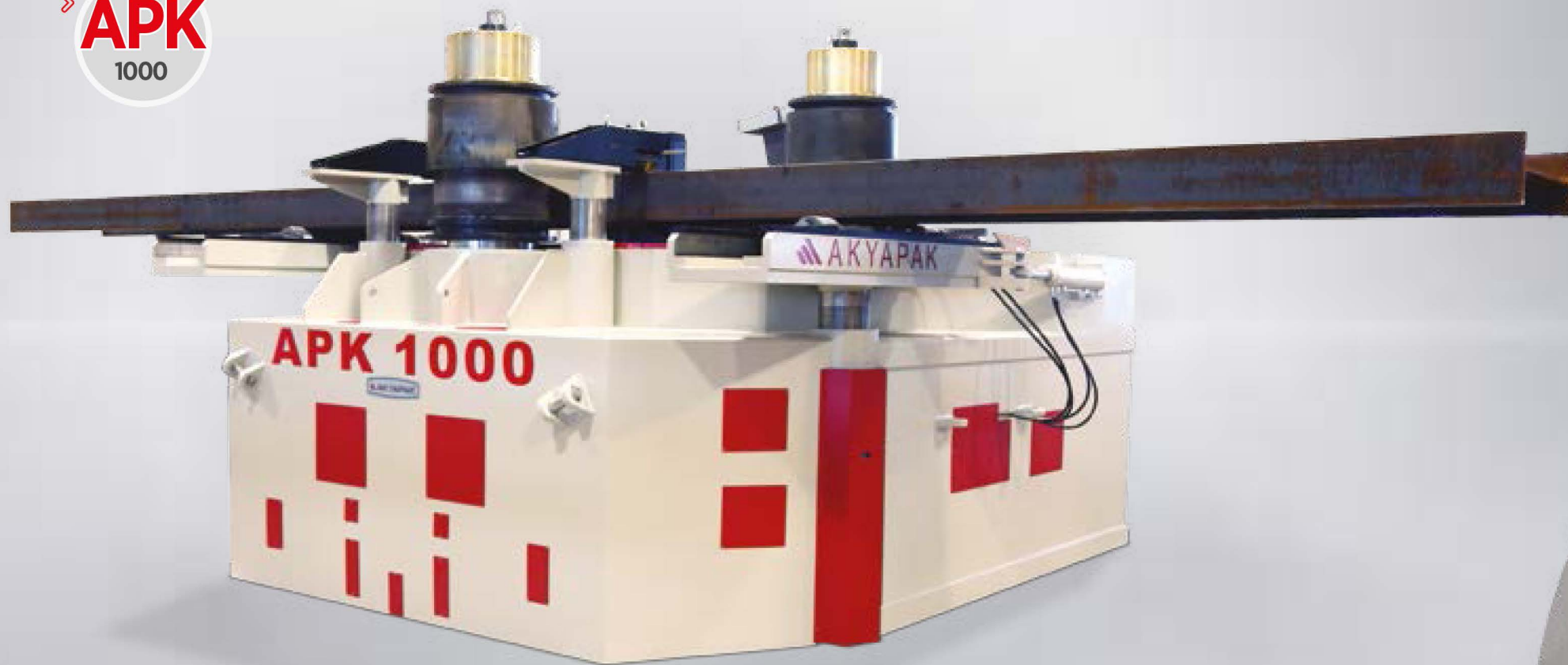


› Angle Rolls

We Exceeded
The Limit On Angle Rolls

› **APK**
1000





THE HUGE PROFILE BENDING MACHINE

THAT COMPETES WITH
THE HEAVY INDUSTRY
CAN BEND

HEB 1000

In 1970 inch diameter



» **APK**
1000



APK 1000

THE STRONGEST PROFILE
BENDER EVER
PRODUCED IN TURKEY
ALSO ONE OF THE BIGGEST
IN THE WORLD !

AKYPAK offers extensive alternatives on heavy duty profile bending machines as well. Our machines are strong and reliable with their St-52 weld construction body. Minimum flexion causes less deformation, by the help of our machines' enlarged roll diameters. By the help of big measurements of bearings, durability and high bending momentum can be obtained.

The power of hydraulic cylinders enables to bend the larger parts without difficulty. Practical and universal rollers creates the possibility of easiness for bending various sections, and this feature gives the opportunity of being more powerful and robust. Akyapak Profile Bending Machines are 3 rolls driven.

This feature allows to have a possibility to make the high capacity bending processes real. Secondly, our 3 Rolls Driven machine minimizes the slipping of the materials during the bending process. The two bottom rolls are hydraulically driven and they can move independently with each other.

Therefore, in comparison with the machines which are top roll drive, the features of our machines enhance the ability of operators and give the opportunity to make pre-bending process on both edges. Side supporters can move towards three directions to reduce the deformations and to facilitate bending processes, especially with angles and spirals.

» **APK**
550



» Standard Features

- Welded steel construction (St-52) body.
- Rolls are driven by 3 separate hydraulic motors.
- Infinitely variable speed of rotation
- Special steel gears
- Shafts are made of special steel, hardened and grinded.
- Manual lubrication
- Guide rolls are hydraulically adjustable.
- Lower rolls are hydraulically moveable up and down.
- Infinitely variable speed of lower rolls moves down-up
- Digital display for lower rolls
- Seperate and moveable control panel
- Horizontal working
- 400 Volt/50-60 Hz
- AKYPAK Service assurance
- Certified by CE, ISO9001 - 2008, TSEK and TURQUM.



» Optional Features

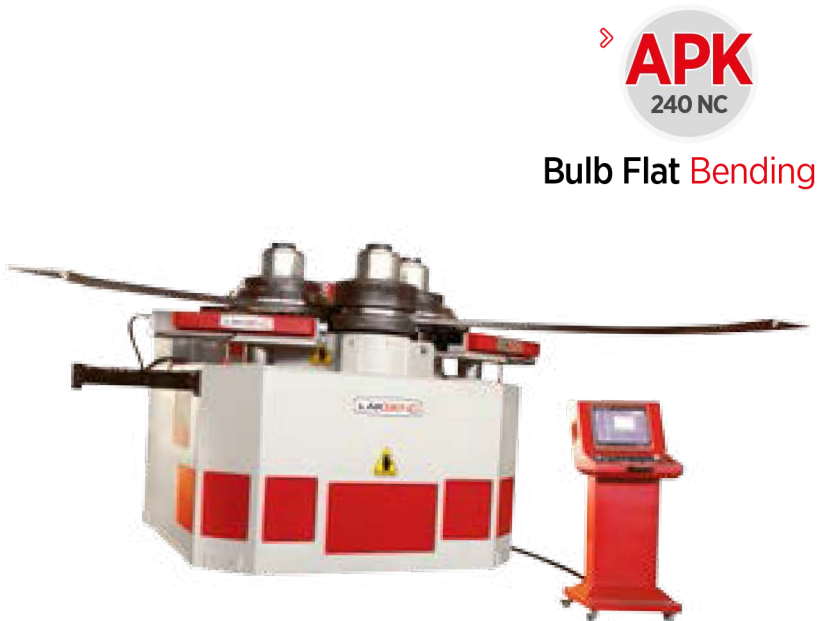
- Special rolls for tubes, profiles and angles
- Special tooling system for bending H, I, U profiles
- Digital display for hydraulic guide rolls
- NC Playback Control System
- CNC Graphic Control System
- Joystickcontrol
- Motors in variable voltage and frequency
- Different rotation speeds



» **APK**
300NC



» **APK**
330
Special Production



» **APK**
240 NC
Bulb Flat Bending



» **APK**
180



» **APK**
121



» **APK**
101

» Standard Features

- Steel (St-52) construction body
- On APK101 and APK121, the rolls are driven by a hydraulic motor+planetary gearbox and gears.
- Shafts are made of special steel, hardened and grinded.
- On APK101, guide rolls are adjustable manually in one direction.
- On APK121, guide rolls are hydraulically adjustable in two directions.
- One set standard rolls
- Manual lubrication
- Hydraulically moveable lower rolls up and down.
- Digital display for lower rolls
- Separate and moveable control panel
- Horizontal & vertical working
- 400 Volt / 50-60 Hz
- Certified by CE, ISO9001 – 2008, TSEK and TURQUM.

» Optional Features

- Special rolls for tubes, profiles and angles
- Special mechanic guide Rolls for bending angles (for APK 101)
- Special tooling systems for bending U,I,H profiles
- Spiral bending device
- Variable speed of rotation
- Hydraulically adjustable guide rolls in two directions (for APK 101)
- Digital display for hydraulic guide rolls
- NC Playback Control System
- CNC Graphic Control System
- Motors in variable voltage and frequency.



» **APK**
101 CNC

» **APK**
81 CNC



» **APK**
61



» Standard Features

- Steel (St-52) construction body.
- On APK61-81, rolls are driven by hydraulic motor+planetary gearbox and gears.
- Shafts are made of special steel (42CrMo4), hardened and grinded.
- One set standard rolls
- Lower rolls hydraulically moveable up and down.
- Digital display for lower rolls
- Separate and moveable control panel
- Guide rolls are adjustable manually in one direction.
- Manual lubrication
- Horizontal & Vertical working
- Certified by CE, ISO9001 – 2008, TSEK and TURQUM.

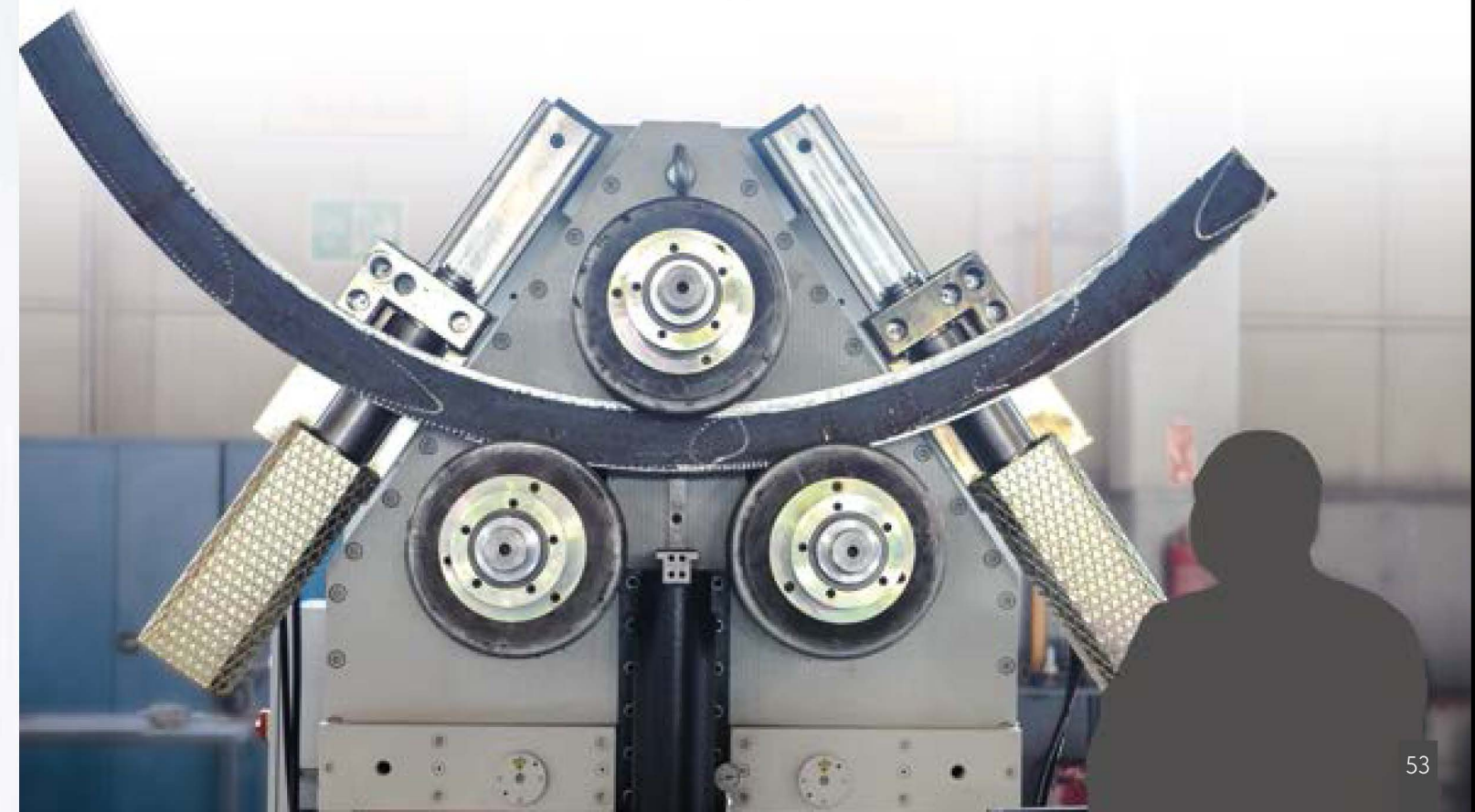
» Optional Features








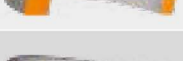










- Special rolls for tubes, profiles and angles
- Adjustable guide rolls for angle profiles
- Spiral bending device
- Variable speed of rotation
- Motors in variable volt and frequency
- For APK81, hydraulically adjustable guide rolls in two directions.
- Digital display for hydraulic guide rolls
- NC Playback Control System
- CNC Graphic Control System

» **APK**
61








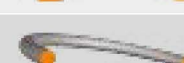









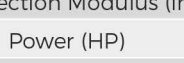


HORIZONTAL WORKING



TECHNICAL SPECIFICATIONS			APK 1000 SIZE AND DIAMETER		APK 800 SIZE AND DIAMETER		APK 550 SIZE AND DIAMETER		ROLLS
			inch	inch	inch	inch	inch	inch	
1		Angle leg out	L8x8 x1-1/4	135	L8x8 x1-1/4	70	L8x8x1	51	AD
2		Angle leg in	L8x8 x1-1/4	135	L8x8 x1-1/4	80	L8x8x1	59	AD
3		Angle leg out	L8x8 x1-1/4	135	L8x8 x1-1/4	80	L8x8 x1-1/8	51	AD
4		T section leg in	WT7x404	135	WT8	60	WT8	79	AD
5		T section leg side	WT7x404	135	WT7x365	80	WT8	71	AD
6		Plate hard way	20x6	120	20x5	120	18x2-3/8 12x4	118 51	A
7		Plate easy way	40x7	120	40x6	70	26x5	67	
8		Square	14x14	120	12x12	100	11x11	100	A
9		Round	16-1/2	150	14	90	12	100	B
10		Tube	24 SCH80	750	24 SCH40	600	22 SCH40	700	B
11		Square tube	24x3/4	-	20x3/4 20x20x0.625	-	20x3/4	-	B
12		Channel easy way-legs out	MC18x58#	135	MC18x58#	60	MC18x58#	60	B
13		Channel easy way-legs in	MC18x58#	135	MC18x58#	60	MC18x58#	600	B
14		Beam easy way	W40x593#	200	W40x503#	200	W33x241#	200	B
15		Beam easy way	W40x593#	200	W36x527#	200	W36x210#	200	B
16		Channel hard way	MC18x58#	700	MC18x58#	700	MC18x58#	700	BC
17		Beam hard way	W40x183#	2000	W30x132#	2500	W24x117#	150	BC
18		Beam hard way	W40x211#	1400	W24x162#	1300	W16x100#	108	BC
Max. Section Modulus (in ³)			427-671		244-550		335		
Power (HP)			214		161		133		
Roll Dia. (inch)			33		34		31.5		
Shaft Dia. (inch)			20.47/16.5		15.75/15.75		14.17/14.17		
Bending Speed (feet/min.)			2		23		23		
Weight (lbs)			188.000		165.570		135.600		
WxLxH (feet)			19,7x24,0x13,8		18,0x22,7x14,1		15,8x21,6x14,2		

Data indicated above are based on steel with yield point 34,800 PSI. All specifications are subject to change without prior notice.

TECHNICAL SPECIFICATIONS			APK 360 SIZE AND DIAMETER		APK 300 SIZE AND DIAMETER		APK 280 SIZE AND DIAMETER		ROLLS
			inch	inch	inch	inch	inch	inch	
1		Angle leg out	L8x8 x1-1/4	60	L8x8x1-1/8	80	L8x8x1	120	AD
2		Angle leg in	L8x8 x1-1/4	70	L8x8x1	100	L8x8x3/4	140	AD
3		T section leg out	WT8	50	WT8	70	WT8	100	AD
4		T section leg in	WT8	60	WT8	100	WT8	120	AD
5		T section leg side	WT7x213	60	WT7x116,5	70	WT8	100	AD
6		Flat hard way	16x2-3/8	120	10x2-1/2	80	8x2	80	A
7		Flat easy way	22x4	70	20x3	80	16x3	80	A
8		Square	10x10	100	6x6	80	5-1/2x5-1/2	60	A
9		Round	10-1/2	80	7	80	6	59	B
10		Tube-Pipe	20 SCH40	600	12 SCH40	160	10 SCH40	160	B
11		Square tube	16x5/8	-	9x1/2	-	7x1/2	-	B
12		Channel easy way - legs out	MC18x58#	60	MC18x58#	40	MC18x58#	60	B
13		Channel easy way - legs in	MC18x58#	60	MC18x58#	40	MC18x58#	60	B
14		Beam easy way	W33x241#	200	W16x77#	80	W16x67#	80	B
15		Beam easy way	W36x210#	200	W21x93#	80	W18x76#	100	B
16		Channel hard way	MC18x58#	700	MC12x50#	350	MC10x41,1#	450	BC
17		Beam hard way	W24x117#	150	W12x35#	500	W10x33#	400	BC
18		Beam hard way	W16x100#	108	W10x39#	400	W8x40#	400	BC
Max. Section Modulus (in ³)			287		42.7		36.6		
Power (HP)			95		87		37		
Roll Dia. (inch)			31.5		29.1		26.0		
Shaft Dia. (inch)			14.17/14.17		11.81/11.00		11.00/10.24		
Bending Speed (feet/min.)			23		23		0-23		
Weight (lbs)			105.820		59.084		40.785		
WxLxH (feet)			15,8x21,6x13,4		11x14,3x7,4		9,4x12,5x7,3		

A: Standard rolls B: Special rolls C: Pulling device D: For bending without deformation and for serial production special rolls are requested

TECHNICAL SPECIFICATIONS			APK 240 SIZE AND DIAMETER		APK 180 SIZE AND DIAMETER		ROLLS
			inch	inch	inch	inch	
1		Angle leg out	L6x6x1	100	L6x6x5/8	85	AD
2		Angle leg in	L6x6x1	130	L5x5x3/4	85	AD
3		T section leg out	WT6	90	WT6	60	AD
4		T section leg in	WT6	110	WT5	65	AD
5		T section leg side	WT6	85	WT8	60	AD
6		Flat hard way	8x1-1/4	100	6x1-1/2	70	A
7		Flat easy way	12x2-1/2	45	10x2	40	A
8		Square	4-1/2	60	3-1/2	45	A
9		Round	5	50	4-3/8	55	B
10		Tube-Pipe	8 SCH40	100	6 SCH40	85	B
11		Square tube	6x3/8 6x6x0.375		5x5/16 4.5x4.5x0.313		B
12		Channel easy way - legs out	C15x50#	60	C12x30#	40	B
13		Channel easy way - legs in	C15x50#	70	C12x30#	45	B
14		Beam easy way	W12x53#	60	W8x31#	45	B
15		Beam easy way	W14x38#	60	W12x35#	45	B
16		Channel hard way	C8x18.75#	410	C7x12.25#	350	BC
17		Beam hard way	W8x21#	200	W6x16#	120	BC
18		Beam hard way	W6x25#	150	W5x19#	100	BC
Max. Section Modulus (in ³)			19.5		12.8		
Power (HP)			40		20		
Roll Dia. (inch)			21.65		18.11		
Shaft Dia. (inch)			9.45/8.66		7.1/6.3		
Bending Speed (feet/min.)			0-23		0-23		
Weight (lbs)			38.580		20.400		
WxLxH (feet)			7.4x11.0x6.8		6.6x7.9x5.6		

Data indicated above are based on steel with yield point 34,800 PSI. All specifications are subject to change without prior notice.

A: Standard rolls
B: Special rolls
C: Pulling device
D: For bending without deformation and for serial production special rolls are required.

TECHNICAL SPECIFICATIONS			APK 121 SIZE AND DIAMETER		APK 101 SIZE AND DIAMETER		ROLLS
			inch	inch	inch	inch	
1		Angle leg out	L2x2x3/16 L4x4x3/8 L5x5x1/2	26 43 52	L2x2x1/4 L3-1/2x3-1/2x5/16 L4x4x3/8	28 40 55	AE F F
2		Angle leg in	L2x2x1/4 L3x3x5/16 L4x4x1/2	26 35 44	L2x2x1/4 L3x3x5/16 L4x4x3/8	32 47 63	AE
3		T section leg out	WT5	48	WT4	48	A
4		T section leg in	WT5	48	WT4	40	A
5		T section leg side	WT5	51	WT4	48	A
6		Flat hard way	1-1/2x3/8 5x1	20 60	1-1/2x3/8 4x13/16 4x1	16 24 63	AF
7		Flat easy way	8x2	40	2x3/8 4x1-9/16 7-1/2x1-3/8	16 24 40	AF
8		Square	3	32	1 2-3/8	16 40	AF
9		Round	3-3/8	36	1-1/2 2-3/4	16 32	B
10		Tube-Pipe	2x0.79 6-1/4x0.157	24 118	2x0.79 5-1/2x0.118	24 118	B
11		Tube-Pipe	5 SCH40	70	2 SCH40 4 SCH40	16 63	B
12		Rectangle tube	2x5- 1/2x0.196		1-1/2x1x0.078 5-1/2x1-1/2x0.125	23 157	B
13		Square tube	3-1/2x0.312		2x0.100 4x0.196	20 157	B
14		Channel easy way - legs out	C8x22.8#	40	C7x12.75#	32	AD F
15		Channel easy way - legs in	C8x22.8#	47	C7x12.75#	32	AD F
16		Beam easy way	W6x20#	51	W4x14#	50	AD F
17		Beam easy way	S5x10#	98	S7x20# W6x16#	40 47	AD F
18		Channel hard way	C5x9#	315			CB
19		Beam hard way	S5x14.75#	98	S5x14.75#		CB
20		Beam hard way	W4x13# W6x16#	102 59			CB
Max. Section Modulus (in ³)			4.3 - 7.3		2.7 - 4.9		
Power (HP)			20		15		
Roll Dia. (inch)			15.35		12.4		
Shaft Dia. (inch)			4.72		3.94		
Bending Speed (feet/min.)			13		18		
Weight (lbs)			10.405		4.940		
WxLxH (feet)			4.8x6.5x6.7		4.9x5.4x6.9		

Data indicated above are based on steel with yield point 34,800 PSI. All specifications are subject to change without prior notice.

A: Standard rolls
B: Special rolls
C: Pulling device
D: For bending without deformation and for serial production special rolls are required.
E: Angle device
F: Stretching device

			inch	inch	inch	inch	
1		Angle leg out	L1-3/8x1-3/8x1/8 L2-1/2x2-1/2x5/16 L3x3x3/8	20 47 63	L1-1/8x1/8 L2x2x1/4	10 40	AD
2		Angle leg in	L1-1/2x1-1/2x1/8 L2-1/2x2-1/2x3/8 L3x3x3/8	24 40 78	L1-1/8x1/8 L2x2x3/16	16 40	AD
3		T section leg out	3x3x5/16	55	2x2x1/4	24	A
4		T section leg in	3x3x5/16	55	2x2x1/4	28	A
5		T section leg side	1-9/16x3/8 3x1 4-13/16	12 28 82	1-3/4x3/8 2-3/8x13/16 3-1/8x1	9 20 83	A
6		Flat hard way	2x3/8 4-3/4x1-1/8	11 24	2x3/16 3x3/4	8 48	A
7		Flat easy way	1-3/8 1-3/4	12 40	5/8 1-3/8	14 55	A
8		Square	1-3/8 1-3/4	12 20	3/4 1-1/2	14 32	B
9		Round	1-1/2x0.078 4x0.0125	16 118	1x0.060 2-3/4x0.078	8 63	B
10		Tube-Pipe	1-1/2 SCH40 3 SCH40	16 63	3/4 SCH40 2 SCH40	8 40	B
11		Rectangle tube	4x1-1/2x0.125	118	3-1-1/8X0.0125	266	B
12		Square tube	2-3/4x0.157	118	2x0.125	157	B
13		Channel easy way - legs out	5.5x2-3/8x5/16	48	3x2x1/4	32	D
14		Channel easy way - legs in	5.5x2-3/8x5/16	48	3x2x1/4	32	D
15		Beam easy way	S5x14.75	20			D
Power (HP)			6.8		5.4		
Roll Dia. (inch)			9.65		6.97		
Shaft Dia. (inch)			3.15/3.15		2.36/2.36		
Bending Speed (feet/min.)			13		21		
Weight (lbs)			3.285		2.140		
WxLxH (feet)			4.43x5.25x6.1		3.12x4.60x4.76		

Data indicated above are based on steel with yield point 34,800 PSI. All specifications are subject to change without prior notice.

A: Standard rolls
B: Special rolls
C: Pulling device
D: For bending without deformation and for serial production special rolls are required.



Industry Applications

