

AHB

GOLD QUAD^F

TOOLING & MACHINERY

COMPLETE METALWORKING SOLUTIONS

(800) 991-4225

www.ahbinc.com

ISO Certified

customerservice@ahbinc.com

Inserts:

- SDES13, SDES19
- SDMS13, SDMS19

Face Mills:

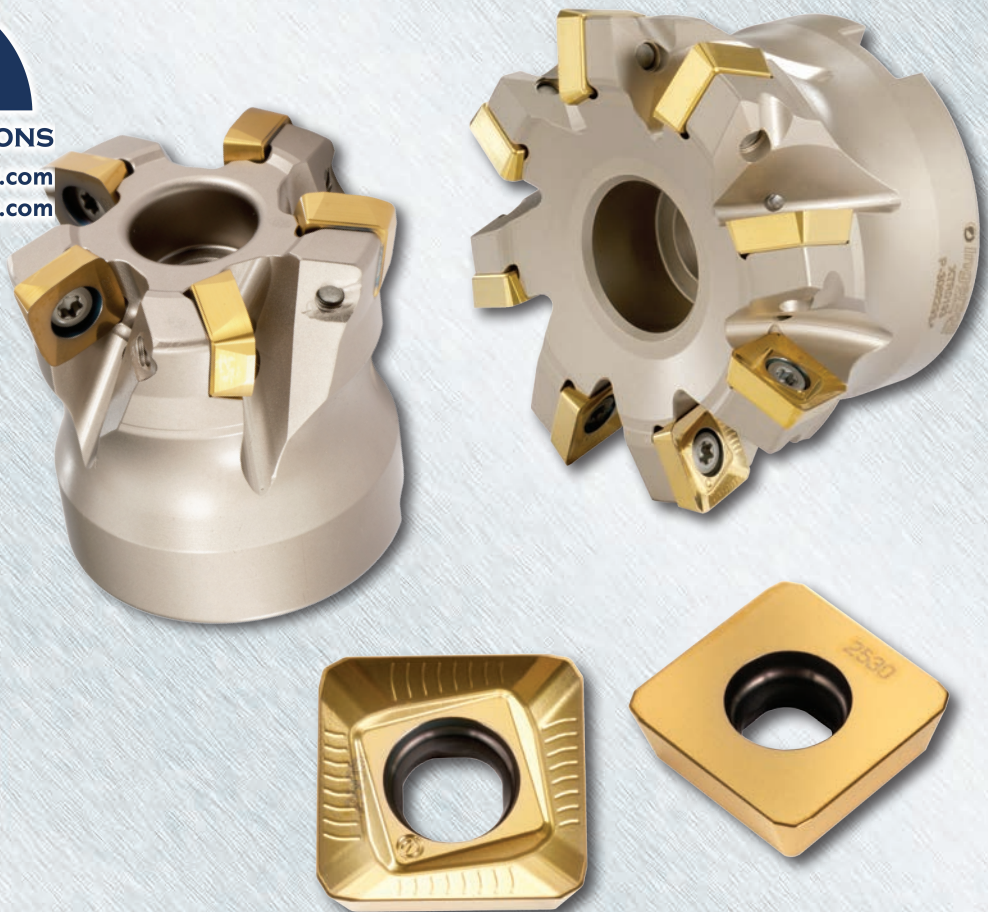
- 5G5M, 5G6M, 5M5P, 5M6P

Grades:

- IN2505
- IN2530
- IN4005
- IN4030
- IN4035

Applications:

- Die & Mold
- Aerospace
- General Purpose



NEW QUAD FEED CUTTER

13mm and 19mm IC Insert Sizes

Features and Benefits

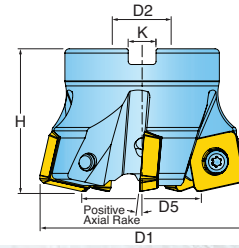
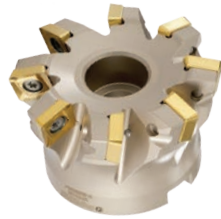
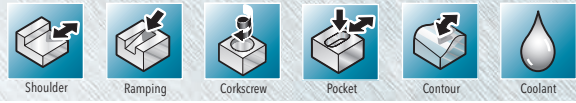
- Positive lead angle - High Feed Technology.
- Ultra-strong, super free cutting insert geometries.
- 4 indexes per insert.
- Up to 8 different insert geometry types.
- Face mill, end mill & top-on systems.
- Application flexibility.
- Premium milling grades.
- Latest post coating treatment technology to ensure long lasting performance.

**NEW
PRODUCT
ANNOUNCEMENT
*2015***

Member IMC Group
Ingersoll
Cutting Tools

GOLD QUAD^F FACE MILLS

19MM INSERTED CUTTERS



Cutter Number	Nom. Dia.	# of Inserts	D2 Bore Dia.	K Keyway	Coolant	SDES1906MDR, SDMS1906MDR-PH, SDES190620N, SDES190620N-001, SDMS190620R-PH				SDES1906MPR, SDES1906MPR-001			
						D1 Program OD Dia.	D5 Effective Dia.	H Height	Max. Ramp Angle	D1 Program OD Dia.	D5 Effective Dia.	H Height	Max. Ramp Angle
5G5M-30R01	3.000	6	1.00	0.375	yes	3.000	1.766	2.000	1.6	2.961	1.903	1.981	1.2
5G6M-30R01	3.000	5	1.00	0.375	no	3.000	1.755	2.000	1.6	2.961	1.894	1.981	1.2
5G5M-40R01	4.000	8	1.50	0.625	yes	4.000	2.769	2.500	1.0	3.961	2.906	2.481	0.8
5G6M-40R01	4.000	6	1.50	0.625	no	4.000	2.755	2.500	1.0	3.961	2.894	2.481	0.8
5G5M-50R01	5.000	9	1.50	0.625	yes	5.000	3.759	2.500	1.7	4.961	3.897	2.481	0.6
5G6M-50R01	5.000	7	1.50	0.625	no	5.000	3.755	2.500	0.7	4.961	3.894	2.481	0.6
5G5M-60R01	6.000	10	1.50	0.625	no	6.000	4.757	2.500	0.6	5.961	4.896	2.481	0.4
5G6M-60R01	6.000	8	1.50	0.625	no	6.000	4.755	2.500	0.6	5.961	4.894	2.481	0.4

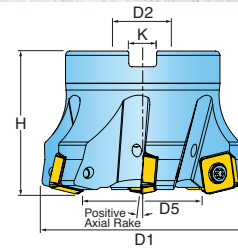
GOLD QUAD^F 19MM INSERTS

SDMS190620R-PH 	SDMS1906MDR-PH 	SDES1906MDR
SDES190620N 	SDES190620N-001 	SDES1906MPR-001
SDES1906MPR 		

Insert Number	Applications	Max DOC	Program Corner Radius	Grade	IN2505	IN2530	IN4005	IN4030	IN4035
SDES1906MDR	Hi-Feed, Flat Face / Wiper - Facets	.118 (3mm)	.180		•	•			
SDES190620N	Hi-Feed, Flat Face / Corner Radius	.118 (3mm)	.180		•	•			
SDES190620N-001	Hi-Feed, Precision Flat Face / Corner Radius	.118 (3mm)	.180		•	•			
SDMS1906MDR-PH	Hi-Feed, Pos Precision / Wiper - Facets	.118 (3mm)	.180		•	•	•	•	•
SDMS190620R-PH	Hi-Feed, Pos Precision / Corner Radius	.118 (3mm)	.180		•	•	•	•	•
SDES1906MPR	Hi-Feed, Heavy Duty - Standard	.147 (3.7mm)	.212		•	•			•
SDES1906MPR-001	Hi-Feed, Heavy Duty - Precision	.147 (3.7mm)	.212		•	•	•	•	•

GOLD QUAD^F FACE MILLS

13MM INSERTED CUTTERS



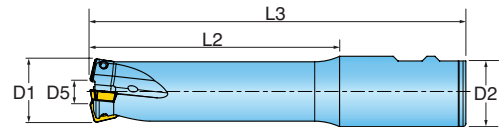
Cutter Number	Nom. Dia.	# of Inserts	D2 Bore Dia.	K Keyway	Coolant	SDES1305MDR, SDMS1305MDR-PH, SDES1305MDR-001, SDES130515N-001, SDES130515N, SDMS130515R-PH, SDMS130512R-PP				SDES1305MPR, SDES1305MPR-001			
						D1 Program OD Dia.	D5 Effective Dia.	H Height	Max. Ramp Angle	D1 Program OD Dia.	D5 Effective Dia.	H Height	Max. Ramp Angle
5M5P-20R01	2.000	5	0.750	0.312	yes	2.000	1.170	2.000	1.7	1.970	1.281	1.985	1.5
5M6P-20R01	2.000	4	0.750	0.312	yes	2.000	1.170	2.000	1.7	1.970	1.281	1.985	1.5
5M5P-25R01	2.500	6	0.750	0.312	yes	2.500	1.670	2.000	1.1	2.470	1.781	1.985	1.1
5M6P-25R01	2.500	5	0.750	0.312	yes	2.500	1.670	2.000	1.1	2.470	1.781	1.985	1.1
5M5P-30R01	3.000	8	1.000	0.375	yes	3.000	2.170	2.000	0.9	2.970	2.280	1.985	0.8
5M6P-30R01	3.000	6	1.000	0.375	yes	3.000	2.170	2.000	0.9	2.970	2.280	1.985	0.8
5M5P-30R02	3.000	8	1.250	0.500	yes	3.000	2.170	2.000	0.9	2.970	2.280	1.985	0.8
5M6P-30R02	3.000	6	1.250	0.500	yes	3.000	2.170	2.000	0.9	2.970	2.280	1.985	0.8
5M5P-40R01	4.000	10	1.500	0.625	yes	4.000	3.170	2.500	0.6	3.970	3.280	2.485	0.6
5M6P-40R01	4.000	8	1.500	0.625	yes	4.000	3.170	2.500	0.6	3.970	3.280	2.485	0.6
5M5P-50R01	5.000	11	1.500	0.625	yes	5.000	4.170	2.500	0.4	4.970	4.280	2.485	0.4
5M6P-50R01	5.000	9	1.500	0.625	yes	5.000	4.170	2.500	0.4	4.970	4.280	2.485	0.4

GOLD QUAD^F FACE MILLS - METRIC

Cutter Number	Nom. Dia.	# of Inserts	D2 Bore Dia.	K Keyway	Coolant	SDES1305MDR, SDMS1305MDR-PH, SDES1305MDR-001, SDES130515N-001, SDES130515N, SDMS130515R-PH, SDMS130512R-PP				SDES1305MPR, SDES1305MPR-001			
						D1 Program OD Dia.	D5 Effective Dia.	H Height	Max. Ramp Angle	D1 Program OD Dia.	D5 Effective Dia.	H Height	Max. Ramp Angle
5M5P050R00	50mm	5	22mm	10.4mm	Yes	50mm	28.92mm	50mm	1.5	49.237mm	31.74mm	49.627mm	1.5
5M5P052R00	52mm	5	22mm	10.4mm	Yes	52mm	30.92mm	50mm	1.5	51.233mm	33.736mm	49.627mm	1.5
5M5P063R00	63mm	6	22mm	10.4mm	Yes	63mm	41.9mm	50mm	1	62.23mm	44.72mm	49.63mm	1
5M5P066R00	66mm	6	27mm	12.4mm	Yes	66mm	44.89mm	50mm	1	65.23mm	47.72mm	49.63mm	1
5M5P100R00	100mm	9	32mm	14.4mm	Yes	100mm	78.91mm	60mm	0.5	99.24mm	81.74mm	59.62mm	0.5
5M6P052R00	52mm	4	22mm	10.4mm	Yes	52mm	30.92mm	50mm	1.5	51.233mm	33.736mm	49.627mm	1.5
5M6P063R00	63mm	5	22mm	10.4mm	Yes	63mm	41.9mm	50mm	1	62.23mm	44.72mm	49.63mm	1
5M6P080R00	80mm	6	27mm	12.4mm	Yes	80mm	58.91mm	50mm	0.5	79.25mm	61.73mm	49.63mm	1
5M6P100R00	100mm	7	32mm	14.4mm	Yes	100mm	78.91mm	60mm	0.5	99.24mm	81.74mm	59.62mm	0.5

GOLD QUAD^F END MILLS

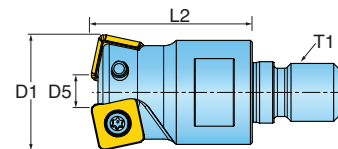
13MM INSERTED CUTTERS



Cutter Number	Nom. Dia.	# of Inserts	L3 OAL	D2 Shank Style	Coolant	SDES1305MDR, SDMS1305MDR-PH, SDES1305MDR-001, SDES130515N-001, SDES130515N, SDMS130515R-PH, SDMS130512R-PP				SDES1305MPR, SDES1305MPR-001			
						D1 Program OD Dia.	D5 Effective Dia.	L2 Ext. Length	Max. Ramp Angle	D1 Program OD Dia.	D5 Effective Dia.	L2 Ext. Length	Max. Ramp Angle
15M1P-1202781R01	1.250	2	5.000	1.25 Weldon	yes	1.250	0.423	2.750	5.6	1.220	0.533	2.735	4.7
15M1P-1204759R01	1.250	2	8.000	1.25 Cylindrical	yes	1.250	0.423	4.750	5.6	1.220	0.533	4.735	4.7
15M1P-1502786R01	1.500	3	5.410	1.50 Weldon	yes	1.500	0.673	2.750	3.1	1.470	0.784	2.735	2.8
15M1P-1505386R01	1.500	3	8.000	1.50 Weldon	yes	1.500	0.673	5.340	3.1	1.470	0.784	5.325	2.8

GOLD QUAD^F TOP-ON END MILLS

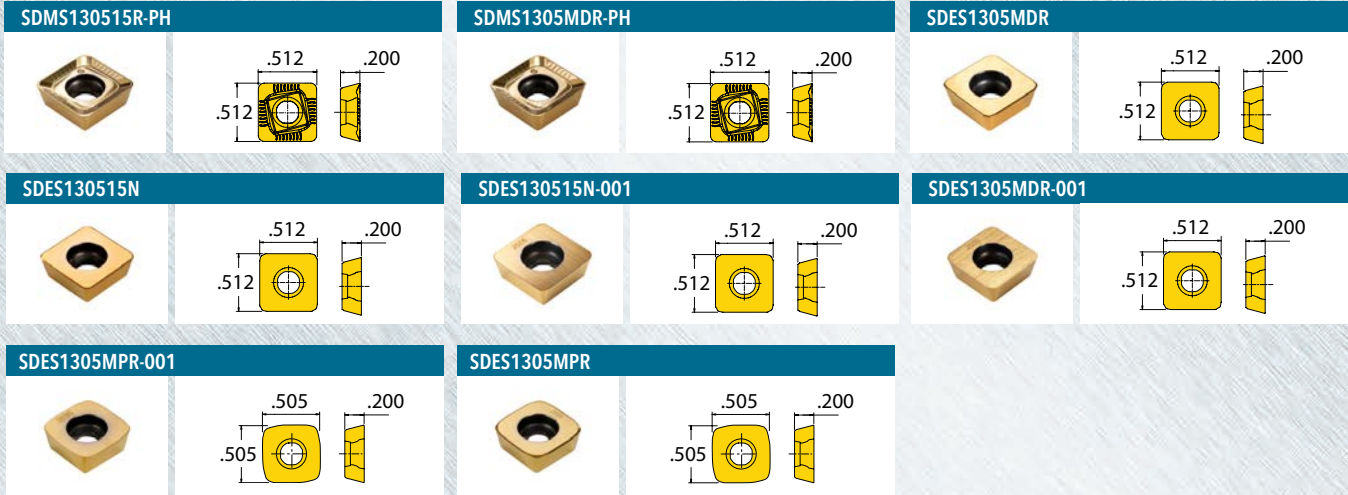
13MM INSERTED CUTTERS



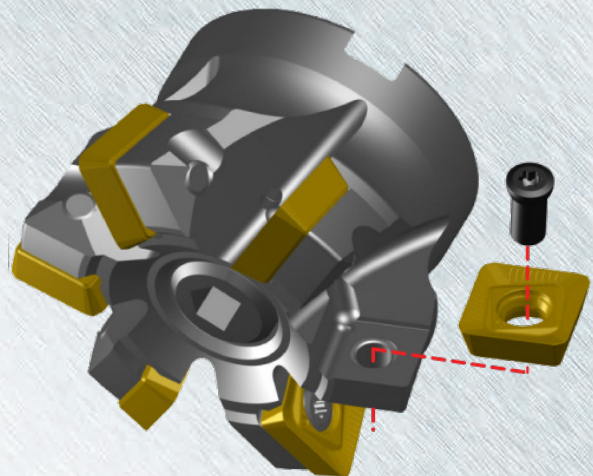
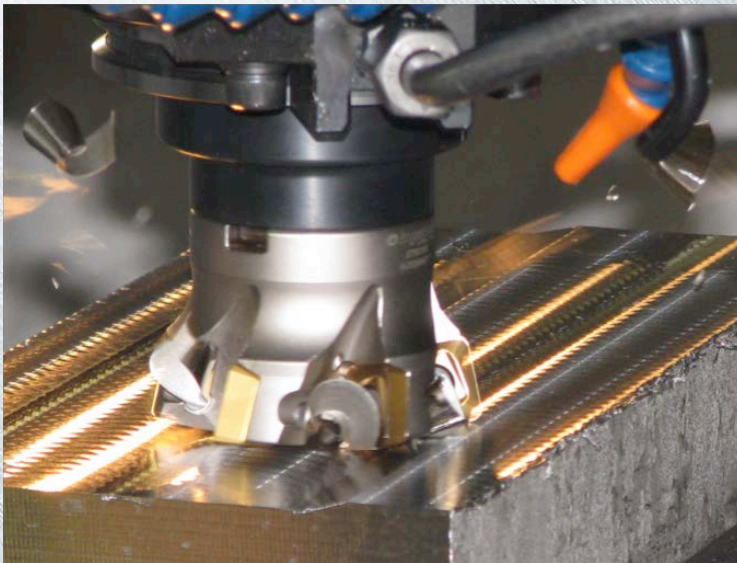
Cutter Number	Nom. Dia.	# of Inserts	T1 Adaption	Coolant	SDES1305MDR, SDMS1305MDR-PH, SDES1305MDR-001, SDES130515N-001, SDES130515N, SDMS130515R-PH, SDMS130512R-PP				SDES1305MPR, SDES1305MPR-001			
					D1 Program OD Dia.	D5 Effective Dia.	L2 Ext. Length	Max. Ramp Angle	D1 Program OD Dia.	D5 Effective Dia.	L2 Ext. Length	Max. Ramp Angle
15M1P-12017X8R01	1.250	2	M16	Yes	1.250	0.423	1.750	5.6	1.220	0.533	1.735	4.7

GOLD QUAD^F TOP-ON END MILLS - METRIC






Cutter Number	Nom. Dia.	# of Inserts	T1 Adaption	Coolant	SDES1305MDR, SDMS1305MDR-PH, SDES1305MDR-001, SDES130515N-001, SDES130515N, SDMS130515R-PH, SDMS130512R-PP				SDES1305MPR, SDES1305MPR-001			
					D1 Program OD Dia.	D5 Effective Dia.	L2 Ext. Length	Max. Ramp Angle	D1 Program OD Dia.	D5 Effective Dia.	L2 Ext. Length	Max. Ramp Angle
15M1P032043X8R00	32mm	2	M16	Yes	32mm	11mm	43mm	5.0	31.23mm	13.8mm	42.63mm	4.5
15M1P035043X8R00	35mm	2	M16	Yes	35mm	14.2mm	43mm	4.0	34.23mm	16.81mm	42.63mm	3.5
15M1P040043X8R00	40mm	3	M16	Yes	40mm	19mm	43mm	2.7	39.23mm	21.8mm	1.678mm	2.5



Insert Number	Applications	Max DOC	Program Corner Radius	Grade	IN2505	IN2530	IN4005	IN4030	IN4035
SDES1305MDR	Hi-Feed, Flat Face / Wiper - Facets	.078 (2mm)	.125		•	•			
SDES130515N	Hi-Feed, Flat Face / Corner Radius	.078 (2mm)	.125		•	•			
SDES130515N-001	Hi-Feed, Precision Flat Face / Corner Radius	.078 (2mm)	.125		•	•			
SDMS1305MDR-PH	Hi-Feed, Pos Precision / Wiper - Facets	.078 (2mm)	.125		•	•	•	•	•
SDMS130515R-PH	Hi-Feed, Pos Precision / Corner Radius	.078 (2mm)	.125		•	•	•	•	•
SDES1305MDR-001	Hi-Feed, Precision Flat Face / Wiper - Facets	.078 (2mm)	.125		•	•			
SDES1305MPR	Hi-Feed, Heavy Duty - Standard	.088 (2.24mm)	.140		•	•	•		•
SDES1305MPR-001	Hi-Feed, Heavy Duty - Precision	.088 (2.24mm)	.140		•	•	•	•	•



Note: Take care when assembling the insert into the insert pocket. Make sure the insert is seated correctly.

Cutter Number					
	Screw	Driver	Driver Bit	Retention Bolt	(Optional) Coolant Bolt
5G5M-30R01	SM60-135-R0	DS-T25T	n/a	SD-08-47	SD-08-92
5G6M-30R01	SM60-135-R0	DS-T25T	n/a	SD-08-47	-
5G5M-40R01	SM60-135-R0	DS-T25T	n/a	SD-12-82	SD-12-99
5G6M-40R01	SM60-135-R0	DS-T25T	n/a	SD-12-82	-
5G5M-50R01	SM60-135-R0	DS-T25T	n/a	SD-12-82	SD-12-99
5G6M-50R01	SM60-135-R0	DS-T25T	n/a	SD-12-82	-
5G5M-60R01	SM60-135-R0	DS-T25T	n/a	SD-12-82	-
5G6M-60R01	SM60-135-R0	DS-T25T	n/a	SD-12-82	-
5M5P-20R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-06-48	SD06-A6
5M6P-20R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-06-48	SD06-A6
5M6P-25R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-06-48	SD06-A6
5M5P-25R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-06-48	SD06-A6
5M5P-30R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-08-47	SD-08-92
5M6P-30R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-08-47	SD-08-92
5M5P-30R02	SM40-100-R0	DS-A00T	BLD T15/S7	SD-10-47	SD-10-99
5M6P-30R02	SM40-100-R0	DS-A00T	BLD T15/S7	SD-10-47	SD-10-99
5M5P-40R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-12-82	SD-12-99
5M6P-40R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-12-82	SD-12-99
5M5P-50R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-12-82	SD-12-99
5M6P-50R01	SM40-100-R0	DS-A00T	BLD T15/S7	SD-12-82	SD-12-99
15M1P-1202081R01	SM40-100-R0	DS-A00T	BLD T15/S7	n/a	n/a
15M1P-1204759R01	SM40-100-R0	DS-A00T	BLD T15/S7	n/a	n/a
15M1P-1502786R01	SM40-100-R0	DS-A00T	BLD T15/S7	n/a	n/a
15M1P-1505386R01	SM40-100-R0	DS-A00T	BLD T15/S7	n/a	n/a

Material	Brinell Hardness	SFM	Feed per Insert	IN2505	IN2530	IN4005	IN4030	IN4035	Coolant	
Steel	Mild 1018-1045	125-425	300-650	.025-.115	2		1	3	NO	
	Low Alloy 4140, 8620, 4340	150-425			300-700	2		1	3	NO
	Med Alloy P20, S7, H13, O1, A2		2			3	1	3	NO	
Stainless Steel	Free Machining 303, 416	150-425	220-550	.025-.110		5	3	4	1	2
	300 Series 304, 310, 316				5	3	4	1	2	NO
	400 Series 410, 420, 15-5PH, 17-4 PH				5	3	4	1	2	YES
	PH Series 13-8				5	3	4	1	2	YES
Hardened Steel	ALL	-	200-400	.030-.050	2		1	3	NO	
Titanium	6AL-4V	-	90-200	.030-.060	5	3	4	1	2	YES

Note: Feed and speed recommendations are starting operating parameters. They are only guidelines from which further optimization should take place. Operating parameters are influenced by many machining variables. These variables may cause for reductions in feeds and speed or dramatic increases. Additionally, DOC and WOC may need to be revised to optimize the tools performance.

Detail	Part Number	Hone	Corner	Description
	SDMS130515R-PH	K	0.060 Radius	HIGH POSITIVE, MULTI-PURPOSE Universal insert with landed edge for machining steels and hi-temp alloys. Good choice for most applications.
	SDMS190620R-PH	K	0.078 Radius	
	SDMS1305MDR-PH	K	.033 Wiper Faceted	HIGH POSITIVE, MULTI-PURPOSE / WIPER Faceted wiper Insert for improved surface finishes. Excels in standard steel and is the first choice in milling high temp alloys such as titanium and stainless steel.
	SDMS1906MDR-PH	K	.043 Wiper Faceted	
	SDES130515N	K	0.060 Radius	MULTI-PURPOSE General machining in standard steels and cast irons.
	SDES190620N	K	0.078 Radius	
	SDES130515N-001	K	0.060 Radius	MULTI-PURPOSE, KEEN EDGE Strong, flat rake face insert for machining in standard steels and stainless steels.
	SDES190620N-001	K	0.078 Radius	
	SDES1305MDR	K	.033 Wiper Faceted	MULTI-PURPOSE, WIPER Faceted wiper insert for improved surface finishes. Strong, flat rake face insert for machining standard steels.
	SDES1906MDR	K	.043 Wiper Faceted	
	SDES1305MDR-001	K	.033 Wiper Faceted	MULTI-PURPOSE, KEEN EDGE General machining in standard steels and cast irons.
	N/A		0.078 Radius	
	SDES1305MPR	K	.059 Wiper	HEAVY DUTY Exceptionally strong, flat rake face insert for machining standard steels and cast materials. Larger insert radius profile allows for deeper DOC and aggressive operating parameters.
	SDES1906MPR	K	.061 Wiper	
	SDES1305MPR-001	K	.059 Wiper	HEAVY DUTY, KEEN EDGE Exceptionally strong, flat rake face insert with sharp edge prep for machining hi-temp alloys or stainless steels. Larger insert radius profile allows for deeper DOC and aggressive operating parameters.
	SDES1906MPR-001	K	.061 Wiper	

