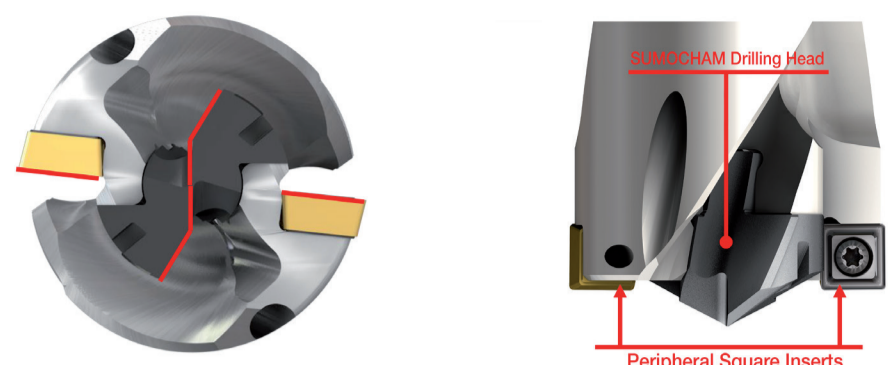


True Fully Effective Geometry
A central SUMOCHAM head and peripheral SOGT/X wiper inserts.



Machining Data for MNC Drills

ISO	Material	Condition	Tensile Strength [N/mm ²]	Hardness HB	Mat. No.	Cutting Speed Vc [m/min]		Feed vs. Drill Diameter F [mm/rev]																							
						Vc min	Vc max	26< OD <28		29< OD <32		33< OD <35		36< OD <43		44< OD <50															
								f min	f max	f min	f max	f min	f max	f min	f max	f min	f max														
P	Non-alloy steel and cast steel, free cutting steel	<0.25% C	Annealed	420	125	1	120	200	0.25	0.35	0.25	0.35	0.25	0.40	0.25	0.40	0.28	0.45													
		>=0.25% C	Annealed	650	190	2																									
		<0.55% C	Quenched and tempered	850	250	3																									
		>=0.55% C	Annealed	750	220	4																									
			Quenched and tempered	1000	300	5																									
			Annealed	600	200	6																									
P	Low alloy steel and cast steel (less than 5% of alloying elements)		Annealed	930	275	7	120	180	0.25	0.33	0.25	0.33	0.25	0.38	0.25	0.38	0.26	0.43													
			Quenched and tempered	1000	300	8																									
				1200	350	9																									
			Annealed	680	200	10																									
			Quenched and tempered	1100	325	11																									
			Ferritic/martensitic	680	200	12																									
M	Stainless steel		Martensitic	820	240	13	90	140	0.12	0.24	0.12	0.24	0.16	0.25	0.18	0.25	0.18	0.30													
			Austenitic	600	180	14																									
K	Grey cast iron (GG)		Ferritic/pearlitic	180	15	150	250	0.25	0.40	0.25	0.45	0.3	0.50	0.3	0.50	0.35	0.55														
			Pearlitic	260	16																										
			Ferritic	160	17																										
			Pearlitic	250	18																										
			Ferritic	130	19																										
			Pearlitic	230	20																										
N	Aluminum-cast, alloyed		Not cureable	60	21	160	280	0.3	0.50	0.3	0.50	0.35	0.55	0.35	0.55	0.4	0.60														
			Cured	100	22																										
		<=12% Si	Not cureable	75	23																										
			Cured	90	24																										
		>12% Si	High temperature	130	25																										
		>1% Pb	Free cutting	110	26																										
		N	Copper alloys		Brass													90	27												
					Electrolytic copper													100	28												
					Duroplastics, fiber plastics														29												
					Hard rubber														30												
S	High temp. alloys	Fe based	Annealed	200	31	30	60	0.1	0.16	0.1	0.18	0.15	0.20	0.15	0.22	0.16	0.24														
				Cured	280													32													
				Annealed	250													33													
		Ni or Co based	Cured	350	34																										
			Cast	320	35																										
		Titanium Ti alloys		RM 400	36																										
				Alpha+beta alloys cured	RM 1050													37													
H	Hardened steel		Hardened	55 HRC	38	20	50	0.1	0.16	0.12	0.18	0.14	0.2	0.14	0.2	0.16	0.22														
			Hardened	60 HRC	39																										
			Cast	400	40																										
			Cast iron	Hardened	55 HRC													41													

Spare Parts

Designation							
MNC 332-265 A32-175-09-8D	SR 34-506	BLD T09/M7-SW4	SW4-SD	K MNC MULTI	SR 34-508/S-HG	T-7/51	GPS-05-18-060
MNC 362-289 A32-190-10-8D	SR 14-571	BLD T10/S7	SW6-SD	K MNC MULTI	SR 34-508/S-HG	T-7/51	GPS-05-18-060
MNC 392-289 A40-219-10-7D	SR 14-571	BLD T10/S7	SW6-SD	K MNC MULTI	SR 34-508/S-HG	T-7/51	GPS-05-18-060

USER GUIDE

Inserts
 Mounting Procedure

Universal Key for full SUMOCHAM heads range

USER GUIDE

SOGX/GT-W
 Max allowed Δ = 0.04 mm
 Axial runout

Radial runout

ICP/M
 Max allowed Δ = 0.02 mm
 Axial runout

Radial runout

Note: We strongly recommend checking the runout on the machine

1.		Exiting inclined surface Not possible.
2.		Entering inclined surface Spot facing operation is needed before drilling.
3.		Boring Not possible.
4.		Cross hole Maximum cross hole diameter must be 1/4 of drill diameter.
5.		Entering on edge Spot facing operation is needed before drilling.
6.		Centering hole Spot facing operation is needed before drilling.
7.		Chamber Not possible.
8.		Convex The radius of the penetration surface must be 4X the SUMOCHAM head ØD. Short pre-hole is needed.
9.		Concave Spot facing operation is needed before drilling.

Flow Rate vs. Pressure and Drill Diameter

Drill Diameter (mm)	Pressure (bar)	Flow Rate (liter/min)
26	25	40
27	25	40
28	25	40
29	25	50
30	25	50
31	25	50
32	25	60
33	20	60
34	20	60
35	20	60
36	20	60
37	20	60
38	20	70
39	20	70
40	20	70
41	20	70
42	20	70
43	20	70
44	15	70
45	15	80
46	15	80
47	15	80
48	15	80
49	15	80
50	15	80