

# www.davi.com





#### **solid, compact and most advanced technology** For the best productivity

#### A COMPLETE RANGE OF QUALITY AND HEAVY DUTY MACHINES

THREE POWERED ROLLS WITH THREE SYNCHRONIZED HYDRAULIC MOTORS (ONE FOR EACH ROLL) TO CARRY MORE TORQUE AND TO FEED EASIER ANY SECTION



ALL MACHINES EQUIPPED WITH 3-D GUIDING ROLL TO GUIDE AND CORRECT AT THE BEST ANY SECTION FROM DEFLECTING



#### THE ENTIRE RANGE OF DAVI ANGLE ROLLS OFFER UNCOMPARABLE BENEFITS



- **B:** Modular rolls perfectly interchangeable with any standard, universal and special customized roll
- C: Heavy duty hydraulic guide rolls
- D: Sturdy, high resistance frame
- E: Hydraulic pulling roll unit for bending I - U and H beams the hard way





#### **SOLID, COMPACT AND MOST ADVANCED TECHNOLOGY** For the best productivity







AN ENDLESS RANGE OF ACCESSORIES TO ANSWER TO ANY NEEDS

HYDRAULIC PULLING ROLL UNIT FOR BENDING I - U AND H BEAMS THE HARD WAY



ROLLS FOR HYDRAULIC PULLING UNIT FOR HEA - HEB AND IPE SECTIONS





**ROLLS FOR HYDRAULIC PULLING** 



ROLLS FOR HYDRAULIC PULLING UNIT FOR UPN SECTIONS



#### **STRONGER, PRECISE AND MORE RELIABLE...** ...New DAVI MCP Angle Roll!



PITCH CONTROL FOR SPIRAL BENDING





**CONICAL SPIRAL** 



HORIZONTAL CONVEYOR FOR BOILERS SPIRALS



SPECIAL ROLLS FOR BULB FLATS

SPECIAL ROLLS FOR TUBE BENDING





**3D SYSTEM** 



HOLLOW SECTIONS MANDRELS BENDING





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## **SOLID, COMPACT AND MOST ADVANCED TECHNOLOGY** For the best productivity

#### SMALL



MCP 11 TUBE 5" SCH10 Ø110"



MCP 14 SQUARE BAR 3" Ø48"



MCP 11 4" X 4" X 1/2" Ø45"



MCP 14 4" SCH 40 Ø98"

#### MEDIUM



MCP 20 WF8" x 28# Ø300"



MCP 20 WF8" x 28# Ø300"



MCP 26 TUBE 12" SCH10 Ø400"



MCP 26 S12" x 50# Ø430"

MCP 36 WF40" x 324# Ø180"







MCP 32 SQUARE HOLLOW 9" x 1/2"

MCP 32 WF12" x 58# Ø59"





### HEAVY

MCP WF33" x 141# Ø240'

MCP SQUARE BAR 13-3/8" Ø95"





MCP BULB FLAT 340 x15

MCP PIPE 26" SCH 10 Ø787"





# **CUSTOM**



# EXCELLENCE IN FORMING

# **STRONGER, PRECISE AND MORE RELIABLE...** ...New DAVI MCP Angle Roll!





#### **SOLID, COMPACT AND MOST ADVANCED TECHNOLOGY** For the best productivity

#### KNOW-HOW

DAVI engineering has 50 years of technological experience in the heavy bending industry.



#### DAVI UTMOST LEVEL OF QUALITY CONTROL

100% Made in Italy, total quality management (ISO 9001).





#### READY FOR IMMEDIATE DELIVERY

Dozens of machines (often more than 100), even those for heavy industries, are finished and ready for immediate delivery. As the production is determined not only on orders received, but for its own inventory, DAVI can offer THE SHORTEST DELIVERY TIME.







#### stronger, precise and more reliable... ...New DAVI MCP Angle Roll!

# EXCELLENCE IN FORMING

#### THE ONLY CUSTOMER CARE IN ROLLING INDUSTRY

Customer care satisfaction is the DAVI way to conduct business. Performed by professional, experienced, and specialized customer care Training Team:



**16** qualified and dedicated service engineers worldwide



**MASTER TRAINER** 

Master trainer (available for angle roll customers training)



DAVI Customer Care provides the following services:



#### 11.000 PARTS ON SHELF

More than 11.000 parts are available on shelf, in one of the largest Logistic Centers of the fabricating machine industry, are used for machines production or, if needed, as spare parts, to be shipped **ON SAME-DAY BASIS** to our clients.



### DAVI CONTROLS: MAKES IT ALL!





# **solid, compact and most advanced technology** For the best productivity

MODEL			МСР							
			9	11	14	18	20	24	28	
	la	flat on edge	3-1/2"x3/4" ø30"	4" x 1" ø28"	5" x 1 1/4" ø39"	6" x 1 9/16" ø55"	7" x 2" ø63"	7" x 2 3/8" ø63"	8 11/16" x 2 3/8" ø83"	
	2 a	flat on flat	7"x3/4" ø20"	8" x 1 3/8" ø24"	8 11/16" x 2" ø39"	9 7/8" x 2 3/8"-3/8" ø55"	13 1/16" x 2 3/4" ø55"	13 3/8" x 3 3/16" ø55"	6 9/16" x 39/16" ø75"	
-	3 a	square bar	2"x2" ø22"	2 9/16" ø27"	3 3/8" ø47"	4 1/8" ø63"	4 3/4" ø59"	5 1/8 ø67"	5 5/16" ø87"	
	4 a	round bar	2"1/2" ø30"	2 15/16" ø36"	3 9/16" ø44"	4 5/16" ø48"	5 1/8" ø55"	5 1/2" ø47"	6 5/16" ø59"	
-	5 a**	Angle leg out	3"x3"x3/8" ø33"	4" x 4" x 1/2" ø45"	5" x 5" x 5/8" ø51"	6" x 6"x 5/8" ø47"	7"x7"x 3/4" ø70"	8" x 8" x 3/4" ø79"	8" x 8" x 1 1/16" ø98"	
	6 a**	Angle leg in	3"x3"x3/8" ø40"	4" x 4" x 3/8" ø45"	5" x 5" x 1/2" ø43"	6" x 6" x 5/8" ø59"	7"x7"x 5/8" ø79"	7" x 7" x 3/4" ø98"	8" x 8" x 1" ø98"	
	7 a	T section leg out	WT 3"x12.5# ø30"	WT 4" x 10,5# ø40"	WT 5" x 16,5# ø45"	WT 6" x 39,5# ø47"	WT 7" x 26,5# ø47"	WT 8" x 18# ø79"	WT 8" x 50# ø100"	
	8 a	T section leg in	WT 3"x12.5# ø50"	WT 4" x 10,5# ø60"	WT 5" x 16,5# ø60"	WT 5" x 56# ø55"	WT 7" x 41# ø50"	WT 7" x 45# ø98"	WT 7" x 66# ø120"	
	9 a	T section on one side	WT 3"x12.5# ø28"	WT 4" x 14# ø79"	WT 5" x 22,5# ø118"	WT 6" x 29# ø118"	WT 7" x 41# ø118"	WT 8" x 25# ø118"	WT 8" x 50# ø80"	
	10 a*	rectangular hollow section	3 1/2" x 1 3/4" x 3/16"	4 3/4" x 2" x 3/16"	5 5/16" x 2" x 3/16"	7 1/16" x 2 3/4" x 5/16"	8" x 2 15/16" x 5/16"	8 1/4" x 3 9/16" x 5/16"	9 7/16" x 4 3/8" x 3/8"	
	11 a*	square hollow section	2-1/2"x2-1/2"x1/4"	3 1/2" x 3 1/2" x 1/4"	4" x 4" x 5/16"	5" x 5" x 3/8"	6" x 6" x 3/8"	6 5/16" x 3/8"	8" x 8" x 1/2"	
-	12 a**	channel leg out	C 6"x13# ø24"	C 7 x 14.75# ø30"	C 8" x 22,8# ø30"	C 12" x 30# ø40"	C 15" x 50# ø60"	C 15" x 50# ø50"	MC 18" x 58# ø40"	
-	13 a**	channel leg in	C 6"x13# ø33"	C 7 x 14.75# ø35"	C 8" x 22,8# ø35"	C 12" x 30# ø45"	C 15" x 50# ø70"	C 15"x 50# ø60"	MC 18" x 58# ø40"	
-	14 a**	S beam easy way	S 6"x17.25# ø25"	S 7 x 20# ø35"	S 8" x 23# ø40"	S 12" x 50# ø44"	S 15" x 50# ø60"	S 15" x 50# ø50"	S 20" x 75# ø70"	
1	15 a**	WF beams easy way	W 4"x13# ø50"	W 6" x 4" x 12# ø35"	W 6"x 6" x 20# ø79"	W 8" x 6,5" x 28# ø47"	W 12" x 8 " x 50# ø63"	W 12" x 8" x 50# ø47"	W 16" x 10,25" x 67# ø80"	
000	16 b*	tube	4" SCH10 ø55"	5" SCH10 ø118"	6" SCH 10 ø98"	8" SCH 5 ø170"	10" SCH 10 ø197"	10" SCH20 ø197"	14" SCH 10 ø393"	
0-0	17 b*	tube	3" Sch.40 ø40"	4" SCH40 ø45"	5" SCH 40 ø45"	6" SCH 40 ø85"	8" SCH 40 ø100"	9" SCH40 ø140"	12" SCH 30 ø160"	
	18 a**- c**	channel hard way	Max sec mod 1.9 ln3	C 5 x 9# ø180"	C 6" x 13# ø240"	C 7" x 14,75# ø320"	C 9" x 20# ø354"	C 10" x 20# ø472"	MC 10" x 41,1# ø472"	
	19 a**- c**	S beam hard way	Max sec mod 1.9 In3	S 5 x 10# ø787"	S 6" x 12,5#ø787"	S 6" x 17,25# ø393"	S 10" x 25,4# ø787"	S 10" x 25,4# ø393"	S 12" x 31,8# ø590"	
-	20 a**- c**	WF beam hard way	Max sec mod 1.9 In3	WF 4" x 4" x 13# ø142"	WF 5" x 5" x 16# ø142"	WF 6" x 6" x 25# ø236"	WF 8"x 6,5" x 28# ø236"	WF 8" x 8" x 40# ø315"	WF 10" x 10" x 49# ø393"	
Section modulus		W Inch <sup>3</sup>	1.3 - 1.9	2.5 - 5.4	4.9 - 9.2	7.3 - 13.4	14.6 - 27.4	14.6 - 34.7	21.3 - 57.3	
Shafts ø		Inch	3 11/32" - 3 11/32"	4 9/64" - 4 9/64"	5 33/64" - 4 23/32"	7 3/32" - 6 19/64"	7 7/8" - 7 3/32"	9 29/64" - 8 21/32"	11 1/32" - 10 15/16"	
Rolls ø (external)		Inch	9 27/32"	12 13/64"	15 5/32"	18 7/64"	21 21/32"	24 51/64"	25 63/64"	
Electric (60Hz) Power		HP	12	24	30	36	48	60	72	
Rolling Speed		Feet/min	23	23	23	23	23	23	23	

a = Universal rolls; b = special rolls; c = special equipment

Additional set of special rolls might be necessary to reduce physical deformations. A set of special, customized rolls, ordered on request, with additional price, that matches exactly the section shape, will minimize the distortions, allowing to achieve the best results. The above mentioned capacities are based on sections in mild steel with a maximum of 270 N/mm<sup>2</sup> of Elastic Yield Point and 400 N/mm<sup>2</sup> UTS, rolled down to the stated diameters in one or a few passes. Capacities can be increased when rolling larger diameters. Tighter diameters can be achieved on lighter capacities\*\* Harder material reduces the announced capacities.

\*On this hollow section, due to its structural weakness, the achievable diameter heavily depends on the section distortion and deformation, rather than on the machine power.

\*\* For smaller sections than those listed, a set of further parts could be required (spacers and parts for the special equipment), therefore a technical analysis is recommended for a better evaluation.

#### **STRONGER, PRECISE AND MORE RELIABLE...** ...New DAVI MCP Angle Roll!



MODEL			МСР								
			30	32	36A	36	40	52			
	la	flat on edge	9 7/8" x 2 3/8" ø83"	9 7/8"x 3 1/8"x ø75"	9 7/8"x 4" ø79"	15 3/4"x 3 1/8" ø83"	20" x 5" 3/16 ø120"	20" x 6" ø120"			
	2 a	flat on flat	18 1/2" x 3 3/16" ø55"	19 11/16"x 3 9/16"x ø47"	19 11/16" x 4 3/8" ø59"	25 1/2"x 3 15/16"ø59"	40" x 6" ø75"	40" x 7" ø160			
-	3 a	square bar	6 5/16" Ø87"	7 1/16"x ø87"	7 7/8" ø98"	9 7/16" ø87"	12" ø100"	14" ø120"			
	4 a	round bar	7 1/6" ø79"	8" ø87"	8 11/16" ø87"	10 1/4" x ø79"	15" ø100"	17" ø160"			
-	5 a**	Angle leg out	8" x 8" x 1 1/16" ø78"	8" x 8" x 1 1/16" ø71"	8" x 8" x 1 1/16" ø67"	8" x 8"x 1 1/16" ø63"	8" x 8" x 1 1/4" ø60"	8" x 8" x 1 1/4" ø60"			
	6 a**	Angle leg in	8" x 8" x 1" ø78"	8" x 8" x 1 1/16" ø98"	8" x 8" x 1 1/16" ø78"	8" x 8" x 1 1/16" ø70"	8" x 8" x 1 1/4" ø70"	8" x 8" x 1 1/4" ø70"			
	7 a	T section leg out	WT 8" x 50# ø70"	WT 8" x 50# ø70"	WT 8" x 50# ø60"	WT 8" x 50# ø50"	WT 8" x 50# ø50"	WT 8" x 50# ø50"			
	8 a	T section leg in	WT 8" x 50# ø100"	WT 8" x 50# ø100"	WT 8" x 50# ø80"	WT 8" x 50# ø60"	WT 8" x 50# ø60"	WT 8" x 50# ø60"			
-	9 a	T section on one side	WT 8" x 50# ø80"	WT 8" x 50# ø80"	WT 8" x 50# ø60"	WT 8" x 50# ø50"	WT 8" x 50# ø50"	WT 8" x 50# ø50"			
	10 a*	rectangular hollow section	9 7/8" x 4 15/16" x 1/2"	9 7/8" x 4 15/16" x 1/2"	11"x 5 5/16" x 1/2"	16 9/16" x 8"x 1/2"	26" x 24" x 3/4"	26" x 24" x 1"			
11-11-11	11 a*	square hollow section	9" x 9" x 1/2"	8 7/8"x 1/2"	10 1/4" x 1/2"	16" x 16" x 5/8"	20" 1/4 x 3/4"	24" x 7/8"			
	12 a**	channel leg out	MC 18" x 58# ø38"	MC 18" x 58# ø38"	MC 18" x 58# ø38"	MC 18" x 58# ø60"	MC 18" X 58# ø60"	MC 18" X 58# x ø60"			
	13 a**	channel leg in	MC 18" x 58# ø40"	MC 18" x 58# ø40"	MC 18" x 58# ø40"	MC 18" x 58# ø60"	MC 18" X 58# ø60"	MC 18" X 58# x ø60"			
-	14 a**	S beam easy way	S 20" x 96# ø60"	S 24"x 121#ø98"	S 24" x 121# ø90"	S 24"x 121# ø87"	S 24"x 121#ø87"	S 24"x 121# ø87"			
1	15 a**	WF beams easy way	W 16" x 10,25" x 77# ø80"	W 18"x 11" x 119# ø98"	W 18" x 11" x 119# ø80"	W 33" x 15,8 x 241# ø200"	WF 40" 397# ø200"	WF 40" 397#x ø200"			
00	16 b*	tube	14" SCH 20 ø472"	16" SCH 10 ø590"	18" SCH 10 ø590"	22" SCH 30 ø393"	26" SCH 10 ø780"	28"x SCH 30 ø130'			
0-0	17 b*	tube	12" SCH 40 ø160"	14" SCH 40 ø200"	16" SCH 40 ø300"	20" SCH 40 ø600"	24" SCH 40 ø600"	24"x SCH 40 ø68'			
	18 a**- c**	channel hard way	MC 12" x 50# ø350"	MC 12"x 50# ø275'	MC 13" x 50# ø787"	MC 18" x 58# ø700"	MC18" x 58# ø700"	MC 18" 58# ø60'			
	19 a**- c**	S beam hard way	S 12" x 50# ø590"	S 15" x 50# ø787"	S 15" x 50# ø590'	S 20" x 96# ø787"	S 24" 121# ø150'	S 24" 121#x ø 75'			
-	20 a**- c**	WF beam hard way	WF 12" x 6,5" x 35# ø500"	WF 12"x 8" x 50# ø450"	WF 12" x 12" x 87# ø590"	WF 21" x 12,34" x 111# ø1580"	WF 33 x 130# ø250'	WF 40" 199# ø190'			
Section modulus		W Inch <sup>3</sup>	21.3 - 70.1	36.6 - 103.7	36.6 - 115.9	61 - 262.4	210 - 470	430 - 770			
Shafts ø		Inch	11 13/16" - 11 1/32"	12 19/32" - 12 19/32"	14 11/64" - 14 11/64"	14 11/64" - 14 11/64"	16 1/2" - 16 1/2"	20 1/2" - 16 1/2"			
Rolls ø (external)		Inch	29 9/64"	30 45/64"	31 1/2"	31 1/2"	33"	33"			
Electric (60Hz) Power		HP	96	120	120	150	180	275			
Rolling Speed		Feet/min	23	23	23	23	23	23			

a = Universal rolls; b = special rolls; c = special equipment

Additional set of special rolls might be necessary to reduce physical deformations. A set of special, customized rolls, ordered on request, with additional price, that matches exactly the section shape, will minimize the distortions, allowing to achieve the best results. The above mentioned capacities are based on sections in mild steel with a maximum of 270 N/mm<sup>2</sup> of Elastic Yield Point and 400 N/mm<sup>2</sup> UTS, rolled down to the stated diameters in one or a few passes. Capacities can be increased when rolling larger diameters. Tighter diameters can be achieved on lighter capacities\*\*. Harder material reduces the announced capacities.

\*On this hollow section, due to its structural weakness, the achievable diameter heavily depends on the section distortion and deformation, rather than on the machine power.

To reduce distortion it is suggested to fill up the hollow section with sand and/or to use special tools.

\*\* For smaller sections than those listed, a set of further parts could be required (spacers and parts for the special equipment), therefore a technical analysis is recommended for a better evaluation.



**DAVI** manufactures high quality section bending machines, the perfect machine for any type of beams, sections and pipes, especially the heaviest. These machines can be equipped with many different accessories, to provide the most ergonomic and productive solutions. **DAVI** provides the most user friendly **AUTOMATION**, with software from the simplest to the most technically advanced for angle rolls.

**DAVI** products portfolio includes 3 and 4 roll plate rolls, with capacity in thickness up to 16" and in width up to 40', suitable for any applications, particularly the heavy duty ones.



#### **DAVI** partner



DAVI, Inc.

Sales and Technical Center 4460, Spring Valley Road 75244 Dallas, TX Ph. (972) 661-0288

Logistic Center Rockford, IL