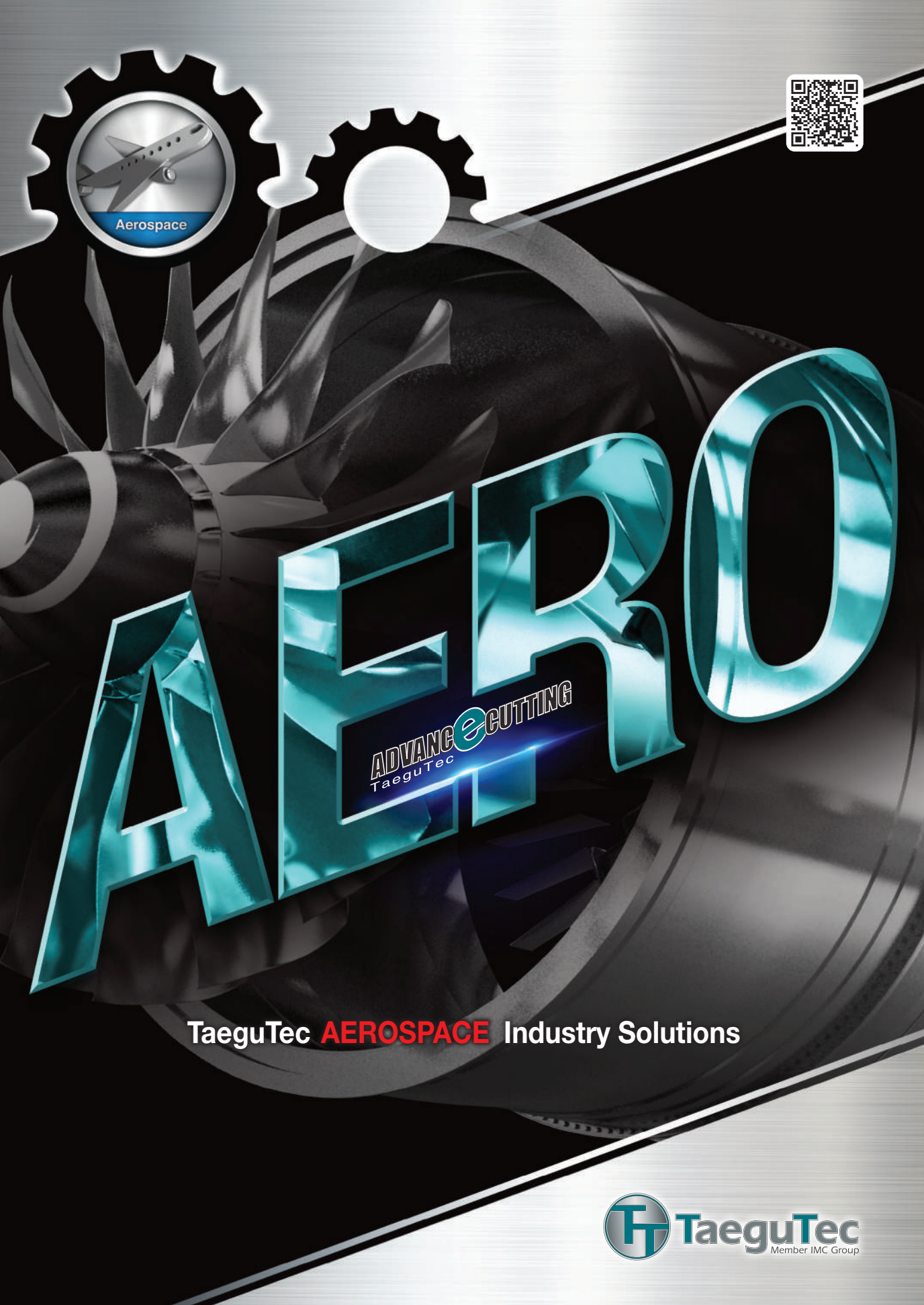

TaeguTec AEROSPACE Industry Solutions

TaeguTec
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AEROSPACE

ENGINE CASING

Cases, mounted on the exterior of the aircraft engines, protect and support the parts required for combustion. Accordingly, they need to be made from materials that can stand rapid temperature change and that can reduce weight of an engine. Titanium alloys and stainless alloys are often used for parts that go into compressors installed on the cold section of the engine, while Inconel and nickel-base superalloy are often used for combustion chamber and turbine parts in the hot section of the engine.

BLISK

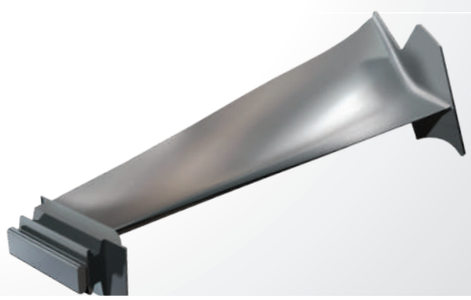
A blisk is a single engine component comprising a rotor disc and blades. It is both integrally cast and machined from a solid piece of material or it is made by welding individual blades to the rotor disc. This eliminates the need to attach the blades to the disk (via screws, bolts, etc.), thus decreasing the number of components within the compressor, while at the same time decreasing drag and increasing efficiency of air compression within the engine.

LANDING GEAR

The landing gear is used during landing, take-off and taxiing. It supports the aircraft weight and performs as a shock absorber. The nose landing gear includes a steering system and the main landing gear that is installed on the lower left and right of center area of an aircraft, supporting 90% of the aircraft weight.

FRAME

Frames for the aerospace sector are components that literally frame the basic structure of an aircraft. As they require high rigidity and light weight; aluminum alloys are often used to produce the frames. The use of titanium alloys has also increased due to its exceptional high strength-to-weight ratio.



TURBINE BLADE

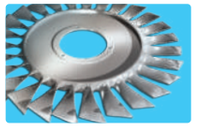
Turbine blades resemble fan blades and are susceptible to considerable heat inside the aircraft engine. The blades are made of super heat-resistant alloys that contain chrome, aluminum, cobalt and many more materials that can withstand high stress levels and temperatures beyond 700°C.

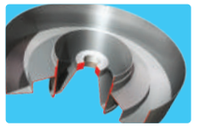
Contents

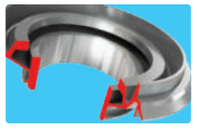
Engine Parts

06-07 Casing

08-09 Turbine Blade


10-11 Blisk


12-13 Diffuser


14-15 Housing Bearing

Wing Parts

16-17 Frame

Fuselage Parts

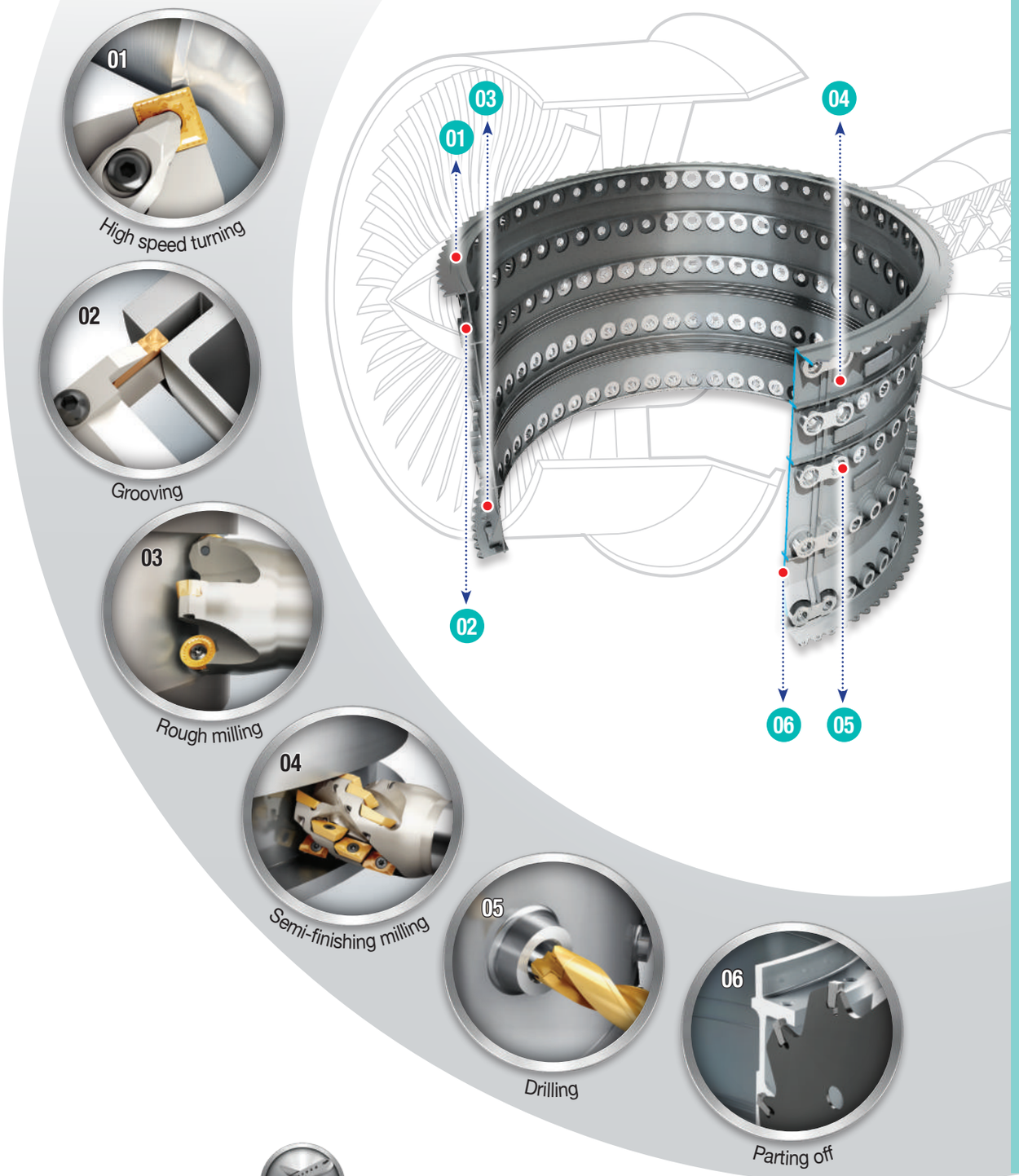
18-19 Composite Material (CFRP)

Landing Gear Parts

20-21 Landing Gear

Casing

Heat Resistant Super Alloy / Titanium Alloy / Precipitation Hardened Stainless Steel



Casing

Turning 01

T-TURN

Ceramic - High speed

Grooving 02

COOLBURST

T-CLAMP FACERUSH

CADAPTER
Modular system

Rough Milling 03

CHASEMOLD

-General machining
-Various chip breakers
(MM, ML, MLL)

CERAMICSPEED **Ceramic**

Semi-finish Milling 04

CHASEMILL STARMILL

Drilling 05

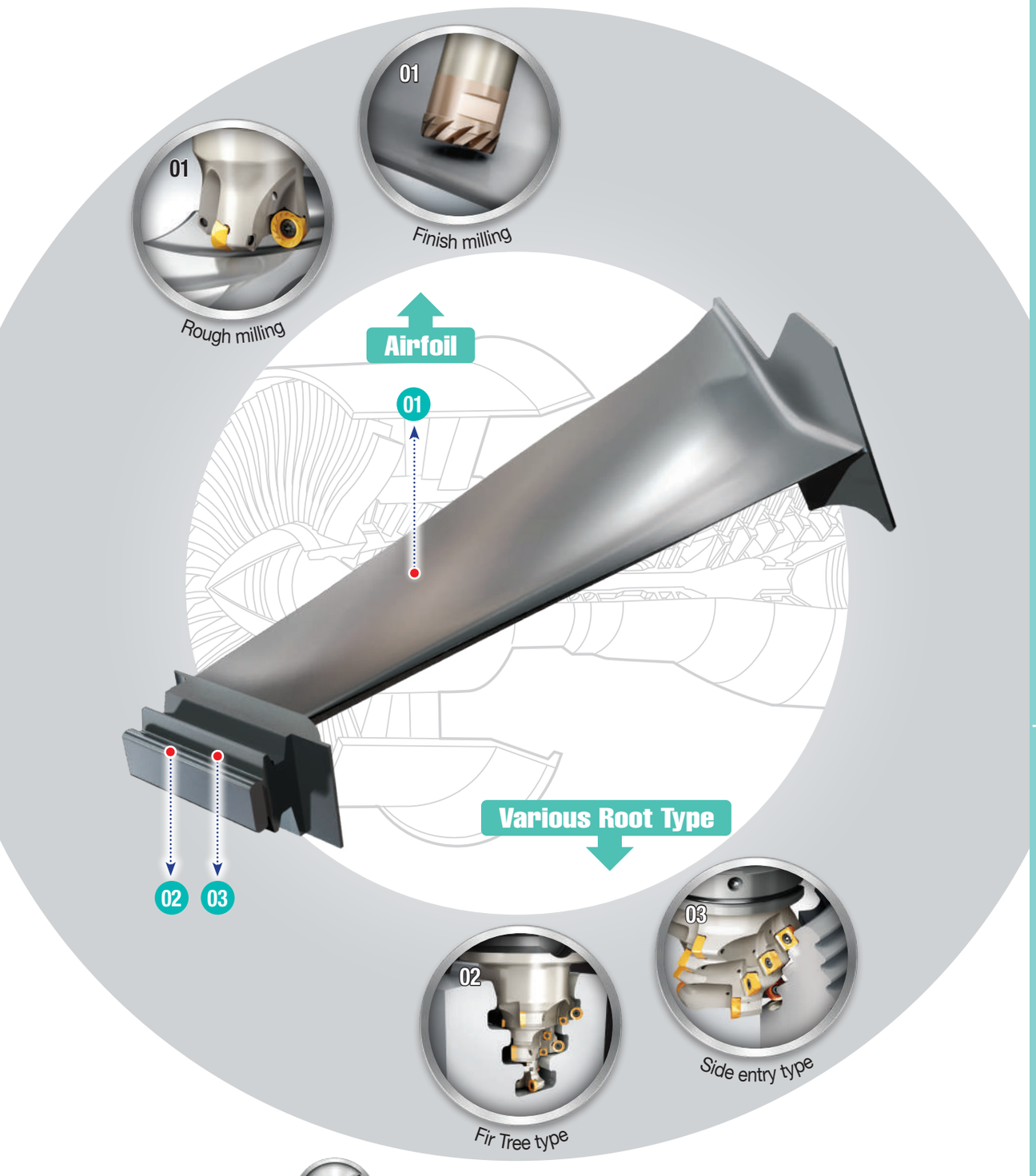
DRILLRUSH TOPDRILL

Parting off 06

(Tailor-made)

Turbine Blade

Heat Resistant Super Alloy / Titanium Alloy



Airfoil

Airfoil Milling

01

CHASEMOLD

Rough sprial path

RTM(H)X

WINMILL ADVANCED MACHINING

CHASE10MILL FACE MILLING

Rough Z level

AVKT

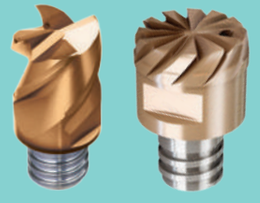
PTKU

CHASE2MOLD

RNMU

Semi-finish

MAXIRUSH INDEXABLE SOLID HEADS



Finish

FINEBARREL

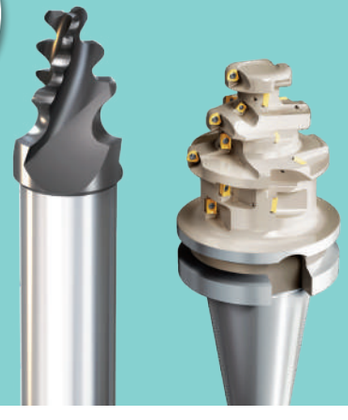
NFLB

Finish

Various Root Type

Fir Tree Type

02



Side Entry Type

03

Blisk

Heat Resistant Super Alloy (Inconel 718)

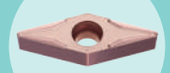
Blisk

Turning & Grooving
01

COOLBURST
High pressure coolant for tool life and productivity

T-TURN

-MGS


-FGS

T-CLAMP

TDT-RS

TDXU

CADAPTER
Modular system

Rough Milling - High feed
02

CHASE4FEED

BLMP-MM/ML

Rough Milling
03

CHASEMOLD

RYMX-ML

RYMX-MLL

Finish Milling
04

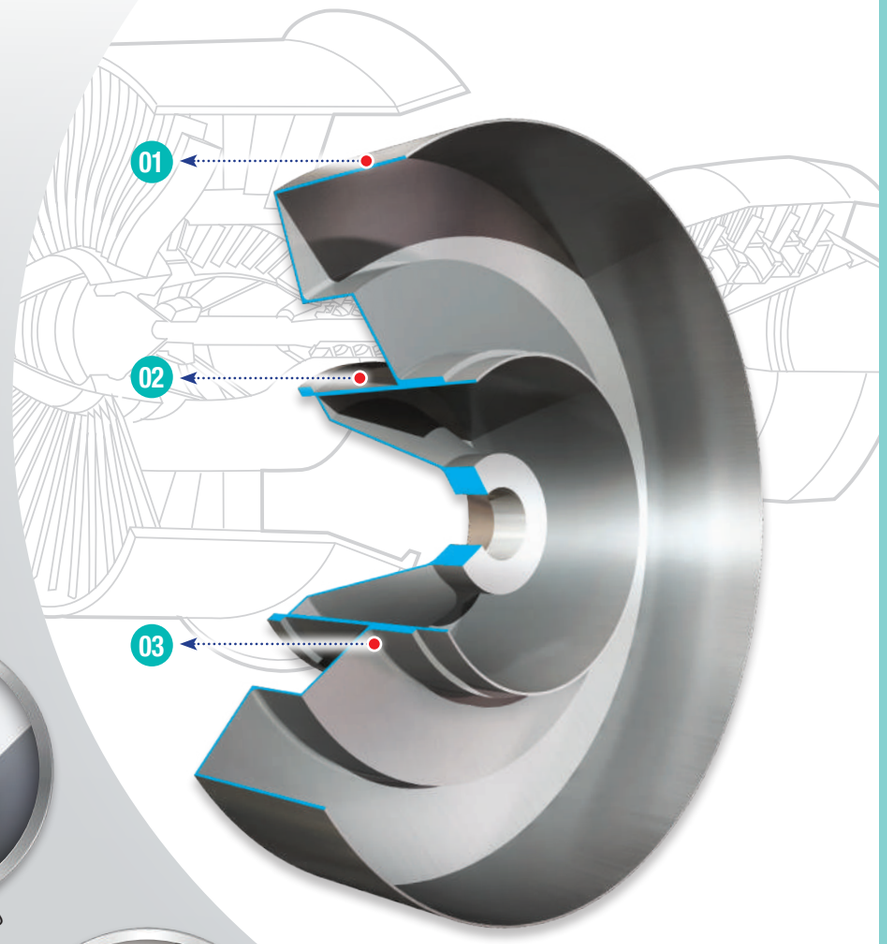
FINEBARREL

NFLB

STARMILL

Diffuser

Heat Resistant Super Alloy (Inconel 718)



Grooving

Grooving & turning

Shallow grooving and turning

Diffuser

Grooving and Turning
01 T-CLAMP

TDXU

COOLBURST

▶ High pressure coolant

Face Grooving and Turning
02 FACERUSH

PMUR/L

Tailor-made

TDFX

COOLBURST

▶ High pressure coolant

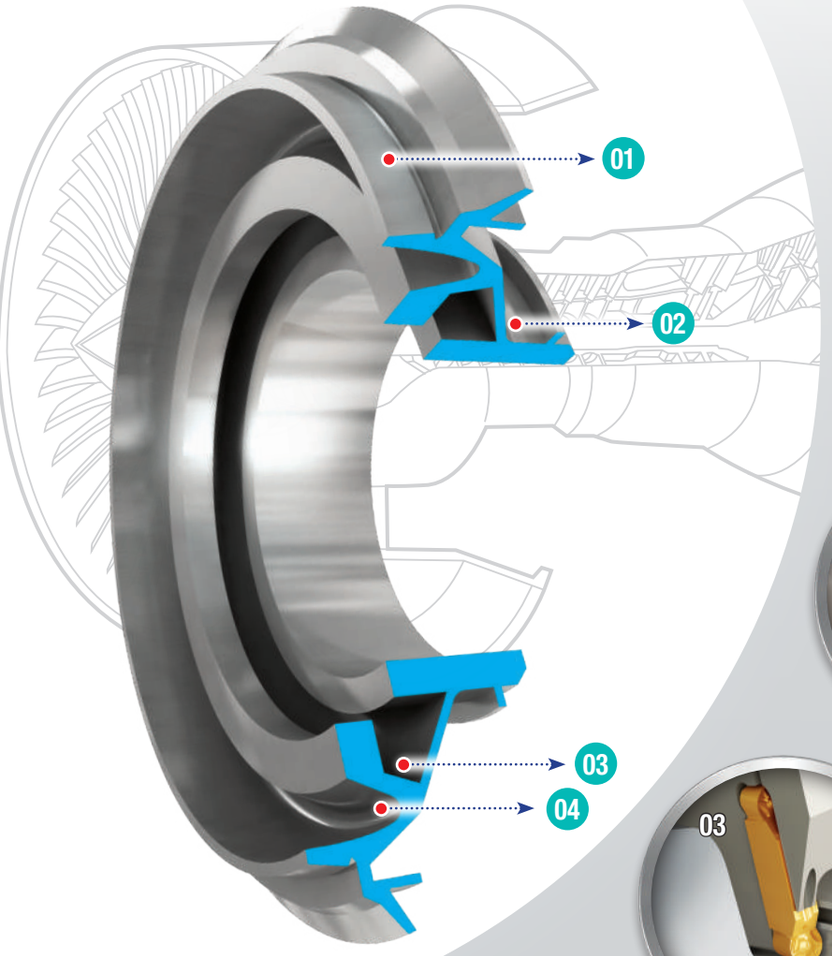
Shallow Grooving and Turning
03 T-CLAMP

TDIM

TDIP

Housing Bearing

**Heat Resistant Super Alloy / Titanium Alloy /
Precipitation Hardened Stainless Steel**



Turning

High speed turning

Grooving and turning

Shallow grooving and turning

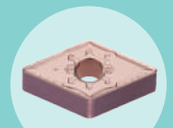
Housing Bearing

Turning 01

T-TURN

COOLBURST PINPOINTED COOLANT

- High pressure coolant



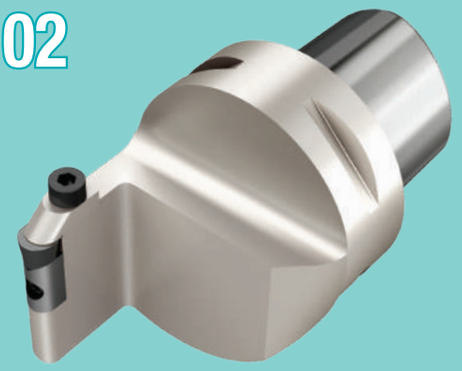
-MGS

-FGS

-MP

-ML

02



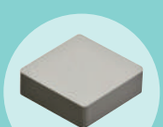
Whisker & SiAlON Ceramic grades

- High speed turning

Grades *TC430* *TC3020* *TC3030*

RNGN

RCGX



SNGN

Grooving and Turning 03

T-CLAMP PARTING & GROOVING

Tailor-made

TDT-RS

COOLBURST PINPOINTED COOLANT

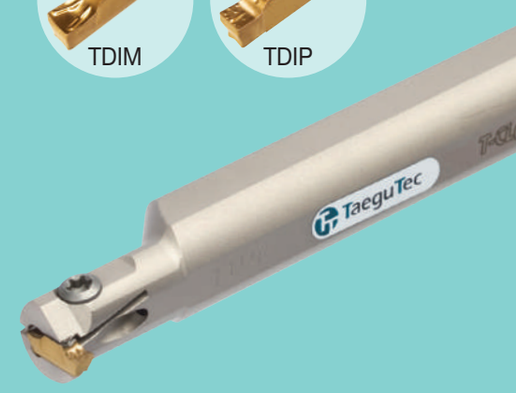
- High pressure coolant

Shallow Grooving and Turning 04

T-CLAMP PARTING & GROOVING

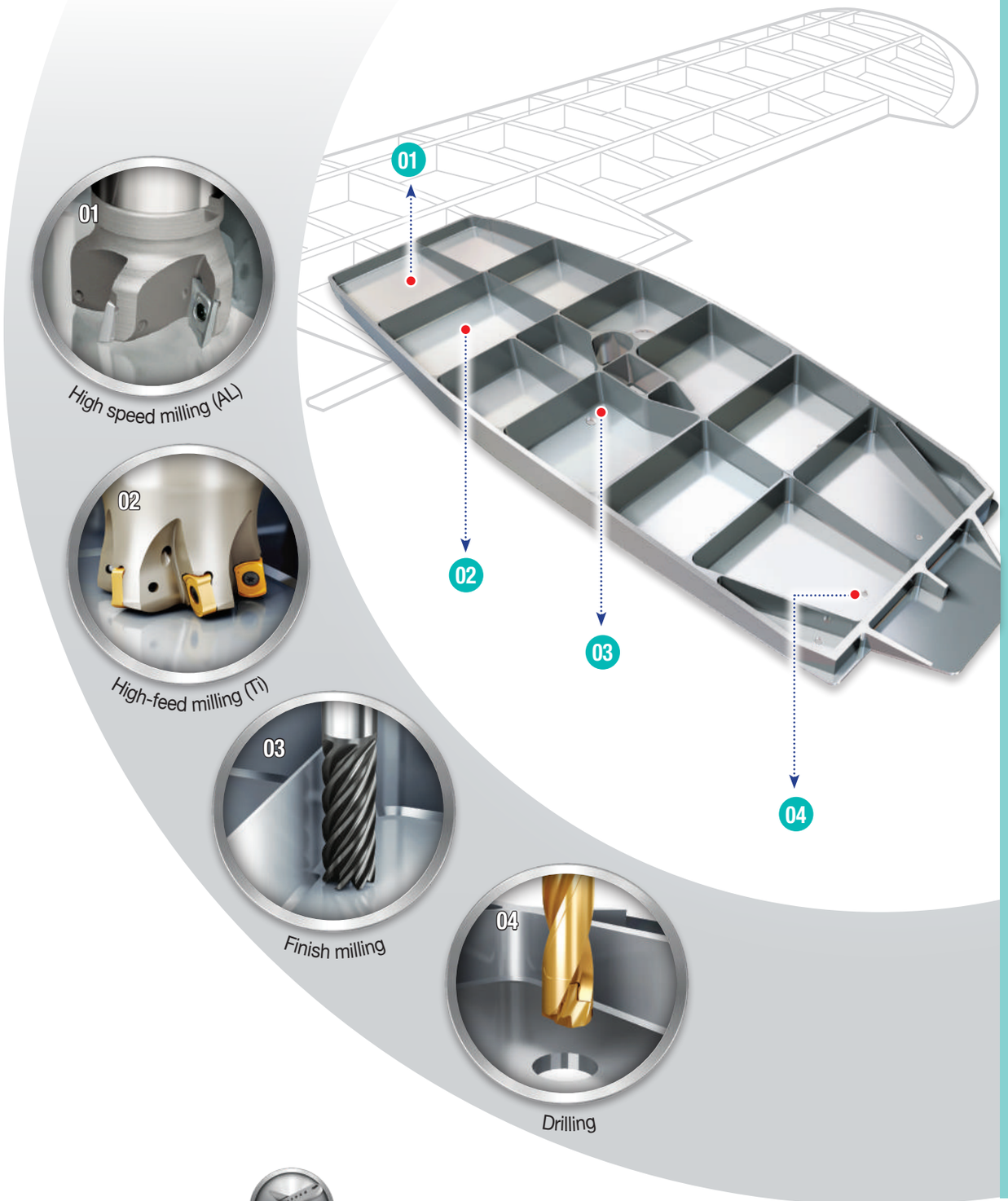
TDIM

TDIP



Frame

Aluminum & Titanium Alloy



Frame

High Speed Milling (AL)

01 CHASEALU

Stable in high speed machining

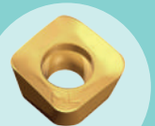
XEVT

High-feed Milling (Ti)

02 CHASE4FEED CHASEFEED CHASEMOLD

BLMP-ML

High-feed



SBMT-ML

High-feed

RYHX-L

Finish Milling

03

Good performnce in high speed machining

ALUMILL (AL) STARMILL (Ti) MAXIRUSH

(Splitter type)

(Finishing)

MXEE (AL)

MXEE (Ti)

Drilling

04

DRILLSPEED

3ED-P+

DRILLRUSH

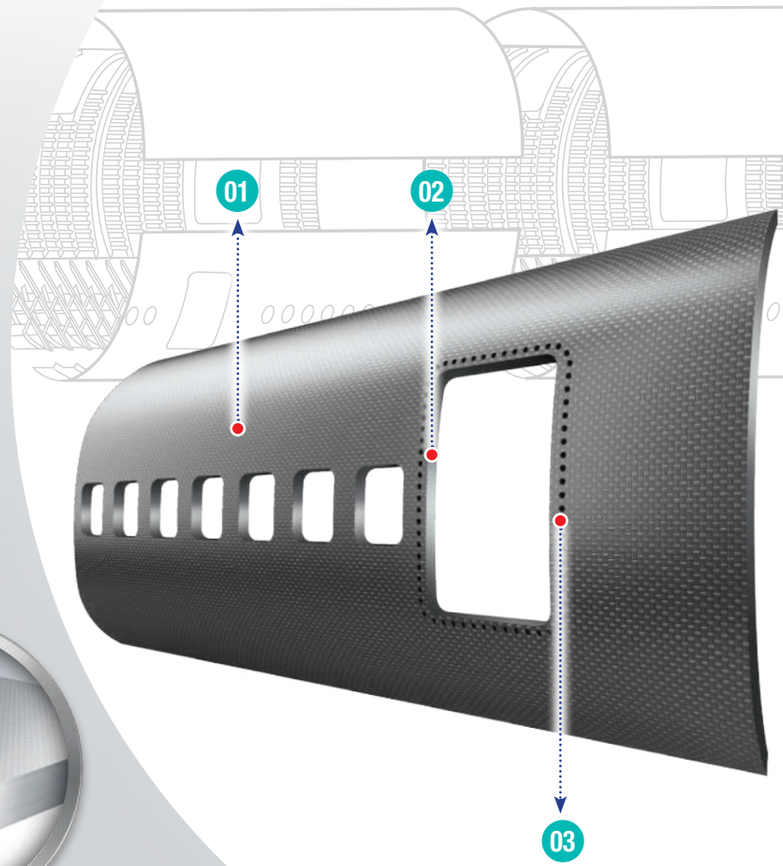
TCD

TCD-N

Composite Material

Carbon Fibre Reinforced Plastic (CFRP)

High speed milling



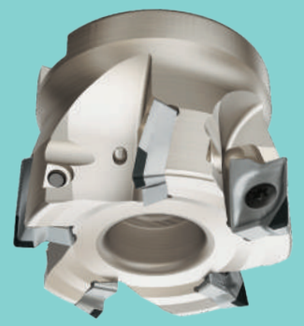
Endmilling

Drilling

Composite Material

High Speed Milling for CFRP

01



CHASEMILL

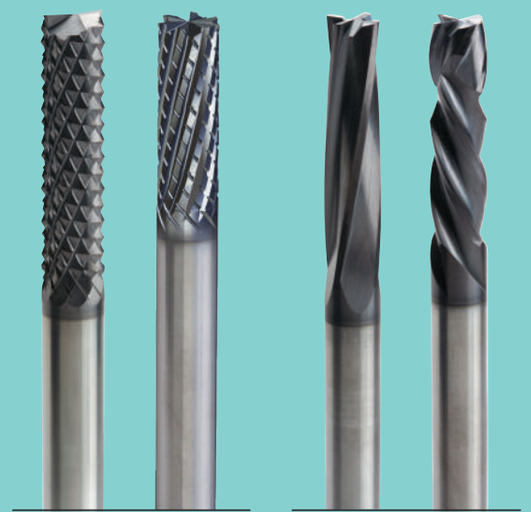
APCT TD810

Stable in high speed machining

Endmilling

02

DIAMILL



(Roughing) (Finishing)

TTD 610 diamond coated grade

Drilling

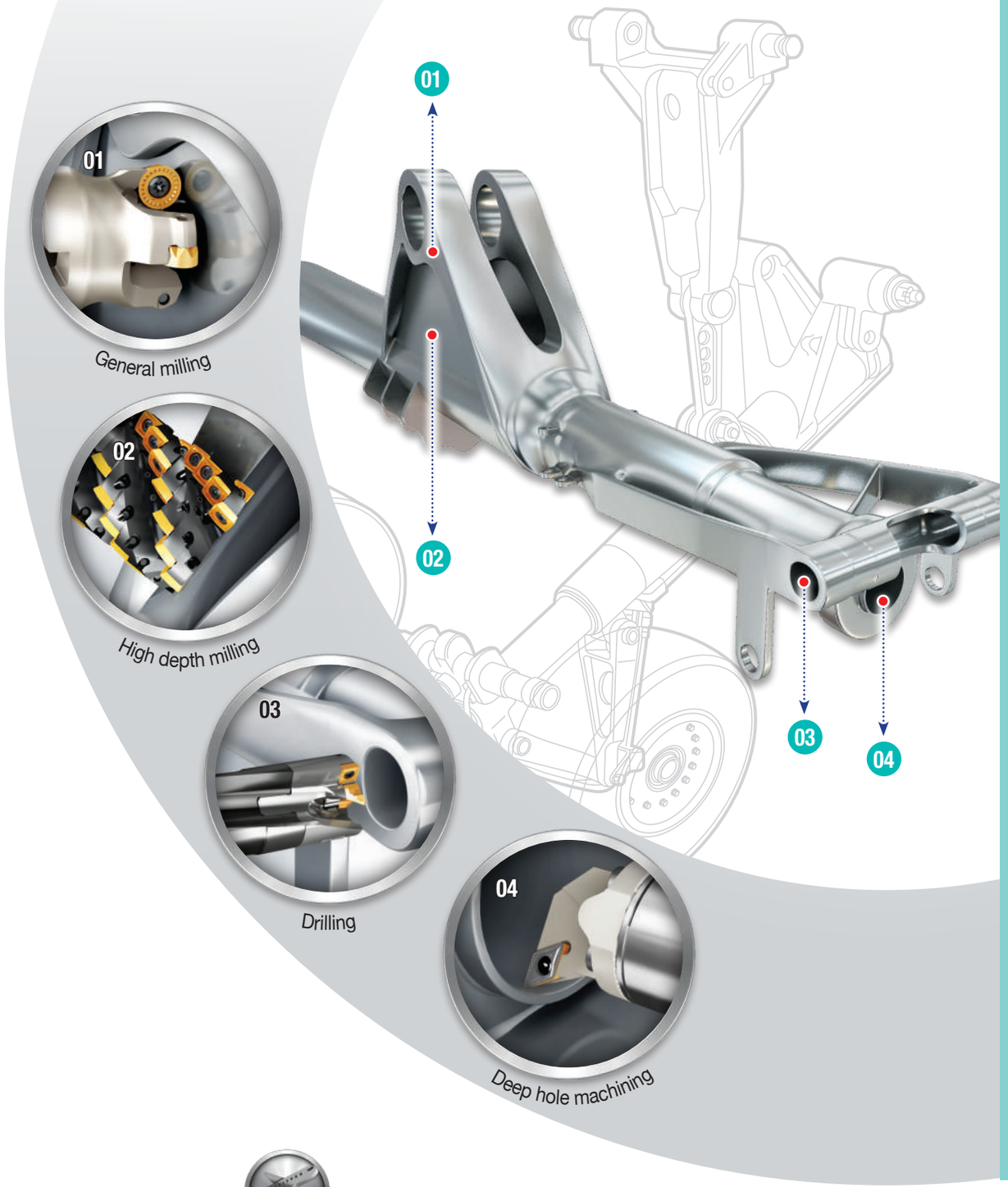
03

HDRILL

Prevents & delamination

Landing Gear

Titanium Alloy / Stainless Steel / Aluminum Alloy



Landing Gear Parts

Landing Gear

General Milling 01

CHASEMOLD

RYHX-L

RYMX
-MM/ML/MLL

High Depth Milling 02

CHASEMILL

APKT-EML

CHASEVQUAD

SVKT

Drilling 03

SPGX-DW

TCD P-CO+

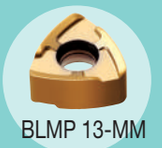
TCD P+

MODUDRILL DRILLRUSH

TRIOBALL WINMILL CHASE2FEED

3FB C-M

AVKT



BLMP 13-MM

High feed rate & 6 corners for economy with stable seating

Deep Hole Machining 04

TDEEP

Drilling

TPMX

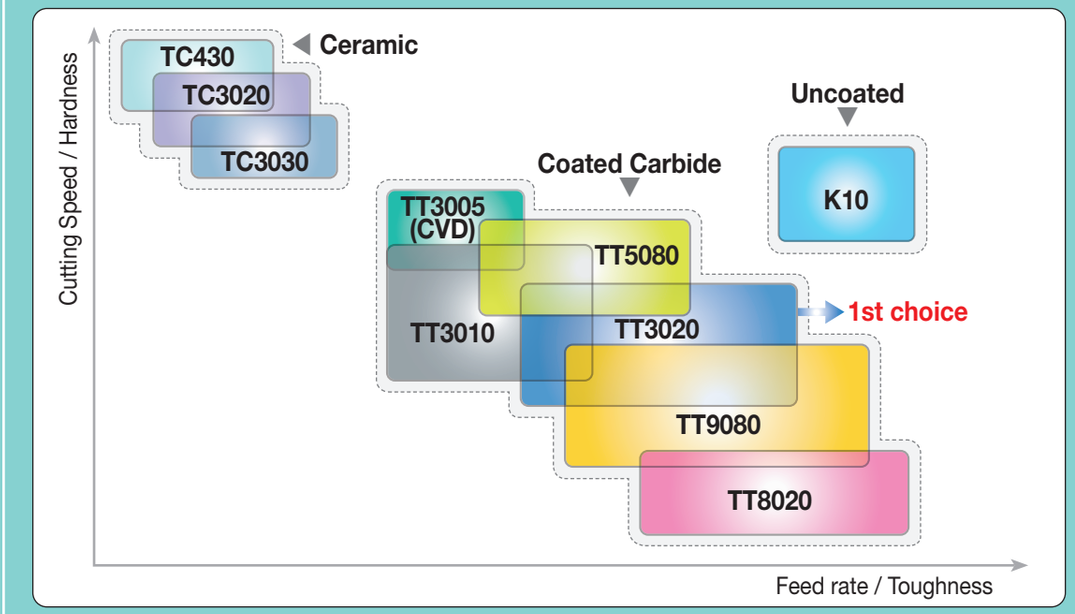
TOGT

WINGUN

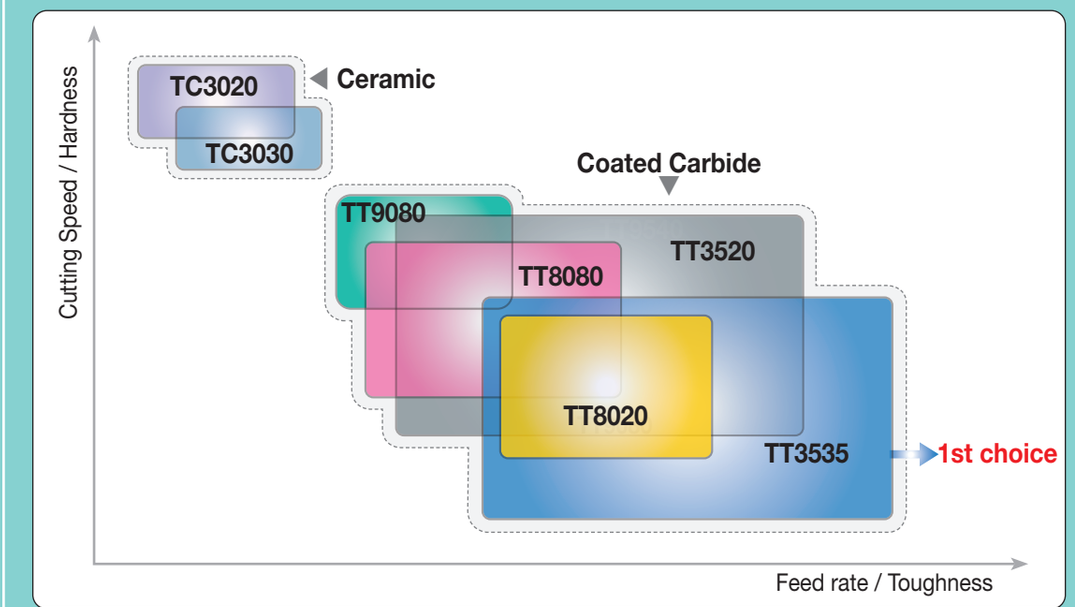
Head-changeable
double effective gundrill

Grades

Turning Grads for ISO



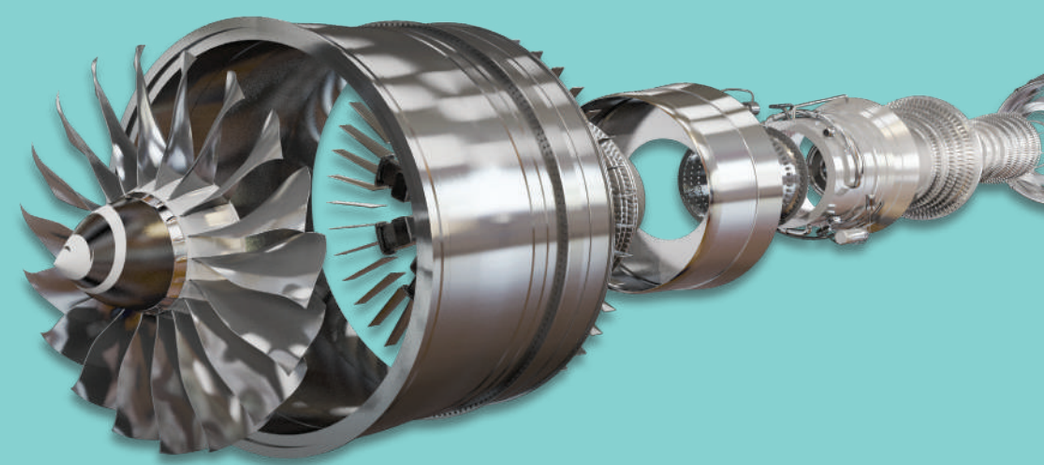
Milling Grade for ISO



Chipbreakers

Milling Insert

Turning Insert



Tool CutZZ

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