

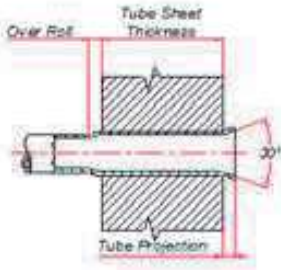


Tube Sheet Thickness	Roller Length	Effective Rolling Length	When ordering add Expander Prefix
1/2" – 7/8" (12.7 – 22.22mm)	1.7/16" (36.5 mm)	1" (25.30 mm)	1142/3
3/4" – 1.1/8" (19.05 – 28.58mm)	1.15/16" (49.20 mm)	1.1/2" (38.00 mm)	1142/5
1.1/8" – 1.5/8" (28.58 – 41.30mm)	2.7/16" (61.90 mm)	2" (50.70 mm)	1142/7
1.5/8" – 2.1/8" (41.30 – 54.0mm)	2.15/16" (74.6 mm)	2.1/2" (63.40 mm)	1142/9
2.1/8" – 2.5/8" (54.0 – 66.70mm)	3.7/16" (87.30 mm)	3" (76.10 mm)	1142/9

## TUBE EXPANDERS SPECIFICATION

Tube O.D	Gauge	Tube O.D	Gauge	Min. I.D.	Max. Exp.	Expander Model	Roll Model	Mandrel Model	SQ. Drive
1	13-14	1.1/8	9	19.7	23.4	1079	079-FS	83-MP	1/2"
1	15-16	1.1/8	10	20.7	24.4	1083	083-FS	83-MP	1/2"
1.1/4	7	1.1/8	11-12	21.7	25.5	1087	087-FS	91-MP	1/2"
1.1/4	8-9	1.1/8	13-14	22.7	26.5	1091	095-FS	91-MP	1/2"
1.1/4	10	1.1/8	15-16	23.7	28.1	1095	095-FS	99-MP	1/2"
1.1/4	11-13	1.3/8	8	24.7	29.0	1099	099-FS	99-MP	1/2"
1.1/4	14-15	1.3/8	9	25.7	30.0	1103	103-FS	99-MP	1/2"
1.1/4	16	1.3/8	10	27.8	33.0	1111	111-FS	118-MP	3/4"
1.1/2	10-12	1.3/8	15-16	30.7	35.0	1118	118-FS	118-MP	3/4"
1.1/2	13-16	1.3/4	6-7	32.7	38.0	1126	126-FS	126-MP	3/4"
2	3	1.3/4	8-9	34.7	40.0	1134	126-FS	134-MP	3/4"
2	4-5	1.3/4	10-12	36-7	42.5	1142	142-FS	150-MP	3/4"
2	6	1.3/4	13-16	38.7	44.5	1150	150-FS	150-MP	3/4"
2	7-9	2.1/4	3	40.7	47.0	1158	158-FS	174-MP	3/4"
2	10-12	2.1/4	4	42.7	49.0	1166	166-FS	174-MP	3/4"
2	13-15	2.1/4	5-6	44.7	51.5	1174	174-FS	174-MP	3/4"
2	16	2.1/4	7-9	46.7	54.0	1181	181-FS	197-MP	1"
2.1/2	4-5	2.1/4	10-13	48.7	56.0	1189	174-FS	197-MP	1"
2.1/2	6	2.1/4	14-16	50.7	60.0	1197	205-FS	197-MP	1"
2.1/2	7-10	2.3/4	2-3	52.7	62.0	1205	205-FS	221-MP	1"
2.1/2	11-13	2.3/4	4-5	54.7	64.0	1213	213-FS	221-MP	1"
2.1/2	14-16	2.3/4	6-7	56.7	66.0	1221	221-FS	221-MP	1"
3	2	2.3/4	8-9	58.7	68.0	1229	221-FS	244-MP	1"
3	3-4	2.3/4	10-12	60.7	70.0	1237	237-FS	244-MP	1"
3	5-6	2.3/4	13-16	62.7	72.0	1244	252-FS	244-MP	1"
3	7-9			64.7	74.0	1252	252-FS	268-MP	1"
3	10-12	3.1/4	3	66.7	76.0	1260	260-FS	268-MP	1"
3	13-14	3.1/4	4	68.7	78.0	1268	268-FS	268-MP	1"
3	15-16	3.1/4	5-6	70.7	80.0	1276	276-FS	300-MP	1"
3.1/2	2-3	3.1/4	7-11	72.7	82.0	1284	284-FS	300-MP	1"
3.1/2	4-6	3.1/4	12-14	74.7	84.0	1292	292-FS	300-MP	1"
3.1/2	7-9	3.1/4	15-16	76.7	86.0	1300	315-FS	300-MP	1"
3.1/2	10-12	3.3/4	2-3	78.7	88.0	1308	284-FS	347-MP	1"
3.1/2	13-15	3.3/4	4-6	80.7	90.0	1315	315-FS	347-MP	1"
3.1/2	16	3.3/4	7-8	82.7	94.0	1323	323-FS	347-MP	1"
4	3	3.3/4	9-12	84.7	96.0	1331	331-FS	347-MP	1"
4	4-6	3.3/4	13-16	86.7	98.0	1339	355-FS	347-MP	1"
4	7-8	4.1/4	2	88.7	100.0	1347	363-FS	347-MP	1"
4	9-12	4.1/4	3	90.7	102.0	1355	355-FS	394-MP	1"
4	13-15	4.1/4	4	92.7	104.0	1363	363-FS	394-MP	1"
4	16	4.1/4	7-8	94.7	106.0	1370	370-FS	394-MP	1"
4.1/2	3	4.1/4	9-11	96.7	108.0	1378	378-FS	394-MP	1"
4.1/2	4-6	4.1/4	12-16	98.7	110.0	1386	386-FS	394-MP	1"
4.1/2	7-14			100.7	111.0	1394	394-FS	394-MP	1"

**1000 SERIES**

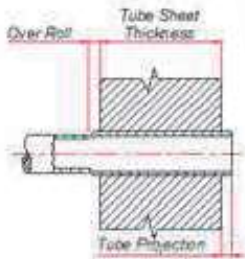


Tube Sheet Thickness	Roller Length	Effective Rolling Length	When ordering Expander add Prefix
1/2" – 7/8" (12.7 – 22.22mm)	1.7/16" (36.5 mm)	1" (25.30 mm)	1142/3
3/4" – 1.1/8" (19.05 – 28.58mm)	1.15/16" (49.20 mm)	1.1/2" (38.00 mm)	1142/5
1.1/8" – 1.5/8" (28.58 – 41.30mm)	2.7/16" (61.90 mm)	2" (50.70 mm)	1142/7
1.5/8" – 2.1/8" (41.30 – 54.0mm)	2.15/16" (74.6 mm)	2.1/2" (63.40 mm)	1142/9
2.1/8" – 2.5/8" (54.0 – 66.70mm)	3.7/16" (87.30 mm)	3" (76.10 mm)	1142/9

## TUBE EXPANDERS SPECIFICATION

Tube O.D	Gauge	Tube O.D	Gauge	Min. I.D.	Max. Exp.	Expander Model	Roll Model	Mandrel Model	SQ. Drive
1	13-14	1.1/8	9	19.7	23.4	2079	079-FS	83-MP	1/2"
1	15-16	1.1/8	10	20.7	24.4	2083	083-FS	83-MP	1/2"
1.1/4	7	1.1/8	11-12	21.7	25.5	2087	087-FS	91-MP	1/2"
1.1/4	8-9	1.1/8	13-14	22.7	26.5	2091	095-FS	91-MP	1/2"
1.1/4	10	1.1/8	15-16	23.7	28.1	2095	095-FS	99-MP	1/2"
1.1/4	11-13	1.3/8	8	24.7	29.0	2099	099-FS	99-MP	1/2"
1.1/4	14-15	1.3/8	9	25.7	30.0	2103	103-FS	99-MP	1/2"
1.1/4	16	1.3/8	10	27.8	33.0	2111	111-FS	118-MP	3/4"
1.1/2	10-12	1.3/8	15-16	30.7	35.0	2118	118-FS	118-MP	3/4"
1.1/2	13-16	1.3/4	6-7	32.7	38.0	2126	126-FS	126-MP	3/4"
2	3	1.3/4	8-9	34.7	40.0	2134	126-FS	134-MP	3/4"
2	4-5	1.3/4	10-12	36.7	42.5	2142	142-FS	150-MP	3/4"
2	6	1.3/4	13-16	38.7	44.5	2150	150-FS	150-MP	3/4"
2	7-9	2.1/4	3	40.7	47.0	2158	158-FS	174-MP	3/4"
2	10-12	2.1/4	4	42.7	49.0	2166	166-FS	174-MP	3/4"
2	13-15	2.1/4	5-6	44.7	51.5	2174	174-FS	174-MP	3/4"
2	16	2.1/4	7-9	46.7	54.0	2181	181-FS	197-MP	1"
2.1/2	4-5	2.1/4	10-13	48.7	56.0	2189	174-FS	197-MP	1"
2.1/2	6	2.1/4	14-16	50.7	60.0	2197	205-FS	197-MP	1"
2.1/2	7-10	2.3/4	2-3	52.7	62.0	2205	205-FS	221-MP	1"
2.1/2	11-13	2.3/4	4-5	54.7	64.0	2213	213-FS	221-MP	1"
2.1/2	14-16	2.3/4	6-7	56.7	66.0	2221	221-FS	221-MP	1"
3	2	2.3/4	8-9	58.7	68.0	2229	221-FS	244-MP	1"
3	3-4	2.3/4	10-12	60.7	70.0	2237	237-FS	244-MP	1"
3	5-6	2.3/4	13-16	62.7	72.0	2244	252-FS	244-MP	1"
3	7-9			64.7	74.0	2252	252-FS	268-MP	1"
3	10-12	3.1/4	3	66.7	76.0	2260	260-FS	268-MP	1"
3	13-14	3.1/4	4	68.7	78.0	2268	268-FS	268-MP	1"
3	15-16	3.1/4	5-6	70.7	80.0	2276	276-FS	300-MP	1"
3.1/2	2-3	3.1/4	7-11	72.7	82.0	2284	284-FS	300-MP	1"
3.1/2	4-6	3.1/4	12-14	74.7	84.0	2292	292-FS	300-MP	1"
3.1/2	7-9	3.1/4	15-16	76.7	86.0	2300	315-FS	300-MP	1"
3.1/2	10-12	3.3/4	2-3	78.7	88.0	2308	284-FS	347-MP	1"
3.1/2	13-15	3.3/4	4-6	80.7	90.0	2315	315-FS	347-MP	1"
3.1/2	16	3.3/4	7-8	82.7	94.0	2323	323-FS	347-MP	1"
4	3	3.3/4	9-12	84.7	96.0	2331	331-FS	347-MP	1"
4	4-6	3.3/4	13-16	86.7	98.0	2339	355-FS	347-MP	1"
4	7-8	4.1/4	2	88.7	100.0	2347	363-FS	347-MP	1"
4	9-12	4.1/4	3	90.7	102.0	2355	355-FS	394-MP	1"
4	13-15	4.1/4	4	92.7	104.0	2363	363-FS	394-MP	1"
4	16	4.1/4	7-8	94.7	106.0	2370	370-FS	394-MP	1"
4.1/2	3	4.1/4	9-11	96.7	108.0	2378	378-FS	394-MP	1"
4.1/2	4-6	4.1/4	12-16	98.7	110.0	2386	386-FS	394-MP	1"
4.1/2	7-14			100.7	111.0	2394	394-FS	394-MP	1"

**2000 SERIES**



Tube Sheet Thickness	Roller Length	Effective Rolling Length	When ordering Expander add Prefix
1/2" – 7/8" (12.7 – 22.22mm)	2.7/16" (61.90 mm)	2" ( 50.70 mm)	1142/7
3/4" – 1.1/8" (19.05 - 28.58mm)	3.7/16" (87.30 mm)	3" ( 76.10 mm)	1142/11

## TUBE EXPANDERS SPECIFICATION

Tube O.D	Gauge	Tube O.D	Gauge	Min. I.D.	Max. Exp.	Expander Model	Roll Model	Mandrel Model	SQ. Drive
1.1/4	16	1.3/8	10	27.8	33.0	3111	111-RS	118-M	3/4"
1.1/2	10-12	1.3/8	15-16	30.7	35.0	3118	118-RS	118-M	3/4"
1.1/2	13-16	1.3/4	6-7	32.7	38.0	3126	126-RS	126-M	3/4"
2	3	1.3/4	8-9	34.7	40.0	3134	126-RS	134-M	3/4"
2	4-5	1.3/4	10-12	36-7	42.5	3142	142-RS	150-M	3/4"
2	6	1.3/4	13-16	38.7	44.5	3150	150-RS	150-M	3/4"
2	7-9	2.1/4	3	40.7	47.0	3158	158-RS	174-M	3/4"
2	10-12	2.1/4	4	42.7	49.0	3166	166-RS	174-M	3/4"
2	13-15	2.1/4	5-6	44.7	51.5	3174	174-RS	174-M	3/4"
2	16	2.1/4	7-9	46.7	54.0	3181	181-RS	197-M	1"
2.1/2	4-5	2.1/4	10-13	48.7	56.0	3189	174-RS	197-M	1"
2.1/2	6	2.1/4	14-16	50.7	60.0	3197	205-RS	197-M	1"
2.1/2	7-10	2.3/4	2-3	52.7	62.0	3205	205-RS	221-M	1"
2.1/2	11-13	2.3/4	4-5	54.7	64.0	3213	213-RS	221-M	1"
2.1/2	14-16	2.3/4	6-7	56.7	66.0	3221	221-RS	221-M	1"
3	2	2.3/4	8-9	58.7	68.0	3229	221-RS	244-M	1"
3	3-4	2.3/4	10-12	60.7	70.0	3237	237-RS	244-M	1"
3	5-6	2.3/4	13-16	62.7	72.0	3244	252-RS	244-M	1"
3	7-9			64.7	74.0	3252	252-RS	268-M	1"
3	10-12	3.1/4	3	66.7	76.0	3260	260-RS	268-M	1"
3	13-14	3.1/4	4	68.7	78.0	3268	268-RS	268-M	1"
3	15-16	3.1/4	5-6	70.7	80.0	3276	276-RS	300-M	1"
3.1/2	2-3	3.1/4	7-11	72.7	82.0	3284	284-RS	300-M	1"
3.1/2	4-6	3.1/4	12-14	74.7	84.0	3292	292-RS	300-M	1"
3.1/2	7-9	3.1/4	15-16	76.7	86.0	3300	315-RS	300-M	1"
3.1/2	10-12	3.3/4	2-3	78.7	88.0	3308	284-RS	347-M	1"
3.1/2	13-15	3.3/4	4-6	80.7	90.0	3315	315-RS	347-M	1"
3.1/2	16	3.3/4	7-8	82.7	94.0	3323	323-RS	347-M	1"
4	3	3.3/4	9-12	84.7	96.0	3331	331-RS	347-M	1"
4	4-6	3.3/4	13-16	86.7	98.0	3339	355-RS	347-M	1"
4	7-8	4.1/4	2	88.7	100.0	3347	363-RS	347-M	1"
4	9-12	4.1/4	3	90.7	102.0	3355	355-RS	394-M	1"
4	13-15	4.1/4	4	92.7	104.0	3363	363-RS	394-M	1"
4	16	4.1/4	7-8	94.7	106.0	3370	370-RS	394-M	1
4.1/2	3	4.1/4	9-11	96.7	108.0	3378	378-RS	394-M	1"
4.1/2	4-6	4.1/4	12-16	98.7	110.0	3386	386-RS	394-M	1"
4.1/2	7-14			100.7	111.0	3394	394-RS	394-M	1"

**3000 SERIES**