

STANDARD MODELS OF TUBE EXPANDERS

For Condensers And Heat Exchangers.



CH-900

Model: CH-900 Tube range: 1/4" to 3/8" O.D.
(6.35 to 9.52 mm) O.D.

Expander with 3/4" (19.05 mm) long rolls suitable for tube sheet thicknesses from 1/8" to 3/4" (3.175 mm to 19.05 mm).

Expander with 1 1/4" (31.75 mm) long rolls suitable for tube sheet thicknesses from 1/2" to 1 1/4" (12.70 mm to 31.75 mm).

CH-1300

Model: CH-1300 Tube range: 3/8" (9.52 mm) O.D.

Expander with 3/4" (19.05 mm) long rolls suitable for tube sheet thicknesses from 1/4" to 3" (6.35 mm to 76.20 mm).

Expander with 1 1/4" (31.75 mm) long rolls suitable for tube sheet thicknesses from 3/4" to 3 1/2" (19.05 mm to 88.90 mm).

CH-800

Model: CH-800 Tube range: 1/2" to 1 3/4" O.D.
(12.70 to 44.45 mm) O.D.

Expander with 1 1/2" (38.10 mm) long rolls suitable for tube sheet thicknesses from 1/4" to 1 1/2" (6.35 mm to 38.10 mm).

Expander with 2 1/4" (57.15 mm) long rolls suitable for tube sheet thicknesses from 1" to 2 1/4" (25.40 mm to 57.15 mm).

CH-1200

Special 4 or 5 roll models available.

Model: CH-1200 Tube range: 1/2" to 1 3/4" O.D.
(12.70 to 44.45 mm) O.D.

Expander with 1 1/2" (38.10 mm) long rolls suitable for tube sheet thicknesses from 3/4" to 5 7/8" (19.05 mm to 149.09 mm).

Expander with 2 1/4" (57.15 mm) long rolls suitable for tube sheet thicknesses from 1 1/2" to 6 1/2" (38.10 mm to 165.10 mm).

CH-1200

Special 4 or 5 roll models available.

Model: CH-1200 Long reach with 1 1/2" or 2 1/4" rolls.
Tool reach standard 10"(B) or 12"(C) (254 mm or 305 mm).
Longer reaches available upon request.

Tube range: 1/2" to 1 3/4" (12.70 to 44.45 mm) O.D.

Special 4 or 5 roll models available.

CH-8012

Model: CH-8012 Tube range: 1 3/4" to 4 1/2" O.D.
(44.45 to 114.30 mm) O.D.

Expander with 2 1/4" (57.15 mm) long rolls suitable for tube sheet thicknesses from 1/4" to 4" (6.35 mm to 101.60 mm).

SPECIAL MODELS OF TUBE EXPANDERS



STEP EXPANDER Model: SL (patented)

Designed to avoid destructive axial stress in welded joints.

Among the many applications is expanding U-tubes in welded joints on thick tube plates, whereby the tubes are expanded after welding.

Automatic axial movement of the expander housing during expansion, ensures that tube elongation developed during this operation, is on the rear side of the tube plate.

The TECO SL Step Expander automatically smooths out the overlapping during expanding.

The range covered is for tubes from 3/8" to 1 11/32" (9 to 34 mm) I.D. and tube sheets thickness 2 9/16" to 27 1/2" (65 to 698.5 mm).

On request the expander can be supplied with Teflon bushings to prevent tube damage.



STEP BY STEP TUBE EXPANDER

This model expander is specially designed for thick tube sheets.

Automatic overlapping of the rolling in stages.

For tubes 3/8" to 1 3/8" (9.5 mm to 34.9 mm) I.D.

and tube sheet thickness 2 1/2" to 27 1/2" (63.5 mm to 698.5 mm).



FIVE ROLL EXPANDER Model: CH 800 AND CH 1200

A special line of expanders to expand thin wall tubes, titanium, stainless steel and other high quality metals.

Available with special thrust collars, to eliminate the possibility of the tube being drawn up inside the thrust collar.

Reference pages 10-11 & 14-15.



TUBE EXPANDER Model: CC

Ideal for expanding tubes in thin tube sheets.

For tubes from 1/2" to 4 1/2" (12.7 mm to 114.3 mm) O.D..

Available with adjustable collar.

SPECIAL MODELS OF TUBE EXPANDERS



TUBE EXPANDER Model: SR

Ideally suited for tube rolling with minimum travel of mandrel.
Expander mandrel is retained at rear to shorten mandrel length and to allow use near tube bends or I.D. fixed tubes.



TUBE EXPANDER Model: CL

Specially designed to enlarge the ends of non ferrous or thin steel tubes so that another tube of the same diameter can be inserted and welded or soldered.
All tube sizes covered.
Available with adjustable collar.

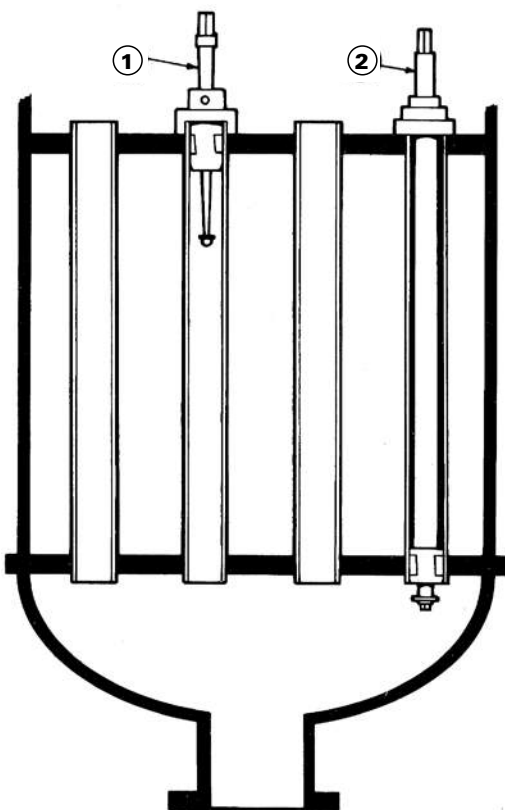


TUBE EXPANDER Model: Simplex

Designed for expanding core seals, according to DIN 443, in motor housings, cylinder heads and other cast parts.

SPECIAL MODELS OF TUBE EXPANDERS

SPECIAL EXPANDERS FOR SUGAR MILL EVAPORATORS



The diagram illustrates:

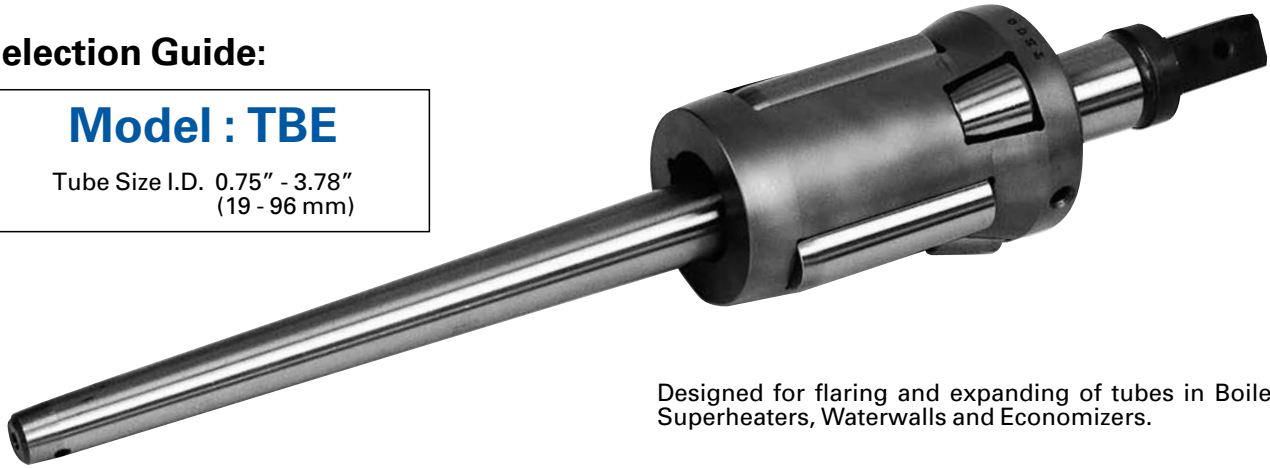
① a Short-Body parallel rolling type expander to locate and seal the tube in the upper tube plate and ② the Long-Body Sugar Refinery expander operated from tube sheet area.

TBE SERIES BOILER TUBE EXPANDERS

Selection Guide:

Model : TBE

Tube Size I.D. 0.75" - 3.78"
(19 - 96 mm)



Designed for flaring and expanding of tubes in Boilers, Superheaters, Waterwalls and Economizers.

TOOL NO.	MIN. I.D. TUBE TOOL		MAX. TOOL EXPANSION		STD. ROLL LENGHT O.A.L.		ROLL EXPANSION & FLARE	MANDREL NO.	MANDREL O.A.L.		SHORT MANDREL SET (3 PCS)	SMS O.A.L.		SIZE SQUARE ON MANDREL
	mm	Inch	mm	Inch	mm	Inch			mm	Inch		mm	Inch	
TBE-19	19	0.75	22	0.87	42	1.65	TBR-12	TBM-19	195	7.68				1/2"
TBE-20	20	0.79	23	0.91	42	1.65	TBR-12	TBM-20	195	7.68				1/2"
TBE-22	22	0.87	25	0.98	42	1.65	TBR-12	TBM-22	195	7.68				1/2"
TBE-23	23	0.91	26	1.02	42	1.65	TBR-13	TBM-23	195	7.68				1/2"
TBE-24	24	0.94	27	1.06	42	1.65	TBR-13	TBM-24	195	7.68				1/2"
TBE-25	25	0.98	28	1.10	42	1.65	TBR-13	TBM-25	195	7.68				1/2"
TBE-27	27	1.06	30	1.18	42	1.65	TBR-15	TBM-27	200	7.87				1/2"
TBE-28	28	1.10	32	1.26	42	1.65	TBR-16	TBM-28	260	10.24	TBMS-28	175	6.89	3/4"
TBE-29	29	1.14	33	1.30	42	1.65	TBR-16	TBM-29	260	10.24	TBMS-29	175	6.89	3/4"
TBE-30	30	1.18	34	1.34	42	1.65	TBR-16	TBM-30	260	10.24	TBMS-30	175	6.89	3/4"
TBE-32	32	1.26	36	1.42	42	1.65	TBR-17	TBM-32	260	10.24	TBMS-32	175	6.89	3/4"
TBE-35	35	1.38	41	1.61	42	1.65	TBR-21	TBM-37	310	12.20	TBMS-37	188	7.40	3/4"
TBE-37	37	1.46	43	1.69	42	1.65	TBR-22	TBM-37	310	12.20	TBMS-37	188	7.40	3/4"
TBE-40	40	1.57	46	1.81	50	1.97	TBR-40	TBM-42	310	12.20	TBMS-42	205	8.07	3/4"
TBE-42	42	1.65	48	1.89	50	1.97	TBR-23	TBM-42	310	12.20	TBMS-42	205	8.07	3/4"
TBE-44	44	1.73	50	1.97	50	1.97	TBR-23	TBM-44	310	12.20	TBMS-44	205	8.07	3/4"
TBE-47	47	1.85	54	2.13	50	1.97	TBR-24	TBM-47	338	13.31	TBMS-47	218	8.58	3/4"
TBE-49	49	1.93	56	2.20	50	1.97	TBR-24	TBM-49	338	13.31	TBMS-49	218	8.58	3/4"
TBE-52	52	2.05	59	2.32	50	1.97	TBR-25	TBM-49	338	13.31	TBMS-49	218	8.58	3/4"
TBE-54	54	2.13	62	2.44	50	1.97	TBR-26	TBM-54	375	14.76	TBMS-54	230	9.06	3/4"
TBE-57	57	2.24	66	2.60	50	1.97	TBR-27	TBM-57	395	15.55	TBMS-57	235	9.25	3/4"
TBE-60	60	2.36	69	2.72	50	1.97	TBR-28	TBM-57	395	15.55	TBMS-57	235	9.25	3/4"
TBE-65	65	2.56	74	2.91	50	1.97	TBR-29	TBM-65	395	15.55	TBMS-65	235	9.25	3/4"
TBE-68	68	2.68	78	3.07	50	1.97	TBR-30	TBM-72	425	16.73	TBMS-72	255	10.04	1"
TBE-72	72	2.83	82	3.23	50	1.97	TBR-31	TBM-72	425	16.73	TBMS-72	255	10.04	1"
TBE-77	77	3.03	87	3.43	50	1.97	TBR-32	TBM-77	425	16.73	TBMS-77	255	10.04	1"
TBE-82	82	3.23	92	3.62	50	1.97	TBR-33	TBM-82	425	16.73	TBMS-82	255	10.04	1"
TBE-86	86	3.39	96	3.78	50	1.97	TBR-34	TBM-86	425	16.73	TBMS-86	255	10.04	1"
TBE-90	90	3.54	102	4.02	50	1.97	TBR-34	TBM-90	485	19.09	TBMS-90	275	10.83	1"
TBE-96	96	3.78	108	4.25	50	1.97	TBR-35	TBM-96	485	19.09	TBMS-96	275	10.83	1"

Extra roll length:

TBE-19 up to TBE-27, 30 mm (1.18") OR 50 mm (1.97").

TBE-28 up to TBE-37, 30 mm (1.18") OR 50 mm (1.97") OR 60 mm (2.36") OR 70 mm (2.76").

TBE-40 up to TBE-96, 40 mm (1.57") OR 60 mm (2.36") OR 70 mm (2.76") OR 80 mm (3.15") OR 90 mm (3.54") OR 100 mm (3.94").

Expanders from TBE-35 to TBE-96 have metal roll retainer.

Expanders from TBE-19 to TBE-32 have pin hole rather than metal roll retainer.

If you order expander TBE-54 with rolls of 50 mm you should specify TBE-5450, with 60 mm TBE-5460.

Short mandrel set with shorter length on request.