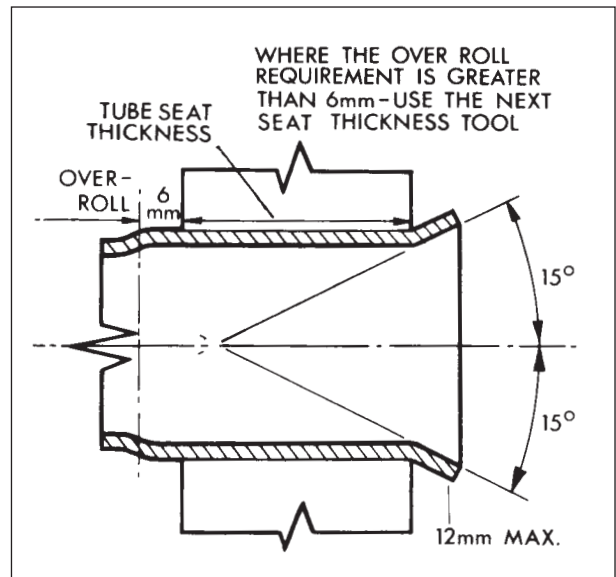
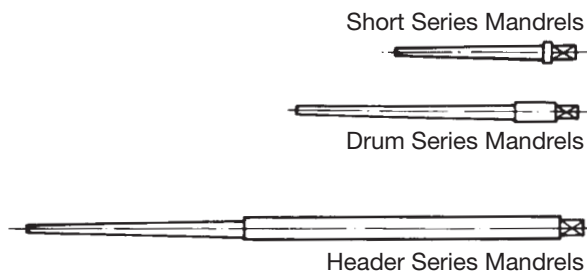


'3A' Type

(continued)



Drum mandrels will be supplied unless header or short series mandrels are ordered.

Note: In all cases the effective parallel rolling lengths of these tools is 6mm longer than the seat thickness dimensions given in the tables. Where it is necessary to expand in seats which are thicker than those covered below, the recommended procedure for rolling in thick drums applies.

MIN BORE TOOL ENTERS		TUBE SEAT THICKNESS			Mandrel Size	DRUM MANDREL	HEADER MANDREL	SHORT MANDREL	EXTRA SHORT MANDREL
		50mm 1.969"	60mm 2.362"	70mm 2.756"					
mm	inch	TOOL NUMBER			inch				
15	.591				3/8	DA1	HA1	SA1/2	ESA1/2/3
16	.630					225mm lg	450mm lg	145mm lg	125mm lg
17	.669					8.858" lg	17.717" lg	5.709" lg	4.921" lg
18	.709								
19	.748				3/8	DA2	HA2	SA3/4	ESA4/5/6
20	.787					225mm lg	450mm lg	160mm lg	135mm lg
21	.827					10.039" lg	17.717" lg	6.299" lg	5.315" lg
22	.866								
23.5	.925				1/2	DA3	HA3	SA5/6	ESA7/8/9
25	.984					225mm lg	450mm lg	160mm lg	135mm lg
27	1.063					10.039" lg	17.717" lg	6.299" lg	5.315" lg
29	1.142								
31	1.220				3/4	DA4	HA4	SA7/8	ESA10/11/12
33	1.300					350mm lg	500mm lg	214mm lg	174mm lg
35	1.378					13.780" lg	19.685" lg	8.425" lg	6.850" lg
37	1.457	3A37/50	3A37/60	3A37/70	3/4	DA5	HA5	SA9/10	ESA13/14/15
40	1.575	3A40/50	3A40/60	3A40/70		355mm lg	550mm lg	225mm lg	185mm lg
43	1.693	3A43/50	3A43/60	3A43/70		13.976" lg	21.654" lg	8.858" lg	7.284" lg
46	1.811	3A46/50	3A46/60	3A46/70					
49	1.930	3A49/50	3A49/60	3A49/70					
52	2.047	3A52/50	3A52/60	3A52/70	3/4	DA6	HA6	SA11/12	ESA16/17/18
56	2.205	3A56/50	3A56/60	3A56/70		355mm lg	550mm lg	225mm lg	185mm lg
60	2.362	3A60/50	3A60/60	3A60/70		13.976" lg	21.654" lg	8.858" lg	7.284" lg
64	2.520	3A64/50	3A64/60	3A64/70					
68	2.678	3A68/50	3A68/60	3A68/70					
72	2.835	3A72/50	3A72/60	3A72/70	1	DA7	HA7	SA13/14	ESA19/20/21
76	2.992	3A76/50	3A76/60	3A76/70		355mm lg	550mm lg	225mm lg	185mm lg
80	3.149	3A80/50	3A80/60	3A80/70		13.976" lg	21.654" lg	8.858" lg	7.284" lg
84	3.307	3A84/50	3A84/60	3A84/70					
88	3.465	3A88/50	3A88/60	3A88/70					
92	3.622	3A92/50	3A92/60	3A92/70	1	DA8	HA8	SA15/16	ESA22/23/24
96	3.780	3A96/50	3A96/60	3A96/70		355mm lg	550mm lg	225mm lg	185mm lg
100	3.937	3A100/50	3A100/60	3A100/70		13.976" lg	21.654" lg	8.858" lg	7.284" lg