Solid Carbide Endmills

ISCAR is introducing a new evolution of the CHATTERFREE solid carbide endmills for high speed / trochoidal milling and finishing operations with specifically designed multi-flute endmills with different flute helix angles and variable pitch.

The unique geometry of the CHATTERFREE ECI-H… CF series of endmills will provide improved dampening, aggressive performance, and deliver excellent tool life. CHATTERFREE mult-flute endmills are suitable for most material types such as alloyed and stainless steel as well as high temperature alloys.

With a substrate and coating specifically matched with this unique geometry, CHATTERFREE multi-flute end mills are perfectly suited for today's high speed and trochoidal milling environments.

CHATTERFREE multi-flute **ECI-H…CF** endmills are available with 6-20 flutes in .250-.750 diameters.

Use Promo Code:
ATOMV

Purchase
3 solid carbide

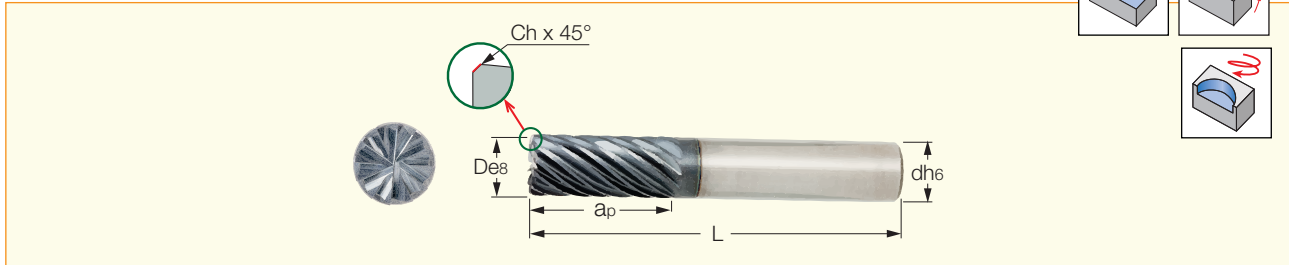## Receive

1 additional endmill*
FREE OF CHARGE

* Must be all the same endmill

SPECIAL OFFER

SOLIDMILL • CHATTERFREE
PREMIUM LINE   SOLID MILL LINE

ECI-H-CF
6-20 Flute Endmills with Different Helix and Variable Pitch,
for CHATTERFREE High Speed Finish Milling

Designation	Dimensions								IC902	Recommended Machining Data f_z (inch/t)
	D	d	a_p	L	Flute	Ch	$H_a°$	$R_d°$		
ECI-H6 250-500C250CF-H2.5	.250	.250	.500	2.500	6	0.0079	45.0	3.0	●	.0012-.0028
ECI-H8 312-630C312CF-H2.5	.312	.312	.630	2.500	8	0.0079	45.0	3.0	●	.0012-.0035
ECI-H10 375-750C375CF-H3	.375	.375	.750	3.000	10	0.0118	35.0	3.0	●	.0012-.0039
ECI-H12 500-1.0C500CFH3.5	.500	.500	1.000	3.500	12	0.0118	35.0	3.0	●	.0016-.0043
ECI-H16 625-1.25C625CF-H4	.625	.625	1.250	4.000	16	0.0118	35.0	3.0	●	.0020-.0051
ECI-H20 750-1.50C750CF-H5	.750	.750	1.500	5.000	20	0.0118	35.0	3.0	●	.0020-.0051

• Can machine at radial width of cut (ae) of up to 0.06xD

Flat Top Design for Unobstructed Chip Flow, Economical Blades with 4 Pockets and Shank Tools with 2 Pockets

- The new blades and tools feature high rigidity and are capable of bearing heavy tooth load (high feed)
- No chip obstruction under any possible machining conditions
- Excellent surface and part straightness due to high blade rigidity

- Can be used for deep grooving and parting applications (the TGSU blades are longer than any other standard blade)
- **Most economical price per pocket**

ECONOMICAL BLADES

Use Promo Code: **ATOMU**

Purchase
20 TAG inserts

Receive
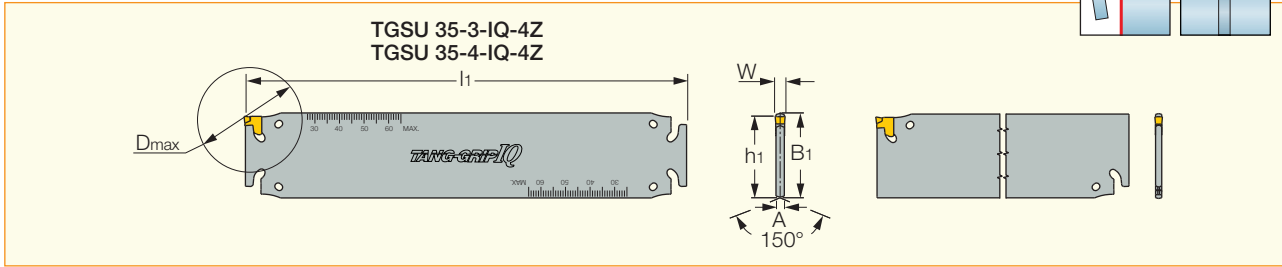### 1 corresponding TGSU 35 IQ BLADE
or TGTR/L IQ-2Z INTEGRAL HOLDER*

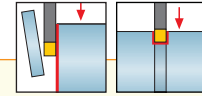# FREE OF CHARGE

* Extractor sold separately

TANG-GRIP IQ
350 LINE

TGSU
Flat Top Blades with Tangentially Oriented Pocket for Parting and Grooving,
for TANG-GRIP Single-Ended Inserts

TGSU 35-3-IQ-4Z
TGSU 35-4-IQ-4Z

Designation	B_1	W_{min}	W_{max}	D_{max}	NOP[2]	A	l_1	h_1	Insert	Coolant
TGSU 35-1.4-IQ	1.38	.055	.055	1.38	2	.098 [3]	7.087	1.307	TAG 1.4	-
TGSU 35-2-IQ	1.38	.071	.094	2.34	2	.098 [4]	6.299	1.307	TAG 2	-
TGSU 35-3-IQ-4Z	1.38	.110	.138	4.72	4	.098	7.087	1.307	TAG 3	-
TGSU 35-4-IQ-4Z	1.38	.146	.177	4.72	4	.134	7.087	1.307	TAG 4	-
TGSU 35-5-IQ	1.38	.185	.217	5.67	2	.157	7.087	1.307	TAG 5	-
TGSU 35-6-IQ	1.38	.224	.256	5.67	2	.205	7.087	1.307	TAG 6	-
TGSU 35-7-IQ	1.38	.268	.295	5.67	2	.236	7.087	1.307	TAG 7	-
TGSU 35C-8-IQ [1]	1.38	.303	.335	5.67	2	.283	7.087	1.307	TAG 8	Y
TGSU 35C-9-IQ [1]	1.38	.343	.394	5.67	2	.323	7.087	1.307	TAG 9	Y

NEW
NEW

[1] C- Internal coolant, use with TGTBU HD blocks only. Cooling tube SGCU 341 should be ordered separately. [2] Number of pockets
[3] Thickness at the D.O.C. area is .041" [4] Thickness at the D.O.C. area is .065"

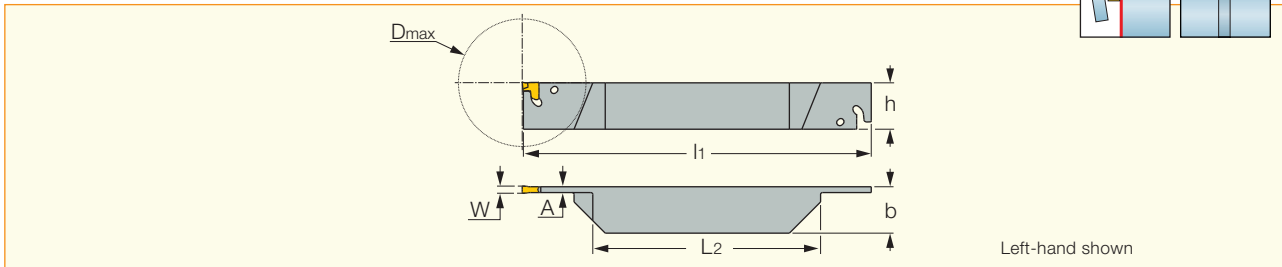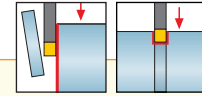• **Blades should be used with TGTBU blocks**

Spare Parts

Designation	Extractor	Cooling Tube
TGSU 35-1.4-IQ	ETG 1.4/1.6*	
TGSU 35-2-IQ	ETG 2*	
TGSU 35-3-IQ-4Z	ETG 3-4-SH*	
TGSU 35-4-IQ-4Z	ETG 3-4-SH*	
TGSU 35-5-IQ	ETG 5-7*	
TGSU 35-6-IQ	ETG 5-7*	
TGSU 35-7-IQ	ETG 5-7*	
TGSU 35C-8-IQ	ETG 8-12*	SGCU 341*
TGSU 35C-9-IQ	ETG 8-12*	SGCU 341*

* Optional, should be ordered separately

ECONOMICAL BLADES

TANG-GRIP IQ
350 LINE

TGTR/L-IQ-2Z

Integral Shank, TANG-GRIP Parting and Grooving Toolholders with 2 Pockets

Left-hand shown

Designation	W_{min}	W_{max}	D_{max}	h	b	A	l_1	L_2
TGTR/L 19-3-IQ-2Z	.110	.138	2.12	.750	.750	.098	5.905	3.860
TGTR/L 25.4-3-IQ-2Z	.110	.138	2.12	1.000	1.000	.098	5.905	3.937
TGTR/L 19-4-IQ-2Z	.146	.177	2.24	.750	.750	.134	5.905	4.090
TGTR/L 25.4-4-IQ-2Z	.146	.177	2.56	1.000	1.000	.134	5.905	4.170

Spare Parts

Designation	Extractor
TGTR/L-IQ-2Z	ETG 3-4-SH*

* Optional, should be ordered separately