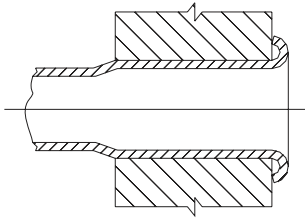


2"-3"  
O.D.

**COMBINATION BEADING EXPANDERS**

**TUBE EXPANDING AND BEADING IN SINGLE OPERATION**



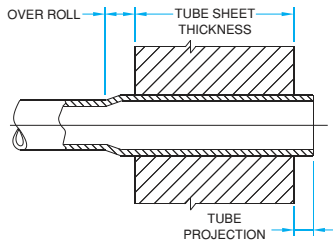
	Previously	Now
Tools Required	1) Flaring tube expander 2) Tube expander drive 3) Beading tool 4) Air hammer	1) COMBINATION BEADING EXPANDER 2) Tube Expander Drive
Operating Steps	1) Expand 2) Bead 3) Reroll	1) Expand and Bead (single operation)
Operator Fatigue	high...largely due to air hammer vibration and noise	Reduced significantly no air hammer for beading ... no rerolling

Tube O.D. inch	Tube Thickness		Expansion Range		Model No.	Mandrel Model No. (Square)	Spare Roller Set Model No.	Beading Roll Model No.	Guide Roll Assembly Model No.
	bwg	inch	mm	inch					
2	10	.134	43.2 - 48.41	1.700 - 1.906	41633 - 0010	41615 (3/4")	41670 set of 4	41631 - 0010	41701 - 0010
	11	.120			41633 - 0011			41631 - 0011	41701 - 0011
	12	.109			41633 - 0012			41631 - 0012	41701 - 0012
	13	.095			41633 - 0013			41631 - 0013	41701 - 0013
2.1/2	10	.134	55.9 - 62.48	2.200 - 2.460	41634 - 0010	41635 (1")	41673 set of 5	41651 - 0010	41702 - 0010
	11	.120			41634 - 0011			41651 - 0011	41702 - 0011
	12	.109			41634 - 0012			41651 - 0012	41702 - 0012
	13	.095			41634 - 0013			41651 - 0013	41702 - 0013
3	10	.134	68.6 - 75.69	2.700 - 2.980	41359 - 0010	41653 (1")	41676 set of 5	41666 - 0010	41703 - 0010
	11	.120			41359 - 0011			41666 - 0011	41703 - 0011
	12	.109			41359 - 0012			41666 - 0012	41703 - 0012

Note : Refer to operation manual for other spare parts. Reverse mandrels are available.

1"-3"  
O.D.

**V SERIES NON PARALLEL EXPANSION**



• Use : Type 'V' Expander is used for repair and erection of boilers having thin tube sheets. It is approximately twice as fast during use than other conventional expanders. Use Header Mandrel when expander is to be used through a waterleg.

Tube O.D. inch	Tube Thickness		Expansion Range		Effective Rolling Length		Tube Expander Model No.	Spare Mandrel			Spare Roller Set Model No.
	bwg	inch	Dim.A - Dim.B mm	Dim.A - Dim.B inch	mm	inch		Short Mandrel Model No.	Header Mandrel Model No.	Mandrel Sq. Size inch	
1	10 - 13	.134 - .095	17.3 - 23.7	.681 - .937	84.20	3.5/16	V - 1	VSM - 1	VHM - 1	1/2	VR - 1
1.1/4	10 - 13	.134 - .095	23.8 - 30.6	.940 - 1.206	84.20	3.5/16	V - 2	VSM - 2	VHM - 2	1/2	VR - 2
1.1/2	10 - 13	.134 - .095	29.3 - 37.3	1.156 - 1.469	101.20	4.000	V - 3	VSM - 3	VHM - 3	1/2	VR - 3
2	10 - 13	.134 - .095	42.3 - 49.7	1.665 - 1.960	101.20	4.000	V - 4	VSM - 4	VHM - 4	3/4	VR - 4
2.1/2	10 - 13	.134 - .095	54.5 - 62.7	2.145 - 2.469	101.20	4.000	V - 5	VSM - 5	VHM - 5	3/4	VR - 5
3	10 - 13	.134 - .095	68.2 - 76.6	2.687 - 3.015	101.20	4.000	V - 6	VSM - 6	VHM - 6	1	VR - 6

Note : Other sizes available on request.