

CENTURION PIPE BENDING MACHINE 22"-36"



- The New Centurion Bender offered by CRCEvans is the next generation of the state-of-the-art Bending Machines.
- Following is a list of new features which truly highlight the superiority of our design.
- Outboard cylinder travel is now 68% faster than our standard machine by improvement to the hydraulic system design.
- Bending cylinder force is now 39% greater than standard machine by increased cylinder size and higher pressure rating.
- Through re-engineering efforts a stronger frame was designed to now offer increased bending capacity. (See Sheet A6 for improved specifications)
- Hydraulic pump automatically adjusts output and pressure to engine horsepower, thus obtaining maximum benefit in speed and bending force under all conditions.
- Rated pressure has been raised from 2200 psi to 2500 psi.
- Newly supplied diesel engine designed for rugged dependability under all weather conditions.
- The hydraulic system has a larger hydraulic tank and incorporates a hydraulic oil cooler allowing cooler hydraulic oil operating temperatures. By mounting the engine and air compressor platform, (Air Compressor Optional) on the sides, the center of gravity is lower.

Pipe Bending General Data

ENGINE		Units
Mfg	CAT-Perkins	
Model	C6.6	
Net Power	173/129	hp/kW
Speed	2,200	rpm
N° of Cylinders	6	
Bore x Stroke	4.1x5.0/105x127	inch/mm
Displacement	402/6.6	cu.inch/l
Fuel Tank Capacity	85/322	gal/l

HYDRAULIC		Units
Pump Type	Fixed Volume	
Maximum Flow	60/230	gpm/lpm
Operating Pressure	3,000/207	psi/Bar
Valve Type	Manual	
No. Sections	3 or 5	
Relief Valves	1 for each section + 1 main relief	
Filtration	10 Micron	

WINCH		Units
Type	Planetary	
Drive	Hydraulic	
Pulling Force	15,000/66	Lbf/kN
Cable Diamter	0.563/14	inch/mm

HYDRAULIC		Units
Outboard		
Bore	9/228	inch/mm
Stroke	19.25/489	inch/mm
Qty.	4	
Inboard		
Bore	7/179	inch/mm
Stroke	5/127	inch/mm
Qty.	4	
Pin Up		
Bore	6/152	inch/mm
Stroke	23/584	inch/mm
Qty.	1	

ELECTRICAL		Units
Voltage	12	VDC
No. Batteries	1	
Total Rating	190	Amp Hr @ 20 F
Alternator	100	Amp
Starter	3.3	kW

UNDERCARRIAGE		
Type	Track	30 ton

HYDR. MANDREL CONNECTIONS	
Qty.	4
Size	3/4"

Pipe Bending Data (Imperial)

Nominal Pipe OD	Maximum Wall Thickness by Grade						Recommended Bend			
	inch	X52	X60	X65	X70	X80	x100	Degree Arc (per foot)	Radius (feet)	Max degree per 40 foot joint
22	-	-	-	-	-	-	-	0.80	72.00	22.28
24	-	-	-	-	-	-	-	0.75	76.00	21.11
26	-	-	-	-	-	-	1.706	0.70	82.00	19.56
28	-	-	-	-	-	1.839	1.456	0.65	88.00	18.23
30	-	-	1.972	1.824	1.586	1.257	-	0.60	95.00	16.89
32	-	1.867	1.717	1.589	1.383	1.098	-	0.58	98.00	16.37
34	1.905	1.640	1.509	1.398	1.217	0.967	-	0.55	104.00	15.43
36	1.686	1.453	1.338	1.239	1.080	0.859	-	0.50	115.00	13.95

*Based on 85% efficiency and maximum strength = 1.2 x X# x 1000.
These figures are recommended only and do not constitute a warranty

Pipe Bending Data (Metric)

Nominal Pipe OD	Maximum Wall Thickness by Grade						Recommended Bend			
	mm	X52	X60	X65	X70	X80	x100	Degree Arc (per meter)	Radius (meters)	Max degree per 12 meter joint
559	-	-	-	-	-	-	-	2.60	21.95	22.28
610	-	-	-	-	-	-	-	2.50	23.16	21.11
660	-	-	-	-	-	-	43.34	2.30	24.99	19.56
711	-	-	-	-	-	46.71	36.97	2.10	26.82	18.23
762	-	-	50.08	46.33	40.29	31.94	-	2.00	28.96	16.89
813	-	47.42	43.61	40.36	35.13	27.89	-	1.90	29.87	16.37
864	48.38	41.66	38.33	35.50	30.92	24.57	-	1.80	31.70	15.43
914	42.83	36.92	33.98	31.48	27.44	21.83	-	1.60	35.05	13.95

559mm - 914mm (CENTURION) PIPE BENDING DATA
ALLDIMENSIONS IN MILLIMETERS
Based on 85% efficiency and maximum strength.