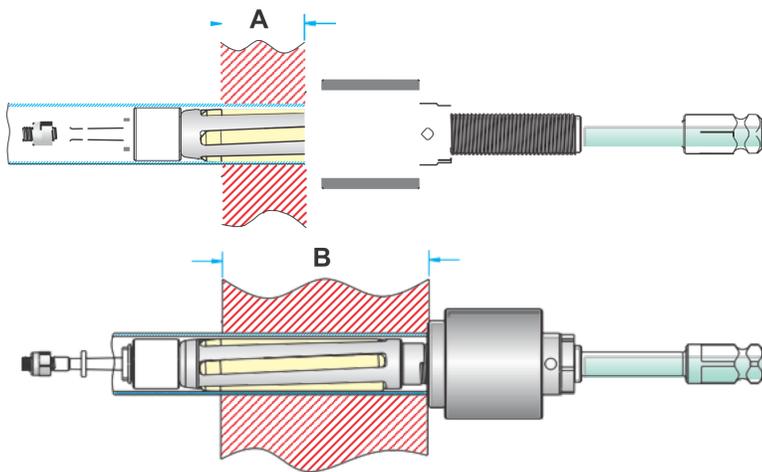


800-5 SERIES FIVE ROLL FOR THIN WALL TUBES

5 - 1
/ 8" 1 / 2"
O.D.



800-5 SERIES



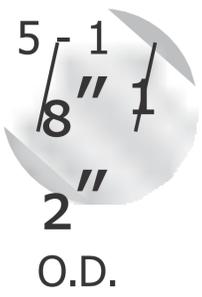
FOR TUBES INTERNAL DIAMETER
FROM (12.9 mm) .509" TO (36.7 mm) 1.44"

TUBE EXPANDERS FITTED WITH ROLLER LENGTH	FOR TUBE SHEET ADJUSTABLE RANGE	
	MINIMUM A	MAXIMUM B
(38.1mm) 1.1/2"	(12.7mm) 1/2"	(38.1mm) 1.1/2"
(57.1mm) 2.1/4"	(31.7mm) 1.1/4"	(57.1mm) 2.1/4"

- Use : Highly recommended for use on thin walled tubes (19 thru 22 gage walls) of Stainless Steel, Titanium, Incoloy and other exotic materials.
- Advantages : Gives a more concentric and even expansion when expanding thin walled tubes vs. a conventional 3 roll expander and reduces tube spring back effect.

Tube O.D. (mm) inch	Tube Thickness			Tube I.D.		Minimum I.D. Tool Enters		Maximum Expansion of Tool		EXPANDER with (38.10 mm) 1.1/2" Long Rollers			EXPANDER with (57.15 mm) 2.1/4" Long Rollers		
										Complete Tool No.	Mandrel No.	Rollers Set. No.	Complete Tool No.	Mandrel No.	Rollers Set. No.
	bwg	mm	inch	mm	inch	mm	inch	mm	inch						
5/8 (15.88)	17	1.47	.058	12.9	.509	12.6	.499	14.3	.564	815-5	816-5	R-4-5	816-5	816-5	R-4-A-5
	18	1.24	.049	13.4	.527	13.1	.517	14.6	.576	817-5	M-9	R-4-5	-	-	-
	19	1.06	.042	13.7	.541	13.3	.522	14.8	.582	819-5	820-5	R-4-5	820-5	820-5	R-4-A-5
	20	0.88	.035	14.1	.555	13.6	.536	15.1	.596	819-5 S	820-5 S	R-4-5	820-5 S	820-5 S	R-4-A-5
	21	0.81	.032	14.2	.561	13.6	.536	15.1	.596	819-5 S	820-5 S	R-4-5	820-5 S	820-5 S	R-4-A-5
	22	0.71	.028	14.5	.569	13.6	.536	15.1	.596	819-5 S	820-5 S	R-4-5	820-5 S	820-5 S	R-4-A-5
3/4 (19.05)	13	2.41	.095	14.2	.560	13.9	.550	15.6	.615	821-5	822-5	R-5-5	822-5	822-5	R-5-A-5
	14	2.10	.083	14.8	.584	14.5	.574	15.9	.629	823-5	824-5	R-6-5	824-5	824-5	R-6-A-5
	15	1.82	.072	15.3	.606	14.9	.590	16.8	.661	825-5	826-5	R-7-5	826-5	826-5	R-7-A-5
	16	1.65	.065	15.7	.620	15.3	.605	17.2	.680	827-5	M-13	R-7-5	828-5	M-13	R-7-A-5
	17	1.47	.058	16.1	.634	15.7	.619	17.8	.699	829-5	830-5	R-7-5	830-5	830-5	R-7-A-5
	18	1.24	.049	16.5	.652	15.7	.619	17.8	.699	829-5	830-5	R-7-5	830-5	830-5	R-7-A-5
	19	1.06	.042	16.9	.666	16.3	.642	18.5	.729	831-5	M-13	R-9-5	832-5	M-13	R-9-A-5
	20	0.88	.035	17.2	.680	16.3	.642	18.5	.729	831-5	M-13	R-9-5	832-5	M-13	R-9-A-5
	21	0.81	.032	17.4	.686	16.3	.642	18.5	.729	831-5	M-13	R-9-5	832-5	M-13	R-9-A-5
	22	0.71	.028	17.6	.694	16.3	.642	18.5	.729	831-5	M-13	R-9-5	832-5	M-13	R-9-A-5
	23	0.64	.025	17.8	.700	17.0	.670	18.9	.747	833-5	M-14-3/8	R-9-5	834-5	M-14-3/8	R-9-A-5
	24	0.56	.022	17.9	.706	17.0	.670	18.9	.747	833-5	M-14-3/8	R-9-5	834-5	M-14-3/8	R-9-A-5
	25	0.51	.020	18.0	.710	17.4	.685	19.0	.750	835-5	M-15-3/8	R-10-5	836-5	M-15-3/8	R-10-A-5

For best results a 'Thin Wall Thrust Collar' should be used when rolling 19 thru 22 gauge wall tubes. (See Pg. 5)
Model 815-5 - 858-5 come with 3/8" square mandrel drives and Model 859-5 - 900-5 come with 1/2" square mandrel drives.



800-5 SERIES FIVE ROLL FOR THIN WALL TUBES

Tube O.D. (mm) inch	Tube Thickness			Tube I.D.		Minimum I.D. Tool Enters		Maximum Expansion of Tool		EXPANDER with (38.10 mm) 1.1/2" Long Rollers			EXPANDER with (57.15 mm) 2.1/4" Long Rollers		
	bwg	mm	inch	mm	inch	mm	inch	mm	inch	Complete Tool No.	Mandrel No.	Rollers Set. No.	Complete Tool No.	Mandrel No.	Rollers Set. No.
(22.22) 7/8	13	2.41	.095	17.4	.685	17.0	.670	18.9	.747	833-5	M-14-3/8	R-9-5	834-5	M-14-3/8	R-9-A-5
	14	2.10	.083	18.0	.709	17.4	.685	19.0	.750	835-5	M-15-3/8	R-10-5	836-5	M-15-3/8	R-10-A-5
	16	1.65	.065	18.9	.745	18.4	.726	20.3	.800	839-5	840-5	R-11-5	840-5	840-5	R-11-A-5
	17	1.47	.058	19.2	.759	18.8	.740	20.9	.824	843-5	M-17-3/8	R-11-5	844-5	M-17-3/8	R-11-A-5
	18	1.24	.049	19.7	.777	18.8	.740	20.9	.824	843-5	M-17-3/8	R-11-5	844-5	M-17-3/8	R-11-A-5
	19	1.07	.042	20.1	.791	19.4	.763	21.6	.851	845-5	M-18-3/8	R-11-5	846-5	M-18-3/8	R-11-A-5
	20	0.89	.035	20.4	.805	19.4	.763	21.6	.851	845-5	M-18-3/8	R-11-5	846-5	M-18-3/8	R-11-A-5
	21	0.81	.032	20.6	.811	19.4	.763	21.6	.851	845-5	M-18-3/8	R-11-5	846-5	M-18-3/8	R-11-A-5
	22	0.71	.028	20.8	.819	19.4	.763	21.6	.851	845-5	M-18-3/8	R-11-5	846-5	M-18-3/8	R-11-A-5
	23	0.64	.025	20.9	.825	20.1	.791	22.4	.880	847-5	M-18-3/8	R-13-5	848-5	M-18-3/8	R-13-A-5
24	0.56	.022	21.1	.831	20.1	.791	22.4	.880	847-5	M-18-3/8	R-13-5	848-5	M-18-3/8	R-13-A-5	
(25.40) 1	12	2.76	.109	19.8	.782	19.4	.763	21.6	.852	845-5	M-18-3/8	R-11-5	846-5	M-18-3/8	R-11-A-5
	13	2.41	.095	20.5	.810	20.1	.791	22.4	.880	847-5	M-18-3/8	R-13-5	848-5	M-18-3/8	R-13-A-5
	14	2.10	.083	21.2	.834	20.5	.810	22.3	.879	849-5	850-5	R-12-5	850-5	850-5	R-12-A-5
	15	1.82	.072	21.7	.856	21.3	.837	23.8	.936	851-5	852-5	R-13-5	852-5	852-5	R-13-A-5
	16	1.65	.065	22.0	.870	21.3	.837	23.8	.936	851-5	852-5	R-13-5	852-5	852-5	R-13-A-5
	17	1.47	.058	22.4	.884	22.0	.865	24.5	.965	855-5	856-5	R-13-5	856-5	856-5	R-13-A-5
	18	1.24	.049	22.9	.902	22.0	.865	24.5	.965	855-5	856-5	R-13-5	856-5	856-5	R-13-A-5
	19	1.06	.042	23.2	.916	22.0	.865	24.5	.965	855-5	856-5	R-13-5	856-5	856-5	R-13-A-5
	20	0.88	.035	23.6	.930	22.0	.865	24.5	.965	855-5	856-5	R-13-5	856-5	856-5	R-13-A-5
	21	0.81	.032	23.8	.936	22.4	.883	25.3	.997	857-5	M-21-3/8	R-15-5	858-5	M-21-3/8	R-15-A-5
22	0.71	.028	24.0	.944	22.4	.883	25.3	.997	857-5	M-21-3/8	R-15-5	858-5	M-21-3/8	R-15-A-5	
23	0.64	.025	24.1	.950	22.4	.883	25.3	.997	857-5	M-21-3/8	R-15-5	858-5	M-21-3/8	R-15-A-5	
24	0.56	.022	24.3	.956	22.4	.883	25.3	.997	857-5	M-21-3/8	R-15-5	858-5	M-21-3/8	R-15-A-5	
25	0.51	.020	24.4	.960	22.4	.883	25.3	.997	857-5	M-21-3/8	R-15-5	858-5	M-21-3/8	R-15-A-5	
(28.58) 1.1/8	12	2.76	.109	23.0	.907	22.4	.883	25.3	.997	857-5	M-21-3/8	R-15-5	858-5	M-21-3/8	R-15-A-5
	13	2.41	.095	23.7	.935	23.2	.916	25.4	1.000	859-5	860-5	R-16-5	860-5	860-5	R-16-A-5
	14	2.11	.083	24.3	.959	23.7	.935	26.4	1.039	861-5	862-5	R-17-5	862-5	862-5	R-17-A-5
	22	0.71	.028	27.2	1.069	26.4	1.039	29.4	1.157	871-5	872-5	R-19-5	872-5	872-5	R-19-A-5
(31.75) 1.1/4	24	0.56	.022	27.5	1.081	26.4	1.039	29.4	1.157	871-5	872-5	R-19-5	872-5	872-5	R-19-A-5
	15	1.82	.072	28.1	1.106	27.6	1.087	30.4	1.196	875-5	876-5	R-21-5	876-5	876-5	R-21-A-5
	16	1.65	.065	28.4	1.120	27.6	1.087	30.4	1.196	875-5	876-5	R-21-5	876-5	876-5	R-21-A-5
	17	1.47	.058	28.8	1.134	28.3	1.115	31.3	1.231	879-5	880-5	R-21-5	880-5	880-5	R-21-A-5
	18	1.24	.049	29.3	1.152	28.3	1.115	31.3	1.231	879-5	880-5	R-21-5	880-5	880-5	R-21-A-5
	19	1.07	.042	29.6	1.166	28.3	1.115	31.3	1.231	879-5	880-5	R-21-5	880-5	880-5	R-21-A-5
	20	0.88	.035	30.0	1.180	28.3	1.115	31.3	1.231	879-5	880-5	R-21-5	880-5	880-5	R-21-A-5
	21	0.81	.032	30.1	1.186	28.3	1.115	31.3	1.231	879-5	880-5	R-21-5	880-5	880-5	R-21-A-5
	22	0.71	.028	30.3	1.194	28.3	1.115	31.3	1.231	879-5	880-5	R-21-5	880-5	880-5	R-21-A-5
	23	0.64	.025	30.5	1.200	28.8	1.133	31.5	1.242	881-5	882-5	R-21-5	882-5	882-5	R-21-A-5
(34.92) 1.3/8	24	0.56	.022	30.6	1.206	28.8	1.133	31.5	1.242	881-5	882-5	R-21-5	882-5	882-5	R-21-A-5
	12	2.76	.109	29.3	1.154	28.8	1.133	31.5	1.242	881-5	882-5	R-21-5	882-5	882-5	R-21-A-5
	14	2.11	.083	30.7	1.209	29.9	1.179	32.9	1.296	885-5	882-5	R-23-5	882-5	882-5	R-23-A-5
	20	0.88	.035	33.2	1.305	31.9	1.257	35.2	1.385	893-5	894-5	R-26-5	894-5	894-5	R-26-A-5
(38.10) 1.1/2	22	0.71	.028	33.5	1.319	32.6	1.285	36.0	1.417	895-5	896-5	R-26-5	896-5	896-5	R-26-A-5
	24	0.56	.022	33.8	1.331	32.6	1.285	36.0	1.417	895-5	896-5	R-26-5	896-5	896-5	R-26-A-5
	17	1.47	.058	35.1	1.384	33.8	1.331	37.8	1.489	899-5	900-5	R-29-5	900-5	900-5	R-29-A-5
	18	1.24	.049	35.6	1.402	33.8	1.331	37.8	1.489	899-5	900-5	R-29-5	900-5	900-5	R-29-A-5
	19	1.06	.042	36.0	1.416	33.8	1.331	37.8	1.489	899-5	900-5	R-29-5	900-5	900-5	R-29-A-5
	20	0.89	.035	36.3	1.430	33.8	1.331	37.8	1.489	899-5	900-5	R-29-5	900-5	900-5	R-29-A-5
(38.10) 1.1/2	21	0.81	.032	36.5	1.436	33.8	1.331	37.8	1.489	899-5	900-5	R-29-5	900-5	900-5	R-29-A-5
	22	0.71	.028	36.7	1.444	33.8	1.331	37.8	1.489	899-5	900-5	R-29-5	900-5	900-5	R-29-A-5
	23	0.64	.025	36.8	1.450	33.8	1.331	37.8	1.489	899-5	900-5	R-29-5	900-5	900-5	R-29-A-5
	24	0.56	.022	37.0	1.456	33.8	1.331	37.8	1.489	899-5	900-5	R-29-5	900-5	900-5	R-29-A-5

For best results a 'Thin Wall Thrust Collar' should be used when rolling 19 thru 22 gauge wall tubes. (See Pg. 5)
Model 815-5 - 858-5 come with 3/8" square mandrel drives and Model 859-5 - 900-5 come with 1/2" square mandrel drives.