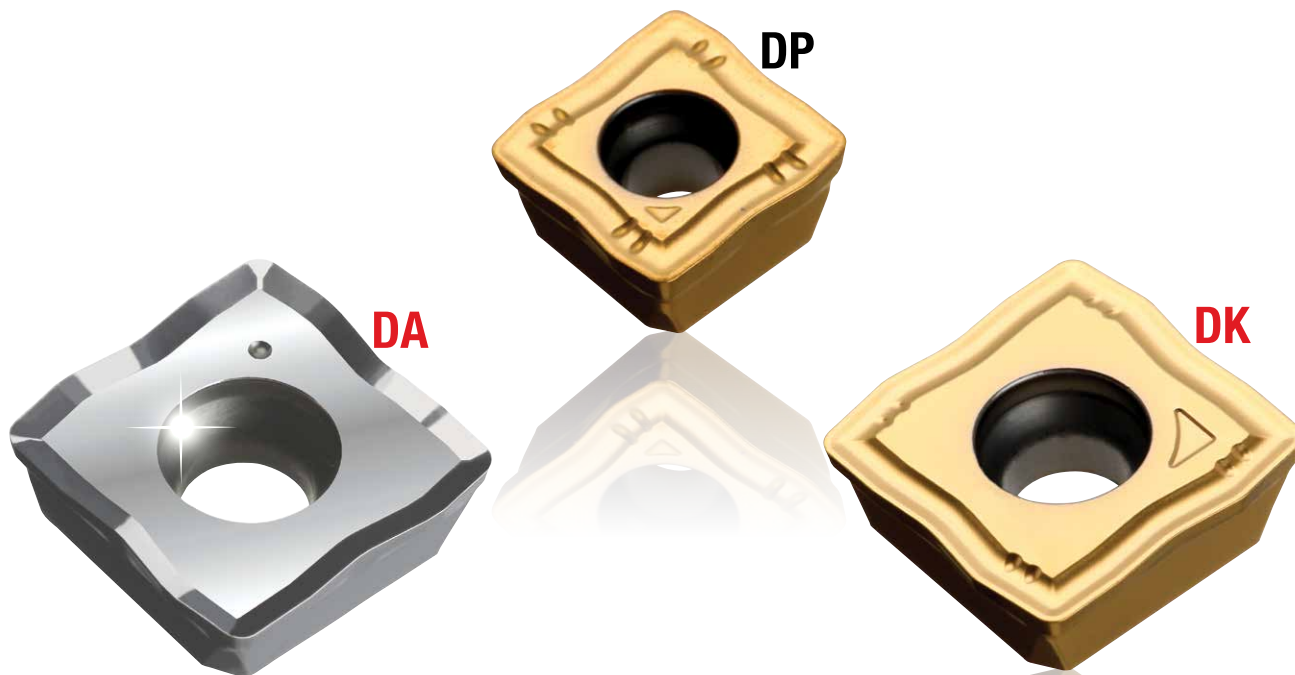


NEW PRODUCT NEWS

TOPDRILL



New Chip Formers for Aluminum and Cast Iron Machining - DA & DK Types



TaeguTec has launched two new chip former inserts for the TOPDRILL line, the “DK” type for cast iron drilling and the “DA” type for aluminum drilling.

TaeguTec’s current “DP” chip former was developed for general drilling applications whereas the new geometry “DK” type, utilizing the TT6080 grade, improves wear resistance when machining cast iron. This enables customers to reduce cost as well as improve stability during the machining process of cast iron materials.

The “DA” chip former is designed with a polished top face surface as well as a sharp edge to minimize cutting forces and built-up-edges while drilling aluminum.

Both the “DK” and “DA” chip formers are available in the same size range as the current “DP” geometry inserts.

FEATURES

DK

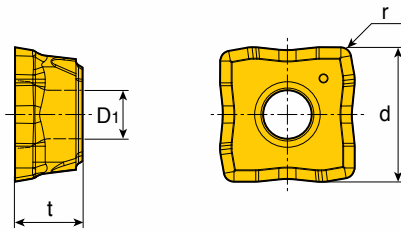
- **New “DK” chip former is designed with a stronger geometry for more robust machining.**
- **TT6080 : an improved wear resistant grade dedicated to cast iron machining.**
- **Combining the “DK” chip former’s strong geometry and wear resistant TT6080 grade promotes excellent performance on cast iron hole-making applications.**

DA

- **The “DA” chip former generates excellent chip evacuation and the applied K10 grade makes it suitable for aluminum hole-making applications.**
- **The chip former’s sharp cutting edges means excellent performance on aluminum workpieces due to the minimized cutting force and built-up-edges associated with high speed cutting on aluminum.**

SOMT...DA

Insert



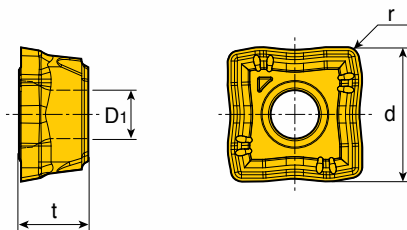
Size	Dimension (mm)			
	d	t	r	D1
05	4.9	2.38	0.4	2.25
06	5.7	2.38	0.4	2.60
07	6.8	2.80	0.6	2.60
08	7.9	3.97	0.6	2.85
09	9.2	3.97	0.8	3.80
11	11.0	3.97	0.8	3.80
13	12.8	4.40	0.8	4.40
15	15.0	4.80	1.0	5.40

Insert	Designation	Uncoated
		K10
	SOMT 050204 DA	●
	060204 DA	●
	070306 DA	●
	08T306 DA	●
	09T308 DA	●
	11T308 DA	●
	130408 DA	●
	150510 DA	●

● : Standard items

SOMT...DK

Insert



Size	Dimension (mm)			
	d	t	r	D1
05	4.9	2.38	0.4	2.25
06	5.7	2.38	0.4	2.60
07	6.8	2.80	0.6	2.60
08	7.9	3.97	0.6	2.85
09	9.2	3.97	0.8	3.80
11	11.0	3.97	0.8	3.80
13	12.8	4.40	0.8	4.40
15	15.0	4.80	1.0	5.40

Insert	Designation	Coated
		TT6080
	SOMT 050204 DK	●
	060204 DK	●
	070306 DK	●
	08T306 DK	●
	09T308 DK	●
	11T308 DK	●
	130408 DK	●
	150510 DK	●

● : Standard items

Recommended Cutting Conditions

ISO	Material	Condition	Hardness HB	Material No.	Cutting speed Vc(m/min)	Feed (mm/rev) vs. drill diameter Drill length 2,3,4xD								
						SOMT 05 Ø14-Ø16	SOMT 06 Ø17-Ø19	SOMT 07 Ø20-Ø22	SOMT 08 Ø23-Ø26	SOMT 09 Ø27-Ø31	SOMT 11 Ø32-Ø36	SOMT 13 Ø37-Ø43	SOMT 15 Ø44-Ø50	
K	Gray cast iron (GG)	Ferritic	160	15	160-260	0.08-0.18	0.08-0.18	0.10-0.20	0.10-0.20	0.10-0.20	0.10-0.20	0.10-0.22	0.10-0.22	
		Pearlitic	250	16	160-260	0.08-0.18	0.08-0.18	0.10-0.20	0.10-0.20	0.10-0.20	0.10-0.20	0.10-0.22	0.10-0.22	
	Cast iron nodular (GGG)	Ferritic	180	17	160-260	0.08-0.18	0.08-0.18	0.10-0.20	0.10-0.20	0.10-0.20	0.10-0.20	0.10-0.22	0.10-0.22	
		Pearlitic	260	18	160-260	0.08-0.18	0.08-0.18	0.10-0.20	0.10-0.20	0.10-0.20	0.10-0.20	0.10-0.22	0.10-0.22	
	Malleable cast iron	Ferritic	130	19	120-220	0.08-0.14	0.08-0.14	0.10-0.16	0.10-0.16	0.10-0.16	0.10-0.18	0.10-0.18	0.10-0.18	
		Pearlitic	230	20	120-220	0.08-0.14	0.08-0.14	0.10-0.16	0.10-0.16	0.10-0.16	0.10-0.18	0.10-0.18	0.10-0.18	
N	Aluminum - Wrought alloy	Not cureable	60	21	200-350	0.06-0.15	0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.18	0.08-0.18	0.10-0.18	0.10-0.18	
		Cured	100	22	200-350	0.06-0.15	0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.18	0.08-0.18	0.10-0.18	0.10-0.18	
	Aluminum- cast, alloyed	<=12% Si	Not cureable	75	23	200-350	0.06-0.15	0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.18	0.08-0.18	0.10-0.18	0.10-0.18
		>12% Si	High temp.	130	25	200-350	0.06-0.15	0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.18	0.08-0.18	0.10-0.18	0.10-0.18
	Copper alloys	>1% Pb	Free cutting	110	26	150-250	0.06-0.15	0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.16	0.08-0.17	0.10-0.18	0.10-0.18
		Brass	90	27	150-250	0.06-0.15	0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.16	0.08-0.17	0.10-0.18	0.10-0.18	
		Electrolitic copper	100	28	150-250	0.06-0.15	0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.16	0.08-0.17	0.10-0.18	0.10-0.18	
	Non-metallic	Duroplastics, fiber plastics	29	29	150-250	0.06-0.15	0.06-0.15	0.08-0.16	0.08-0.16	0.10-0.17	0.10-0.17	0.10-0.18	0.10-0.18	
		Hard rubber	30	30	150-250	0.06-0.15	0.06-0.15	0.08-0.16	0.08-0.16	0.10-0.17	0.10-0.17	0.10-0.18	0.10-0.18	

ISO	Material	Condition	Hardness HB	Material No.	Cutting speed Vc(m/min)	Feed (mm/rev) vs. drill diameter Drill length 5xD								
						SOMT 05 Ø14-Ø16	SOMT 06 Ø17-Ø19	SOMT 07 Ø20-Ø22	SOMT 08 Ø23-Ø26	SOMT 09 Ø27-Ø31	SOMT 11 Ø32-Ø36	SOMT 13 Ø37-Ø43	SOMT 15 Ø44-Ø50	
K	Gray cast iron (GG)	Ferritic	160	15	160-260	0.08-0.14	0.08-0.14	0.08-0.16	0.08-0.16	0.10-0.18	0.10-0.18	0.10-0.20	0.10-0.20	
		Pearlitic	250	16	160-260	0.08-0.14	0.08-0.14	0.08-0.16	0.08-0.16	0.10-0.18	0.10-0.18	0.10-0.20	0.10-0.20	
	Cast iron nodular (GGG)	Ferritic	180	17	160-260	0.08-0.14	0.08-0.14	0.08-0.16	0.08-0.16	0.10-0.18	0.10-0.18	0.10-0.20	0.10-0.20	
		Pearlitic	260	18	160-260	0.08-0.14	0.08-0.14	0.08-0.16	0.08-0.16	0.10-0.18	0.10-0.18	0.10-0.20	0.10-0.20	
	Malleable cast iron	Ferritic	130	19	120-220	0.08-0.12	0.08-0.14	0.08-0.16	0.08-0.16	0.10-0.16	0.10-0.16	0.10-0.16	0.10-0.16	
		Pearlitic	230	20	120-220	0.08-0.12	0.08-0.14	0.08-0.16	0.08-0.16	0.10-0.16	0.10-0.16	0.10-0.16	0.10-0.16	
N	Aluminum - Wrought alloy	Not cureable	60	21	200-350	0.06-0.15	0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.16	0.08-0.16	0.10-0.17	0.10-0.17	
		Cured	100	22	200-350	0.06-0.15	0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.16	0.08-0.16	0.10-0.17	0.10-0.17	
	Aluminum- cast, alloyed	<=12% Si	Not cureable	75	23	200-350	0.06-0.15	0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.16	0.08-0.16	0.10-0.17	0.10-0.17
		>12% Si	High temp.	130	25	200-350	0.06-0.15	0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.16	0.08-0.16	0.10-0.17	0.10-0.17
	Copper alloys	>1% Pb	Free cutting	110	26	150-250	0.06-0.15	0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.15	0.08-0.16	0.10-0.17	0.10-0.17
		Brass	90	27	150-250	0.06-0.15	0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.15	0.08-0.16	0.10-0.17	0.10-0.17	
		Electrolitic copper	100	28	150-250	0.06-0.15	0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.15	0.08-0.16	0.10-0.17	0.10-0.17	
	Non-metallic	Duroplastics, fiber plastics	29	29	150-250	0.06-0.15	0.06-0.15	0.08-0.16	0.08-0.16	0.10-0.16	0.10-0.16	0.10-0.17	0.10-0.17	
		Hard rubber	30	30	150-250	0.06-0.15	0.06-0.15	0.08-0.16	0.08-0.16	0.10-0.16	0.10-0.16	0.10-0.17	0.10-0.17	

■ Cast iron ■ Nonferrous