



TUBE AND PIPE FABRICATORS BROCHURE

FOR MANUFACTURERS AND MAKERS



Helping fabricators succeed

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- American made. Built by experienced masters.
- Rugged I-beam construction. ... Tough as hell. Lasts decades.

For manufacturers who build with tube or pipe, we have the handiest, most affordable bending and end forming equipment and tooling to help you succeed.

Pipe Bending for Thousands of Applications

The value of portable, affordable pipe benders was quickly evident when Huth first introduced them. With a Huth bender, it is not necessary to keep a variety of pre-bent pipes in inventory. With a few sizes of straight tubing on hand, you can quickly bend pipes for thousands of applications.

A Heritage of Durability, Power and Ease of Operation

Huth benders and end formers have been made in Wisconsin for the last 35 years. A favorite among both automotive shop and manufacturing fabricators, Huth Ben Pearson compression pipe benders are extremely powerful and versatile, as well as easy to use. And, they last a really long time. Customers commonly use them profitably and successfully for 25 plus years.



Our fabrication customers include:

- Leaders in trailer manufacturing, fencing and fence gate sections, pole barns and car ports
- Sporting equipment manufacturers (think batting cages, blocking sleds, soccer goal posts etc.)
- Farm structure builders (feed rings, arena panels, gates, saddle racks)
- Boat accessory manufacturers (square applications include sub frame, boat lifts)
- Industrial/commercial racking ...
- to name just a few!

Overall capabilities:

- Bending up to 3" round tubing
- Bending up to 1½" schedule 40 pipe
- Bend square and rectangular tubing up to 2½" diameters easily and neatly
- Bending flat stock, as well as make custom tooling.
- Expanding from 1" to 12"
- Tube reduction for tube O.D. 1⅛" to 3"
- Custom tooling available

BENDERS

From the leader in shop bending & end forming machines



Fabrication Bender (models 2650 and 2660)

Simple. Tough. Powerful. Fast-working.

Great for frame fabrication and manufacturing.

- Steel I-beam construction reinforced with heavy steel framing
- Bends round, square, rectangular tube/pipe
- Handles schedule/thick wall pipe with ease
- Extra-large oil tank (10 gal) for continuous & multi-shift usage

Available two ways:

5" cylinder: 58,000 pounds bending force (Model 2650)

6" cylinder: 85,000 pounds of bending force (Model 2660)

- Small foot print ... 24" wide 54" long
- 7½ horse power motor
- Heavy duty gates and bushings
- Knee pedal activation for set up
- Auto depth of bend selector

Model 3012 makes 360 degree bends!

- Completely bend around dies on the same centerline
- More clearance allows you to create more designs
- Ben Pearson-compatible round and square tooling
- Bend round tubing from ¾" to 3" in diameter
- Custom tooling for bending and end finishing can be made
- Expanding up through 3", 3½" and 4"



Tooling sold separately

Original Model 2806 with automatic depth of bend and full end-finishing

- 5 HP motor gives 58,000 pounds of bending force, more than enough for 3" tubing
- Heavy duty swager/expander gives complete end-finishing ability
- Expanding ability 1" to 5½"
- Automatic depth of bend indicator makes repeatable bends easy
- Both push button and knee controls for hands-free operation



Tooling sold separately

UNMATCHED VERSATILITY, SPEED AND EASE IN BENDING AND FORMING

Bending Examples

Round Tubing up to 3" diameter



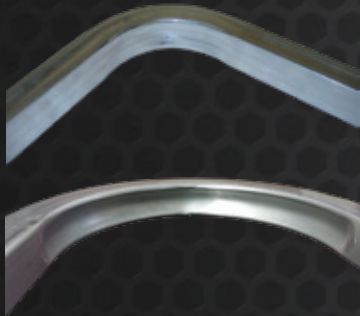
Square tubing up to 3" diameter



Schedule Pipe up to 2" schedule 80



Aluminum and other "soft" metals
(annealed)



Galvanized Steel



Angle Iron



Flat stock up to 4"



Solid bar up to 1 1/8"



End Forming Examples

Tubing Expansions, flares, reductions,
beads, ball joints ... you name it!



Schedule pipe
reductions



Expanding square
to round



Expanding copper (Type L)



Large expansions (up to 12")



END FORMING EXPANDERS AND SWAGERS COMPACT FOOTPRINT FOR WORK CELLS



Model 1673: Portable Expander-Swager Expands and Reduces Pipe Diameter

Swage box allows reductions up to 3" and solid tool expansions.

- A powerful 5 HP motor, single-phase (30 amp), or 3-phase (20 amp)
- Runs on 220 volt, 60 Hz supply. 50 Hz and other voltages available
- The 3½" cylinder produces 25,000 lbs. of expanding power
- Expanding capacity from 1" to 5½"
- Features Huth's Accu-Sizer™ automatic, preset expanding system for quick, precise expanding each and every time
- Adjustable Collar (41047) for expanding 1" to 3½"
- Collet Holder for 1" to 2½" O.D. tubing
- Swaging capacity from 1" to 3"
- "See-through" safety guards for increased protection during all operations
- Front swivel caster w/brake
- 15' power cord with male and female receptacles

Model 1674: Portable Expander with Two Powerful Cylinders

Now with the powerful 5" cylinder you can expand tubing from 3" up to, and larger than 6" diameter, 3" deep (5" deep tooling also available).

- Powerful 5 HP motor, single-phase (30 amp), or 3-phase (20 amp)
- Runs on 220 volt, 60 Hz supply. 50 Hz and other voltages available
- The 3½" cylinder produces 25,000 lbs. of expanding power and the 5" cylinder produces 49,000 lbs. of expanding power
- Expanding capacity from 1" to 6" and greater
- Features Huth's Accu-Sizer™ automatic, preset expanding system for quick, precise expanding each and every time
- Front swivel caster w/brake
- 15' power cord with male and female receptacles
- Includes 41047 Accu - Sizer adjustable collar for the 3½" cylinder, and the 527 adjustable collar with the 528 collar extension for the 5" cylinder

New Model 1674V: Portable Expander ... vertical lets you expand bigger!

1690 Bench Top Expander

1691 Portable Expander

1690 and 1691 Features



- Compact design fits on your bench-top (12" x 20" x 24")
- 10 ft. power cord with male and female receptacles

- Compact 24" x 23" x 39" design on rugged cart for maximum portability
- 15 ft. power cord with male and female receptacles

- Hands-free operation with foot pedal activation
- Create custom brackets with Rod Bracket Bender (Part 985)(optional)
- Standard expanding capacity from 1½" to 3½"
- Expanding capacity from 1" to 5½" with additional tooling
- Powerful 2 HP motor available in 110V, 30 Amp or 220V, 20 Amp. Motor runs on both 50Hz and 60Hz
- 25,000 lbs of expanding power
- Features Huth's Accu-Sizer™ automatic, preset expanding system for quick, precise expanding each and every time
- Built-in tool tray for easy access to tooling
- "See-through" safety guards for increased protection during all operations
- Includes: 572, 573 Arbors and 472, 474, 475, 476, 477 Segment Sets



1685S Mitey Mate Jr Expander gives you 17000 lbs of expanding force right in your hand. Now CE listed!



Small but powerful, the Mitey Mate Jr expander is ideal for making flares, ball joints, and slip connections wherever you need to work ... in a work cell or on the bench.

- Set to operate at 3200 psi (shop air pressure between 80 and 120 psi maximum)
- 1½" to 3" I.D. (3½" to 4" capability with additional tooling)
- Comes with Huth's unique Accu-Sizer™ System for right-on expansions, job after job
- Expander gun weighs only 7 pounds

STOCK END FORMING TOOLING

Expanding Segment Tooling

Segments				1674 Segments			
No.	Descrip.*	Finger No.	Comments	No.	Descrip.*	Finger No.	Comments
470	1½" - 1¾"	670	Used with 575 with 570 Spacer or 496 Arbor	481	2⅞" - 3½"	681	Used with 574 Arbor (1674 Model Only)
404	1¾" - 1½"	604		482	3⅞" - 4"	682	
400	1¾" - 1½"	600	Used with 500 or 495 Arbor	483	3⅞" - 4½"	683	
472	1¾" - 1¾"	672	Used with 572 Arbor or 508 Arbor+ 498 Tip	484	4⅞" - 5"	684	
473	1¾" - 1¾"	673		485	4⅞" - 5½"	685	
474	1¾" - 2⅛"	674	Used with 573 Arbor or 508 Arbor + 499 Tip	486	5⅞" - 6"	686	
475	2⅞" - 2½"	675	Used with 573 Arbor or 508 Arbor + 499 Tip	Flaring Segments			
476	2½" - 3"	676		No.	Descrip.*	Finger No.	Comments
477	3" - 3½"	677	Used with 503 Arbor Requires 512 or 523 Adj Collar	405	1⅞" - 1½"	605	Used with 575 Arbor with 570 Spacer
478	3½" - 4"	678		440	1½" - 2½"	640	Used with 573 Arbor or 508 Arbor + 499 Tip
403	2¾" - 3⅞"	603	Used with 503 Arbor Requires 512 or 523 Adj Collar	441	2½" - 3½"	641	
406	3⅞" - 3½"	606					
408	3½" - 4"	608					
450	4" - 4⅞"	650					
451	4⅞" - 5½"	651					

*All Sizes are IDs

Fab Tool Packages

Many of our operator customers have a narrower need than a comprehensive die package, but still appreciate a deal on multiple tool sets. We have combined the tools that go together for some of the industry's most important applications into affordable and convenient tool packages to make life easier and more profitable for you!

074 Die Package - Use with 1674 Expander Only			1988 3" End Finishing Package	
No.	Type	Size	No.	Product Description
574*	Arbor	2⅞" to 6"	892	Collet Holder - 3"
572	Arbor	1⅞" to 1¾" (Solid Piece)	1730	Collet - 3"
573	Arbor	1¾" to 4" (Solid Piece)	130	Swage Die - 3"
472	Segment	1½" to 1¾" (Solid Surface)	783	Reducer (3" to 2½")
474	Segment	1¾" to 2⅞"	853	Flaring / Flanging Tool (1½" to 3½")
475	Segment	2⅞" to 2½"		
476	Segment	2½" to 3"		
481	Segment	2⅞" to 3½"		
482	Segment	3⅞" to 4"		
483	Segment	3⅞" to 4½"		
484	Segment	4⅞" to 5"		
485	Segment	4⅞" to 5½"		
486	Segment	5⅞" to 6"		
O'Rings	O'Rings	Assorted		

End Finishing and Swager Tooling

Clamp Collets		Swage Dies		Reducing Dies*	
No.	Size	No.	Size	No.	Size
1775	¾" EMT	110	1"	*Require Collet holder 890, 891, or 892.	
1709	1" EMT	118	1⅞"	775	¾" EMT
1710	1"	114	1¼"	779	1" EMT
1718	1⅞"	138	1⅞"	780	2" to 1¾"
1714	1¼"	112	1½"	781	2¼" to 2"
1756	1⅞"	158	1⅞"	782	2½" to 2¼"
1738	1⅞"	134	1¾"	783	3" to 2½"
1712	1½"	178	1⅞"	784	2" to 1⅞"
1758	1⅞"	120	2"	785	1¾" to 1⅞"
1734	1¾"	128	2⅞"	786	1⅞" to 1½"
1778	1⅞"	125	2¼"	787	1½" to 1⅞"
1720	2"	150	2½"	788	1⅞" to 1¼"
1720DF	2" Double Flare (Use with Part #518)	129	2¾"	789	1¼" to 1⅞"
1728	2⅞"	130	3"	790	3" to 2¾"
1725	2¼"	Flaring/Flanging Tools			
1723	2⅞"	No.	Size		
1750	2½"	518	Flare Tool - 2" Double Flare and 1½" Flat Flare*		
1729	2¾" *	519	Flare Tool - 1¾" and 1⅞" Double Flat Flare*		
1731	2⅞" *	853	Pipe Flanger 1½" to 3" - (Replaces Pipe Flangers 848, 849, 850, 851)		
1730	3" *	*NOT SHOWN			

Arbors

Arbors	
No.	Description
572	Arbor, 1⅞" ID - 1¾" ID, Solid Piece, (Same as #508 and #498 Combination)
573	Arbor, 1¾" ID - 4" ID, Solid Piece, (Same as #508 and #499 Combination)
503	Arbor 2¾" ID - 5½" ID
574	Arbor 2⅞" ID - 6" ID (H1674 Model)

STOCK BENDING TOOLING FOR PIPE, SQUARE, FLAT STOCK, RECTANGULAR AND ROUND TUBING

All Huth tooling is machined to specific tolerances from solid steel. After it is machined, it is gas-carburized and oil quenched to a minimum hardness of 58 Rockwell "C" scale. All Huth tooling is available from shelf stock. However, Huth will manufacture custom tooling to your specification for sizes not listed in this schedule.

Fabricators commonly work with schedule 40, schedule 80 or schedule 10 pipe due to their outstanding strength characteristics. Bending these pipes is easy with the Huth Fabrication bender, as well as other models as well (check the bending capacity specifications for your bender).

Pipe Tooling

Nominal size Schedule 10, 40, 80	Outer Diameter	Die Cavity Dimension	5" Center Line Radius Die	4" Center Line Radius Die	3 1/2" Center Line Radius Die	Full Back Shoe	Three Quarter Back Shoe	Half Back Shoe
1/2"	.840"	0.840		4084	3084	1840		1085
3/4"	1.050"	1.050		4105	3105	1105		1005
1"	1.315"	1 5/16	5056	4056	3056	1256		1356
1 1/4"	1.660"	42mm	5042	4042	3042	1342	1542	1425
1 1/2"	1.900"	48mm	5048	4048	3048	1348	1548	1448
2"	2.375"	2 3/8	5438	4438	3438	4237		4437
Schedule 10, 40, 80 Pipes All Have The Same Outer Diameter						2 Required	1 Required	1 Required
						(2) #855 Pins Required Each	1 - #855 Pin Required Each	1 - #855 Pin Required Each

Square, Rectangle and Flat Stock

Many structural fabricators have discovered the power of a compression pipe bender for working with square and rectangular tubing while building structures and frames. The key to making it work is that Huth Ben Pearson designed and built special dies that allow bending machines to bend square and rectangular tubing up to 2 1/2" diameters easily and neatly.

Flat Stock Bending Dies				
No.	Radius	Size	No.	BACKSHOE SIZE
3303	3 1/2"	Variable*	1003	Flat Stock Back Shoe (2 Req.)**
*See the Sell Sheet for examples or call (800) 558-7808 for additional size options			**(4) #855 Pins Required	

Square and Rectangular Bending Dies

Square Dies				
No.	Radius	Size	No.	Backshoe Size (2 Required)
3334	3"	3/4"	1000	3/4" to 1 1/2" *
4334	4"	3/4"	1000	3/4" to 1 1/2" *
3310	3"	1"	1000	3/4" to 1 1/2" *
4310	4"	1"	1000	3/4" to 1 1/2" *
4314	4"	1 1/4"	1000	3/4" to 1 1/2" *
5314	5"	1 1/4"	1000	3/4" to 1 1/2" *
5312	5"	1 1/2"	1000	3/4" to 1 1/2" *
5320	5"	2"	1020	2"*
5325	5"	2 1/4"	1025	2 1/4" *
5350	5"	2 1/2"	1054	2 1/2" *
5330*	5"	3" - 14 Ga	1030*	3" *
*Used on 2600, 2650 and 2660 models only			*(4) #855 Pins Required	

Round Tube Tooling

Huth benders bend tubing up to 3" diameters easily and neatly. We have extensive tooling in stock to handle your needs immediately in both imperial and metric tubing sizes.

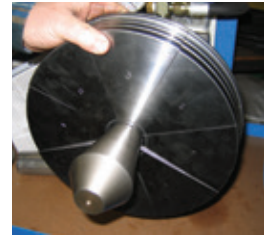
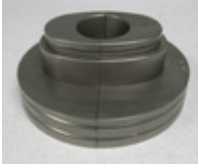
Round Tube Tooling Imperial Sizes						Back Shoes (Full, 1/2, 3/4, 1/4)					Round Tube Tooling: Metric Sizes						
	Full 5"	Full 4"	5"	4"	3.5"		Full Shoes	1/2 Shoes	3/4 Shoes	1/4 Shoes		5" Center-line Radius	4" Center-line Radius	3" Center-line Radius	Full Shoes	1/2 Shoes	3/4 Shoes
Size	No.	No.	No.	No.	No.	Size	2 req.	1 req.	1 req.	1 req.	Metric Size	No.	No.	No.	2 req.	1 req.	1 req.
1/2"				4012	3012	1/2"	1012	1027			40mm	5040	4040	3040	1340	1405	1540
5/8"				4058	3058	3/8"	1058	1029			42mm	5042	4042	3042	1342	1425	1542
3/4"			5034	4034	3034	3/4"	1034	1035			45mm	5045	4045	3045	1345	1455	1545
0.840"					3084	0.840"	1840	1085			48mm	5048	4048	3048	1348	1448	1548
7/8"				4078	3078	7/8"	1078	1031			50mm	5050	4050	3050	1349	1450	1550
0.922"				4092	3092	0.922"	1092	1002			54mm**	5218	4218	3218	1218	1051	1053
1"			5100	4100	3100	1"	1100	1037			55mm	5055	4055	3055	1355	1445	1555
1.050"			5105	4105	3105	1.050"	1105	1005			60mm	5060	4060		1360	1460	1560
1 1/8"			5118	4118	3118	1 1/8"	1118	1033			**2 1/8" = 54mm						
1.163"			5116	4116	3116	1.163"	1116	1016									
1 1/4"			5114	4114	3114	1 1/4"	1114	1039		1084							
1 5/16"			5056	4056	3056	1 5/16"	1256	1356									
1 3/8"			5138	4138	3138	1 3/8"	1138	1041		1083							
1 1/2"	5812		5112	4112	3112	1 1/2"	1112	1038		1082							
1 5/8"		4858	5158	4158	3158	1 5/8"	1158	1042		1081							
1 3/4"	5834	4834	5134	4134	3134	1 3/4"	1134	1040	1036								
1 7/8"	5878		5178	4178	3178	1 7/8"	1178	1043	1044								
2"	5820	4820	5200	4200	3200	2"	1200	1045	1046								
2 1/8"			5218	4218	3218	2 1/8"	1218	1051	1053								
2 1/4"	5824		5414	4414	3414	2 1/4"	4211	4416	4413								
2 3/8"			5438	4438	3438	2 3/8"	4237	4437									
2 1/2"	5825		5412	4409		2 1/2"	4412	4410	4415								
2 3/4"			5534			2 3/4"	1234	1236	1235								
2 7/8"			5578			2 7/8"	1378	1379									
3"			5530			3"	1350	1352	1351								
							(2) #855 Pins Req. Each	(1) #855 Pins Req.	(1) #855 Pins Req.	(1) #855 Pins Req.							

CUSTOM TOOLING AND MACHINES

Custom Tooling and Machines

Huth will manufacture tooling to your specifications for sizes not listed in this schedule. We count among our many custom tooling customers leaders in metal fabrication in the automotive, aerospace and manufacturing industries. We offer many custom finishes depending on your application.

Call for details. 800-558-7808.



Vertical Heavy Duty Bender



Three head Vertical Expander



Vertical Swage Press with custom tooling

ACCESSORIES AND ADD ONS

Dead Stop positioning system

Part No. 73DS-6 (kit 6')

Part No. 73DS-3 (kit 3')

- Supports tubing for swaging with defined end point.
- Makes repeated parts quicker and easier to produce.
- Reduces collet marks!



73DS-6 has 6 feet of track, adjustable stop, support legs, support yoke, 832 cylinder stop and positioning pins.

73DS-3 has 3 feet of track, adjustable stop, support leg, support yoke, 832 cylinder stop & positioning pins

Double the expanding set-up of your Bender! Expander Option Kit

Part No. 92222/92225

The 2nd cylinder allows two different expanding systems always available and ready to use, reducing changeover time.

Kit 92222 allows for addition of expanding from 1" to 5½" by 2" deep. Or choose to install the Rod Bracket Bender #H985 on the new cylinder and create hangers and brackets in seconds.

Kit 92225 allows for expanding from 3" to 5" by 3" deep. Arbor 574 included.



Complete end-finishing add-on capability

Part No. 1960

With this upgrade kit you can take advantage of Huth's full line of swaging and reducing dies including 2¾" and 3" (additional tooling may be required).



Huth's Accu-Sizer™ system for more accurate end-finishing

Part No. 1990 Retrofit Kit

Includes two arbors, hardware, decals and three expander tools (sizes 1½" to 2½").



Collet Set for no-slip grip

Part No. 1985

Huth's Sure-Grip™ collet closer kit firmly holds pipes in a "no-slip" grip.

Comes with one collet holder and six collets: 1½", 1¾", 1⅞", 2", 2¼" and 2½".

