



Product Guide  
**SaraDrill**

**SARADRILL / A QUICK GUIDE**

Drilling from solid - a proven technology to drill large diameter holes on low horse power machines.

Drilling from 49mm to 270mm diameter holes from solid material.

Recommended maximum boring depths 20 x diameter.

Internal coolant supply standard.

Large diameter bores machined with 50% less machine power, reduced machining forces on machine drive and spindle.

Short, curled chips originated by roughing and finishing blade avoiding reciprocating tool actions.

Ensuring free egress of the chips when drilling vertically.

Low cost for replacement of blades and centre drills.

No pre-centering or counterboring.

Tool length easily changeable by using extension bars of either 150mm or 300mm lengths.

### **SARADRILL / IN DETAIL**

The SARADRILL is a universal tool for drilling from the solid on low HP machines. The centre drill also acts as a support to the boring head, enabling the SARADRILL to be used effectively on radial drilling machines.

The difference height of the two blades and the 'toothed' shape of the roughing blade, ensures the cutting load is equal (symmetrical) on both blades. This ensures a very quiet cutting process, an accurate hole and a high degree of surface finish.

The chipbreaker geometry of the cutting blades produces on all materials, except austenitic alloys, small, round chips which emerge from the entrance of the drilled hole. Chip removal systems, even on extremely deep hole drilling, are not necessary so that SARADRILL can be used on CNC turning machines and machining centres.

The SARADRILL is supplied with an internal coolant supply. For stationary applications, for instance, on lathes, the coolant is supplied via the connection plug. On horizontal boring or milling machines when the SARADRILL is rotating, the coolant inductor must be used. When drilling deep holes, particularly on horizontal machines, the SARADRILL is fitted with guides mounted in the boring head. The guides prevent chatter at the end of a through hole boring operation. The guides cannot be used with the SARADRILL types A1 and A2 (for diameters from 49mm to 65mm).

The excellent centering, guiding and supporting of the SARADRILL by the centre drill, ensures the axial geometry of drilled holes is held within very close tolerances. Thus long holes can be drilled from opposite ends without any detrimental joint in the centre of the hole.

**SARADRILL / COOLANT**

Never use SARADRILL without coolant. A high quality emulsion will ensure excellent results and economical edge life. An internal supply through the SARADRILL is fed directly to the cutting edges of the centre drill and the blades.

Direct delivery of the cutting coolant to the machining area is critical when drilling horizontally. When drilling vertically, normal delivery of the cutting coolant into the drilled hole is generally satisfactory. Direct delivery to the cutting edges, will always have advantages.

**SARADRILL / SIZES & INCREMENTS**

Saradrill Type	Capacity (mm)	Blade size available in increments of:
A1	49-55	1mm
A2	55-65	1mm
B80	65-80	1mm
C100	80-100	1mm
D120	100-120	1mm
E150	120-150	5mm
F180	150-180	5mm
G210	180-210	10mm
H240	210-240	10mm
I270	240-270	10mm

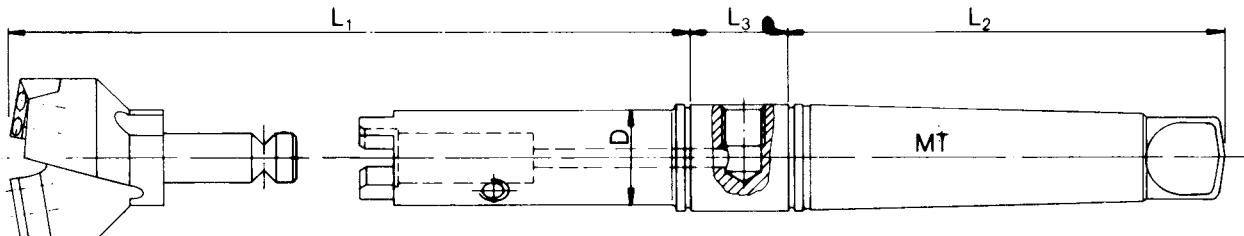
**SARADRILL / BORING HEADS & BARS**

**BORING HEADS**

Order Code	Boring Head Style	Working Range
5040011	A1-55	49-55
5040012	A2-65	55-65
5040013	B-80	65-80
5040014	C-100	80-100
5040015	D-120	100-120
5040016	E-150	120-150
5040017	F-180	150-180
5040018	G-210	180-210
5040019	H-240	210-240
5040020	I-270	240-270

**BORING BARS**

Order Code	Boring Head	L1 (mm)	L2 (mm)	L3 (mm)	D (mm)	Morse Taper
5041202	A1/A2	200	158	30	29	4
5041203	B-80	200	158	30	35	4
5041204	C-100	200	158	30	38	4
5041205	D-120	200	192	30	45	5
5041206	E-150	200	192	30	55	5
5041207	F-180	200	192	30	65	5
5041208	G-210	200	192	30	75	5
5041209	H-240	200	267	40	85	6
5041210	I-270	200	267	40	95	6



**SARADRILL / EXTENSION BARS, TC GUIDES, CENTRE DRILLS & COOLANT RINGS**

**EXTENSION BARS**

Order L1 = 150mm	Order L1 = 300mm	Boring Head Style	D (mm)	Order Code	Working Range (mm)	Boring Head Style
5040152	5040302	A1/A2	29	5048001-26	65-70	B-80
5040153	5040303	B-80	35	5048001-30	70-80	B-80
5040154	5040304	C-100	38	5048002	80-100	C-100
5040155	5040305	D-120	45	5048003	100-120	D-120
5040156	5040306	E-150	55	5048004	120-150	E-150
5040157	5040307	E-150	65	5048005	150-180	F-180
5040158	5040308	G-210	75	5048006	180-210	G-210
5040159	5040309	H-240	85	5048007	210-240	H-240
5040160	5040310	I-270	95	5048008	240-270	I-270

**TC GUIDES**

**CENTRE DRILLS**

Order Code	Boring Head Style	Dia (mm)	Working Range (mm)	Order Code	Boring Head Style	Morse Taper	Working Range (mm)
5046012	A1-55 - D-120	12	49-120	5046001	A1-55 - C-100	4	49-100
5046020	E-150 - I-270	20	120-270	5046002	D-120 - G-210	5	100-210

**COOLANT RINGS**

5046003	H-240 - I-270	6	210-270
---------	---------------	---	---------

**SARADRILL / BLADES (Supplied in pairs, roughing & finishing)****BLADES FOR SARADRILL**

Order Code	Diameter (mm)	Boring Head To Suit
5042049	49	A1-55
5042050	50	A1-55
5042051	51	A1-55
5042052	52	A1-55
5042053	53	A1-55
5042054	54	A1-55
5042055	55	A1-55
5042055	55	A2-65
5042056	56	A2-65
5042057	57	A2-65
5042058	58	A2-65
5042059	59	A2-65
5042060	60	A2-65
5042061	61	A2-65
5042062	62	A2-65
5042063	63	A2-65
5042064	64	A2-65
5042065	65	A2-65
5042065	65	B-80
5042066	66	B-80
5042067	67	B-80





**SARADRILL / BLADES (Supplied in pairs, roughing & finishing)**

**BLADES FOR SARADRILL**

Order Code	Diameter (mm)	Boring Head To Suit
5042068	68	B-80
5042069	69	B-80
5042070	70	B-80
5042071	71	B-80
5042072	72	B-80
5042073	73	B-80
5042074	74	B-80
5042075	75	B-80
5042076	76	B-80
5042077	77	B-80
5042078	78	B-80
5042079	79	B-80
5042080	80	B-80
5042080	80	C-100
5042081	81	C-100
5042082	82	C-100
5042083	83	C-100
5042084	84	C-100
5042085	85	C-100
5042086	86	C-100
5042087	87	C-100

**BLADES FOR SARADRILL**

Order Code	Diameter (mm)	Boring Head To Suit
5042089	89	C-100
5042090	90	C-100
5042091	91	C-100
5042092	92	C-100
5042093	93	C-100
5042094	94	C-100
5042095	95	C-100
5042096	96	C-100
5042097	97	C-100
5042098	98	C-100
5042099	99	C-100
5042100	100	C-100
5042100	100	D-120
5042101	101	D-120
5042102	102	D-120
5042103	103	D-120
5042104	104	D-120
5042105	105	D-120
5042106	106	D-120
5042107	107	D-120
5042108	108	D-120

**SARADRILL / BLADES (Supplied in pairs, roughing & finishing)****BLADES FOR SARADRILL**

Order Code	Diameter (mm)	Boring Head To Suit
5042109	109	D-120
5042110	110	D-120
5042111	111	D-120
5042112	112	D-120
5042113	113	D-120
5042114	114	D-120
5042115	115	D-120
5042116	116	D-120
5042117	117	D-120
5042118	118	D-120
5042119	119	D-120
5042120D	120	D-120
5042120E	120	E-150
5042125	125	E-150
5042130	130	E-150
5042135	135	E-150
5042140	140	E-150
5042145	145	E-150
5042150E	150	E-150
5042150F	150	F-180
5042155	155	F-180

**BLADES FOR SARADRILL**

Order Code	Diameter (mm)	Boring Head To Suit
5042160	160	F-180
5042165	165	F-180
5042170	170	F-180
5042175	175	F-180
5042180	180	F-180
5042180	180	G-210
5042190	190	G-210
5042200	200	G-210
5042210	210	G-210
5042210	210	H-240
5042220	220	H-240
5042230	230	H-240
5042240	240	H-240
5042240	240	I-270
5042250	250	I-270
5042260	260	I-270
5042270	270	I-270