

Tooling for Pipe

Pipe Size	Outside Diameter	Wall Thickness Sch. / Inch	Min. CLR Inch	Drive Diameter	Center Former Part#	Counterbend Die Part#
¼"	.540	40 - .088	1.4	40mm	153R036P0250	155P0250
		40 - .091	1.4		153R036P0375	155P0375
¾"	.675	10 - .065	2.2		153R056P0375	
		40 - .109	1.8		153R046P0500 ●	
½"	.840	10 - .083	2.2		153R056P0500	155P0750
		5 - .065	2.6		153R067P0500	
		5 - .065	4.4		156R112P0500	
		40 - .113	2.2		153R056P0750 ●	
¾"	1.050	10 - .083	2.6		153R067P0750	155P1000
		5 - .065	3.2		153R082P0750	
		5 - .065	5.1	50mm 156R130P0750		
1"	1.315	40 - .133	2.6	40mm 153R067P1000 ●	155P1250	
		10 - .109	3.2	40mm 153R082P1000		
		10 - .109	3.9	50mm 156R100P1000		
		5 - .065	4.4	40mm 153R112P1000		
		5 - .065	6.7	50mm 156R170P1000		
1¼"	1.660	5 - .065	6.7	110mm 157R170P1000-110	155P1500	
		40 - .140	3.5	50mm		153R090P1250 ●
		40 - .140	3.9			153R100P1250
		10 - .109	5.1			153R130P1250
		5 - .065	5.9			153R150P1250
		5 - .065	7.5			153R190P1250
		5 - .065	8.9			157R225P1250
5 - .065	8.9	110mm 157R225P1250-110				
1½"	1.900	40 - .145	3.9	50mm	153R100P1500 ●	155P2000
		40 - .145	5.1		153R130P1500	
		40 - .145	5.9		153R150P1500	
		10 - .109	6.7		153R170P1500	
		5 - .065	7.5		153R190P1500	
		5 - .065	9.8		157R250P1500	
		5 - .065	9.8		110mm 157R250P1500-110	
		40 - .154	5.1		50mm	
10 - .109	5.9	153R150P2000 ●				
5 - .065	7.5	153R190P2000				
5 - .065	8.9	157R225P2000				
5 - .065	10.2	157R260P2000				
5 - .065	10.2	80mm 157R260P2000-80				
5 - .065	11.8	50mm 157R300P2000				
5 - .065	11.8	80mm 157R300P2000-80				
2"	2.375	5 - .065	11.8	110mm 157R300P2000-110	155P2500	
		40 - .203	10.2	80mm 157R260P2500-80		
		40 - .203	11.8	80mm 157R300P2500-80		
		40 - .203	11.8	110mm 157R300P2500-110		
2½"	2.875	10 - .120	13.8	80mm 157R350P2500-80	155P3000	
		10 - .120	13.8	110mm 157R350P2500-110		
		40 - .216	11.8	80mm 157R300P3000-80		
		40 - .216	11.8	110mm 157R300P3000-110		
3"	3.500	40 - .216	13.8	80mm 157R350P3000-80	152BP4000	
		10 - .120	17.7	110mm 157R450P3000-110		
		40 - .237	13.8	110mm 157R350P400-110		
4"	4.500	10 - .120	22.0	110mm 157R560P400-110**		

 3D Tooling
 5D Tooling
 ● Included in standard Pipe Tooling Kits

**Center Former Part# 157R560P400-110 requires lead time.

80mm drive diameter available for TB80 / TB100 / TB130

110mm drive diameter available for TB130 / TB180

130mm drive diameter available for TB180 only

Bending of non-ferrous material may require tooling modification.

*Select models require counterbending die support O50E when bending radii 225mm and larger.

Refer to machine manual for CLR capacities and drive. All standard Ercolina® counterbending dies are provided in bronze.

ADDITIONAL TOOLING & SQUARE TUBE TOOLING AVAILABLE ON REQUEST

Tooling for Round Tube

Tube Size	Outside Diameter	Wall Thickness	Minimum CLR Inch	Drive Diameter	Center Former Part#	Counterbend Die Part#
¼"	.750	.083	1.8	40mm	153R046T0750	154T0750
		.065	2.2		153R056T0750	
		.035	2.6		153R067T0750 ● ●	
¾"	.875	.083	1.8		153R046T0875	154T0875
		.065	2.2		153R056T0875 ●	
		.035	2.6		153R067T0875 ●	
1"	1.000	.083	2.2		153R056T1000	154T1000
		.065	2.6		153R067T1000 ●	
		.035	3.2		153R082T1000 ●	
1¼"	1.250	.095	2.6		153R067T1250	154T1250
		.083	3.2	153R082T1250 ●		
		.035	4.4	153R112T1250 ●		
1½"	1.375	.083	3.2	153R082T1375	154T1375	
		.035	4.4	153R112T1375		
		.109	3.5	153R090T1500		
1¾"	1.500	.083	3.9	50mm 153R100T1500 ●	154T1500	
		.083	4.4	40mm 156R112T1500		
		.065	5.1	153R130T1500		
2"	1.500	.049	5.9	50mm	153R150T1500 ●	154T1500
		.035	6.7		156R170T1500	
		.035	7.5		153R190T1500	
1½"	1.625	.109	3.5	50mm	153R090T1625	154T1625
		.083	3.9		153R100T1625	
		.065	5.1		153R130T1625	
		.049	5.9		153R150T1625	
		.035	6.7		153R170T1625	
		.035	7.5		153R190T1625	
		.109	3.9		153R100T1750	
1¾"	1.750	.095	5.1	50mm	153R130T1750	154T1750
		.095	5.9		153R150T1750	
		.065	6.7		153R170T1750 ●	
2"	1.750	.035	7.5	50mm	153R190T1750	154T1750
		.109	3.9		153R100T1875	
		.095	5.1		153R130T1875	
1½"	1.875	.083	5.9	50mm	156R150T1875	154T1875
		.065	6.7		153R170T1875	
		.035	7.5		153R190T1875	
2"	2.000	.109	4.7	50mm	153R120T2000	154T2000
		.109	5.1		156R130T2000	
		.095	5.9		153R150T2000 ●	
2¼"	2.250	.083	6.7	50mm	156R170T2000	154T2000
		.065	7.5		153R190T2000 ●	
		.109	5.1		153R130T2250	
2½"	2.250	.095	5.9	50mm	153R150T2250	154T2250
		.083	6.7		156R170T2250	
		.083	7.5		153R190T2250	
2"	2.500	.187	8.9	50mm	157R225T2500*	154T2500
		.156	9.8		157R250T2500*	
		.120	10.2		157R260T2500*	
2½"	2.500	.065	11.8	50mm	157R300T2500*	154T2500
		.187	9.8		157R250T3000*	
		.156	10.2		157R260T3000*	
3"	3.000	.120	11.8	50mm	157R300T3000*	154T3000
		.216	10.2		157R260T3000-80	
		.156	11.8		157R300T3000-80	
3"	3.000	.216	10.2	80mm	157R260T3000-80	154T3000
		.156	11.8		157R300T3000-80	
4"	4.000	.216	13.8	110mm	157R350T4000-11	155BT4000

● Included in standard small radius Tube Tooling Kits
 ● Included in standard large radius Tube Tooling Kits



Use ONLY Ercolina Spray Grease Part# 810 to Lubricate Counterbending Die



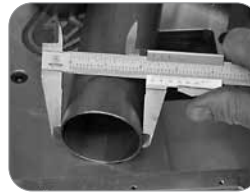
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Pipe Information



Pipe dimensions are based on I.D. of material (2" sch. 40 pipe measures 2.375" O.D.).

Tube Information



Tube dimensions are based on O.D. of material (2" tube measures 2.00" O.D.).

Commercial Pipe and Wall Thickness

Nominal Pipe Size	Outside Diameter	Schedule 5	Schedule 10	Schedule 40	Schedule 80	Schedule 160	Schedule XXS
6.35mm 1/4"	13.7mm 0.540"	1.20 0.049	1.72 0.065	2.24 0.088	3.02 0.119		
9.52mm 3/8"	17.1mm 0.675"	1.20 0.049	1.72 0.065	2.31 0.091	3.20 0.126		
12.7mm 1/2"	21.3mm 0.840"	1.72 0.065	2.11 0.083	2.77 0.109	3.73 0.147	4.78 0.187	7.47 0.294
19.1mm 3/4"	26.7mm 1.050"	1.72 0.065	2.11 0.083	2.87 0.113	3.91 0.154	5.54 0.218	7.82 0.308
25.4mm 1"	33.4mm 1.315"	1.72 0.065	2.77 0.109	3.38 0.133	4.55 0.179	6.35 0.250	9.09 0.358
31.8mm 1-1/4"	42.2mm 1.660"	1.72 0.065	2.77 0.109	3.56 0.140	4.85 0.191	6.35 0.250	9.70 0.382
38.1mm 1-1/2"	48.3mm 1.900"	1.72 0.065	2.77 1.109	3.68 0.145	5.08 0.200	7.10 0.281	10.16 0.400
50.8mm 2"	60.3mm 2.375"	1.72 0.065	2.77 0.109	3.91 0.154	5.54 0.218	8.74 0.343	11.07 0.436
63.5mm 2-1/2"	73.0mm 2.875"	2.11 0.083	3.04 0.120	5.16 0.203	7.01 0.276	9.52 0.375	14.02 0.552
76.1mm 3"	88.9mm 3.500"	2.11 0.083	3.04 0.120	5.49 0.216	7.62 0.300	11.13 0.438	15.24 0.600
88.9mm 3-1/2"	101.6mm 4.000"	2.11 0.083	3.04 0.120	5.70 0.226	8.10 0.318		15.91 0.636
101.6mm 4"	114.3mm 4.500"	2.11 0.083	3.04 0.120	6.02 0.237	8.56 0.337	13.49 0.531	17.12 0.674
127.0mm 5"	141.3mm 5.563"	2.77 0.109	3.38 0.134	6.55 0.258	9.52 0.375	15.88 0.625	19.1 0.750
152.4mm 6"	168.3mm 6.625"	2.77 0.109	3.38 0.134	7.11 0.280	10.97 0.432	18.26 0.718	21.95 0.864

Minimum Achievable "Centerline Radius" with Standard Tooling

Tube Size	Wall Thickness							
	.035 20 Ga.	.049 18 Ga.	.065 16 Ga.	.083 14 Ga.	.095 13 Ga.	.109 12 Ga.	.120 11 Ga.	.134 10 Ga.
1/4"	1.4	1.4	1.4	1.4	1.4	1.4	.78	.78
3/8"	1.4	1.4	.78	.78	.78	.78	.78	.78
1/2"	1.4	1.4	1	1	1	1	1	1
5/8"	1.8	1.8	1.8	1.4	1.4	1.4	1.4	1.4
3/4"	2.6	2.6	2.6	1.8	1.8	1.8	1.8	1.8
7/8"	2.6	2.6	2.2	1.8	1.8	1.8	1.8	1.8
1"	3.2	3.2	2.6	2.2	2.2	2.2	2.2	2.2
1 1/8"	3.2	3.2	3.2	2.6	2.2	2.2	2.2	2.2
1 1/4"	4.4	4.4	4.4	3.2	2.6	2.6	2.6	2.6
1 3/8"	4.4	4.4	4.4	3.2	3.2	3.2	3.2	3.2
1 1/2"	7.5	5.9	5.1	3.9	3.9	3.5	3.5	3.5
1 5/8"	7.5	5.9	5.1	3.9	3.9	3.5	3.5	3.5
1 3/4"			6.7	6.7	5.1	3.9	3.9	3.9
1 7/8"			7.5	5.9	5.1	3.9	3.9	3.9
2"			7.5	7.5	5.9	4.7	4.7	4.7
2 1/8"			7.5	7.5	5.9	5.1	5.1	4.7
2 1/4"				7.5	5.9	5.1	5.1	5.1
2 3/8"				7.5	5.9	5.1	5.1	5.1
2 1/2"					11.8	10.2	9.8	
3"					11.8	10.2	9.8	

Pipe & Tube Tooling Kits

(Additional Savings when Purchased with Machine)

Description	Material Size	Centerline Radius - Inches -	Min. Wall	Center Former Part#	Counterbend Die Part#	Available with Ercolina Machines
PIPEKIT1	1/2"	1.8	.109	153R046P0500	155P0500	TB60, O30 Mega Bender, TB80
	3/4"	2.2	.113	153R056P0750	155P0750	
	1"	2.6	.133	153R067P1000	155P1000	
	1 1/4"	3.5	.140	153R090P1250	155P1250	
	1 1/2"	3.9	.145	153R100P1500	155P1500	
PIPEKIT2	2"	5.9	.109	153R150P2000	155P2000	48Plus, SB48, HB60
	1/2"	1.8	.109	153R046P0500	155P0500	
	3/4"	2.2	.113	153R056P0750	155P0750	
	1"	2.6	.133	153R067P1000	155P1000	
	1 1/4"	3.5	.140	153R090P1250	155P1250	
PIPEKIT3	1 1/2"	3.9	.145	153R100P1500	155P1500	070 Medi Bender
	1/2"	1.8	.109	153R046P0500	155P0500	
Handrail Pipe Kit HRAPIPEKIT	3/4"	2.2	.113	153R056P0750	155P0750	48Plus, SB48, TB60, O30 Mega Bender, TB80
	1"	2.6	.133	153R067P1000	155P1000	
PIPEKIT4	1 1/4"	3.5	.140	153R090P1250	155P1250	TB100, TB130
	1 1/2"	3.9	.145	153R100P1500	155P1500	
	2"	5.9	.109	153R150P2000	155P2000	
	2 1/2"	11.8	.203	157R300P2500-80	155P2500	
	3"	11.8	.216	157R300P3000-80	155P3000	
PIPEKIT6	1"	2.6	.133	153R067P1000	155P1000	TB80
	1 1/4"	3.5	.140	153R090P1250	155P1250	
	1 1/2"	3.9	.145	153R100P1500	155P1500	
	2"	5.9	.109	153R150P2000	155P2000	
	2 1/2"	10.2	.203	157R260P2500-80	155P2500	

Description	Material Size	Centerline Radius - Inches -	Min. Wall	Center Former Part#	Counterbend Die Part#	Available with Ercolina Machines
Small Radius Tube Kit TUBEKIT1SR	3/4"	2.6	.035	153R067T0750	155T0750	TB60, O30 Mega Bender, TB80, TB100, TB130
	1/2"	2.2	.065	153R056T0875	154T0875	
	1"	2.6	.065	153R067T1000	154T1000	
	1 1/4"	3.2	.083	153R082T1250	154T1250	
	1 1/2"	3.9	.083	153R100T1500	154T1500	
Small Radius Tube Kit TUBEKIT2SR	2"	5.9	.095	153R150T2000	154T2000	48Plus, SB48, HB60
	3/4"	2.6	.035	153R067T0750	154T0750	
	1/2"	2.2	.065	153R056T0875	154T0875	
	1"	2.6	.065	153R067T1000	154T1000	
	1 1/4"	3.2	.083	153R082T1250	154T1250	
Large Radius Tube Kit TUBEKIT1	1 1/2"	3.9	.083	153R100T1500	154T1500	TB60, O30 Mega Bender, TB100, TB130
	1"	3.2	.035	153R067T0750	154T0750	
	3/4"	2.6	.035	153R067T0875	154T0875	
	1"	3.2	.035	153R082T1000	154T1000	
	1 1/4"	4.4	.035	153R112T1250	154T1250	
Large Radius Tube Kit TUBEKIT2	1 1/2"	5.9	.049	153R150T1500	154T1500	48Plus, SB48, HB60
	1 3/4"	6.7	.065	153R170T1750	154T1750	
	2"	7.5	.065	153R190T2000	154T2000	
	3/4"	2.6	.035	153R067T0750	154T0750	
	1"	3.2	.035	153R067T0875	154T0875	
TUBEKIT3	1 1/4"	4.4	.035	153R112T1250	154T1250	070 Medi Bender
	1 1/2"	5.9	.049	153R150T1500	154T1500	
	1 3/4"	6.7	.065	153R170T1750	154T1750	
	2"	7.5	.065	153R190T2000	154T2000	
	1"	3.2	.035	153R082T1000	154T1000	
Large Radius Tube Kit TUBEKIT5	1 1/4"	4.4	.035	153R112T1250	154T1250	TB80
	1 1/2"	5.9	.049	153R150T1500	154T1500	
	1 3/4"	6.7	.065	153R170T1750	154T1750	
	2"	7.5	.065	153R190T2000	154T2000	
	1"	3.2	.035	153R082T1000	154T1000	

Refer to machine specifications for individual capacities.

All standard Ercolina counterbending dies are provided in bronze. *Polished tooling for round tube recommended for materials with a polished finish such as stainless and aluminum. Optional polymer counterbending dies available on request. Consult factory for more information.