202 DC-GD-2 HPCD	6,35	2,38	0,2	2,8	2,5-3,5
		DCMW 070204 DC-GD-2 HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		DCMW 070208 DC-GD-2 HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		DCMW 11T302 DC-GD-2 HPCD	9,525	3,97	0,2	4,4	2,5-3,5
		DCMW 11T304 DC-GD-2 HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		DCMW 11T308 DC-GD-2 HPCD	9,525	3,97	0,8	4,4	2,5-3,5

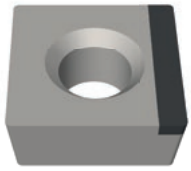
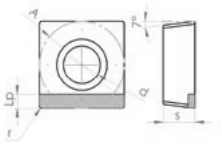
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		DCMW 070202 DC-CB HPCD	6,35	2,38	0,2	2,8	2,5-3,5
		DCMW 070204 DC-CB HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		DCMW 070208 DC-CB HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		DCMW 11T302 DC-CB HPCD	9,525	3,97	0,2	4,4	2,5-3,5
		DCMW 11T304 DC-CB HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		DCMW 11T308 DC-CB HPCD	9,525	3,97	0,8	4,4	2,5-3,5

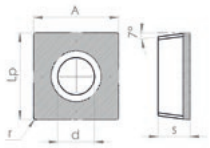
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		RCGX 0603 M0 DC-FF HPCD	6,35	3,18	-	-	-
		RCGX 0903 M0 DC-FF HPCD	9,525	3,18	-	-	-
		RCGX 1204 M0 DC-FF HPCD	12,7	4,76	-	-	-
		RCGX 0607 M0 DC-FF HPCD	6,35	4,76	-	-	-
		RCGX 0907 M0 DC-FF HPCD	9,525	4,76	-	-	-
		RCGX 1207 M0 DC-FF HPCD	12,7	4,76	-	-	-

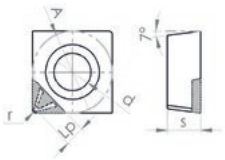
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		RCMW 0602 M0 DC-FF HPCD	6,4	2,4	-	2,8	-
		RCMW 0802 M0 DC-FF HPCD	8,0	2,4	-	3,3	-
		RCMW 0803 M0 DC-FF HPCD	8,0	3,2	-	3,3	-
		RCMW 1003 M0 DC-FF HPCD	10,0	3,2	-	4,4	-
		RCMW 1204 M0 DC-FF HPCD	12,7	4,8	-	5,5	-

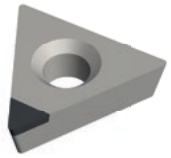
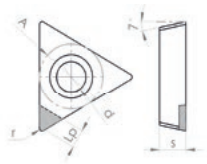
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		SCMW 060204 DC-GL HPCD	7,94	2,38	0,4	3,4	2,5-3,5
		SCMW 060208 DC-GL HPCD	7,94	2,38	0,8	3,4	2,5-3,5
		SCMW 09T304 DC-GL HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		SCMW 09T308 DC-GL HPCD	9,525	3,97	0,8	4,4	2,5-3,5
		SCMW 120404 DC-GL HPCD	12,7	4,76	0,4	5,5	2,5-3,5
		SCMW 120408 DC-GL HPCD	12,7	4,76	0,8	5,5	2,5-3,5
		SCMW 120412 DC-GL HPCD	12,7	4,76	1,2	5,5	2,5-3,5

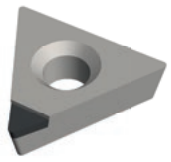
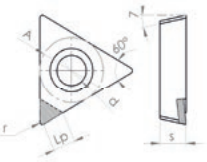
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		SCMW 060204 DC-GD HPCD	7,94	2,38	0,4	3,4	2,5-3,5
		SCMW 060208 DC-GD HPCD	7,94	2,38	0,8	3,4	2,5-3,5
		SCMW 09T304 DC-GD HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		SCMW 09T308 DC-GD HPCD	9,525	3,97	0,8	4,4	2,5-3,5
		SCMW 120404 DC-GD HPCD	12,7	4,76	0,4	5,5	2,5-3,5
		SCMW 120408 DC-GD HPCD	12,7	4,76	0,8	5,5	2,5-3,5
		SCMW 120412 DC-GD HPCD	12,7	4,76	1,2	5,5	2,5-3,5

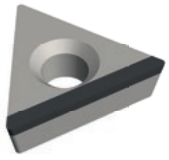
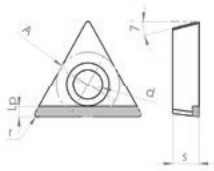
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		SCMW 060204 DC-FE HPCD	7,94	2,38	0,4	3,4	7,94
		SCMW 060208 DC-FE HPCD	7,94	2,38	0,8	3,4	2,5-3,5
		SCMW 09T304 DC-FE HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		SCMW 09T308 DC-FE HPCD	9,525	3,97	0,8	4,4	2,5-3,5
		SCMW 120404 DC-FE HPCD	12,7	4,76	0,4	5,5	2,5-3,5
		SCMW 120408 DC-FE HPCD	12,7	4,76	0,8	5,5	2,5-3,5
		SCMW 120412 DC-FE HPCD	12,7	4,76	1,2	5,5	2,5-3,5

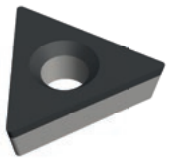
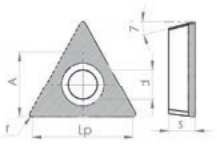
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		SCMW 060204 DC-FF HPCD	7,94	2,38	0,4	3,4	7,94
		SCMW 060208 DC-FF HPCD	7,94	2,38	0,8	3,4	7,94
		SCMW 09T304 DC-FF HPCD	9,525	3,97	0,4	4,4	9,525
		SCMW 09T308 DC-FF HPCD	9,525	3,97	0,8	4,4	9,525
		SCMW 120404 DC-FF HPCD	12,7	4,76	0,4	5,5	12,7
		SCMW 120408 DC-FF HPCD	12,7	4,76	0,8	5,5	12,7
		SCMW 120412 DC-FF HPCD	12,7	4,76	1,2	5,5	12,7

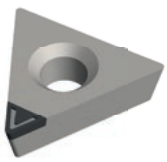
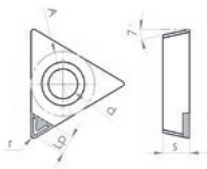
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		SCMW 060204 DC-CB HPCD	7,94	2,38	0,4	3,4	2,5-3,5
		SCMW 060208 DC-CB HPCD	7,94	2,38	0,8	3,4	2,5-3,5
		SCMW 09T304 DC-CB HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		SCMW 09T308 DC-CB HPCD	9,525	3,97	0,8	4,4	2,5-3,5
		SCMW 120404 DC-CB HPCD	12,7	4,76	0,4	5,5	2,5-3,5
		SCMW 120408 DC-CB HPCD	12,7	4,76	0,8	5,5	2,5-3,5
		SCMW 120412 DC-CB HPCD	12,7	4,76	1,2	5,5	2,5-3,5

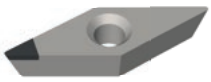
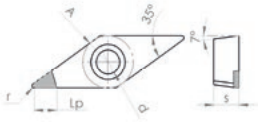
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		TCMW 06T102 DC-GL HPCD	3,97	1,98	0,2	2.2	2,5-3,5
		TCMW 06T104 DC-GL HPCD	3,97	1,98	0,4	2.2	2,5-3,5
		TCMW 06T108 DC-GL HPCD	3,97	1,98	0,8	2.2	2,5-3,5
		TCMW 090202 DC-GL HPCD	5,56	2,38	0,2	2,5	2,5-3,5
		TCMW 090204 DC-GL HPCD	5,56	2,38	0,4	2,5	2,5-3,5
		TCMW 090208 DC-GL HPCD	5,56	2,38	0,8	2,5	2,5-3,5
		TCMW 110202 DC-GL HPCD	6,35	2,38	0,2	2,8	2,5-3,5
		TCMW 110204 DC-GL HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		TCMW 110208 DC-GL HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		TCMW 16T304 DC-GL HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		TCMW 16T308 DC-GL HPCD	9,525	3,97	0,8	4,4	2,5-3,5

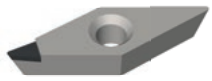
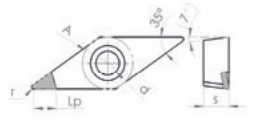
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		TCMW 06T102 DC-GD HPCD	3,97	1,98	0,2	2.2	2,5-3,5
		TCMW 06T104 DC-GD HPCD	3,97	1,98	0,4	2.2	2,5-3,5
		TCMW 06T108 DC-GD HPCD	3,97	1,98	0,8	2.2	2,5-3,5
		TCMW 090202 DC-GD HPCD	5,56	2,38	0,2	2,5	2,5-3,5
		TCMW 090204 DC-GD HPCD	5,56	2,38	0,4	2,5	2,5-3,5
		TCMW 090208 DC-GD HPCD	5,56	2,38	0,8	2,5	2,5-3,5
		TCMW 110202 DC-GD HPCD	6,35	2,38	0,2	2,8	2,5-3,5
		TCMW 110204 DC-GD HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		TCMW 110208 DC-GD HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		TCMW 16T304 DC-GD HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		TCMW 16T308 DC-GD HPCD	9,525	3,97	0,8	4,4	2,5-3,5

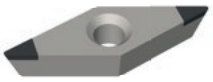
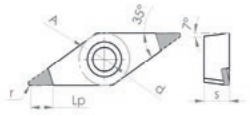
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		TCMW 06T102 DC-FE HPCD	3,97	1,98	0,2	2.2	2,5-3,5
		TCMW 06T104 DC-FE HPCD	3,97	1,98	0,4	2.2	2,5-3,5
		TCMW 06T108 DC-FE HPCD	3,97	1,98	0,8	2.2	2,5-3,5
		TCMW 090202 DC-FE HPCD	5,56	2,38	0,2	2,5	2,5-3,5
		TCMW 090204 DC-FE HPCD	5,56	2,38	0,4	2,5	2,5-3,5
		TCMW 090208 DC-FE HPCD	5,56	2,38	0,8	2,5	2,5-3,5
		TCMW 110202 DC-FE HPCD	6,35	2,38	0,2	2,8	2,5-3,5
		TCMW 110204 DC-FE HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		TCMW 110208 DC-FE HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		TCMW 16T304 DC-FE HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		TCMW 16T308 DC-FE HPCD	9,525	3,97	0,8	4,4	2,5-3,5

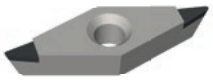
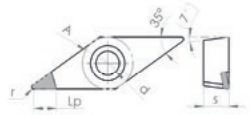
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		TCMW 06T102 DC-FF HPCD	3,97	1,98	0,2	2,5	3,97
		TCMW 06T104 DC-FF HPCD	3,97	1,98	0,4	2,5	3,97
		TCMW 06T108 DC-FF HPCD	3,97	1,98	0,8	2,5	3,97
		TCMW 090202 DC-FF HPCD	5,56	2,38	0,2	2,5	5,56
		TCMW 090204 DC-FF HPCD	5,56	2,38	0,4	2,5	5,56
		TCMW 090208 DC-FF HPCD	5,56	2,38	0,8	2,5	5,56
		TCMW 110202 DC-FF HPCD	6,35	2,38	0,2	2,8	6,35
		TCMW 110204 DC-FF HPCD	6,35	2,38	0,4	2,8	6,35
		TCMW 110208 DC-FF HPCD	6,35	2,38	0,8	2,8	6,35
		TCMW 16T304 DC-FF HPCD	9,525	3,97	0,4	4,4	9,525
		TCMW 16T308 DC-FF HPCD	9,525	3,97	0,8	4,4	9,525

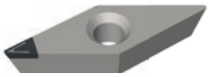
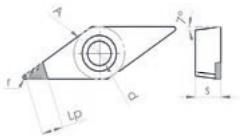
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		TCMW 110202 DC-CB HPCD	6,35	2,38	0,2	2,8	2,5-3,5
		TCMW 110204 DC-CB HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		TCMW 110208 DC-CB HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		TCMW 16T304 DC-CB HPCD	9,525	3,97	0,4	4,4	2,5-3,5
		TCMW 16T308 DC-CB HPCD	9,525	3,97	0,8	4,4	2,5-3,5

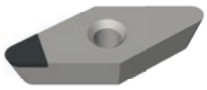
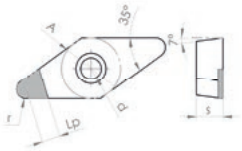
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		VCMW 110302 DC-GL HPCD	6,35	2,38	0,2	2,8	2,5-3,5
		VCMW 110304 DC-GL HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		VCMW 110308 DC-GL HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		VCMW 160402 DC-GL HPCD	9,525	4,76	0,2	4,4	2,5-3,5
		VCMW 160404 DC-GL HPCD	9,525	4,76	0,4	4,4	2,5-3,5
		VCMW 160408 DC-GL HPCD	9,525	4,76	0,8	4,4	2,5-3,5
		VCMW 160412 DC-GL HPCD	9,525	4,76	1,2	4,4	2,5-3,5
		VCMW 160416 DC-GL HPCD	9,525	4,76	1,6	4,4	2,5-3,5
		VCMW 160418 DC-GL HPCD	9,525	4,76	1,8	4,4	2,5-3,5
		VCMW 160420 DC-GL HPCD	9,525	4,76	2,0	4,4	2,5-3,5

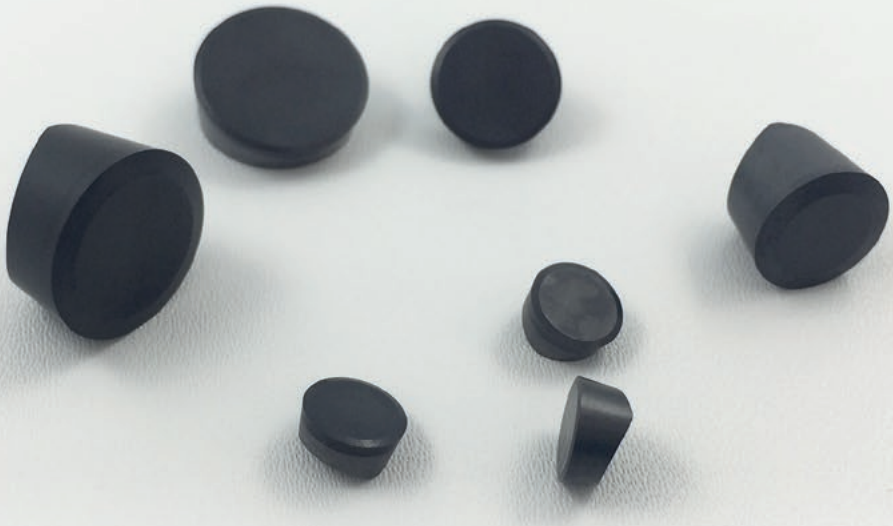
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		VCMW 110202 DC-GD HPCD	6,35	2,38	0,2	2,8	2,5-3,5
		VCMW 110204 DC-GD HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		VCMW 110208 DC-GD HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		VCMW 160402 DC-GD HPCD	9,525	4,76	0,2	4,4	2,5-3,5
		VCMW 160404 DC-GD HPCD	9,525	4,76	0,4	4,4	2,5-3,5
		VCMW 160408 DC-GD HPCD	9,525	4,76	0,8	4,4	2,5-3,5
		VCMW 160412 DC-GD HPCD	9,525	4,76	1,2	4,4	2,5-3,5
		VCMW 160416 DC-GD HPCD	9,525	4,76	1,6	4,4	2,5-3,5
		VCMW 160418 DC-GD HPCD	9,525	4,76	1,8	4,4	2,5-3,5
		VCMW 160420 DC-GD HPCD	9,525	4,76	2,0	4,4	2,5-3,5

3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		VCMW 110302 DC-GL-2 HPCD	6,35	2,38	0,2	2,8	2,5-3,5
		VCMW 110304 DC-GL-2 HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		VCMW 110308 DC-GL-2 HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		VCMW 160402 DC-GL-2 HPCD	9,525	4,76	0,2	4,4	2,5-3,5
		VCMW 160404 DC-GL-2 HPCD	9,525	4,76	0,4	4,4	2,5-3,5
		VCMW 160408 DC-GL-2 HPCD	9,525	4,76	0,8	4,4	2,5-3,5
		VCMW 160412 DC-GL-2 HPCD	9,525	4,76	1,2	4,4	2,5-3,5
		VCMW 160416 DC-GL-2 HPCD	9,525	4,76	1,6	4,4	2,5-3,5
		VCMW 160418 DC-GL-2 HPCD	9,525	4,76	1,8	4,4	2,5-3,5
		VCMW 160420 DC-GL-2 HPCD	9,525	4,76	2,0	4,4	2,5-3,5

3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		VCMW 110202 DC-GD-2 HPCD	6,35	2,38	0,2	2,8	2,5-3,5
		VCMW 110204 DC-GD-2 HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		VCMW 110208 DC-GD-2 HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		VCMW 160402 DC-GD-2 HPCD	9,525	4,76	0,2	4,4	2,5-3,5
		VCMW 160404 DC-GD-2 HPCD	9,525	4,76	0,4	4,4	2,5-3,5
		VCMW 160408 DC-GD-2 HPCD	9,525	4,76	0,8	4,4	2,5-3,5
		VCMW 160412 DC-GD-2 HPCD	9,525	4,76	1,2	4,4	2,5-3,5
		VCMW 160416 DC-GD-2 HPCD	9,525	4,76	1,6	4,4	2,5-3,5
		VCMW 160418 DC-GD-2 HPCD	9,525	4,76	1,8	4,4	2,5-3,5
		VCMW 160420 DC-GD-2 HPCD	9,525	4,76	2,0	4,4	2,5-3,5

3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		VCMW 110302 DC-CB HPCD	6,35	2,38	0,2	2,8	2,5-3,5
		VCMW 110304 DC-CB HPCD	6,35	2,38	0,4	2,8	2,5-3,5
		VCMW 110308 DC-CB HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		VCMW 110312 DC-CB HPCD	6,35	2,38	0,8	2,8	2,5-3,5
		VCMW 160402 DC-CB HPCD	9,525	4,76	0,2	4,4	2,5-3,5
		VCMW 160404 DC-CB HPCD	9,525	4,76	0,4	4,4	2,5-3,5
		VCMW 160408 DC-CB HPCD	9,525	4,76	0,8	4,4	2,5-3,5
		VCMW 160412 DC-CB HPCD	9,525	4,76	1,2	4,4	2,5-3,5

3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		VCMW 220510 DC-GL HPCD	12,7	5,56	1	7,5	4-5
		VCMW 220515 DC-GL HPCD	12,7	5,56	1,5	7,5	4-5
		VCMW 220520 DC-GL HPCD	12,7	5,56	2	7,5	4-5
		VCMW 220525 DC-GL HPCD	12,7	5,56	2,5	7,5	4-5
		VCMW 220530 DC-GL HPCD	12,7	5,56	3	7,5	4-5



CBN TURNING TOOLS

CBN or Solid-CBN inserts are mostly suitable for cast iron and sintered iron materials and due to the nature of the CBN material, they can operate at a much higher speeds even with a longer tool life than carbide inserts.

You can save machining time with a much precise surface values in your machining operations with different sizes of CBN with a wide range of material qualities in many different geometries.

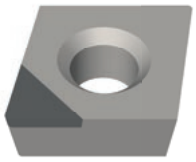
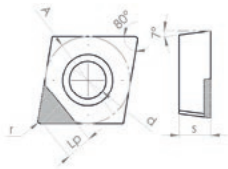
With Full-Face or Half-Face CBN (optionally PCD) bits, you can perform ribbing operations on your steels more efficiently than carbide inserts.

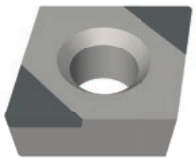
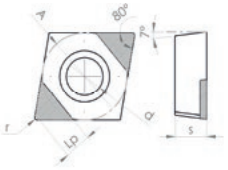
Hyperion can to produce bites in all the forms and sizes you want.

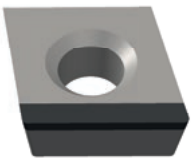
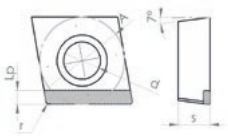
In CBN inserts, CBN geometry is as important as CBN quality. At this point, as Hyperion, we can make inserts with different geometries that work more efficiently, especially by adjusting the chamfer dimensions as desired. Thus, your machining tools will have a longer life.

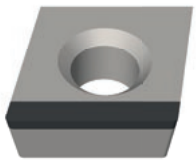
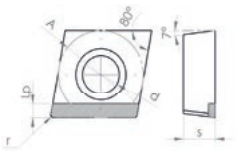
CBN GRADES&MATERIAL SELECTION

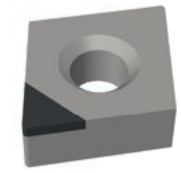
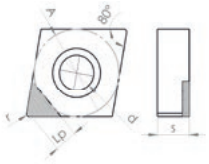
Number	Code	Grain Size	Detail
1	HPCBN 121	3	Hardened Steel. High speed,Continue
2	HPCBN 125	1	Hardened Steel. Continue,Middle Interrupt Cutting
3	HPCBN 130	0,5	Hardend Steel. Interrupt Cutting
4	HPCBN 145	3	Hardened Steel More than HRC65 Precision Interrupt
5	HPCBN 170	3	Cast Iron &Powder Metallurgy
6	HPCBN 180	2	Material of General purpose
7	HPCBN 3500	1	Continuous, Hard Materials

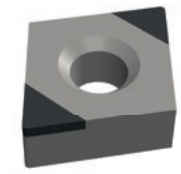
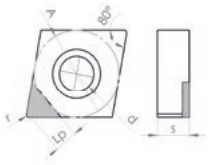
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		CCMW 050202 DC-GL HPCBN	5,56	2,38	0,2	2,8	2,5-3,5
		CCMW 050204 DC-GL HPCBN	5,56	2,38	0,4	2,8	2,5-3,5
		CCMW 050208 DC-GL HPCBN	5,56	2,38	0,8	2,8	2,5-3,5
		CCMW 060202 DC-GL HPCBN	6,35	2,38	0,2	2,8	2,5-3,5
		CCMW 060204 DC-GL HPCBN	6,35	2,38	0,4	2,8	2,5-3,5
		CCMW 060208 DC-GL HPCBN	6,35	2,38	0,8	2,8	2,5-3,5
		CCMW 09T302 DC-GL HPCBN	9,525	3,97	0,2	4,4	2,5-3,5
		CCMW 09T304 DC-GL HPCBN	9,525	3,97	0,4	4,4	2,5-3,5
		CCMW 09T308 DC-GL HPCBN	9,525	3,97	0,8	4,4	2,5-3,5
		CCMW 120402 DC-GL HPCBN	12,7	4,76	0,2	5,16	2,5-3,5
		CCMW 120404 DC-GL HPCBN	12,7	4,76	0,4	5,16	2,5-3,5
		CCMW 120408 DC-GL HPCBN	12,7	4,76	0,8	5,16	2,5-3,5

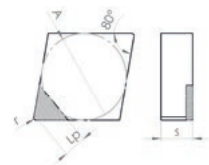
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		CCMW 050202 DC-GL-2 HPCBN	5,56	2,38	0,2	2,8	2,5-3,5
		CCMW 050204 DC-GL-2 HPCBN	5,56	2,38	0,4	2,8	2,5-3,5
		CCMW 050208 DC-GL-2 HPCBN	5,56	2,38	0,8	2,8	2,5-3,5
		CCMW 060202 DC-GL-2 HPCBN	6,35	2,38	0,2	2,8	2,5-3,5
		CCMW 060204 DC-GL-2 HPCBN	6,35	2,38	0,4	2,8	2,5-3,5
		CCMW 060208 DC-GL-2 HPCBN	6,35	2,38	0,8	2,8	2,5-3,5
		CCMW 09T302 DC-GL-2 HPCBN	9,525	3,97	0,2	4,4	2,5-3,5
		CCMW 09T304 DC-GL-2 HPCBN	9,525	3,97	0,4	4,4	2,5-3,5
		CCMW 09T308 DC-GL-2 HPCBN	9,525	3,97	0,8	4,4	2,5-3,5
		CCMW 120402 DC-GL-2 HPCBN	12,7	4,76	0,2	5,16	2,5-3,5
		CCMW 120404 DC-GL-2 HPCBN	12,7	4,76	0,4	5,16	2,5-3,5
		CCMW 120408 DC-GL-2 HPCBN	12,7	4,76	0,8	5,16	2,5-3,5

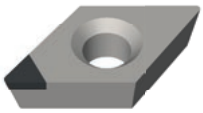
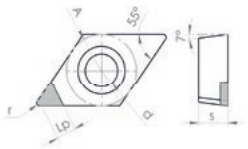
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		CCMW 060202 DC-FE-L HPCBN	6,35	2,38	0,2	2,8	2,5-3,5
		CCMW 060204 DC-FE-L HPCBN	6,35	2,38	0,4	2,8	2,5-3,5
		CCMW 060208 DC-FE-L HPCBN	6,35	2,38	0,8	2,8	2,5-3,5
		CCMW 09T302 DC-FE-L HPCBN	9,525	3,97	0,2	4,4	2,5-3,5
		CCMW 09T304 DC-FE-L HPCBN	9,525	3,97	0,4	4,4	2,5-3,5
		CCMW 09T308 DC-FE-L HPCBN	9,525	3,97	0,8	4,4	2,5-3,5

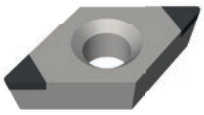
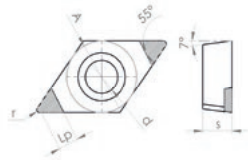
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		CCMW 060202 DC-FE-R HPCBN	6,35	2,38	0,2	2,8	2,5-3,5
		CCMW 060204 DC-FE-R HPCBN	6,35	2,38	0,4	2,8	2,5-3,5
		CCMW 060208 DC-FE-R HPCBN	6,35	2,38	0,8	2,8	2,5-3,5
		CCMW 09T302 DC-FE-R HPCBN	9,525	3,97	0,2	4,4	2,5-3,5
		CCMW 09T304 DC-FE-R HPCBN	9,525	3,97	0,4	4,4	2,5-3,5
		CCMW 09T308 DC-FE-R HPCBN	9,525	3,97	0,8	4,4	2,5-3,5

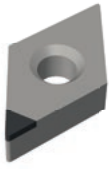
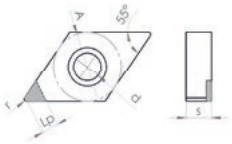
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		CNGA 09T304 DC-GL HPCBN	9,525	3,97	0,4	3,81	2,5-3,5
		CNGA 09T308 DC-GL HPCBN	9,525	3,97	0,8	3,81	2,5-3,5
		CNGA 09T312 DC-GL HPCBN	9,525	3,97	1,2	3,81	2,5-3,5
		CNGA 120404 DC-GL HPCBN	12,7	4,76	0,4	5,16	2,5-3,5
		CNGA 120408 DC-GL HPCBN	12,7	4,76	0,8	5,16	2,5-3,5
		CNGA 120412 DC-GL HPCBN	12,7	4,76	1,2	5,16	2,5-3,5

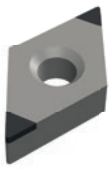
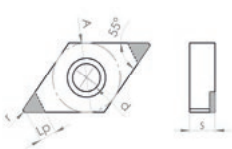
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		CNGA 09T304 DC-GL-2 HPCBN	9,525	3,97	0,4	3,81	2,5-3,5
		CNGA 09T308 DC-GL-2 HPCBN	9,525	3,97	0,8	3,81	2,5-3,5
		CNGA 09T312 DC-GL-2 HPCBN	9,525	3,97	1,2	3,81	2,5-3,5
		CNGA 120404 DC-GL-2 HPCBN	12,7	4,76	0,4	5,16	2,5-3,5
		CNGA 120408 DC-GL-2 HPCBN	12,7	4,76	0,8	5,16	2,5-3,5
		CNGA 120412 DC-GL-2 HPCBN	12,7	4,76	1,2	5,16	2,5-3,5

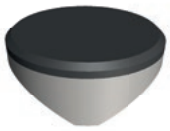
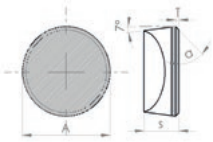
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		CNGN 09T304 DC-GL HPCBN	9,525	3,97	0,4	-	2,5-3,5
		CNGN 09T308 DC-GL HPCBN	9,525	3,97	0,8	-	2,5-3,5
		CNGN 09T312 DC-GL HPCBN	9,525	3,97	1,2	-	2,5-3,5
		CNGN 120404 DC-GL HPCBN	12,7	4,76	0,4	-	2,5-3,5
		CNGN 120408 DC-GL HPCBN	12,7	4,76	0,8	-	2,5-3,5
		CNGN 120412 DC-GL HPCBN	12,7	4,76	1,2	-	2,5-3,5

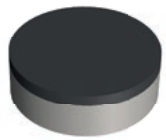
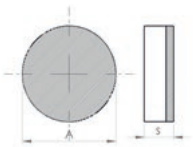
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		DCMW 070202 DC-GL HPCBN	6,35	2,38	0,2	2,8	2,5-3,5
		DCMW 070204 DC-GL HPCBN	6,35	2,38	0,4	2,8	2,5-3,5
		DCMW 070208 DC-GL HPCBN	6,35	2,38	0,8	2,8	2,5-3,5
		DCMW 11T302 DC-GL HPCBN	9,525	3,18	0,2	4,4	2,5-3,5
		DCMW 11T304 DC-GL HPCBN	9,525	3,18	0,4	4,4	2,5-3,5
		DCMW 11T308 DC-GL HPCBN	9,525	3,18	0,8	4,4	2,5-3,5

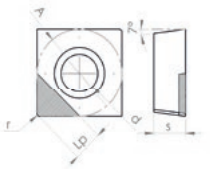
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		DCMW 070202 DC-GL-2 HPCBN	6,35	2,38	0,2	2,8	2,5-3,5
		DCMW 070204 DC-GL-2 HPCBN	6,35	2,38	0,4	2,8	2,5-3,5
		DCMW 070208 DC-GL-2 HPCBN	6,35	2,38	0,8	2,8	2,5-3,5
		DCMW 11T302 DC-GL-2 HPCBN	9,525	3,18	0,2	4,4	2,5-3,5
		DCMW 11T304 DC-GL-2 HPCBN	9,525	3,18	0,4	4,4	2,5-3,5
		DCMW 11T308 DC-GL-2 HPCBN	9,525	3,18	0,8	4,4	2,5-3,5

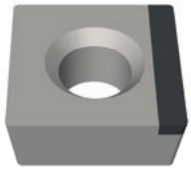
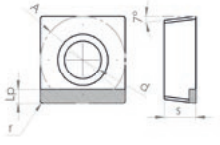
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		DNGA 150404 DC-GL HPCBN	12,7	4,76	0,4	5,16	2,5-3,5
		DNGA 150408 DC-GL HPCBN	12,7	4,76	0,8	5,16	2,5-3,5
		DNGA 150412 DC-GL HPCBN	12,7	4,76	1,2	5,16	2,5-3,5
		DNGA 150604 DC-GL HPCBN	12,7	4,76	0,4	5,16	2,5-3,5
		DNGA 150608 DC-GL HPCBN	12,7	6,35	0,8	5,16	2,5-3,5
		DNGA 150612 DC-GL HPCBN	12,7	6,35	1,2	5,16	2,5-3,5

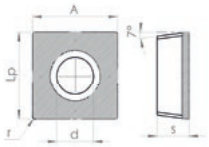
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		DNGA 150404 DC-GL-2 HPCBN	12,7	4,76	0,4	5,16	2,5-3,5
		DNGA 150408 DC-GL-2 HPCBN	12,7	4,76	0,8	5,16	2,5-3,5
		DNGA 150412 DC-GL-2 HPCBN	12,7	4,76	1,2	5,16	2,5-3,5
		DNGA 150604 DC-GL-2 HPCBN	12,7	4,76	0,4	5,16	2,5-3,5
		DNGA 150608 DC-GL-2 HPCBN	12,7	6,35	0,8	5,16	2,5-3,5
		DNGA 150612 DC-GL-2 HPCBN	12,7	6,35	1,2	5,16	2,5-3,5

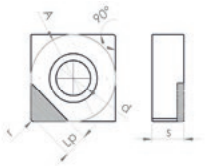
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		RCGX 0603 M0 DC-FF HPCBN	6,35	3,18	-	-	-
		RCGX 0903 M0 DC-FF HPCBN	9,525	3,18	-	-	-
		RCGX 1204 M0 DC-FF HPCBN	12,7	4,76	-	-	-
		RCGX 0607 M0 DC-FF HPCBN	6,35	4,76	-	-	-
		RCGX 0907 M0 DC-FF HPCBN	9,525	4,76	-	-	-
		RCGX 1207 M0 DC-FF HPCBN	12,7	4,76	-	-	-

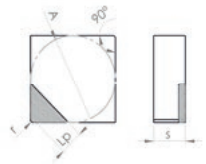
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		RNGN 09T3 M0 DC-FF HPCBN	9,525	3,97	-	-	-
		RNGN 10T3 M0 DC-FF HPCBN	10	3,97	-	-	-
		RNGN12T3 M0 DC-FF HPCBN	12,7	3,97	-	-	-
		RNGN13T3 M0 DC-FF HPCBN	13	3,97	-	-	-
		RNGN1504 M0 DC-FF HPCBN	15,875	4,76	-	-	-
		RNGN 1906 M0 DC-FF HPCBN	19,05	6,35	-	-	-

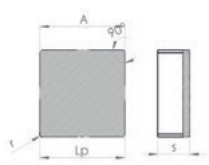
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		SCMW 090304 DC-GL HPCBN	9,525	3,18	0,4	4,4	2,5-3,5
		SCMW 090308 DC-GL HPCBN	9,525	3,18	0,8	4,4	2,5-3,5
		SCMW 090312 DC-GL HPCBN	9,525	3,18	1,2	4,4	2,5-3,5
		SCMW 120404 DC-GL HPCBN	12,7	4,76	0,4	5,16	2,5-3,5
		SCMW 120408 DC-GL HPCBN	12,7	4,76	0,8	5,16	2,5-3,5
		SCMW 120412 DC-GL HPCBN	12,7	4,76	1,2	5,16	2,5-3,5

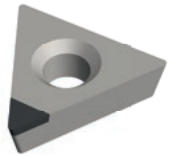
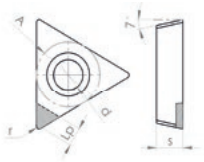
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		SCMW 090304 DC-FE HPCBN	9,525	3,18	0,4	4,4	2,5-3,5
		SCMW 090308 DC-FE HPCBN	9,525	3,18	0,8	4,4	2,5-3,5
		SCMW 090312 DC-FE HPCBN	9,525	3,18	1,2	4,4	2,5-3,5
		SCMW 120404 DC-FE HPCBN	12,7	4,76	0,4	5,16	2,5-3,5
		SCMW 120408 DC-FE HPCBN	12,7	4,76	0,8	5,16	2,5-3,5
		SCMW 120412 DC-FE HPCBN	12,7	4,76	1,2	5,16	2,5-3,5

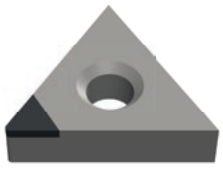
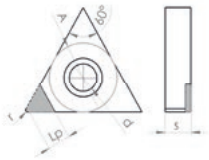
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		SCMW 090304 DC-FF HPCBN	9,525	3,18	0,4	4,4	2,5-3,5
		SCMW 090308 DC-FF HPCBN	9,525	3,18	0,8	4,4	2,5-3,5
		SCMW 090312 DC-FF HPCBN	9,525	3,18	1,2	4,4	2,5-3,5
		SCMW 120404 DC-FF HPCBN	12,7	4,76	0,4	5,16	2,5-3,5
		SCMW 120408 DC-FF HPCBN	12,7	4,76	0,8	5,16	2,5-3,5
		SCMW 120412 DC-FF HPCBN	12,7	4,76	1,2	5,16	2,5-3,5

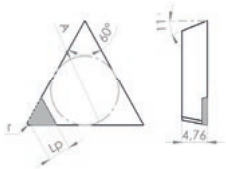
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		SNGA 120404 DC-GL HPCBN	12,7	4,76	0,4	5,16	2,5-3,5
		SNGA 120408 DC-GL HPCBN	12,7	4,76	0,8	5,16	2,5-3,5
		SNGA 120412 DC-GL HPCBN	12,7	4,76	1,2	5,16	2,5-3,5
		SNGA 150404 DC-GL HPCBN	15,875	4,76	0,4	6,35	2,5-3,5
		SNGA 150408 DC-GL HPCBN	15,875	4,76	0,8	6,35	2,5-3,5
		SNGA 150412 DC-GL HPCBN	15,875	4,76	1,2	6,35	2,5-3,5
		SNGA 150604 DC-GL HPCBN	15,875	6,35	0,4	6,35	2,5-3,5
		SNGA 150608 DC-GL HPCBN	15,875	6,35	0,8	6,35	2,5-3,5
		SNGA 150612 DC-GL HPCBN	15,875	6,35	1,2	6,35	2,5-3,5

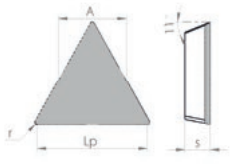
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		SNGN 09T304 DC-GL HPCBN	9,525	3,97	0,4	-	2,5-3,5
		SNGN 09T308 DC-GL HPCBN	9,525	3,97	0,8	-	2,5-3,5
		SNGN 09T312 DC-GL HPCBN	9,525	3,97	1,2	-	2,5-3,5
		SNGN 120404 DC-GL HPCBN	12,7	4,76	0,4	-	2,5-3,5
		SNGN 120408 DC-GL HPCBN	12,7	4,76	0,8	-	2,5-3,5
		SNGN 120412 DC-GL HPCBN	12,7	4,76	1,2	-	2,5-3,5

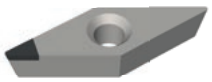
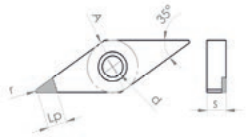
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		SNGN 09T304 DC-FF HPCBN	9,525	3,97	0,4	-	2,5-3,5
		SNGN 09T308 DC-FF HPCBN	9,525	3,97	0,8	-	2,5-3,5
		SNGN 09T312 DC-FF HPCBN	9,525	3,97	1,2	-	2,5-3,5
		SNGN 120404 DC-FF HPCBN	12,7	4,76	0,4	-	2,5-3,5
		SNGN 120408 DC-FF HPCBN	12,7	4,76	0,8	-	2,5-3,5
		SNGN 120412 DC-FF HPCBN	12,7	4,76	1,2	-	2,5-3,5

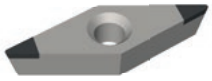
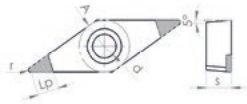
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		TCMW 06T102 DC-GL HPCBN	3,97	1,98	0,2	2,5	2,5-3,5
		TCMW 06T104 DC-GL HPCBN	3,97	1,98	0,4	2,5	2,5-3,5
		TCMW 06T108 DC-GL HPCBN	3,97	1,98	0,8	2,5	2,5-3,5
		TCMW 090202 DC-GL HPCBN	5,56	2,38	0,2	2,8	2,5-3,5
		TCMW 090204 DC-GL HPCBN	5,56	2,38	0,4	2,8	2,5-3,5
		TCMW 090208 DC-GL HPCBN	5,56	2,38	0,8	2,8	2,5-3,5
		TCMW 110202 DC-GL HPCBN	6,35	2,38	0,2	3,3	2,5-3,5
		TCMW 110204 DC-GL HPCBN	6,35	2,38	0,4	3,3	2,5-3,5
		TCMW 110208 DC-GL HPCBN	6,35	2,38	0,8	3,3	2,5-3,5
		TCMW 16T304 DC-GL HPCBN	9,525	3,97	0,4	4,4	2,5-3,5
		TCMW 16T308 DC-GL HPCBN	9,525	3,97	0,8	4,4	2,5-3,5

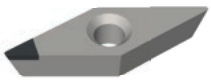
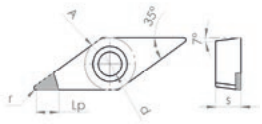
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		TNMA 160404 DC-GL HPCBN	9,525	4,76	0,4	3,81	2,5-3,5
		TNMA 160408 DC-GL HPCBN	9,525	4,76	0,8	3,81	2,5-3,5
		TNMA 160412 DC-GL HPCBN	9,525	4,76	1,2	3,81	2,5-3,5
		TNMA 220404 DC-GL HPCBN	12,7	4,76	0,4	5,16	2,5-3,5
		TNMA 220408 DC-GL HPCBN	12,7	4,76	0,8	5,16	2,5-3,5
		TNMA 220412 DC-GL HPCBN	12,7	4,76	1,2	5,16	2,5-3,5

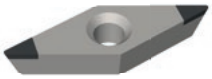
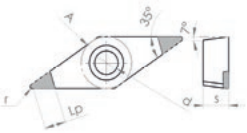
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		TPGN 11T302 DC-GL HPCBN	6,35	3,97	0,2	-	2,5-3,5
		TPGN 11T304 DC-GL HPCBN	6,35	3,97	0,4	-	2,5-3,5
		TPGN 11T308 DC-GL HPCBN	6,35	3,97	0,8	-	2,5-3,5
		TPGN 160404 DC-GL HPCBN	9,525	4,76	0,2	-	2,5-3,5
		TPGN 160408 DC-GL HPCBN	9,525	4,76	0,4	-	2,5-3,5
		TPGN 160412 DC-GL HPCBN	9,525	4,76	0,8	-	2,5-3,5

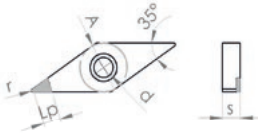
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		TPGN 11T302 DC-FF HPCBN	6,35	3,97	0,2	-	2,5-3,5
		TPGN 11T304 DC-FF HPCBN	6,35	3,97	0,4	-	2,5-3,5
		TPGN 11T308 DC-FF HPCBN	6,35	3,97	0,8	-	2,5-3,5
		TPGN 160404 DC-FF HPCBN	9,525	4,76	0,2	-	2,5-3,5
		TPGN 160408 DC-FF HPCBN	9,525	4,76	0,4	-	2,5-3,5
		TPGN 160412 DC-FF HPCBN	9,525	4,76	0,8	-	2,5-3,5

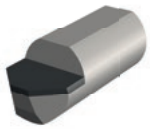
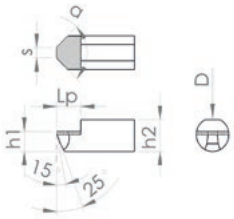
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		VBMW 110302 DC-GL HPCBN	6,35	3,18	0,2	2,8	2,5-3,5
		VBMW 110304 DC-GL HPCBN	6,35	3,18	0,4	2,8	2,5-3,5
		VBMW 110308 DC-GL HPCBN	6,35	3,18	0,8	2,8	2,5-3,5
		VBMW 160402 DC-GL HPCBN	9,525	4,76	0,2	4,4	2,5-3,5
		VBMW 160404 DC-GL HPCBN	9,525	4,76	0,4	4,4	2,5-3,5
		VBMW 160408 DC-GL HPCBN	9,525	4,76	0,8	4,4	2,5-3,5
		VBMW 160412 DC-GL HPCBN	9,525	4,76	1,2	4,4	2,5-3,5
		VBMW 160416 DC-GL HPCBN	9,525	4,76	1,6	4,4	2,5-3,5
		VBMW 160418 DC-GL HPCBN	9,525	4,76	1,8	4,4	2,5-3,5
		VBMW 160420 DC-GL HPCBN	9,525	4,76	2,0	4,4	2,5-3,5

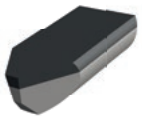
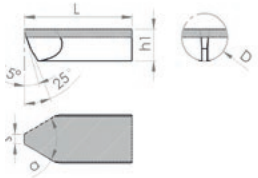
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		VBMW 110302 DC-GL-2 HPCBN	6,35	3,18	0,2	2,8	2,5-3,5
		VBMW 110304 DC-GL-2 HPCBN	6,35	3,18	0,4	2,8	2,5-3,5
		VBMW 110308 DC-GL-2 HPCBN	6,35	3,18	0,8	2,8	2,5-3,5
		VBMW 160402 DC-GL-2 HPCBN	9,525	4,76	0,2	4,4	2,5-3,5
		VBMW 160404 DC-GL-2 HPCBN	9,525	4,76	0,4	4,4	2,5-3,5
		VBMW 160408 DC-GL-2 HPCBN	9,525	4,76	0,8	4,4	2,5-3,5
		VBMW 160412 DC-GL-2 HPCBN	9,525	4,76	1,2	4,4	2,5-3,5
		VBMW 160416 DC-GL-2 HPCBN	9,525	4,76	1,6	4,4	2,5-3,5
		VBMW 160418 DC-GL-2 HPCBN	9,525	4,76	1,8	4,4	2,5-3,5
		VBMW 160420 DC-GL-2 HPCBN	9,525	4,76	2,0	4,4	2,5-3,5

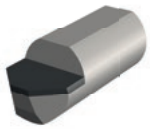
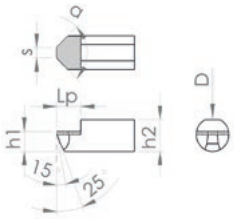
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		VCMW 110302 DC-GL HPCBN	6,35	2,38	0,2	2,8	2,5-3,5
		VCMW 110304 DC-GL HPCBN	6,35	2,38	0,4	2,8	2,5-3,5
		VCMW 110308 DC-GL HPCBN	6,35	2,38	0,8	2,8	2,5-3,5
		VCMW 160402 DC-GL HPCBN	9,525	4,76	0,2	4,4	2,5-3,5
		VCMW 160404 DC-GL HPCBN	9,525	4,76	0,4	4,4	2,5-3,5
		VCMW 160408 DC-GL HPCBN	9,525	4,76	0,8	4,4	2,5-3,5
		VCMW 160412 DC-GL HPCBN	9,525	4,76	1,2	4,4	2,5-3,5
		VCMW 160416 DC-GL HPCBN	9,525	4,76	1,6	4,4	2,5-3,5
		VCMW 160418 DC-GL HPCBN	9,525	4,76	1,8	4,4	2,5-3,5
		VCMW 160420 DC-GL HPCBN	9,525	4,76	2,0	4,4	2,5-3,5

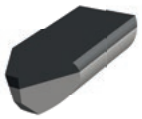
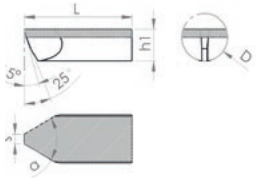
3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		VCMW 110302 DC-GL-2 HPCBN	6,35	2,38	0,2	2,8	2,5-3,5
		VCMW 110304 DC-GL-2 HPCBN	6,35	2,38	0,4	2,8	2,5-3,5
		VCMW 110308 DC-GL-2 HPCBN	6,35	2,38	0,8	2,8	2,5-3,5
		VCMW 160402 DC-GL-2 HPCBN	9,525	4,76	0,2	4,4	2,5-3,5
		VCMW 160404 DC-GL-2 HPCBN	9,525	4,76	0,4	4,4	2,5-3,5
		VCMW 160408 DC-GL-2 HPCBN	9,525	4,76	0,8	4,4	2,5-3,5
		VCMW 160412 DC-GL-2 HPCBN	9,525	4,76	1,2	4,4	2,5-3,5
		VCMW 160416 DC-GL-2 HPCBN	9,525	4,76	1,6	4,4	2,5-3,5
		VCMW 160418 DC-GL-2 HPCBN	9,525	4,76	1,8	4,4	2,5-3,5
		VCMW 160420 DC-GL-2 HPCBN	9,525	4,76	2,0	4,4	2,5-3,5

3D Picture	Technical Drawing	Code	Dimensions				
			ØA	s	r	a	Lp
		VNGA 160404 DC-GL HPCBN	9,525	4,76	0,4	3,81	2,5-3,5
		VNGA 160408 DC-GL HPCBN	9,525	4,76	0,8	3,81	2,5-3,5
		VNGA 160412 DC-GL HPCBN	9,525	4,76	1,2	3,81	2,5-3,5
		VNGA 220404 DC-GL HPCBN	12,7	4,76	0,4	5,16	2,5-3,5
		VNGA 220408 DC-GL HPCBN	12,7	4,76	0,8	5,16	2,5-3,5
		VNGA 220412 DC-GL HPCBN	12,7	4,76	1,2	5,16	2,5-3,5

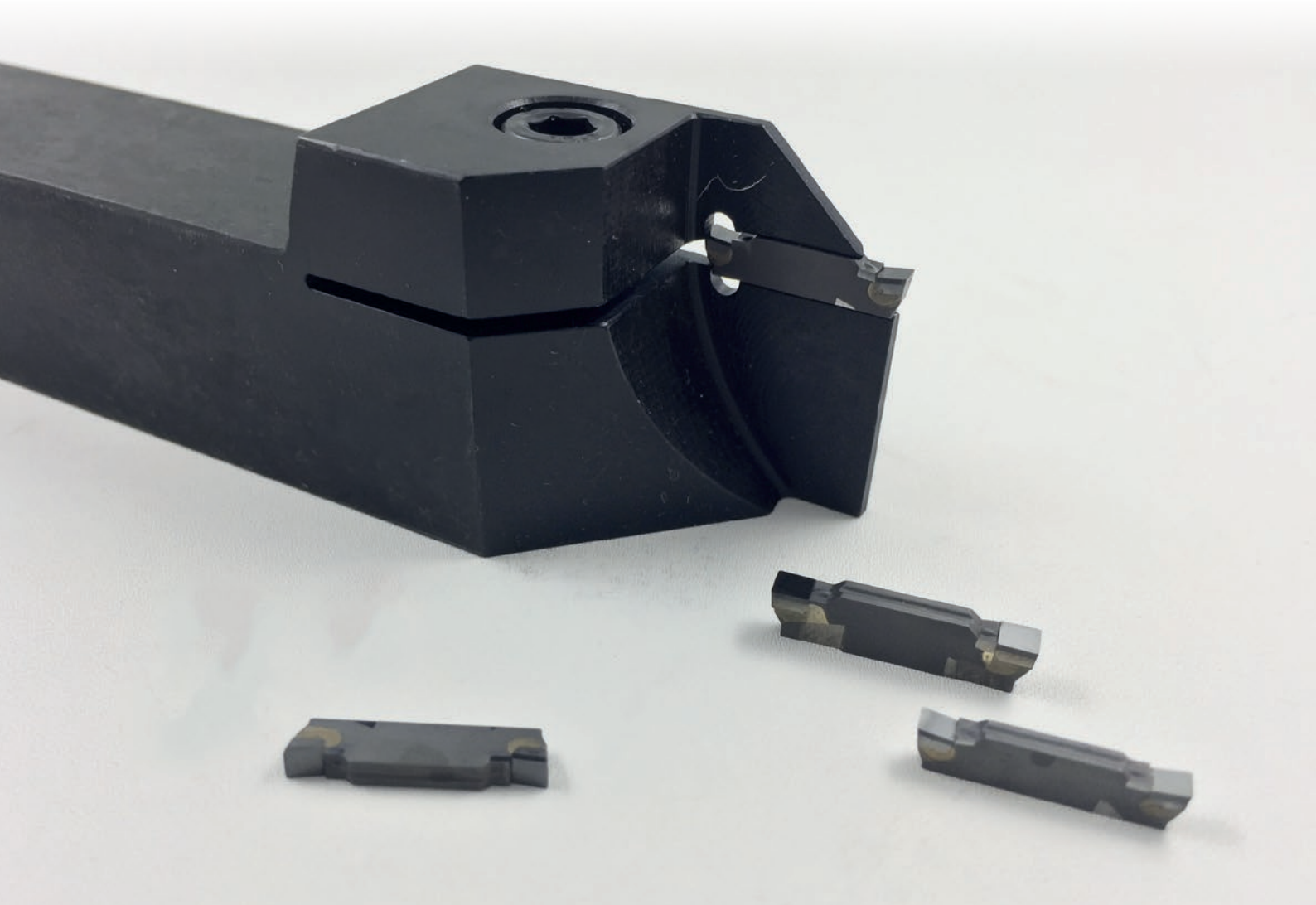
3D Picture	Technical Drawing	Code	Dimensions				
			D	α	h1-h2	s	L
		N8 HF HPCD	2,5	90	0,2 - 0,6	0,8	5,5
		N10 HF HPCD	3,0	90	0,3 - 0,8	1,0	6,8
		N12 HF HPCD	4,0	90	0,3 - 0,8	1,2	8,0
		N14 HF HPCD	5,0	90	0,4 - 1,0	1,4	9,5
		N16 HF HPCD	5,0	90	0,4 - 1,0	1,6	11,0
		N18 HF HPCD	6,0	90	0,5 - 1,2	1,8	12,0
		N20 HF HPCD	8,0	90	0,6 - 1,6	2,0	14,1
		N22 HF HPCD	8,0	90	0,6 - 1,6	2,2	15,0
		N24 HF HPCD	8,0	90	0,6 - 1,6	2,4	18,0
		N25 HF HPCD	8,0	90	0,6 - 1,6	2,5	18,47
		N28 HF HPCD	10,0	90	0,8 - 2,0	2,8	20
		N32 HF HPCD	10,0	90	0,8 - 2,0	3,2	23
		N36 HF HPCD	12,0	90	1,0 - 2,4	3,6	25
		N40 HF HPCD	14,0	90	1,1 - 2,8	4,0	28

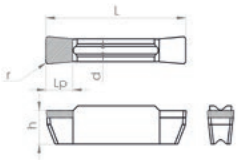
3D Picture	Technical Drawing	Code	Dimensions				
			D	α	h1	s	L
		N8 FF HPCD	2,5	90	0,2	0,8	5,5
		N10 FF HPCD	3,0	90	0,3	1,0	6,8
		N12 FF HPCD	4,0	90	0,3	1,2	8,0
		N14 FF HPCD	5,0	90	0,4	1,4	9,5
		N16 FF HPCD	5,0	90	0,4	1,6	11,0
		N18 FF HPCD	6,0	90	0,5	1,8	12,0
		N20 FF HPCD	8,0	90	0,6	2,0	14,1
		N22 FF HPCD	8,0	90	0,6	2,2	15,0
		N24 FF HPCD	8,0	90	0,6	2,4	18,0
		N25 FF HPCD	8,0	90	0,6	2,5	18,47
		N28 FF HPCD	10,0	90	0,8	2,8	20
		N32 FF HPCD	10,0	90	0,8	3,2	23
		N36 FF HPCD	12,0	90	1,0	3,6	25
		N40 FF HPCD	14,0	90	1,1	4,0	28

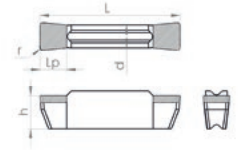
3D Picture	Technical Drawing	Code	Dimensions				
			D	α	h1-h2	s	L
		N8 HF HPCBN	2,5	90	0,2 - 0,6	0,8	5,5
		N10 HF HPCBN	3,0	90	0,3 - 0,8	1,0	6,8
		N12 HF HPCBN	4,0	90	0,3 - 0,8	1,2	8,0
		N14 HF HPCBN	5,0	90	0,4 - 1,0	1,4	9,5
		N16 HF HPCBN	5,0	90	0,4 - 1,0	1,6	11,0
		N18 HF HPCBN	6,0	90	0,5 - 1,2	1,8	12,0
		N20 HF HPCBN	8,0	90	0,6 - 1,6	2,0	14,1
		N22 HF HPCBN	8,0	90	0,6 - 1,6	2,2	15,0
		N24 HF HPCBN	8,0	90	0,6 - 1,6	2,4	18,0
		N25 HF HPCBN	8,0	90	0,6 - 1,6	2,5	18,47
		N28 HF HPCBN	10,0	90	0,8 - 2,0	2,8	20
		N32 HF HPCBN	10,0	90	0,8 - 2,0	3,2	23
		N36 HF HPCBN	12,0	90	1,0 - 2,4	3,6	25
		N40 HF HPCBN	14,0	90	1,1 - 2,8	4,0	28

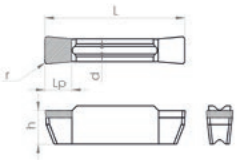
3D Picture	Technical Drawing	Code	Dimensions				
			D	α	h1	s	L
		N8 FF HPCBN	2,5	90	0,2	0,8	5,5
		N10 FF HPCBN	3,0	90	0,3	1,0	6,8
		N12 FF HPCBN	4,0	90	0,3	1,2	8,0
		N14 FF HPCBN	5,0	90	0,4	1,4	9,5
		N16 FF HPCBN	5,0	90	0,4	1,6	11,0
		N18 FF HPCBN	6,0	90	0,5	1,8	12,0
		N20 FF HPCBN	8,0	90	0,6	2,0	14,1
		N22 FF HPCBN	8,0	90	0,6	2,2	15,0
		N24 FF HPCBN	8,0	90	0,6	2,4	18,0
		N25 FF HPCBN	8,0	90	0,6	2,5	18,47
		N28 FF HPCBN	10,0	90	0,8	2,8	20
		N32 FF HPCBN	10,0	90	0,8	3,2	23
		N36 FF HPCBN	12,0	90	1,0	3,6	25
		N40 FF HPCBN	14,0	90	1,1	4,0	28

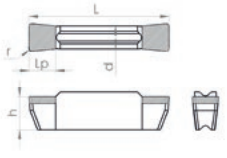
PCD&CBN GROOVING TOOLS

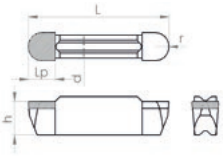


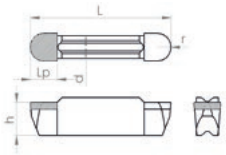
3D Picture	Technical Drawing	Code	Dimensions				
			b	d	r	h	L
		GHN 1,50 - R0,20 DC-GL HPCD	1,5	1,2	0,2	3,5	16
		GHN 1,50 - R0,40 DC-GL HPCD	1,5	1,2	0,4	3,5	16
		GHN 2,00 - R0,20 DC-GL HPCD	2,0	1,6	0,2	3,5	16
		GHN 2,00 - R0,40 DC-GL HPCD	2,0	1,6	0,4	3,5	16
		GHN 2,50 - R0,20 DC-GL HPCD	2,5	2,0	0,2	3,85	18,5
		GHN 2,50 - R0,40 DC-GL HPCD	2,5	2,0	0,4	3,85	18,5
		GHN 2,50 - R0,80 DC-GL HPCD	2,5	2,0	0,8	3,85	18,5
		GHN 3,00 - R0,20 DC-GL HPCD	3,0	2,35	0,2	4,8	21
		GHN 3,00 - R0,40 DC-GL HPCD	3,0	2,35	0,4	4,8	21
		GHN 3,00 - R0,80 DC-GL HPCD	3,0	2,35	0,8	4,8	21
		GHN 4,00 - R0,20 DC-GL HPCD	4,0	3,3	0,2	4,8	21
		GHN 4,00 - R0,40 DC-GL HPCD	4,0	3,3	0,4	4,8	21
		GHN 4,00 - R0,80 DC-GL HPCD	4,0	3,3	0,8	4,8	21
		GHN 5,00 - R0,20 DC-GL HPCD	5,0	4,1	0,2	5,8	26
		GHN 5,00 - R0,40 DC-GL HPCD	5,0	4,1	0,4	5,8	26
		GHN 5,00 - R0,80 DC-GL HPCD	5,0	4,1	0,8	5,8	26
		GHN 6,00 - R0,20 DC-GL HPCD	6,0	5,0	0,2	5,8	26
		GHN 6,00 - R0,40 DC-GL HPCD	6,0	5,0	0,4	5,8	26
		GHN 6,00 - R0,80 DC-GL HPCD	6,0	5,0	0,8	5,8	26

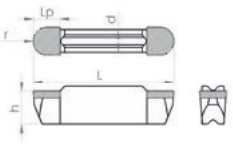
3D Picture	Technical Drawing	Code	Dimensions				
			b	d	r	h	L
		GHN 1,50 - R0,20 DC-GL-2 HPCD	1,5	1,2	0,2	3,5	16
		GHN 1,50 - R0,40 DC-GL-2 HPCD	1,5	1,2	0,4	3,5	16
		GHN 2,00 - R0,20 DC-GL-2 HPCD	2,0	1,6	0,2	3,5	16
		GHN 2,00 - R0,40 DC-GL-2 HPCD	2,0	1,6	0,4	3,5	16
		GHN 2,50 - R0,20 DC-GL-2 HPCD	2,5	2,0	0,2	3,85	18,5
		GHN 2,50 - R0,40 DC-GL-2 HPCD	2,5	2,0	0,4	3,85	18,5
		GHN 2,50 - R0,80 DC-GL-2 HPCD	2,5	2,0	0,8	3,85	18,5
		GHN 3,00 - R0,20 DC-GL-2 HPCD	3,0	2,35	0,2	4,8	21
		GHN 3,00 - R0,40 DC-GL-2 HPCD	3,0	2,35	0,4	4,8	21
		GHN 3,00 - R0,80 DC-GL-2 HPCD	3,0	2,35	0,8	4,8	21
		GHN 4,00 - R0,20 DC-GL-2 HPCD	4,0	3,3	0,2	4,8	21
		GHN 4,00 - R0,40 DC-GL-2 HPCD	4,0	3,3	0,4	4,8	21
		GHN 4,00 - R0,80 DC-GL-2 HPCD	4,0	3,3	0,8	4,8	21
		GHN 5,00 - R0,20 DC-GL-2 HPCD	5,0	4,1	0,2	5,8	26
		GHN 5,00 - R0,40 DC-GL-2 HPCD	5,0	4,1	0,4	5,8	26
		GHN 5,00 - R0,80 DC-GL-2 HPCD	5,0	4,1	0,8	5,8	26
		GHN 6,00 - R0,20 DC-GL-2 HPCD	6,0	5,0	0,2	5,8	26
		GHN 6,00 - R0,40 DC-GL-2 HPCD	6,0	5,0	0,4	5,8	26
		GHN 6,00 - R0,80 DC-GL-2 HPCD	6,0	5,0	0,8	5,8	26

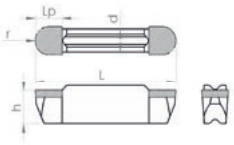
3D Picture	Technical Drawing	Code	Dimensions				
			b	d	r	h	L
		GHN 1.50 - R0.20 DC-GL HPCBN	1,5	1,2	0,2	3,5	16
		GHN 1.50 - R0.40 DC-GL HPCBN	1,5	1,2	0,4	3,5	16
		GHN 2.00 - R0.20 DC-GL HPCBN	2,0	1,6	0,2	3,5	16
		GHN 2.00 - R0.40 DC-GL HPCBN	2,0	1,6	0,4	3,5	16
		GHN 2.50 - R0.20 DC-GL HPCBN	2,5	2,0	0,2	3,85	18,5
		GHN 2.50 - R0.40 DC-GL HPCBN	2,5	2,0	0,4	3,85	18,5
		GHN 2.50 - R0.80 DC-GL HPCBN	2,5	2,0	0,8	3,85	18,5
		GHN 3.00 - R0.20 DC-GL HPCBN	3,0	2,35	0,2	4,8	21
		GHN 3.00 - R0.40 DC-GL HPCBN	3,0	2,35	0,4	4,8	21
		GHN 3.00 - R0.80 DC-GL HPCBN	3,0	2,35	0,8	4,8	21
		GHN 4.00 - R0.20 DC-GL HPCBN	4,0	3,3	0,2	4,8	21
		GHN 4.00 - R0.40 DC-GL HPCBN	4,0	3,3	0,4	4,8	21
		GHN 4.00 - R0.80 DC-GL HPCBN	4,0	3,3	0,8	4,8	21
		GHN 5.00 - R0.20 DC-GL HPCBN	5,0	4,1	0,2	5,8	26
		GHN 5.00 - R0.40 DC-GL HPCBN	5,0	4,1	0,4	5,8	26
		GHN 5.00 - R0.80 DC-GL HPCBN	5,0	4,1	0,8	5,8	26
		GHN 6.00 - R0.20 DC-GL HPCBN	6,0	5,0	0,2	5,8	26
		GHN 6.00 - R0.40 DC-GL HPCBN	6,0	5,0	0,4	5,8	26
		GHN 6.00 - R0.80 DC-GL HPCBN	6,0	5,0	0,8	5,8	26

3D Picture	Technical Drawing	Code	Dimensions				
			b	d	r	h	L
		GHN 1.50 - R0.20 DC-GL-2 HPCBN	1,5	1,2	0,2	3,5	16
		GHN 1.50 - R0.40 DC-GL-2 HPCBN	1,5	1,2	0,4	3,5	16
		GHN 2.00 - R0.20 DC-GL-2 HPCBN	2,0	1,6	0,2	3,5	16
		GHN 2.00 - R0.40 DC-GL-2 HPCBN	2,0	1,6	0,4	3,5	16
		GHN 2.50 - R0.20 DC-GL-2 HPCBN	2,5	2,0	0,2	3,85	18,5
		GHN 2.50 - R0,40 DC-GL-2 HPCBN	2,5	2,0	0,4	3,85	18,5
		GHN 2.50 - R0.80 DC-GL-2 HPCBN	2,5	2,0	0,8	3,85	18,5
		GHN 3.00 - R0.20 DC-GL-2 HPCBN	3,0	2,35	0,2	4,8	21
		GHN 3.00 - R0.40 DC-GL-2 HPCBN	3,0	2,35	0,4	4,8	21
		GHN 3.00 - R0.80 DC-GL-2 HPCBN	3,0	2,35	0,8	4,8	21
		GHN 4.00 - R0.20 DC-GL-2 HPCBN	4,0	3,3	0,2	4,8	21
		GHN 4.00 - R0.40 DC-GL-2 HPCBN	4,0	3,3	0,4	4,8	21
		GHN 4.00 - R0.80 DC-GL-2 HPCBN	4,0	3,3	0,8	4,8	21
		GHN 5.00 - R0.20 DC-GL-2 HPCBN	5,0	4,1	0,2	5,8	26
		GHN 5.00 - R0.40 DC-GL-2 HPCBN	5,0	4,1	0,4	5,8	26
		GHN 5.00 - R0.80 DC-GL-2 HPCBN	5,0	4,1	0,8	5,8	26
		GHN 6.00 - R0.20 DC-GL-2 HPCBN	6,0	5,0	0,2	5,8	26
		GHN 6.00 - R0.40 DC-GL-2 HPCBN	6,0	5,0	0,4	5,8	26
		GHN 6.00 - R0.80 DC-GL-2 HPCBN	6,0	5,0	0,8	5,8	26

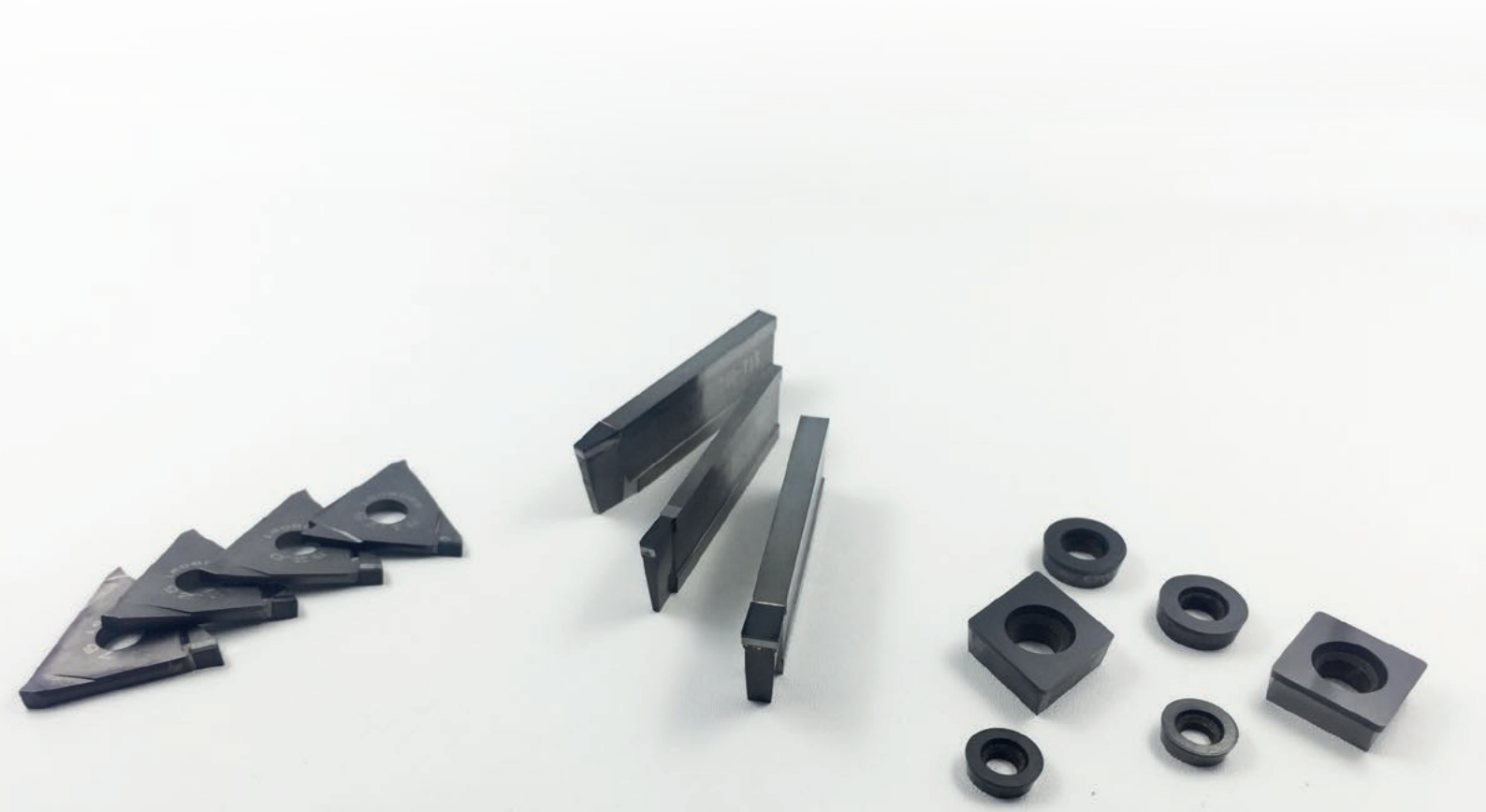
3D Picture	Technical Drawing	Code	Dimensions				
			b	d	r	h	L
		GHR 2,00 - R1,00 DC-GL HPCD	2,0	1,6	1,0	3,5	16
		GHR 3,00 - R1,50 DC-GL HPCD	3,0	2,35	1,5	4,8	21
		GHR 4,00 - R2,00 DC-GL HPCD	4,0	3,3	2,0	4,8	21
		GHR 5,00 - R2,50 DC-GL HPCD	5,0	4,1	2,5	5,8	26
		GHR 6,00 - R3,00 DC-GL HPCD	6,0	5,0	3,0	5,8	26

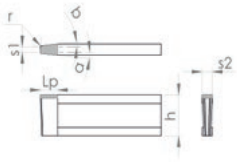
3D Picture	Technical Drawing	Code	Dimensions				
			b	d	r	h	L
		GHR 2.00 - R1.00 DC-GL HPCBN	2,0	1,6	1,0	3,5	16
		GHR 3.00 - R1.50 DC-GL HPCBN	3,0	2,35	1,5	4,8	21
		GHR 4.00 - R2.00 DC-GL HPCBN	4,0	3,3	2,0	4,8	21
		GHR 5.00 - R2.50 DC-GL HPCBN	5,0	4,1	2,5	5,8	26
		GHR 6.00 - R3.00 DC-GL HPCBN	6,0	5,0	3,0	5,8	26

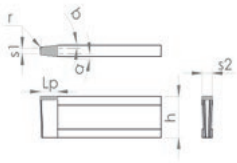
3D Picture	Technical Drawing	Code	Dimensions				
			b	d	r	h	L
		GHR 2,00 - R1,00 DC-GL-2 HPCD	2,0	1,6	1,0	3,5	16
		GHR 3,00 - R1,50 DC-GL-2 HPCD	3,0	2,35	1,5	4,8	21
		GHR 4,00 - R2,00 DC-GL-2 HPCD	4,0	3,3	2,0	4,8	21
		GHR 5,00 - R2,50 DC-GL-2 HPCD	5,0	4,1	2,5	5,8	26
		GHR 6,00 - R3,00 DC-GL-2 HPCD	6,0	5,0	3,0	5,8	26

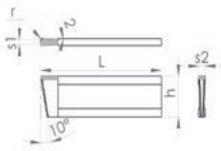
3D Picture	Technical Drawing	Code	Dimensions				
			b	d	r	h	L
		GHR 2.00 - R1.00 DC-GL-2 HPCBN	2,0	1,6	1,0	3,5	16
		GHR 3.00 - R1.50 DC-GL-2 HPCBN	3,0	2,35	1,5	4,8	21
		GHR 4.00 - R2.00 DC-GL-2 HPCBN	4,0	3,3	2,0	4,8	21
		GHR 5.00 - R2.50 DC-GL-2 HPCBN	5,0	4,1	2,5	5,8	26
		GHR 6.00 - R3.00 DC-GL-2 HPCBN	6,0	5,0	3,0	5,8	26

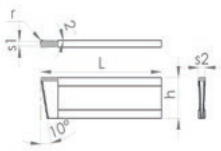
PISTON GROOVING TOOLS

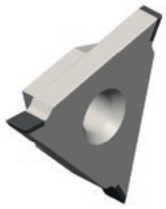
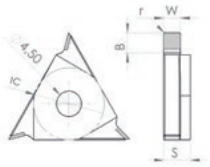


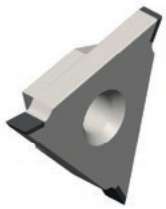
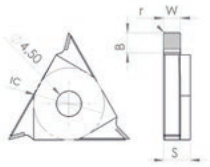
3D Picture	Technical Drawing	Code	Dimensions							
			T	t	r	α	β	h	Lc	Lt
		PGT . . . . . - R . . . . HPCD								
		PGT . . . . . - R . . . . HPCD								
		PGT . . . . . - R . . . . HPCD								
		PGT . . . . . - R . . . . HPCD								
		PGT . . . . . - R . . . . HPCD								
		PGT . . . . . - R . . . . HPCD								
		PGT . . . . . - R . . . . HPCD								
		PGT . . . . . - R . . . . HPCD								

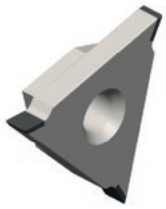
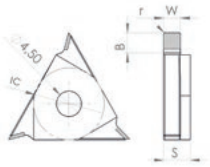
3D Picture	Technical Drawing	Code	Dimensions							
			T	t	r	α	β	h	Lc	Lt
		PGT . . . . . - R . . . . HPCBN								
		PGT . . . . . - R . . . . HPCBN								
		PGT . . . . . - R . . . . HPCBN								
		PGT . . . . . - R . . . . HPCBN								
		PGT . . . . . - R . . . . HPCBN								
		PGT . . . . . - R . . . . HPCBN								
		PGT . . . . . - R . . . . HPCBN								
		PGT . . . . . - R . . . . HPCBN								

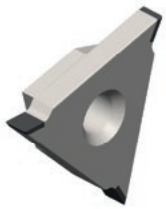
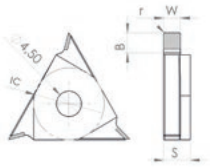
3D Picture	Technical Drawing	Code	Dimensions							
			T	t	r	α	β	h	Lc	Lt
		PGT . . . . . - R . . . . HPCD				0	0			
		PGT . . . . . - R . . . . HPCD				0	0			
		PGT . . . . . - R . . . . HPCD				0	0			
		PGT . . . . . - R . . . . HPCD				0	0			
		PGT . . . . . - R . . . . HPCD				0	0			
		PGT . . . . . - R . . . . HPCD				0	0			
		PGT . . . . . - R . . . . HPCD				0	0			
		PGT . . . . . - R . . . . HPCD				0	0			

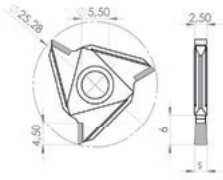
3D Picture	Technical Drawing	Code	Dimensions							
			T	t	r	α	β	h	Lc	Lt
		PGT . . . . . - R . . . . HPCBN				0	0			
		PGT . . . . . - R . . . . HPCBN				0	0			
		PGT . . . . . - R . . . . HPCBN				0	0			
		PGT . . . . . - R . . . . HPCBN				0	0			
		PGT . . . . . - R . . . . HPCBN				0	0			
		PGT . . . . . - R . . . . HPCBN				0	0			
		PGT . . . . . - R . . . . HPCBN				0	0			
		PGT . . . . . - R . . . . HPCBN				0	0			

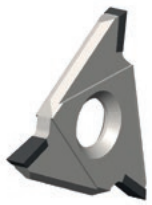
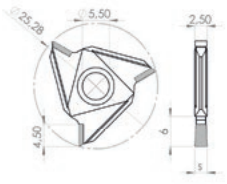
3D Picture	Technical Drawing	Code	Dimensions				
			W	Lc	r	ΦA	s
		THN R/L3 0,75 - R0,20 HPCD	0,75	2,0	0,2	9,525	3,18
		THN R/L3 1,00 - R0,20 HPCD	1,00	2,0	0,2	9,525	3,18
		THN R/L3 1,25 - R0,20 HPCD	1,25	2,0	0,2	9,525	3,18
		THN R/L3 1,35 - R0,20 HPCD	1,35	2,0	0,2	9,525	3,18
		THN R/L3 1,45 - R0,20 HPCD	1,45	2,0	0,2	9,525	3,18
		THN R/L3 1,50 - R0,20 HPCD	1,50	2,0	0,2	9,525	3,18
		THN R/L3 1,65 - R0,20 HPCD	1,65	2,0	0,2	9,525	3,18
		THN R/L3 1,75 - R0,20 HPCD	1,75	2,0	0,2	9,525	3,18
		THN R/L3 1,85 - R0,20 HPCD	1,85	2,0	0,2	9,525	3,18
		THN R/L3 2,00 - R0,20 HPCD	2,00	2,5	0,2	9,525	3,18
		THN R/L3 2,50 - R0,20 HPCD	2,50	2,5	0,2	9,525	3,18
		THN R/L3 2,65 - R0,20 HPCD	2,65	2,5	0,2	9,525	3,18
		THN R/L3 2,75 - R0,20 HPCD	2,75	2,5	0,2	9,525	3,18
		THN R/L3 2,80 - R0,20 HPCD	2,80	2,5	0,2	9,525	3,18

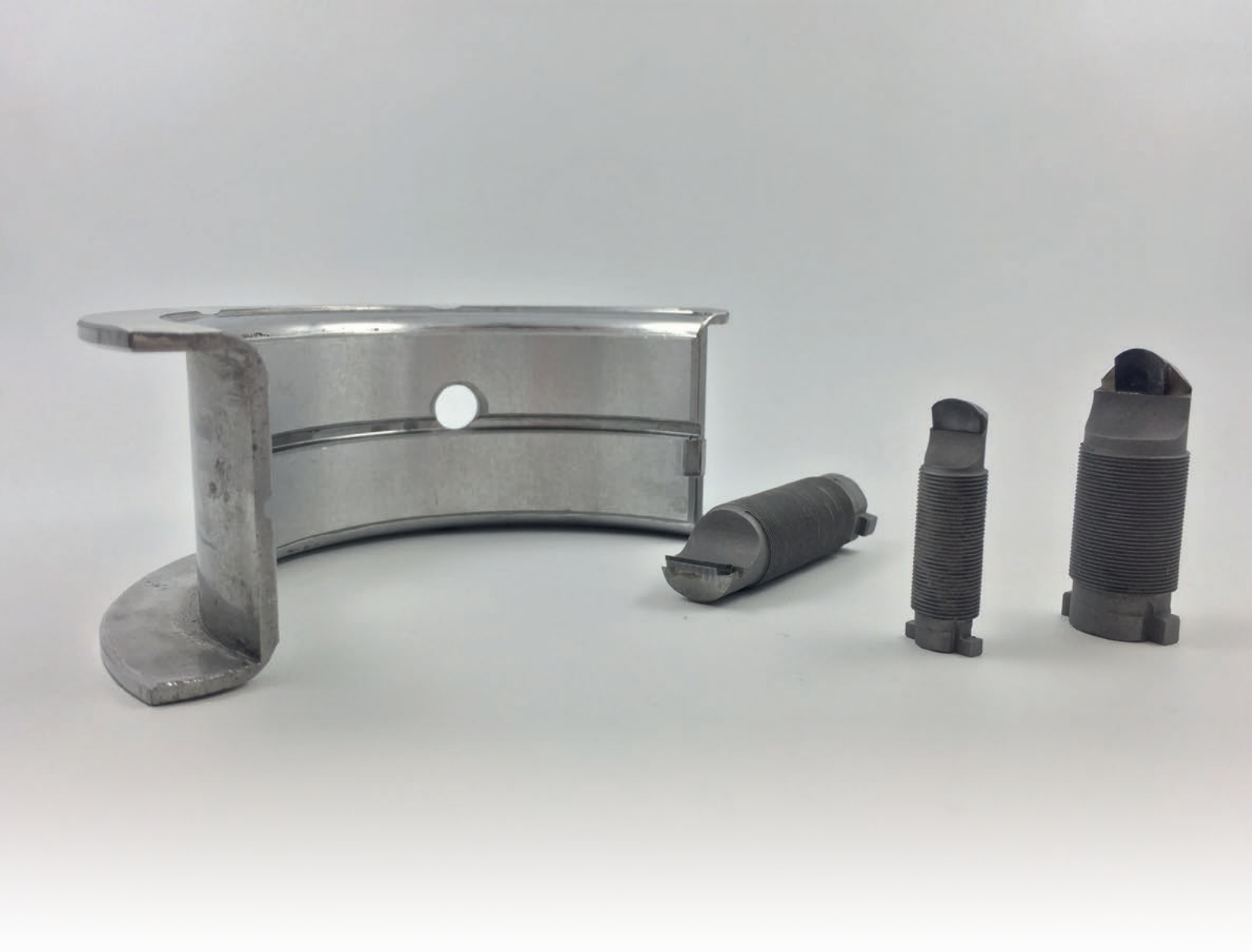
3D Picture	Technical Drawing	Code	Dimensions				
			W	Lc	r	ΦA	s
		THN R/L4 1,25 - R0,20 HPCD	1,25	2,0	0,2	12,7	4,76
		THN R/L4 1,45 - R0,20 HPCD	1,45	2,0	0,2	12,7	4,76
		THN R/L4 1,50 - R0,20 HPCD	1,50	3,5	0,2	12,7	4,76
		THN R/L4 1,75 - R0,20 HPCD	1,75	3,5	0,2	12,7	4,76
		THN R/L4 2,00 - R0,20 HPCD	2,00	3,5	0,2	12,7	4,76
		THN R/L4 2,30 - R0,20 HPCD	2,30	3,5	0,2	12,7	4,76
		THN R/L4 2,50 - R0,20 HPCD	2,50	4,5	0,2	12,7	4,76
		THN R/L4 2,70 - R0,20 HPCD	2,70	4,5	0,2	12,7	4,76
		THN R/L4 2,80 - R0,20 HPCD	2,80	4,5	0,2	12,7	4,76
		THN R/L4 3,00 - R0,20 HPCD	3,00	4,5	0,2	12,7	4,76
		THN R/L4 3,20 - R0,20 HPCD	3,20	4,5	0,2	12,7	4,76
		THN R/L4 3,50 - R0,20 HPCD	3,50	4,5	0,2	12,7	4,76
		THN R/L4 3,70 - R0,20 HPCD	3,70	4,5	0,2	12,7	4,76
		THN R/L4 3,90 - R0,20 HPCD	3,90	4,5	0,2	12,7	4,76
		THN R/L4 4,00 - R0,20 HPCD	4,00	4,5	0,2	12,7	4,76
		THN R/L4 4,20 - R0,20 HPCD	4,20	4,5	0,2	12,7	4,76

3D Picture	Technical Drawing	Code	Dimensions				
			W	Lc	r	ΦA	s
		THN R/L3 0,75 - R0,20 HPCBN	0,75	2,0	0,2	9,525	3,18
		THN R/L3 1,00 - R0,20 HPCBN	1,00	2,0	0,2	9,525	3,18
		THN R/L3 1,25 - R0,20 HPCBN	1,25	2,0	0,2	9,525	3,18
		THN R/L3 1,35 - R0,20 HPCBN	1,35	2,0	0,2	9,525	3,18
		THN R/L3 1,45 - R0,20 HPCBN	1,45	2,0	0,2	9,525	3,18
		THN R/L3 1,50 - R0,20 HPCBN	1,50	2,0	0,2	9,525	3,18
		THN R/L3 1,65 - R0,20 HPCBN	1,65	2,0	0,2	9,525	3,18
		THN R/L3 1,75 - R0,20 HPCBN	1,75	2,0	0,2	9,525	3,18
		THN R/L3 1,85 - R0,20 HPCBN	1,85	2,0	0,2	9,525	3,18
		THN R/L3 2,00 - R0,20 HPCBN	2,00	2,5	0,2	9,525	3,18
		THN R/L3 2,50 - R0,20 HPCBN	2,50	2,5	0,2	9,525	3,18
		THN R/L3 2,65 - R0,20 HPCBN	2,65	2,5	0,2	9,525	3,18
		THN R/L3 2,75 - R0,20 HPCBN	2,75	2,5	0,2	9,525	3,18
		THN R/L3 2,80 - R0,20 HPCBN	2,80	2,5	0,2	9,525	3,18

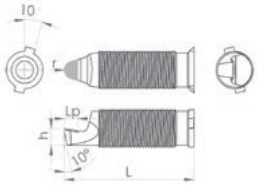
3D Picture	Technical Drawing	Code	Dimensions				
			W	Lc	r	ΦA	s
		THN R/L4 1,25 - R0,20 HPCBN	1,25	2,0	0,2	12,7	4,76
		THN R/L4 1,45 - R0,20 HPCBN	1,45	2,0	0,2	12,7	4,76
		THN R/L4 1,50 - R0,20 HPCBN	1,50	3,5	0,2	12,7	4,76
		THN R/L4 1,75 - R0,20 HPCBN	1,75	3,5	0,2	12,7	4,76
		THN R/L4 2,00 - R0,20 HPCBN	2,00	3,5	0,2	12,7	4,76
		THN R/L4 2,30 - R0,20 HPCBN	2,30	3,5	0,2	12,7	4,76
		THN R/L4 2,50 - R0,20 HPCBN	2,50	4,5	0,2	12,7	4,76
		THN R/L4 2,70 - R0,20 HPCBN	2,70	4,5	0,2	12,7	4,76
		THN R/L4 2,80 - R0,20 HPCBN	2,80	4,5	0,2	12,7	4,76
		THN R/L4 3,00 - R0,20 HPCBN	3,00	4,5	0,2	12,7	4,76
		THN R/L4 3,20 - R0,20 HPCBN	3,20	4,5	0,2	12,7	4,76
		THN R/L4 3,50 - R0,20 HPCBN	3,50	4,5	0,2	12,7	4,76
		THN R/L4 3,70 - R0,20 HPCBN	3,70	4,5	0,2	12,7	4,76
		THN R/L4 3,90 - R0,20 HPCBN	3,90	4,5	0,2	12,7	4,76
		THN R/L4 4,00 - R0,20 HPCBN	4,00	4,5	0,2	12,7	4,76
		THN R/L4 4,20 - R0,20 HPCBN	4,20	4,5	0,2	12,7	4,76

3D Picture	Technical Drawing	Code	Dimensions				
			ΦA	s	r	a	Lp
		THH 2.50 - R0.20 HPCD	25,28	2,50	0,2	5,50	4,50
		THH 2.50 - R0.40 HPCD	25,28	2,50	0,4	5,50	4,50
		THH 2.50 - R0.80 HPCD	25,28	2,50	0,8	5,50	4,50
		THH 2.75 - R0.20 HPCD	25,28	2,75	0,2	5,50	4,50
		THH 2.75 - R0.40 HPCD	25,28	2,75	0,4	5,50	4,50
		THH 2.75 - R0.80 HPCD	25,28	2,75	0,8	5,50	4,50
		THH 3.00 - R0.20 HPCD	25,28	3,00	0,2	5,50	4,50
		THH 3.00 - R0.20 HPCD	25,28	3,00	0,4	5,50	4,50
		THH 3.00 - R0.20 HPCD	25,28	3,00	0,8	5,50	4,50
		THH 3.25 - R0.20 HPCD	25,28	3,25	0,2	5,50	4,50
		THH 3.25 - R0.20 HPCD	25,28	3,25	0,4	5,50	4,50
		THH 3.25 - R0.20 HPCD	25,28	3,25	0,8	5,50	4,50
		THH 3.50 - R0.20 HPCD	25,28	3,50	0,2	5,50	4,50
		THH 3.50 - R0.40 HPCD	25,28	3,50	0,4	5,50	4,50
		THH 3.50 - R0.80 HPCD	25,28	3,50	0,8	5,50	4,50

3D Picture	Technical Drawing	Code	Dimensions				
			ΦAs		ra		Lp
		THH 2.50 - R0.20 HPCBN	25,28	2,50	0,25	,504	,50
		THH 2.50 - R0.40 HPCBN	25,28	2,50	0,45	,504	,50
		THH 2.50 - R0.80 HPCBN	25,28	2,50	0,85	,504	,50
		THH 2.75 - R0.20 HPCBN	25,28	2,75	0,25	,504	,50
		THH 2.75 - R0.40 HPCBN	25,28	2,75	0,45	,504	,50
		THH 2.75 - R0.80 HPCBN	25,28	2,75	0,85	,504	,50
		THH 3.00 - R0.20 HPCBN	25,28	3,00	0,25	,504	,50
		THH 3.00 - R0.20 HPCBN	25,28	3,00	0,45	,504	,50
		THH 3.00 - R0.20 HPCBN	25,28	3,00	0,85	,504	,50
		THH 3.25 - R0.20 HPCBN	25,28	3,25	0,25	,504	,50
		THH 3.25 - R0.20 HPCBN	25,28	3,25	0,45	,504	,50
		THH 3.25 - R0.20 HPCBN	25,28	3,25	0,85	,504	,50
		THH 3.50 - R0.20 HPCBN	25,28	3,50	0,25	,504	,50
		THH 3.50 - R0.40 HPCBN	25,28	3,50	0,45	,504	,50
		THH 3.50 - R0.80 HPCBN	25,28	3,50	0,85	,504	,50



ENGINE BEARING TOOLS

3D Picture	Technical Drawing	Code	Dimensions				
			h	α	r	L	Lp
		MTT L21 - R0.20 HPCD	2,5	10	2	21	8
		MTT L21 - R0.40 HPCD	2,5	10	4	21	8
		MTT L21 - R1.00 HPCD	2,5	10	10	21	8
		MTT L30 - R0.20 HPCD	2,5	10	2	30	8
		MTT L30 - R0.40 HPCD	2,5	10	4	30	8
		MTT L30 - R1.00 HPCD	2,5	10	10	30	8
		MTT L35 - R0.20 HPCD	4,5	10	2	35	8
		MTT L35 - R0.40 HPCD	4,5	10	4	35	8
		MTT L35 - R1.00 HPCD	4,5	10	10	35	8
		MTT L35 - R0.20 HPCD	4,5	10	2	45	8
		MTT L35 - R0.40 HPCD	4,5	10	4	45	8
		MTT L35 - R1.00 HPCD	4,5	10	10	45	8

MILLING

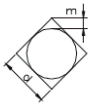
In today's manufacturing technologies, the features of the machines are improving day by day. Expectations are increasing especially in the processing of non-ferrous alloys. Carbide endmills, the most common tool material, are inadequate at the speeds and advances provided by the machines, and wear increases at high speeds. Therefore, the use of PCD tools is gaining more importance and application areas are increasing. The use of PCD tools makes it even more logical to reduce machining times without reducing tool life. With Hyperion PCD milling tools, keep your difference against competitors in surface quality and life while machining your parts at high speeds and feeds.

TOOLS

1	2	3	4	5	6	7
A	P	K	T	16	04	08

1	
INSERT SHAPE	
A	
C	
D	
O	
R	
S	
T	
V	
W	
X	SPECIAL SHAPE

2	
CLEARANCE ANGLE	
B	
C	
D	
N	
P	
OTHER	OTHER

3			
PRECISION			
			
CODE	TOLERANCE		
	m	d	s
A	±0.005	±0.025	±0.025
C	±0.013	±0.025	±0.025
E	±0.025	±0.025	±0.025
F	±0.005	±0.025	±0.013
G	±0.025	±0.025	±0.013
H	±0.013	±0.025	±0.013
M	±0.008 ±0.018	±0.005 ±0.013	±0.013
N	±0.008 ±0.018	±0.005 ±0.013	±0.025
U	±0.013 ±0.038	±0.008 ±0.025	±0.013

4	
CHIP BREAKER AND FIXING TYPE	
A	
G	
M	
R	
T	
W	
X	SPECIAL

8	9	10	11	12	13
P	D	F	R	2	HPCD

5
CUTTING EDGE LENGTH





6	
THICKNESS	
1	1.59
2	2.38
3	3.18
4	4.76
5	5.56
6	6.35
7	7.95
9	9.52

7	
CORNER RADIUS	
00	0
02	0.2
04	0.4
08	0.8
12	12
15	15
20	20
30	30
M0	ROUND INSERT

8	
WIPER LEAD ANGLE	
A	45°
D	60°
E	75°
L	75°
P	0°
S	75°

9	
WIPER CLEANER ANGLE	
C	7°
D	15°
E	20°
G	30°
N	0°
P	11°

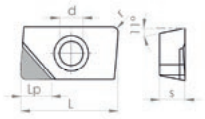
10	
CUTTING EDGE PREPARATION	
F	SHARP
E	HONED
T	T-LAND
X	SPECIAL

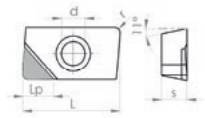
10
CHIP BREAKER (IF APPLICABLE)
CB

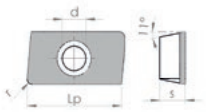
11	
WIPER CLEANER ANGLE	
R	RIGHT HAND CUTTING ONLY
FE-R	FULL EDGE RIGHT HAND CUTTING ONLY
L	LEFT HAND CUTTING ONLY
FE-L	FULL EDGE LEFT HAND CUTTING ONLY
N	BOTH RIGHT AND LEFT CUTTING

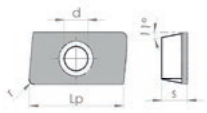
12	
MATERIAL	
HPCBN	CBN
HPCD	PCD

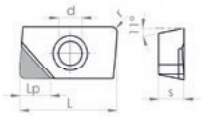
PCD&CBN MILLING TOOLS

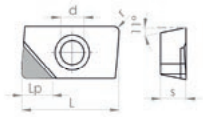
3D Picture	Technical Drawing	Code	Dimensions				
			L	s	r	a	Lp
		APKT100304 PDFR HPCD	11	3,65	0,4	2,8	4-5
		APKT100306 PDFR HPCD	11	3,65	0,6	2,8	4-5
		APKT100308 PDFR HPCD	11	3,65	0,8	2,8	4-5
		APKT100310 PDFR HPCD	11	3,65	1	2,8	4-5
		APKT100315 PDFR HPCD	11	3,65	1,5	2,8	4-5
		APKT100320 PDFR HPCD	11	3,65	2	2,8	4-5
		APKT100325 PDFR HPCD	11	3,65	2,5	2,8	4-5
		APKT100330 PDFR HPCD	11	3,65	3	2,8	4-5

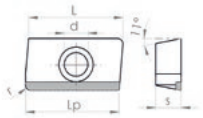
3D Picture	Technical Drawing	Code	Dimensions				
			L	s	r	a	Lp
		APKT100304 PDFR HPCBN	11	3,65	0,4	2,8	4-5
		APKT100306 PDFR HPCBN	11	3,65	0,6	2,8	4-5
		APKT100308 PDFR HPCBN	11	3,65	0,8	2,8	4-5
		APKT100310 PDFR HPCBN	11	3,65	1	2,8	4-5
		APKT100315 PDFR HPCBN	11	3,65	1,5	2,8	4-5
		APKT100320 PDFR HPCBN	11	3,65	2	2,8	4-5
		APKT100325 PDFR HPCBN	11	3,65	2,5	2,8	4-5
		APKT100330 PDFR HPCBN	11	3,65	3	2,8	4-5

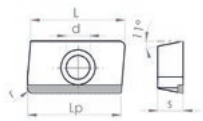
3D Picture	Technical Drawing	Code	Dimensions				
			L	s	r	a	Lp
		APKT100304 PDFR FF HPCD	11	3,65	0,4	2,8	11
		APKT100306 PDFR FF HPCD	11	3,65	0,6	2,8	11
		APKT100308 PDFR FF HPCD	11	3,65	0,8	2,8	11
		APKT100310 PDFR FF HPCD	11	3,65	1	2,8	11
		APKT100315 PDFR FF HPCD	11	3,65	1,5	2,8	11
		APKT100320 PDFR FF HPCD	11	3,65	2	2,8	11
		APKT100325 PDFR FF HPCD	11	3,65	2,5	2,8	11
		APKT100330 PDFR FF HPCD	11	3,65	3	2,8	11

3D Picture	Technical Drawing	Code	Dimensions				
			L	s	r	a	Lp
		APKT100304 PDFR FF HPCBN	11	3,65	0,4	2,8	11
		APKT100306 PDFR FF HPCBN	11	3,65	0,6	2,8	11
		APKT100308 PDFR FF HPCBN	11	3,65	0,8	2,8	11
		APKT100310 PDFR FF HPCBN	11	3,65	1	2,8	11
		APKT100315 PDFR FF HPCBN	11	3,65	1,5	2,8	11
		APKT100320 PDFR FF HPCBN	11	3,65	2	2,8	11
		APKT100325 PDFR FF HPCBN	11	3,65	2,5	2,8	11
		APKT100330 PDFR FF HPCBN	11	3,65	3	2,8	11

3D Picture	Technical Drawing	Code	Dimensions				
			L	s	r	a	Lp
		APKT160402 PDFR HPCD	16,88	4,76	0,2	4,4	4-5
		APKT160404 PDFR HPCD	16,88	4,76	0,4	4,4	4-5
		APKT160408 PDFR HPCD	16,88	4,76	0,8	4,4	4-5
		APKT160410 PDFR HPCD	16,88	4,76	0,8	4,4	4-5
		APKT160412 PDFR HPCD	16,88	4,76	1,2	4,4	4-5
		APKT 160424 PDFR HPCD	16,88	4,76	2.4	4,4	4-5

3D Picture	Technical Drawing	Code	Dimensions				
			L	s	r	a	Lp
		APKT160402 PDFR HPCBN	16,88	4,76	0,2	4,4	4-5
		APKT160404 PDFR HPCBN	16,88	4,76	0,4	4,4	4-5
		APKT160408 PDFR HPCBN	16,88	4,76	0,8	4,4	4-5
		APKT160410 PDFR HPCBN	16,88	4,76	0,8	4,4	4-5
		APKT160412 PDFR HPCBN	16,88	4,76	1,2	4,4	4-5
		APKT 160424 PDFR HPCBN	16,88	4,76	2.4	4,4	4-5

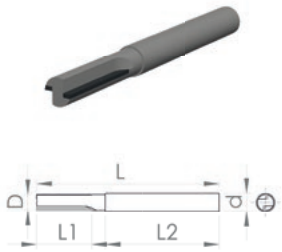
3D Picture	Technical Drawing	Code	Dimensions				
			L	s	r	a	Lp
		APKT160402 PDFR FE HPCD	16,88	4,76	0,2	4,4	16,88
		APKT160404 PDFR FE HPCD	16,88	4,76	0,4	4,4	16,88
		APKT160408 PDFR FE HPCD	16,88	4,76	0,8	4,4	16,88
		APKT160410 PDFR FE HPCD	16,88	4,76	0,8	4,4	16,88
		APKT160412 PDFR FE HPCD	16,88	4,76	1,2	4,4	16,88
		APKT 160424 PDFR FE HPCD	16,88	4,76	2.4	4,4	16,88

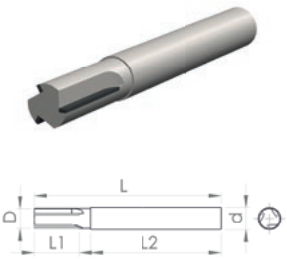
3D Picture	Technical Drawing	Code	Dimensions				
			L	s	r	a	Lp
		APKT160402 PDFR FE HPCBN	16,88	4,76	0,2	4,4	16,88
		APKT160404 PDFR FE HPCBN	16,88	4,76	0,4	4,4	16,88
		APKT160408 PDFR FE HPCBN	16,88	4,76	0,8	4,4	16,88
		APKT160410 PDFR FE HPCBN	16,88	4,76	0,8	4,4	16,88
		APKT160412 PDFR FE HPCBN	16,88	4,76	1,2	4,4	16,88
		APKT 160424 PDFR FE HPCBN	16,88	4,76	2.4	4,4	16,88

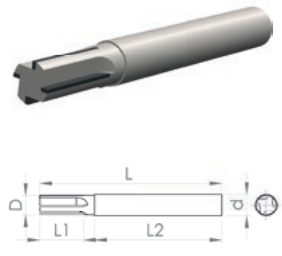
PCD ENDMILLS

3D Picture & Technical Drawing	Code	Dimensions					
		Z	D	d	L	L1	L2
 	DJD03L10-1Z HPCD	1	3	3	60	10	45
	DJD04L10-1Z HPCD	1	4	5	60	10	45
	DJD05L10-1Z HPCD	1	5	6	60	10	45
	DJD06L10-1Z HPCD	1	6	6	80	10	60
	DJD08L10-1Z HPCD	1	8	8	80	20	50
	DJD10L10-1Z HPCD	1	10	10	100	10	70
	DJD10L20-1Z HPCD	1	10	10	100	20	60
	DJD12L10-1Z HPCD	1	12	12	100	10	70
	DJD12L20-1Z HPCD	1	12	12	100	20	60

3D Picture & Technical Drawing	Code	Dimensions					
		Z	D	d	L	L1	L2
 	DJD08L10-2Z HPCD	2	8	8	80	10	50
	DJD10L10-2Z HPCD	2	10	10	80	10	50
	DJD10L20-2Z HPCD	2	10	10	80	20	50
	DJD12L10-2Z HPCD	2	12	12	100	10	70
	DJD12L20-2Z HPCD	2	12	12	100	20	70
	DJD16L10-2Z HPCD	2	16	16	100	10	60
	DJD16L20-2Z HPCD	2	16	16	100	20	70
	DJD20L10-2Z HPCD	2	20	20	100	10	70
	DJD20L20-2Z HPCD	2	20	20	100	20	70

3D Picture & Technical Drawing	Code	Dimensions						
		Z	D	d	L	L1	L2	θ
	DKD06L10-2Z HPCD	2	6	6	60	10	45	2°
	DKD06L20-2Z HPCD	2	6	6	60	20	40	2°
	DKD08L10-2Z HPCD	2	8	8	80	10	60	3°
	DKD08L20-2Z HPCD	2	8	8	80	20	50	3°
	DKD10L10-2Z HPCD	2	10	10	80	10	50	4°
	DKD10L20-2Z HPCD	2	10	10	80	20	50	4°
	DKD12L10-2Z HPCD	2	12	12	85	10	60	6°
	DKD12L20-2Z HPCD	2	12	12	100	20	70	6°
	DKD16L10-2Z HPCD	2	16	16	85	10	60	6°
	DKD16L20-2Z HPCD	2	16	16	100	20	70	6°
	DKD20L10-2Z HPCD	2	20	20	100	10	70	6°
	DKD20L20-2Z HPCD	2	20	20	100	20	70	6°

3D Picture & Technical Drawing	Code	Dimensions						
		Z	D	d	L	L1	L2	θ
	DKD08L10-3Z HPCD	3	8	8	80	10	50	2°
	DKD08L20-3Z HPCD	3	8	8	80	20	50	2°
	DKD10L10-3Z HPCD	3	10	10	80	10	50	3°
	DKD10L20-3Z HPCD	3	10	10	80	20	50	3°
	DKD12L10-3Z HPCD	3	12	12	100	10	70	4°
	DKD12L20-3Z HPCD	3	12	12	100	20	70	4°
	DKD16L10-3Z HPCD	3	16	16	100	10	70	5°
	DKD16L20-3Z HPCD	3	16	16	100	20	70	5°
	DKD20L10-3Z HPCD	3	20	20	100	10	70	6°
	DKD20L20-3Z HPCD	3	20	20	100	10	70	6°

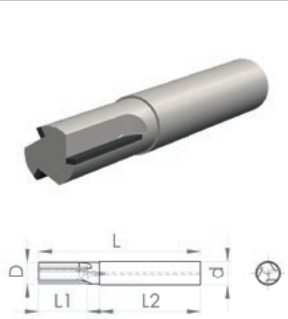
3D Picture & Technical Drawing	Code	Dimensions						
		Z	D	d	L	L1	L2	θ
	DKD12L10-4Z HPCD	4	12	12	100	10	70	4°
	DKD12L20-4Z HPCD	4	12	12	100	20	70	4°
	DKD12L25-4Z HPCD	4	16	16	100	25	70	4°
	DKD16L10-4Z HPCD	4	16	16	100	10	60	5°
	DKD16L20-4Z HPCD	4	16	16	100	20	70	5°
	DKD16L25-4Z HPCD	4	16	16	100	25	70	5°
	DKD20L10-4Z HPCD	4	20	20	100	10	70	6°
	DKD20L20-4Z HPCD	4	20	20	100	20	70	6°
	DKD20L25-4Z HPCD	4	20	20	100	25	70	6°

3D Picture & Technical Drawing	Code	Dimensions						
		Z	D	d	R	L	L1	L2
	DQD6L10-1Z HPCD	2	6	6	3	60	10	45
	DQD8L10-1Z HPCD	2	8	8	4	80	10	60
	DQD8L20-2Z HPCD	2	8	8	4	80	20	50
	DQD10L10-2Z HPCD	2	10	10	5	80	10	60
	DQD10L20-2Z HPCD	2	10	10	5	80	20	50
	DQD12L10-2Z HPCD	2	12	12	6	100	10	70
	DQD12L20-2Z HPCD	2	12	12	6	100	20	60
	DQD16L10-2Z HPCD	2	16	16	8	100	10	70
	DQD16L20-2Z HPCD	2	16	16	8	100	20	60

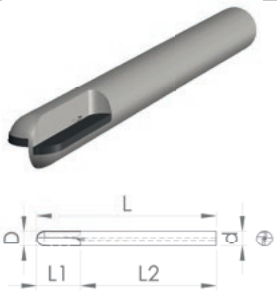
3D Picture & Technical Drawing	Code	Dimensions					
		Z	D	d	L	L1	L2
	DJD08L10-1Z HPCD	1	8	8	80	10	60
	DJD08L20-1Z HPCD	1	8	8	80	20	50
	DJD08L25-1Z HPCD	1	8	8	80	25	45
	DJD10L10-1Z HPCD	1	10	10	100	10	70
	DJD10L20-1Z HPCD	1	10	10	100	20	60
	DJD10L25-1Z HPCD	1	10	10	100	25	55
	DJD12L10-1Z HPCD	1	12	12	100	10	70
	DJD12L20-1Z HPCD	1	12	12	100	20	60
	DJD12L25-1Z HPCD	1	12	12	100	25	55

3D Picture & Technical Drawing	Code	Dimensions					
		Z	D	d	L	L1	L2
	DJD08L10-2Z HPCD	2	8	8	80	10	50
	DJD10L10-2Z HPCD	2	10	10	80	10	50
	DJD10L20-2Z HPCD	2	10	10	80	20	50
	DJD12L10-2Z HPCD	2	12	12	100	10	70
	DJD12L20-2Z HPCD	2	12	12	100	20	70
	DJD16L10-2Z HPCD	2	16	16	100	10	60
	DJD16L20-2Z HPCD	2	16	16	100	20	70
	DJD20L10-2Z HPCD	2	20	20	100	10	70
	DJD20L20-2Z HPCD	2	20	20	100	20	70

3D Picture & Technical Drawing	Code	Dimensions						
		Z	D	d	L	L1	L2	θ
	DKD06L10-2Z HPCD	2	6	6	60	10	45	2°
	DKD06L20-2Z HPCD	2	6	6	60	20	40	2°
	DKD08L10-2Z HPCD	2	8	8	80	10	60	3°
	DKD08L20-2Z HPCD	2	8	8	80	20	50	3°
	DKD10L10-2Z HPCD	2	10	10	80	10	50	4°
	DKD10L20-2Z HPCD	2	10	10	80	20	50	4°
	DKD12L10-2Z HPCD	2	12	12	85	10	60	6°
	DKD12L20-2Z HPCD	2	12	12	100	20	70	6°
	DKD16L10-2Z HPCD	2	16	16	85	10	60	6°
	DKD16L20-2Z HPCD	2	16	16	100	20	70	6°
	DKD20L10-2Z HPCD	2	20	20	100	10	70	6°
	DKD20L20-2Z HPCD	2	20	20	100	20	70	6°

3D Picture & Technical Drawing	Code	Dimensions						
		Z	D	d	L	L1	L2	θ
	DKD08L10-3Z HPCD	3	8	8	80	10	50	2°
	DKD08L20-3Z HPCD	3	8	8	80	20	50	2°
	DKD10L10-3Z HPCD	3	10	10	80	10	50	3°
	DKD10L20-3Z HPCD	3	10	10	80	20	50	3°
	DKD12L10-3Z HPCD	3	12	12	100	10	70	4°
	DKD12L20-3Z HPCD	3	12	12	100	20	70	4°
	DKD16L10-3Z HPCD	3	16	16	100	10	70	5°
	DKD16L20-3Z HPCD	3	16	16	100	20	70	5°
	DKD20L10-3Z HPCD	3	20	20	100	10	70	6°
	DKD20L20-3Z HPCD	3	20	20	100	10	70	6°

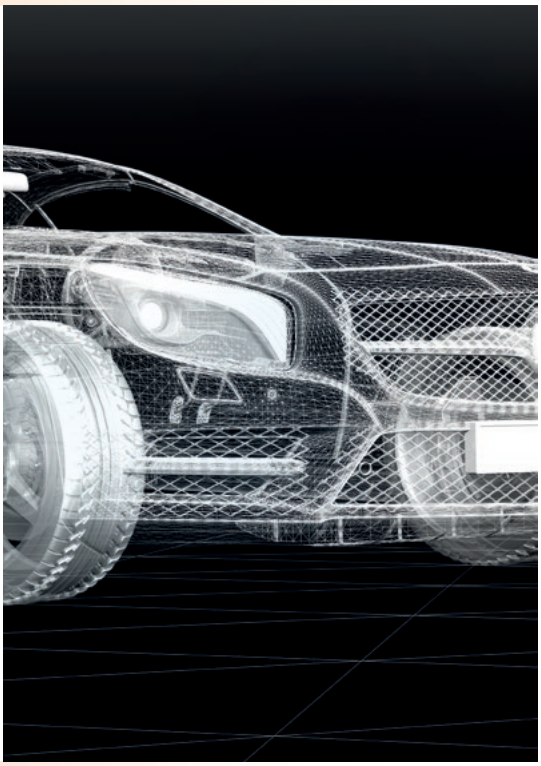
3D Picture & Technical Drawing	Code	Dimensions						
		Z	D	d	L	L1	L2	θ
	DKD12L10-4Z HPCD	4	12	12	100	10	70	4°
	DKD12L20-4Z HPCD	4	12	12	100	20	70	4°
	DKD12L25-4Z HPCD	4	16	16	100	25	70	4°
	DKD16L10-4Z HPCD	4	16	16	100	10	60	5°
	DKD16L20-4Z HPCD	4	16	16	100	20	70	5°
	DKD16L25-4Z HPCD	4	16	16	100	25	70	5°
	DKD20L10-4Z HPCD	4	20	20	100	10	70	6°
	DKD20L20-4Z HPCD	4	20	20	100	20	70	6°
	DKD20L25-4Z HPCD	4	20	20	100	25	70	6°

3D Picture & Technical Drawing	Code	Dimensions						
		Z	D	d	R	L	L1	L2
	DQD4L10-1Z HPCD	1	4	6	2	60	10	45
	DQD6L10-1Z HPCD	1	6	6	3	60	10	45
	DQD8L10-1Z HPCD	2	8	8	4	80	10	60
	DQD8L20-2Z HPCD	2	8	8	4	80	20	50
	DQD10L10-2Z HPCD	2	10	10	5	80	10	60
	DQD10L20-2Z HPCD	2	10	10	5	80	20	50
	DQD12L10-2Z HPCD	2	12	12	6	100	10	70
	DQD12L20-2Z HPCD	2	12	12	6	100	20	60
	DQD16L10-2Z HPCD	2	16	16	8	100	10	70
	DQD16L20-2Z HPCD	2	16	16	8	100	20	60

SPECIAL TOOLS

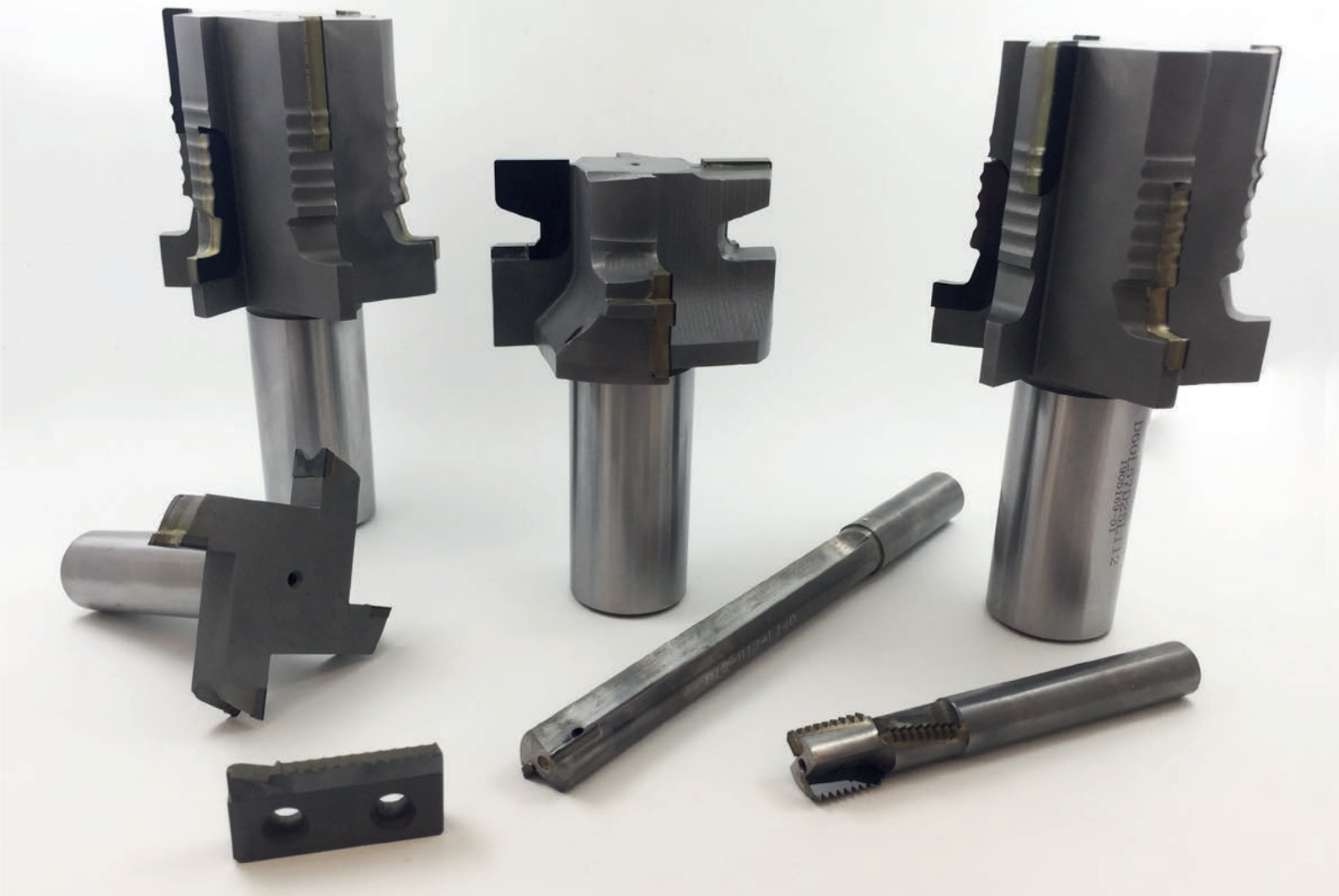
AUTOMOTIVE

PAGE 59-86



COOKWARE

PAGE 87-92



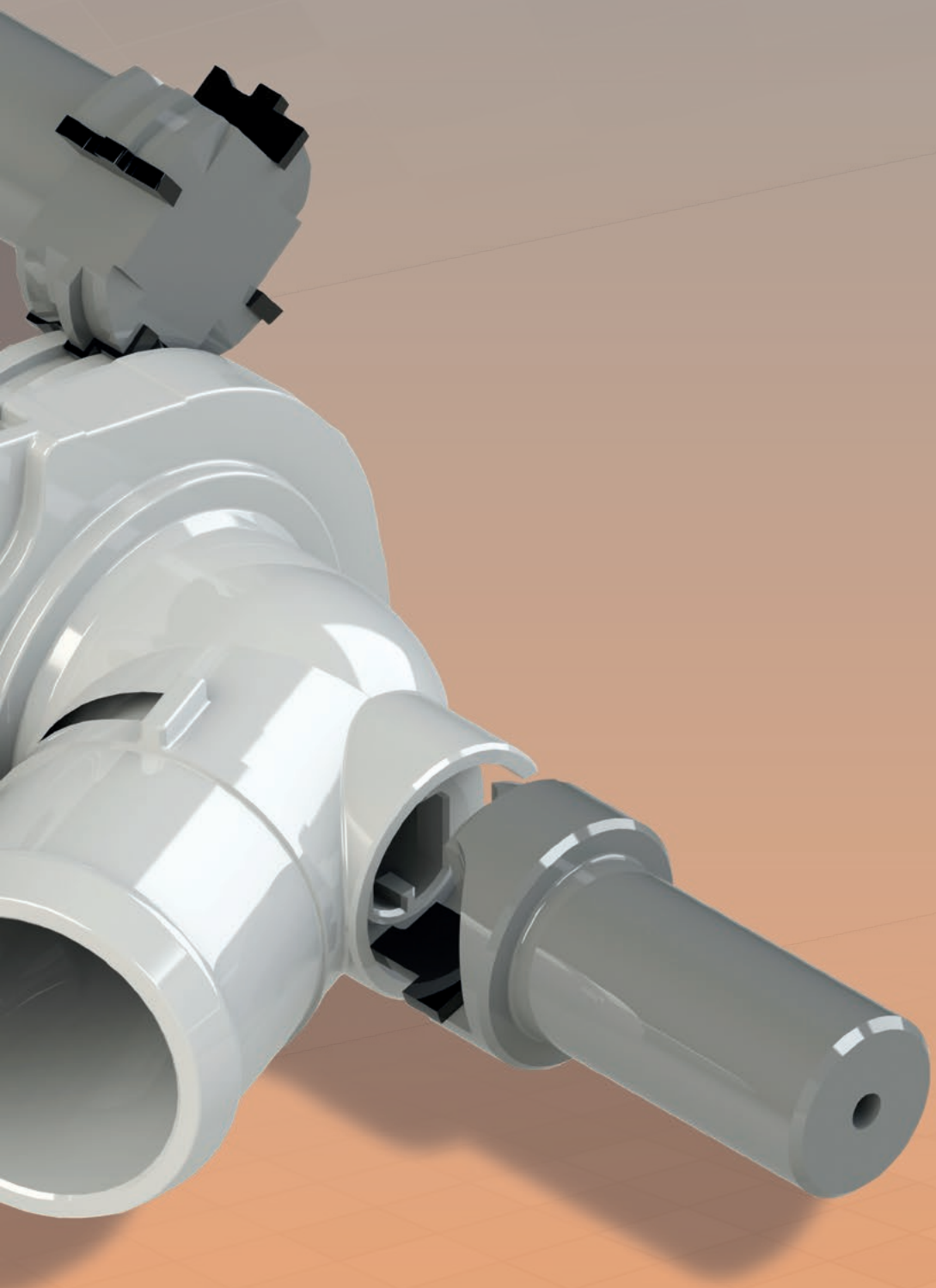
AUTOM

Parts of today's modern manufacturing technology, particularly in the automotive industry, are becoming ever more complex. There is a change in the material properties and workpiece designs used with the expected increase in properties from the workpieces. As these changes make processing difficult, the need for PCD / CBN special tools is further increased. Rational and impressive solutions we apply in the automotive sector make it easy to process complex parts and reduce costs. Some of the tools in this catalog, include examples from solutions we have implemented in the automotive sector.

OTIVE

HYPERION®

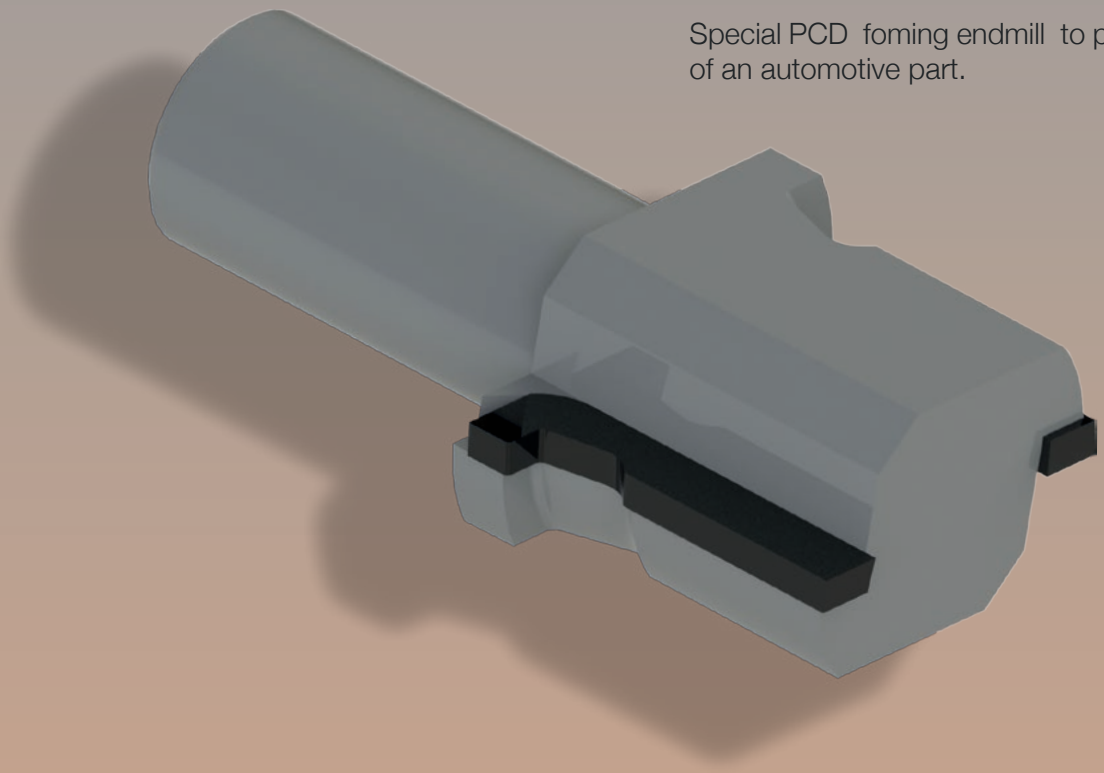
We give you time back...



01

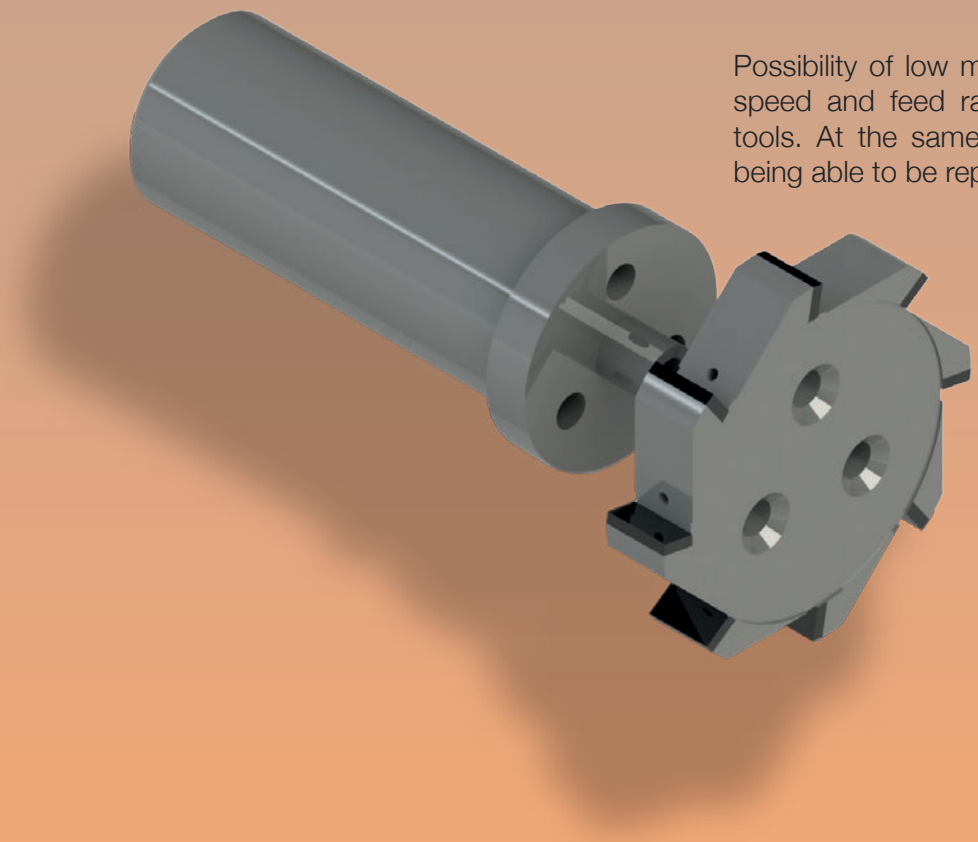
PCD FORMING ENDMILL

Special PCD foming endmill to process special form of an automotive part.



INTERCHANGEABLE GROOVE MILLING

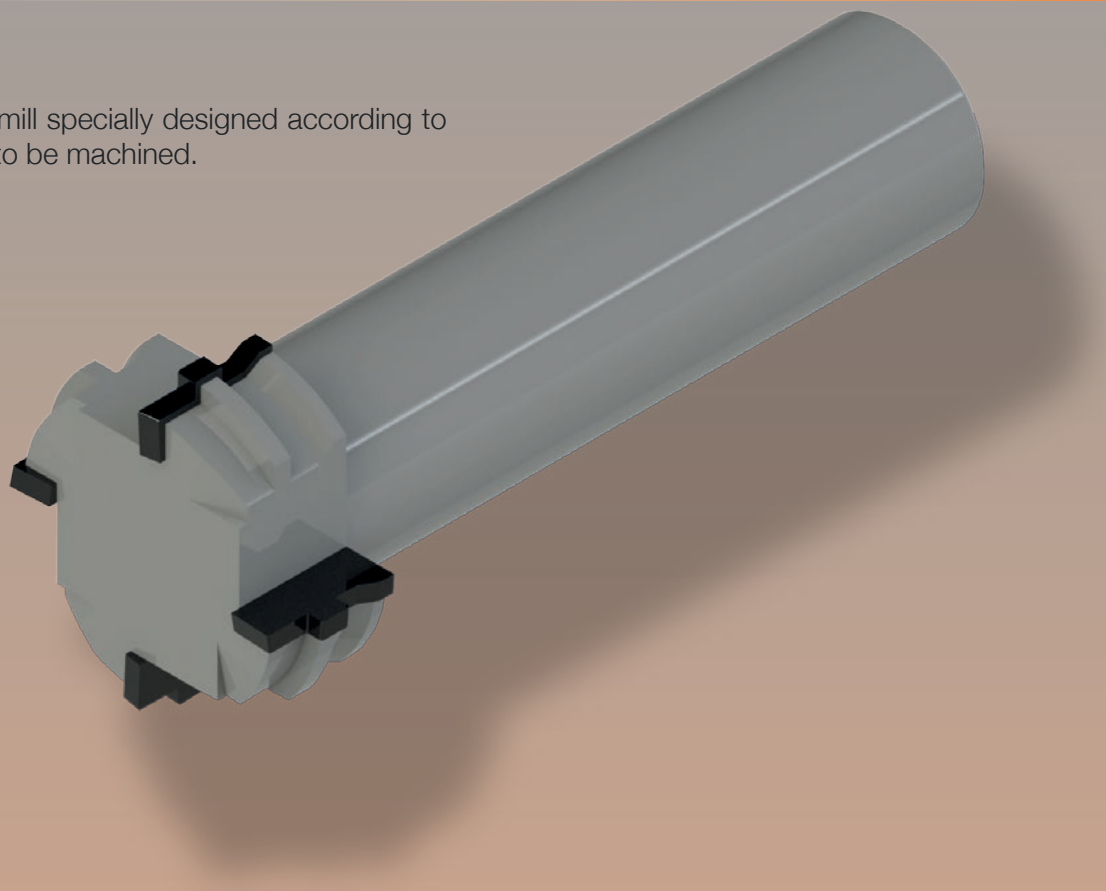
Possibility of low machining time at high cutting speed and feed rate with multi-channel milling tools. At the same time the low cost tool with being able to be replaced.



02

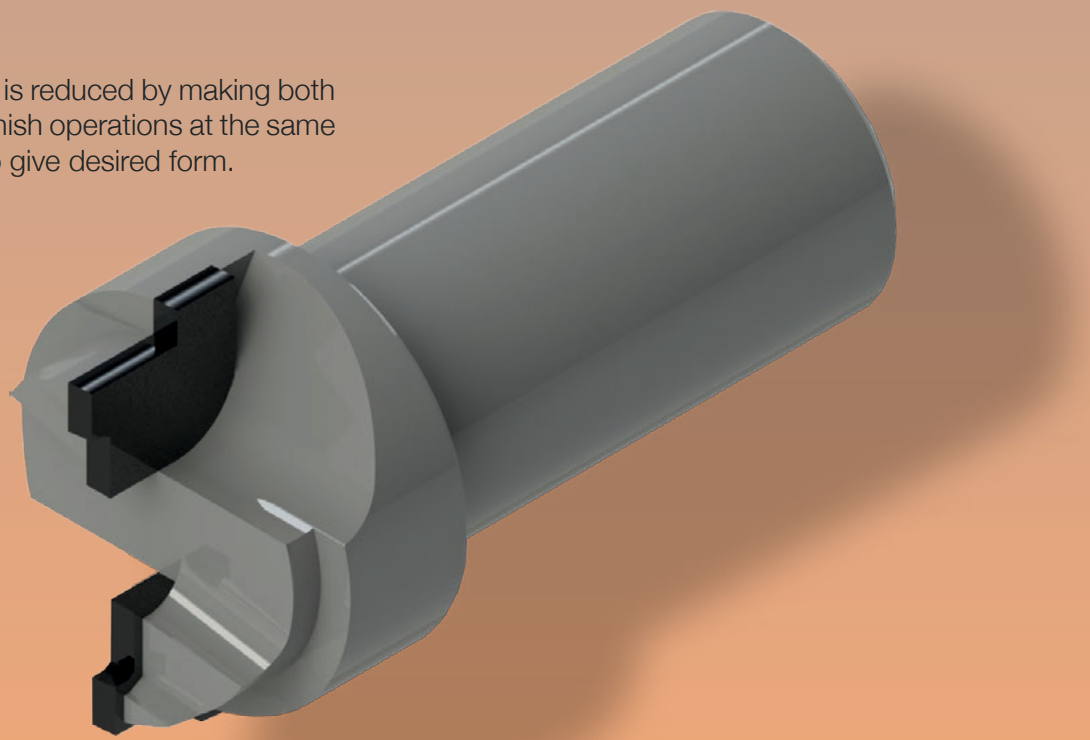
FOUR EDGE SPECIAL FORM ENDMILL

Four-edge PCD endmill specially designed according to the form of the part to be machined.



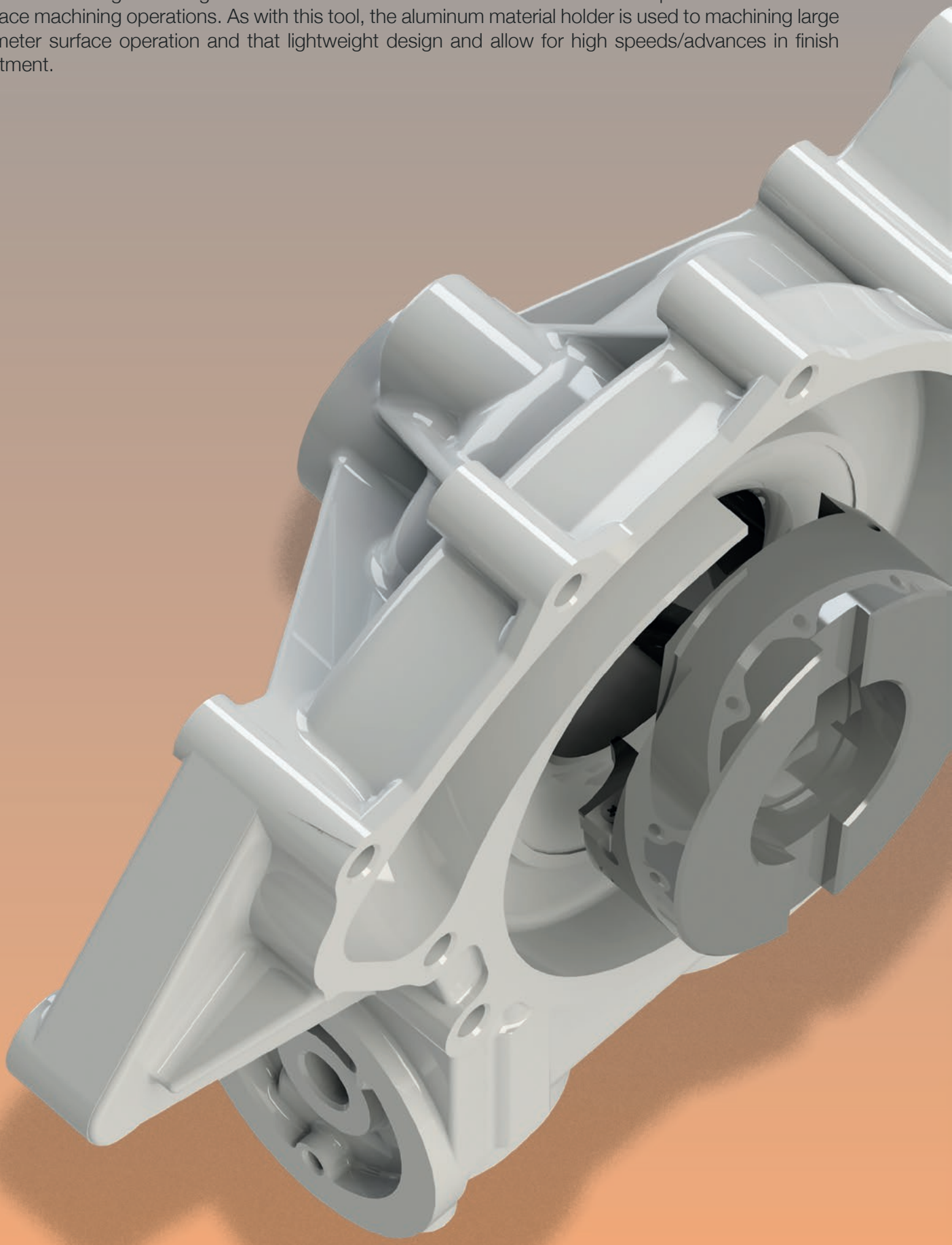
FORM MACHINING PCD TOOL

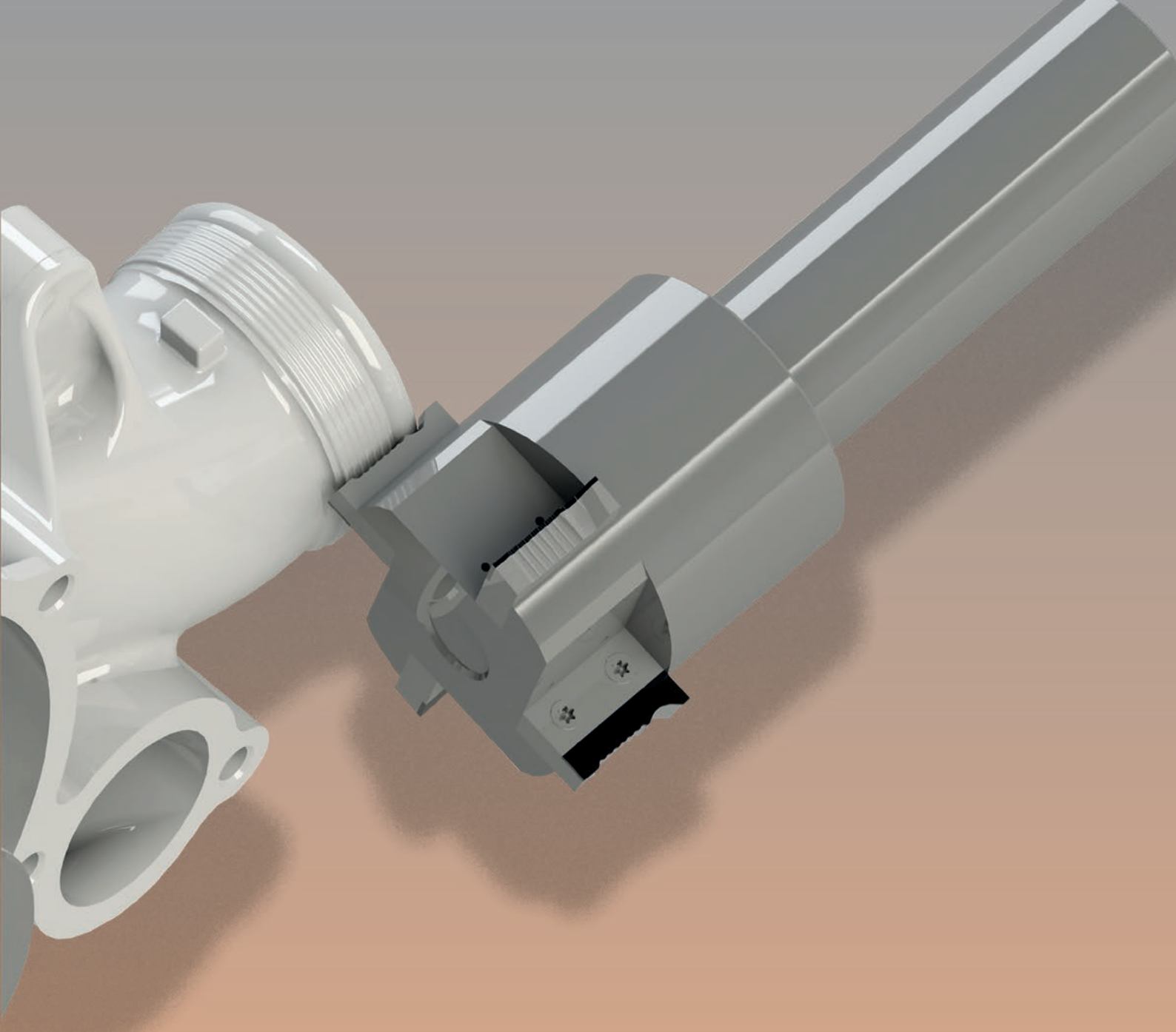
The machining time is reduced by making both the rough and the finish operations at the same time with the tool to give desired form.



PCD SURFACE FORMING/FINISHING OPERATIONS

Precise machining tool designs suitable for the desired surface form are made in special dimensions for surface machining operations. As with this tool, the aluminum material holder is used to machining large diameter surface operation and that lightweight design and allow for high speeds/advances in finish treatment.



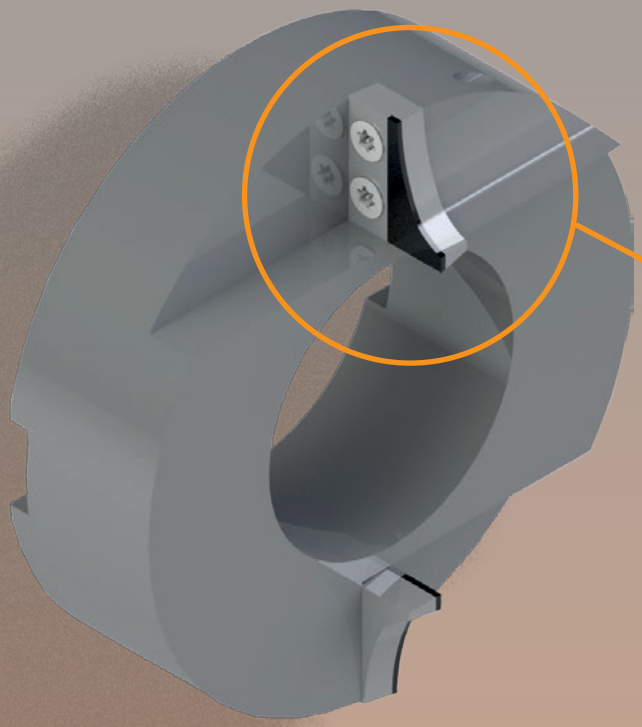


HYPERION®

Complex forms are easily manufactured and the desired surface form is revealed with Hyperion Cutting Tools precisely. With optimum tool designs and cutting edge application, excellent surface qualities are achieved.

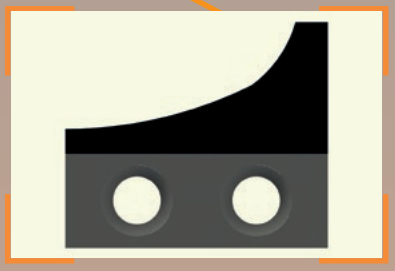
01

ALUMINIUM BODY INDEXABLE PCD TOOL

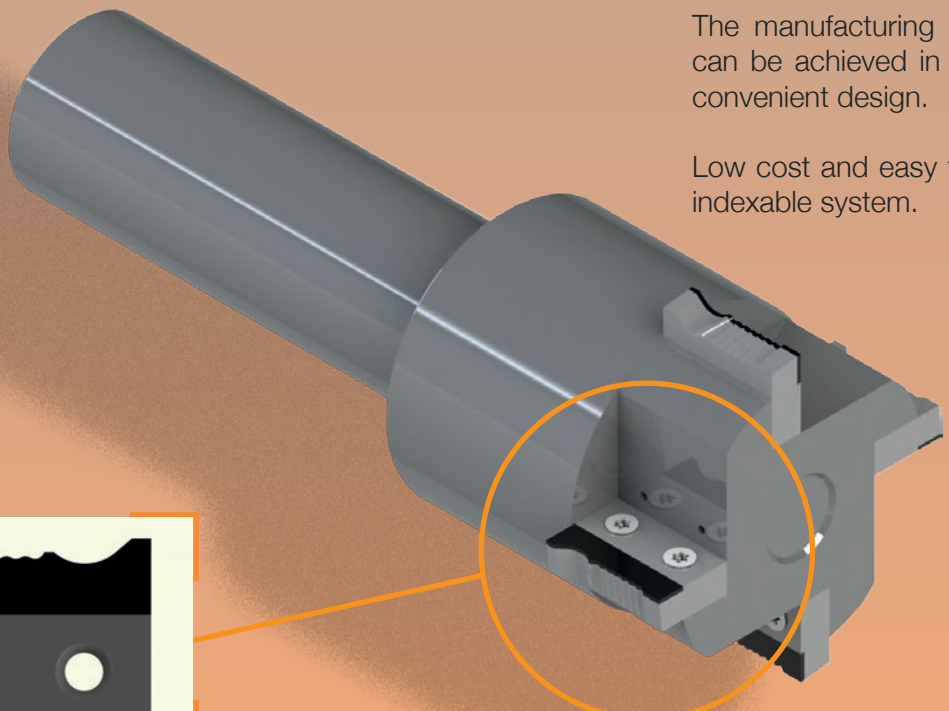


Convenient insert design to obtain the surface form and quality expected from the workpiece.

Lightweight aluminum holder for high-cutting speed and feed rate applications.

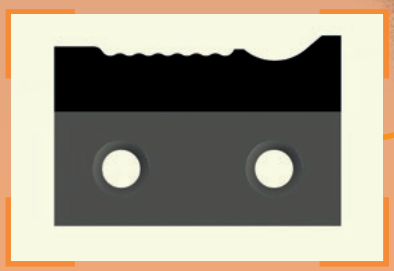


INDEXABLE SURFACE THREAD FORMING TOOL



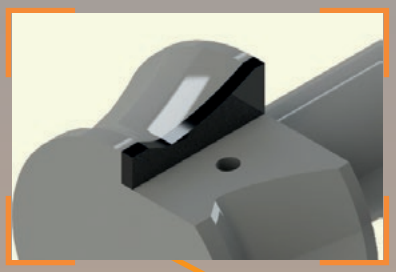
The manufacturing of complex forms can be achieved in one step with the convenient design.

Low cost and easy tool changing with indexable system.



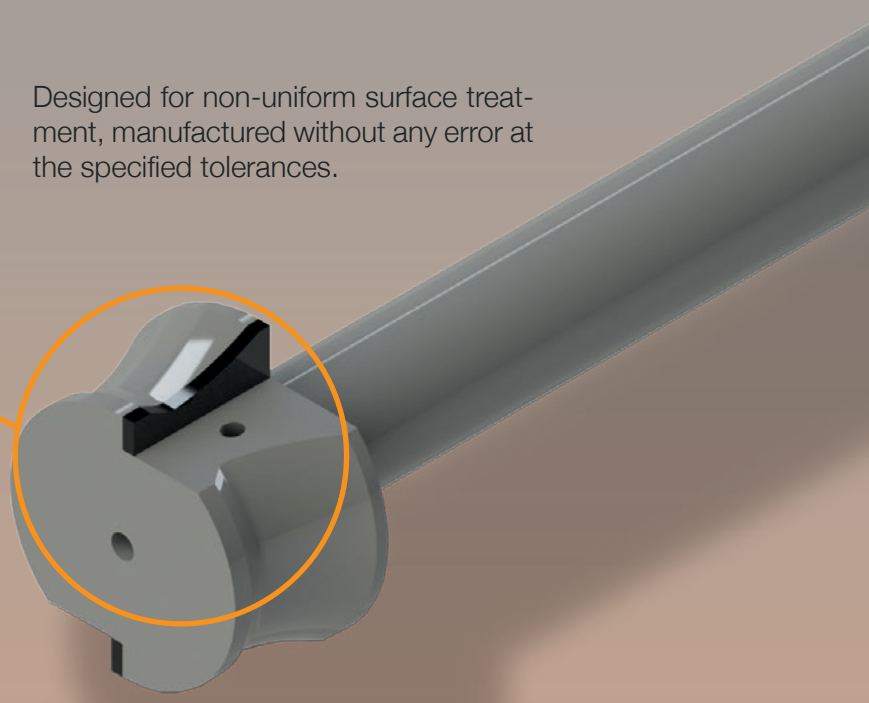
02

NON-UNIFORM SURFACE ENDMILL



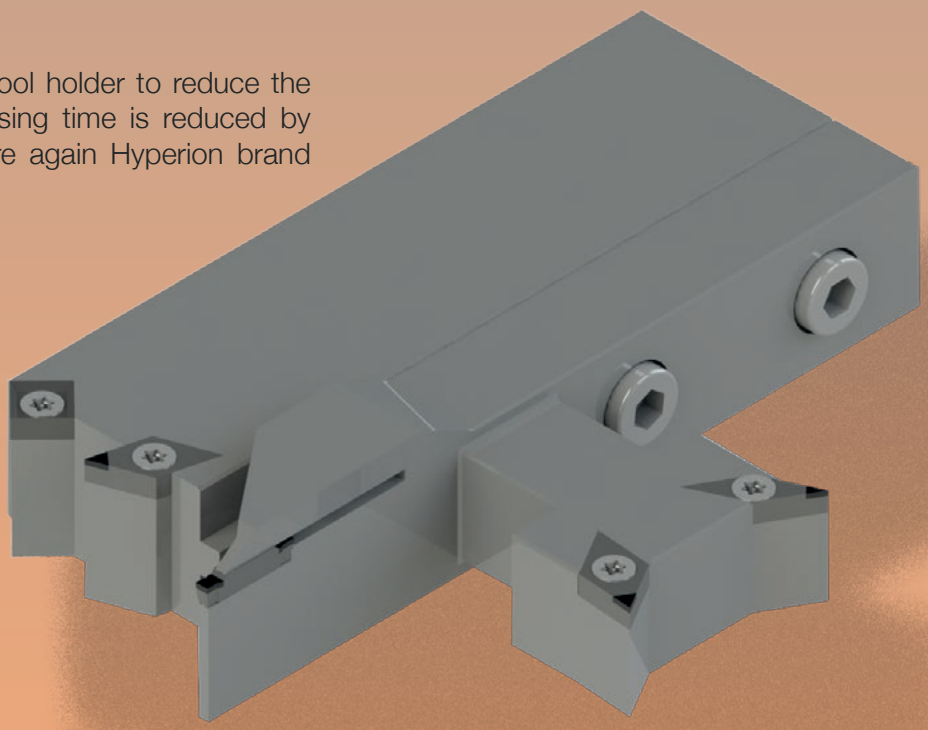
Designed for non-uniform surface treatment, manufactured without any error at the specified tolerances.

In operations where cutting fluid can be used, cooling and chip removal can be achieved with in-tool channels.

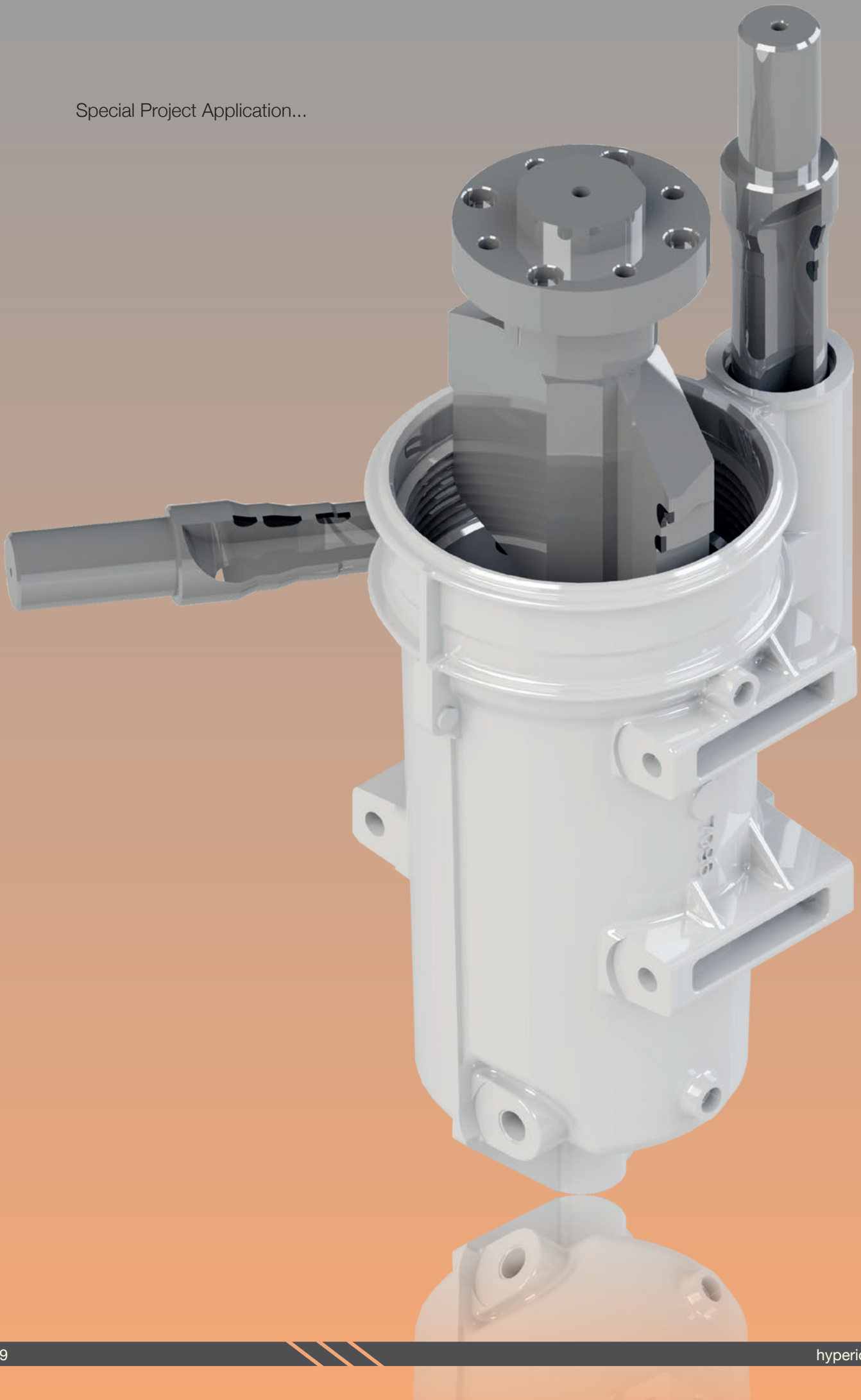


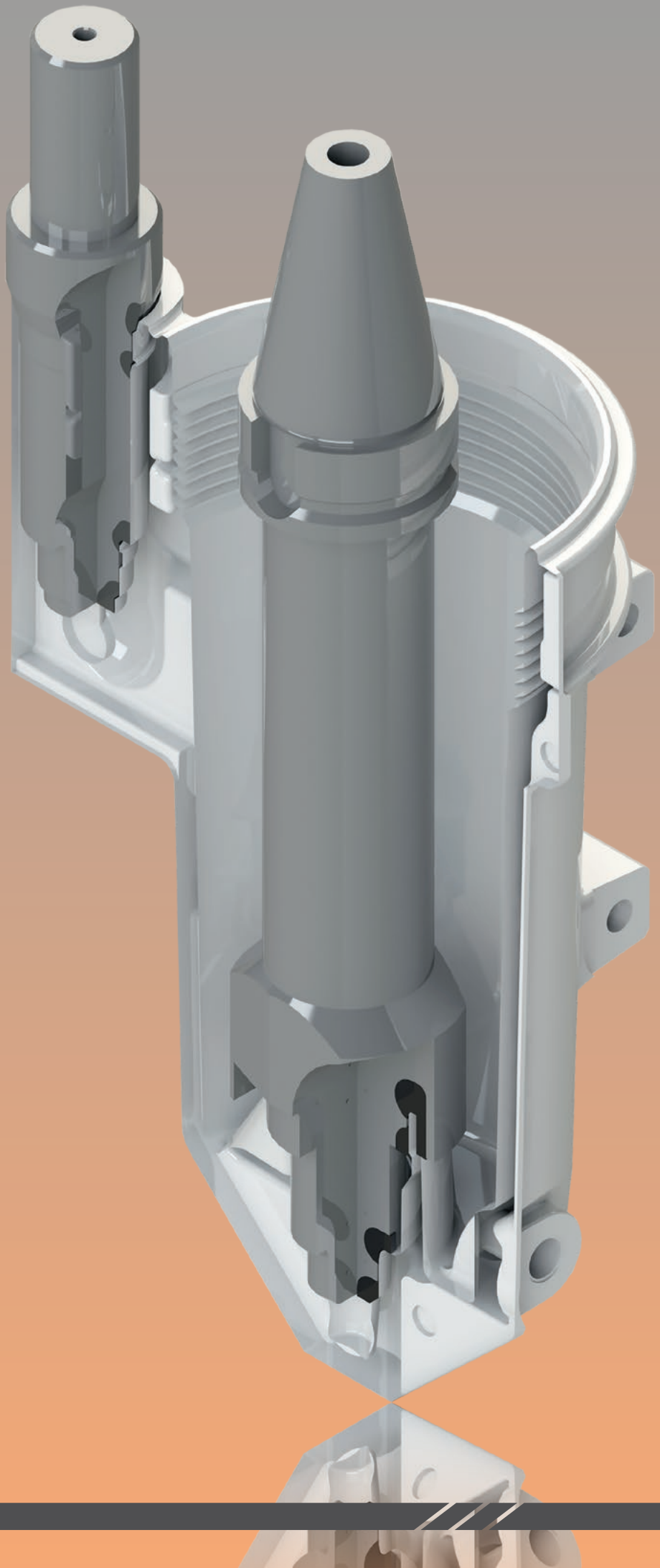
COMBINED TURNING SOLUTIONS

Specially designed five mouthed tool holder to reduce the duration of the operation. Processing time is reduced by 40%. All inserts on tool holder are again Hyperion brand PCD inserts.

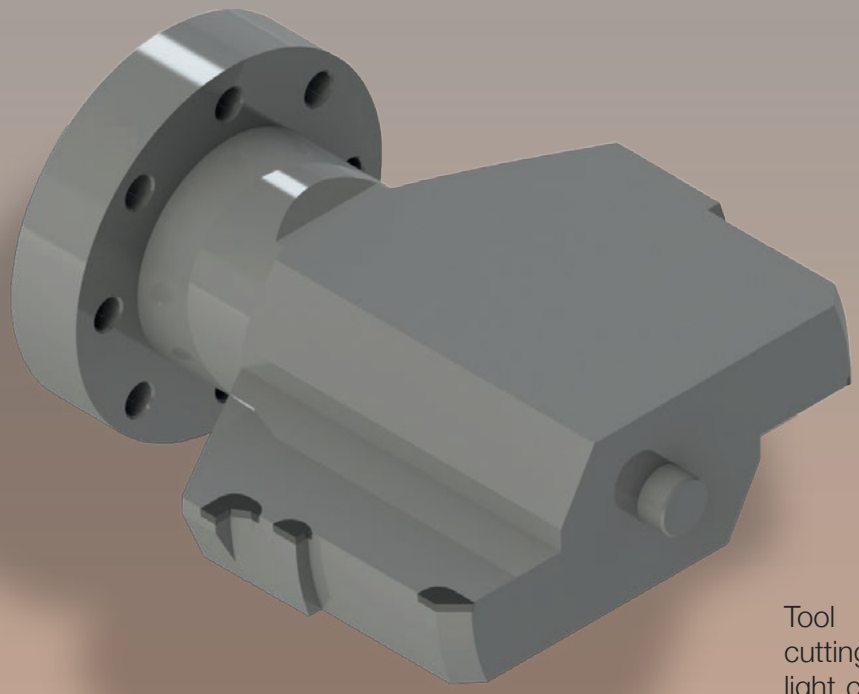


Special Project Application...





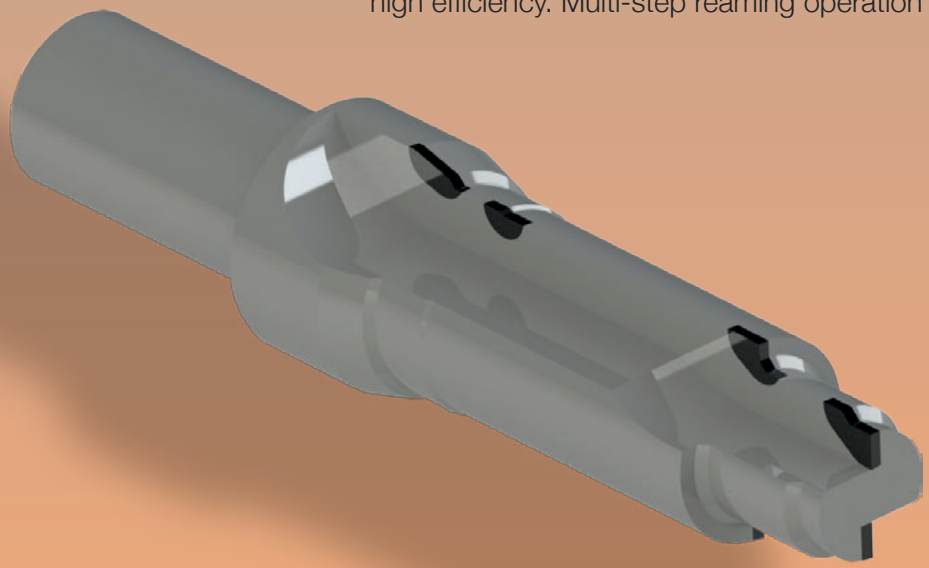
LARGE DIAMETER REAMER



Tool geometry allows for high cutting speed and feed rate with a light construction in large overhead reamer applications. Extra rigidity with strong clamping system.

STEP PCD REAMER CARBIDE BODY

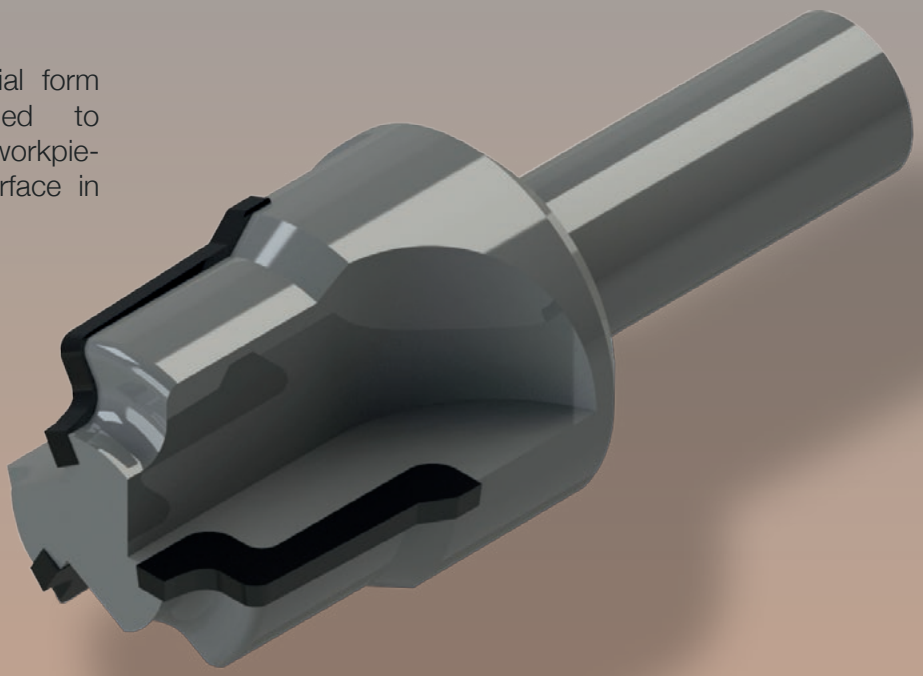
Carbide body and high quality PCD technology combined with high efficiency. Multi-step reaming operation with low vibration.



02

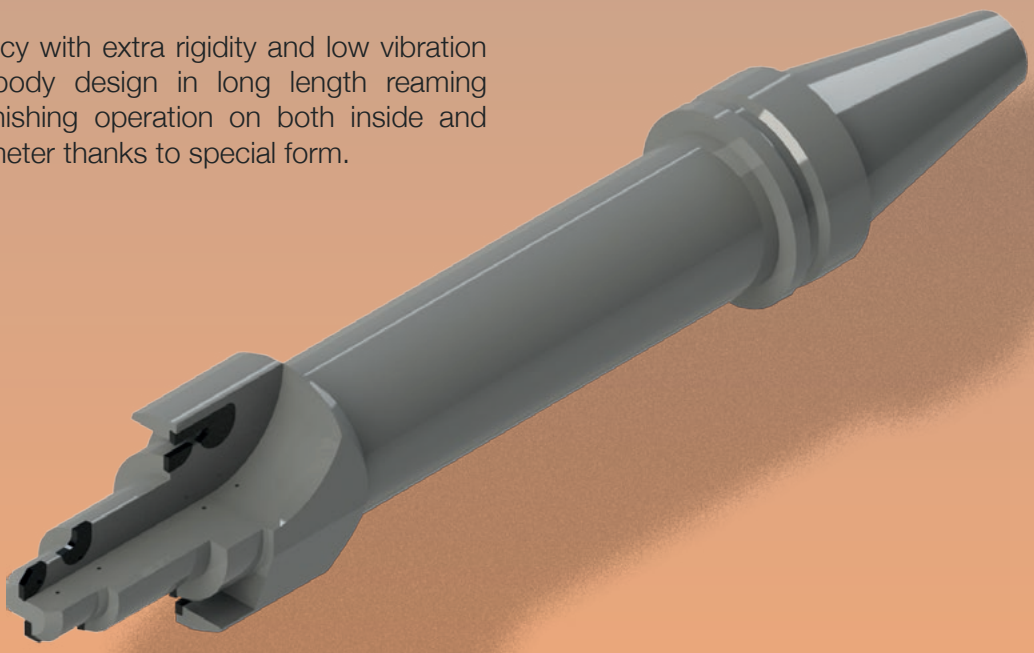
STEP FORMING PCD SOLID REAMER

Reamer tool with special form PCD inserts, designed to process inside of entire workpiece with high quality surface in single step.



INTERNAL EXTERNAL REAMING SOLID BODY

High efficiency with extra rigidity and low vibration with solid body design in long length reaming process. Finishing operation on both inside and outside diameter thanks to special form.




THREAD MILL

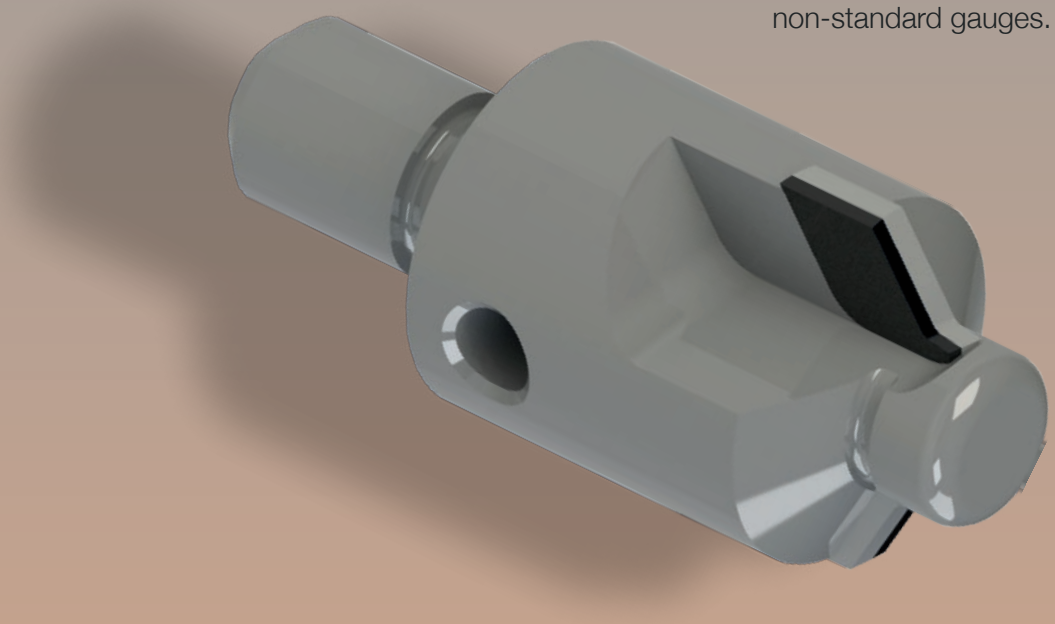
High tool life with Hyperion, extra rigidity, low costs, excellent surface finish.

Conclusion: High efficiency

01

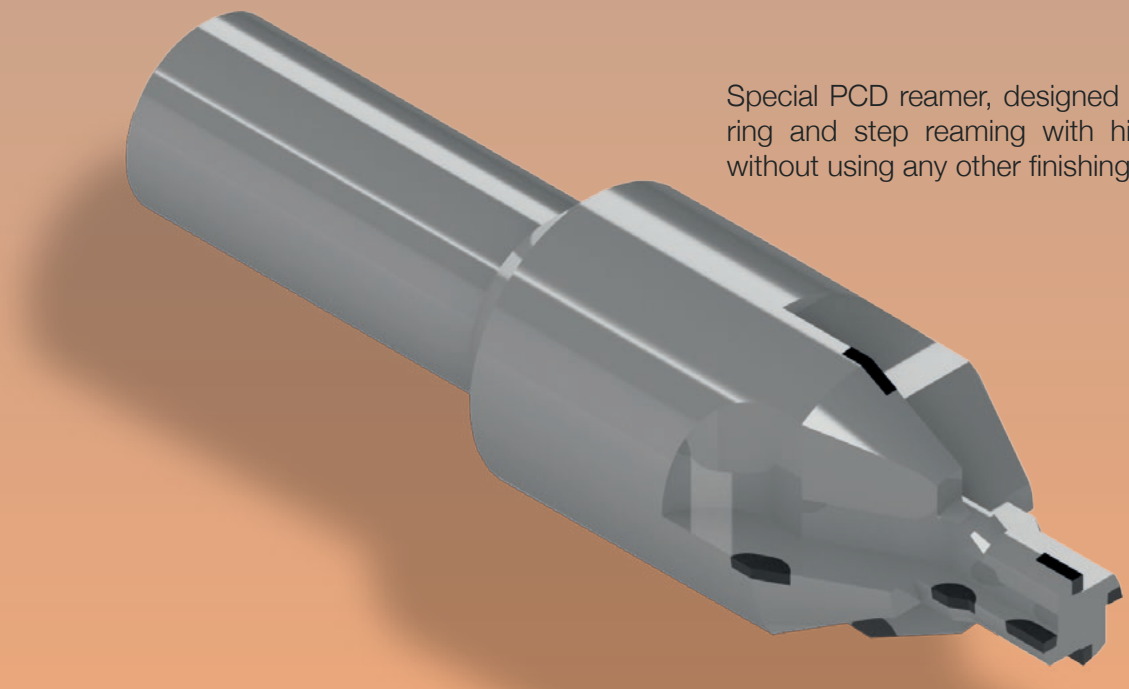
CHAMFER REAMER FINISH TOOL

The processing quality is increased with PCD tool. Suitable for chamfering operations where high surface quality expected. Produced for non-standard gauges.



STEP REAMER WITH CHAMFERING TOOL

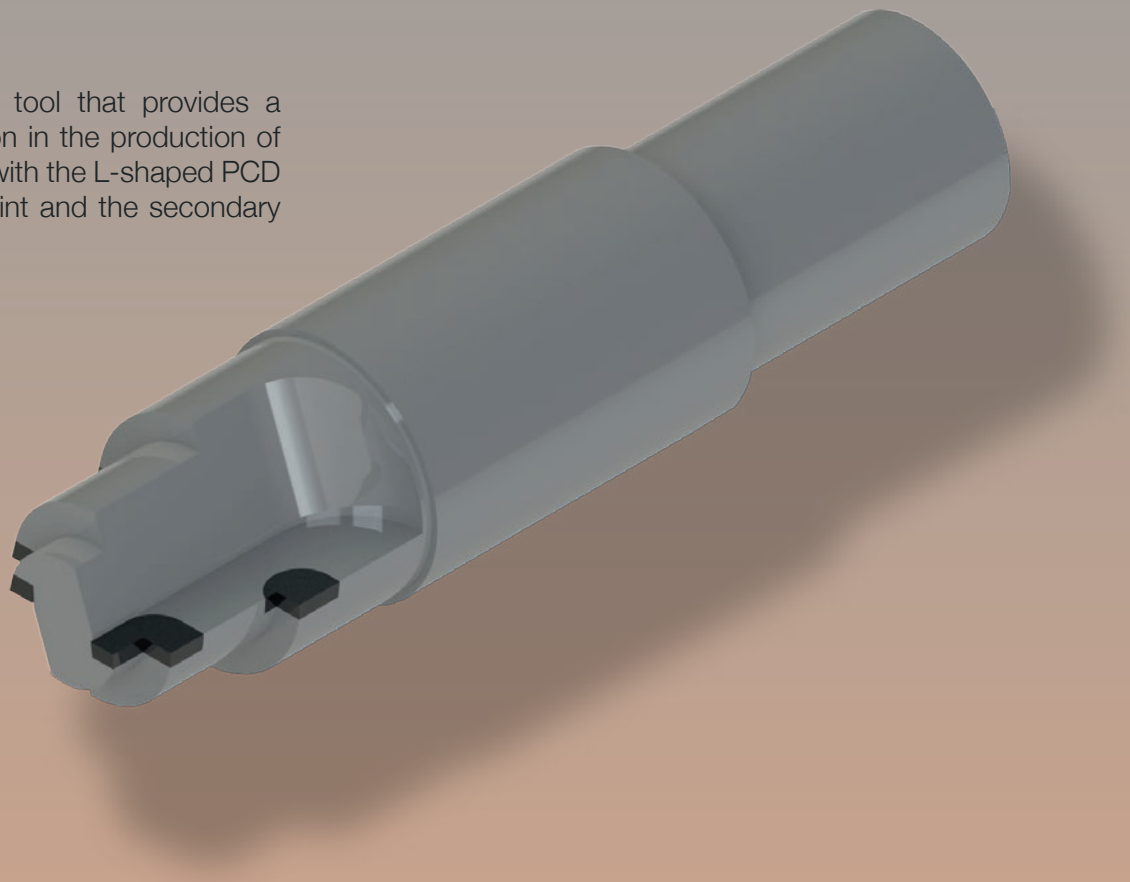
Special PCD reamer, designed to use for chamfering and step reaming with high quailty surface without using any other finishing tool.



02

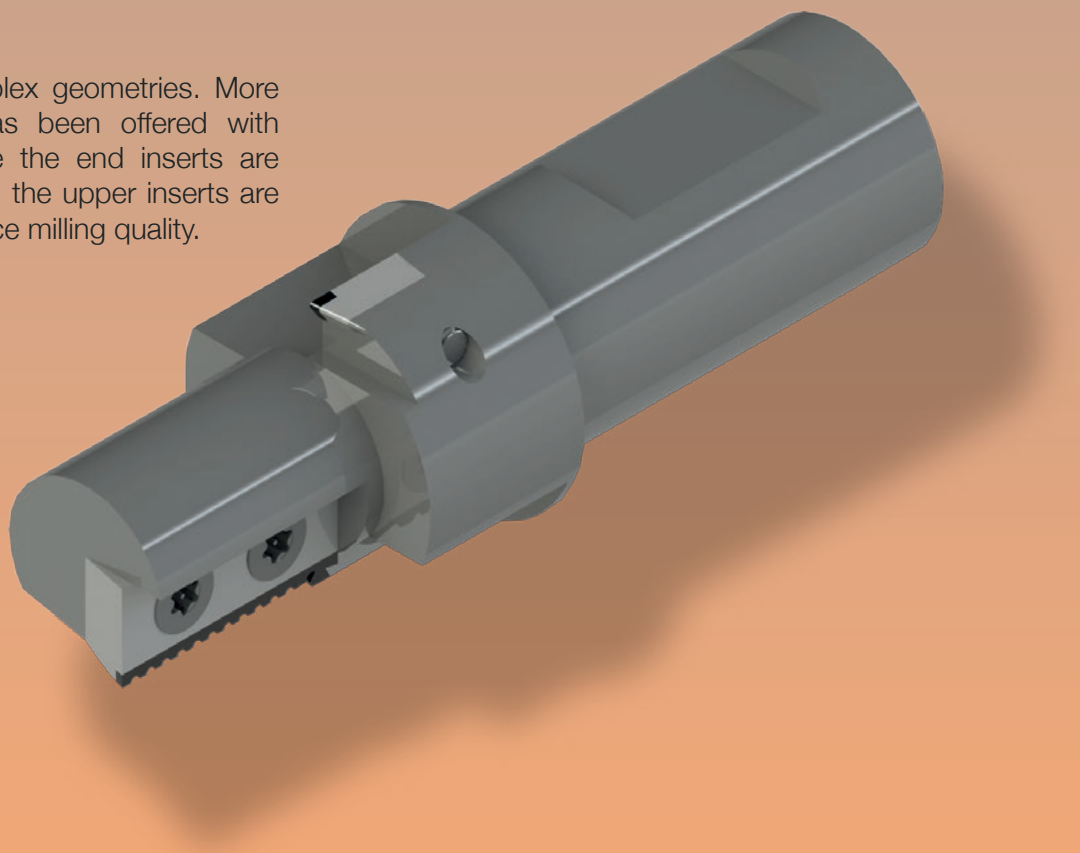
90° STEP MILLING/REAMING PCD

Special holemaking tool that provides a fast and final solution in the production of an automotive part with the L-shaped PCD insert in the end point and the secondary PCD insert in back.

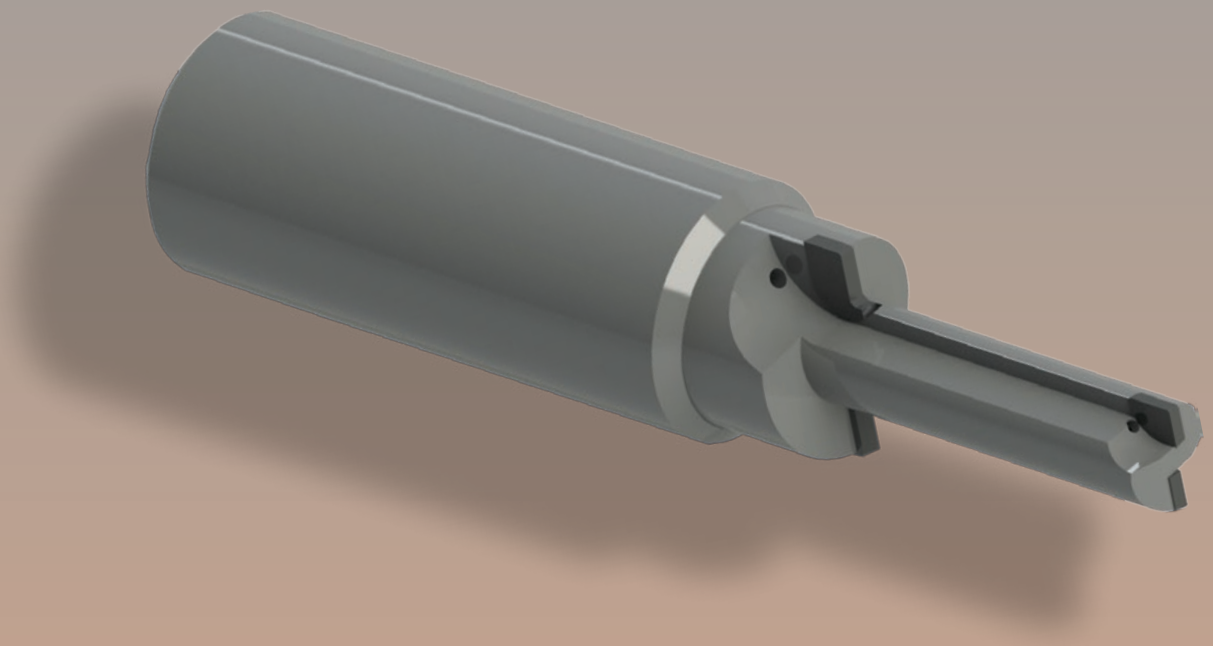


INDEXABLE INSERT SPECIAL PCD TOOL

During machining complex geometries. More economical solution has been offered with indexable inserts. While the end inserts are used for thread forming, the upper inserts are used for high level surface milling quality.

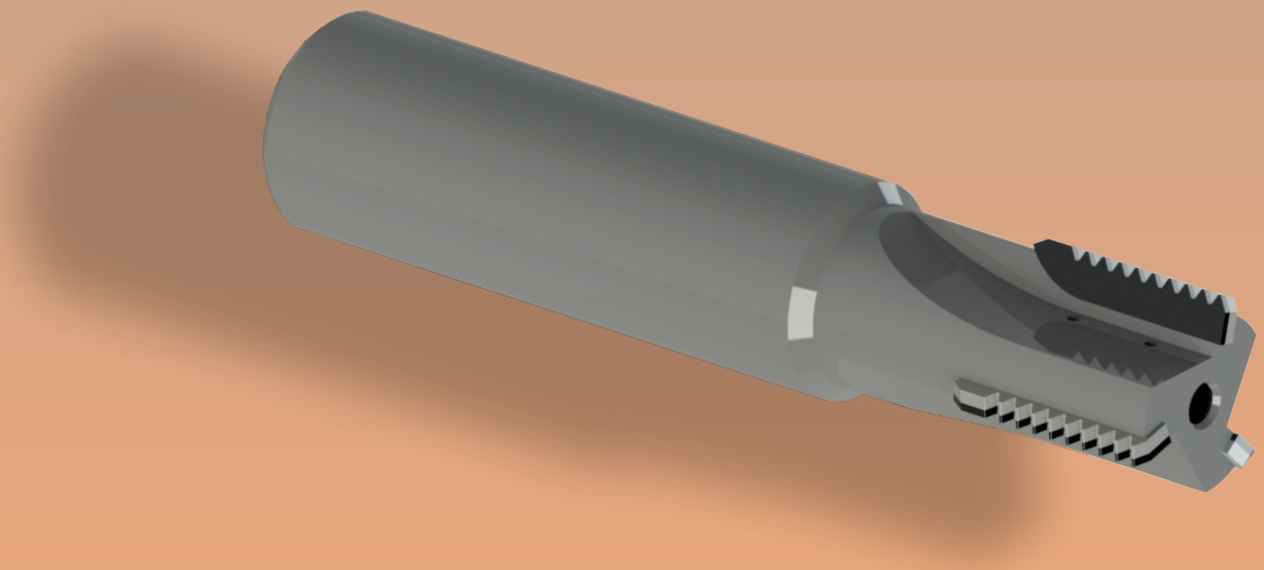


PCD STEP REAMER



Special two-step reaming tool designed to shorten the processing time.

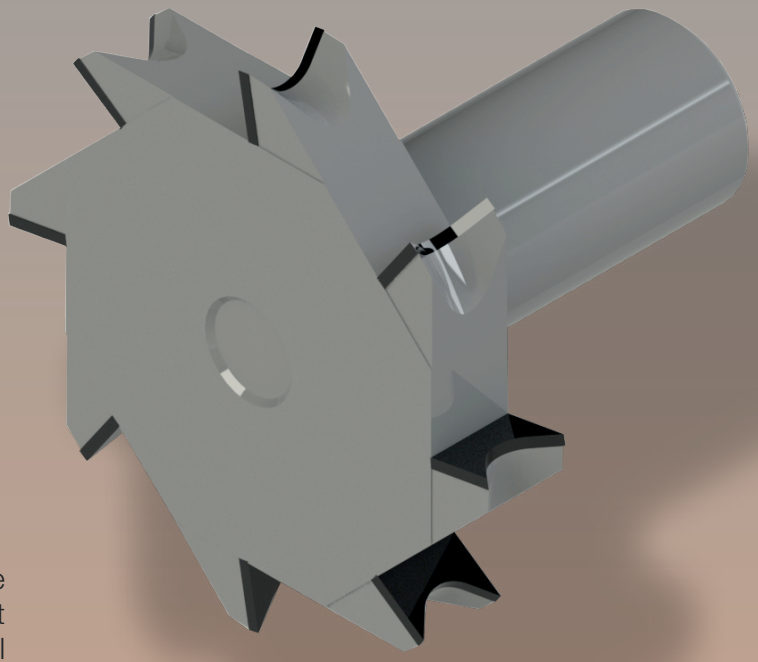
THREE EDGED PCD THREADING TOOL



Thanks to the design for the threading operation, which is made in accordance with the number of teeth required, the interpolation milling is completed in one round. In this way, the time of actual processing is reduced.

04

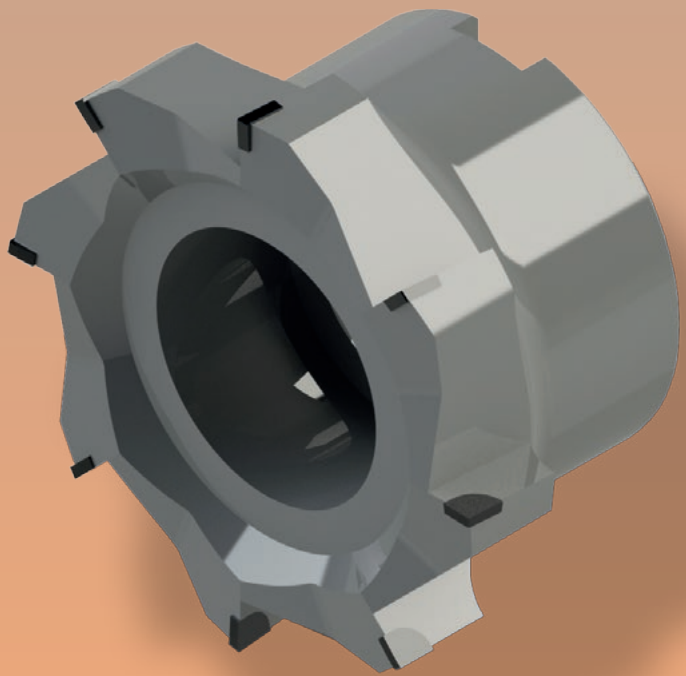
T-GROOVE FORMING TOOL



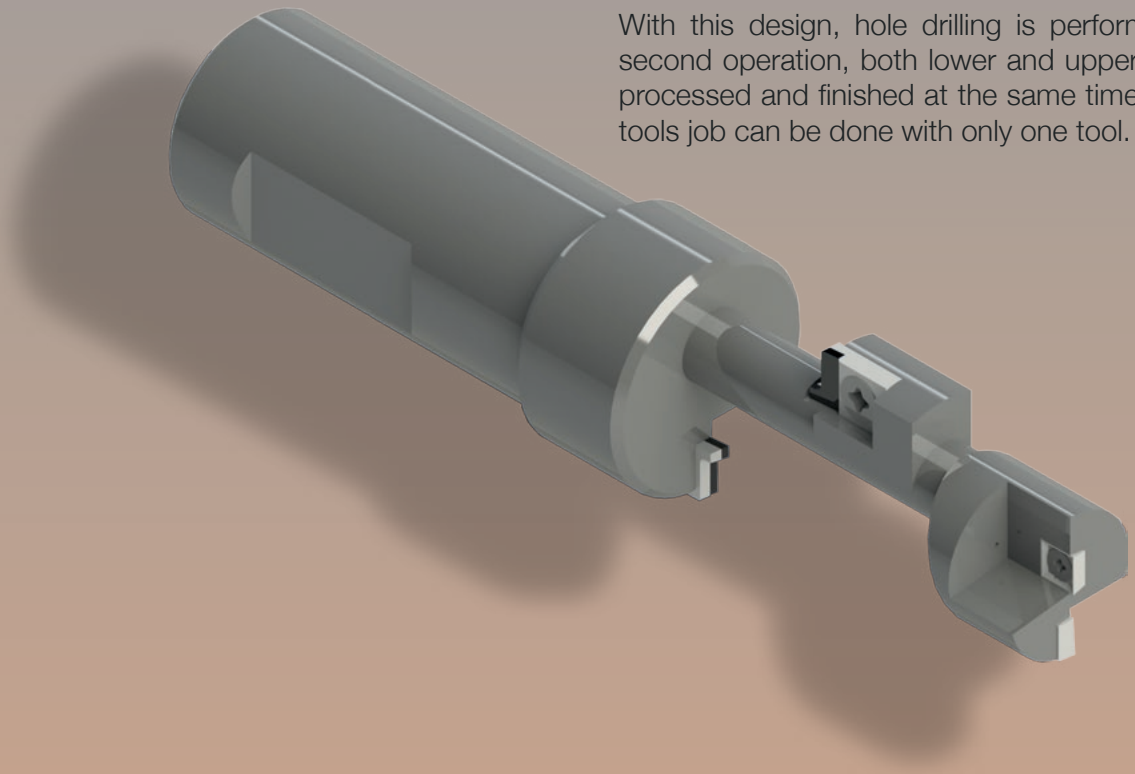
The specially developed cutting edge geometry as well as the arrangement of the cutting edges provide optimal accuracy and short cycle times while maintaining consistent quality.

PCD/CBN MILLING CUTTER

Eight edge PCD face milling tool specially designed to increase surface quality.



INDEXABLE DRILL & SURFACE FINISH TOOL



With this design, hole drilling is performed and as the second operation, both lower and upper surface can be processed and finished at the same time. Therefore, two tools job can be done with only one tool.

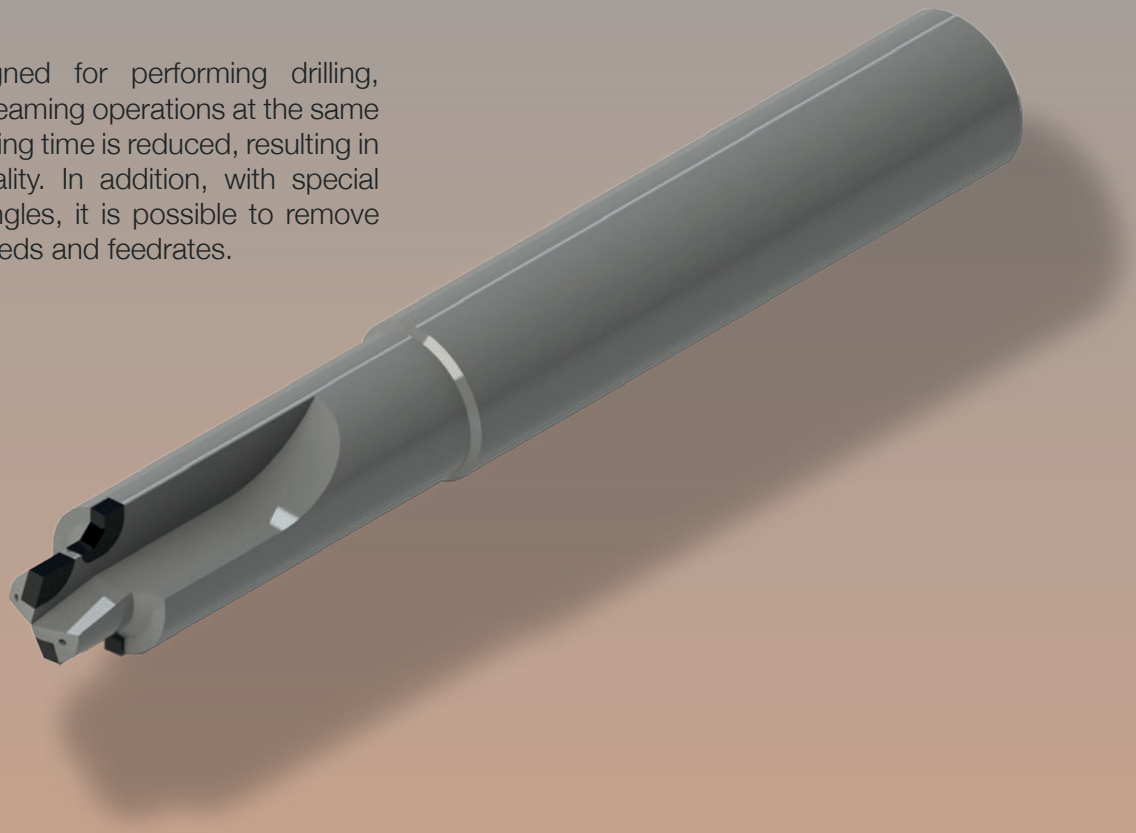
GROOVE FORMING PCD/CBN SAW BLADE

PCD/CBN welded circular saws can operate at much higher cutting speeds and feed rates in channel opening processes. In addition, due to the nature of the PCD/CBN material, tool life increases and manufacturing costs are reduced.

06

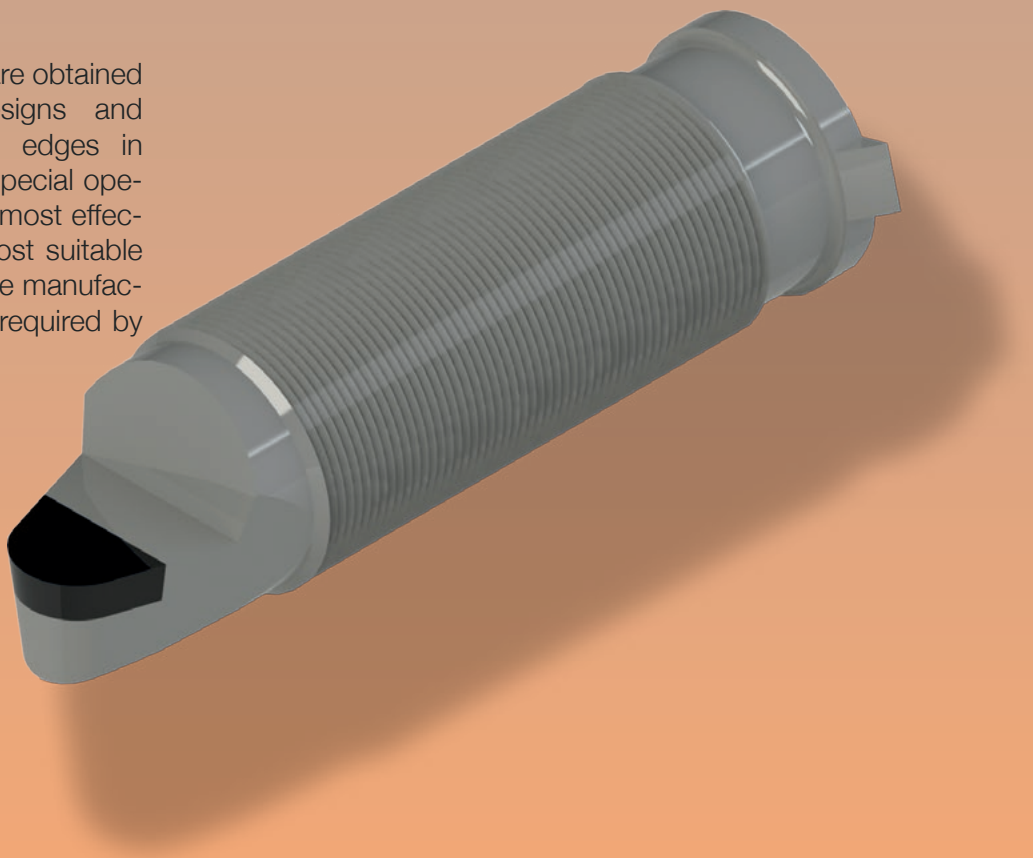
PCD DRILL AND CHAMFER TOOL

PCD tool designed for performing drilling, chamfering and reaming operations at the same time, and machining time is reduced, resulting in high surface quality. In addition, with special geometry and angles, it is possible to remove chips at high speeds and feedrates.

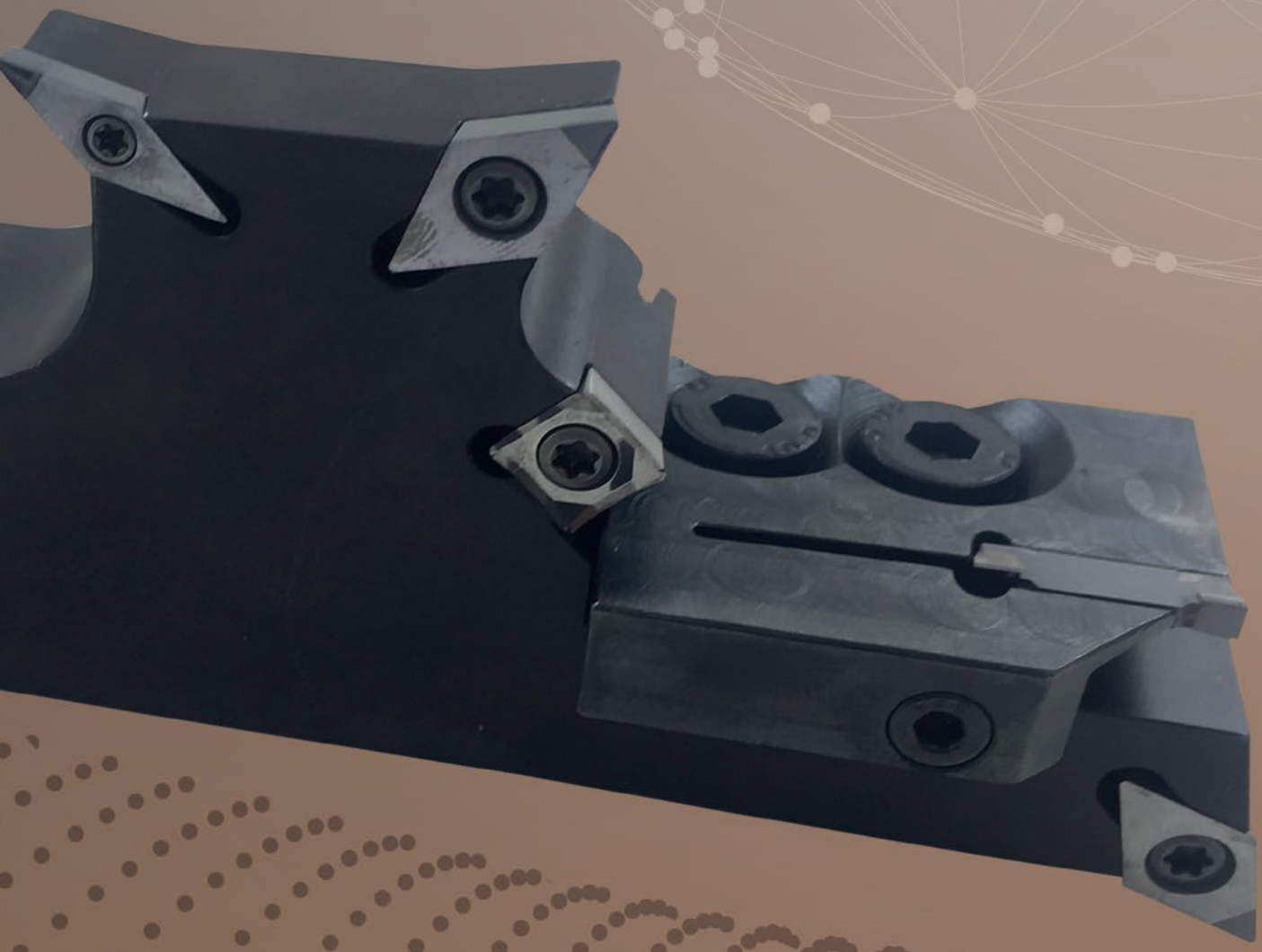


BODY & INSERT FOR SPECIAL MACHINERY

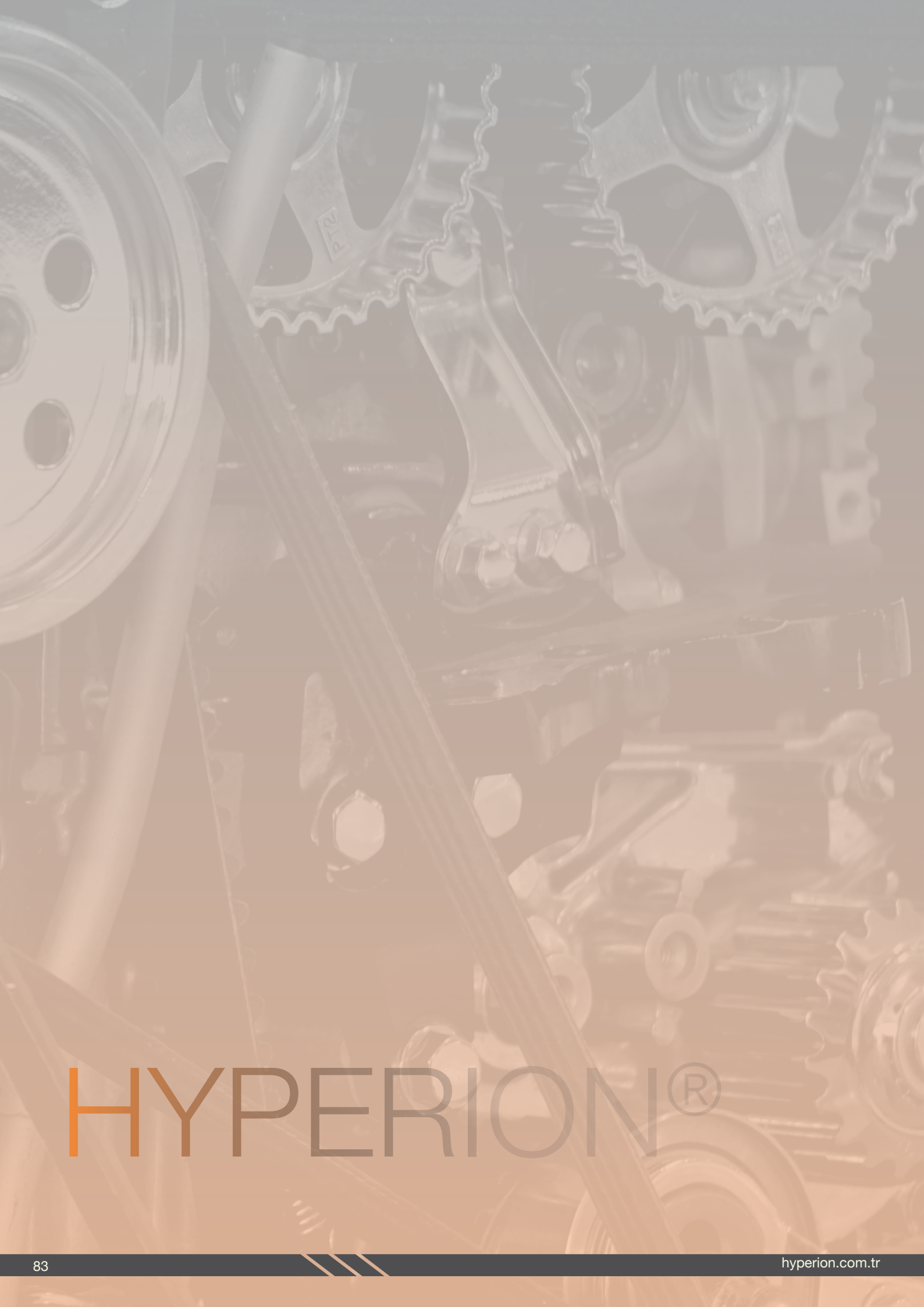
Optimum cutting values are obtained with correct body designs and appropriate tool cutting edges in machines, designed for special operations. We combine the most effective solutions with the most suitable design and deliver it to the manufacturer in the special tools required by the special machines.



HYPERION®



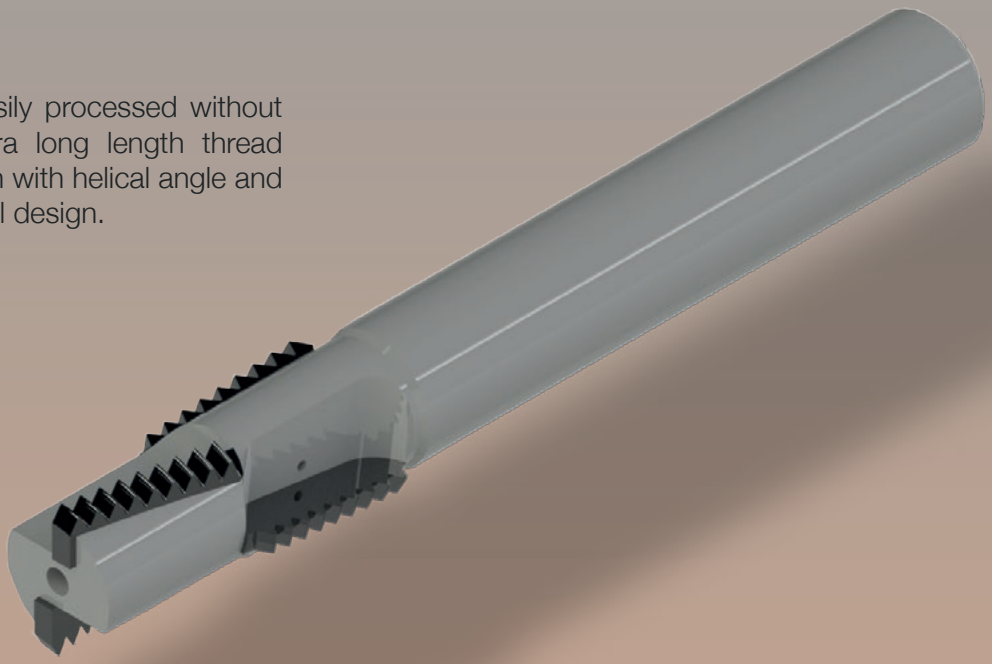
With special tools you will save time...


HYPERION®

01

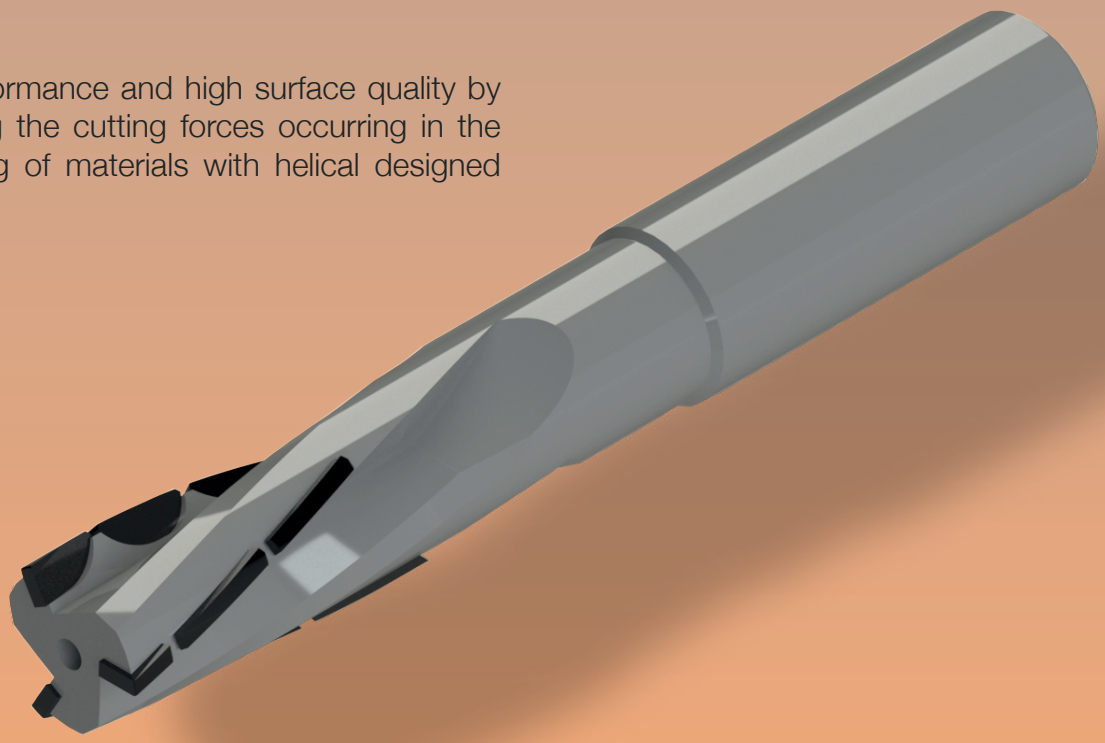
HELICAL THREAD MILLING TOOL

Parts can be easily processed without vibration on extra long length thread milling application with helical angle and multiple edge tool design.

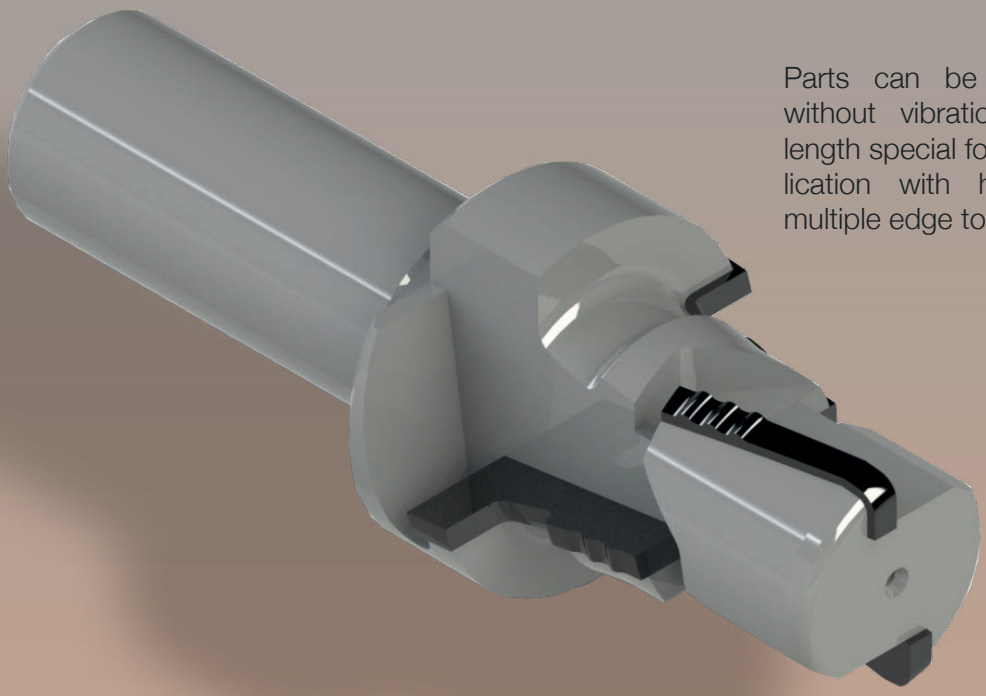


HELICAL PCD/CBN ENDMILL

High performance and high surface quality by minimizing the cutting forces occurring in the processing of materials with helical designed tools.

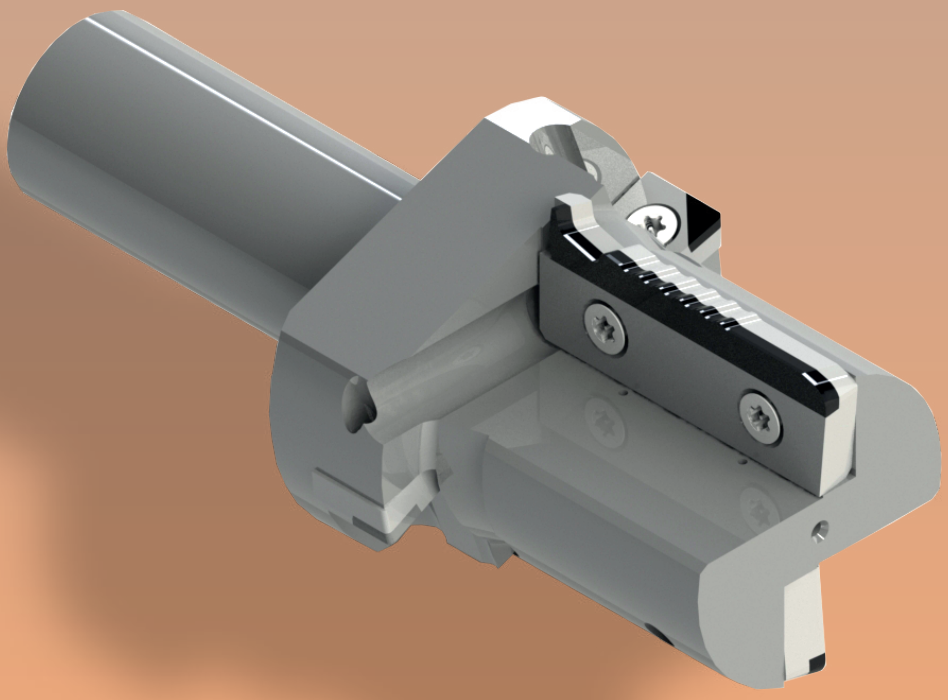


SPECIAL FORM VALVE TOOL



Parts can be easily processed without vibration on extra long length special form machining application with helical angle and multiple edge tool design.

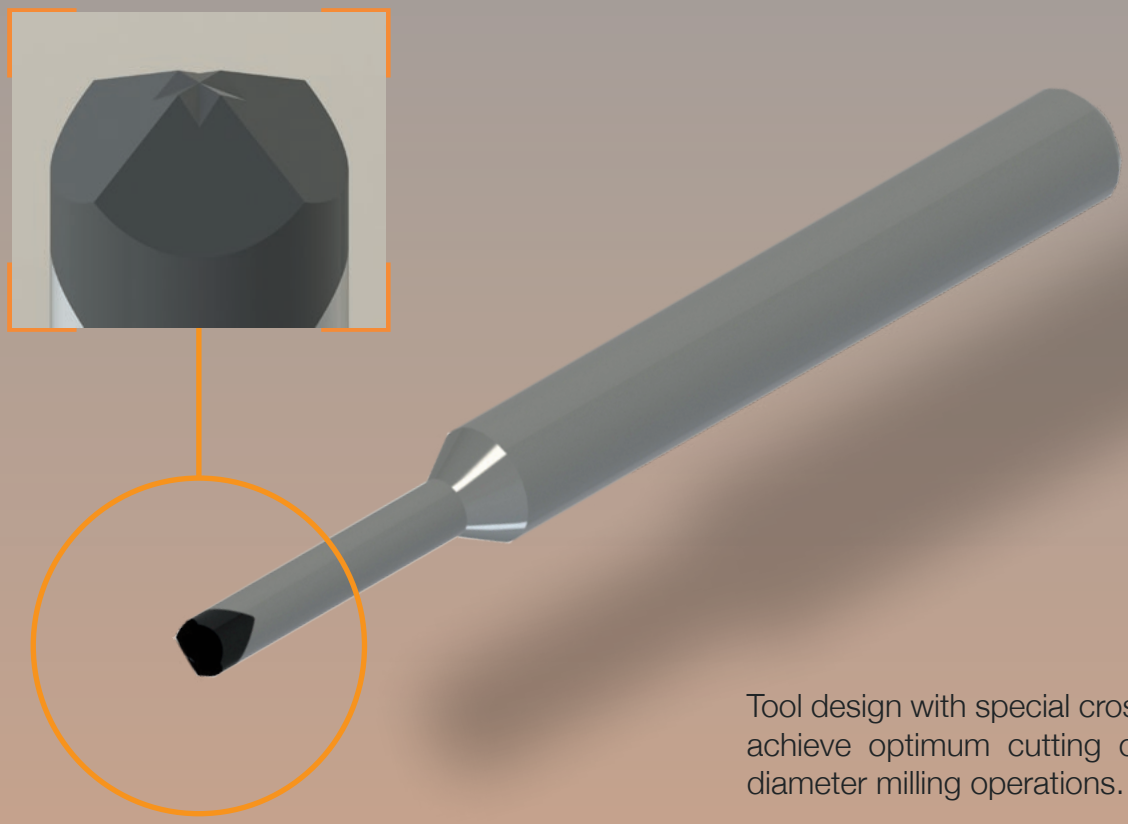
INDEXABLE SPECIAL VALVE FORM TOOL



Costs are reduced with indexable tool design.

03

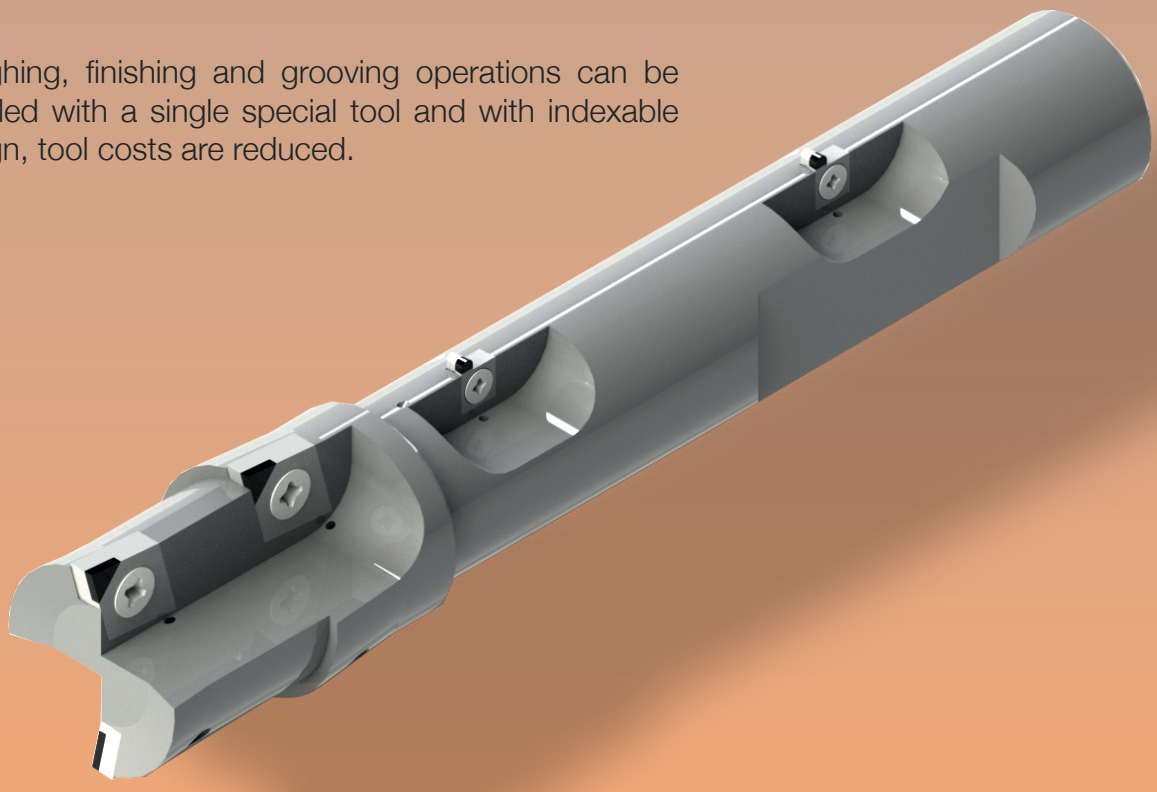
STONE CARVING CBN TOOL



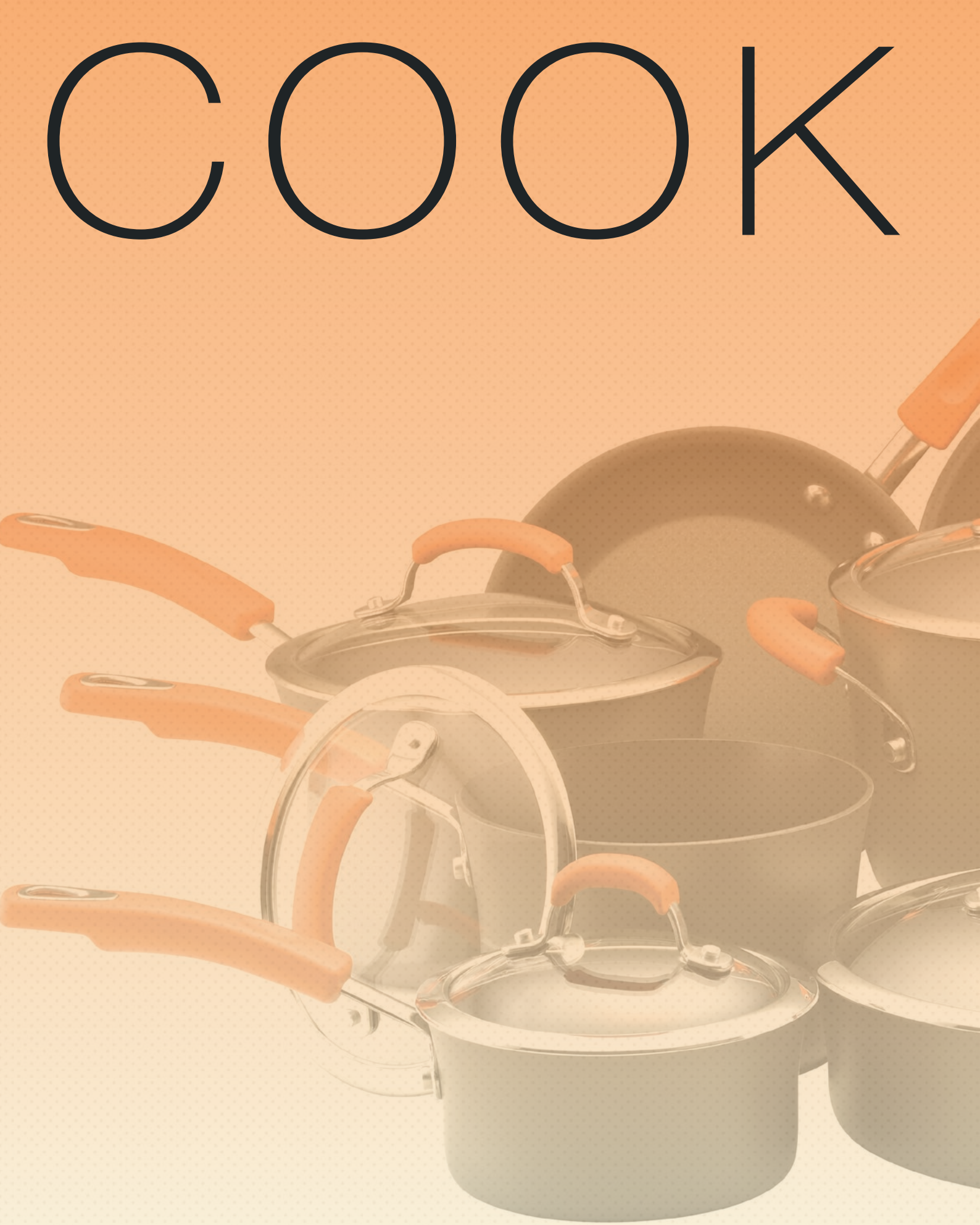
Tool design with special cross-edge grinding to achieve optimum cutting conditions in small diameter milling operations.

INDEXABLE SPECIAL TOOL

Roughing, finishing and grooving operations can be handled with a single special tool and with indexable design, tool costs are reduced.

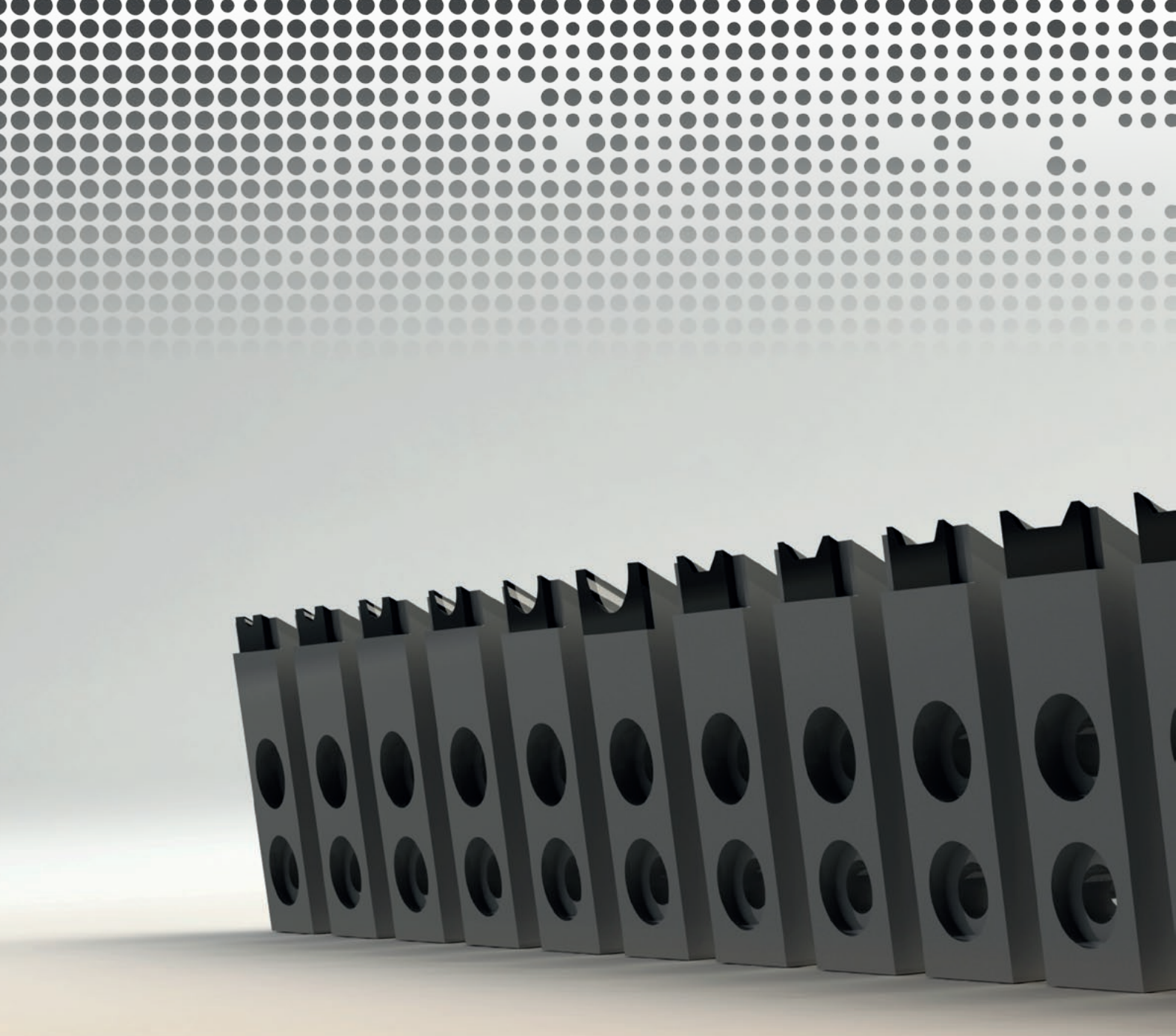


COOK

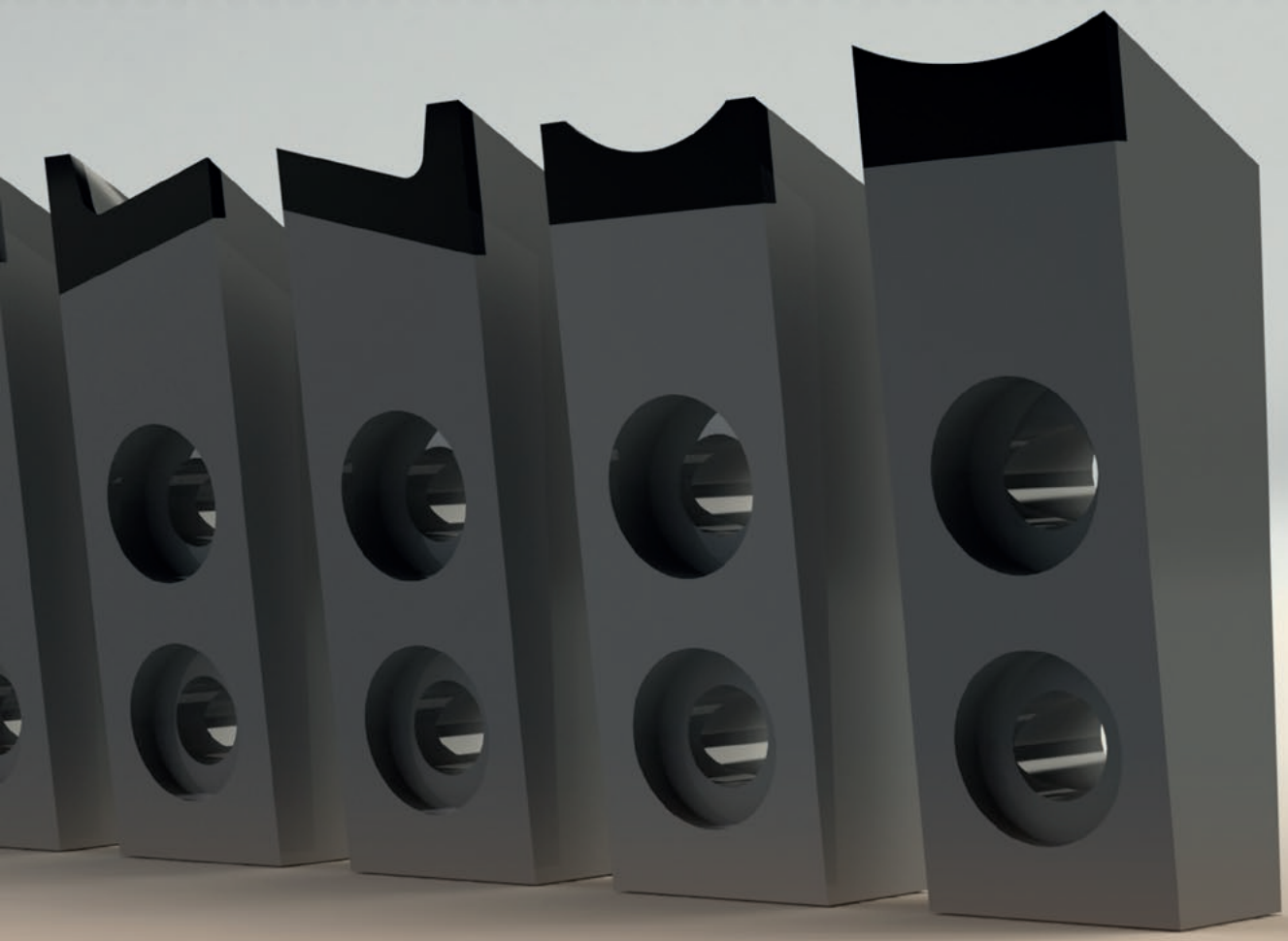


Combination of several operating steps or special holes where no chips are allowed to enter inside the work-piece: For any machining task Hyperion has an individual solution. Complex tools from Hyperion combine multiple machining steps into one tooling solution and thus save tools and tool change time.

WARE

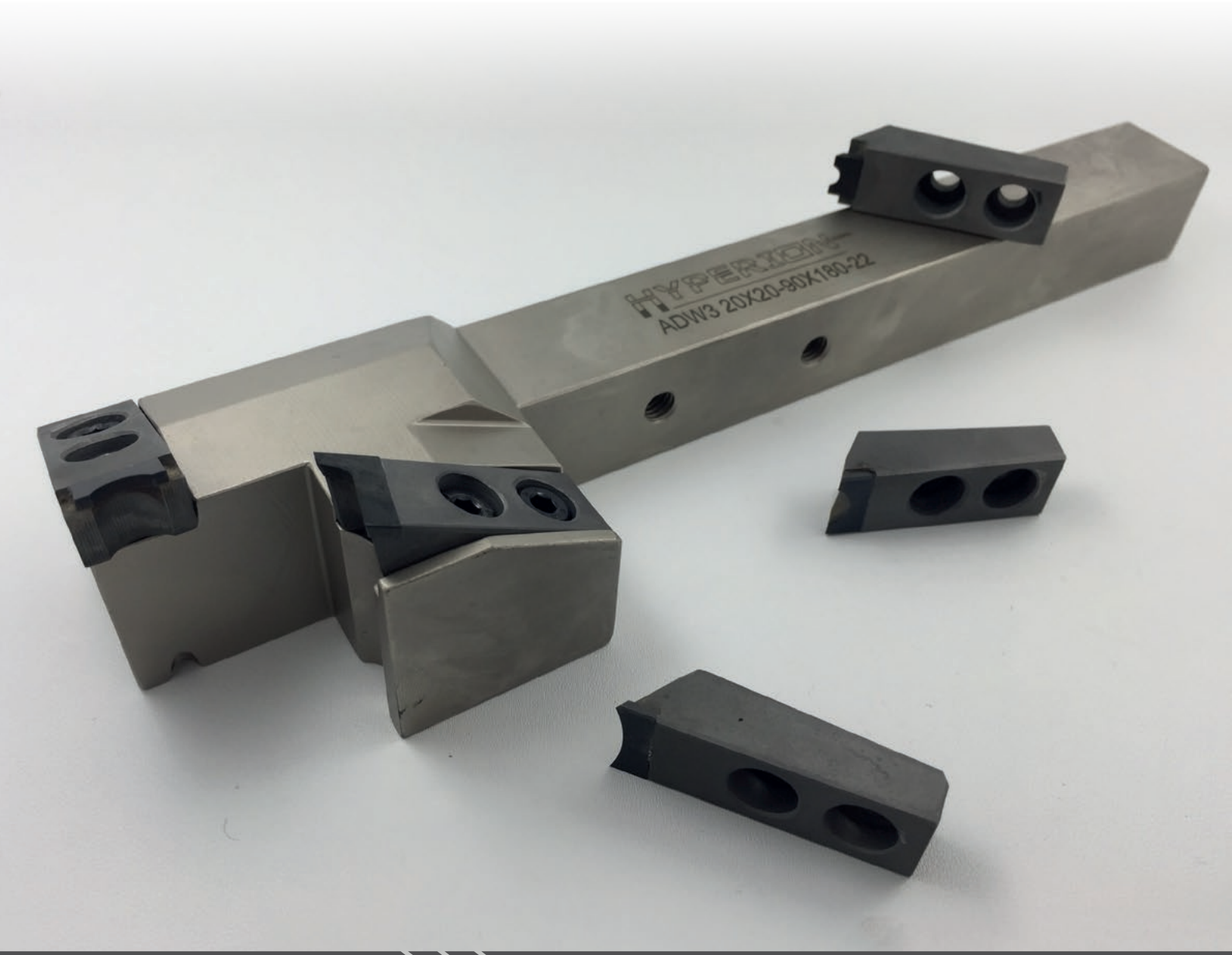


You can use Hyperion cookware tool inserts safely and for a long time in all horizontal or vertical cookware processing operations. With Hyperion PCD special tools, you can shorten both operation times and improve surface quality. Depending on your request for any form or measurement, tools can be produced in very low quantities to ensure reducing your operating expenses.



Hyperion High Performance Precision tools have been used extensively for over a decade in over 50 production facilities from Asia to Europe.

SPECIAL COOKWARE TOOLS



15 Degree
Example: ADW2 R7.00-1210 HPCD - 15°

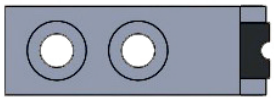
First Choice for Interrupted Cutting Conditions
Higher Tool Life
Higher Durability For Balanced Cutting Conditions

30 Degree
Example: ADW3 R7.00-1210 HPCD - 30°

Easy Cutting Operation
Better Surface Quality
Easy Chip Removing
First Choice For Thin Workpiece Edges

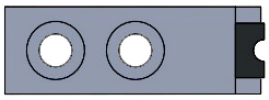
SPHERICAL EDGE MACHINING

3D Picture



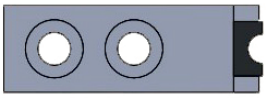
ADW2 R1.20-1210 HPCD - 15°
ADW3 R1.20-1210 HPCD - 30°

3D Picture



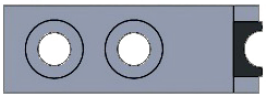
ADW2 R1.50-1210 HPCD - 15°
ADW3 R1.50-1210 HPCD - 30°

3D Picture



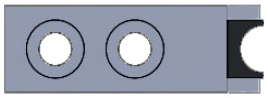
ADW2 R2.00-1210 HPCD - 15°
ADW3 R2.00-1210 HPCD - 30°

3D Picture



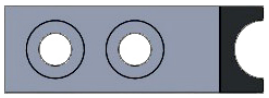
ADW2 R2.50-1210 HPCD - 15°
ADW3 R2.50-1210 HPCD - 30°

3D Picture



ADW2 R3.20-1210 HPCD - 15°
ADW3 R3.20-1210 HPCD - 30°

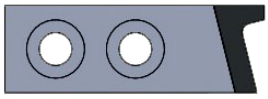
3D Picture



ADW2 R4.00-1210 HPCD - 15°
ADW3 R4.00-1210 HPCD - 30°

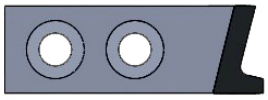
THICK PARTS ANGULAR MACHINING

3D Picture



ADL2 A14-1210 HPCD - 15°
ADL3 A14-1210 HPCD - 30°

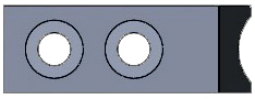
3D Picture



ADR2 A14-1210 HPCD - 15°
ADR3 A14-1210 HPCD - 30°

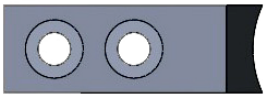
ELLIPTICAL MACHINING

3D Picture



ADW2 R7.00-1210 HPCD - 15°
ADW3 R7.00-1210 HPCD - 30°

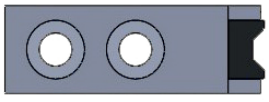
3D Picture



ADW2 R15.00-1210 HPCD - 15°
ADW3 R15.00-1210 HPCD - 30°

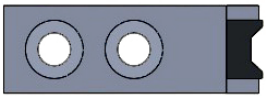
PLAIN CHAMFERED MACHINING

3D Picture



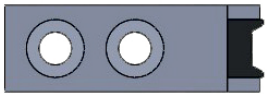
ADW2 L2.60-1210 HPCD - 15°
ADW3 L2.60-1210 HPCD - 30°

3D Picture



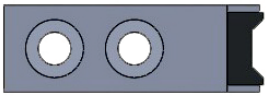
ADW2 L3.20-1210 HPCD - 15°
ADW3 L3.20-1210 HPCD - 30°

3D Picture



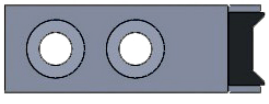
ADW2 L4.00-1210 HPCD - 15°
ADW3 L4.00-1210 HPCD - 30°

3D Picture



ADW2 L5.00-1210 HPCD - 15°
ADW3 L5.00-1210 HPCD - 30°

3D Picture



ADW2 L6.00-1210 HPCD - 15°
ADW3 L6.00-1210 HPCD - 30°

HYPERION

HIGH PERFORMANCE PRECISION TOOLS

Hyperion High Performance Precision Tools

Hyperion İşleme Teknolojileri San. ve Tic. Ltd. Şti.

Kosuyolu Mh. Ali Nazima Sk. No: 26 34718 Kadikoy / Istanbul

Tel: +90.216.909.72.64
+90.535.216.99.57
+90.535.622.09.69

Internet: www.hyperion.com.tr
E-mail: sales@hyperion.com.tr