

ISOPLUS



Diameters:

2.00" - 6.00"

Depth of Cut:

.235" - .355"

Insert Style:

SNGU12

SNGQ12

Insert Grades:

IN2035

IN2505

IN2510

IN2530

IN2540

IN4015

IN4030

IN10K

IN71N

NEW

Materials:

Stainless Steel, Hi-temp Alloys,
Aluminum, Iron, Steel

45° & 75° Lead Face Mills with 8 Positive Cutting Edges

Two-Sided Technology is incorporated into ISO Quad inserts for an Ingersoll Exclusive product named ISO-Plus. Users benefit by doubling their cutting edges from 4 to 8 while also taking advantage of clean shearing pressed rake face performance for ideal machining efficiency.

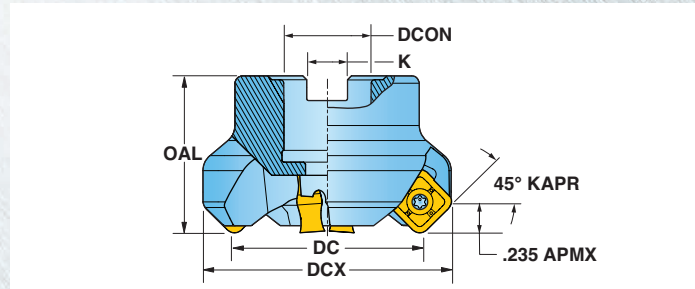
Features & Benefits

- New IN71N (SiNi) grade added for high-speed iron applications
- Thick and robust insert adds durability to demanding cutting conditions
- Strong corner configuration for heavy duty roughing
- .050" wiper flat for 32-63 Ra surface finishes
- Add 1 wiper in 1 station for finish as good as 8 Ra
- Same insert fits both 45° & 75° lead cutter



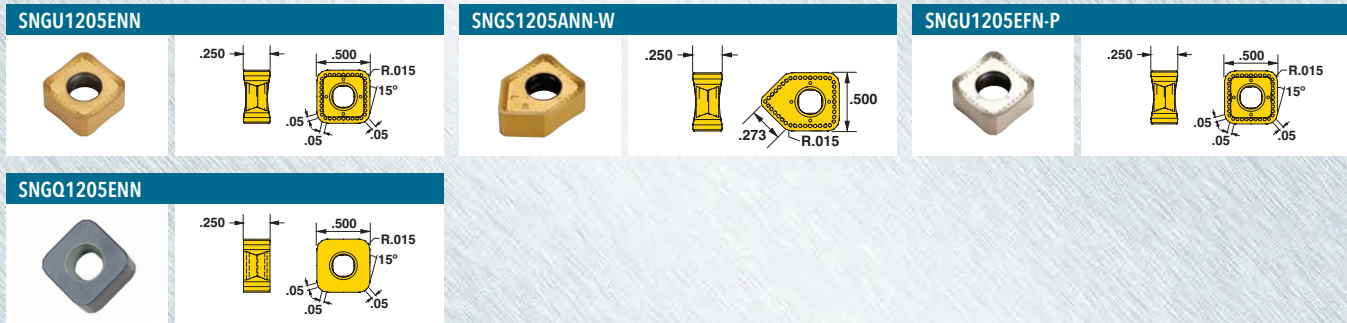
ISOPLUS SERIES DN6H/DN5H

45° FACE MILL WITH 8 CUTTING EDGES



Designation	DC Cutting Dia	DCX Cutting Dia Max	OAL Overall Length	ZEFF Eff Teeth	DCON Bore Dia	K Keyway	CSP Coolant
DN6H-20R01	2.000	2.57	1.750	4	.750	.312	Yes
DN5H-20R01	2.000	2.57	1.750	6	.750	.312	Yes
DN6H-25R01	2.500	3.07	1.750	6	1.000	.375	Yes
DN6H-30R01	3.000	3.57	1.750	7	1.000	.375	Yes
DN5H-30R01	3.000	3.57	1.750	10	1.000	.375	Yes
DN6H-40R01	4.000	4.57	2.375	8	1.500	.625	Yes
DN5H-40R01	4.000	4.57	2.375	12	1.500	.625	Yes
DN6H-50R01	5.000	5.57	2.375	9	1.500	.625	Yes
DN6H-60R01	6.000	6.57	2.000	12	1.500	.625	No
DN5H-60R01	6.000	6.57	2.000	20	1.500	.625	No

ISOPLUS SERIES DN6H/DN5H INSERTS



Insert Number	Application	Grade								
		IN2035	IN2505	IN2510	IN2530	IN2540	IN4030	IN4015	IN10K	IN71N
SNGU1205ENN	Multi-Purpose	•	•	•	•	•	•	•		
SNGS1205ANN-W	Wiper		•	•						
SNGU1205EFN-P	Aluminum								•	
NEW SNGQ1205ENN	SiNi									•

** Faceted corner simulates R.093.

Cutter Body Hardware for Series DN6H/DN5H

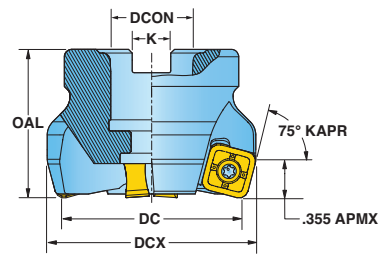
Insert Number		
	SHCS	Coolant Through SHCS (opt)
DN6H-20R01	SD-06-46	SD-06-89
DN5H-20R01	SD-06-46	SD-06-89
DN6H-25R01	SD-08-46	SD-08-92
DN6H-30R01	SD-08-46	SD-08-92
DN5H-30R01	SD-08-46	SD-08-92
DN6H-40R01	SD-12-82	SD-12-99
DN5H-40R01	SD-12-82	SD-12-99
DN6H-50R01	SD-12-82	SD-12-99

Insert Hardware

Insert Number	Substrate						Recommended Torque
		Insert Screw	Driver Handle	Insert Driver Blade	Optional Torque Wrench	Optional Insert Driver Blade	
SNGU1205ENN	carbide	SM40-100-R0	DS-A00T	DS-T156B	DT-35-02	DS-T15B1	30-35 in. lbs.
SNGS1205ANN-W	carbide	SM40-100-R0	DS-A00T	DS-T156B	DT-35-02	DS-T15B1	30-35 in. lbs.
SNGU1205EFN-P	carbide	SM40-100-R0	DS-A00T	DS-T156B	DT-35-02	DS-T15B1	30-35 in. lbs.
SNGQ1205ENN	SiNi	SM40-100-R0	DS-A00T	DS-T156B	DT-28-01	DS-T15B1	28 in. lbs.

ISOPLUS SERIES DL6H

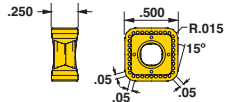
75° FACE MILL WITH 8 CUTTING EDGES



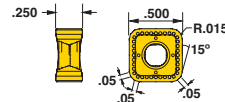
Designation	DC Cutting Dia	DCX Cutting Dia Max	OAL Overall Length	ZEFF Eff Teeth	DCON Bore Dia	K Keyway	CSP Coolant
DL6H-20R01	2.000	2.30	1.750	4	.750	.312	Yes
DL6H-25R01	2.500	2.80	1.750	6	1.00	.375	Yes
DL6H-30R01	3.000	3.30	1.750	7	1.00	.375	No
DL6H-40R01	4.000	4.30	2.000	8	1.50	.625	No
DL6H-60R01	6.500	6.30	2.000	12	1.50	.625	No

ISOPLUS SERIES DL6H INSERTS

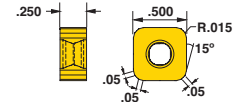
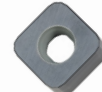
SNGU1205ENN



SNGU1205EFN-P



SNGQ1205ENN



Insert Number	Application	Grade								
		IN2035	IN2505	IN2510	IN2530	IN2540	IN4030	IN6515	IN10K	IN71N
SNGU1205ENN	Multi-Purpose	•	•	•	•	•	•	•	•	•
SNGU1205EFN-P	Aluminum									•
SNGQ1205ENN	SiNi									•

NEW

** Faceted corner simulates R.093.

Cutter Body Hardware for Series DL6H

Insert Number		
	SHCS	Coolant Through SHCS (opt)
DL6H-20R01	SD-06-46	SD-06-89
DL6H-25R01	SD-08-46	SD-08-92

Insert Hardware

Insert Number	Substrate						Recommended Torque
		Insert Screw	Driver Handle	Insert Driver Blade	Optional Torque Wrench	Optional Insert Driver Blade	
SNGU1205ENN	carbide	SM40-100-R0	DS-A00T	DS-T156B	DT-35-02	DS-T15B1	30-35 in. lbs.
SNGU1205EFN-P	carbide	SM40-100-R0	DS-A00T	DS-T156B	DT-35-02	DS-T15B1	30-35 in. lbs.
SNGQ1205ENN	SiNi	SM40-100-R0	DS-A00T	DS-T156B	DT-28-01	DS-T15B1	28 in. lbs.

ISOPLUS OPERATING GUIDELINES



Material	Brinell Hardness	SFM	Feed per Insert (inch)	Grade								Coolant		
				IN10K	IN2035	IN2505	IN2510	IN2530	IN2540	IN4015	IN4030		IN71N	
Aluminum	7075-T6, 6061-T6, 2024	-	1,000 - 8,000	.004 - .015	1									Yes
Cast Iron	Gray	150 - 250	400 - 1,000	.006 - .015			3	1			2	4		No
			1800 - 3000	.005 - .008									1	
	Nodular	150 - 250	400 - 800	.005 - .012			3	2			1	4		
			1500 - 2500	.004 - .007									1	
Steel	Low Carbon 1018, 8620	100 - 250	400 - 1000	.006 - .015									No	
	High Carbon F-6180	250 - 400	350 - 650				3		2	4		1		
	Alloyed Steel 4140, 4340	150 - 300	300 - 700											
	Tool Steel A-6, D-1, D-2	Up to 300	300 - 600											
Stainless Steel	300 Series, 304, 316	-	300 - 700	.005 - .010									May not be required at high speeds	
	400 Series 15-5 PH	Up to 320	400 - 700			1	4		3	5		2		
	13-8 PH	-	200 - 400											Yes
Nickel Alloys	Inconel, Hastelloy, Waspalloy	-	75-120	.003 - .006		1	3		4			2	Yes	
Titanium	6AL-4V	-	100 - 150	.004 - .008		1	4		3			2	Yes	