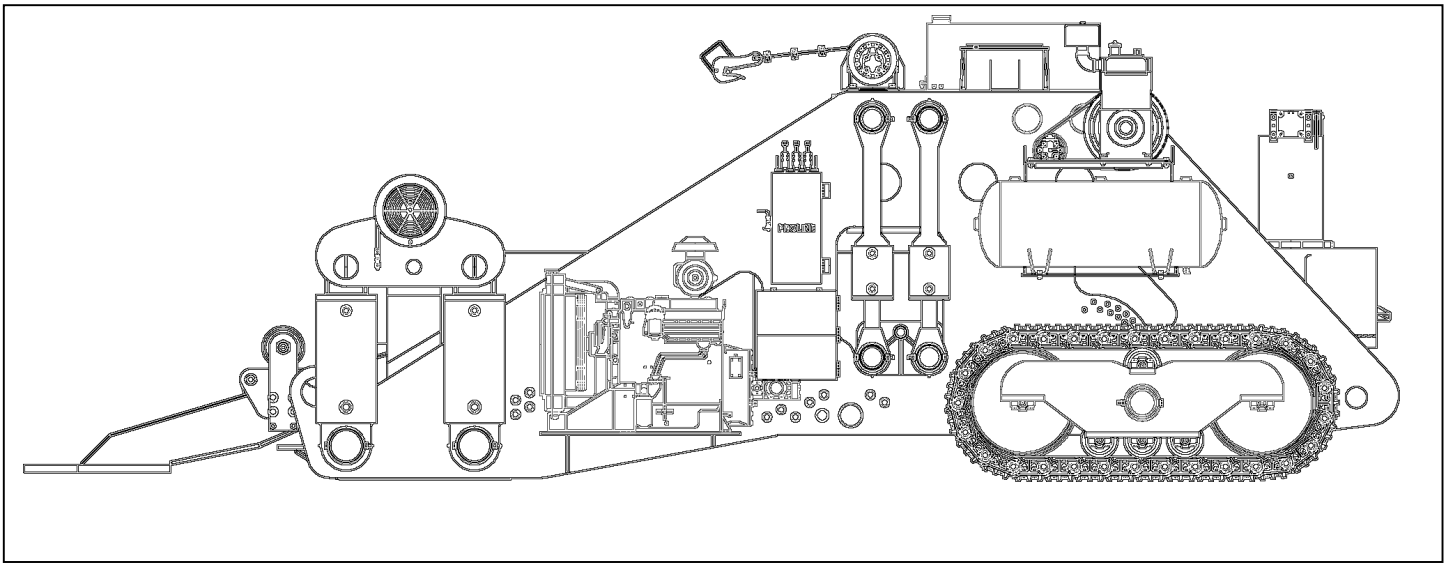
PROLINE HYDRAULIC PIPE BENDING MACHINES

RANGE 36” – 48”



MODEL Working Temperature Undercarriage Structure	**BM3648** -49ºF to 122ºF / -45ºC to 50ºC heavy-duty tractor style wide pad tracks High Strength Steel
ENGINE MODEL TYPE Power Electrical System Maintenance Free battery	Caterpillar or Cummins water-cooled diesel engine 230 HP 12 VOLT, ELECTRIC START YES
HYDRULIC SYSTEM Maximum Operating Pressure Pump Out board Cylinders Inboard Cylinders	 3,000 psi (210 kg/cm ≥) Vickers hydraulic vane pump Four 10” x 18” Four 8” x 5”
HYDRAULIC DRIVE WINCH Line pull Length of Cable Diameter of Cable	Pullmaster planetary P12 12,000 lbs. / 5,448 kgs. 100 feet /30.5 metres 5/8 / 15.9 mm
COMPRESSOR MODEL (Optional) Power @ 175 psi Maximum PSI ACFM @ 175 psig man. RPM Air Tank Capacity	Quincy QR25-390 7.5 - 20 HP / 5.59 – 14.9 kW 250 69.21 120 US gallon / 450 litre
Length Width Height Weight	32 feet / 9.90 metres 10 feet 10 inches / 3.30 metres 10 feet10 inches / 3.30 metres 125,000 lbs. / 56,750 kgs.

Proline Bending Machines are designed to bend each pipe size to +/- 40 times pipe diameter = bend radius

EACH PIPE SIZE WITHIN A MACHINE’S RANGE REQUIRES A DIFFERENT BENDING DIE SET.
SPECIALLY LINED BENDING DIE SETS, TO PREVENT DAMAGE WHEN BENDING PRE-COATED PIPE, ARE AVAILABLE.

SPECIFICATIONS AND DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE…SEE YOUR PROLINE REP FOR THE VERY LATEST DATA.

PROLINE BM36-48 PIPE BENDING MACHINE DATA

PIPE DIAMETER	MAXIMUM WALL THICKNESS BY GRADE (mm)				
Inches / mm	X42 - X52 To 59,800 p.s.i. yield	X60 To 69,000 p.s.i. yield	X65 To 74,750 p.s.i. yield	X70 To 80,500 p.s.i. yield	X80 To 92,000 p.s.i. yield
36 / 914.4	82.55	69.85	63.50	58.74	50.80
38 / 965.2	74.61	63.50	59.53	53.97	46.03
40 / 1016.0	66.67	56.35	51.59	47.63	41.97
42 / 1066.8	60.32	50.80	46.83	43.65	36.90
44 / 1117.6	53.50	46.00	41.97	38.80	33.73
46 / 1168.4	47.63	41.28	37.31	34.92	30.60
48 / 1219.2	43.66	38.89	35.72	32.54	28.57

PIPE DIAMETER	DEGREE PER ARC 30.5cm IN DIE	RECOMMENDED BEND BASED ON BENDING AT 1.5° PER PIPE DIAMETER		MAXIMUM BEND BASED ON BENDING MACHINE'S CAPABILITY	
Inches / mm		BEND RADIUS (M)	DEGREES IN 12M JOINT	BEND RADIUS (M)	DEGREES IN 12M JOINT
36 / 914.4	0.96	34.93	11.5	28.69	14.0
38 / 965.2	0.96	36.87	10.9	28.69	14.0
40 / 1016.0	0.96	38.81	10.4	28.69	14.0
42 / 1066.8	0.96	40.75	9.9	28.69	14.0
44 / 1117.6	0.96	42.69	9.4	28.69	14.0
46 / 1168.4	0.96	44.63	9.0	28.69	14.0
48 / 1219.2	0.96	46.57	8.6	28.69	14.0

Pipe ends not bendable, based on stiff back and pin-up fully loaded with pipe.

Stiff-back end 3.05M
Pin-up end 1.52M

(BENDING PIPE WITH STIFFBACK AND PINUP NOT FULLY LOADED WITH PIPE MAY CAUSE THE PIPE TO RUPTURE/BUCKLE)

The above figure are “average” and are based on the use of Proline Bending Mandrels and Proline Bending Die Sets, they may vary due to:

- The wall thickness of the pipe.
- The actual yield point of the pipe.
- The skill of the Bending Machine and Bending Mandrel operators.
- The type and quality of the pipe. (spiral seam pipe will normally accept 75% of the bend)