



Mold and Die

# MOLD and DIE

ADVANCECUTTING  
TaeguTec

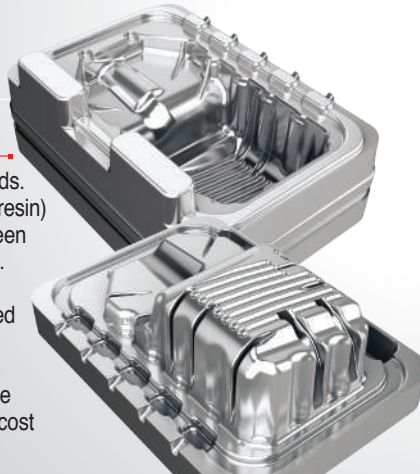
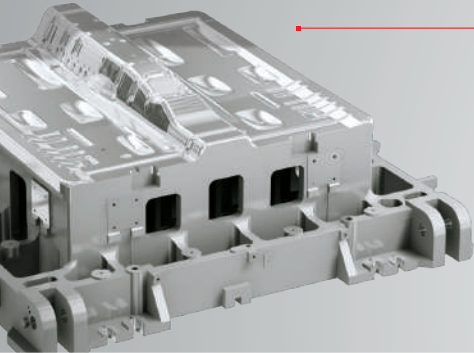
TaeguTec **MOLD and DIE** Industry Solutions

# MOLD and DIE



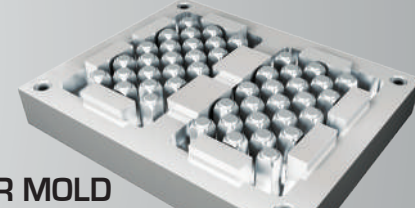
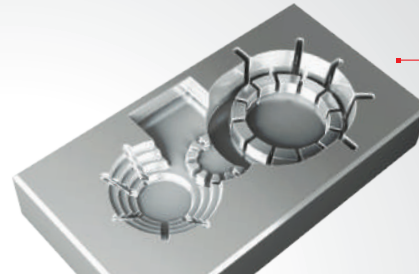
## PRESS DIE

Press dies are a metal forming process that installs special mold tools into a press machine that works in a linear reciprocating movement. The main materials used in press dies are grey cast iron, tool steel and carbon steel. TaeguTec's extensive experience in the mold and die industry and its plethora of tooling solutions can easily and quickly machine any material and shape no matter their complexity.



## DIE CASTING

Die casting molds are made from low melting point metal alloys, such as aluminum, zinc and magnesium. With high-pressure, the materials are injected into a precision-shaped die, in order to make thin and lightweight precision metal molding. Die casting mold materials require exceptional strength, toughness and hardness to bear the severe conditions of high temperature and high pressure. TaeguTec offers powerful tools and superior expertise to effortlessly handle any project.



## INJECTION MOLD

Injection molds are another form of die that can produce plastic molds. Initially, hot melt (or half melt) macromolecule (high polymer plastic resin) materials are injected with high pressure into an empty space between the core and cavity and then cooled to gain the desired plastic mold. The injection mold materials should be heat resistant with a low coefficient of thermal expansion. The molds should be uncomplicated for machining and thermal processing aspects. The composition of the molds includes mold bases, a core and additional parts. Until recently, the process only used plastics but now mold steels are more widely applied. TaeguTec's optimized solutions can easily cut cost and lead time without sacrificing quality and speed.

## FORGING DIE

Forging dies are a mold process that shapes a workpiece by hammering or pressing. Most forging die materials must have strong thermal and mechanical resistance. In order to make forging dies, the forging materials are machined into a desired shape after being cast or forged and then worked through to the final process. TaeguTec's vast selection of tools and in-depth knowledge work to increase productivity, reduce inventory and cut costs.

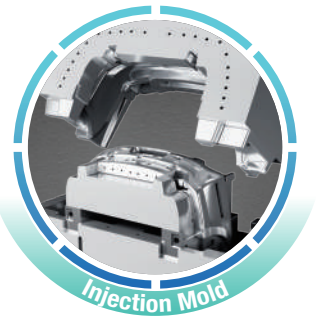
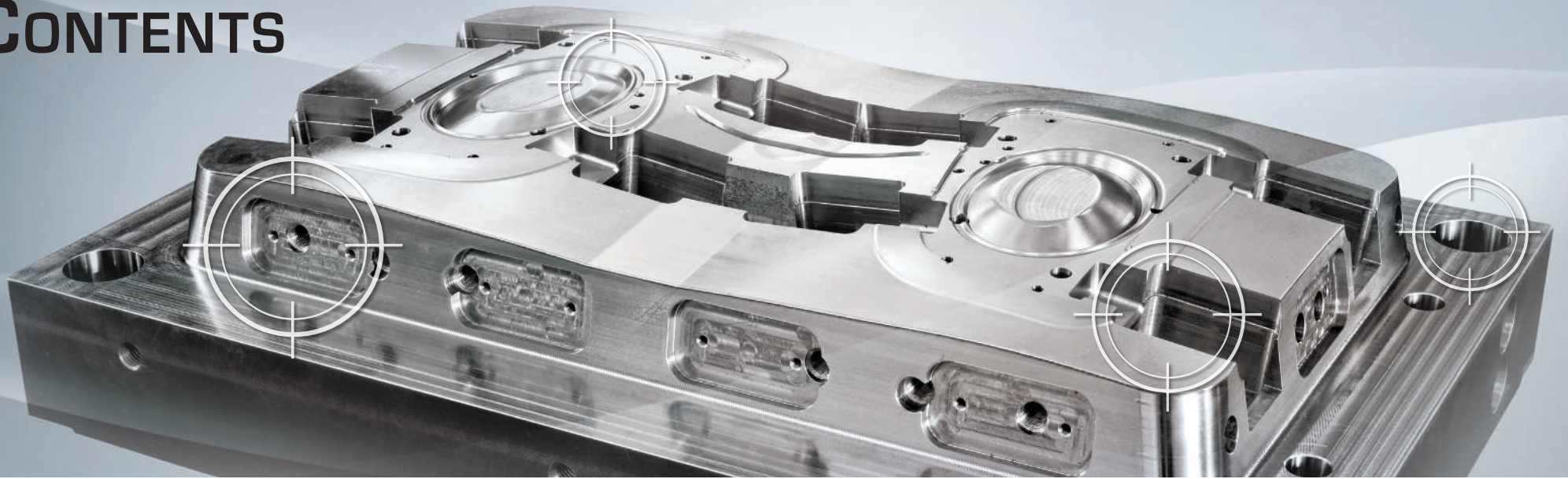
## RUBBER MOLD

Rubber molding uses different rubber materials made into a mold to develop the shape of the rubber workpiece by heat and press. The materials for molds may depend upon the rubber materials, quality and quantity produced. If the production run is a small quantity, structural carbon steel can be applied. In the case of producing uniform products for a longer period, hardened steel will be utilized. TaeguTec offers the products and professional solutions to increase profitability and production.





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# Small Core Machining



## Small Core

### Milling

#### 01/02

##### WINMILL

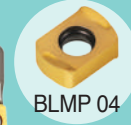
Mini sized 90° shoulder milling with strong V-bottom inserts  
- Cutter diameter: Ø6 – Ø20

##### CHASE4FEED

Versatile high feed milling with strong 4 cutting edge inserts  
- Cutter diameter: Ø8 – Ø32

##### NANRUSH

High feed milling with nano sized inserts  
- Cutter diameter: Ø6 – Ø8

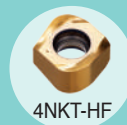
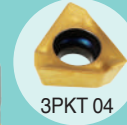


##### MILLRUSH

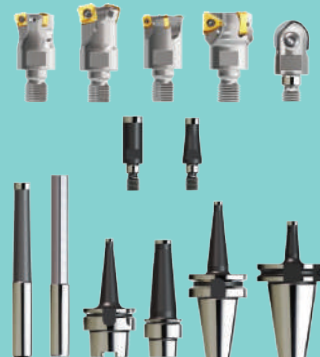
Multi-tooth 90° shoulder milling with small helical triangular inserts  
- Cutter diameter: Ø8 – Ø16

##### CHASE4MILL

90° shoulder milling and 4 cutting edge inserts with high ramping capability  
- Cutter diameter: Ø8 – Ø40



##### T-FLEXTEC



##### MAXIRUSH

Hea-changeable solid carbide end mill



### Drilling

#### 03

##### SOLID3DRILL

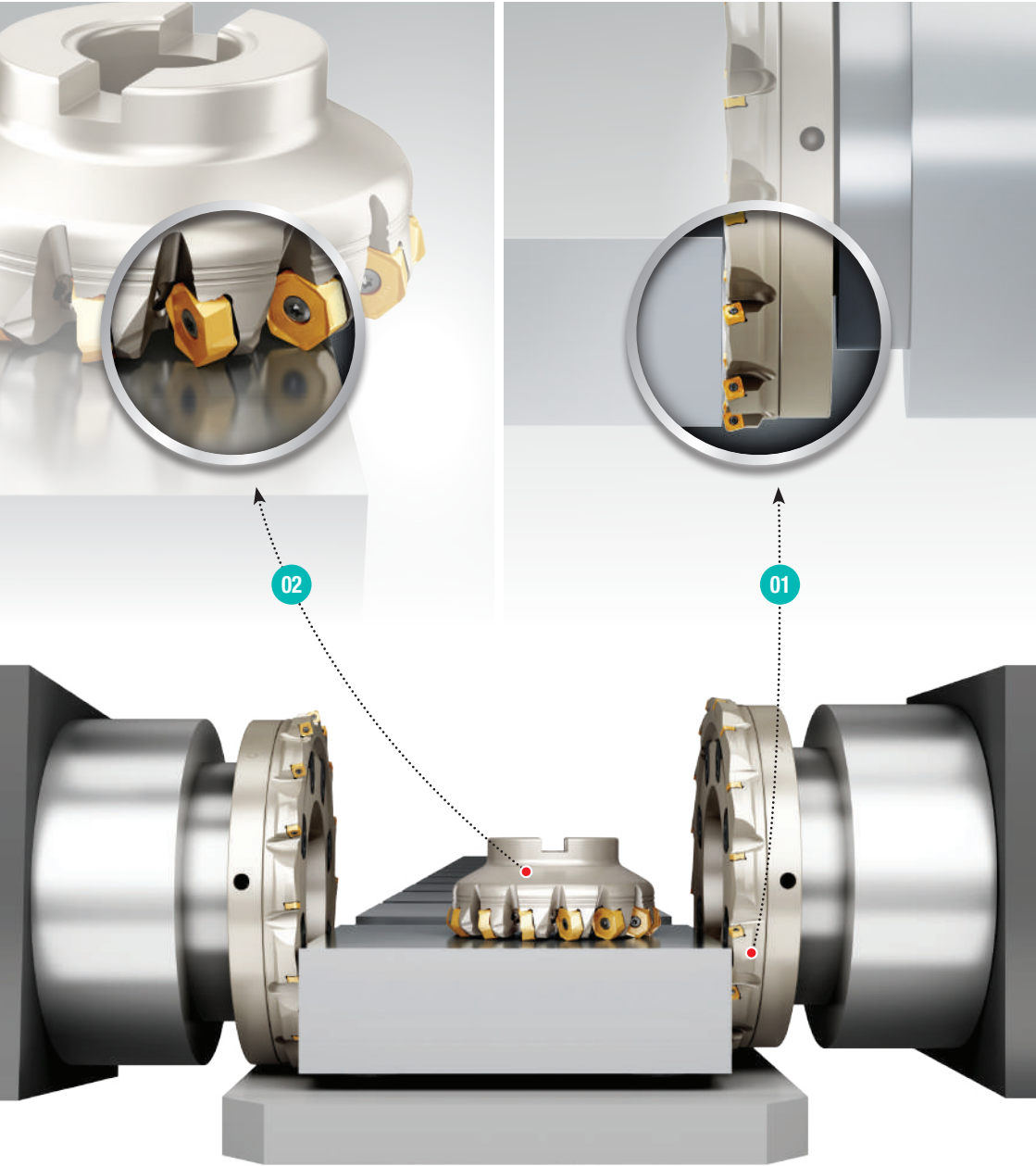
3 flute solid carbide drill





# Face Milling

## Mold Base



### Quick Change System

01

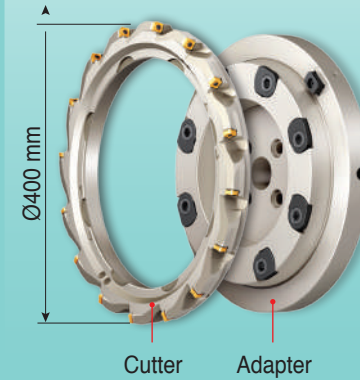
#### Lighter

Less than half the weight



#### Quicker

Simple & user-friendly clamping system



#### Safer

Lighter cutter protects users



### CHASE2QUAD

High feed rough and finish milling



For large diameter cutters



### Bottom Face Milling

02

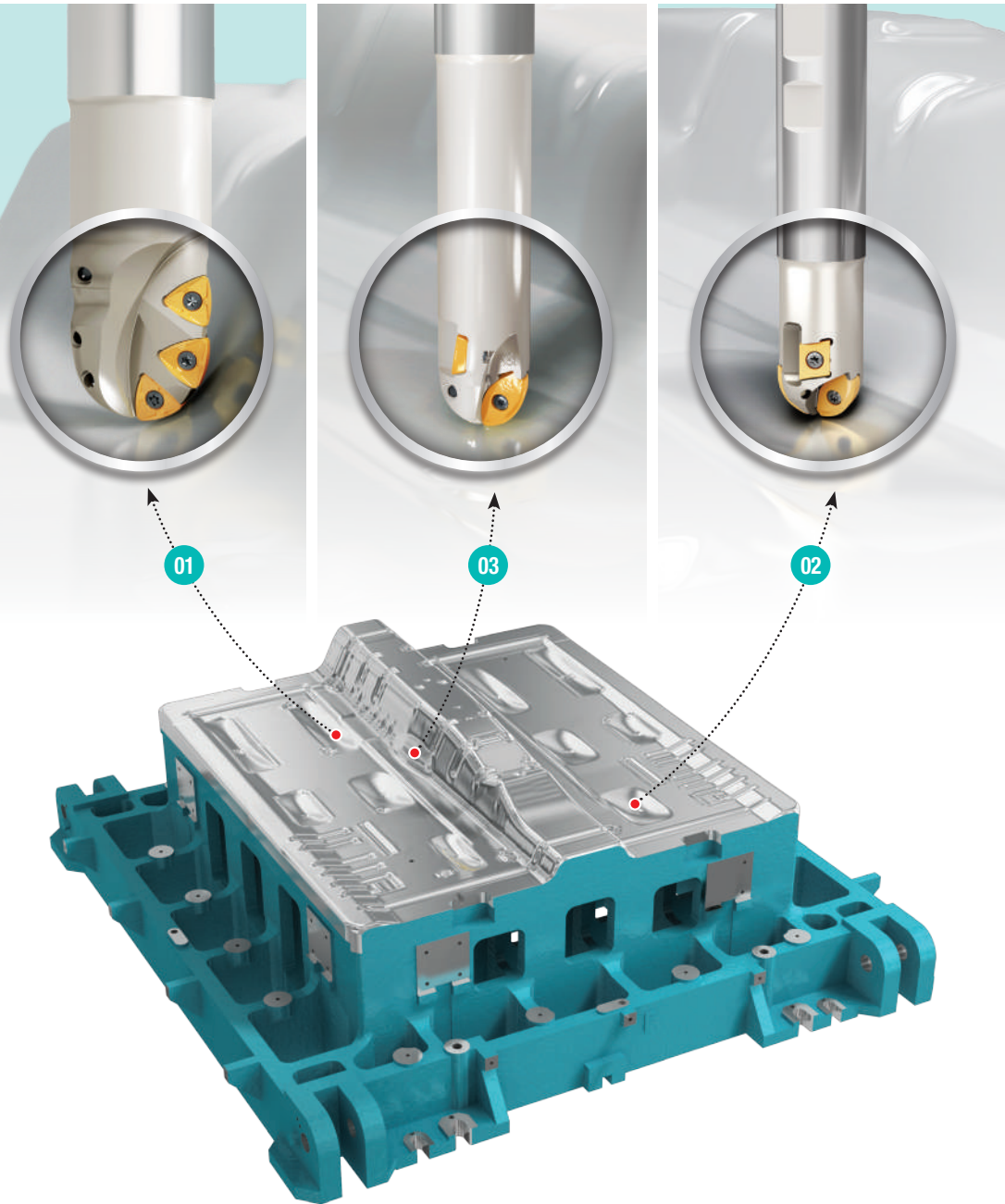
### CHASE2MILL

Entering angle 45°  
face milling with  
12 cutting edge inserts



# Rough and Semi-finish Profile Milling

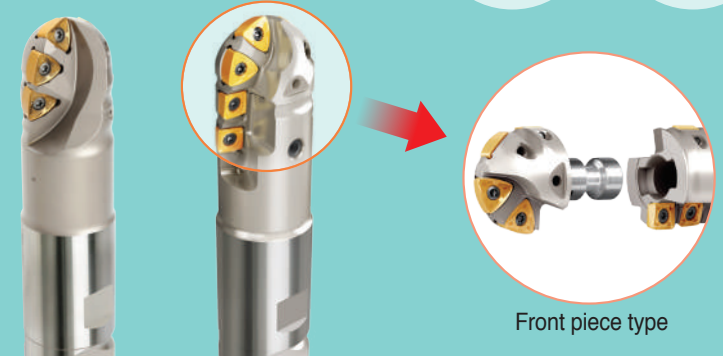
Press Die



## Rough Profile Milling

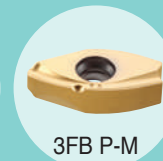
### 01 CHASE2BALL

Optimized double-sided inserts for rough profile milling  
- Cutter diameter: Ø50



### 02 TRIOBALL

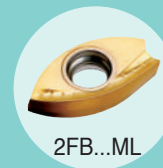
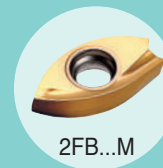
Triple feed rates for rough and medium profile milling  
- Cutter diameter: Ø32, Ø50



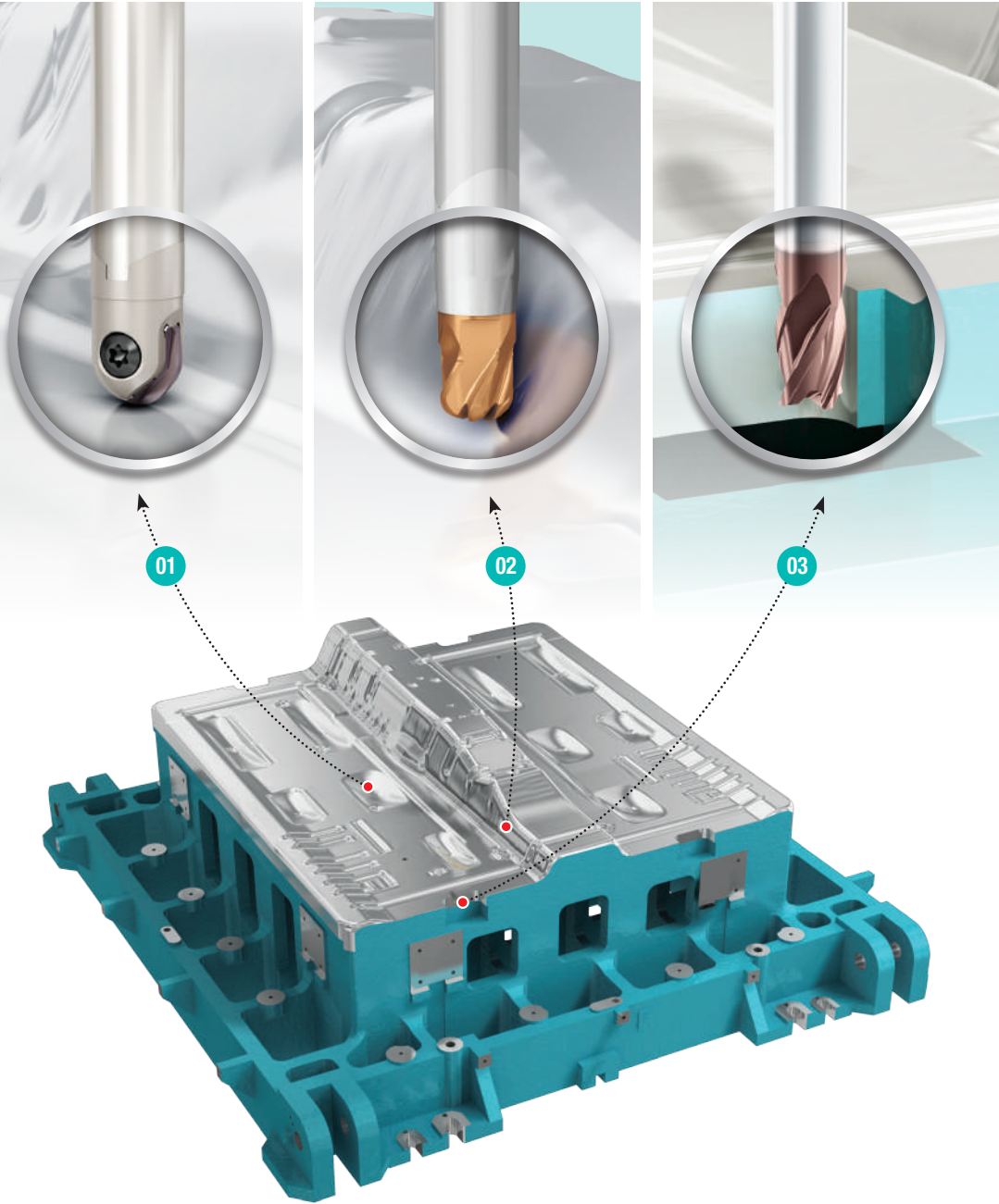
## Semi-finish Profile Milling

### 03 DUETBALL

An excellent choice for rough and semi-finish profile milling  
- Cutter diameter: Ø16 - Ø32

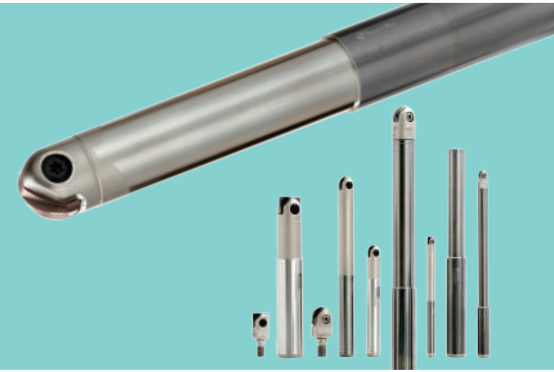




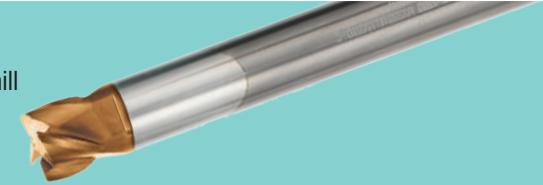
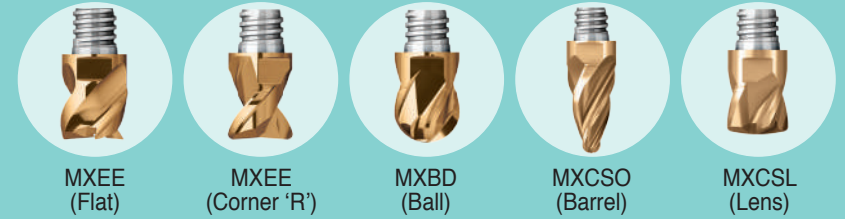


## Semi-finish and Finish Milling

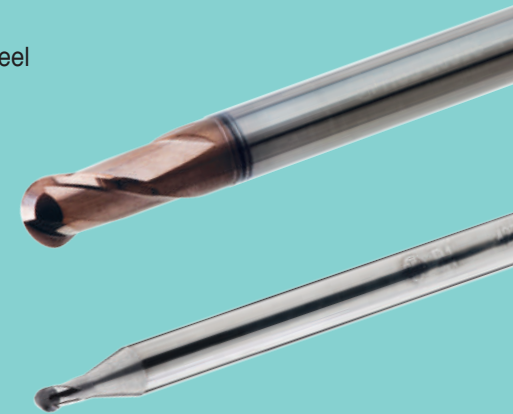
**01 FINEBALL**  
Accurate profile milling  
- Cutter diameter: Ø6 - Ø32

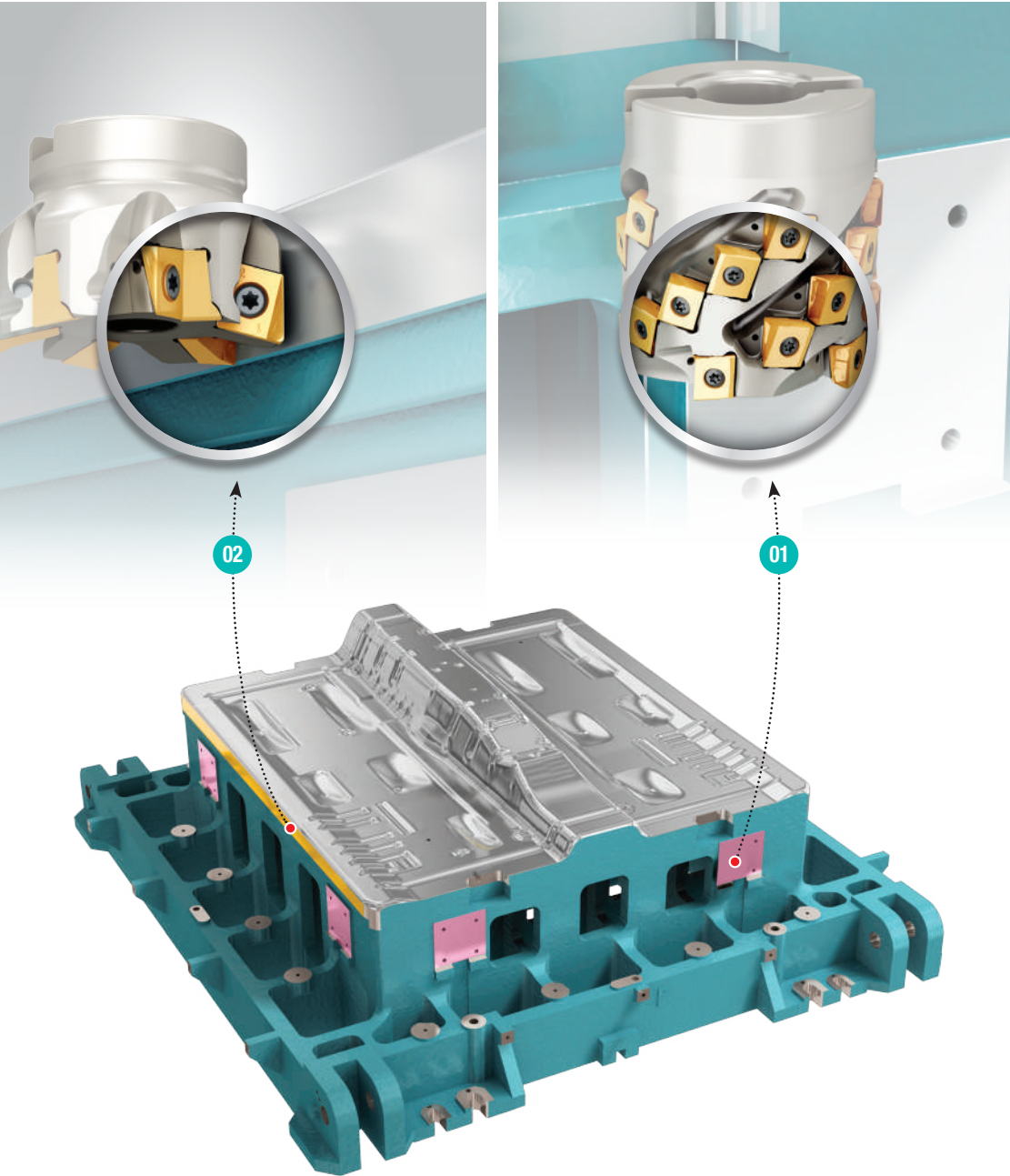


**02 MAXIRUSH**  
Head-changeable type solid end mill



**03 HARDMILL**  
Solid carbide end mill for hardened steel

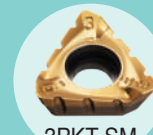




## Peripheral Milling

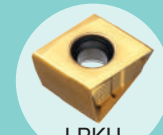
**01** High productivity milling solution

**MILLRUSH**



3PKT-SM  
Chip splitter

**TANGSPEED**

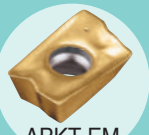


LPKU

**CHASEMILL**



APKT-SM  
Chip splitter



APKT-EM

## Boss Face and Side Milling

**02** Super high positive insert with 3 cutting edges

**MILLRUSH**



3PKT

**CHASE4MILL**

90° shoulder milling with 4 cutting edge inserts for better surface finish



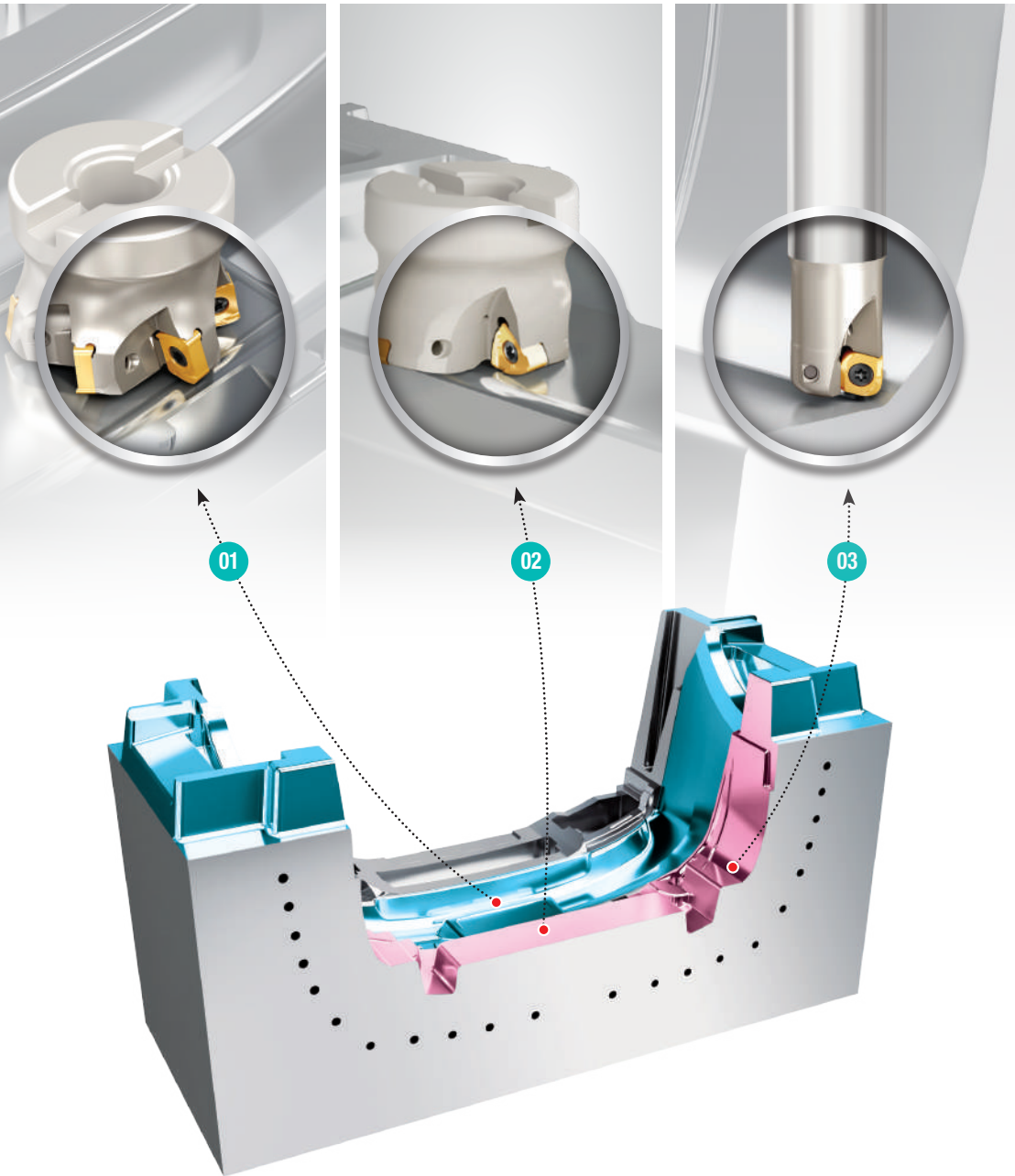
4NKT-PNR  
Bottom wiper



4NHT-F  
Shoulder wiper







### Rough Milling - High feed

01/02

**CHASE4FEED**

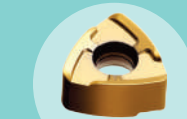
Versatile high feed milling with strong 4 cutting edge inserts



BLMP 11

**CHASE2FEED**

High feed milling with strong 6 cutting edge inserts



BLMP 13

**CHASEFEED**

High feed milling with smooth cutting



SBMT 13

### Rest Rough Milling - High feed

03

**CHASEFEED**



SBMT 06



SBMT 09

**CHASE4FEED**



BLMP 06



BLMP 09

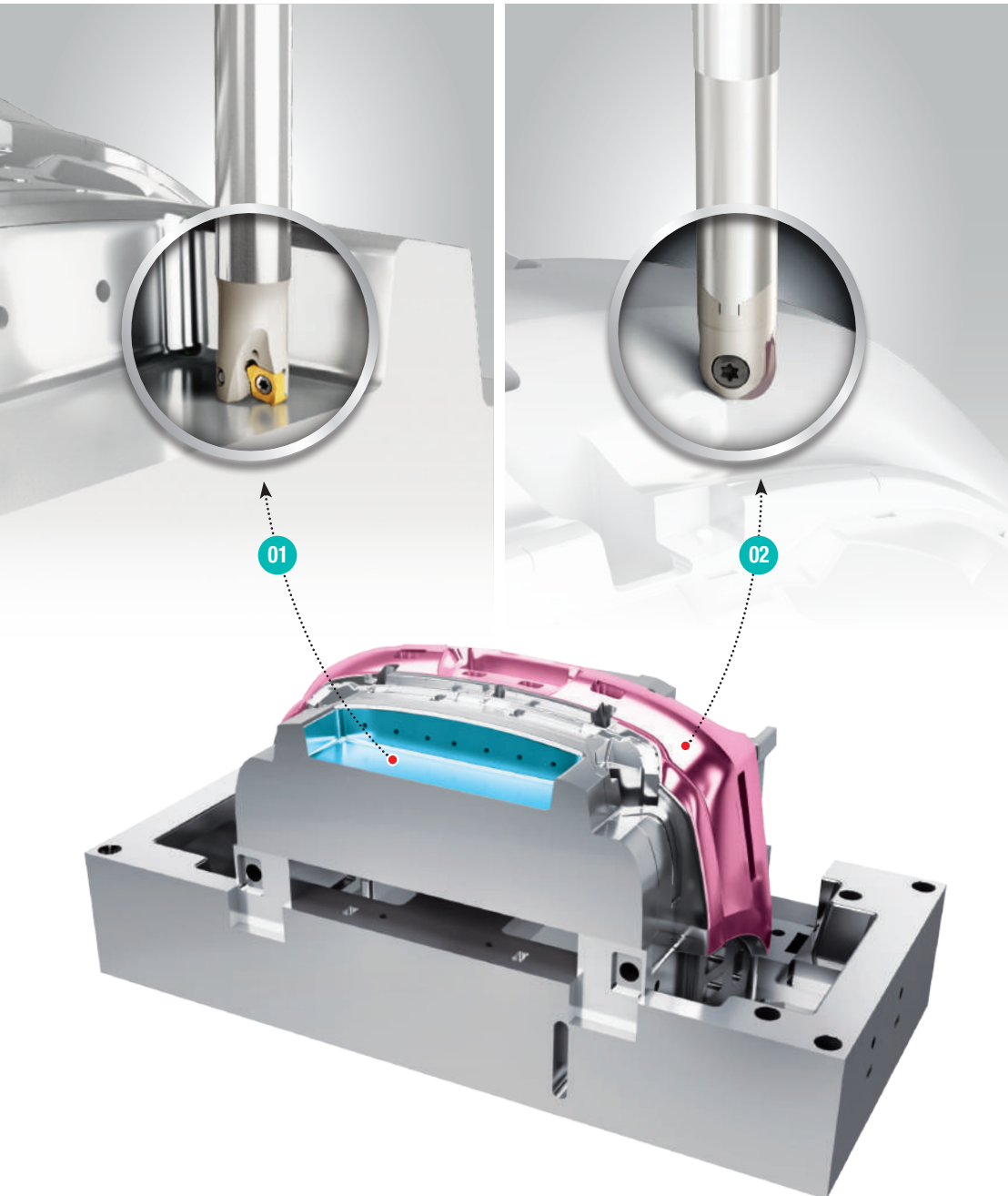
**CHASE4MILL**

High feed and high ramping capability with 4 large corner radius inserts



4NKT-HF





### Semi-finish Milling

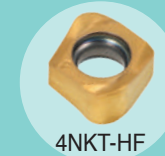
#### 01 CHASE4MILL

Semi-finish 90° shoulder milling with excellent surface-finish and high feed milling with 4 large corner radius inserts



4NHT-F

Shoulder wiper



4NKT-HF

High-feed type



#### DUETBALL

An excellent choice for profile milling



2FB..M



2FB..ML



### Finish Milling

#### 02 FINEBALL

Accurate profile milling  
- Cutter diameter: Ø6 - Ø32



NFB



#### HARDMILL

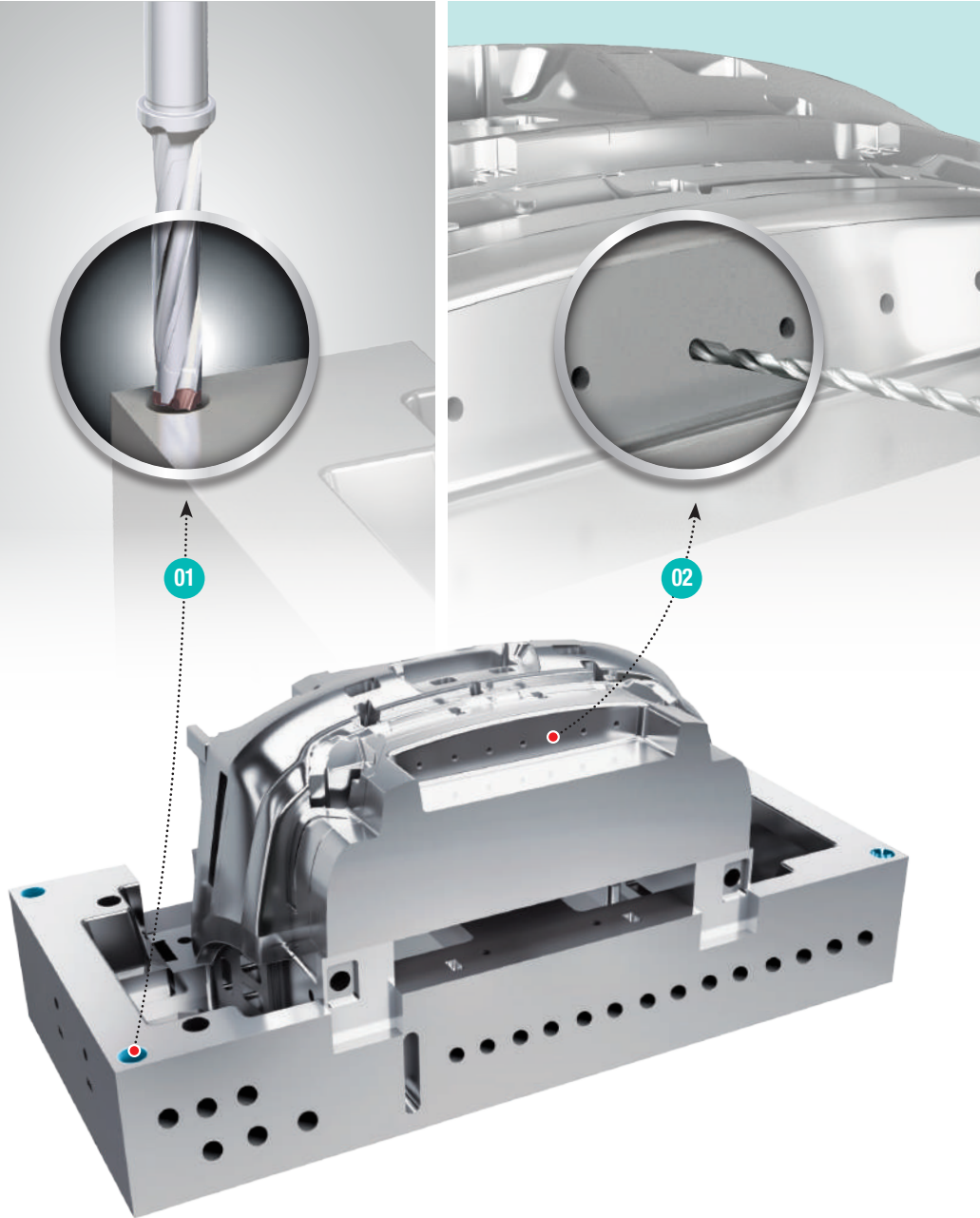
High-performance solid carbide end mill for high-speed milling



HSB-CBN







### Drilling 01

#### TOPDRILL

New generation of indexable drill



SOMT



#### MODURDRILL

Unique modular system for various drilling diameters and depths



TCD-P-CO+



#### DRILLSPEED

Head-changeable 3 flute drill for higher productivity



3ED-P+



#### TM-REAM

Head-changeable reamer for high-speed reaming



TM



### Deep Hole Drilling 02

#### HDRILL

Solid carbide long drill with coolant hole



#### MOQDRILL



#### TDEEP

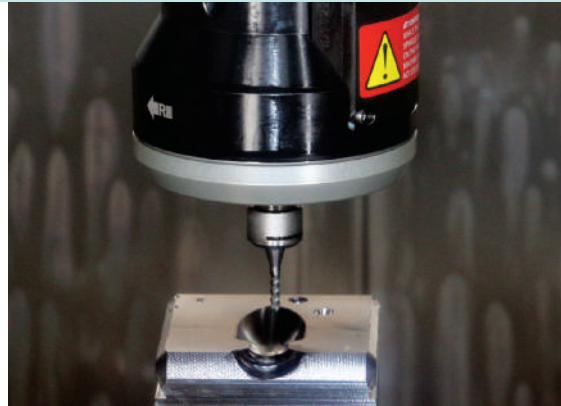
New indexable gun drill with unique trigonal inserts



TOGT



High-speed spindle driven by high-pressure coolant for small diameter tools



Coolant pressure [bar] operating range: 20 - 40  
 Rotational spindle speed [RPM]: 35,000 - 55,000  
 Tool diameter [mm]: Up to Ø3.5 (shank Ø7)



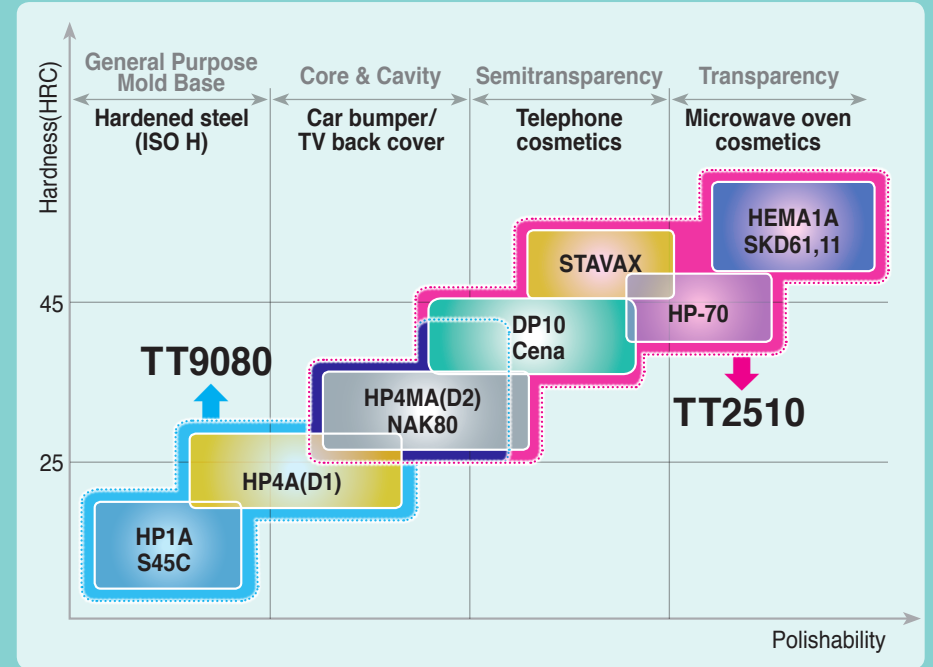
Coolant pressure [bar] operating range: 40 - 70  
 Rotational spindle speed [RPM]: 25,000 - 45,000  
 Tool diameter [mm]: Up to Ø4.0 (shank Ø7)

\* More powerful

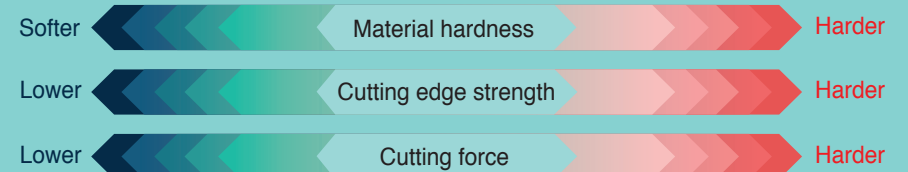
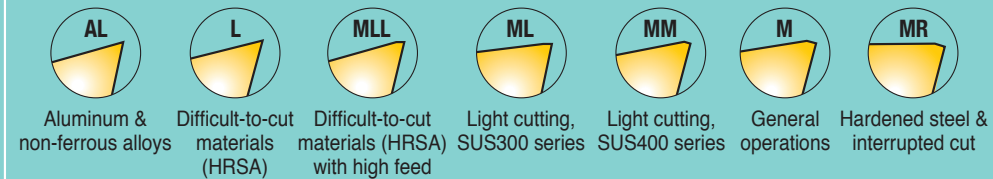


# Grades and Insert Geometry

## Milling Insert Grades for Die Steel



## Milling Inserts Geometry Selection







# Tool CutZZ

*Your Knowledge Machining Link!*



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Google play

Scan me!



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