

# 1300 Series

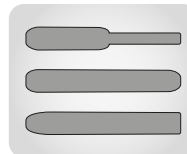
Tools for expanding tubes in condensers, chillers, heat exchangers, fin fan coolers, feedwater heaters and surface condensers.



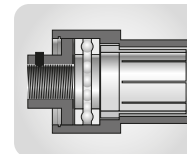
## WORKING RANGE

TUBE ID	TUBE OD	TUBE SHEET
5,87 - 8,41 mm	9,5 MM	19,0 - 88,9 MM
0,231" - 0,331"	3/8"	3/4" to 3-1/2"

## OPTIONAL SPARES AND ACCESSORIES



**ROLLS ON REQUEST**  
→ PAGE 11



**THRUST COLLARS**  
→ PAGE 10



**ROLLING MOTORS**  
→ CHAPTER PAGE 44

TUBE OD		TUBE GAUGE			TUBE ID		EXPANSION RANGE				TUBE SHEET THICKNESS				MANDREL	MANDREL SQUARE		PNEUMATIC MOTOR	ELECTRIC MOTOR
											3/4" TO 3"		1-1/4" TO 3-1/2"						
[INCH]	[MM]	[BWG]	[INCH]	[MM]	[INCH]	[MM]	MIN	MAX	MIN	MAX	TOOL NO.	ROLL NO.	TOOL NO.	ROLL NO.	[INCH]	[MM]			
3/8	9,5	15	0,072	1,83	0,231	5,87	0,230	0,265	5,84	6,73	<b>1315</b>	<b>1315</b>	<b>1316</b>	<b>1316</b>	<b>M-86</b>	1/4"	6,3	K20-1800	TES3000 S3000
		16	0,065	1,65	0,245	6,22	0,240	0,275	6,10	6,99	<b>1319</b>	<b>1315</b>	<b>1319-L</b>	<b>916-L</b>	<b>M-86</b>	1/4"	6,3		
		17	0,058	1,47	0,259	6,58	0,255	0,289	6,48	7,34	<b>1317</b>	<b>903</b>	<b>1318</b>	<b>904</b>	<b>M-88</b>	1/4"	6,3		
		18	0,049	1,24	0,277	7,04	0,272	0,307	6,91	7,80	<b>1301</b>	<b>903</b>	<b>1302</b>	<b>904</b>	<b>M-80</b>	1/4"	6,3		
		19	0,042	1,07	0,291	7,39	0,286	0,320	7,26	8,13	<b>1303</b>	<b>903</b>	<b>1304</b>	<b>904</b>	<b>M-81</b>	1/4"	6,3		
		20	0,035	0,89	0,305	7,75	0,300	0,334	7,62	8,48	<b>1305</b>	<b>907</b>	<b>1306</b>	<b>908</b>	<b>M-82</b>	1/4"	6,3		
		21	0,032	0,81	0,311	7,90	0,306	0,340	7,77	8,64	<b>1307</b>	<b>907</b>	<b>1308</b>	<b>908</b>	<b>M-83</b>	1/4"	6,3		
		22	0,028	0,71	0,319	8,10	0,314	0,349	7,98	8,86	<b>1309</b>	<b>909</b>	<b>1310</b>	<b>910</b>	<b>M-84</b>	1/4"	6,3		
		23	0,025	0,64	0,325	8,26	0,320	0,357	8,13	9,07	<b>1311</b>	<b>911</b>	<b>1312</b>	<b>912</b>	<b>M-84</b>	1/4"	6,3		
24	0,022	0,56	0,331	8,41	0,319	0,357	8,10	9,07	<b>1311</b>	<b>911</b>	<b>1312</b>	<b>912</b>	<b>M-84</b>	1/4"	6,3				

\* Motor recommendation applies only to most popular cases with a standard percentage of the wall reduction. The recommendation can be different for thicker tube sheet, harder and exotic metal tube and a higher percentage of wall reduction.