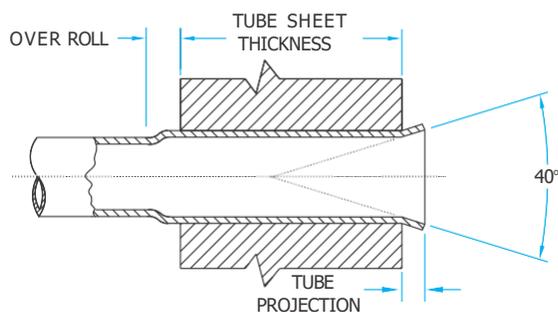2"-4 1/2" O.D.

114 SERIES

Features :

- Overlapping rolls prevent ridging of tube.
- Can be converted for parallel expansion use - enquire with us.
- Self retained rolls in cage.
- Compact design for use through small hand holes, headers etc.
- Use - General purpose expander for expanding and flaring boiler tubes, water wall, downcomer, economizer, riser and air heater tubes.
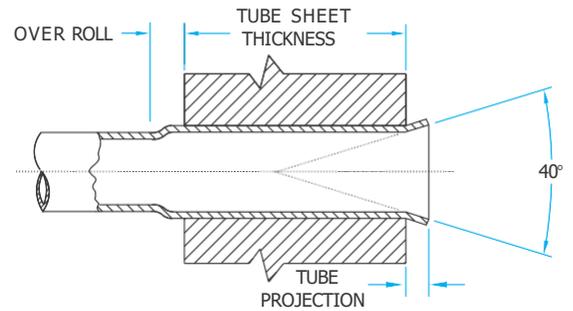

OVER ROLL — TUBE SHEET THICKNESS — 40° — TUBE PROJECTION

Tube O.D.	Tube Thickness		Tube O.D.	Tube Thickness		Minimum I.D. Tool Enters		Maximum Expansion Of Tool		Tube Expander Model Number Tube Sheet Thickness Range				
										1/2" To 7/8"	3/4" To 1.1/8"	1.1/8" To 1.5/8"	1.5/8" To 2.1/8"	2.1/8" To 2.5/8"
inch	bwg	inch	inch	bwg	inch	mm	inch	mm	inch					
2	4 & 5	.238 & .220	1.3/4	11 - 13	.120 - .095	36.7	1.444	43.1	1.696	-	14172	14174	14176	14178
2	6 & 7	.203 & .180	1.3/4	14 - 16	.480 - .065	38.3	1.507	44.6	1.755	-	14182	14184	14186	14188
2	7 & 8	.180 & .165				39.9	1.570	46.4	1.826	14191	14192	14194	14196	14198
2	9 & 10	.148 & .134	2.1/4	13	.095	41.5	1.633	48.0	1.889	14201	14202	14204	14206	14208
2	11 - 13	.120 - .095	2.1/4	4 & 5	.238 & .220	43.1	1.696	49.6	1.952	14211	14212	14214	14216	14218
2.1/2	2	.284	2.1/4	6 - 8	.203 - .165	45.5	1.791	52.6	2.070	-	14222	14224	14226	14228
2.1/2	3 & 4	.259 & .238	2.1/4	9 - 11	.148 - .120	47.1	1.856	54.2	2.133	-	14232	14234	14236	14238
2.1/2	4 - 6	.238 - .203	2.1/4	12 - 15	.109 - .072	49.0	1.929	57.3	2.255	-	14242	14244	14246	14248
2.1/2	7 - 10	.180 - .134	2.3/4	2 & 3	.284 & .259	51.9	2.043	60.5	2.381	-	14252	14254	14256	14258
2.1/2	11 - 13	.120 - .095	2.3/4	4 & 5	.238 & .220	55.1	2.169	63.7	2.507	14261	14262	14264	14266	14268
3	1 - 3	.300 - .259	2.3/4	6 - 10	.203 - .134	57.4	2.259	66.6	2.622	-	14272	14274	14276	14278
3	4 - 6	.238 - .203	2.3/4	11 - 15	.120 - .072	60.6	2.385	70.0	2.755	-	14282	14284	14286	14288
3	7 - 11	.180 - .120	3.1/4	1 - 4	.300 - .238	63.8	2.511	73.9	2.909	-	14292	14294	14296	14298
3	10 - 12	.134 - .109	3.1/4	4 - 7	.238 - .180	66.9	2.635	77.3	3.043	14301	14302	14304	14306	14308
3.1/2	1 - 4	.300 - .238	3.1/4	7 - 11	.180 - .120	70.1	2.759	80.1	3.153	-	14312	14314	14316	14318
3.1/2	4 - 7	.238 - .180	3.1/4	10 - 15	.134 - .072	73.0	2.874	83.4	3.283	-	14322	14324	14326	14328
3.1/2	7 - 11	.180 - .120	3.3/4	2 & 3	.284 & .259	76.2	3.000	86.8	3.417	-	14332	14334	14336	14338
3.1/2	10 - 12	.134 - .109	3.3/4	4 & 5	.238 & .220	79.3	3.122	89.8	3.535	-	14342	14344	14346	14348
4	1 - 4	.300 - .238	3.3/4	6 - 10	.203 - .134	82.5	3.248	93.0	3.661	-	14352	14354	14356	14358
4	4 - 7	.238 - .180	3.3/4	11 - 15	.120 - .072	85.7	3.374	96.0	3.779	-	14362	14364	14366	14368
4	7 - 11	.180 - .120	4.1/4	2 & 3	.284 & .259	88.9	3.500	98.6	3.881	-	14372	14374	14376	14378
4	8 - 12	.165 - .109	4.1/4	3 & 5	.259 & .220	90.5	3.562	102.3	4.027	-	14382	14384	14386	14388
4.1/2	1 - 4	.300 - .238	4.1/4	6 - 9	.203 - .148	95.2	3.748	104.7	4.122	-	14392	14394	14396	14398
4.1/2	3 - 8	.238 - .165	4.1/4	10 - 13	.134 - .095	98.4	3.874	110.3	4.342	-	14402	14404	14406	14408
4.1/2	6 - 12	.203 - .109	-	-	-	101.6	4.000	113.5	4.468	-	14412	14414	14416	14418

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

OVER ROLL

TUBE SHEET THICKNESS

40°

TUBE PROJECTION

Spare Rollers Set Model Number Tube Sheet Thickness Range					Mandrel Square Drive Size inch	Spare Mandrel Model Number			
1/2" To 7/8"	3/4" To 1.1/8"	1.1/8" To 1.5/8"	1.5/8" To 2.1/8"	2.1/8" To 2.5/8"		Drum Type	Header Type	Short Series 5.1/8 inch	Short Series 7.1/8 inch
-	34872	34874	34878	34948	3/4	32269	32289	32308 32309 32310 32311	34876, 34948
-	34879	34881	34883	34949	3/4	32269	32289	32309 32310 32311	-
34878	34879	34881	34883	34949	3/4	32270	32290	32309 32310 32311 32312	-
34878	34879	34881	34883	34949	3/4	32271	32291	32311 32312 32313	32346
34885	34886	34888	34890	34950	3/4	32270	32290	32310 32311 32312	32345
-	34893	34895	34897	34951	3/4	32270	32290	32310 32311 32312 32313	-
-	34893	34895	34897	34951	3/4	32271	32291	32311 32312 32313 32314	-
-	34893	34895	34897	34951	3/4	32272	32292	32312 32313 21214 32315 32316	-
-	34900	34902	34904	34952	3/4	32272	32292	32312 32313 32314 32315 32316	32347 32348 32349
34899	34900	34902	34904	34952	3/4	32273	32293	32315 32316 32317	33630 33631
-	34907	34909	34911	34953	3/4	32273	32293	32315 32316 32317 32318 32319	-
-	34907	34909	34911	34953	1	32274	32294	32317 32318 32319 32320 32321	-
-	34914	34916	34918	34954	1	32274	32294	32318 32319 32320 32321 32322	33632 33633 33634 33635
34913	34914	34916	34918	34954	1	32275	32295	32320 32321 32322	33634 33635
-	34921	34923	34925	34955	1	32274	32294	32318 32319 32320 32321 32322	-
-	34921	34923	34925	34955	1	32275	32295	32321 32322 32323 32324 32325	-
-	34921	34923	34925	34955	1	32276	32296	32323 32324 32325 32326 32327	-
-	34921	34923	34925	34955	1	32277	32297	32324 32325 32326 32327 32328	-
-	34928	34930	34932	34956	1	32276	32296	32324 32325 32326 32327 32328	-
-	34928	34930	34932	34956	1	32277	32297	32326 32327 32328 32329 32330	-
-	34928	34930	34932	34956	1	32278	32298	32328 32329 32330 32331 32332	-
-	34935	34937	34939	34957	1	32277	32297	32324 32325 32326 32327 32328	-
-	34935	34937	34939	34957	1	32278	32298	32329 32330 32331 32332 32350	-
-	34935	34937	34939	34957	1	32279	32299	32331 32332 32350 32337 32338	-
-	34942	34944	34946	34958	1	32278	32298	32326 32327 32328 32329 32330	-