DENKSAN
MAKİNE MÜHENDİSLİK

PIPE BENDING MACHINE
DPBM 32''-42''

About Us

DENKSAN Machinery and Engineering Company has been supplying equipments to domestic and foreign oil, gas and water pipeline projects since 1985.

Our core production range includes the following equipments;

- Pipe Bending Machine
- Hydraulic Wedge mandrel
- Pipe internal and external clamps,
- Pipe lowering-in belts,
- Roller Cradles
- Pipe Rollers
- Pipeline pigs, temporary pig launcher and receivers,
- Flame pipe cutting machines,
- Welding tents and cabins, coils for holiday detectors,
- Tape wrapping machines, pipeline anticorrosion
- Tapes and coatings and special customized products.
- Welding Electrodes

DENKSAN supplies machinery and equipment to pipeline projects in Turkey as well as in U.A.E, Saudi Arabia, Italy, Germany, Kazakhstan, Azerbaijan, Algeria and Iraq.

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PIPE BENDING MACHINE 32''-42''

- Pipe bending machine produced 100% locally by DENKSAN is equipped with the latest technology hydraulic system.
- Machine is capable of bending all grades of currently available API-5L pipe within its range..
- Outboard cylinder travel is now 2x faster than our standard machine by improvement to the hydraulic system design.
- Bending cylinder force is now 1,5x 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.
- Hydro Control five-section hydraulic control valve provides bending and winch operation
- Hydraulic mandrel operation is a standard feature on all Denksan bending machine
- 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 Cummins QSB 6.7 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, on the sides, the center of gravity is lower.
- Hydraulic cylinders can be disassembled without cutting for ease of repair

Pipe Bending General Data

HYDRAULIC PISTONS	DESC.	UNITS
Outboard		
Bore	350	mm
Storke	500	mm
Qty	4	Pcs
Inboard		
Bore	250	mm
Storke	180	mm
Qty	4	Pcs
Pin Up		
Bore	190	mm
Storke	1350	mm
Qty	1	pcs

ENGINE	DESC.	UNITS
Mfg	Cummins Inc/GreatBritain	
Model	6BT5.9-C	
Net Power	112/152	KW/HP
Speed	2500	RPM
N of Cylinders	6	Cylinders
Type	In-line, 4 stroke	+4
Displacement	6.7	L
Intake System	Turbocharged and Aftercooled	
Electrical System	12/24	V
Emission	China stage III, Euro stage IIIA	
Max Torque	949/1500	N.m/RPM

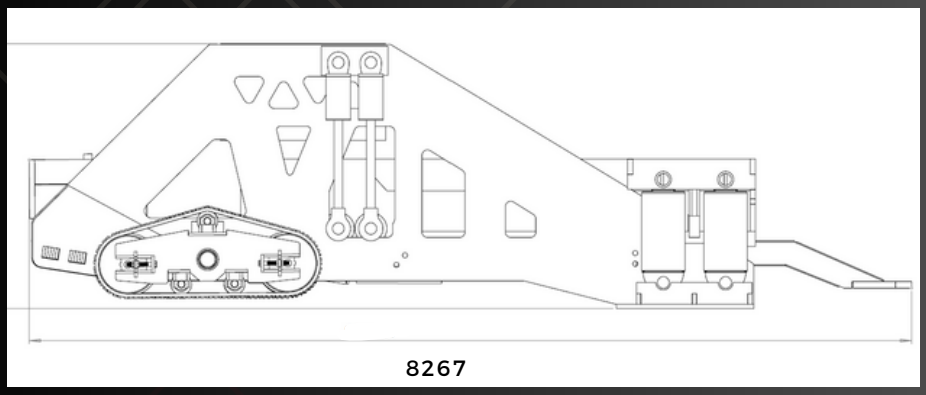
WINCH	DESC.	UNITS
Mfg	KMS Winch	
Type	Planetary	
Drive	Hydraulic	100 bar
Pulling Force	120	kN
Cable Diameter	20	mm

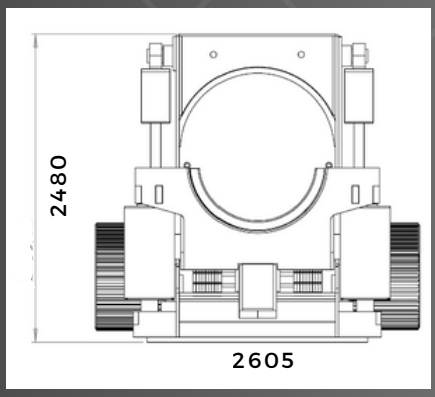
HYDRAULIC MANDREL CONNECTIONS	
Qty	4
Size	1/2 ”

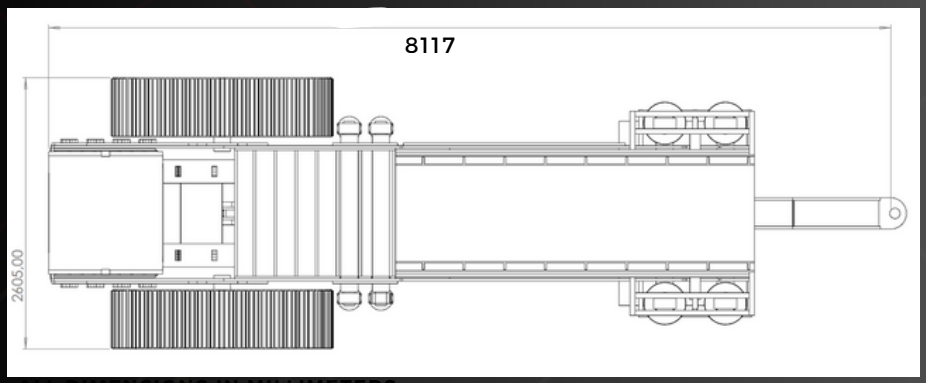
ELECTRICAL	UNIT
Voltage	24 V-DC
Number of Batteries	2 X90 Amper
Total Rating	180 Amper

HYDRAULIC SYSTEM	DESC.	UNITS
Mfg	Kawasaki/U.K.	
Model	K3VL200	
Pump Type	Fixed Volume	
Maximum Flow	200	cc/dev
Operating Rressure	350	bar
Peak Pressure	400	bar
Walve Type	Manual	
RotationWay	R	
Control Type	load sensitive pressure control	
Relief Valves	1 for each section	
Filtration	10	Micron
Hydraulic Tank Capacity	580	Liters

Pipe Bending Dimensional Data

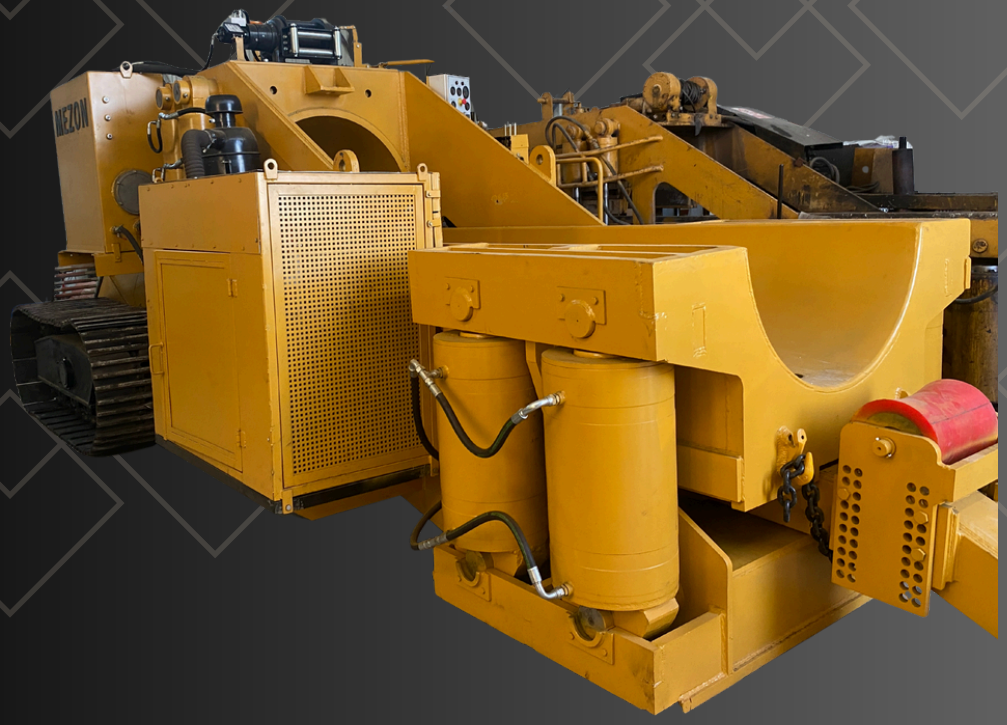






ALL DIMENSIONS IN MILLIMETERS

Pipe Bending Data



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
36	-	-	-	-	-	-	0.50	115.00	12.46
38	-	-	-	-	-	-	0.50	115.00	12.46
40	-	-	-	-	-	1.840	0.50	115.00	12.46
42	-	-	-	-	-	1.660	0.50	115.00	12.46
44	-	-	-	-	1.897	1.506	0.50	115.00	12.46
46	-	-	-	1.983	1.727	1.372	0.50	115.00	12.46
48	-	-	1.958	1.813	1.580	1.256	0.50	115.00	12.46

***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
914	50.80	50.80	50.80	50.80	50.80	50.80	1.60	35.05	12.46
965	50.80	50.80	50.80	50.80	50.80	47.40	1.60	35.05	12.46
1,016	50.80	50.80	50.80	50.80	47.40	42.04	1.60	35.05	12.46
1,067	50.80	50.80	50.80	49.02	42.04	37.64	1.60	35.05	12.46
1,118	50.80	50.80	47.63	43.74	37.64	33.99	1.60	35.05	12.46
1,168	50.80	46.84	42.77	39.37	33.99	30.84	1.60	35.05	12.46
1,219	49.73	42.32	38.71	35.69	30.84	29.97	1.60	35.05	12.46

- 914mm - 1,219mm PIPE BENDING DATA - ALL DIMENSIONS IN MILLIMETERS
- Based on 85% efficiency and maximum strength = 1. 2 x X# x 1000.

ALLDIMENSIONS IN MILLIMETERS
Based on 85% efficiency and maximum strength.

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