

Technical Information **KORLOY**

AUTOMOTIVE INDUSTRY



Automotive Industry





Part 1

Engine Parts of Automobile

Part 2

Other Automotive Parts

AUTOMOTIVE INDUSTRY

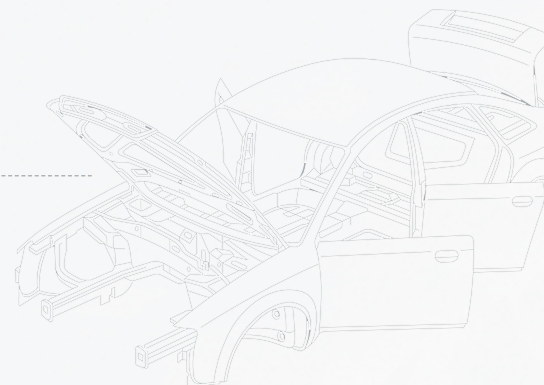
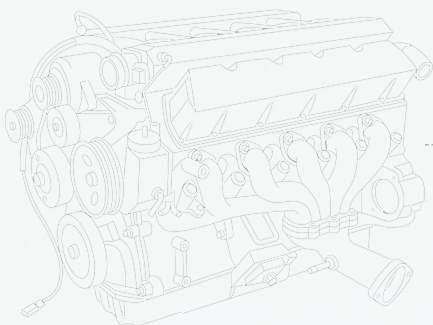
Contents

AUTOMOTIVE INDUSTRY

Part 1

Engine Parts Of Automobile

01	Cylinder Block(Upper Part) - Cast iron	008
02	Cylinder Block(Lower Part) - Cast iron	010
03	Cylinder Block - Al alloy	012
04	Cylinder Head - Al alloy	014
05	Crank Shaft	016
06	Cam Shaft	018
07	Connecting Rod	020
08	Bearing Cap	022
09	Crank Case	024
10	Flywheel	026
11	Flywheel	028
12	Pulley	030

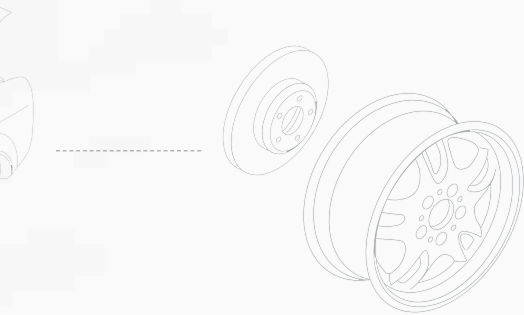


AUTOMOTIVE INDUSTRY

Part 2

Other Automotive Parts

01	Transmission Housing	036
02	Main Shaft	038
03	Valve Body	040
04	Knuckle	042
05	CV Joint	044
06	Caliper Bracket	046
07	Brake Disk	048
08	Wheel	050
09	ABS Housing	052
10	Manifold	054





AUTOMOTIVE INDUSTRY

Part 1

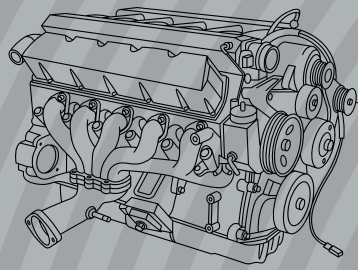
Part 1

Engine Parts of Automobile



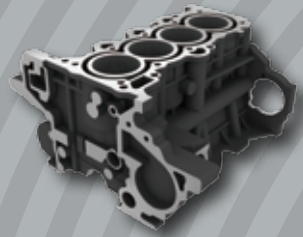
01	Cylinder Block(Upper Part) - Cast iron	008
02	Cylinder Block(Lower Part) - Cast iron	010
03	Cylinder Block - Al alloy	012
04	Cylinder Head - Al alloy	014
05	Crank Shaft	016
06	Cam Shaft	018
07	Connecting Rod	020
08	Bearing Cap	022
09	Crank Case	024
10	Flywheel	026
11	Flywheel	028
12	Pulley	030

Part 1 *Engine Parts Of Automobile*



Cylinder Block

Cast iron



Cylinder Block

Al alloy



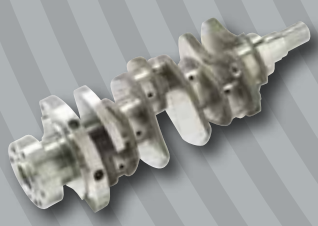
Cylinder Head

Al alloy



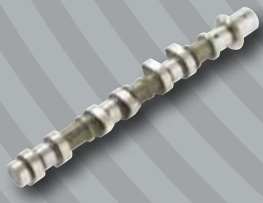
Crank shaft

Cast iron, Alloy steels



Cam Shaft

Cast iron, Alloy steels





Connecting Rod

Ti alloy, Carbon steels



Bearing Cap

Heat treated Carbon steels



Crank Case

Al alloy + Cast iron



FlyWheel

Al alloy



FlyWheel

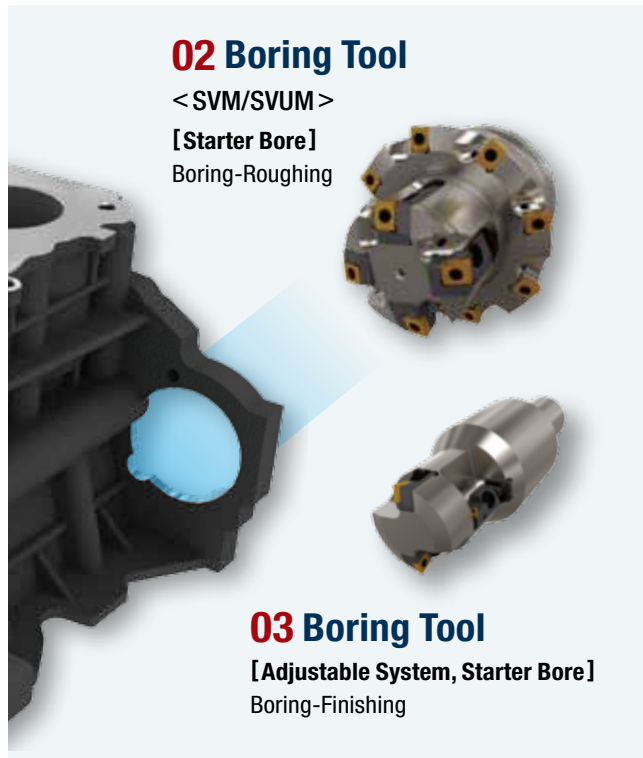
Cast iron



Pulley

Low carbon steels






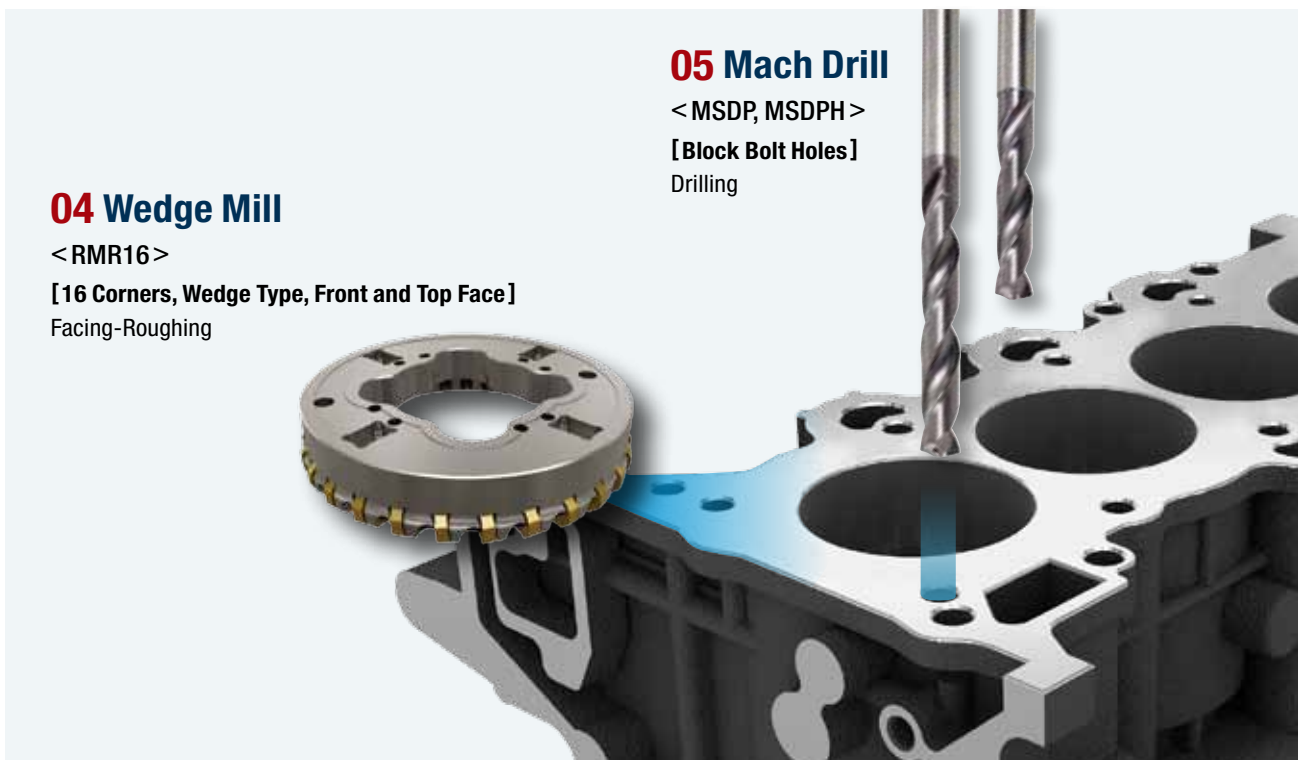
Automotive Industry

01

Cylinder Block
(Upper Part - Cast iron)



A 3D cutaway illustration of a cylinder block, showing the internal bores and cooling passages. The block is dark grey and has a blue highlight on the top surface.





06 Step Burnishing Reamer

[Mechanic Holes]

Reaming



07 Special Side Cutter

[Start Motor Seat]

Facing



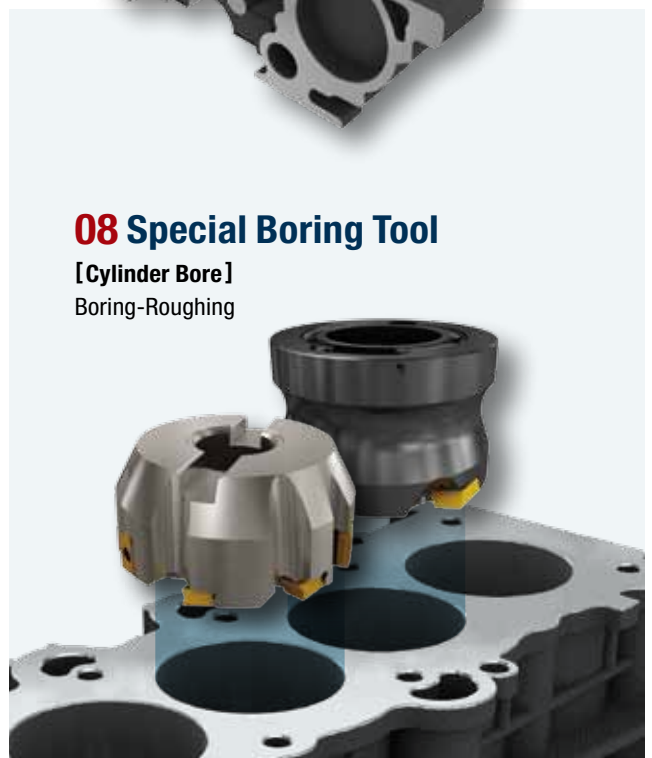
**AUTOMOTIVE
INDUSTRY**



09 Rich Mill

[RM4, RM3]

Facing



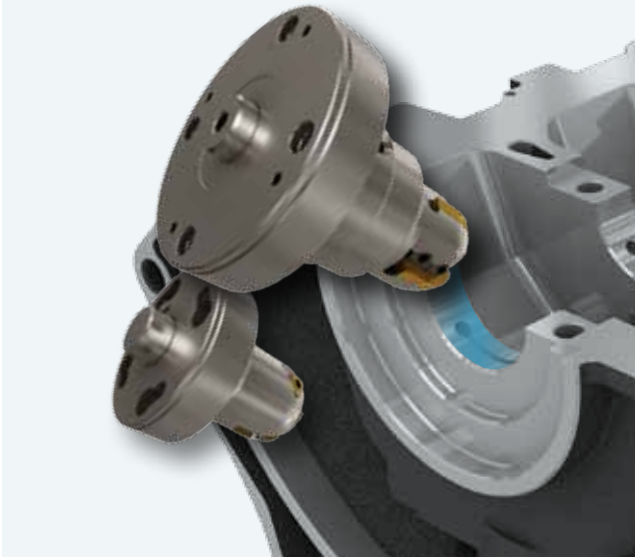
08 Special Boring Tool

[Cylinder Bore]

Boring-Roughing

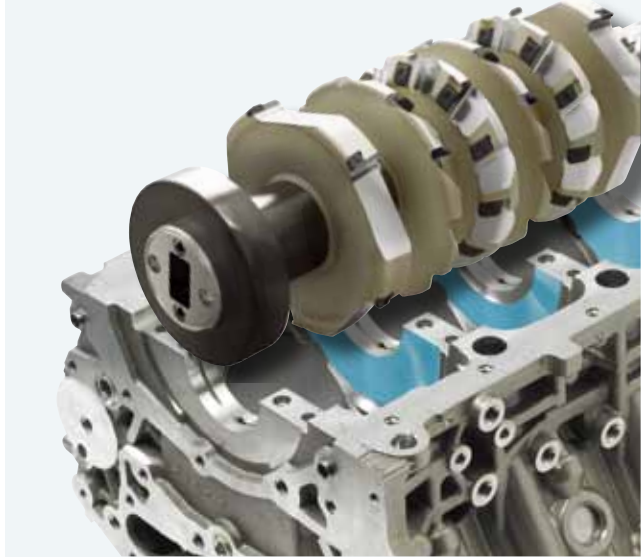
01 Ball Cutter

[Crank Half Bore]
Boring-Roughing



02 Gang Cutter

[Cheek Face]
Facing



Automotive Industry

02

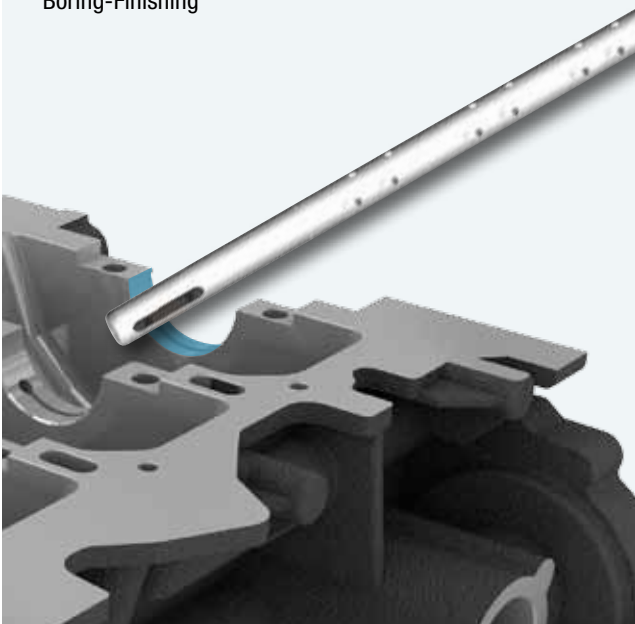
Cylinder Block

(Lower Part - Cast iron)



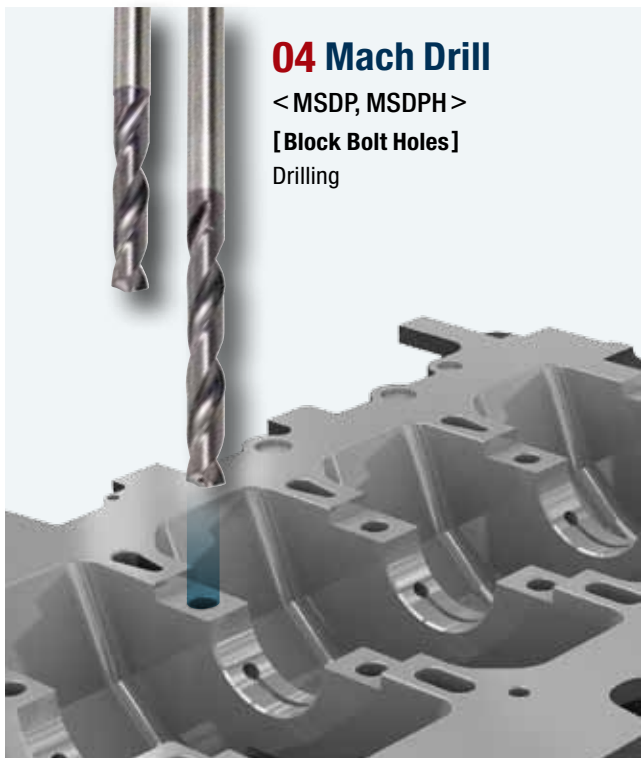
03 Line Boring Bar

[Crank Bore]
Boring-Finishing



04 Mach Drill

<MSDP, MSDPH>
[Block Bolt Holes]
Drilling





05 Shave Mill

< SVM/SVUM >

[Adjustable System, Front and Top Face]

Facing-Finishing

06 Rich Mill

< RM4, RM3 >

[Shouldering, Boss End]

Facing

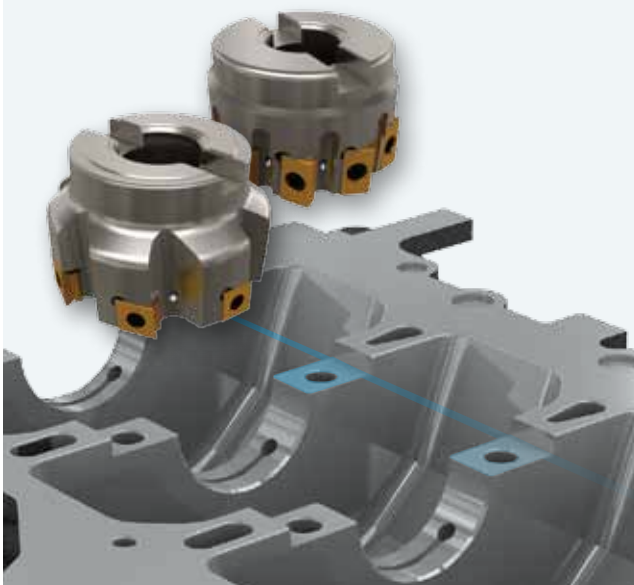


**AUTOMOTIVE
INDUSTRY**

07 Tangen-pro Cutter

[Bearing Cap Seat]

Facing-Roughing

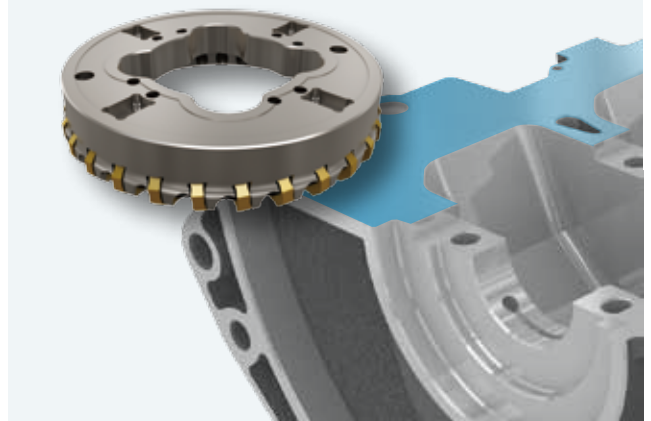


08 Wedge Mill

< RMR16 >

[16 Corners, Wedge Shape]

Facing-Roughing





01 Aero Mill-Mini, Pro-X Mill Modular Type

< MAPD/PAXM >

[Side Face]

Facing-Roughing, Finishing



02 Special Boring Cutter

[Cylinder Bore]

Boring-Roughing



03 Aero Mill, Aero Mill Plus

< APD/APD-P >

[Block Top and Bottom Face]

Facing-Roughing, Finishing



04 Special Side Cutter

[Start Motor Seat]

Boring-Roughing, Finishing

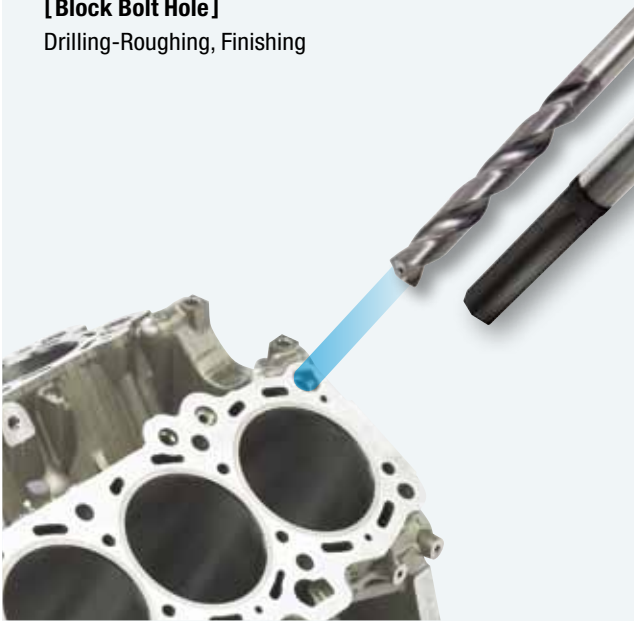


05 Mach Drill / Burnishing Drill

< MSDPH-N/ND Type >

[Block Bolt Hole]

Drilling-Roughing, Finishing

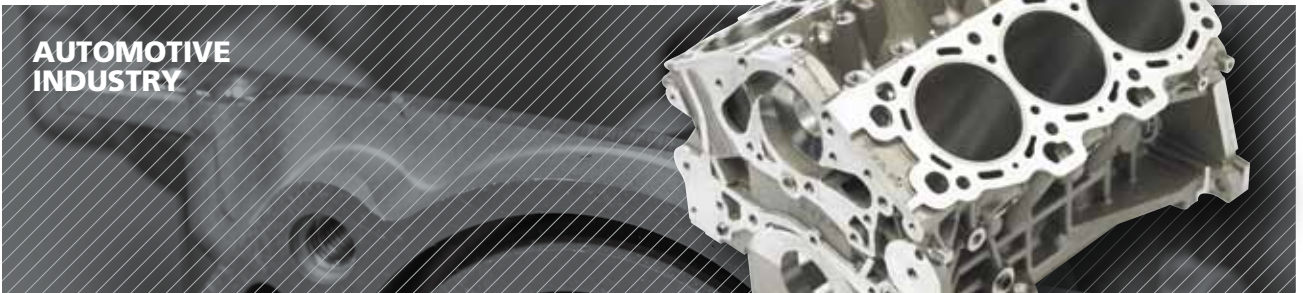


06 Aero Mill, Aero Mill Plus

< APD/APD-P >

[Block Front and Rear Face]

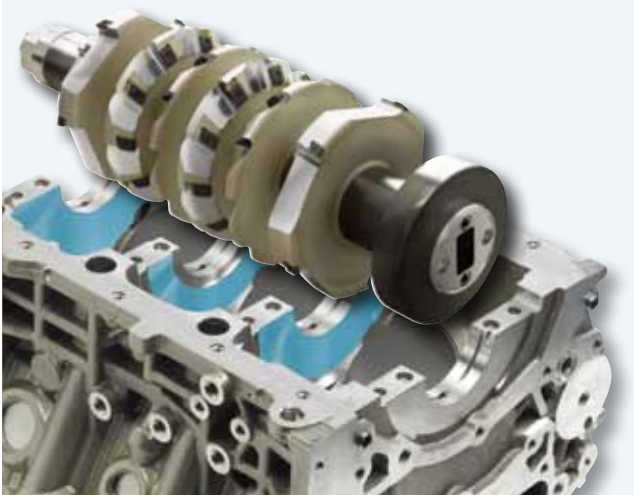
Facing-Roughing, Finishing



07 Gang Cutter

[Cheek Face]

Special Machining-Finishing



08 Pro-X Mill

< Pro-X Mill >

[Block Hole Seat]

Facing, Shouldering-Roughing, Finishing



01 Aero Mill, Aero Mill Plus

<APD/APD-P>

[Head Top and Bottom Face]

Facing-Roughing, Finishing



02 Line Boring Bar / High Speed Reamer

[Cam Shaft Bearing Seat]

Line Boring Bar-Boring

Automotive Industry

04

Cylinder Head

(Al alloy)



03 Straight Reamer / Step Burnishing Reamer

[Head Gallery Hole and Guide]

Reaming-Finishing

04 Valve Seat Guide Tool

[Valve Seat Face]

Drilling, boring-Roughing, Finishing



05 Micro Boring Bar

<FBH>

[Spark Plug Holes]

High Precision Boring





06 Mach Drill / Burnishing Drill
 <MSDPH-N/ND Type>
[Head Holes]
 Drilling-Centering, Drilling
[Head Bolt Hole]
 Burnishing Drill-Roughing, Finishing



07 Aero Mill-Mini

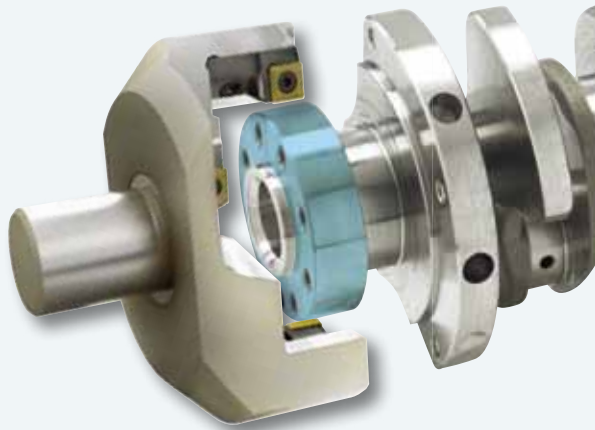
<MAPD>
[Bore Sides]
 Facing-Roughing, Finishing



**AUTOMOTIVE
INDUSTRY**

08 Laser Mill
 <LBH, LBS>
[Inside Diameter]
 High Precision Finishing

09 Aero Mill, Aero Mill Plus
 <APD/APD-P>
[Rear Face]
 Facing-Roughing, Finishing



01 Hollow Mill

[Crank Shaft Flange End]

Facing and Outside Diameter(Multi Machining)

02 Counter Weight Miller

[Counter Weight]

Counter Weight O.D. Machining



Automotive Industry

05

Crank shaft

(Cast iron, Alloy steels)

03 Rich Mill

<RMT8Q>

[End Facing]

Facing-Roughing



04 TM Solid / Mach Step Drill

<MSDS, MSDHS>

[Flange End Holes]

· Drilling-Step Machining / Threading



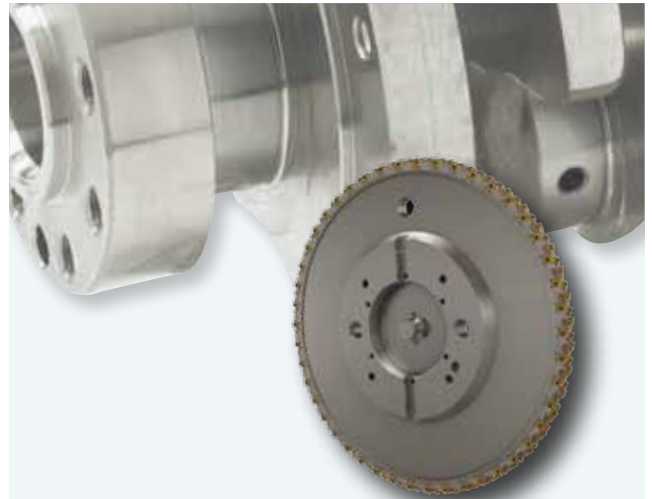
05 Turn Broach

[Journal]

Turning-Roughing, Finishing



06 Rich Mill
< RM4, RM3 shank Type >
[Crank Arm Sides]
Facing



08 External Miller
[Pin, Journal]
O.D. Milling-Roughing, Finishing



07 Mach Drill
< MLD, MLDH >
[Pin, Journal Oil Holes]
Drilling-Deep Hole Making



09 Pin Miller / Journal Miller
[Pin, Journal]
O.D. Milling-Roughing, Finishing



10 Double Clamp
< DCLNR/L >
[Boss End]
O.D. Turning-Roughing, Finishing



01 Rich Mill

<RMT8Q>

[End Facing]

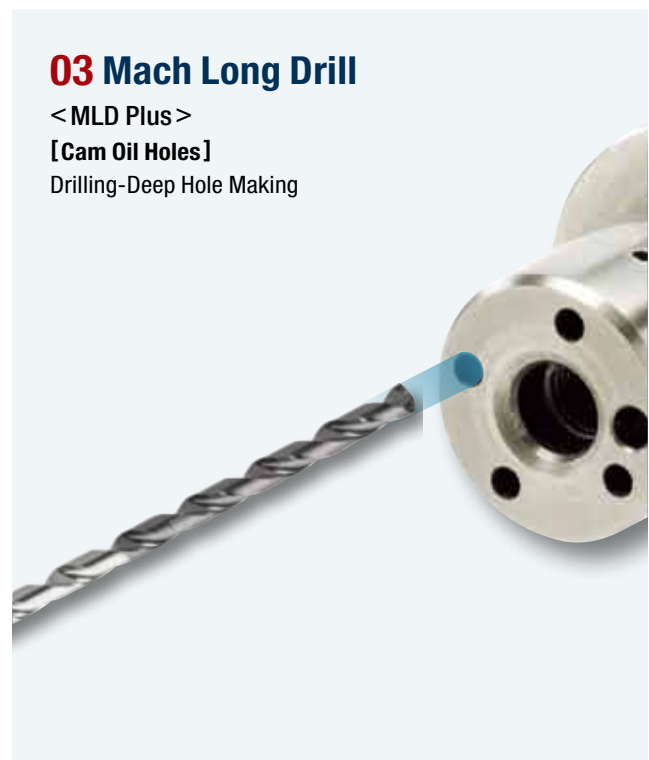
Facing-Roughing

Automotive Industry

06

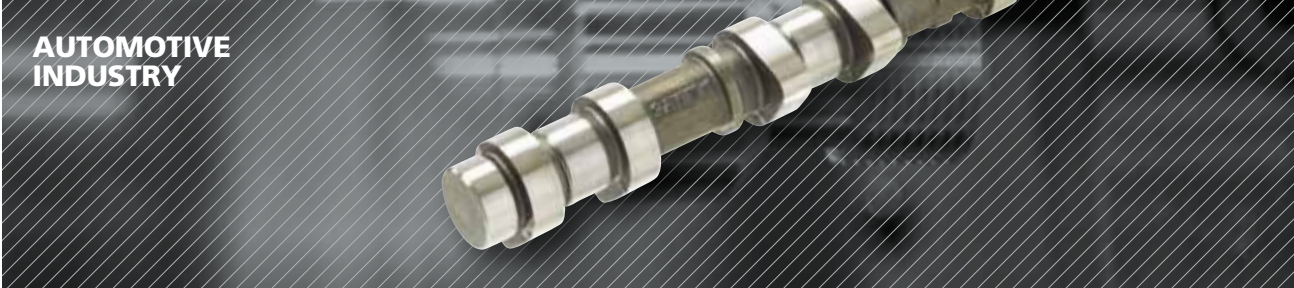
Cam Shaft

(Cast iron, Alloy steels)

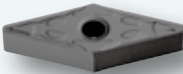




04 Special Cam(Groove) Miller
[Cam and Mec Groove]
Special Machining-Slotting (Edges and Chamfers)



05 Double Clamp Holder
<DVJNR/L>
[Cam Journals]
Turning-Grooving Part



< VNMG >



01 Indexable Step Drill

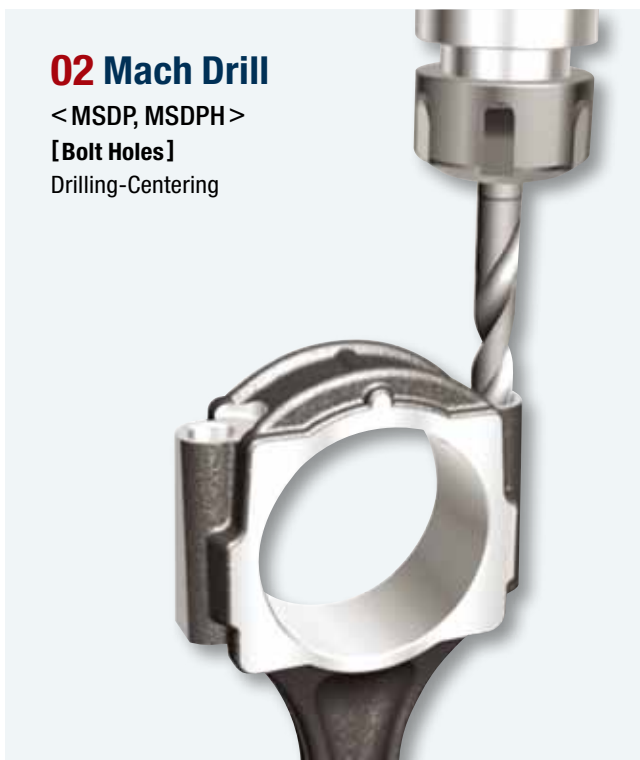
[Small Ends, Inside Diameter]
Drilling, Facing-Roughing, Finishing

Automotive Industry

07

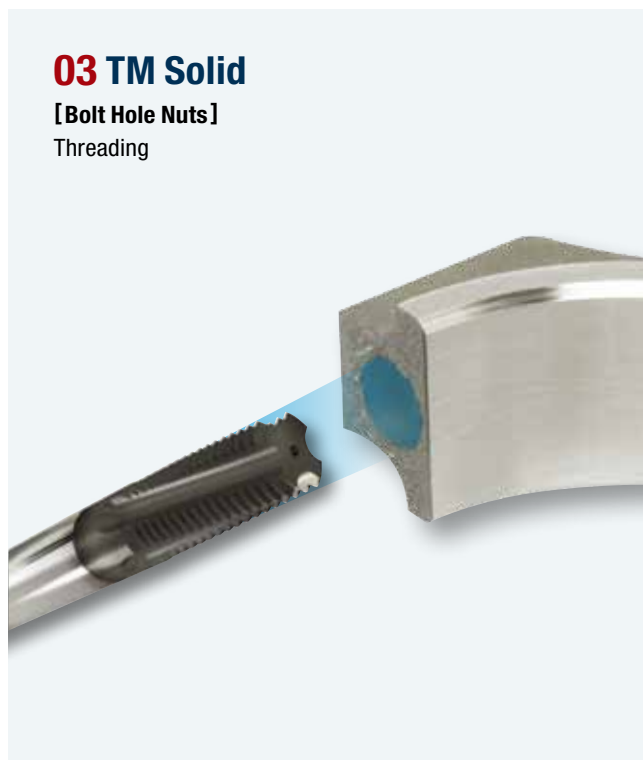
Connecting Rod

(Ti alloy, Carbon steels)



02 Mach Drill

<MSDP, MSDPH>
[Bolt Holes]
Drilling-Centering



03 TM Solid

[Bolt Hole Nuts]
Threading

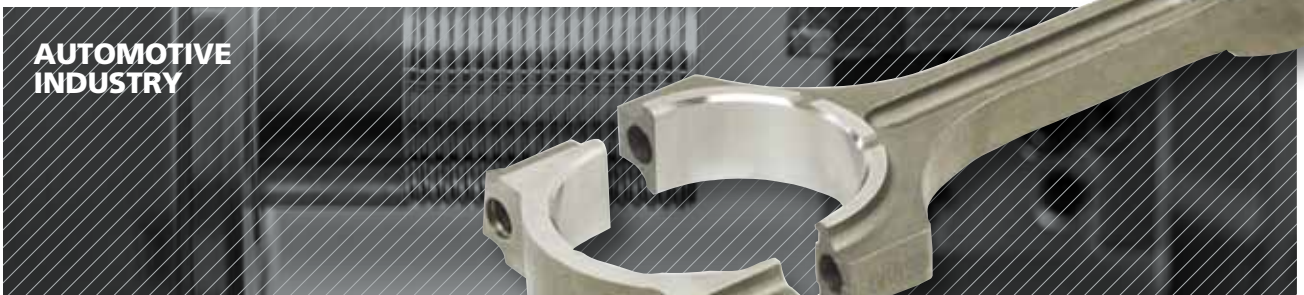


04 Rich Mill

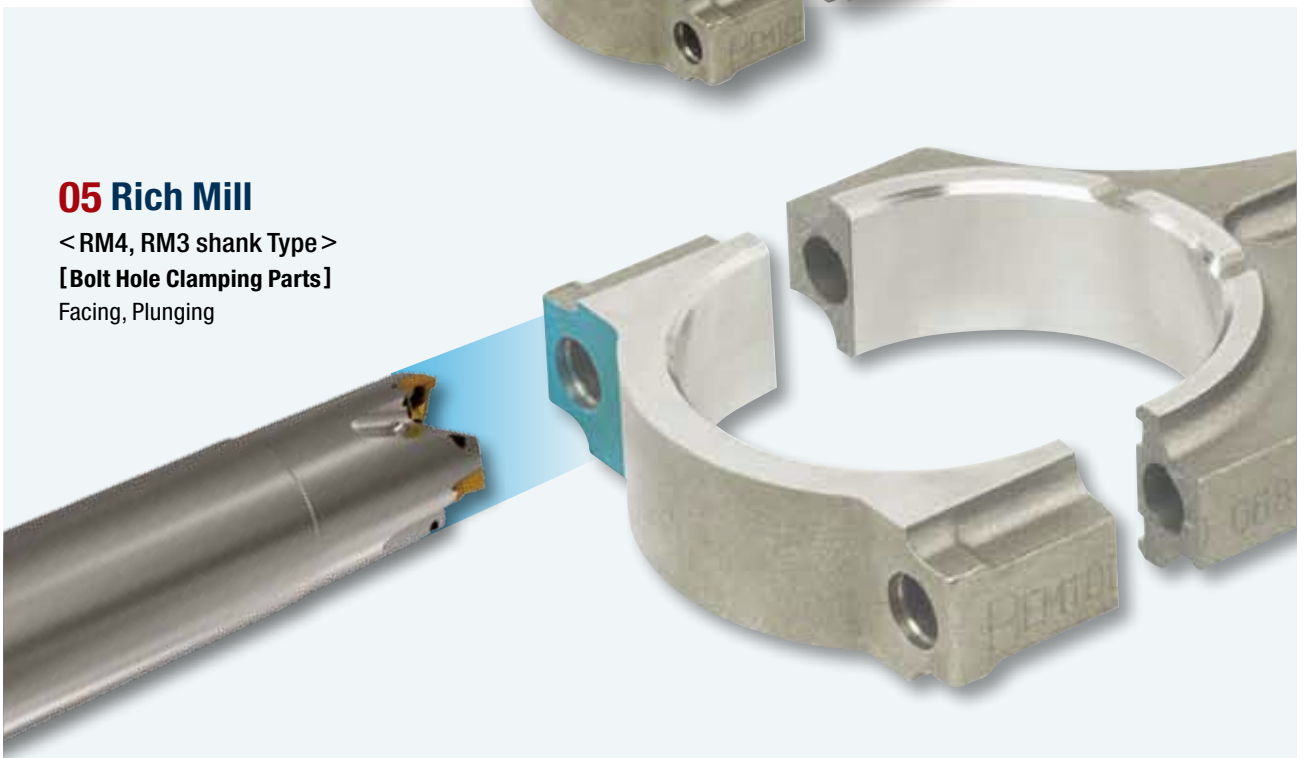
< RM8/RMT8 >

[Big Ends]

Facing-Roughing, Finishing



**AUTOMOTIVE
INDUSTRY**



05 Rich Mill

< RM4, RM3 shank Type >

[Bolt Hole Clamping Parts]

Facing, Plunging

01 Rich Mill

<RM4, RM3>

[Cap Hole Clamping Part]

Facing, plunging-Roughing, Finishing



Automotive Industry

08

Bearing Cap

(Heat treated carbon steels)



02 Rich Mill

<RM8>

[Cap Mounting]

Facing-Roughing, Finishing





03 Wind Mill
[Bearing Cap Side]
Special-Parting



**AUTOMOTIVE
INDUSTRY**



04 Exchangeable Drill
< TPDB, TPDC >
[Cap Clamping Bolt Holes]
Drilling-Centering, Drilling

01 Future Mill

<FMPC>
[Bearing Cap]
Facing-Roughing



Automotive Industry

09

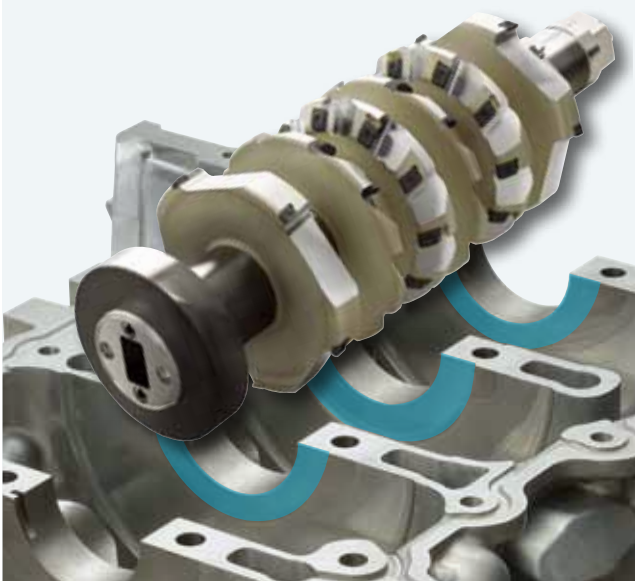
Crank Case

(Al alloy + Cast iron)



02 Gang Cutter

[Cheek Face]
Facing



03 Mach Drill

<MSDPH>
[Bearing Cap]
Drilling





04 Boring Tool

[Bearing Cap]
Boring-Roughing



05 Rich Mill

<RM16>
[Bearing Cap]
Facing-Roughing



AUTOMOTIVE
INDUSTRY



06 Finishing Cutter

[Top Face]
Facing-Finishing

01 MGT Holder

<MGEHR>

[Fly Wheel Chamber]

Turning-I.D. Finishing



<MRGN-A>



Automotive Industry

10

Fly Wheel

(Al alloy)



02 TB Holder

<TBH>

[Fly Wheel Ring Seat]

Turning-Grooving



<TB>





03 MGT Holder

< MGEHR >

[Fly Wheel Outside Diameter]

Turning-O.D. Profiling



**AUTOMOTIVE
INDUSTRY**

04 Special Holder

< VCGT >

[Fly Wheel Holes]

Turning-Inside Diameter Finishing



01 Double Clamp Holder

< DCLNR/L >

[Face turning]

Turning-Roughing



< CNMG >



Automotive Industry

11

Fly Wheel

(Cast iron)



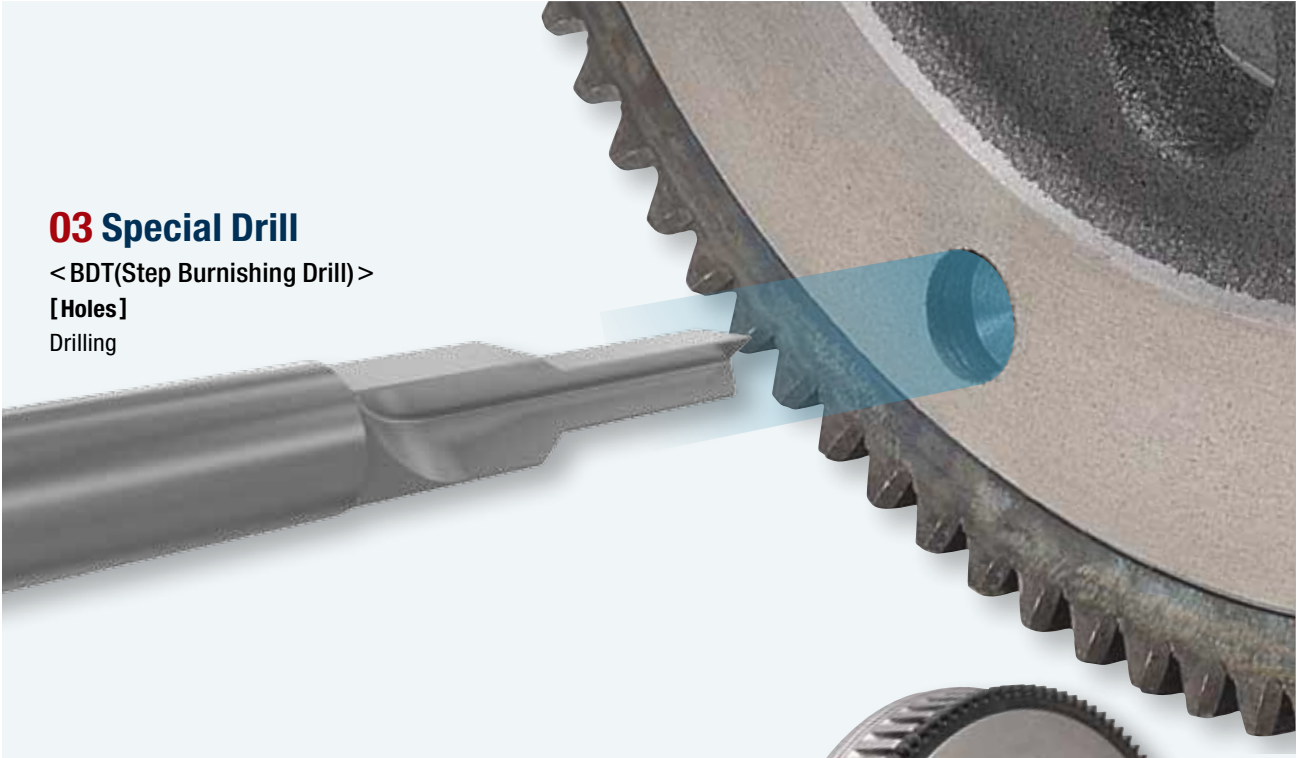
02 Mach Drill

< MSDP, MSDPH >

[Holes]

Drilling



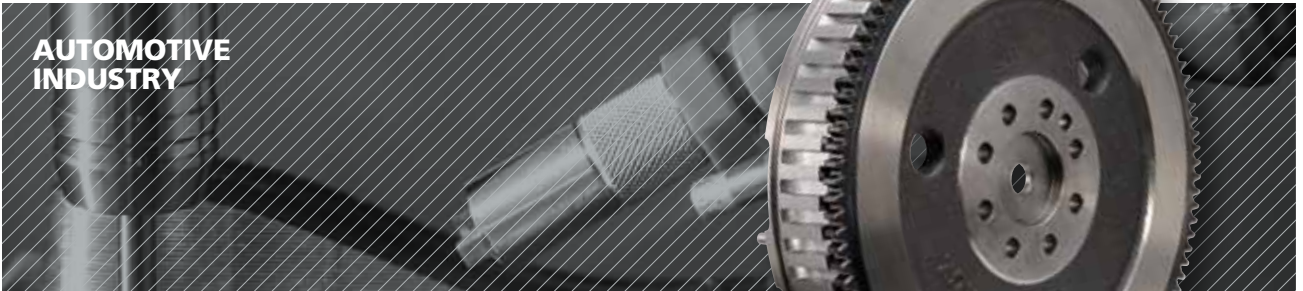


03 Special Drill

<BDT(Step Burnishing Drill)>

[Holes]

Drilling



**AUTOMOTIVE
INDUSTRY**

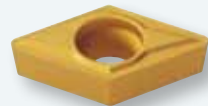


04 Screw On Holder

<SDJCR/L>

[Face Turning]

Turning-Finishing



<DCMT>



01 Special Insert for Pulley

< DF356 >

[Groove]

Grooving

Automotive Industry

12

Pulley

(Low carbon steels)

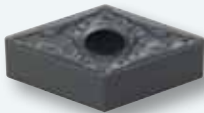


02 Double Clamp Holder

< DDJNR/L >

[Face Turning]

Turning



< DNMG >



**AUTOMOTIVE
INDUSTRY**

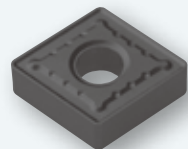


03 Double Clamp Holder

< DCLNR/L >

[Outside Diameter]

Turning



< CNMG >

AUTOMOTIVE INDUSTRY

Part 2

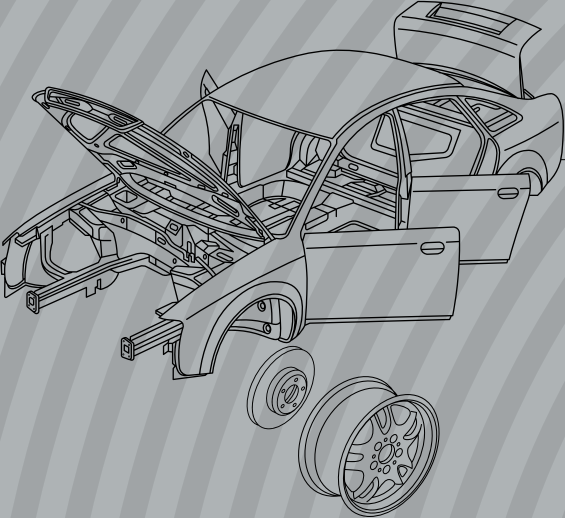
AUTOMOTIVE INDUSTRY

Part 2

Other Automotive Parts

01	Transmission Housing	036
02	Main Shaft	038
03	Valve Body	040
04	Knuckle	042
05	CV Joint	044
06	Caliper Bracket	046
07	Brake Disk	048
08	Wheel	050
09	ABS Housing	052
10	Manifold	054

Part 2 *Other Automotive Parts*



Transmission Housing

Al alloy



Main Shaft

Low carbon steels



Caliper Bracket

Cast iron



Brake Disc

Cast iron





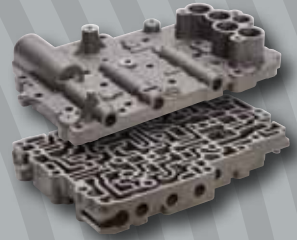
Wheel

Aluminum



Valve Body

Al alloy



Knuckle

Gray cast iron



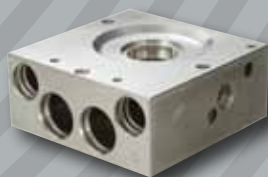
CV Joint

Forged steels



ABS Housing

Al alloy



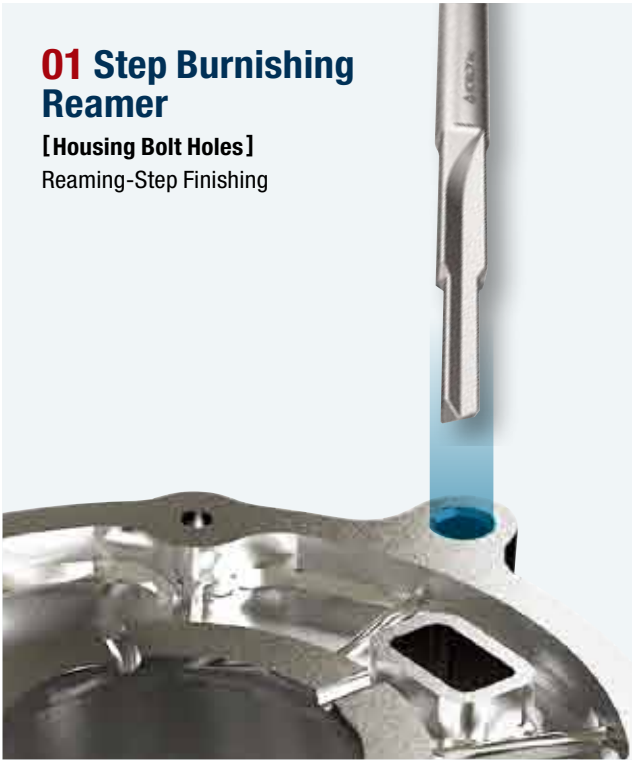
Manifold

Cast iron, Al alloy



01 Step Burnishing Reamer

[Housing Bolt Holes]
Reaming-Step Finishing



02 Special Boring Cutter

< HSK, Cartridge type >
[Cylinder Bore, Oil Seat]
Boring-Finishing

Automotive Industry

01

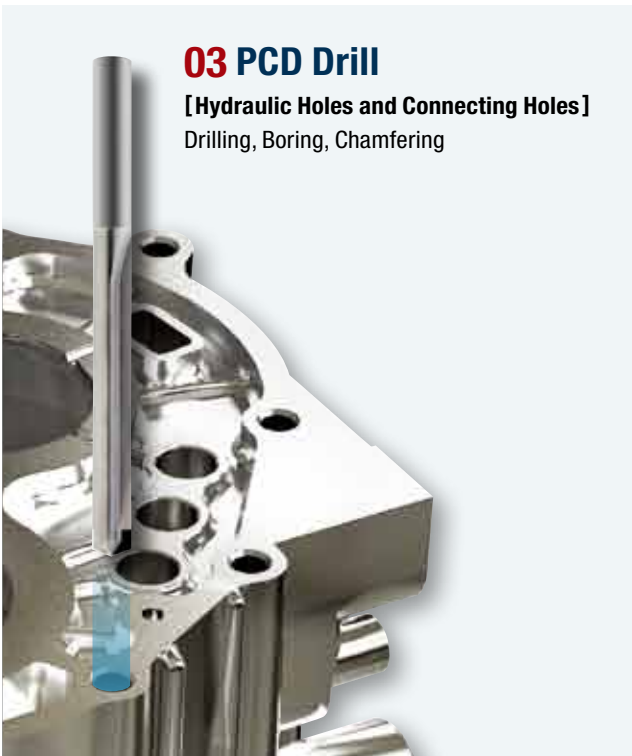
Transmission Housing

(Al alloy)



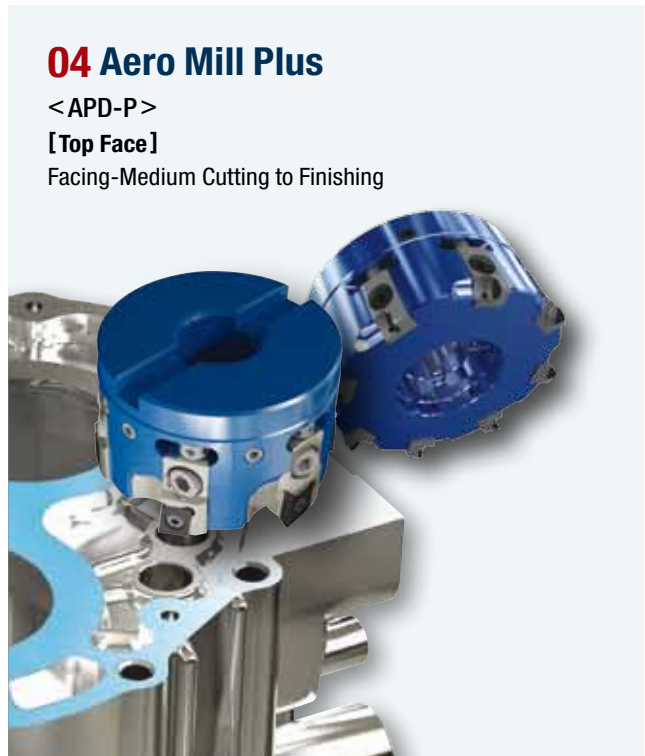
03 PCD Drill

[Hydraulic Holes and Connecting Holes]
Drilling, Boring, Chamfering



04 Aero Mill Plus

< APD-P >
[Top Face]
Facing-Medium Cutting to Finishing



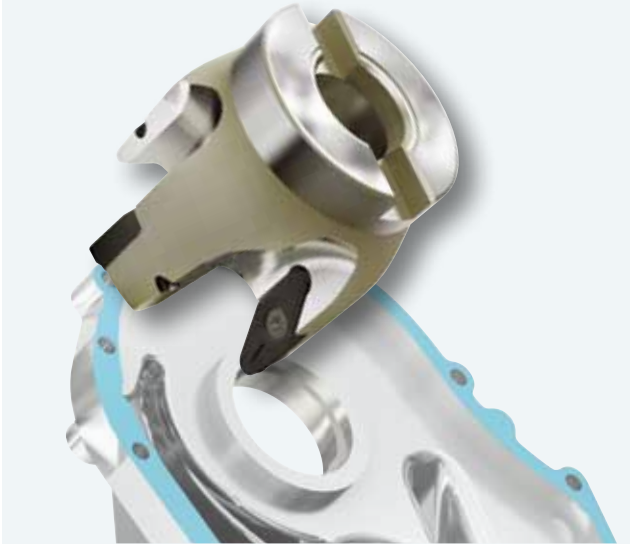


05 Pro-A Mill

<PAS/C>

[Housing Mounting Face]

Facing-Finishing

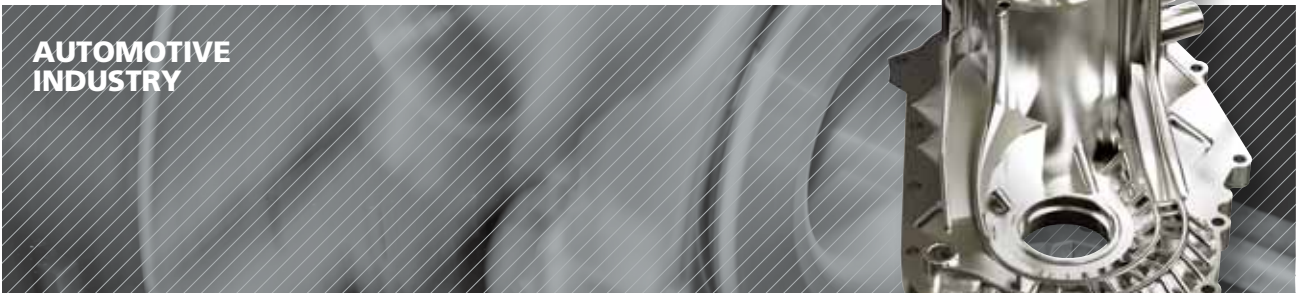
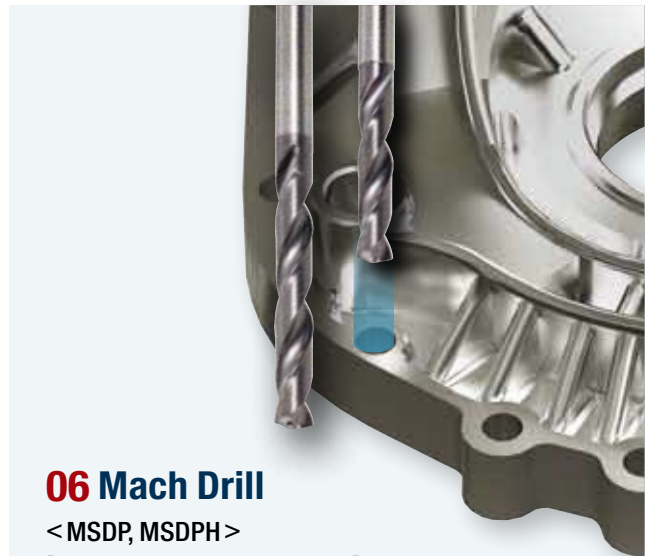


06 Mach Drill

<MSDP, MSDPH>

[Housing Clamping Bolt Holes]

Drilling

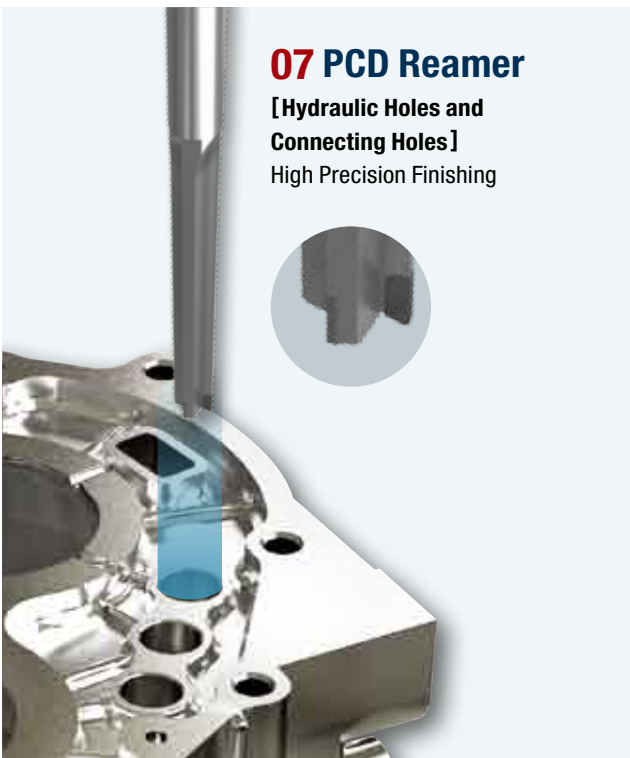


AUTOMOTIVE
INDUSTRY

07 PCD Reamer

[Hydraulic Holes and
Connecting Holes]

High Precision Finishing



08 TM Solid

[Side Clamping Bolt Holes]

Threading



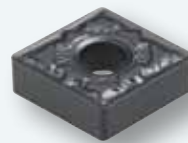


01 Double Clamp Holder

<DCLNR/L>

[Outside Diameter and Face Turning]

Turning-Roughing to Medium Cutting



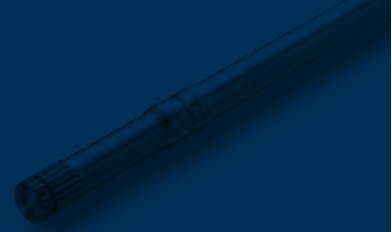
< CNMG >

Automotive Industry

02

Main Shaft

(Low carbon steels)

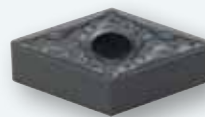


02 Double Clamp Holder

<DDJNR/L>

[Outside Diameter]

Turning-Finishing

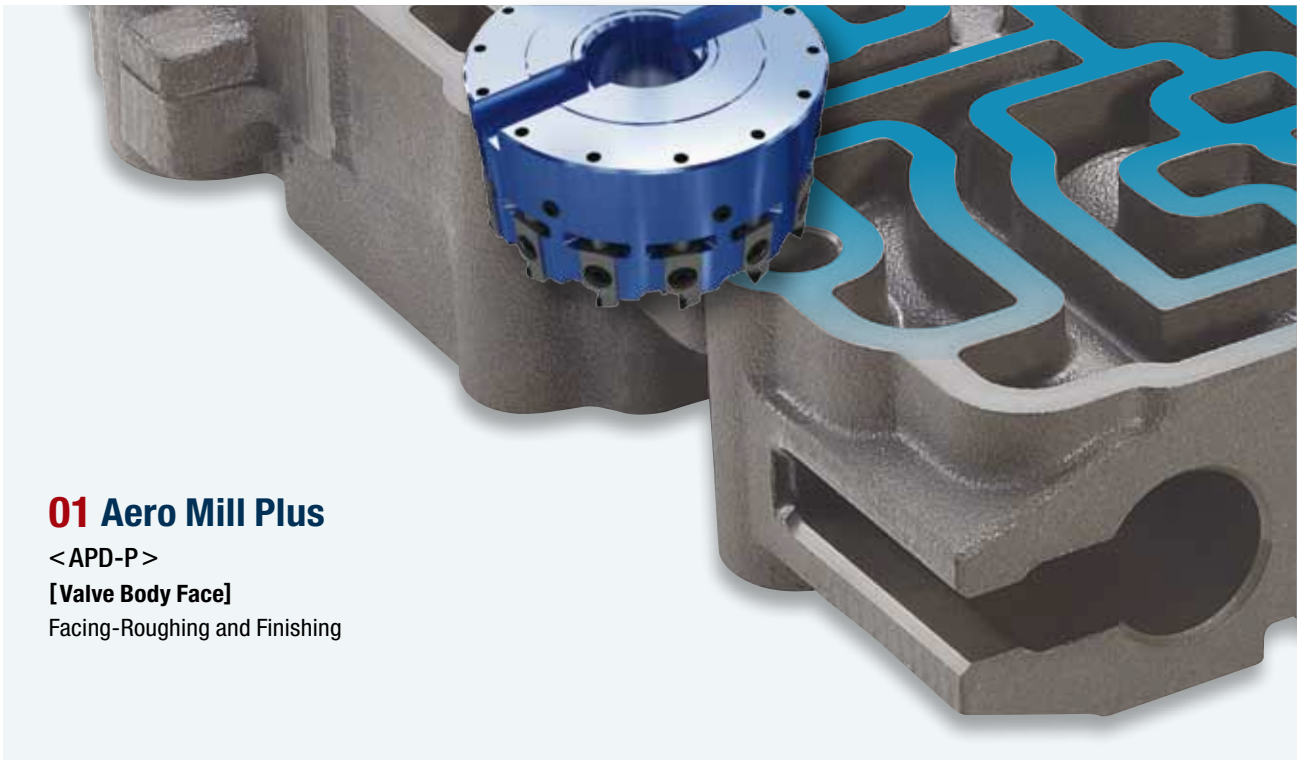


< DNMG >



Main Shaft





01 Aero Mill Plus

<APD-P>

[Valve Body Face]

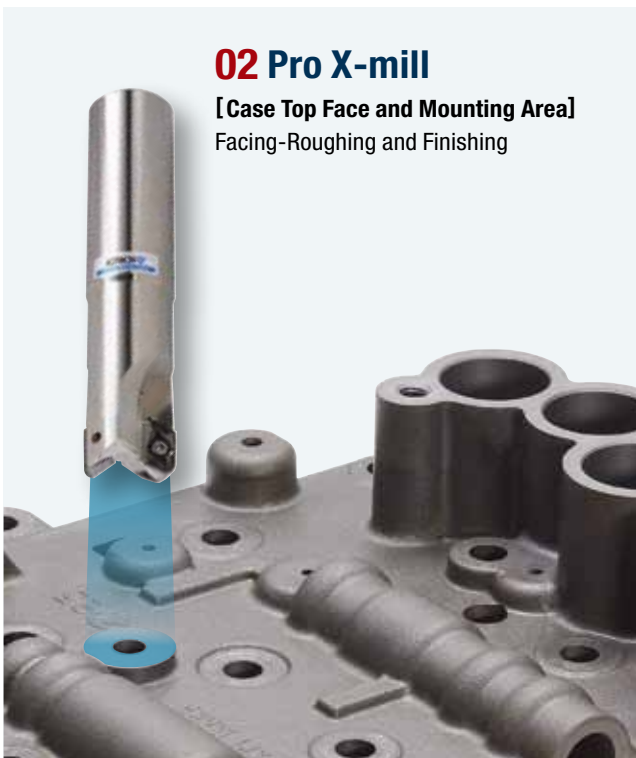
Facing-Roughing and Finishing

Automotive Industry

03

Valve Body

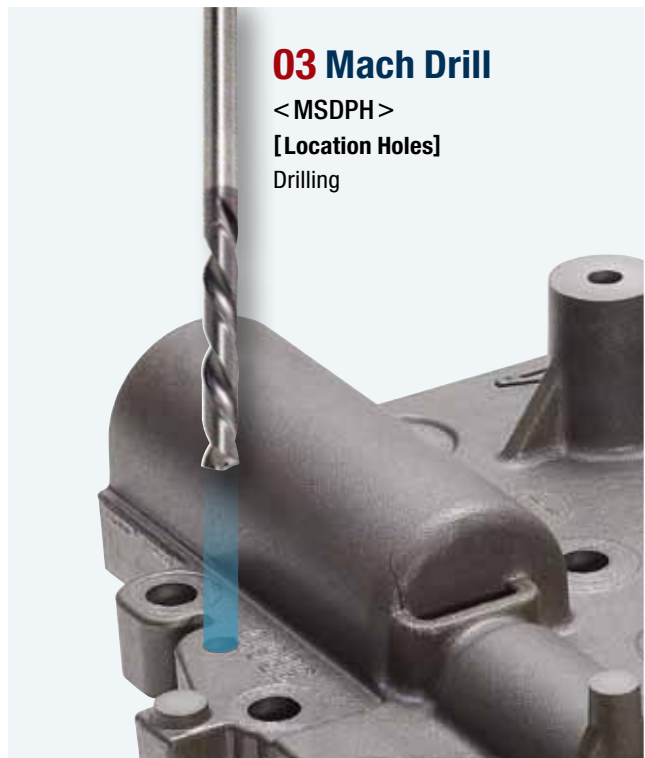
(Al alloy)



02 Pro X-mill

[Case Top Face and Mounting Area]

Facing-Roughing and Finishing



03 Mach Drill

<MSDPH>

[Location Holes]

Drilling



04 Step Burnishing Reamer

[Solenoid Holes]
Reaming-Finishing



AUTOMOTIVE
INDUSTRY



05 Mach Drill

< Double Margin >
[Location Holes]
Drilling

01 Indexable Side Cutter

<RMT8>

[Damper(upper arm)]

Double Side Milling



Automotive Industry

04

Knuckle (Gray cast iron)



02 Mach Drill

<MSDPH>

[Caliper Holes]

Drilling

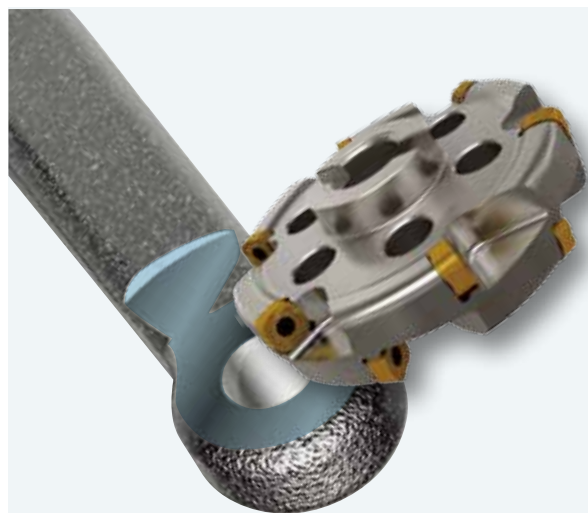


03 Indexable Side Cutter

<RM8>

[Tie Rod, Low Arm]

Full Side Face Milling





04 TPDC Drill

[Low Arm, ABS, Caliper]
Drilling, Chamfering



05 Micro Boring Bar

[Knuckle Center Hole]
High Precision Boring

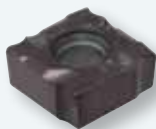


**AUTOMOTIVE
INDUSTRY**



06 Wind Mill

[Low Arm]
Slotting



07 Rich Mill

< RM3 >
[Low Arm, ABS, Caliper]
Facing-Roughing and Finishing

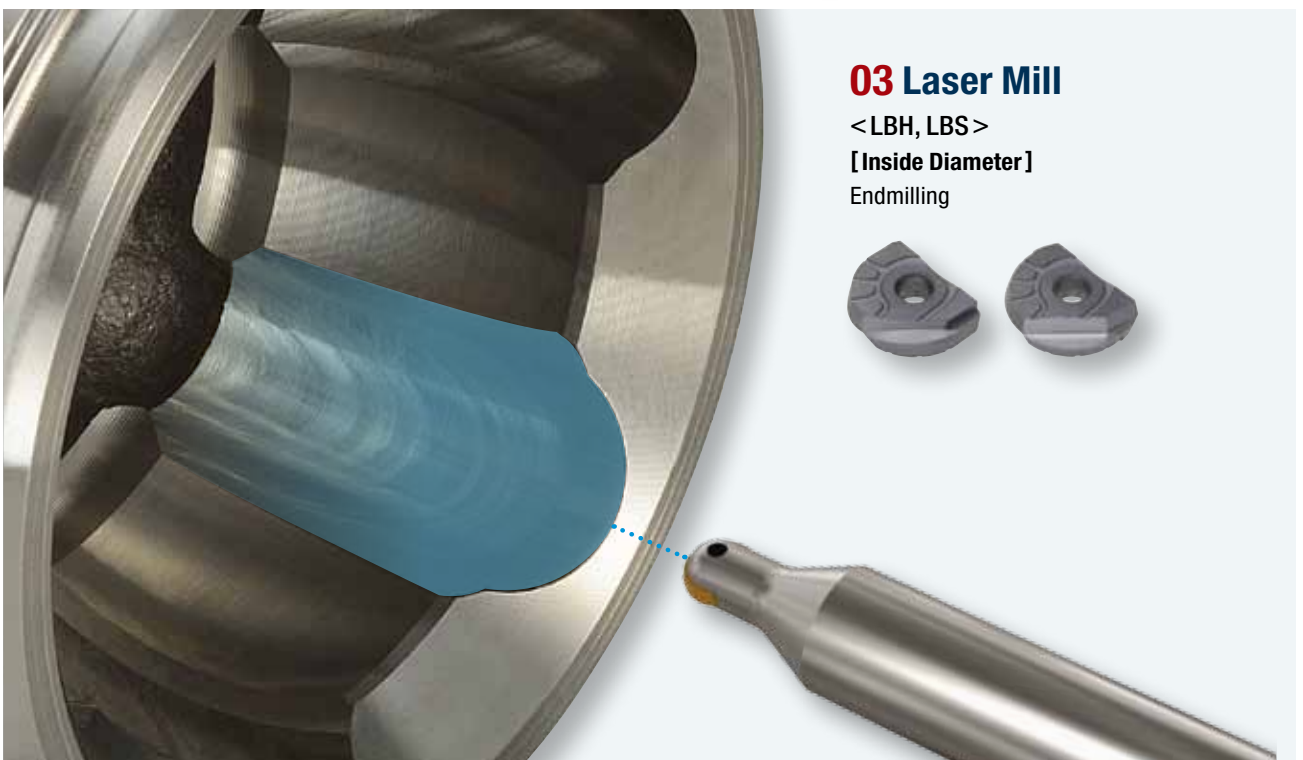
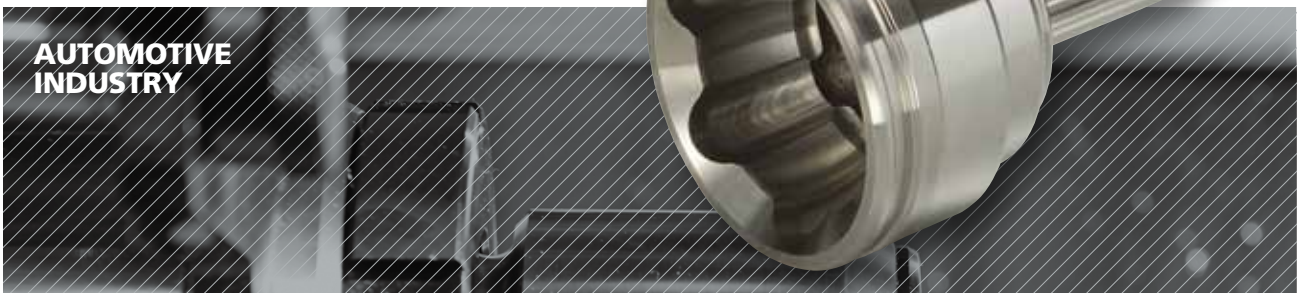
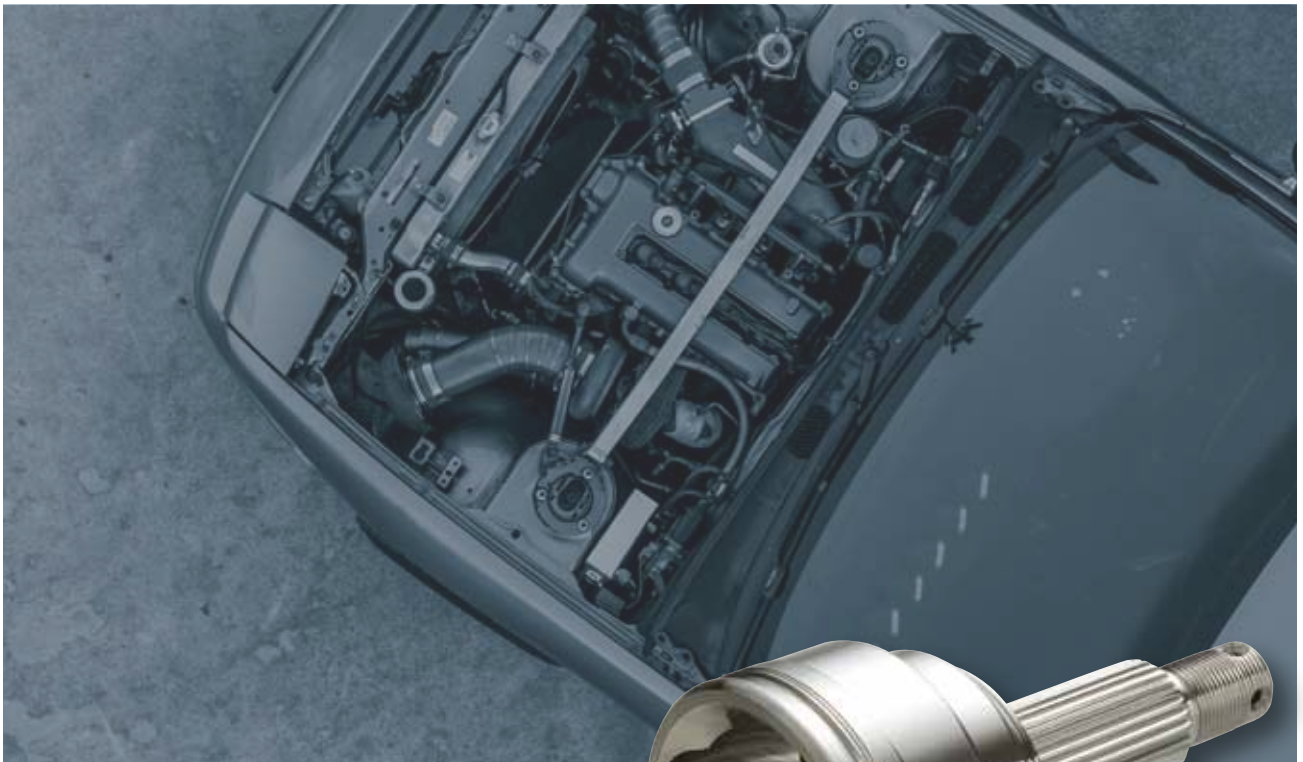


Automotive Industry

05

CV Joint
(Forged steels)





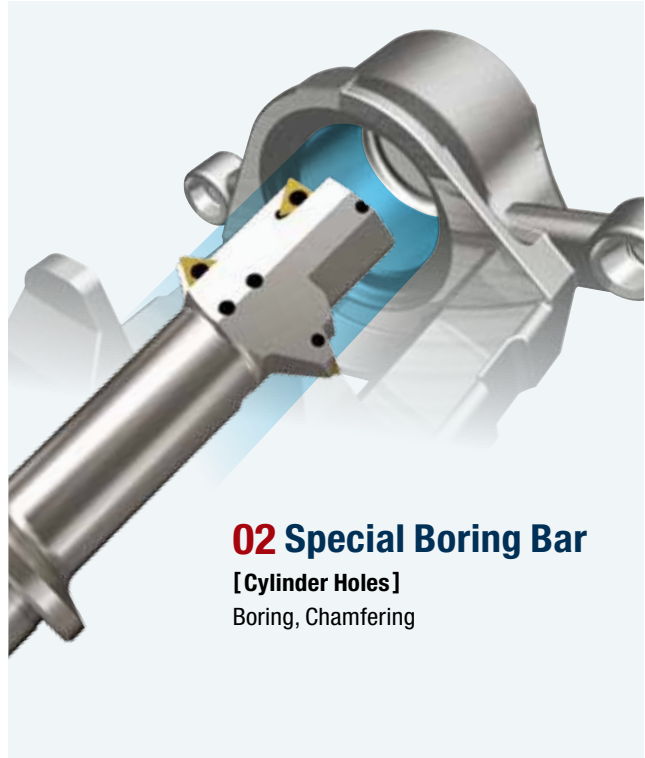
01 Special Side Cutter

[Disk Seat]
Slotting



02 Special Boring Bar

[Cylinder Holes]
Boring, Chamfering



Automotive Industry

06

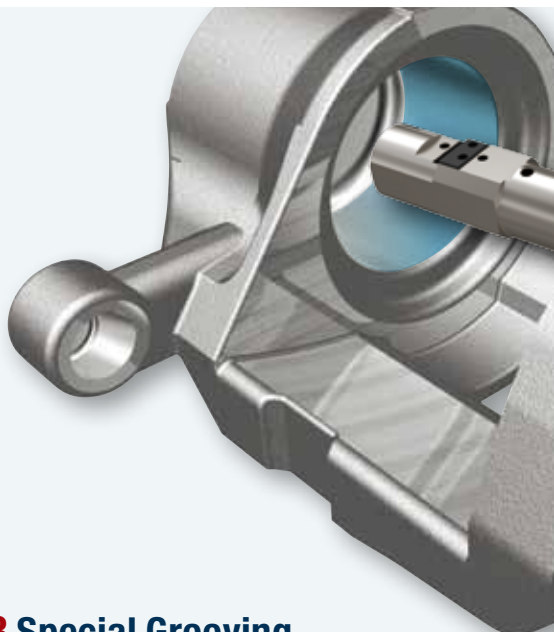
Caliper Bracket

(Cast iron)



03 Special Grooving

[Cylinder Holes]
Grooving



04 Special Side Cutter

[Break Seat]
Slotting





05 TM Solid

[Carrier Reference Holes]

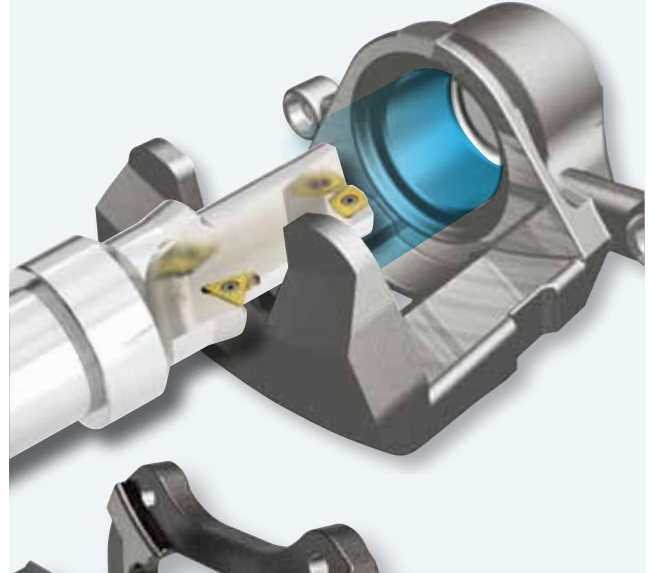
Threading



06 Step Drill

[Cylinder Holes]

Drilling, Chamfering



AUTOMOTIVE
INDUSTRY



07 Special Side Cutter

[Lug Pin]

Double Side Milling



08 Burnishing Drill

[Carrier Reference Holes]

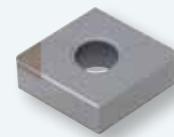
Drilling





01 Double Clamp Holder

< DCLNR/L >
[Face Turning]
Turning



< CNMA(cBN) >

Automotive Industry

07

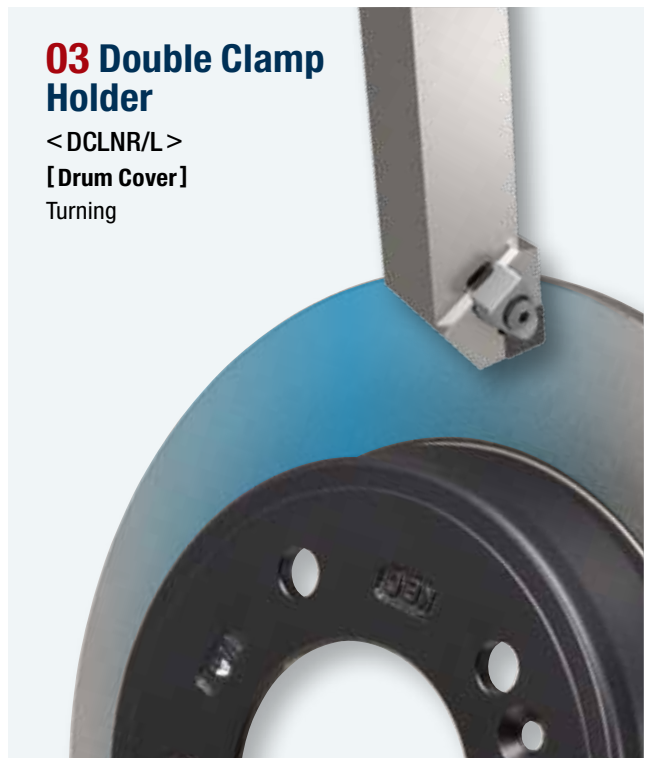
Brake Disk

(Cast iron)



02 Mach Drill

< MSDP, MSDPH >
[Fixing Holes]
Drilling



03 Double Clamp Holder

< DCLNR/L >
[Drum Cover]
Turning



04 Double Clamp Holder

< DSNR/L >
[Outside Diameter]
Turning



**AUTOMOTIVE
INDUSTRY**



05 Mach Drill

< MSDP, MSDPH >
[Fixing Bolt Holes]
Drilling



01 MGT Holder

< MGEHR/L >

[Wheel Outside Diameter]

Turning-Roughing, Finishing

< MRGN-A(PCD) >

Automotive Industry

08

Wheel
(Aluminum)

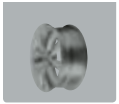


02 King Drill Step Drill

< SPMT, XOMT-ND >

[Wheel Bolt Holes]

Drilling, Chamfering



03 Boring Bar

< MGIXR/L >

[Wheel Inside Diameter]

Turning-Roughing, Finishing



< MRGN-A(PCD) >



**AUTOMOTIVE
INDUSTRY**

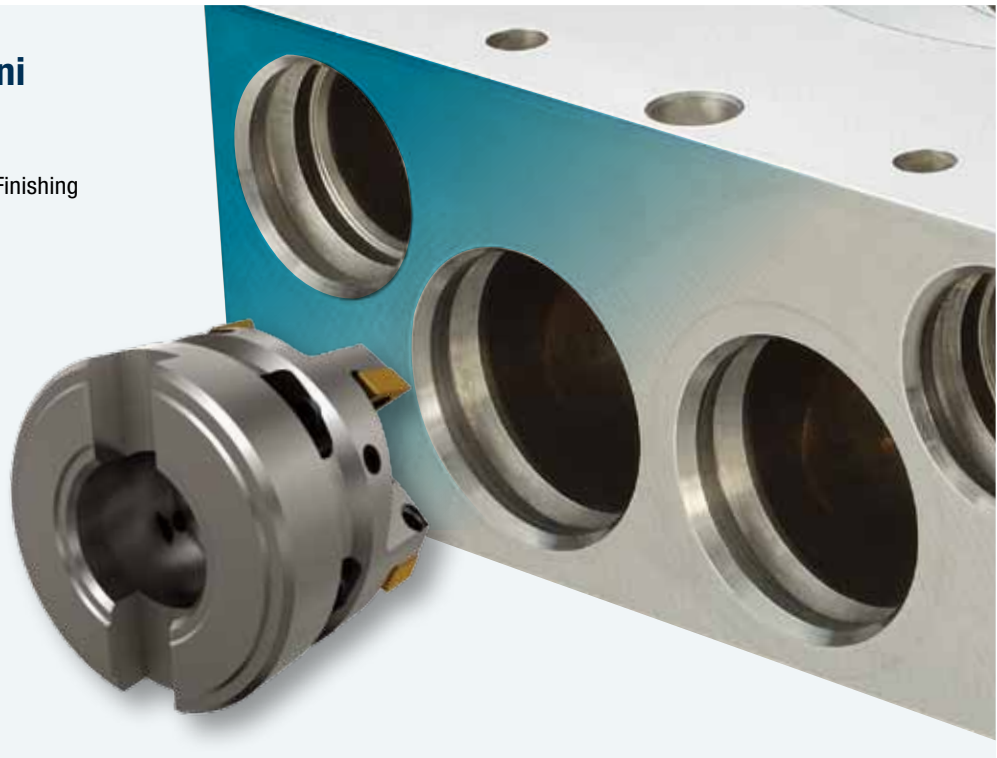


01 Aero Mill-Mini

<MAPD>

[ABS Housing Face]

Facing-Medium Cutting to Finishing

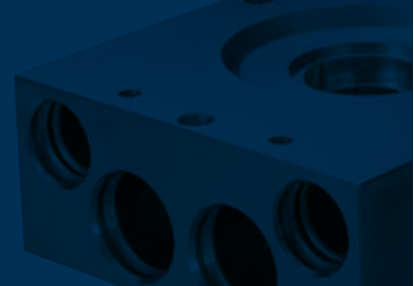


Automotive Industry

09

ABS Housing

(Al alloy)



02 TM Solid

<Thread Milling Tool>

[TAP]

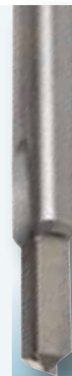
Threading



03 Burnishing Drill

[TAP]

Drilling



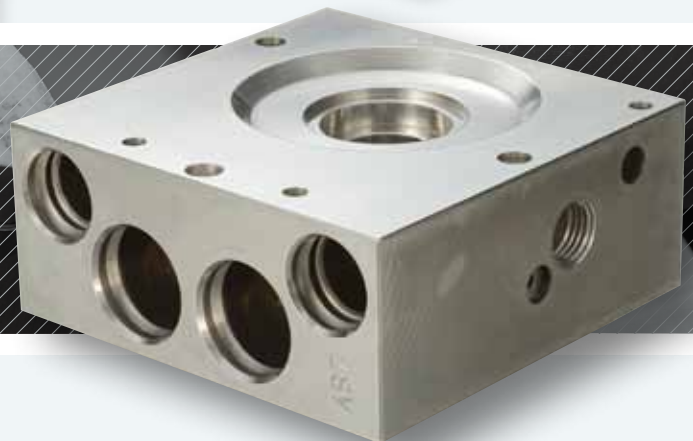


04 PCD Boring Tool and Drills

[ABS Housing Multi Holes, Countersink Step Holes and Connecting Holes]
Boring, Drilling



**AUTOMOTIVE
INDUSTRY**

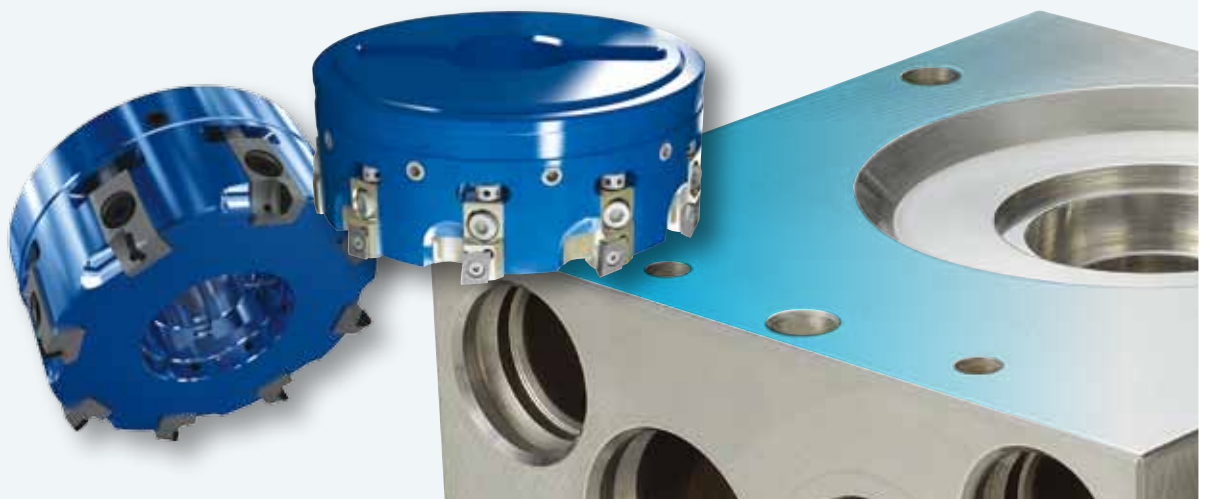


05 Aero Mill, Aero Mill Plus

<APD, APD-P>

[ABS Housing Face]

Facing-Medium Cutting to Finishing



01 Aero Mill, Aero Mill Plus

< APD, APD-P >

[ABS Housing Face]

Facing-Medium Cutting to Finishing



Automotive Industry

10

Manifold

(Cast iron, Al alloy)

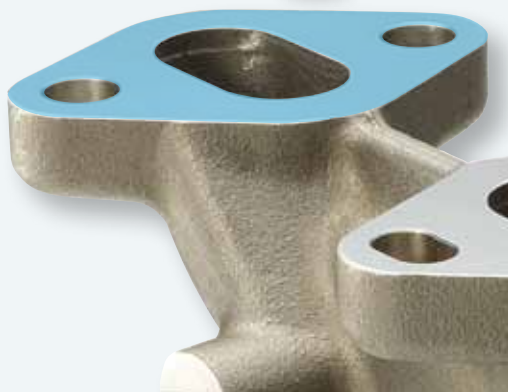


02 Rich Mill

< RM16, RM8 >

[Cylinder Facing]

Facing

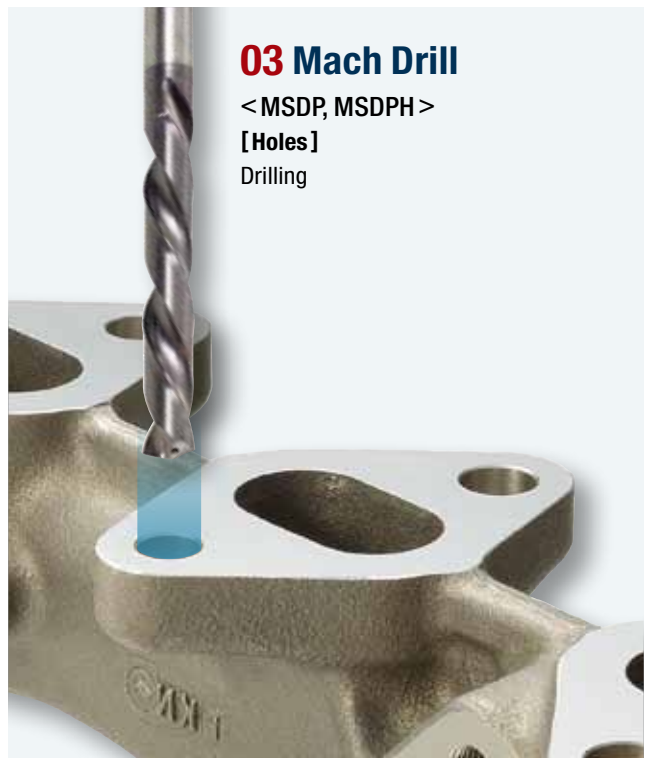


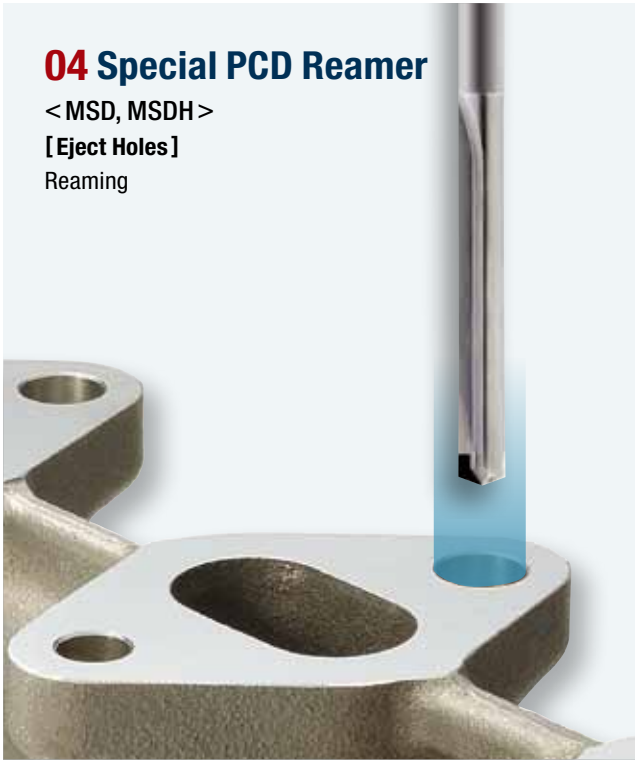
03 Mach Drill

< MSDP, MSDPH >

[Holes]

Drilling



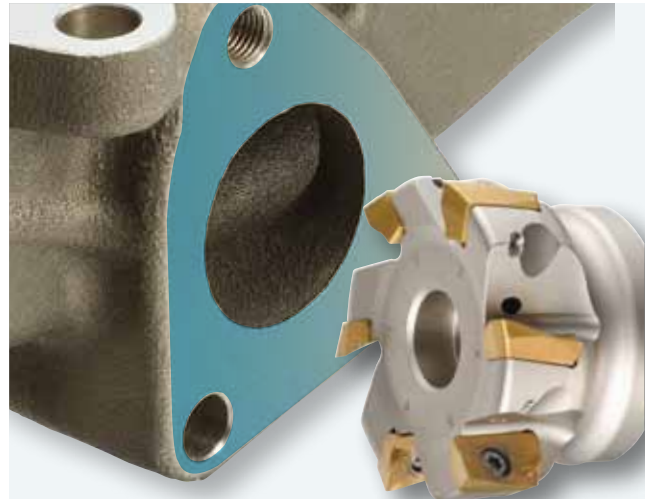


04 Special PCD Reamer

<MSD, MSDH>

[Eject Holes]

Reaming



05 Rich Mill

<RM6, Alpha Mill X>

[Facing]

Facing



AUTOMOTIVE
INDUSTRY



06 Rich Mill

<RM3/RM4>

[Manifold Bracket & Eject Hole Face]

Facing

www.korloy.com

