

NPA

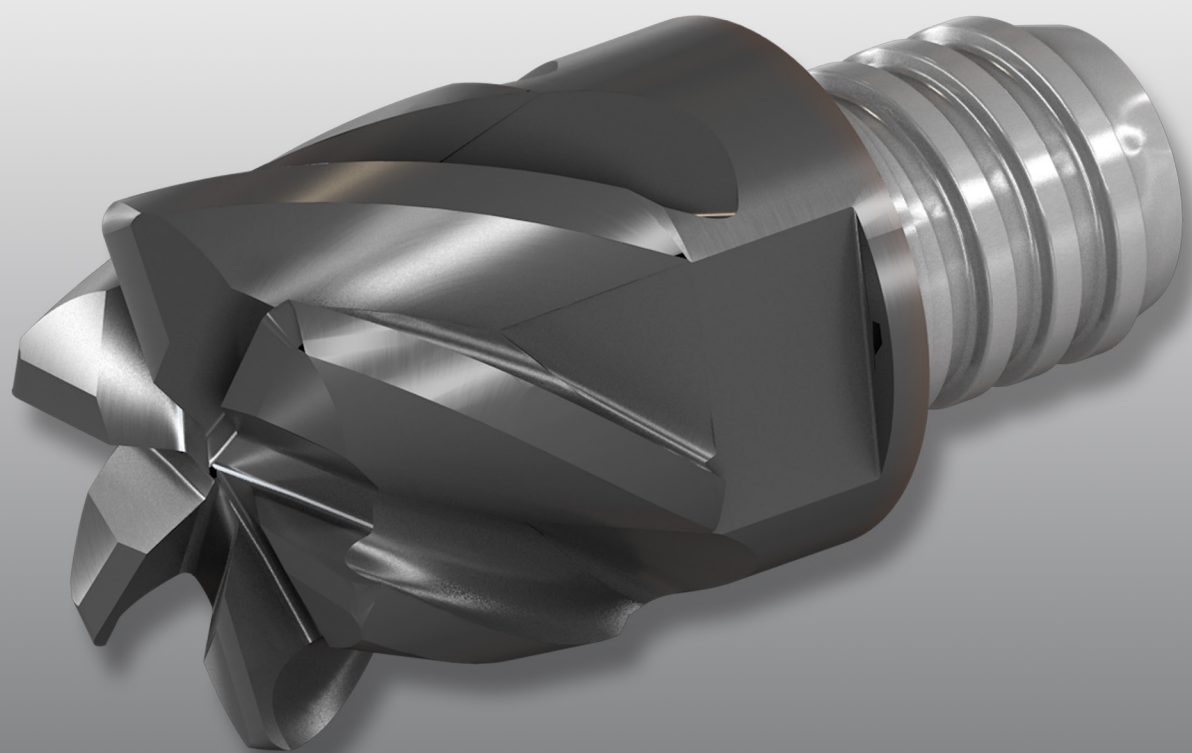
New Product Announcement

MILLING

38-2020

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Ultimate Solution
for Titanium

MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE

**Upgrading MULTI-MASTER Endmill Products:
New Geometry, More Capabilities**

Highlights

ISCAR is expanding the MULTI-MASTER family by introducing new exchangeable solid carbide MM ECK... milling heads with different helix and variable pitch.

The new MM ECK... milling heads have 6 cutting edges and are available in nominal diameters of 8 - 25 mm. The head corner radii vary from 0.4 to 1 mm, depending on the head diameter.

The advantageous combination of different helix and variable pitch, which has already proven itself in the popular ISCAR CHATTERFREE solid carbide endmills and MULTI-MASTER heads, significantly improves tool dynamic behavior and ensures stable cutting in various milling applications even in unfavorable machining conditions.

The MM ECK heads have been designed specifically for machining titanium and titanium alloys (ISCAR material groups 36 and 37), including hard-to-cut β - and near β - alloys such as Ti-10V-2Fe-3Al and Ti-5Al-5Mo-5V-3Cr, especially by trochoidal milling technique. This important design features, differentiates the new heads from the existing MULTI-MASTER CHATTERFREE items.

The MM ECK... milling heads are available in IC908 carbide grade.

Cutting data

The table with the head dimensions below specifies the range of feeds per tooth. In trochoidal milling, the width (radial depth) of cut should be up to 15% of the head nominal diameter.

For more detailed cutting data recommendations, please refer to our Reference Guide for Machining Titanium.

Click Link to See Short Video



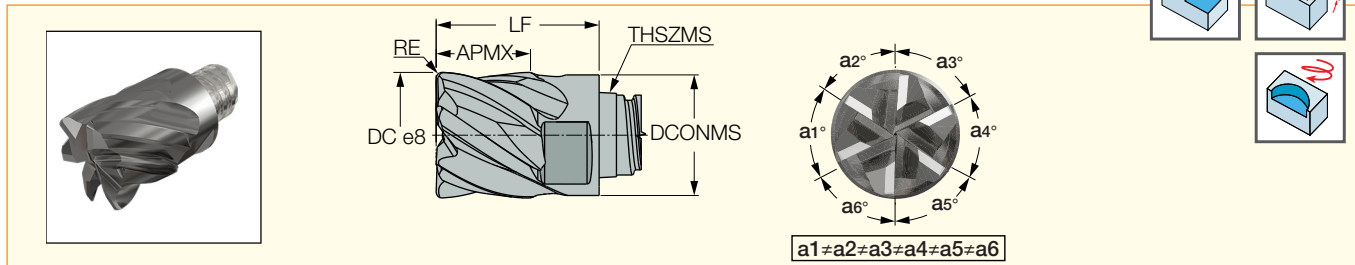
<https://youtu.be/ZAghRI7RXzA>

MULTI-MASTER
High reliability and high dimensional repeatability for high-efficiency milling

MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE

MM ECK-CF

Six-Flute Heads with 35°/37° Helix Featuring Different Corner Radii



Designation	Dimensions								IC908	Recommended Machining Data
	DC	RE	NOF ⁽¹⁾	APMX	THSZMS	DCONMS	LF	RMPX ⁽²⁾		fz (mm/t)
MM ECK080H05R04-6T05CF	8.00	0.40	6	5.00	T05	7.70	10.00	5.0	●	0.04-0.08
MM ECK100H07R05-6T06CF	10.00	0.50	6	7.00	T06	9.60	13.00	5.0	●	0.04-0.08
MM ECK120H09R05-6T08CF	12.00	0.50	6	9.00	T08	11.70	16.50	5.0	●	0.04-0.08
MM ECK160H12R08-6T10CF	16.00	0.80	6	12.00	T10	15.30	20.50	5.0	●	0.07-0.12
MM ECK200H15R10-6T12CF	20.00	1.00	6	15.00	T12	18.45	25.50	5.0	●	0.07-0.12
MM ECK250H22R10-6T15CF	25.00	1.00	6	22.00	T15	23.90	37.00	5.0	●	0.07-0.12

• Do not apply lubricant to the threaded connection.

⁽¹⁾ Number of flutes ⁽²⁾ Maximum ramping angle