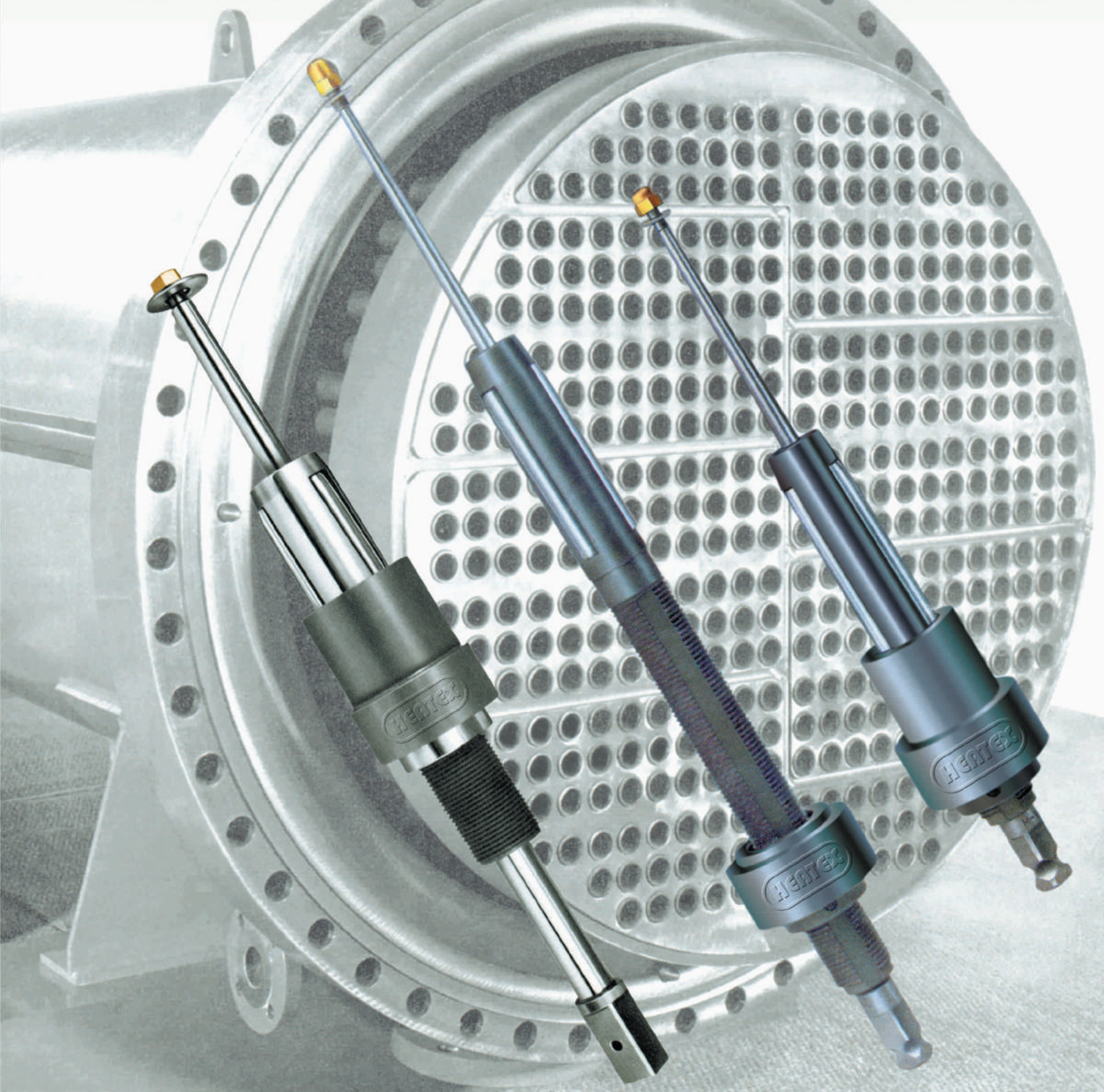


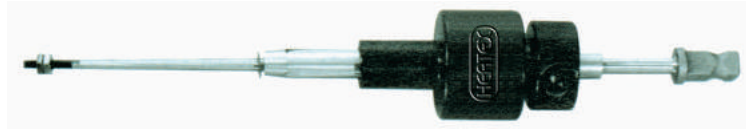


TUBE EXPANDERS



100% BOND BETWEEN TUBE & TUBE SHEET

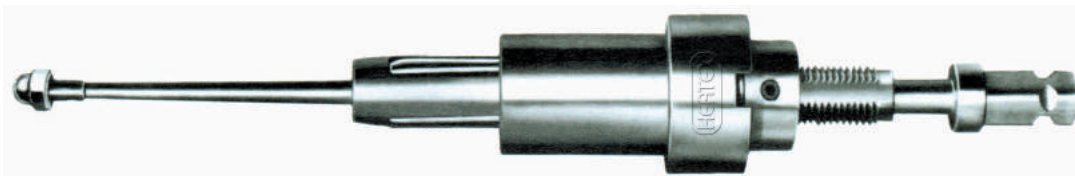
HEAT EXCHANGER AND CONDENSER TUBE EXPANDERS



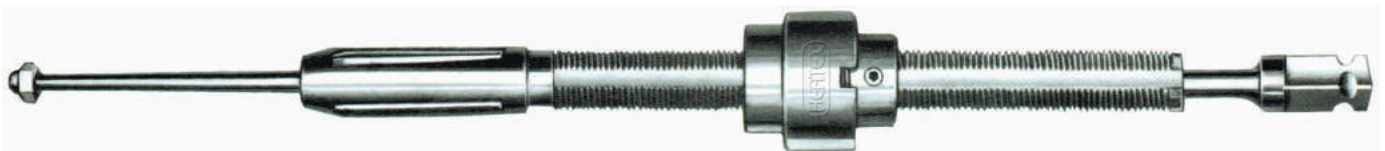
SERIES 900 (1/4" TO 3/8" OD)



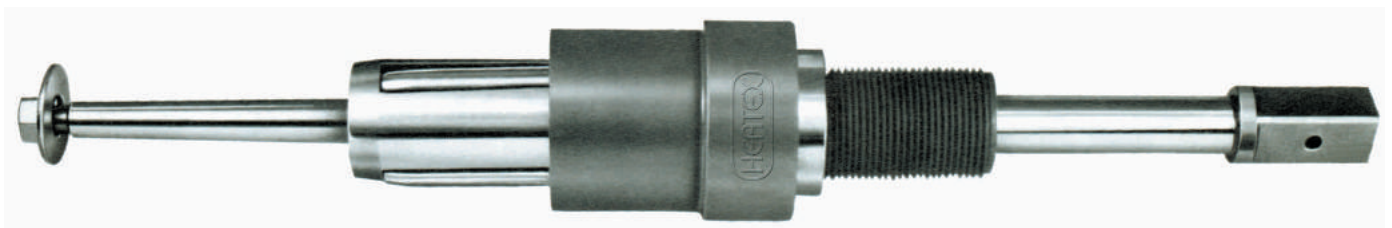
SERIES 1300 (3/8" OD TUBE)



SERIES 800 (1/2" TO 1 1/2" OD TUBE)



SERIES 1200 (1/2" TO 1 1/2" OD TUBE)

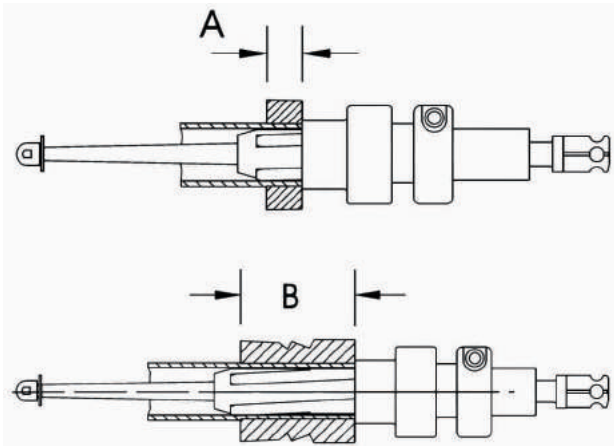


SERIES 8012 (1 1/4" TO 4" OD TUBE)

H-900 SERIES HEAT EXCHANGER AND CONDENSER TUBE EXPANDERS

RANGE : 1/4" TO 3/8" (6.30 TO 9.50 mm)

**FOR
OIL COOLERS
AIR COOLERS
PRE HEATERS
RADIATORS**



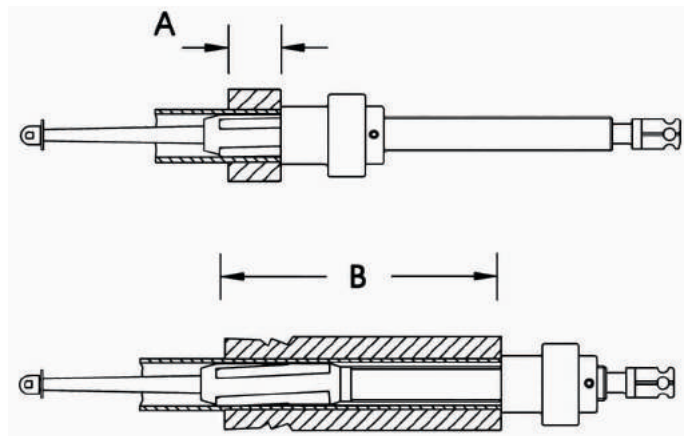
RANGE	FITTED WITH 3/4" (19.0) LG. ROLLER	FITTED WITH 1 1/4" (31.7) LG. ROLLER
MINIMUM A.	6.3 MM (1/4")	19.0 MM (3/4")
MAXIMUM B.	19.0 MM (3/4")	31.7 MM (1 1/4")

Tube OD in. (mm)	Tube Gauge bwg. in. (mm)	Tube ID in. (mm)	Min. ID Tool Enters in. (mm)	Maximum Expansion of Tool in. (mm)	Tube Sheet Thickness				Mandrel No.	Mandrel Square Drive in. (mm)
					1/4 in. to 3/4 in.		3/4 in. to 1 1/4 in.			
					Tool No. with Rolls 3/4 in. (19.0 mm) long.	Roll no.	Tool No. with Rolls 1- 1/4 in. (31.70 mm) long.	Roll no.		
1/4 (6.3)	18 .049 (1.24)	.152 (3.8)	.151 (3.8)	.173 (4.3)	921	921			M-39	1/4 (6.3)
	19 .042 (1.06)	.166 (4.2)	.165 (4.1)	.185 (4.7)	922	923				
	20 .035 (0.88)	.180 (4.5)	.175 (4.4)	.205 (5.2)	923				M-41	
	21 .032 (0.81)	.186 (4.7)	.180 (4.5)	.212 (5.3)	924		924			
	22 .028 (0.71)	.194 (4.9)	.190 (4.8)	.220 (5.5)	925		925		M-41	
	23 .025 (0.63)	.200 (5.0)	.195 (4.9)	.226 (5.7)	926	923	928			
	24 .022 (0.55)	.206 (5.2)	.201 (5.1)	.232 (5.8)	927	924		928		
	28 .014 (0.35)	.222 (5.6)	.222 (5.6)	.238 (6.0)	928	903				
	29 .013 (0.33)	.224 (5.7)								
30 .012 (0.30)	.226 (5.7)									
3/8 (9.5)	14 .083 (2.10)	.209 (5.3)	.201 (5.1)	.232 (5.8)	927	924			M-41	1/4 (6.3)
	15 .072 (1.82)	.231 (5.8)	.230 (5.8)	.265 (6.7)	915	903			M-42	
	16 .065 (1.65)	.245 (6.2)	.240 (6.1)	.275 (6.9)	916	916			M-36	
							916L	916L	M-36L	
	17 .058 (1.47)	.259 (6.5)	.255 (6.4)	.289 (7.3)	918	903	920	904	M-38	
	18 .049 (1.24)	.277 (7.0)	.272 (6.9)	.307 (7.8)	901		902		M-30	
	19 .042 (1.06)	.291 (7.3)	.286 (7.2)	.320 (8.1)	903		904		M-31	
	20 .035 (0.88)	.305 (7.7)	.300 (7.6)	.334 (8.4)	905		907		906	
	21 .032 (0.81)	.311 (7.9)	.306 (7.7)	.340 (8.6)	907	908		M-33		
	22 .028 (0.71)	.319 (8.1)	.314 (7.9)	.349 (8.8)	909	909	910	910	M-34	
	23 .025 (0.63)	.325 (8.2)	.320 (8.1)	.357 (9.0)	911	911	912	912		
	24 .022 (0.55)	.331 (8.4)								

H-1300 SERIES HEAT EXCHANGER AND CONDENSER TUBE EXPANDERS

RANGE : 3/8" (9.5 mm) OD

**FOR
OIL COOLERS
AIR COOLERS
PRE HEATERS
RADIATORS**



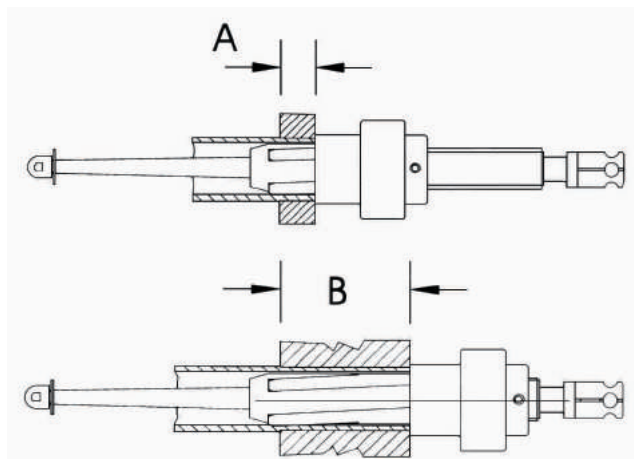
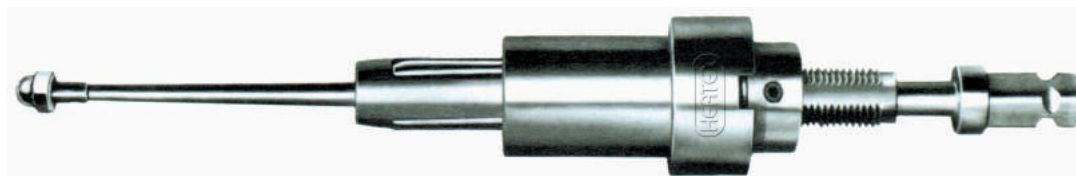
RANGE	FITTED WITH 3/4" (19.0) LG. ROLLER	FITTED WITH 1 1/4" (31.7) LG. ROLLER
MINIMUM A.	19.0 MM (3/4")	31.7 MM (1 1/4")
MAXIMUM B.	76.2 MM (3")	88.9 MM (3 1/2")

Tube OD in. (mm)	Tube Gauge bwg. in. (mm)	Tube ID in. (mm)	Min. ID Tool Enters in. (mm)	Maximum Expansion of Tool in. (mm)	Tube Sheet Thickness				Mandrel No.	Mandrel Square Drive in. (mm)
					3/4 in. to 3 in. (19.0mm) (76.2mm)		1 1/4 in. to 3-1/2 in. (31.7mm) (88.9mm)			
					Tool No. with Rolls 3/4 in. (19.0mm) long.	Roll no.	Tool No. with Rolls 1- 1/4 in. (31.70 mm) long.	Roll no.		
3/8 (9.5)	15 .072 (1.82)	.231 (5.8)	.230 (5.8)	.265 (6.7)	1315	1315	1316	1316	M-86	1/4 (6.3)
	16 .065 (1.65)	.245 (6.2)	.240 (6.1)	.275 (6.9)	1319		1319-L	916-L		
	17 .058 (1.47)	.259 (6.5)	.255 (6.4)	.289 (7.3)	1317	903	1318	904	M-88	
	18 .049 (1.24)	.277 (7.0)	.272 (6.9)	.307 (7.8)	1301		1302		M-80	
	19 .042 (1.06)	.291 (7.3)	.286 (7.2)	.320 (8.1)	1303		1304		M-81	
	20 .035 (0.88)	.305 (7.7)	.300 (7.6)	.334 (8.4)	1305	907	1306	908	M-82	
	21 .032 (0.81)	.311 (7.9)	.306 (7.7)	.340 (8.6)	1307		1308		M-83	
	22 .028 (0.71)	.319 (8.1)	.314 (7.9)	.349 (8.8)	1309	909	1310	910	M-84	
	23 .025 (0.63)	.325 (8.2)	.320 (8.1)	.357 (9.0)	1311	911	1312	912		
	24 .022 (0.55)	.331 (8.4)								

H-800 SERIES HEAT EXCHANGER AND CONDENSER TUBE EXPANDERS

RANGE : 1/2" TO 1 1/2" (12.7 TO 38.1 mm) OD

**FOR
OIL COOLERS
AIR COOLERS
PRE HEATERS
RADIATORS**



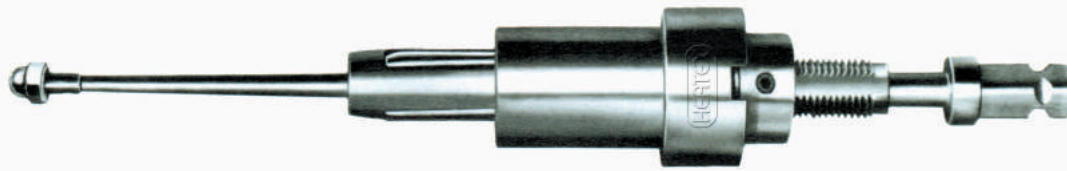
RANGE	FITTED WITH 1 1/2" (38.1) LG. ROLLER	FITTED WITH 2 1/4" (57.1) LG. ROLLER
	MINIMUM A.	MINIMUM B.
	12.7 MM (1/2")	31.7 MM (1 1/4")
	MAXIMUM B.	MAXIMUM C.
	38.1 MM (1 1/2")	57.1 MM (2 1/4")

Tube OD in. (mm)	Tube Gauge bwg. in. (mm)	Tube ID in. (mm)	Min. ID Tool Enters In. (mm)	Maximum Expansion of Tool in. (mm)	Tube Sheet Thickness				Mandrel No.	Mandrel Square Drive in (mm)	
					1/2 in. to 1-1/2 in. (12.7mm) (38.1mm)		1-1/4 in. to 2-1/4 in. (31.7mm) (57.1mm)				
					Tool No. with Rolls 1- 1/2 in. (38.1mm) long.	Roll no.	Tool No. with Rolls 2- 1/4 in. (57.1mm) long.	Roll no.			
1/2 (12.7)	14 .083 (2.10)	.334 (8.4)	.324 (8.2)	.374 (9.5)	797	797			797	3/8 (9.5)	
	15 .072 (1.82)	.356 (9.0)	.348 (8.8)	.398 (10.1)	799	R-1			799		
	16 .065 (1.65)	.370 (9.4)	.360 (9.1)	.410 (10.4)	801				M-1		
	17 .058 (1.47)	.384 (9.7)	.374 (9.5)	.424 (10.7)	803	R-2					
	18 .049 (1.24)	.402 (10.2)	.392 (9.9)	.447 (11.3)	805	R-3			M-2		
	20 .035 (0.88)	.430 (10.9)	.406 (10.3)	.461 (11.7)	805 (spec)				M-3		
5/8 (15.8)	12 .109 (2.76)	.407 (10.3)	.392 (9.9)	.447 (11.3)	805	R-3			M-2		3/8 (9.5)
	13 .095 (2.41)	.435 (11.0)	.425 (10.8)	.480 (12.1)	807	R-4			M-3		
	14 .083 (2.10)	.459 (11.6)	.449 (11.4)	.509 (12.9)	809			810	R-4-A		
	15 .072 (1.82)	.481 (12.2)	.471 (11.9)	.536 (13.6)	811	R-5	812	R-5 A	M-5		
	16 .065 (1.65)	.495 (12.5)	.485 (12.3)	.550 (13.9)	813	R-6	814	R-6 A			
	17 .058 (1.47)	.509 (12.9)	.499 (12.6)	.564 (14.3)	815			816			
	18 .049 (1.24)	.527 (13.3)	.517 (13.1)	.572 (14.5)	817	R-7	818	R-7-A	M-7		
	19 .042 (1.06)	.541 (13.7)	.522 (13.2)	.582 (14.7)	819		820		M-6		
	20 .035 (0.88)	.555 (14.1)	.536 (13.6)	.596 (15.1)	819 (spec)				820 (spec)	M-8	
	21 .032 (0.81)	.561 (14.2)									
	22 .028 (0.71)	.569 (14.4)									

Continued on following page.

H-800 SERIES HEAT EXCHANGER AND CONDENSER TUBE EXPANDERS

RANGE : 1/2" TO 1 1/2" (12.7 TO 38.1 mm) OD



Tube OD In. (mm)	Tube Gauge bwg. in. (mm)	Tube ID in. (mm)	Min. ID Tool Enters in. (mm)	Maximum Expansion of Tool in. (mm)	Tube Sheet Thickness				Mandrel No.	Mandrel Square Drive in (mm)
					1/2 in. to 1-1/2 in. (12.7mm) (38.1mm)		1-1/4 in. to 2-1/4 in. (31.7mm) (57.1mm)			
					Tool No. with Rolls 1- 1/2 in. (38.1mm) long.	Roll no.	Tool No. with Rolls 2- 1/4 in. (57.1mm) long.	Roll no.		
3/4 (19.0)	10 .134 (3.40)	.482 (12.2)	.471 (11.9)	.536 (13.6)	811	R-5	812	R-5-A	M-5	3/8 (9.5)
	11 .120 (3.04)	.510 (12.9)	.499 (12.6)	.564 (14.3)	815	R-6	816	R-6-A		
	12 .109 (2.76)	.532 (13.5)	.522 (13.2)	.582 (14.7)	819	R-7	820	R-7-A	M-6	
	13 .095 (2.41)	.560 (14.2)	.550 (13.9)	.615 (15.6)	821	R-8	822	R-8-A		
	14 .083 (2.10)	.584 (14.8)	.574 (14.5)	.639 (16.2)	823	R-9	824	R-9-A	M-8	
	15 .072 (1.82)	.606 (15.3)	.596 (15.1)	.661 (16.7)	825		826			
	16 .065 (1.65)	.620 (15.7)	.605 (15.3)	.685 (17.4)	827	R-10	828	R-10-A		
	17 .058 (1.47)	.634 (16.1)								
	18 .049 (1.24)	.652 (16.5)	.619 (15.7)	.699 (17.7)	829	R-11	830	R-11-A		
	19 .042 (1.06)	.666 (16.9)							M-9	
	20 .035 (0.88)	.680 (17.2)	.642 (16.3)	.722 (18.3)	831	R-12	832	R-12-A		
	21 .032 (0.81)	.686 (17.4)								
	22 .028 (0.71)	.694 (17.6)								
7/8 (22.2)	10 .134 (3.40)	.607 (15.4)	.596 (15.1)	.661 (16.7)	825	R-10	826	R-10-A	M-8	3/8 (9.5)
	11 .120 (3.04)	.635 (16.1)	.619 (15.7)	.699 (17.7)	829	R-11	830	R-11-A		
	12 .109 (2.76)	.657 (16.6)	.642 (16.3)	.722 (18.3)	831	R-12	832	R-12-A	M-9	
	13 .095 (2.41)	.685 (17.4)	.670 (17.0)	.750 (19.0)	833	R-13	834	R-13-A	M-10	
	14 .083 (2.10)	.709 (18.0)	.685 (17.4)	.774 (19.6)	835	R-14	836	R-14-A	M-11	
	15 .072 (1.82)	.731 (18.5)	.712 (18.0)	.801 (20.3)	837	R-15	838			
	16 .065 (1.65)	.745 (18.9)	.726 (18.4)	.815 (20.7)	839		840	R-15-A		
	17 .058 (1.47)	.759 (19.2)							M-12	
	18 .049 (1.24)	.777 (19.7)	.740 (18.8)	.829 (21.0)	843	R-16	844	R-16-A		
1 (25.4)	8 .165 (4.19)	.670 (17.0)	.655 (16.6)	.735 (18.6)	841	R-13	842	R-13-A	M-9	3/8 (9.5)
	9 .148 (3.75)	.704 (17.8)	.685 (17.4)	.774 (19.6)	835	R-14	836	R-14-A		
	10 .134 (3.40)	.732 (18.5)	.712 (18.0)	.801 (20.3)	837	R-15	838	R-15-A	M-11	
	11 .120 (3.04)	.760 (19.3)	.740 (18.8)	.829 (21.0)	843	R-16	844	R-16-A		
	12 .109 (2.76)	.782 (19.8)	.763 (19.3)	.852 (21.6)	845	R-17	846	R-17-A	M-12	
	13 .095 (2.41)	.810 (20.5)	.791 (20.0)	.880 (22.3)	847		848			
	14 .083 (2.10)	.834 (21.1)	.810 (20.5)	.909 (23.0)	849	R-18	850	R-18-A		
	15 .072 (1.82)	.856 (21.7)								
	16 .065 (1.65)	.870 (22.1)	.837 (21.2)	.936 (23.7)	851	R-19	852	R-19-A		
	17 .058 (1.47)	.884 (22.4)							M-13	
	18 .049 (1.24)	.902 (22.9)	.865 (21.9)	.964 (24.4)	855	R-21	856	R-21-A		
	19 .042 (1.06)	.916 (23.2)								
20 .035 (0.88)	.930 (23.6)									

Continued on following page.

H-800 SERIES HEAT EXCHANGER AND CONDENSER TUBE EXPANDERS

Tube OD in. (mm)	Tube Gauge Bwg. in. (mm)	Tube ID in. (mm)	Min. ID Tool Enters in. (mm)	Maximum Expansion of Tool in. (mm)	Tube Sheet Thickness				Mandrel No.	Mandrel Square Drive in (mm)
					1/2 in. to 1-1/2 in. (12.7mm) (38.1mm)		1-1/4 in. to 2-1/4 in. (31.7mm) (57.1mm)			
					Tool No. with Rolls 1- 1/2 in. (38.1mm) long.	Roll no.	Tool No. with Rolls 2- 1/4 in. (57.1mm) long.	Roll no.		
1-1/8 (28.5)	8 .165 (4.19)	.795 (20.1)	.776 (19.7)	.875 (22.2)	853	R-20	854	R-20-A	M-13	3/8 (9.5)
	9 .148 (3.75)	.829 (21.0)	.810 (20.5)	.909 (23.0)	849	R-18	850	R-18-A		
	10 .134 (3.40)	.857 (21.7)	.837 (21.2)	.936 (23.7)	851	R-19	852	R-19-A		
	11 .120 (3.04)	.885 (22.4)	.865 (21.9)	.964 (24.4)	855	R-21	856	R-21-A		
	12 .109 (2.76)	.907 (23.0)	.883 (22.4)	.982 (24.9)	857		858		M-14	1/2 (12.7)
	13 .095 (2.41)	.935 (23.7)	.916 (23.2)	1.015 (25.7)	859	R-22	860	R-22-A		
	14 .083 (2.10)	.959 (24.7)	.935 (23.7)	1.044 (26.5)	861	R-23	862	R-23-A	M-15	
	15 .072 (1.82)	.981 (24.9)				R-24	864	R-24-A		
	16 .065 (1.65)	.995 (25.2)	.962 (24.4)	1.071 (23.7)	863				M-16	
	17 .058 (1.47)	1.009 (25.6)	.990 (25.1)	1.099 (27.9)	867	R-26	868	R-26-A		
18 .049 (1.24)	1.027 (26.0)									
1-1/4 (31.7)	8 .165 (4.19)	.920 (23.3)	.901 (22.8)	1.010 (25.6)	865	R-25	866	R-25-A	M-15	1/2 (12.7)
	9 .148 (3.75)	.954 (24.2)	.935 (23.7)	1.044 (26.5)	861	R-23	862	R-23-A		
	10 .134 (3.40)	.982 (24.9)	.962 (24.4)	1.071 (27.2)	863	R-24	864	R-24-A		
	11 .120 (3.04)	1.010 (25.6)	.990 (25.1)	1.099 (27.9)	867	R-26	868	R-26-A	M-16	
	12 .109 (2.76)	1.032 (26.2)	1.013 (25.7)	1.122 (28.5)	869	R-27	870	R-27-A		
	13 .095 (2.41)	1.060 (26.9)	1.041 (26.4)	1.150 (29.2)	871	R-28	872	R-28-A	M-17	
	14 .083 (2.10)	1.084 (27.5)	1.060 (26.9)	1.169 (29.6)	873	R-29	874	R-29-A		
	15 .072 (1.82)	1.106 (28.0)								
	16 .065 (1.65)	1.120 (28.4)	1.087 (27.6)	1.196 (30.3)	875	R-30	876	R-30-A		
	17 .058 (1.47)	1.134 (28.8)								
18 .049 (1.24)	1.152 (29.2)	1.115 (28.3)	1.224 (31.0)	879		880				
1-3/8 (34.9)	8 .165 (4.19)	1.045 (26.5)	1.026 (26.0)	1.135 (28.8)	877	R-31	878	R-31-A	M-17	1/2 (12.7)
	9 .148 (3.75)	1.079 (27.4)	1.060 (26.9)	1.169 (29.6)	873	R-29	874	R-29-A		
	10 .134 (3.40)	1.107 (28.1)	1.087 (27.6)	1.196 (30.3)	875		876			
	11 .120 (3.04)	1.135 (28.8)	1.115 (28.3)	1.224 (31.0)	879	R-30	880	R-30-A	M-18	
	12 .109 (2.76)	1.157 (29.3)	1.133 (28.7)	1.242 (31.5)	881	R-32	882	R-32-A		
	13 .095 (2.41)	1.185 (30.1)	1.160 (29.4)	1.275 (32.3)	883	R-33	884	R-33-A	M-19	
	14 .083 (2.10)	1.209 (30.7)	1.179 (29.9)	1.294 (32.8)	885	R-34	886	R-34-A	M-20	
	15 .072 (1.82)	1.231 (31.2)								
1-1/2 (38.1)	16 .065 (1.65)	1.245 (31.6)	1.206 (30.6)	1.321 (33.5)	887	R-35	888	R-35-A	M-19	1/2 (12.7)
	8 .165 (4.19)	1.170 (29.7)	1.145 (29.0)	1.260 (32.0)	889	R-34	890	R-34-A		
	9 .148 (3.75)	1.204 (30.5)	1.145 (29.9)	1.294 (32.8)	885		886			
	10 .134 (3.40)	1.232 (31.2)	1.206 (30.6)	1.321 (33.5)	887	R-35	888	R-35-A	M-20	
	11 .120 (3.04)	1.260 (32.0)	1.235 (31.3)	1.350 (34.2)	891	R-36	892	R-36-A		
	12 .109 (2.76)	1.282 (32.5)	1.257 (31.9)	1.372 (34.8)	893		894		M-21	
	13 .095 (2.41)	1.310 (33.2)	1.285 (32.6)	1.400 (35.5)	895	R-37	896	R-37-A		
	14 .083 (2.10)	1.334 (33.8)								
	15 .072 (1.82)	1.356 (34.4)							M-22	
	16 .065 (1.65)	1.370 (34.8)		1.446 (36.7)	897		898			
	17 .058 (1.47)	1.384 (35.1)								
18 .049 (1.24)	1.402 (35.6)	1.331 (33.8)	1.472 (37.3)	899	R-38	900	R-38-A			
19 .042 (1.06)	1.416 (35.9)									
20 .035 (0.88)	1.430 (36.3)									

H-800 TYPE FIVE ROLLER EXPANDER
RANGE : 1/2" TO 1 1/2" (12.7 TO 38.1 mm) OD



RANGE	FITTED WITH 1 1/2" Long ROLLER (38.1)	FITTED WITH 2 1/4" Long ROLLER (57.1)
MINIMUM A.	12.7 MM (1/2")	31.75 MM (1 1/4")
MAXIMUM B.	38.1 MM (1 1/2")	57.1 MM (2 1/4")

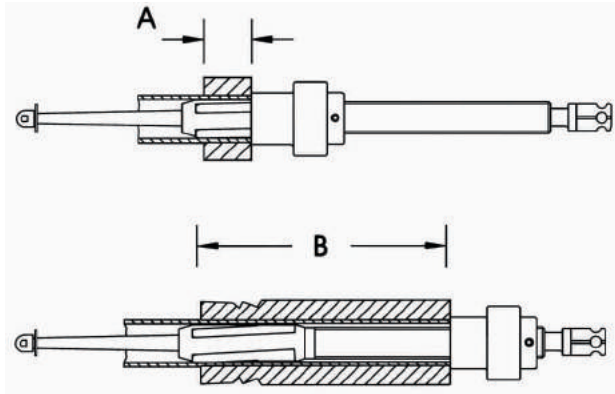
Tube Size		Tube I. D.	Expander Range		Tube Sheet Thickness				Mandrel No.	Mandrel Sq. Drive.						
O. D.	Gage		Min. Dia.	Max. Expn.	1/2" to 1 1/2"	1 1/4" to 2 1/4"										
5/8"	17	.509"	.499"	.564"	815-5	R-4-5	816-5	R-4-A-5	816-5	3/8"						
	18	.527"	.517"	.572"	817-5		-		M - 9							
	19	.541"	.522"	.582"	819-5		820-5		820-5							
	20	.555"	.536"	.596"	819 - spec-5		820 - spec-5		820 - spec-5							
	21	.561"														
	22	.569"														
3/4"	13	.560"	.550"	.615"	821-5	R-5-5	822-5	R-5-A-5	821-5							
	14	.584"	.574"	.639"	823-5	R-6-5	824-5	R-6-A-5	824-5							
	15	.606"	.590"	.661"	-	R-7-5	826-5	R-7-A-5	826-5							
	16	.620"	.605"	.685"	827 5-		828-5		827-5							
	17	.634"	.619"	.699"	829-5		830-5									
	18	.652"														
	19	.666"			R-9-5	832-5	R-9-A-5	M - 13								
	20	.680"														
	21	.686"														
	22	.694"														
7/8"	13	.685"	.670"	.750"	833-5	R-10-5	834-5	R-10-A-5	M-14-3/8	3/8"						
	14	.709"	.685"	.774"	835-5		836-5		M - 13							
	16	.745"	.726"	.815"	839-5		840-5		840-5							
	17	.759"	.763"	.852"	843-5	R-11-5	844-5	R-11-A-5	M-17-3/8							
	18	.777"														
	19	.791"														
	20	.805"							M-18-3/8							
	21	.811"			845-5		846-5									
22	.819"															
1"	12	.782"			.883"	.982"	857-5	R-15-A	858.5		R-15-A-5	M-21-3/8				
	13	.810"	.791"	.880"										847-5		
	14	.834"	.810"	.909"										849-5	850-5	
	15	.856"	.837"	.936"										851-5		852-5
	1"	16					.870"	852-5	R-13-A-5							
		17					.884"					855-5				
		18					.902"	856-5								
		19					.916"									
20		.930"														
21		.936"														
22	.944"															
1 1/8"	12	.907"	.883"	.982"	857-5	R-15-A	858.5	R-15-A-5	M-21-3/8							
	13	.935"									.916"	1.015"	859-5	R-16-5	860-5	R-16-A-5
1 1/4"	14	.959"	.935"	1.044"	861-5	R-17-5	862-5	R-17-A-5	862-5	1/2"						
	15	1.106"	1.087"	1.196"	875-5		R-21-5		876-5		R-21-A-5	876-5				
	16	1.120"	1.115"	1.231"	879-5				880-5			880-5				
	17	1.134"														
	18	1.152"														
	19	1.166"														
	20	1.180"														
	21	1.186"														
22	1.194"															
1 3/8"	12	1.157"	1.133"	1.242"	881-5	R-23-5	882-5	R-23-A-5	882-5							
	14	1.209"	1.179"	1.294"	885-5		886-5		882-5							
1 1/2"	17	1.384"	1.331"	1.472"	899-5	R-29-5	900-5	R-29-A-5	900-5							
	18	1.402"														
	19	1.416"														
	20	1.430"														
	21	1.436"														
	22	1.444"														

SIZE NOT LISTED AVAILABLE ON REQUEST

H-1200 SERIES HEAT EXCHANGER AND CONDENSER TUBE EXPANDERS

RANGE : 1/2" TO 1 1/2" (12.7 TO 38.1 mm) OD

**FOR
CONDENSORS
HEAT EXCHANGERS
CHILLERS
AIR COOLERS**



RANGE	FITTED WITH 1 1/2" (38.1) LG. ROLLER	FITTED WITH 2 1/4" (57.1) LG. ROLLER
MINIMUM A.	12.7 MM (1/2")	38.1 MM (1 1/2")
MAXIMUM B.	31.7 MM (1 1/4")	57.1 MM (2 1/4")

**LONGER REACHES AVAILABLE UPON
REQUEST IN 2" (50.8MM) INCREMENT**

Tube OD in. (mm)	Tube Gauge bwg. in. (mm)	Tube ID in. (mm)	Min. ID Tool Enters in. (mm)	Maximum Expansion of Tool in. (mm)	Tube Sheet Thickness				Mandrel No.	Mandrel Square Drive in (mm)		
					1-1/2 in. to 6 in. (38.1mm) (152.4mm)		2-1/4 in. to 6-3/4 in. (57.1mm) (171.4mm)					
					Tool No. with Rolls 1- 1/2 in. (38.1mm) long.	Roll no.	Tool No. with Rolls 2- 1/4 in. (57.1mm) long.	Roll no.				
1/2 (12.7)	14 .083 (2.10)	.334 (8.4)	.324 (8.2)	.374 (9.5)	1197	797			1197	3/8 (9.5)		
	15 .072 (1.82)	.356 (9.0)	.348 (8.8)	.398 (10.1)	1199	R-1			1199			
	16 .065 (1.65)	.370 (9.4)	.360 (9.1)	.410 (10.4)	1201				M-51			
	17 .058 (1.47)	.384 (9.7)	.374 (9.5)	.424 (10.7)	1203	R-2						
	18 .049 (1.24)	.402 (10.2)	.392 (9.9)	.447 (11.3)	1205	R-3			M-52			
	20 .035 (0.88)	.430 (10.9)	.406 (10.3)	.461 (11.7)	1205 (spec)				M-53			
5/8 (15.8)	12 .109 (2.76)	.407 (10.3)	.392 (9.9)	.447 (11.3)	1205	R-3			M-52	3/8 (9.5)		
	13 .095 (2.41)	.435 (11.0)	.425 (10.8)	.480 (12.1)	1207	R-4			M-53			
	14 .083 (2.10)	.459 (11.6)	.449 (11.4)	.509 (12.9)	1209		1210	R-4-A	M-54			
	15 .072 (1.82)	.481 (12.2)	.471 (11.9)	.536 (13.6)	1211	R-5	1212	R-5 A				
	16 .065 (1.65)	.495 (12.5)	.485 (12.3)	.550 (13.9)	1213	R-6	1214	R-6 A	M-55			
	17 .058 (1.47)	.509 (12.9)	.499 (12.6)	.564 (14.3)	1215		1215		M-56			
	18 .049 (1.24)	.527 (13.3)	.517 (13.1)	.572 (14.5)	1217	R-7	1218	R-7-A	M-57			
	19 .042 (1.06)	.541 (13.7)	.522 (13.2)	.582 (14.7)	1219		1220		M-56			
	20 .035 (0.88)	.555 (14.1)	.536 (13.6)	.596 (15.1)	1219 (spec)		1220 (spec)		M-58			
	21 .032 (0.81)	.561 (14.2)										
	22 .028 (0.71)	.569 (14.4)										

STEP EXPANDING becomes necessary if the Tubesheet thickness exceeds the length of the ROLLER.

Continued on following page.

H-1200 SERIES HEAT EXCHANGER AND CONDENSER TUBE EXPANDERS

RANGE : 1/2" TO 1 1/2" (12.7 TO 38.1 mm) OD



Tube OD in. (mm)	Tube Gauge bwg. in. (mm)	Tube ID in. (mm)	Min. ID Tool Enters in. (mm)	Maximum Expansion of Tool in. (mm)	Tube Sheet Thickness				Mandrel No.	Mandrel Square Drive in (mm)		
					1-1/2 in. to 6 in. (38.1mm) (152.4mm)		2-1/4 in. to 6-3/4 in. (57.1mm) (171.4mm)					
					Tool No. with Rolls 1- 1/2 in. (38.1mm) long.	Roll no.	Tool No. with Rolls 2- 1/4 in. (57.1mm) long.	Roll no.				
3/4 (19.0)	10 .134 (3.40)	.482 (12.2)	.471 (11.9)	.536 (13.6)	1211	R-5	1212	R-5-A	M-55	3/8 (9.5)		
	11 .120 (3.04)	.510 (12.9)	.499 (12.6)	.564 (14.3)	1215	R-6	1216	R-6-A	M-56			
	12 .109 (2.76)	.532 (13.5)	.522 (13.2)	.582 (14.7)	1219	R-7	1220	R-7-A				
	13 .095 (2.41)	.560 (14.2)	.550 (13.9)	.615 (15.6)	1221	R-8	1222	R-8-A	M-58			
	14 .083 (2.10)	.584 (14.8)	.574 (14.5)	.639 (16.2)	1223	R-9	1224	R-9-A				
	15 .072 (1.82)	.606 (15.3)	.596 (15.1)	.661 (16.7)	1225	R-10	1226	R-10-A				
	16 .065 (1.65)	.620 (15.7)	.605 (15.3)	.685 (17.4)	1227		1228					
	17 .058 (1.47)	.634 (16.1)	.619 (15.7)	.699 (17.7)	1229	R-11	1230	R-11-A	M-59			
	18 .049 (1.24)	.652 (16.5)	.642 (16.3)	.722 (18.3)	1231	R-12	1232	R-12-A				
	19 .042 (1.06)	.666 (16.9)										
	20 .035 (0.88)	.680 (17.2)										
	21 .032 (0.81)	.686 (17.4)										
22 .028 (0.71)	.694 (17.6)											
7/8 (22.2)	10 .134 (3.40)	.607 (15.4)	.596 (15.1)	.661 (16.7)	1225	R-10	1226	R-10-A	M-58	3/8 (9.5)		
	11 .120 (3.04)	.635 (16.1)	.619 (15.7)	.699 (17.7)	1229	R-11	1230	R-11-A	M-59			
	12 .109 (2.76)	.657 (16.6)	.642 (16.3)	.722 (18.3)	1231	R-12	1232	R-12-A				
	13 .095 (2.41)	.685 (17.4)	.670 (17.0)	.750 (19.0)	1233	R-13	1234	R-13-A	M-60			
	14 .083 (2.10)	.709 (18.0)	.685 (17.4)	.774 (19.6)	1235	R-14	1236	R-14-A	M-61			
	15 .072 (1.82)	.731 (18.5)	.712 (18.0)	.801 (20.3)	1237	R-15	1238	R-15-A				
	16 .065 (1.65)	.745 (18.9)	.726 (18.4)	.815 (20.7)	1239		1240					
	17 .058 (1.47)	.759 (19.2)	.740 (18.8)	.829 (21.0)	1243	R-16	1244	R-16-A	M-62			
1 (25.4)	8 .165 (4.19)	.670 (17.0)	.655 (16.6)	.735 (18.6)	1241	R-13	1242	R-13-A	M-59	3/8 (9.5)		
	9 .148 (3.75)	.704 (17.8)	.685 (17.4)	.774 (19.6)	1235	R-14	1236	R-14-A	M-61			
	10 .134 (3.40)	.732 (18.5)	.712 (18.0)	.801 (20.3)	1237	R-15	1238	R-15-A				
	11 .120 (3.04)	.760 (19.3)	.740 (18.8)	.829 (21.0)	1243	R-16	1244	R-16-A	M-62			
	12 .109 (2.76)	.782 (19.8)	.763 (19.3)	.852 (21.6)	1245	R-17	1246	R-17-A				
	13 .095 (2.41)	.810 (20.5)	.791 (20.0)	.880 (22.3)	1247	R-18	1248	R-18-A				
	14 .083 (2.10)	.834 (21.1)	.810 (20.5)	.909 (23.0)	1249		1250					
	15 .072 (1.82)	.856 (21.7)	.837 (21.2)	.936 (23.7)	1251	R-19	1252	R-13-A				
	16 .065 (1.65)	.870 (22.1)	1.865 (21.9)	.964 (24.4)	1255	R-21	1256					
	17 .058 (1.47)	.884 (22.4)										
	18 .049 (1.24)	.902 (22.9)										
	19 .042 (1.06)	.916 (23.2)										
20 .035 (0.88)	.930 (23.6)											

Continued on following page.

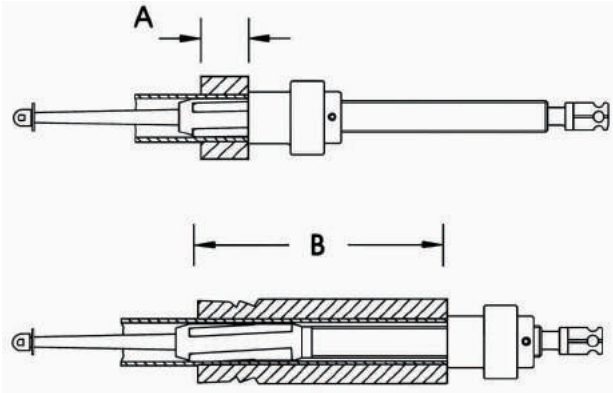
H-1200 SERIES HEAT EXCHANGER AND CONDENSER TUBE EXPANDERS

Tube OD in. (mm)	Tube Gauge bwg. in. (mm)	Tube ID in. (mm)	Min. ID Tool Enters in. (mm)	Maximum Expansion of Tool in. (mm)	Tube Sheet Thickness				Mandrel No.	Mandrel Square Drive in (mm)
					1-1/2 in. to 6 in. (38.1mm) (152.4mm)		2-1/4 in. to 6-3/4 in. (57.1mm) (171.4mm)			
					Tool No. with Rolls 1- 1/2 in. (38.1mm) long.	Roll no.	Tool No. with Rolls 2- 1/4 in. (57.1mm) long.	Roll no.		
1-1/8 (28.5)	8 .165 (4.19)	.795 (20.1)	.776 (19.7)	.875 (22.2)	1253	R-20	1254	R-20-A	M-63	3/8 (9.5)
	9 .148 (3.75)	.829 (21.0)	.810 (20.5)	.909 (23.0)	1249	R-18	1250	R-18-A		
	10 .134 (3.40)	.857 (21.7)	.837 (21.2)	.936 (23.7)	1251	R-19	1252	R-19-A		
	11 .120 (3.04)	.885 (22.4)	.865 (21.9)	.964 (24.4)	1255	R-21	1256	R-21-A	M-64	1/2 (12.7)
	12 .109 (2.76)	.907 (23.0)	.883 (22.4)	.982 (24.9)	1257		1258			
	13 .095 (2.41)	.935 (23.7)	.916 (23.2)	1.015 (25.7)	1259	R-22	1260	R-22-A		
	14 .083 (2.10)	.959 (24.7)	.935 (23.7)	1.044 (26.5)	1261	R-23	1262	R-23-A	M-65	
	15 .072 (1.82)	.981 (24.9)	.962 (24.4)	1.071 (23.7)	1263	R-24		1264		
	16 .065 (1.65)	.995 (25.2)								
17 .058 (1.47)	1.009 (25.6)	.990 (25.1)	1.099 (27.9)	1267	R-26					
18 .049 (1.24)	1.027 (26.0)					1268	R-26-A	M-66		
1-1/4 (31.7)	8 .165 (4.19)	.920 (23.3)	.901 (22.8)	1.010 (25.6)	1265	R-25	1266	R-25-A	M-65	1/2 (12.7)
	9 .148 (3.75)	.954 (24.2)	.935 (23.7)	1.044 (26.5)	1261	R-23	1262	R-23-A		
	10 .134 (3.40)	.982 (24.9)	.962 (24.4)	1.071 (27.2)	1263	R-24	1264	R-24-A		
	11 .120 (3.04)	1.010 (25.6)	.990 (25.1)	1.099 (27.9)	1267	R-26	1268	R-26-A	M-66	
	12 .109 (2.76)	1.032 (26.2)	1.013 (25.7)	1.122 (28.5)	1269	R-27	1270	R-27-A		
	13 .095 (2.41)	1.060 (26.9)	1.041 (26.4)	1.150 (29.2)	1271	R-28	1272	R-28-A	M-67	
	14 .083 (2.10)	1.084 (27.5)	1.060 (26.9)	1.169 (29.6)	1273	R-29	1274	R-29-A		
	15 .072 (1.82)	1.106 (28.0)	1.087 (27.6)	1.196 (30.3)	1275	R-30	1276	R-30-A		
	16 .065 (1.65)	1.120 (28.4)								
	17 .058 (1.47)	1.134 (28.8)	1.115 (28.3)	1.224 (31.0)	1279		1280			
18 .049 (1.24)	1.152 (29.2)							M-68		
1-3/8 (34.9)	8 .165 (4.19)	1.045 (26.5)	1.026 (26.0)	1.135 (28.8)	1277	R-31	1278	R-31-A	M-67	1/2 (12.7)
	9 .148 (3.75)	1.079 (27.4)	1.060 (26.9)	1.169 (29.6)	1273	R-29	1274	R-29-A		
	10 .134 (3.40)	1.107 (28.1)	1.087 (27.6)	1.196 (30.3)	1275	R-30	1276			
	11 .120 (3.04)	1.135 (28.8)	1.115 (28.3)	1.224 (31.0)	1279		R-30	1280	R-30-A	
	12 .109 (2.76)	1.157 (29.3)	1.133 (28.7)	1.242 (31.5)	1281	R-32	1282	R-32-A		
	13 .095 (2.41)	1.185 (30.1)	1.160 (29.4)	1.275 (32.3)	1283	R-33	1284	R-33-A	M-69	
	14 .083 (2.10)	1.209 (30.7)	1.179 (29.9)	1.294 (32.8)	1285	R-34	1285	R-34-A	M-70	
	15 .072 (1.82)	1.231 (31.2)	1.206 (30.6)	1.321 (33.5)	1287	R-35	1288	R-35-A		
	16 .065 (1.65)	1.245 (31.6)								
1-1/2 (38.1)	8 .165 (4.19)	1.170 (29.7)	1.145 (29.0)	1.260 (32.0)	1289	R-34	1290	R-34-A	M-69	1/2 (12.7)
	9 .148 (3.75)	1.204 (30.5)	1.145 (29.9)	1.294 (32.8)	1285		1286		R-34-A	
	10 .134 (3.40)	1.232 (31.2)	1.206 (30.6)	1.321 (33.5)	1287	R-35	1288	R-35-A	M-70	
	11 .120 (3.04)	1.260 (32.0)	1.235 (31.3)	1.350 (34.2)	1291	R-36	1292	R-36-A		
	12 .109 (2.76)	1.282 (32.5)	1.257 (31.9)	1.372 (34.8)	1293	R-37	1294	R-37-A		
	13 .095 (2.41)	1.310 (33.2)	1.285 (32.6)	1.400 (35.5)	1295		1296			
	14 .083 (2.10)	1.334 (33.8)				R-38		R-38-A	M-72	
	15 .072 (1.82)	1.356 (34.4)		1.446 (36.7)	1297		1298			
	16 .065 (1.65)	1.370 (34.8)								
	17 .058 (1.47)	1.384 (35.1)								
	18 .049 (1.24)	1.402 (35.6)	1.331 (33.8)	1.472 (37.3)	1299					
	19 .042 (1.06)	1.416 (35.9)								
20 .035 (0.88)	1.430 (36.3)									

H-1200 TYPE FIVE ROLL EXPANDER

RANGE : 1/2" TO 1 1/2" (12.7 TO 38.1 mm) OD

FOR
OIL COOLERS
AIR COOLERS
PRE HEATERS
RADIATORS



RANGE	FITTED WITH 3/4" (19.0) LG. ROLLER	FITTED WITH 1 1/4" (31.7) LG. ROLLER
MINIMUM A.	38.1 MM (1 1/2")	152.4 MM (6")
MAXIMUM B.	57.1 MM (2 1/4")	171.4 MM (6 3/4")

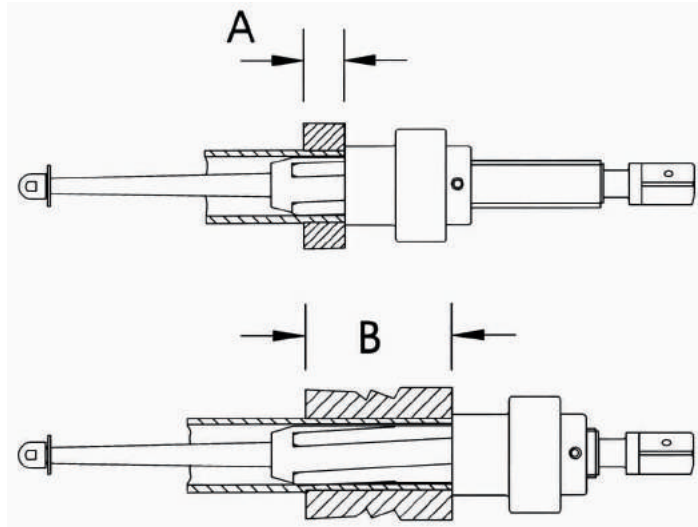
LONGER REACHES AVAILABLE UPON
REQUEST IN 2" (50.8 MM) INCREMENT

Tube Size		Tube I. D.	Expander Range		Tube Sheet Thickness				Mandrel No.	Mandrel Sq. Drive.
O. D.	Gage		Min. Dia.	Max. Expn.	1 1/2" to 6"		2 1/4" to 6 3/4"			
					Tool No.	Roll No.	Tool No.	Roll No.		
3/4"	14	.584"	.574"	.639"	1223-5	R-6-5	1224-5	R-6-A-5	1224-5	
	15	.606"	.590"	.661"	-	R-7-5	1226-5	R-7-A-5	1226-5	
	16	.620"	.605"	.685"	1227 5-		1228-5		1227-5	
	17	.634"	.619"	.699"	1229-5		1230-5		1230-5	
	18	.652"								
	19	.666"				R-9-5		R-9-5		
	20	.680"	.642"	.722"	1231-5		1232-5		M - 63	
	21	.686"								
	22	.694"								
1"	14	.834"	.810"	.909"	1249-5	R-12-5	1250-5	R-12-A-5	1250-5	3/8"
	15	.856"	.837"	.936"	1251-5	R-14-5	1252-5	R-14-A-5	1251-5	
	16	.870"				R-13-5		R-13-A-5		
	17	.884"								
	18	.902"	.865"	.964"	1255-5		1256-5		1256-5	
	19	.916"								
	20	.930"								
	21	.936"				R-15-A		R-15-A-5		
22	.944"	.883"	.982"	1257-5	1258-5		M-71-3/8			
1 1/8"	12	.907"								
	15	.981"	.962"	1.071"	1263-5	R-18-5	-	-	1263-5	1/2"
	16	.995"								
1 1/2"	17	1.384"				R-29-5		R-29-A-5		
	18	1.402"								
	19	1.416"	1.331"	1.472"	1299-5		1300-5		1299-5	
	20	1.430"								

H-8012 SERIES HEAT EXCHANGER AND CONDENSER TUBE EXPANDERS

RANGE : 1 3/4" TO 3" (44.4 to 76.2) OD

**FOR
OIL COOLERS
AIR COOLERS
PRE HEATERS
RADIATORS**



RANGE	FITTED WITH 2 1/4" (57.1) LG. ROLLER
MINIMUM A.	12.7 MM (1/4")
MAXIMUM B.	101.6 MM (4")

Tube OD in. (mm)	Tube Gauge Bwg. in. (mm)	Tube ID in. (mm)	Min. ID Tool Enters in. (mm)	Maximum Expansion Of Tool in. (mm)	Tube Sheet Thickness 1/2 in. to 4 in. (12.7 mm) (101.6 mm)		Mandrel no.	Mandrel Square Drive in. (mm)
					Tool No. with Rolls 2- ¼ in. (57.1 mm) long.	Roll no.		
1 3/4 (44.4)	10 .134 (3.4)	1.482 (37.6)	1.420 (36.0)	1.607 (40.8)	8012-1 ¾ -10	R-37-A	M - 90	3/4 (19.0)
	11 .120 (3.0)	1.510 (38.3)	1.454 (36.9)	1.635 (41.5)	8012-1 ¾ -11	R-42		
	12 .109 (2.7)	1.532 (38.9)	1.482 (37.6)	1.657 (42.0)	8012-1 ¾ -12	R-44		
	13 .095 (2.4)	1.560 (39.6)	1.510 (38.3)	1.685 (42.7)	8012-1 ¾ -13	R-46		
	14 .083 (2.1)	1.584 (40.2)	1.532 (38.9)	1.709 (43.4)	8012-1 ¾ -14	R-48		
2 (50.8)	10 .134 (3.4)	1.732 (43.9)	1.640 (41.6)	1.857 (47.1)	8012-2-10	R-50	M - 91	3/4 (19.0)
	11 .120 (3.0)	1.760 (44.7)	1.670 (42.4)	1.885 (47.8)	8012-2-11	R-52		
	12 .109 (2.7)	1.782 (45.2)	1.704 (43.2)	1.907 (48.4)	8012-2-12	R-54		
	13 .095 (2.4)	1.810 (45.9)	1.732 (43.9)	1.956 (49.6)	8012-2-13-18	R-56		
	14 .083 (2.1)	1.834 (46.5)						
	15 .072 (1.8)	1.856 (47.1)						
	16 .065 (1.6)	1.870 (47.4)						
	17 .058 (1.5)	1.884 (47.9)						
	18 .049 (1.2)	1.902 (48.3)						

H-8012 SERIES HEAT EXCHANGER AND CONDENSER TUBE EXPANDERS



Tube OD in. (mm)	Tube Gauge Bwg. in. (mm)	Tube ID in. (mm)	Min. ID Tool Enters in. (mm)	Maximum Expansion Of Tool in. (mm)	Tube Sheet Thickness 1/2 in. to 4 in. (12.7 mm) (101.6 mm)		Mandrel no.	Mandrel Square Drive in. (mm)
					Tool No. with Rolls 2- ¼ in. (57.1 mm) long.	Roll no.		
2 1/4	10 .134 (3.4)	1.982 (50.3)	1.890 (48.0)	2.107 (53.5)	8012-2 ½ -10	R-56	M - 92	3/4 (19.0)
	11 .120 (3.0)	2.010 (51.0)	1.920 (48.7)	2.135 (54.2)	8012-2 ¼ -11	R-58		
	12 .109 (2.7)	2.032 (51.6)	1.954 (49.6)	2.157 (54.7)	8012-2 ¼ -12	R-60		
	13 .095 (2.4)	2.060 (52.3)	1.982 (50.3)	2.185 (55.4)	8012-2 ¼ -13-16	R-62		
	14 .083 (2.1)	2.084 (52.9)						
	15 .072 (1.8)	2.106 (53.4)						
	16 .065 (1.6)	2.120 (53.8)						
2 1/2 (63.5)	10 .134 (3.4)	2.232 (56.6)	2.140 (54.3)	2.407 (61.1)	8012-2 ½ -10-12	R-64	M - 93	3/4 (19.0)
	11 .120 (3.0)	2.260 (57.4)						
	12 .109 (2.7)	2.282 (57.9)						
	13 .095 (2.4)	2.310 (58.6)	2.232 (56.6)	2.450 (62.2)	8012-2 ½ -13-18			
	14 .083 (2.1)	2.334 (59.2)						
	15 .072 (1.8)	2.356 (59.8)						
	16 .065 (1.6)	2.370 (60.1)						
	17 .058 (1.5)	2.384 (60.6)						
	18 .049 (1.2)	2.402 (61.0)						
2 3/4 (69.8)	10 .134 (3.4)	2.232 (56.6)	2.390 (60.7)	2.702 (68.6)	8012-2 ¾ -10-16	R-66	M - 96	1 (25.4)
	11 .120 (3.0)	2.260 (57.4)						
	12 .109 (2.7)	2.282 (57.9)						
	13 .095 (2.4)	2.310 (58.6)						
	14 .083 (2.1)	2.334 (59.2)						
	15 .072 (1.8)	2.356 (59.8)						
	16 .065 (1.6)	2.370 (60.1)						
	17 .058 (1.5)	2.384 (60.6)						
3 (76.2)	8 .165 (4.1)	2.670 (67.8)	2.560 (65.0)	2.829 (71.8)	8012-3-8-9	R-67	M - 97	1 (25.4)
	9 .148 (3.7)	2.704 (68.6)	2.640 (67.0)	2.952 (74.9)	8012-3-10-18		M - 96	
	10 .134 (3.4)	2.732 (69.3)						
	11 .120 (3.0)	2.760 (70.1)						
	12 .109 (2.7)	2.782 (70.6)						
	13 .095 (2.4)	2.810 (71.3)						
	14 .083 (2.1)	2.834 (71.9)						
	15 .072 (1.8)	2.856 (72.5)						
	16 .065 (1.6)	2.870 (72.8)						
	17 .058 (1.5)	2.884 (73.3)						
	18 .049 (1.2)	2.092 (73.7)						

HEATEX FULLY AUTOMATIC DIGITAL TORQUE CONTROLLER FOR CONSISTENTLY PERFECT ROLLING

Heatex fully automatic solid state electronic torque controlled tube expanding controller is electrical and is based on there fact that under equal conditions the same amount of torque transmitted to an ex pander gives the same amount of expansion in tubes of identical sizes, gauge and material.

The control unit consists of an electrical circuit, which accurately measures the amount of current to the drive unit, provides precise regulation of the drive unit.

THE DRIVE UNIT is a universal electronic drill type machine.

This machine is reversible. The control unit accurately measures the current value, thus limiting the torque at the mandrel of the tube expander.



MODEL : HQC - 100 / 98, RANGE : 1/4" TO 2 1/2" (6.35 TO 63.5 MM) OD TUBES.

DRIVE UNITS



HD-1



HD-2



HD-3



HD-4

Control Unit Model	Phase	Supply Volts	Model of Drive Unit	Full Load RPM	Suitable for Tubes sizes		Wt. of Drive KG.
					FEROUS	N-FEROUS	
HQC-1000	SINGLE	230	HD-1	350	6-12	8-16	2.8
HQC-1000	SINGLE	230	HD-2	380	10-16	13-22	3.7
HQC-1000	SINGLE	230	HD-3	350	16-28	19-35	7.8
HQC-1000	SINGLE	230	HD-4	170	25-45	35-65	11.3

HYDRAULIC TUBE EXPANSION SYSTEMS

Features:

- Easy to use in boiler drums as it is compact.
- Compared to electric and pneumatic tube expansion system, during the use it is noise free.
- It can be expanded large diameter thick wall tubes in thick tube sheets easily as this system develops very high torque.
- Because of hydraulic system it need low maintenance and has long life .
- Boiler tube expansion can get completed in a few days
- Compared to electric drive it can be used for long working hours as the drive is unaffected by heat.
- Microprocessor controls on the hydraulic pump and automat the expansion system.
- The system on four wheels for on site maneuverability.
- Dual drive power back is available to connect two drives to a single power pack to cut down tube expansion time cycle by a further 50%

Expansion of tubes is regulated by adjusting pressure setting on pump. Once required amount of wall thinning is achieved the driver trips automatically.

HYDRAULIC PUMP

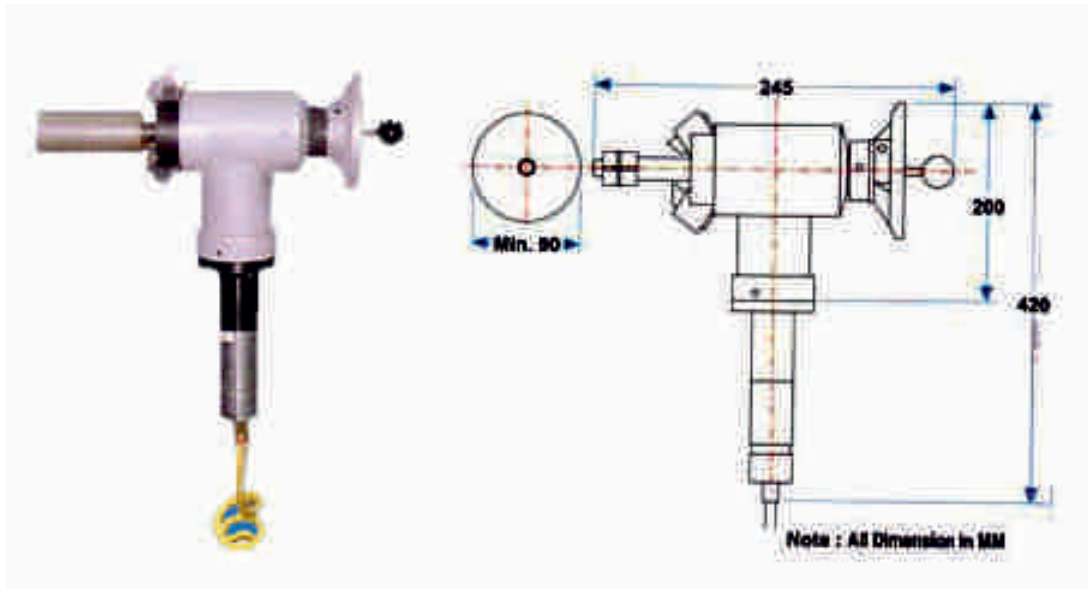
		HPE - 50	HPE - 100 TWIN HEAD
	Maximum Working Pressure (bar)	100 Bar	100 Bar
	Overall Dimensions (mm)	680 x 71 x 1180	1175 x 550 x 1200
	Electric Motor	3 Ph 5 HP	3 Ph 10 HP
	Voltage	440 Volt	440 Volt
	Standard Hose Size (length)	0.75 inch x 15 meter	0.75 inch x 15 meter

HYDRAULIC DRIVE

Model No.	HD-5HR	HD-7HR	
RPM	240/210	48/38	
Torque	605 Kgm	48 Kgm	
Weight	10 Kg.	16 Kg.	
Tube Expansion Range	3/4 "OD to 1-1/2 "	1-1/2 " to 4 "OD	

Drive supplied with START, STOP, REVERSE BUTTONS, QUICK RELEASE COUPLINGS, SOCKETS and REACTION BAR. Powerpack includes two hoses each of length 15 meters, if required longer hoses can be supplied.

TUBE END FACING MACHINE



Features:

- Power and range combined in light and portable design.
- Drive: Electric, Hydraulic or Pneumatic
- Range of Tube end facing, external or internal bevelling and weld seam machining tool bits.
- Quick interchangeability of Pilot to suit range of inside diameters.

FACING ATTACHMENT

Locking Tube Range I.D. (mm)	28-82
Weight (kg)	6.8
Model	FM-3500

DRIVE

Motor	Pneumatic	Electric	Hydraulic
Speed (rpm)	135 @ 500 lpm	350	180
Weight (kg)	1.8	7.7 KG	5.6
Model	MD - P	WDH	FMD-H

Q U A L I T Y & S E R V I C E

HEATEX has more than two decades of experience in the development of Tools incorporating Modern Technique to help the manufacturer gain greater production volume and better product quality.

Every Product Developed by HEATEX has proved its efficiency in extensive factory tests and actual production line applications. Experienced and Qualified Service Division of HEATEX is always ready to offer prompt and reliable service to users and representatives in any part of the World.



HEATEX TOOLS PRIVATE LIMITED

13, Poonam Estate, Navghar, Vasai Road (E) - 401 210. (Dist.) Thane, India.

Tel.: +91 (0250) 2390670 / 2392563 | FAX: +91 (0250) 2390771

E-mail: heatex@heatextools.com | Website: www.heatextools.com