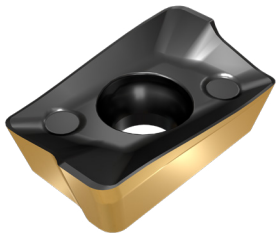


MILLING  
12-2023  
MARCH 2023  
METRIC/IMPERIAL



Light Weight Tool



Anti Vibration



High Productivity



# HELI2000

## Expanding the Range of HELI2000 with Lightweight Milling Cutters





Light Weight  
Tool



Anti  
Vibration



High  
Productivity

# NPA

New Product Announcement

## HELI2000

### Highlights

#### HELI2000 Indexable Milling Cutters with Long Overhangs:

- **Higher Productivity**
- **Longer Tool Life**
- **Safe Machining**

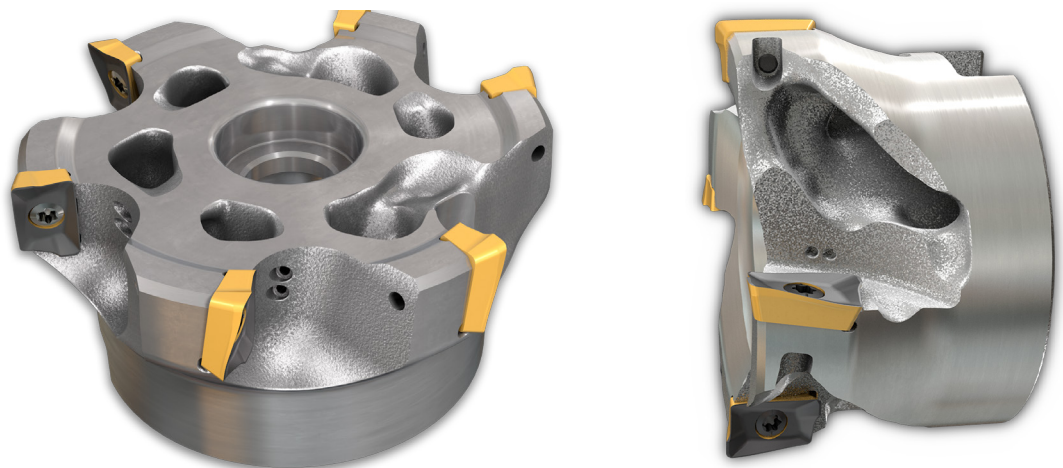
The new HELI2000 expanded tool family features lightweight milling cutters designed with a complex geometry produced by use of Additive Manufacturing (AM) with high strength to density ratio known as Metal-Titanium, assures minimum weight reduction without damaging the cutter's strength.

The new lightweight cutters, go hand in hand with ISCAR's **WHISPER Family for milling adaptors** which include an anti vibration (AV) mechanism to dampen vibration, provides excellent surface finish, and higher tool life for increased productivity.

1. By reducing the weight of the cutter, the damping coefficient increases for higher tool stability and depth of cut, to boost productivity.
2. Adding to significant weight reduction and AM technology the cutter's overall length (OAL) has been reduced by 40% which contributes to increased stiffness and stability assuring higher process safety and reliability.

The new expanded lightweight HELI2000 family is designed to mount HELI2000 and HELIMILL standard insert size 10.

The cutters design configurations are available for face mills with a central bore.



## METRIC/IMPERIAL



Light Weight  
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New Product Announcement

## HELI2000

### Cutter features

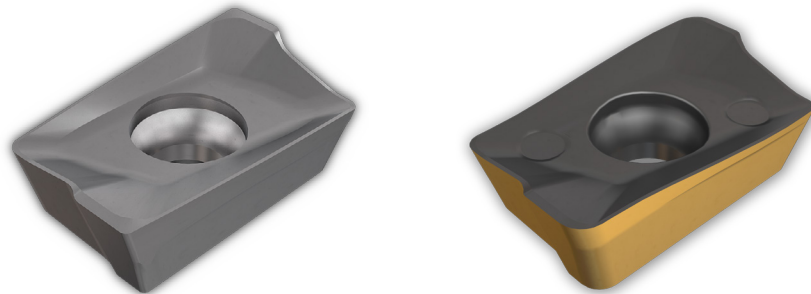
- True 90° shoulder milling
- Unequal angular tooth pitch
- Pinpointed coolant flow directed to each cutting edge
- Ramp down capabilities

### Cutting recommendations

For cutting speeds and feeds, see insert recommendations:

APKT 1003...-FF/APC...1003.../APK...1003...

HM90 APC...1003.../HM90 APK...1003...



# NPA

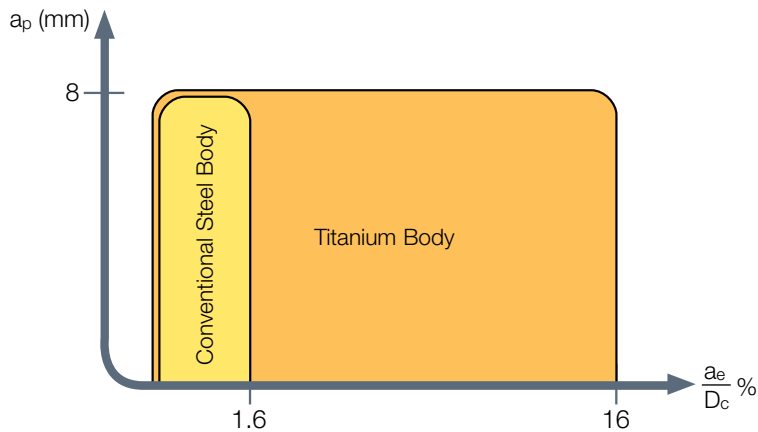
## New Product Announcement

### HELI2000

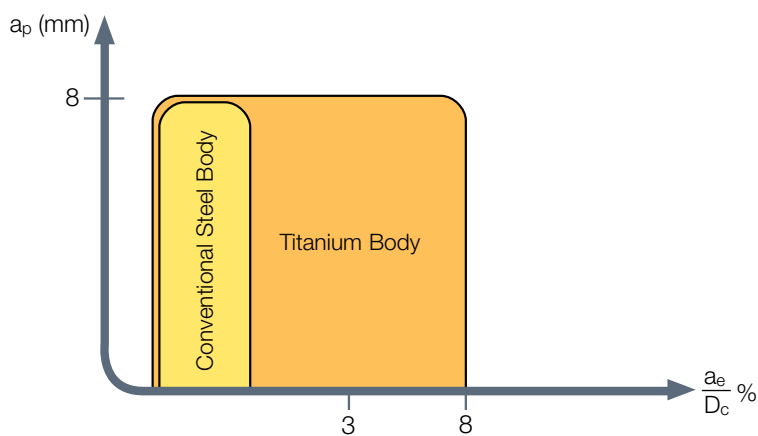
#### HELI2000 Lightweight Cutters

#### Comparative application range for finish milling at 350mm overhang

**HM90 F90AP D50-4-22-AMT** assembled on AV C5 SEM22 48X270 and **C5 AD BT50X40** adaptors  $v_c=200$  (m/min.),  $f_z=0.15$  (mm), AISI/SAE 4340 , W.-Nr.1.6580



**HM90 F90AP D63-6-22-AMT** assembled on AV C5 SEM22 48X270 and **C5 AD BT50X40** adaptors  $v_c=120$  (m/min.),  $f_z=0.10$  (mm), AISI/SAE 4340 , W.-Nr.1.6580



Light Weight  
ToolAnti  
VibrationHigh  
Productivity

# NPA

## New Product Announcement

### **HELI2000**

#### **Applications**

- Excellent for performing long-reach deep cavities in finish applications - milling square shoulders, slots and faces
- For milling Titanium and High-Temperature Superalloys, Stainless Steel and Steel.

#### **Benefits**

- Increased tool life - achieved by reducing vibrations on the cutting zone.
- Increased productivity - achieved by increasing the critical depth of cut (DOC)
- Excellent surface finish
- Higher process safety and reliability
- Pinpointed coolant outlets reduce built-up edge, better chip formation control and tool life.

[Click for Short Video](#)

# NPA

## New Product Announcement

MILLING

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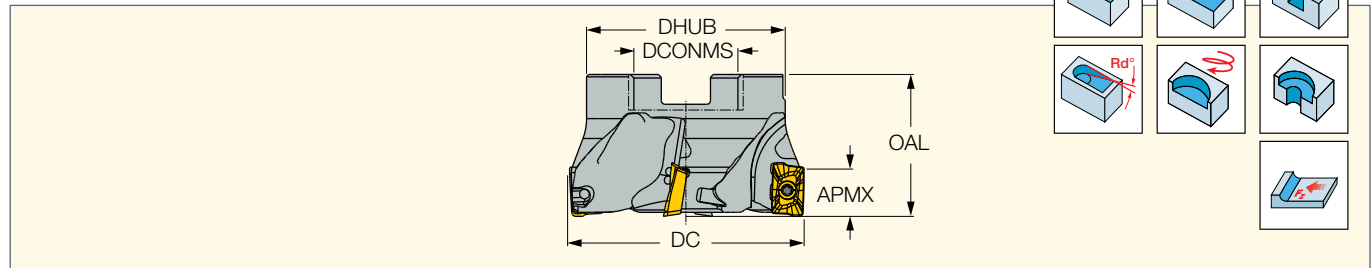
METRIC/IMPERIAL

### HELI2000

#### HM90 F90AP-AMT

90° Light Weight Face Cutters Carrying HM90 AP...T 1003 inserts

<https://www.iscar.com/eCatalog/Family.aspx?fnum=4838&mapp=ML&GFSTYP=M>



M E T R I C									
Designation	DC	CICT <sup>(1)</sup>	APMX	OAL	DHUB	DCONMS	RMPX <sup>(2)</sup>	Arbor	
<b>NEW</b> HM90 F90AP D50-4-22-AMT	50.00	4	9.80	30.00	42.00	22.00	1.4	A	0.13
<b>NEW</b> HM90 F90AP D63-6-22-AMT	63.00	6	9.80	31.00	48.00	22.00	1.0	A	0.20

<sup>(1)</sup> Number of inserts

<sup>(2)</sup> Maximum ramping angle

#### Spare Parts



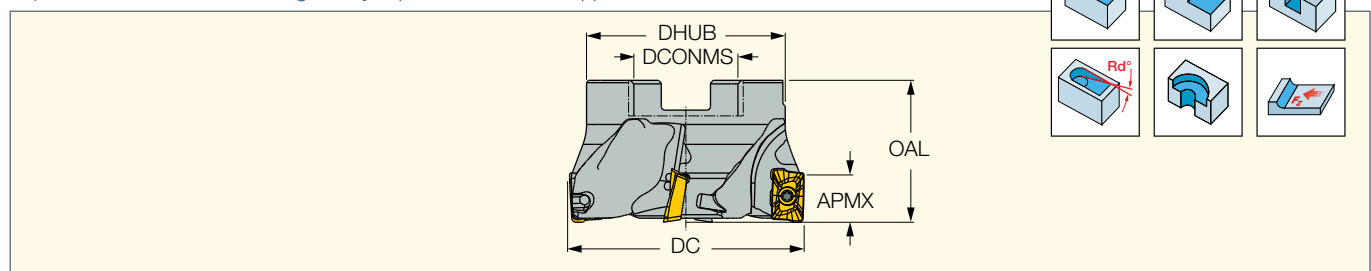
Designation	Screw	Handle	Torx Blade
HM90 F90AP-AMT	SR 34-505/HG	SW4-SD	BLD T08/M7

Recommended tightening torque: 1.2 Nxm

#### HM90 F90AP-AMT

90° Light Weight Face Cutters Carrying HM90 AP...T 1003 inserts

<https://www.iscar.com/eCatalog/Family.aspx?fnum=4839&mapp=ML&GFSTYP=I>



INCH									
Designation	DC	CICT <sup>(1)</sup>	APMX	OAL	DHUB	DCONMS	RMPX <sup>(2)</sup>	Arbor	
<b>NEW</b> HM90 F90AP D2.00-4-.75AMT	2.000	4	.3900	1.180	1.650	.750	1.4	A	.41

<sup>(1)</sup> Number of inserts

<sup>(2)</sup> Maximum ramping angle

#### Spare Parts



Designation	Screw	Handle	Torx Blade
HM90 F90AP-AMT	SR 34-505/HG	SW4-SD	BLD T08/M7

Recommended tightening torque: 10.6lbf\*in