

SB SERIES FOR SUGAR MILLS

1 1/2" - 4 1/2"
O.D.

The SB series is the most easiest of tool combinations to use instead of trying to roll tubes from underneath juice pans and evaporators. A operations are carried out from above making the job quicker and safer.

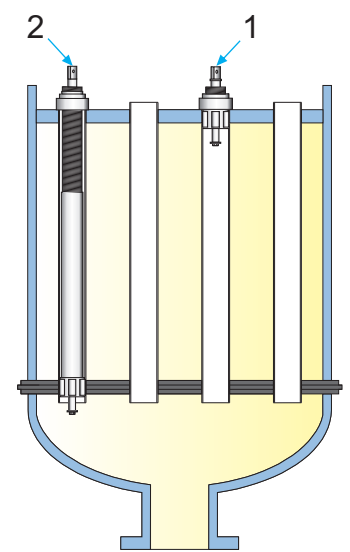
Please provide the following:
Thickness of the tube sheets.
Distance between the tube sheets as in the internal measurement.
Tube OD and ID including the tube wall thickness.



SB Series ①



CSB Series ②



Tube O.D.	Tube Thickness		Minimum I.D. Tool Enters		Maximum Expansion Of Tool		Tube Sheet Thickness mm (inch)			Spare Mandrel Model No.	Mandrel Sq. Drive Inch	Spare Rollers Set Model No.		
	inch	bwg	inch	mm	inch	mm	inch	31.75 (1.25)	38.1 (1.5)			50.8 (2.0)	Tube Expander Model No.	
1.1/2	11 & 12	.120 & .109	31.0	1.220	33.2	1.307	SB-00A	SB-00B	SB-00C	SBM-1	1/2	SBR-1A	SBR-1B	SBR-1C
1.1/2	13 & 14	.095 & .083	32.5	1.279	36.0	1.417	SB-0A	SB-0B	SB-0C	SBM-2	1/2	SBR-2A	SBR-2B	SBR-2C
1.1/2	15 & 16	.072 & .065	33.5	1.319	37.2	1.465	SB-1A	SB-1B	SB-1C	SBM-2	1/2	SBR-3A	SBR-3B	SBR-3C
1.3/4	9 & 10	.148 & .134	35.2	1.386	39.1	1.539	SB-2A	SB-2B	SB-2C	SBM-3	3/4	SBR-3A	SBR-3B	SBR-3C
1.3/4	11 & 12	.120 & .109	36.5	1.437	40.5	1.594	SB-3A	SB-3B	SB-3C	SBM-3	3/4	SBR-4A	SBR-4B	SBR-4C
1.3/4	13 & 14	.095 & .083	38.1	1.500	42.7	1.681	SB-4A	SB-4B	SB-4C	SBM-3	3/4	SBR-5A	SBR-5B	SBR-5C
1.3/4	15 & 16	.072 & .065	39.1	1.539	44.2	1.740	SB-5A	SB-5B	SB-5C	SBM-4	3/4	SBR-4A	SBR-4B	SBR-4C
2	7 & 8	.180 & .165	41.3	1.626	46.7	1.838	SB-6A	SB-6B	SB-6C	SBM-4	3/4	SBR-5A	SBR-5B	SBR-5C
2	9 & 10	.148 & .134	42.8	1.685	48.3	1.901	SB-7A	SB-7B	SB-7C	SBM-4	3/4	SBR-6A	SBR-6B	SBR-6C
2	11 - 13	.120 - .095	44.4	1.748	49.7	1.957	SB-8A	SB-8B	SB-8C	SBM-5	3/4	SBR-6A	SBR-6B	SBR-6C
2	14 - 16	.083 - .065	46.0	1.811	52.2	2.055	SB-9A	SB-9B	SB-9C	SBM-5	3/4	SBR-7A	SBR-7B	SBR-7C
2.1/4	9 & 10	.148 & .134	47.6	1.874	53.8	2.118	SB-10A	SB-10B	SB-10C	SBM-5	3/4	SBR-8A	SBR-8B	SBR-8C
2.1/4	11 - 13	.120 - .095	49.2	1.937	55.4	2.181	SB-11A	SB-11B	SB-11C	SBM-5	3/4	SBR-9A	SBR-9B	SBR-9C
2.1/4	14 - 16	.083 - .065	50.7	1.996	57.8	2.275	SB-12A	SB-12B	SB-12C	SBM-6	3/4	SBR-8A	SBR-8B	SBR-8C
2.1/2	9 & 10	.148 & .134	54.9	2.161	61.0	2.401	SB-13A	SB-13B	SB-13C	SBM-6	3/4	SBR-10A	SBR-10B	SBR-10C
2.1/2	14 - 16	.083 - .065	57.1	2.248	65.6	2.582	SB-14A	SB-14B	SB-14C	SBM-7	1	SBR-11A	SBR-11B	SBR-11C
2.3/4	10 - 14	.134 - .083	60.3	2.374	68.8	2.708	SB-15A	SB-15B	SB-15C	SBM-7	1	SBR-12A	SBR-12B	SBR-12C
3	7 - 9	.180 - .148	63.5	2.500	72.0	2.835	SB-16A	SB-16B	SB-16C	SBM-7	1	SBR-13A	SBR-13B	SBR-13C
3	10 - 14	.134 - .083	66.5	2.618	75.0	2.953	SB-17A	SB-17B	SB-17C	SBM-7	1	SBR-14A	SBR-14B	SBR-14C
3.1/4	7 & 8	.180 & .165	69.8	2.748	78.5	3.090	SB-18A	SB-18B	SB-18C	SBM-8	1	SBR-14A	SBR-14B	SBR-14C
3.1/2	4 & 5	.238 & .220	73.0	2.874	81.7	3.216	SB-19A	SB-19B	SB-19C	SBM-8	1	SBR-15A	SBR-15B	SBR-15C
3.1/2	6 - 8	.203 - .165	76.1	2.996	85.8	3.378	SB-20A	SB-20B	SB-20C	SBM-9	1	SBR-16A	SBR-16B	SBR-16C
3.3/4	4 & 5	.238 & .220	79.3	3.122	89.0	3.504	SB-21A	SB-21B	SB-21C	SBM-9	1	SBR-17A	SBR-17B	SBR-17C
3.3/4	6 - 8	.203 - .165	82.5	3.248	92.2	3.629	SB-22A	SB-22B	SB-22C	SBM-9	1	SBR-18A	SBR-18B	SBR-18C
4	3 & 4	.259 & .238	85.7	3.374	96.2	3.787	SB-23A	SB-23B	SB-23C	SBM-10	1	SBR-18A	SBR-18B	SBR-18C
4	10 - 16	.134 - .065	90.3	3.555	100.8	3.968	SB-24A	SB-24B	SB-24C	SBM-10	1	SBR-19A	SBR-19B	SBR-19C
4.1/4	6 - 8	.203 - .165	94.9	3.736	105.2	4.141	SB-25A	SB-25B	SB-25C	SBM-11	1	SBR-20A	SBR-20B	SBR-20C
4.1/2	4 - 7	.238 - .180	89.7	3.531	110.9	4.366	SB-26A	SB-26B	SB-26C	SBM-11	1	SBR-21A	SBR-21B	SBR-21C
4.1/2	8 - 10	.165 - .134	104.3	4.106	113.1	4.452	SB-27A	SB-27B	SB-27C	SBM-12	1	SBR-21A	SBR-21B	SBR-21C

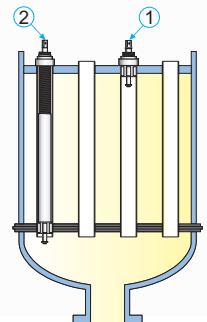


LONG REACH CSB SERIES

Powermaster Industrial Ltd Tel: (613) 764-0572 sales@tubetools.ca



CSB Series No 2



Tube O.D.	Tube Thickness		Minimum I.D. Tool Enters		Maximum Expansion Of Tool		Tube Sheet Thickness 'T'		Depth in Mtrs.		Mandrel Sq. Size	Oal	Weight in Kgs.	Tube Expander Model No.	Spare Mandrel Model No.	Spare Rollers Set Model No.
	inch	bwg	inch	mm	inch	mm	inch	mm	inch	min						
CSB-5 (3 Rollers)																
1.3/4	15 & 16	.072 & .065	39.8	1.566	45.3	1.783	32.0	1.259	1.7	2.0	3/4	2.258	10.0	CSB-5STD	CSBM-5STD	CSBR-5
1.3/4	15 & 16	.072 & .065	39.8	1.566	45.3	1.783	32.0	1.259	2.0	2.3	3/4	2.558	11.2	CSB-5A	CSBM-5A	CSBR-5
1.3/4	15 & 16	.072 & .065	39.8	1.566	45.3	1.783	32.0	1.259	2.3	2.3	3/4	2.858	12.4	CSB-5B	CSBM-5B	CSBR-5
1.3/4	15 & 16	.072 & .065	39.8	1.566	45.3	1.783	32.0	1.259	2.6	2.9	3/4	3.158	13.7	CSB-5C	CSBM-5C	CSBR-5
1.3/4	15 & 16	.072 & .065	39.8	1.566	45.3	1.783	32.0	1.259	2.9	3.2	3/4	3.458	14.9	CSB-5D	CSBM-5D	CSBR-5
1.3/4	15 & 16	.072 & .065	39.8	1.566	45.3	1.783	32.0	1.259	3.2	3.5	3/4	3.758	16.2	CSB-5E	CSBM-5E	CSBR-5
CSB-9 (5 Rollers)																
2	14 - 16	.083 - .065	46.2	1.818	50.8	2.000	32.0	1.259	1.7	2.0	3/4	2.241	16.2	CSB-9STD	CSBM-9STD	CSBR-9
2	14 - 16	.083 - .065	46.2	1.818	50.8	2.000	32.0	1.259	2.0	2.3	3/4	2.541	18.3	CSB-9A	CSBM-9A	CSBR-9
2	14 - 16	.083 - .065	46.2	1.818	50.8	2.000	32.0	1.259	2.3	2.3	3/4	2.841	20.4	CSB-9B	CSBM-9B	CSBR-9
2	14 - 16	.083 - .065	46.2	1.818	50.8	2.000	32.0	1.259	2.6	2.9	3/4	3.141	22.5	CSB-9C	CSBM-9C	CSBR-9
2	14 - 16	.083 - .065	46.2	1.818	50.8	2.000	32.0	1.259	2.9	3.2	3/4	3.441	24.6	CSB-9D	CSBM-9D	CSBR-9
2	14 - 16	.083 - .065	46.2	1.818	50.8	2.000	32.0	1.259	3.2	3.5	3/4	3.741	26.7	CSB-9E	CSBM-9E	CSBR-9
CSB-24 (5 Rollers)																
4	12 - 18	.109 - .049	90.5	3.563	102.4	4.031	32.0	1.259	0.7	1.0	1	1.416	23.7	CSB-24STD	CSBM-24STD	CSBR-24
4	12 - 18	.109 - .049	90.5	3.563	102.4	4.031	32.0	1.259	1.0	1.3	1	1.716	29.4	CSB-24A	CSBM-24A	CSBR-24
4	12 - 18	.109 - .049	90.5	3.563	102.4	4.031	32.0	1.259	1.3	1.6	1	2.016	35.5	CSB-24B	CSBM-24B	CSBR-24
4	12 - 18	.109 - .049	90.5	3.563	102.4	4.031	32.0	1.259	1.6	1.9	1	2.316	40.8	CSB-24C	CSBM-24C	CSBR-24
4	12 - 18	.109 - .049	90.5	3.563	102.4	4.031	32.0	1.259	1.9	2.2	1	2.616	46.5	CSB-24D	CSBM-24D	CSBR-24
4	12 - 18	.109 - .049	90.5	3.563	102.4	4.031	32.0	1.259	2.2	2.5	1	2.916	52.5	CSB-24E	CSBM-24E	CSBR-24

Note : Other sizes, special lengths are available on request.