



TUBE EXPANDERS

100% BOND BETWEEN TUBE AND TUBE SHEET



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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)

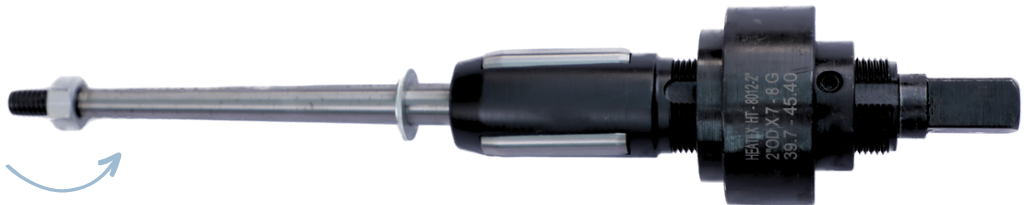
Tube Expander (800 Series)



Tube Expander (1200 Series)

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

SERIES 8012
(1 3/4" TO 4" OD TUBE)



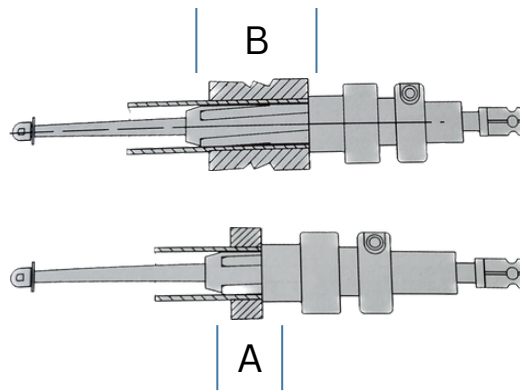
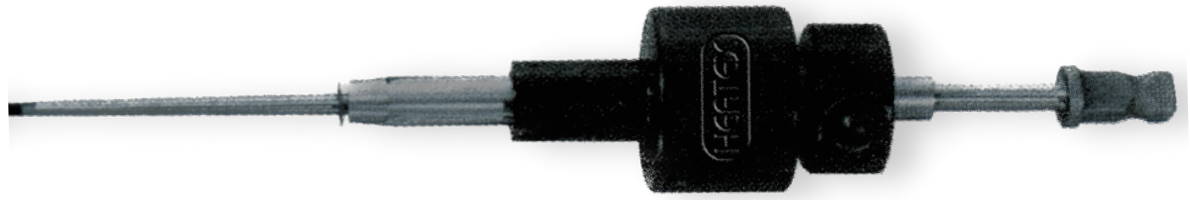
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H-900 SERIES HEAT EXCHANGER AND CONDENSER TUBE EXPANDERS

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")

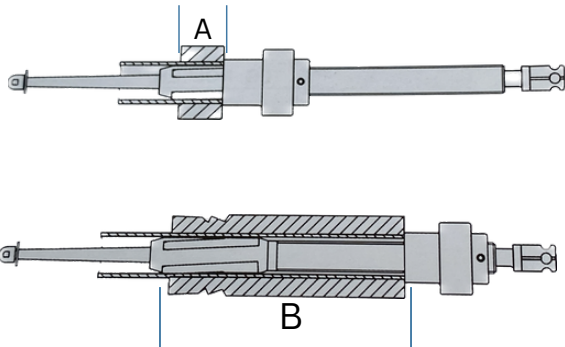
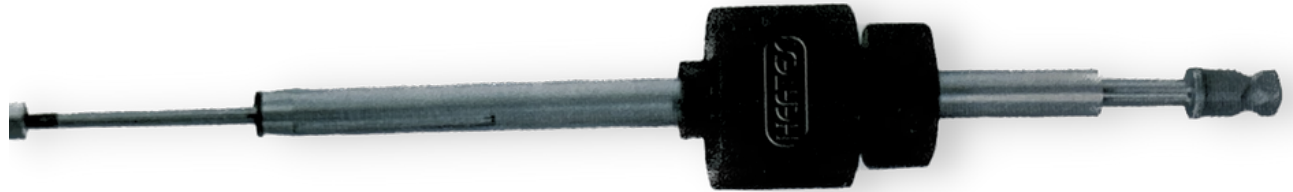
Tube OD in. (mm)	Tube Gauge bwg. in. (mm)		Tube ID in. (mm)		Min ID Tool Enters in. (mm)		Maximum Expansion of tool in. (mm)		Tube Sheet Thickness				Mandrel No.	Mandrel Square Drive in. (mm)
									1/4 in. to 3/4 in.		3/4 in. to 1 1/4 in.			
									Tool No. with Rolls 3/4 in. (19.0 mm) long.	Roll 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						M-40		
	20	.035 (0.88)	.180 (4.5)	.175 (4.4)	.205 (5.2)	923	923					M-41		
	21	.032 (0.81)	.186 (4.7)	.180 (4.5)	.212 (5.3)	924	924					M-41		
	22	.028 (0.71)	.194 (4.9)	.190 (4.8)	.220 (5.5)	925	925							
	23	.025 (0.63)	.200 (5.0)	.195 (4.9)	.226 (5.7)	926	923							
	24	.022 (0.55)	.206 (5.2)	.201 (5.1)	.232 (5.8)	927	924							
	28	.014 (0.35)	.222 (5.6)									928		
29	.013 (0.33)	.224 (5.7)	.222 (5.6)	.238 (6.0)	928	903								
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								M-36
								916L	916L	M-36L				
	17	.058 (1.47)	.259 (6.5)	.255 (6.4)	.289 (7.3)	918		920				M-38		
	18	.049 (1.24)	.277 (7.0)	.272 (6.9)	.307 (7.8)	901	903	902	904			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	908			M-32		
	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					
	23	.025 (0.63)	.325 (8.2)	.320 (8.1)	.357 (9.0)	911	911	912						
	30	.012 (0.30)	.331 (8.4)							912				M-34

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. (19.0 mm) Long.	Roll No.	Tool No. with Rolls 1-1/4 in. (31.70mm) 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

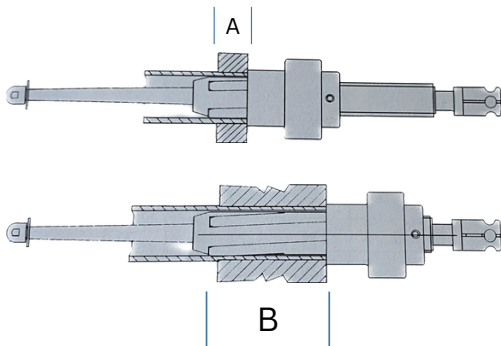
RANGE: 1/2" To 1 1/2" (12.7 TO 38.1 MM)

FOR

OIL COOLERS
AIR COOLERS
PRE HEATERS
RADIATORS



Tube Expander (800 Series)



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")	31.7 MM (1 1/4")
MAXIMUM B.	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 2-1/2 in. (31.7mm) (57.1mm)			
									Tool No. with Rolls 1 - 1/2 in. (38.1 mm) 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 (11.7)	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	M-4				
	15	.072 (1.82)	.481 (12.2)	.471 (11.9)	.536 (13.6)	811	R-5	812	R-5-A					
	16	.065 (1.65)	.495 (12.5)	.485 (12.3)	.550 (13.9)	813	R-6	814	R-6 A	M-5				
	17	.058 (1.47)	.509 (12.9)	.499 (12.6)	.564 (14.3)	815		816		M-6				
	18	.049 (1.24)	.527 (13.3)	.517 (13.1)	.572 (14.5)	817		818		M-7				
	19	.042 (1.24)	.541 (13.7)	.522 (13.2)	.582 (14.7)	819		820		M-6				
	20	.035 (0.88)	.555 (14.1)					820 (SPEC)	R-7-A					
	21	.032 (0.81)	.561 (14.2)	.536 (13.6)	.596 (15.1)	819 (Spec)				M-8				
22	.028 (0.71)	.569 (14.4)												

Continued on the 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. (38.1 mm) long.	Roll No.	Tool No. with Rolls 2- 1/4 in. (57.1 mm) 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	M-6		
	12	.109 (2.76)	.532 (13.5)	.522 (13.2)	.582 (14.7)	819	R-7	820	R-7-A			
	13	.095 (2.41)	.560 (14.2)	.550 (13.9)	.615 (15.6)	821	R-8	822	R-8-A	M-8		
	14	.083 (2.10)	.584 (14.8)	.574 (14.5)	.639 (16.2)	823	R-9	824	R-9-A			
	15	.072 (1.82)	.606 (15.3)	.596 (15.1)	.661 (16.7)	825	R-10	826	R-10-A			
	16	.065 (1.65)	.620 (15.7)	.605 (15.3)	.685 (17.4)	827		828				
	17	.058 (1.47)	.634 (16.1)	.619 (15.7)	.699 (17.7)	829	R-11	830	R-11-A	M-9		
	18	.049 (1.24)	.652 (16.5)					831	R-12			832
	19	.042 (1.06)	.666 (16.9)	.642 (16.3)	.722 (18.3)	831	R-12	832	R-12-A			
	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)	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	M-9		
	12	.109 (2.76)	.657 (16.6)	.642 (16.3)	.722 (18.3)	831	R-12	832	R-12-A			
	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	R-15-A			
	16	.065 (1.65)	.745 (18.9)	.726 (18.4)	.815 (20.7)	839		840				
	17	.058 (1.47)	.759 (19.2)	.740 (18.8)	.829 (21.0)	843	R-16	844	R-16-A	M-12		
18	.049 (1.24)	.777 (19.7)										
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	M-11		
	10	.134 (3.40)	.732 (18.5)	.712 (18.0)	.801 (20.3)	837	R-15	838	R-15-A			
	11	.120 (3.04)	.760 (19.3)	.740 (18.8)	.829 (21.0)	843	R-16	844	R-16-A	M-12		
	12	.109 (2.76)	.782 (19.8)	.763 (19.3)	.852 (21.6)	845	R-17	846	R-17-A			
	13	.095 (2.41)	.810 (20.5)	.791 (20.0)	.880 (22.3)	847	R-18	848	R-18-A			
	14	.083 (2.10)	.834 (21.1)	.810 (20.5)	.909 (23.0)	849		850				
	15	.072 (1.82)	.856 (21.7)	.837 (21.2)	.936 (23.7)	851	R-19	852	R-19-A	M-13		
	16	.065 (1.65)	.870 (22.1)									
	17	.058 (1.47)	.884 (22.4)	.865 (21.9)	.964 (24.4)	855	R-21	856	R-21-A			
18	.049 (1.24)	.902 (22.9)										
19	.042 (1.06)	.916 (23.2)										
20	.035 (0.88)	.930 (23.6)										

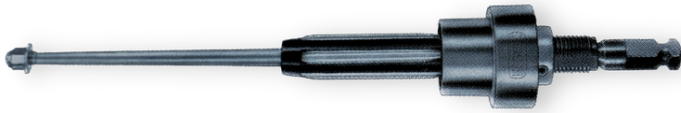
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H-800 SERIES HEAT EXCHANGER AND CONDENSER TUBE EXPANDERS

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. (38.1 mm) long.	Roll No.	Tool No. with Rolls 2- 1/4 in. (57.1 mm) 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	M-14		
	12 .109 (2.76)	.907 (23.0)	.883 (22.4)	.982 (24.9)	857		858				
	13 .095 (2.41)	.935 (23.7)	.916 (23.2)	1.015 (25.7)	859	R-22	860	R-22-A	M-15		
	14 .083 (2.10)	.959 (24.7)	.935 (23.7)	1.044 (26.5)	861	R-23	862	R-23-A			
	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	R-26	868	R-26-A	M-16		1/2 (12.7)
17 .058 (1.47)	1.009 (25.6)	.990 (25.1)	1.099 (27.9)	867							
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 (24.2)	.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			
	14 .083 (2.10)	1.084 (27.5)	1.060 (26.9)	1.169 (29.6)	873	R-29	874	R-29-A	M-17		
	15 .072 (1.82)	1.106 (28.0)				R-30	876	R-30-A			
	16 .065 (1.65)	1.120 (28.4)	1.087 (27.6)	1.196 (30.3)	875						
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		M-18			
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	R-30	876				
	11 .120 (3.04)	1.135 (28.8)	1.115 (28.3)	1.224 (31.0)	879		880	R-30-A			
	12 .109 (2.76)	1.157 (29.3)	1.133 (28.7)	1.242 (31.5)	881	R-32	882	R-32-A	M-18		
	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)									
16 .065 (1.65)	1.245 (31.6)	1.206 (30.6)	1.321 (33.5)	887	R-35	888	R-35-A				
1-1/2 (38.1)	8 .165 (4.19)	1.170 (19.7)	1.145 (29.0)	1.260 (32.0)	889	R-34	890		M-19	1/2 (12.7)	
	9 .148 (3.75)	1.204 (30.5)	1.145 (29.9)	1.294 (32.8)	885		886	R-34-A			
	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	M-21		
	12 .109 (2.76)	1.282 (32.5)	1.257 (31.9)	1.372 (34.8)	893	R-37	894	R-37-A			
	13 .095 (2.41)	1.310 (33.2)	1.285 (32.6)	1.400 (35.5)	895		896				
	14 .083 (2.10)	1.334 (33.8)									
	15 .072 (1.82)	1.356 (34.4)									
	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	M-22		
	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. MAXIMUM B.	12.7 MM (1/2") 38.1 MM (1 1/2")	31.75 MM (1 1/4") 57.1 MM (2 1/4")

TUBE SIZE			EXPANDER RANGE		TUBE SHEET THICKNESS				MANDREL NO.	MANDREL SQ DRIVE.						
O. D.	GAGE	TUBE I. D.	MIN. DIA.	MAX. EXPN.	1/2" TO 1 1/2"		1 1/4" TO 2 1/4"									
					TOOL NO.	ROLL NO.	TOOL NO.	ROLL NO.								
5/8"	17	.509"	.499"	.564"	815-5	R-4-5	816-5	R-4-A-5	816-5							
	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		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"	-		826-5	R-7-A-5	826-5							
	16	.620"	.605"	.685"	827-5	R-7-5	828-5		827-5							
	17	.634"	.619"	.699"	829-5		830-5			830-5						
	18	.652"														
	19	.666"	.642"	.722"	831-5	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							
	14	.709"	.685"	.774"	835-5		836-5		M-13							
	16	.745"	.726"	.815"	839-5		840-5		840-5							
	17	.759"	.740"	.829"	843-5				844-5	R-11-A-5	M-17-3/8					
	18	.777"														
	19	.791"	.763"	.852"	845-5	R-11-5	846-5	R-11-A-5	M-18-3/8							
	20	.805"														
	21	.811"														
	22	.819"														
	1"	12	.782"	.865"	.964"	855-5	R-13-5	856-5	R-13-A-5	856-5						
13		.810"	.791"								.880"	847-5	R-13-5	848-5	R-13-A-5	
14		.834"	.810"								.909"	849-5	R-12-5	850-5	R-12-A-5	850-5
15		.856"	.837"								.936"	851-5		852-5		852-5
16		.870"	.883"	.982"	857-5	R-15-A	858.5	R-15-A-5	M-21-3/8							
17		.884"														
18		.902"														
19		.916"														
20		.930"														
21		.936"														
22	.944"															
11/8"	12	.907"														
1 1/4"	13	.935"	.916"	1.015"	859-5	R-16-5	860-5	R-16-A-5	860-5							
	14	.959"	.935"	1.044"	861-5	R-17-5	862-5	R-17-A-5	862-5							
	15	1.106"	1.087"	1.196"	875-5		876-5		876-5							
	16	1.120"	1.115"	1.231"	879-5	R-21-5	880-5	R-21-A-5	880-5							
	17	1.134"														
	18	1.152"														
	19	1.166"														
	20	1.180"														
21	1.186"															
22	1.194"															
13/8"	12	1.157"	1.133"	1.242"	881-5		882-5									
14	1.209"	1.179"	1.294"	885-5	R-23-5	886-5	R-23-A-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"														

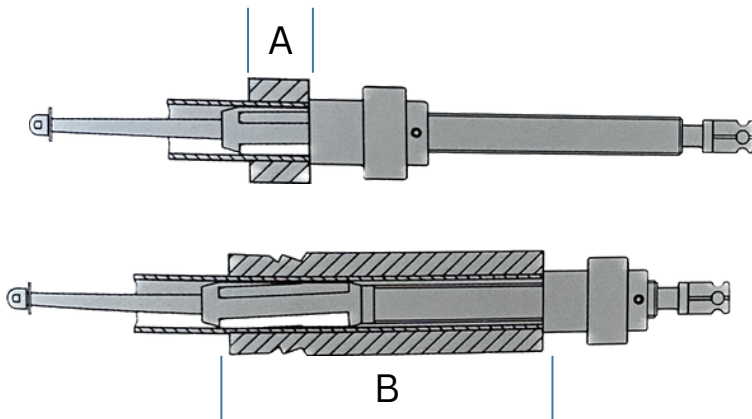
H-1200 SERIES HEAT EXCHANGER AND CONDENSER TUBE EXPANDERS

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



FOR

CONDENSORS
HEAT EXCHANGERS
CHILLERS
AIR COOLERS



TUBE EXPANDERS FITTED WITH ROLLER LENGTH		FOR TUBE SHEET ADJUSTABLE RANGE	
		MINI A	MAX B
1.1/2" (38.1 mm)	STD REACH	38.1mm	135.0mm
	"A" REACH	38.1mm	185.0mm
	"B" REACH	38.1mm	235.0mm
	"C" REACH	38.1mm	285.0mm
	"D" REACH	38.1mm	335.0mm
	"E" REACH	38.1mm	385.0mm
2.1/4" (57.1 mm)	STD REACH	57.1mm	155.0mm
	"A" REACH	57.1mm	205.0mm
	"B" REACH	57.1mm	255.0mm
	"C" REACH	57.1mm	305.0mm
	"D" REACH	57.1mm	355.0mm
	"E" REACH	57.1mm	405.0mm
"F" REACH	57.1mm	455.0mm	

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 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. (38.1 mm) long.	Roll No.	Tool No. with Rolls 2- 1/4 in. (57.1 mm) 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	
	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		1218		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)	R-7	1220 (spec)	R-7-A		
	21 .032 (0.81)	.561 (14.2)							M-58	
22 .028 (0.71)	.569 (14.4)									

STEP EXPANDING becomes necessary if the tube sheet thickness exceeds the length of the roller.

Continued on the 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 Expander (1200 Series)

Tube OD in. (mm)	Tube Gauge 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. (38.1 mm) long.	Roll No.	Tool No. with Rolls 2- 1/4 in. (57.1 mm) 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					
	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		1226		M-59				
	16	.065 (1.65)	.620 (15.7)	.605 (15.3)	.685 (17.4)	1227	R-10	1228	R-10-A					
	17	.058 (1.47)	.634 (16.1)	.619 (15.7)	.699 (17.7)	1229	R-11	1230						
	18	.049 (1.24)	.652 (16.5)						R-11-A					
	19	.042 (1.06)	.666 (16.9)											
	20	.035 (0.88)	.680 (17.2)	.642 (16.3)	.722 (18.3)	1231	R-12	1232	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)	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					
	12	.109 (2.76)	.657 (16.6)	.642 (16.3)	.722 (18.3)	1231	R-12	1232	R-12-A	M-59				
	13	.095 (2.41)	.685 (17.4)	.670 (17.0)	.750 (19.0)	1233	R-13	1234	R-13-A					
	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		1238						
	16	.065 (1.65)	.745 (18.9)	.726 (18.4)	.815 (20.7)	1239	R-15	1240	R-15-A					
	17	.058 (1.47)	.759 (19.2)	.740 (18.8)	.829 (21.0)	1243	R-16	1244	R-16-A	M-62				
18	.049 (1.24)	.777 (19.7)												
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					
	10	.134 (3.40)	.732 (18.5)	.712 (18.0)	.801 (20.3)	1237	R-15	1238	R-15-A	M-61				
	11	.120 (3.04)	.732 (18.5)	.740 (18.8)	.829 (21.0)	1243	R-16	1244	R-16-A					
	12	.109 (2.76)	.782 (19.3)	.763 (19.3)	.852 (21.6)	1245	R-17	1246	R-17-A	M-62				
	13	.095 (2.41)	.810 (20.5)	.791 (20.0)	.880 (22.3)	1247		1248						
	14	.083 (2.10)	.834 (21.1)	.810 (20.5)	.909 (23.0)	1249	R-18	1250	R-18-A					
	15	.072 (1.82)	.856 (21.7)	.837 (21.2)	.936 (23.7)	1251	R-19	1252		M-63				
	16	.065 (1.65)	.870 (22.1)						R-13-A					
	17	.058 (1.47)	.884 (22.4)											
	18	.049 (1.24)	.902 (22.9)	1.865 (21.9)	.964 (24.4)	1255	R-21	1256	R-13-A					
	19	.042 (1.06)	.916 (23.2)											
20	.035 (0.88)	.930 (23.6)												

Continued on the 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. (38.1 mm) long.	Roll No.	Tool No. with Rolls 2- 1/4 in. (57.1 mm) 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		1256		M-64	1/2 (12.7)			
	12	.109	(2.76)	.907	(23.0)	.883	(22.4)	.982	(24.9)	1257	R-21	1258	R-21-A					
	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	1/2 (12.7)			
	15	.072	(1.82)	.981	(24.9)	.962	(24.4)	1.071	(23.7)	1263	R-24							
	16	.065	(1.65)	.995	(25.2)							1264	R-24-A			M-66		
17	.058	(1.47)	1.009	(25.6)	.990	(25.1)	1.099	(27.9)	1267	R-26	1268	R-26-A	M-65					
18	.049	(1.24)	1.027	(26.0)										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	1/2 (12.7)			
	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					
	14	.083	(2.10)	1.084	(27.5)	1.060	(26.9)	1.169	(29.6)	1273	R-29	1274	R-29-A	M-67	1/2 (12.7)			
	15	.072	(1.82)	1.106	(28.0)	1.087	(27.6)	1.196	(30.3)	1275	R-30	1276						
	16	.065	(1.65)	1.120	(28.4)							1280	R-30-A			M-68		
17	.058	(1.47)	1.134	(28.8)	1.115	(28.3)	1.224	(31.0)	1279					M-68				
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		1276						
	11	.120	(3.04)	1.135	(28.8)	1.115	(28.3)	1.224	(31.0)	1279	R-30	1280	R-30-A	M-68	1/2 (12.7)			
	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-69	1/2 (12.7)			
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)												M-69		
1-1/2 (38.1)	8	.165	(4.19)	1.170	(29.7)	1.145	(29.0)	1.260	(32.0)	1289		1290		M-70	1/2 (12.7)			
	9	.148	(3.75)	1.204	(30.5)	1.145	(29.9)	1.294	(32.8)	1285	R-34	1286	R-34-A			M-69		
	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	1/2 (12.7)			
	11	.120	(2.76)	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		1294						
	13	.095	(2.41)	1.310	(33.2)	1.285	(32.6)	1.400	(35.5)	1295	R-37	1296	R-37-A	M-71	1/2 (12.7)			
	14	.083	(2.10)	1.334	(33.8)													
	15	.072	(1.82)	1.356	(34.4)											M-71		
	16	.065	(1.65)	1.370	(34.8)			1.446	(36.7)	1297		1298		M-72	1/2 (12.7)			
	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	R-38	1300	R-38-A					
19	.042	(1.06)	1.416	(35.9)										M-72				
20	.035	(0.88)	1.430	(36.3)										M-72				

H-1200 TYPE FIVE ROLL EXPANDER

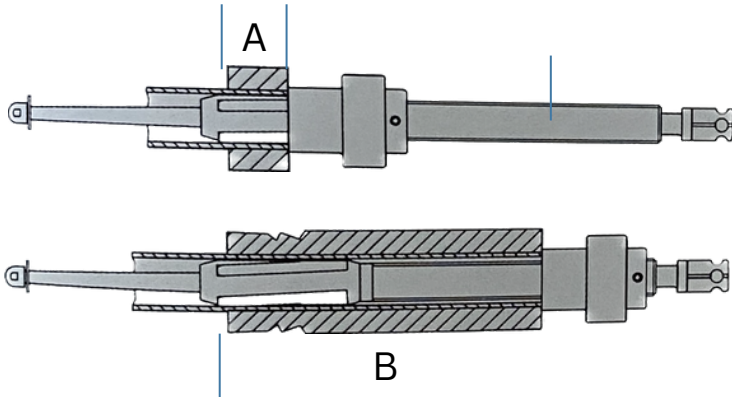
RANGE: 1/2" TO 1 1/2" (12.7 TO 38.1 MM) OD

FOR

OIL COOLERS
AIR COOLERS
PRE HEATERS
RADIATORS



Tube Expander (1200 Series)



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")
MIXIMUM B.	57.1 MM (2 1/4")	171.4 MM (6 3/4")

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

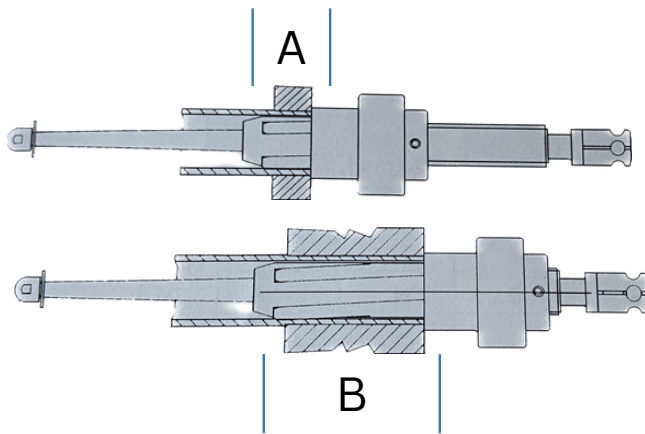
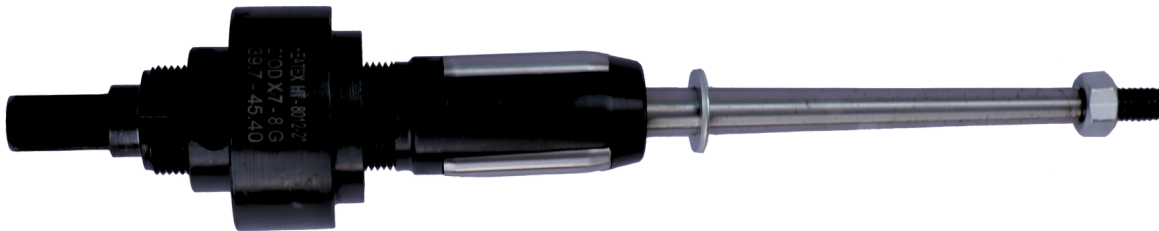
TUBE SIZE		TUBE I. D.	EXPANDER RANGE		TUBE SHEET THICKNESS				MANDREL NO.	MANDRE L SQ DRIVE.
O. D.	GAGE		MIN. DIA.	MAX. EXPN.	1/2" TO 1/2"		1 1/4" TO 2 1/4"			
					TOOL NO.	ROLL NO.	TOOL NO.	ROLL NO.		
3/4"	14	.584"	.574"	.639"	1223-5	R-6-5	1224-5	R-6-A-5	1224-5	3/8"
	15	.606"	.590"	.661"	-		1226-5		1226-5	
	16	.620"	.605"	.685"	1227-5	R-7-5	1228-5	R-7-A-5	1227-5	
	17	.634"	.619"	.699"						
	18	.652"								
	19	.666"								
	20	.680"								
	21	.686"	.642"	.722"	1231-5	R-9-5	1232-5	R-9-5	M-63	
22	.694"									
1"	14	.834"	.810"	.909"	1249-5	R-12-5	1250-5	R-12-A-5	1250-5	3/8"
	15	.856"		.936"						
	16	.870"	.837"		1251-5	R-14-5	1252-5	R-14-A-5	1251-5	
	17	.884"								
	18	.902"								
	19	.916"	.865"	.964"						
20	.930"			1255-5	R-13-5	1256-5	R-13-A-5	1256-5		
21	.936"									
22	.944"	.883"	.982"	1257-5	R-13-5	1256-5	R-15-A-5	M-71-3/8		
1 1/8"	12	.907"								1/2"
	15	.981"	.962"	1.071"	1263-5	R-18-5			1263-5	
	16	.995"								
1 1/2"	17	1.384"								
	18	1.402"								
	19	1.416"	1.331"	1.472"	1299-5	R-29-5	1300-5	R-29-A-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 MM) OD

FOR

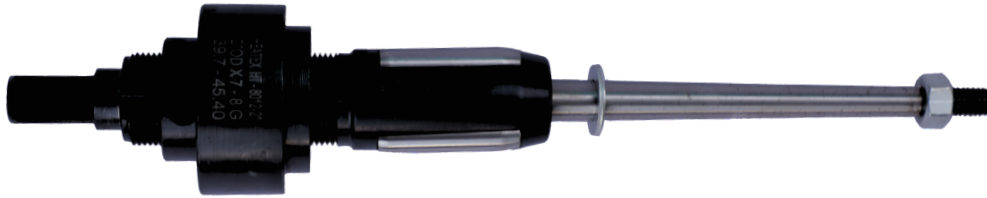
AIR HEATERS
BOILERS
REFINERY TUBES



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		Mandrel No.	Mandrel Square Drive in. (mm)
					1/2 in. to 4 in. (12.7mm) (101.6mm)			
					Tool No. with Rolls 2- 1/4 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 3/4 -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 3/4 -11	R-42		
	12 .109 (2.7)	1.532 (38.9)	1.482 (37.6)	1.657 (42.0)	8012-1 3/4 -12	R-44		
	13 .095 (2.4)	1.560 (39.6)	1.510 (38.3)	1.685 (42.7)	8012-1 3/4 -13	R-46		
	14 .083 (2.1)	1.584 (40.2)	1.532 (38.9)	1.709 (43.4)	8012-1 3/4 -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 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 4 in. (12.7mm) (101.6mm)			
					Tool No. with Rolls 2-1/4 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 1/2-10	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 1/4-11	R-58	
	12	.109 (2.7)	2.032 (51.6)	1.954 (49.6)	2.157 (54.7)	8012-2 1/4-12	R-60	
	13	.095 (2.4)	2.060 (52.3)	1.982 (50.3)	2.185 (55.4)	8012-2 1/4 -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)	1.982 (50.3)	2.185 (55.4)	8012-2 1/2-10-12	R-64	M-93 3/4 (19.0) M-94
	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 1/2 -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 3/4 -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)					
	18	.049 (1.2)	2.402 (61.0)					
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		
	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)					



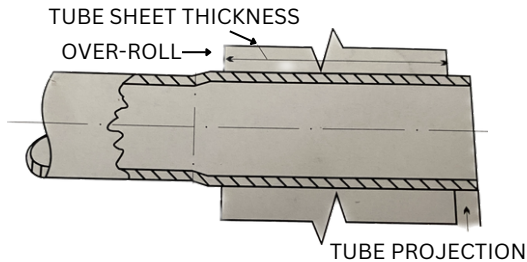
BOILER TUBE EXPANDER



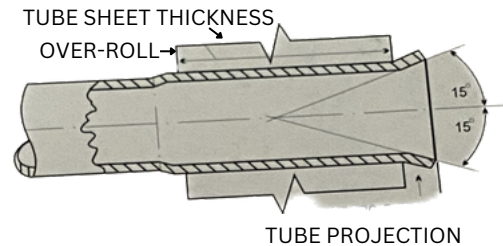
BOILER TUBE EXPANDER

SELF FEEDING PARALLEL ROLLING TUBE EXPANDERS WITH FIXED ROLLER LENGTH.

Using Parallel type Expander



Using FLARE (Bellmouth type Expander)



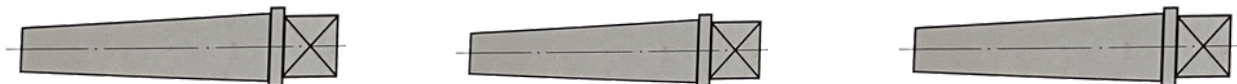
HEADER MANDREL



DRUM MANDREL



SHORT SERIES MANDRELS

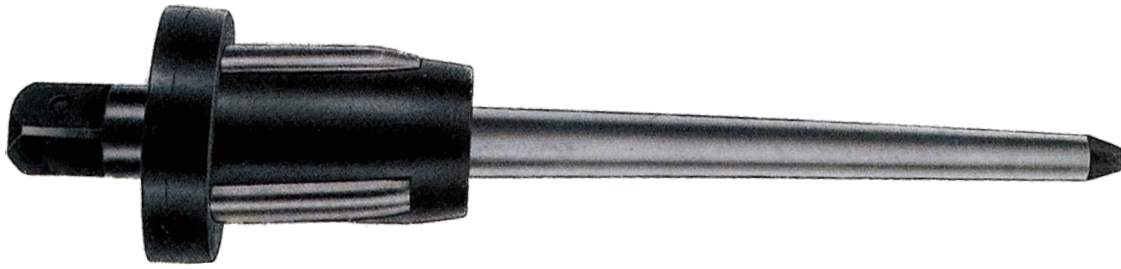


TUBE EXPANDERS available for following standard Drum THICKNESS/TUBE PLATE THICKNESS:

13.0 mm - A	19.0 mm - B	26.0 mm - C	32.0 mm - D	38.0 mm - E	45.0 mm - F	50.0 mm - G
57.0 mm - H	64.0 mm - I	70.0 mm - J	75.0 mm - K	83.0 mm - L	95.0 MM - M	

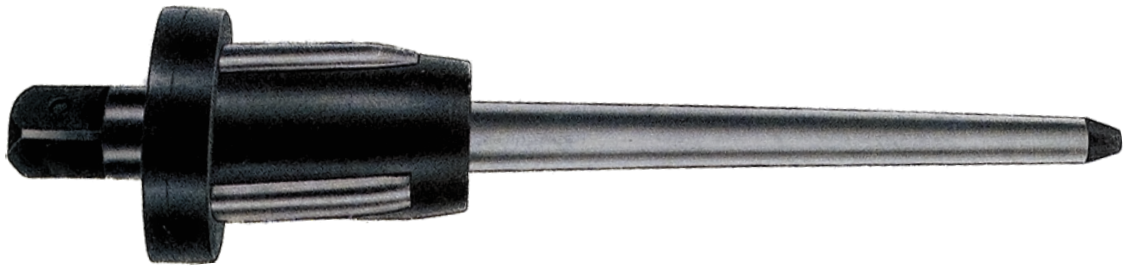
LAST ALPHABET INDICATES FOR TUBE PLATE THICKNESS FOR EXPANDER AT 428-C SUITABLE FOR 2" OD x 9G AND PLATE THICKNESS 26.00 MM.

MANDRELS SUPPLIED WITH SQUARE DRIVE FOR THE RATCHET / MACHINE OPERATIONS



HT - 400 SERIES 3 ROLLER PARALLEL EXPANDERS FOR BOILERS, ECONOMISERS, SUPERHEATER, AIRHEATERS, JUICE HEATERS, PAN & EVAPORATORS

TUBE OD.	SWG.	TUBE OD.	SWG	MINIMUM DIA.	MAXIMUM EXPN.	EXPANDER NO.	DRUM MANDREL NO.	ROLLER NO.	MANDREL SQUARE	RATCHET HANDLE NO.
1"	12	--	--	19.4	21.6	HT - 400	M - 81	R - 31	3/8"	RH - 95
1"	13	--	--	20.1	22.4	HT - 401	M - 81	R - 32	3/8"	RH - 95
1"	14	1.1/8"	9	20.6	23.1	HT - 402	M - 82	R - 32	3/8"	RH - 95
1"	15-16	1.1/8"	10	21.3	23.8	HT - 403	M - 82	R - 33	3/8"	RH - 95
1"	17-18	1.1/8"	11	22.0	24.5	HT - 404	M - 82	R - 34	3/8"	RH - 95
1"	19-20	1.1/8"	12	22.4	25.0	HT - 405	M - 83	R - 34	3/8"	RH - 95
1.1/4"	8	1.1/8"	13	23.3	25.9	HT - 406	M - 83	R - 35	3/8"	RH - 95
1.1/4"	9	1.1/8"	14	23.8	26.5	HT - 407	M - 84	R - 36	1/2"	RH - 127
1.1/4"	10	1.1/8"	15-16	24.4	27.2	HT - 408	M - 84	R - 37	1/2"	RH - 127
1.1/4"	11	--	--	25.2	28.0	HT - 409	M - 85	R - 38	1/2"	RH - 127
1.1/4"	12	--	--	25.8	28.5	HT - 410	M - 85	R - 40	1/2"	RH - 127
1.1/4"	13	1.3/8"	8	26.1	28.8	HT - 411	M - 85	R - 41	1/2"	RH - 127
1.1/4"	14	--	--	26.4	29.2	HT - 412	M - 86	R - 41	1/2"	RH - 127
1.1/4"	15	1.3/8"	9	26.9	29.7	HT - 413	M - 86	R - 42	1/2"	RH - 127
1.1/4"	16	1.3/8"	10	27.6	30.4	HT - 414	M - 86	R - 43	1/2"	RH - 127
1.1/2"	7	1.3/8"	11	28.3	31.2	HT - 415	M - 87	R - 43	1/2"	RH - 127
1.1/2"	8	1.3/8"	12	28.8	31.7	HT - 416	M - 87	R - 44	1/2"	RH - 127
1.1/2"	9	1.3/8"	13-14	29.5	33.4	HT - 417	M - 88	R - 41	1/2"	RH - 127
1.1/2"	10	1.3/8"	15-16	30.0	34.1	HT - 418	M - 88	R - 42	1/2"	RH - 127
1.1/2"	11-12	--	--	30.6	34.8	HT - 419	M - 88	R - 43	1/2"	RH - 127
1.1/2"	13	1.3/4"	5	31.4	35.6	HT - 420	M - 88	R - 45	1/2"	RH - 127
1.1/2"	14-15	1.3/4"	6	32.6	36.8	HT - 421	M - 89	R - 44	1/2"	RH - 127
		1.3/4"	7	33.4	38.1	HT - 422	M - 89	R - 46	1/2"	RH - 127
		1.3/4"	8	34.2	38.7	HT - 423	M - 89	R - 47	1/2"	RH - 127
2"	3	1.3/4"	9-10	35.0	40.6	HT - 424	M - 90	R - 45	3/4"	RH - 190
2"	4	1.3/4"	11-12	36.6	42.2	HT - 425	M - 90	R - 47	3/4"	RH - 190
2"	5-6	1.3/4"	13-14	38.2	43.8	HT - 426	M - 90	R - 48	3/4"	RH - 190
2"	7-8	1.3/4"	15-16	39.8	45.4	HT - 427	M - 90	R - 49	3/4"	RH - 190
2"	9-10	2.1/4"	3	41.4	47.0	HT - 428	M - 90	R - 50	3/4"	RH - 190
2"	11-13	2.1/4"	4-5	42.9	49.5	HT - 429	M - 91	R - 50	3/4"	RH - 190
2"	14-15	2.1/4"	6-7	44.5	51.1	HT - 430	M - 91	R - 51	3/4"	RH - 190
2"	16-18	2.1/4"	8-9	46.1	52.7	HT - 431	M - 91	R - 52	3/4"	RH - 190



TUBE OD.	SWG.	TUBE OD.	SWG	MINIMUM DIA.	MAXIMUM EXPN.	EXPANDER NO.	DRUM MANDREL NO.	ROLLER NO.	MANDREL SQUARE	RATCHET HANDLE NO.
2.1/2"	3	2.1/4"	10 - 11	47.7	54.3	HT - 432	M - 91	R - 53	3/4"	RH - 190
2.1/2"	4 - 5	2.1/4"	12 - 13	49.3	55.9	HT - 433	M - 91	R - 54	3/4"	RH - 190
2.1/2"	6 - 7	2.1/4"	14 - 16	50.8	57.8	HT - 434	M - 92	R - 53	3/4"	RH - 190
2.1/2"	8 - 9	2.3/4"	3	52.4	59.4	HT - 435	M - 92	R - 54	3/4"	RH - 190
2.1/2"	10 - 11	2.3/4"	4	54.0	61.0	HT - 436	M - 92	R - 55	3/4"	RH - 190
2.1/2"	12 - 14	2.3/4"	5 - 6	55.6	64.0	HT - 437	M - 92	R - 57	3/4"	RH - 190
2.1/2"	15 - 16	2.3/4"	7 - 8	57.2	65.6	HT - 438	M - 93	R - 56	1"	RH - 254
3"	3	2.3/4"	9 - 10	58.6	67.0	HT - 439	M - 93	R - 57	1"	RH - 254
3"	4	2.3/4"	11 - 13	60.4	68.8	HT - 440	M - 93	R - 58	1"	RH - 254
3"	5 - 6	2.3/4"	14 - 16	62.2	70.4	HT - 441	M - 93	R - 59	1"	RH - 254
3"	7 - 8	2.3/4"	17 - 18	63.6	72.0	HT - 442	M - 93	R - 60	1"	RH - 254
3"	9 - 10	3.1/4"	3	65.0	73.4	HT - 443	M - 93	R - 61	1"	RH - 254
3"	11 - 13	3.1/4"	4	66.6	75.0	HT - 444	M - 93	R - 62	1"	RH - 254
3"	14 - 16	3.1/4"	5 - 6	68.3	76.9	HT - 445	M - 94	R - 61	1"	RH - 254
3.1/2"	2	3.1/4"	7 - 8	69.9	78.5	HT - 446	M - 94	R - 62	1"	RH - 254
3.1/2"	3	3.1/4"	9 - 10	71.5	80.1	HT - 447	M - 94	R - 63	1"	RH - 254
3.1/2"	4	3.1/4"	11 - 13	73.1	81.7	HT - 448	M - 94	R - 64	1"	RH - 254
3.1/2"	5 - 6	3.1/4"	14 - 16	74.6	84.2	HT - 449	M - 95	R - 64	1"	RH - 254
3.1/2"	7 - 8	3.3/4"	2	76.2	85.5	HT - 450	M - 95	R - 65	1"	RH - 254
3.1/2"	9 - 11	3.3/4"	3	77.8	87.4	HT - 451	M - 95	R - 66	1"	RH - 254
3.1/2"	12 - 16	3.3/4"	4	79.4	89.0	HT - 452	M - 95	R - 67	1"	RH - 254
-	-	3.3/4"	5 - 6	81.0	90.6	HT - 453	M - 95	R - 68	1"	RH - 254
4"	2	3.3/4"	7 - 8	82.6	92.2	HT - 454	M - 95	R - 69	1"	RH - 254
4"	3	3.3/4"	9 - 10	84.2	93.8	HT - 455	M - 95	R - 70	1"	RH - 254
4"	4	3.3/4"	11 - 13	85.8	96.2	HT - 456	M - 96	R - 69	1"	RH - 254
4"	5 - 6	3.3/4"	14 - 16	87.4	97.8	HT - 457	M - 96	R - 70	1"	RH - 254
4"	7 - 8	4.1/4"	2	89.0	99.4	HT - 458	M - 96	R - 71	1"	RH - 254
4"	9 - 11	4.1/4"	3	90.4	100.8	HT - 459	M - 96	R - 72	1"	RH - 254
4"	12 - 16	4.1/4"	4	92.0	102.4	HT - 460	M - 96	R - 73	1"	RH - 254



DAIRY TUBE EXPANDERS



HEATEX DAIRY TUBE EXPANDERS

APPLICATIONS:

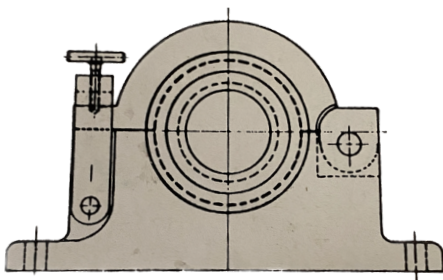
HEATEX DAIRY TUBE EXPANDERS ARE USED FOR EXPANSION OF STAINLESS STEEL TUBES OVER WHICH SLIP ON FITTINGS ARE PLACED.

THESE EXPANDERS ARE DESIGNED WITH 4/5 ROLLERS AND ARE PROVIDED WITH THRUST BEARING TO PREVENT DISTORTION OF TUBE ENDS AND FOR SMOOTH EXPANSION OF THIN GAUGE STAINLESS STEEL TUBES AND BENDS.

EXPANDERS AVAILABLE FOR 14, 16 AND 18 G THK TUBES.

TUBE OD inch	TUBE OD mm	MODEL NO.	NO. OF ROLLS	MANDREL Sq. inch
3/4"	19.05	TD-0	3	3/8"
1"	25.40	TD-1	4	1/2"
1.1/2"	38.10	TD-2	5	1/2"
2"	50.80	TD-3	5	1/2"
2.1/2"	63.50	TD-4	5	3/4"
3"	76.20	TD-5	5	3/4"

CLAMP BLOCK SUB ASSEMBLY



THE SLIP ON FITTINGS ARE FITTED ON S.S. PIPES, BENDS AND TEES BY HOLDING THESE IN SPLIT DIE OR CLAMP BLOCK WITH COUNTER BORE FOR FITTINGS. THIS CLAMP BLOCK ASSEMBLY IS USED TO RESIST THE PRESSURE CREATED BY THE EXPANDING ACTION OF THE TOOL. THESE CLAMP BLOCKS ARE AVAILABLE IN I.D.E., S.M.S. AND D.I.N. STANDARD.

HEATEX FULLY AUTOMATIC SOLID STATE ELECTRONIC TORQUE CONTROLLED TUBE EXPANDING MACHINES

HEATEX FULLY AUTOMATIC SOLID STATE ELECTRONIC TORQUE CONTROLLED TUBE EXPANDING CONTROLLER IS ELECTRICAL AND IS BASED ON THE FACT THAT UNDER EQUAL CONDITIONS THE SAME AMOUNT OF TORQUE TRANSMITTED TO AN EXPANDER 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 ELECTRIC DRILL TYPE MACHINE.

THE MACHINE IS REVERSIBLE.

THE CONTROL UNIT ACCURATELY MEASURES THE CURRENT VALUE, THUS LIMITING THE TORQUE AT THE MANDREL OF THE TUBE EXPANDER.

SELECTION PROCEDURE

CONTROL UNIT MODEL	PHASE	SUPPLY VOLTS	MODEL OF DRIVE UNIT	Full Load RPM	Suitable for Tube sizes FERROUS NON FERROUS	Wt. Of Drive KG.
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

FOR TUBES BEYOND 45 mm SIZE, HIGHER CAPACITY, THREE PHASE, TUBE-EXPANDING MACHINES ARE ALSO AVAILABLE.



GROOVING TOOLS

for PRECISION GROOVING of

Heat Exchanger tube sheets, boiler drums and headers

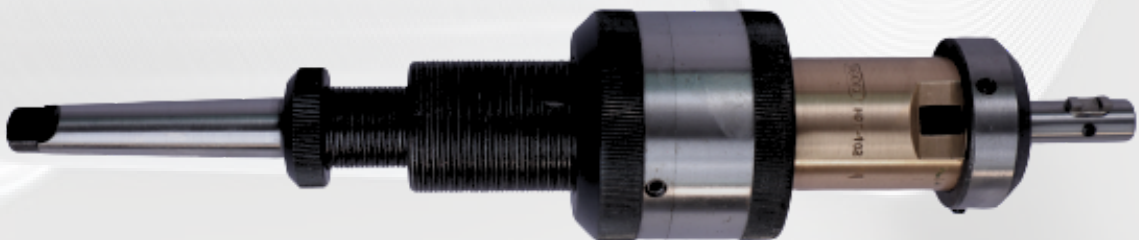
FEATURES:

- *Accurate and Quick.*
- *Automatic 2 in 1 Design.*
- *Covers wide range of bores by simply changing cutters & pilot nose.*
- *Can be used on CNC Machines, Drilling Machines, Turret Lathes, Boring Machines and almost all unconventional Machines Via Morse Taper.*
- *Easy to adjust Length & Depth of cut.*
- *Advantage of using of cutting tool after Re-sharpening.*
- *Recessing Tools can be used in either static or/and dynamic conditions similar to Twist Drill.*

OPERATIONS

HEATEX- Grooving tools having a two-in-one standard design are used to accurately and quickly perform time saving operations which are cost effective on all unconventional machines incorporating an Eccentric Principle.

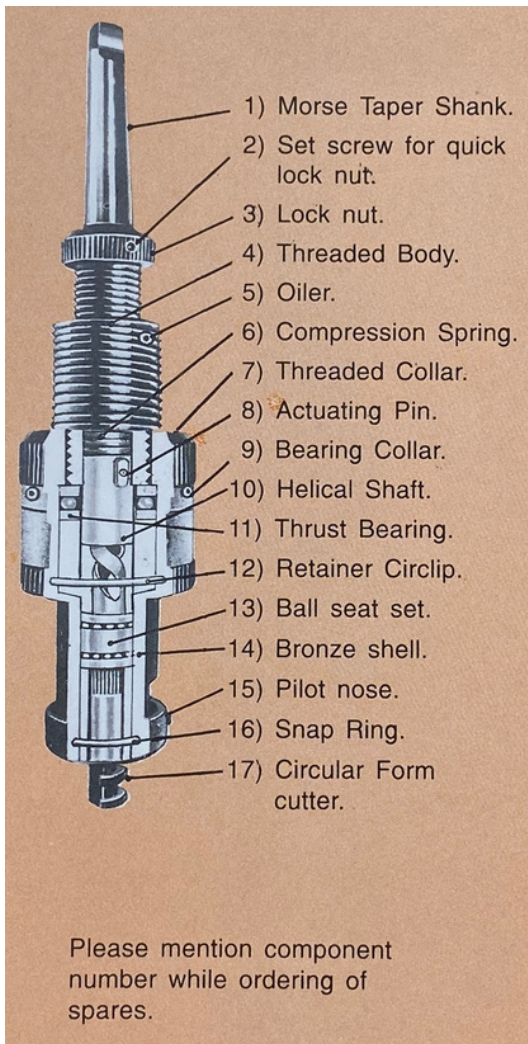
The depth of cut is accomplished by a lead ratio is approx. 4:1.



Tool Specifications:

Tool No.	TUBE SHEET Hole Diameter	Maximum Groove Depth.	Adjustable Range (Face to Groove)	Shank Size (Morse Taper)
HGT - 102	9.5 - 32.0	2.00	3.0 - 9.0	2
HGT - 303	16.0 - 42.0	3.50	3.0 - 14.0	3
HGT - 404	19.0 - 48.0	4.50	3.0 - 14.0	4
HGT - 605	38.0 - 130.0	7.50	3.0 - 16.0	5

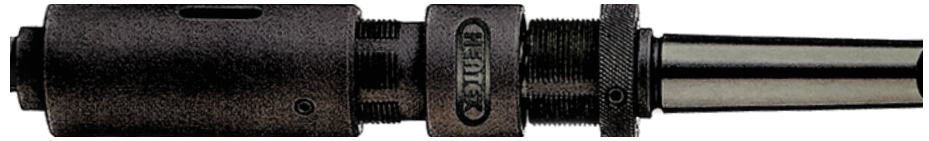
Sectional View:





TUBE PROCESSING TOOLS

GROOVING
TOOL



TUBE GUIDE



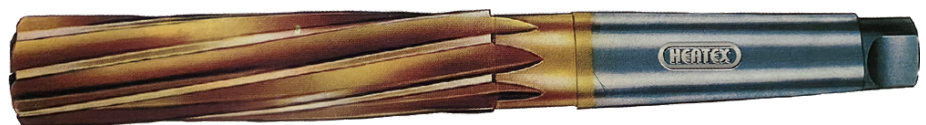
TUBE END
FACER



FLARING TOOL



REAMER



TUBE SHEET - HOLE REAMERS

HEATEX HIGH SPEED STEEL CRYO PROCESSED LONG FLUTED MACHINE REAMER TO IS:5445 HAVING VIRTUALLY PARALLEL CUTTING EDGES WITH BEVEL LEAD INTEGRAL WITH TAPER SHANK, IDEAL FOR THE SMOOTH AND ACCURATE REAMING OF CLEARANCE IN HOLES TUBE SHEETS.

Condenser and Heat Exchanger Tube Sheet Reamers to meet 'TEMA' specification.

TUBE O.D.		REAMER SIZE TO MEET TEMA SPECIFICATION		FLUTE LENGTH	MORSE TAPER
INCH	MM.	INCH	MM.		
3/8"	9.53	0.380	9.65	66	1
1/2"	12.70	0.505	12.83	76	1
5/8"	15.87	0.631	16.03	87	2
-	16.00	0.636	16.16	87	2
3/4"	19.05	0.758	19.25	100	2
-	20.00	0.795	20.20	100	2
7/8"	22.22	0.883	22.42	107	2
-	25.00	0.994	25.25	115	3
1"	25.40	1.010	25.65	115	3
1 1/8"	28.57	1.136	28.85	124	3
1 1/4"	31.75	1.262	32.05	133	4



Cryo processed reamers increase on Life 200 - 300% more

GROOVING TOOLS (SERATING TOOLS)

For machining Grooves in tube sheet holes of Heat Exchanger / Condenser Tube Sheets.

- Compact design permits the tool to be easily used on portable drives.
- Interchangeable standard cutting tools to suit all models.
- Only light pressure is required to cut precision Grooves.
- Simple fast and accurate adjustments for locating the grooves and controlling the depth of cut are incorporated.
- Designed to use with CNC Machines.

SPECIFICATIONS:

MODEL	TO SUIT TUBE OD.		REAMEED HOLE-DIA	DEPTH ADJUSTABLE	MORSE TAPER
	INCH	MM			
ST-1580	5/8"	-	16.04	3 TO 35 MM	MT - 2
ST-1600	-	16.00	16.20	3 TO 35 MM	MT - 2
ST-1900	3/4"	19.00	19.25	3 TO 35 MM	MT - 3
ST-2000	-	20.00	20.20	3 TO 35 MM	MT - 3
ST-2220	7/8"	22.20	22.40	3 TO 35 MM	MT - 3
ST-2500	-	25.00	22.25	3 TO 35 MM	MT - 3
ST-2540	1"	25.40	25.65	3 TO 35 MM	MT - 3



Cutters: Inter changeable Cutting Tools available standard groove spacing. (3 - 6 - 3.)



Cutters supplied as per customers specifications.

Tube Guide (Pilot)



THE PLUG CONSISTS OF AN ALUMINIUM TAPERED NOSE WITH A REPLACEABLE NYLON BRUSH ATTACHED. FOR EASY INSERTING OF TUBES REQUIRED TO PASS THROUGH TUBE SHEETS & BAFFLE PLATES. SIZE AVAILABLE 1/2" OF TO 2" OD TUBES.

TUBE END FACERS

THIS TOOL IS SUITABLE FOR FACING TUBE ENDS FLUSH TO THE TUBE SHEET BY THE ADDITION OF A SHROUD WILL TRIM TUBE ENDS WHICH PROJECTS FROM TUBE SHEET. BY CHANGING THE PILOT BUSH THE TOOL CAN BE ADAPTED TO SUIT ANY PARTICULAR GAUGE FOR A SPECIFIC SIZE.



FACERS SUPPLIED WITH HEXAGONAL SHANK FACERS ALSO AVAILABLE WITH ROUND SHANK AND MORSE TAPER / SQUARE SHANK.

TUBE O. D.		GAUGE SWG	MODEL
INCH	MM		
1/2	12.70	15 - 20	TEF - 127
5/8	15.80	14 - 20	TEF - 158
3/4	19.05	10 - 22	TEF - 190
7/8	22.20	10 - 22	TEF - 222
1	25.4	10 - 20	TEF - 254
1 1/4	31.75	10 - 18	TEF - 317
1 1/2	38.1	10 - 18	TEF - 381

FLARING TOOLS

FOR FLARING OF TUBE PROJECTION AFTER EXPANSION. SIZE AVAILABLE 1/2" OD TO 1 1/2" OD.





TUBE MAINTENANCE TOOLS

CUTTER



PULLER



**WALL
REDUCER**



**COLLAPSING
TOOL**



**KNOCKOUT
TOOL**





MACHINE OPERATED INTERNAL TUBE CUTTER (PUSH TYPE)

HEATEX Machine operated tuber cutter cuts away fast and accurately through the walls of tubes in Condensers and Heat Exchangers as a step in their removal from the tube sheets. forward pressure in motor causes cutter to extend nearly serving of tube. Closely coupled cutter bit can be changed quickly and easily. Driven by standard electric or pneumatic motor.

SPECIFICATIONS

TUBE OD	14 & 15	16 & 17	18 & 19	20 & 22
3/4"	-	-	TCP - 190 - 18	TCP - 190 - 20
7/8"	-	TCP - 222 - 16	TCP - 222 - 18	TCP - 222 - 20
1"	TCP - 254 - 14	TCP - 254 - 16	TCP - 254 - 18	TCP - 254 - 20
1 1/4"	TCP - 317 - 14	TCP - 317 - 16	TCP - 317 - 18	TCP - 317 - 20
1 1/2"	TCP - 381 - 14	TCP - 381 - 16	TCP - 381 - 18	TCP - 381 - 20
1 3/4"	TCP - 445 - 14	TCP - 445 - 16	TCP - 445 - 18	TCP - 445 - 20
2"	TCP - 508 - 14	TCP - 508 - 16	TCP - 508 - 18	TCP - 508 - 20

Standard Reach 4 1/2" Specify of bits for ferrous / nonferrous

MANUAL ONE REVOLUTION INTERNAL TUBE CUTTER

For cutting nonferrous Tubes in Heat Exchangers, Condensers, Boilers.
Adjustable 2" to 8". Tools Designed for Manual operation employing Ratchet or Hand wrench of proper size to fit the square drive of the cutter

SIZE & SPECIFICATIONS

TUBE OD	14 & 15	16 & 17	18 & 19	20 & 22
5/8"	--	OTC-158-16	OTC-158-18	OTC-158-20
3/4"	OTC-190-14	OTC-190-16	OTC-190-18	OTC-190-20
7/8"	OTC-222-14	OTC-222-16	OTC-222-18	OTC-222-20
1"	OTC-254-14	OTC-254-16	OTC-254-18	OTC-254-20
1 1/4"	OTC-317-14	OTC-317-16	OTC-317-18	OTC-317-20
1 1/2"	OTC-381-14	OTC-381-16	OTC-381-18	OTC-381-20
1 3/4"	OTC-445-14	OTC-445-16	OTC-445-18	OTC-445-20
2"	OTC-508-14	OTC-508-16	OTC-508-18	OTC-508-20

MANUAL TUBE PULLER

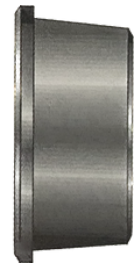
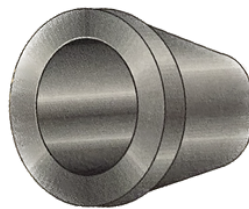
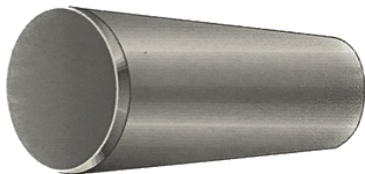
SIZE & SPECIFICATIONS

ECONOMICAL MANUAL TUBE PULLER PROVIDES EASY METHOD FOR FASTER TUBE REMOVAL.



TUBE O.D.	GAUGE	MODEL
1/2"	16	HTPM-1270-16
1/2"	18	HTPM-1270-18
1/2"	20	HTPM-1270-20
5/8"	16	HTPM-1580-16
5/8"	18	HTPM-1580-18
5/8"	20	HTPM-1580-20
3/4"	14	HTPM-1900-14
3/4"	16	HTPM-1900-16
3/4"	18	HTPM-1900-18
3/4"	20	HTPM-1900-20
7/8"	14	HTPM-2220-14
7/8"	16	HTPM-2220-16
7/8"	18	HTPM-2220-18
7/8"	20	HTPM-2220-20
1"	14	HTPM-2540-14
1"	16	HTPM-2540-16
1"	18	HTPM-2540-18
1"	20	HTPM-2540-20

- **EASY TO USE:** Manual insertion of spear into tube requires a Hand Wrench, Removing the Tube also requires a Hand Wrench.
- **NO EXTERNAL POWER:** Manual operation eliminates the need for air or Electricity making the Tube Puller ideal for service application.
- **DURABILITY:** The two major components are machined from High quality steel that heat treated for extra long service life.



- The ring-and-pin type plug, is designed to seal off leaking or damaged tubes in heat-exchangers and condensers. It ensures a uniform joint without damaging the tube-sheet.
- Place the ring in the tube then force the pin into the ring with a few sharp blows from a hammer until a tight seal is made between the ring and the tube bore.
- These plugs can be supplied in brass, steel or stainless steel for tubes in the range 1/2" (12.7 mms) to 1 1/4" in (31.75 mms) O.D.
- The solid type tube plug is used to seal off a leaking or damaged boiler tube. Because it is made in one piece it is more robust and will withstand the substantial pressure of the boiler.
- As with the ring-and-pin, a few sharp hammer blows will effectively seal off the tube.
- These plugs are supplied in steel for tubes in the range 1 1/4" (31.75 mms) to 3" (76.2 mms) O.D.

WALL REDUCING TOOL, DRIFTS & COLLAPSING TOOLS

TUBE WALL REDUCING TOOLS



The first stage in removal of a Tube is the reduction of the rolled portion of the Tube in the Tube Sheet. This tool enables the operation to be performed, the pilot maintaining the alignment in the Tube Bore. The Tube can be removed with the knock out tools.

TUBE DRIFTS (KNOCK OUT TOOLS)



These tools are designed to use with either Hammer or pneumatic Hammer. The pilot diameter is accurately machined to locate in the Tube ID whilst the main body of the Tools forces the Tube away from Tube Plate.

TUBE COLLAPSING TOOL



These Tools are used as collapsing Tubes in the Tube Sheet and are used with either manual Hammer or pneumatic Hammer.

DESCR-IPTION	MODEL	SIZE DESIGNATION							GAUGE	SHANK TYPE
		1/2"	5/8"	3/4"	7/8"	1"	1 1/4"	1 1/2"		
Wall Reducer	TWRT	127	158	190	222	254	317	381	Specific Gauge	MT
Collapsing Tool	TCT	127	190	190	222	254	317	381	-	Specific Type
Tube Drift	TD	127	190	190	222	254	317	381	Specific Gauge	Specific Type



QUALITY & SERVICE

HEATEX has more than two decades of experience in the development of Tools incorporating Modern Technique to help the manufacture 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.



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