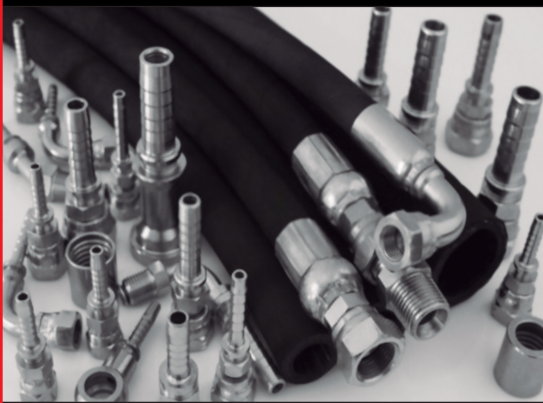



**Benchmark Machines**


BENCHMARK MACHINES

Hydraulic & Pneumatic Systems

CONTACT US

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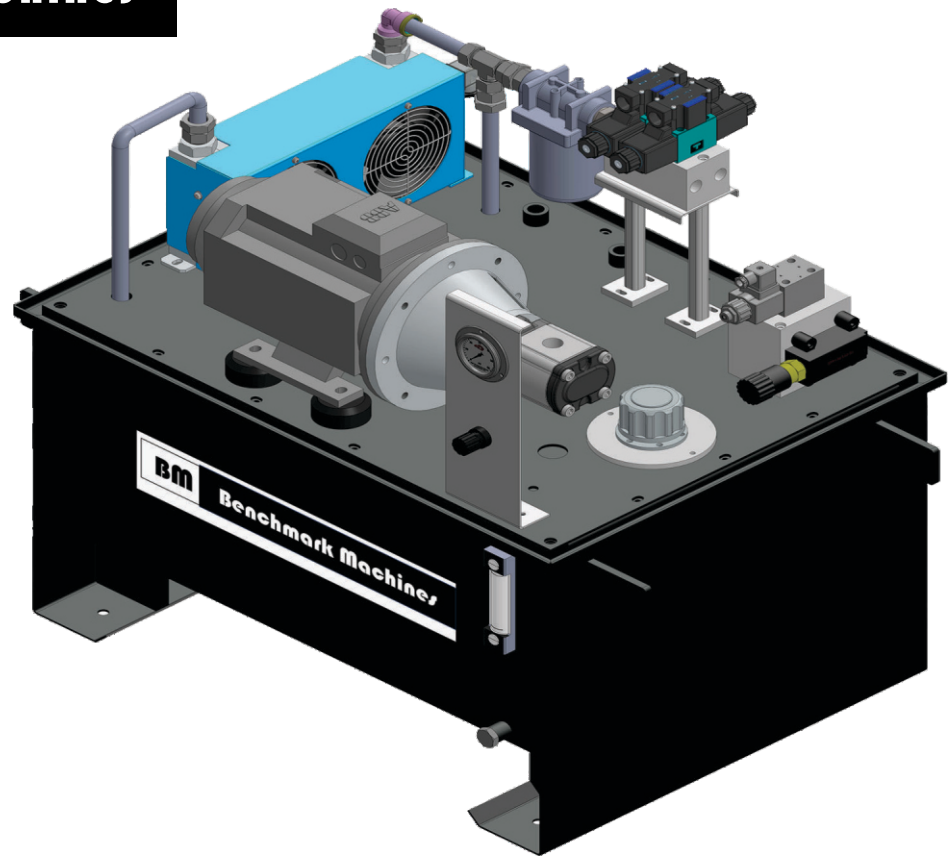
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Hydraulic power pack is a self-contained system that generally includes a motor, a fluid reservoir and a pump. It works to apply the hydraulic pressure needed to drive motors, cylinders and other complementary parts of a given hydraulic system.

Specifications

- Power Supply - AC /DC
- Tank - Upto 2000 Liter
- Oil Flow - Upto 500 LPM
- Motor - Upto 75 kW
- Pressure - Upto 700 Bar
- Controls - Solenoid Operated / Manual
- Cooling System - Air Cooled / Water Cooled

Applications

- Paper Industry
- Cement Industry
- Cranes
- Presses
- Bailers And Compactors
- Agricultural Machines
- Processing Machines
- Punching Machines
- Injection Moulding Machines
- Lifting Equipment
- Marine Applications

HYDRAULIC CYLINDERS

BM Benchmark Machines

Hydraulic cylinder is a mechanical actuator that is used to give a unidirectional force through a unidirectional stroke. We generally manufacture hydraulic cylinders as per ISO standards & also as per customer's specification.

Types

Single Acting
Double Acting



Designs

Tie Rod Design

Operating Pressure - 210 bar
Speed - Upto 5 m/s



Mobile Design

Operating Pressure - 210 bar
Speed - Upto 5 m/s



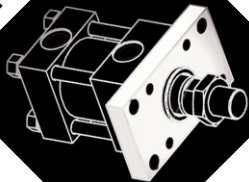
Heavy Duty Design

Operating Pressure - 400 bar
Speed - Upto 5 m/s

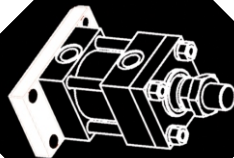


Mountings

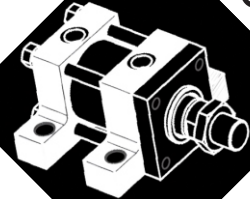
FRONT FLANGE



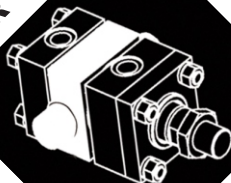
REAR FLANGE



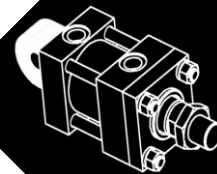
FOOT MOUNTING



CENTER TRUNION



REAR CLEVIS



*Available With Higher Specifications Of Working Pressure, Temperature & Speed.

HYDRAULIC POWER PACKS, CYLINDERS, AIR COOLED OIL COOLERS, PRESSES & SPMs



Air cooled oil cooler is a heat rejection equipment where the excess process heat from oil is rejected to the atmosphere. It works on the principle of convection and conduction to dissipate heat from process fluid to air.

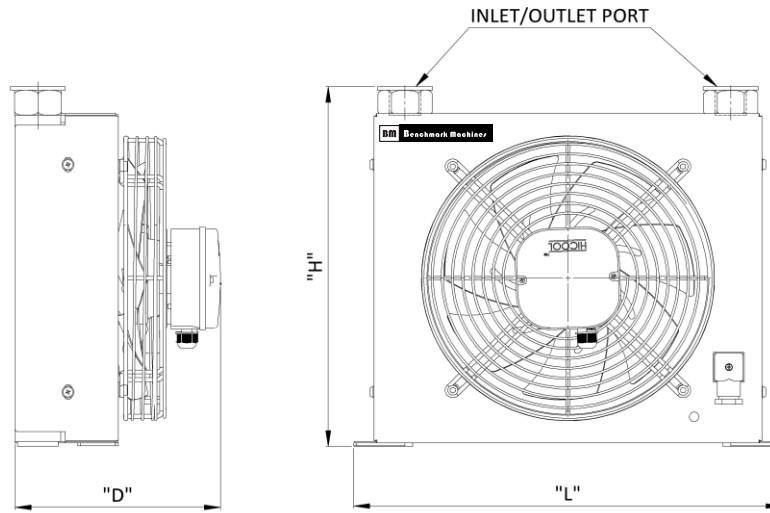
Applications

- Hydraulic Power Packs & Presses
- Lubrication Systems
- Injection Moulding Machines
- Quenching Applications
- Cement Plants
- Crushers Plants
- Gear Boxes
- CNC Machines

Specifications

- Specific Heat Dissipation Capacity : Upto 4.25 kW/°C
- Oil Flow Range : Upto 400 LPM
- Maximum Working Pressure : Upto 20 Bar
- Power Supply / Voltage : 12 VDC / 24 VDC / 230 VAC / 415 VAC

AIR COOLED OIL COOLERS DATA SHEET



SERIES	MODEL NO.	COOLING CAPACITY (kW)			HYDRAULIC SYSTEM (HP)	OIL FLOW CAPACITY (LPM)	FAN SIZE	MAX. WORKING PRESSURE (BAR)	PORT SIZE	WEIGHT (KG)	DIMENSION L x H x D (MM)
		SPECIFIC	Δ15°C	Δ30°C							
BM-L	BM-L-0608	0.05	0.7	1.4	Drain Line	10	6"	10	3/8" BSPT	2.6	250x230x115
BM-W	BM-W-0608	0.04	0.7	1.3	1 ~ 2	20	6"	15	1/2" BSP	3.7	335x206x105
	BM-W-0608-2F	0.06	1.0	1.9	1 ~ 2	20	2 x 6"	15	1/2" BSP	5.2	435x206x105
BM-H	BM-H-0608	0.05	0.7	1.5	2 ~ 3	60	6"	20	3/4" BSP	4.2	335x200x115
	BM-H-0608-2F	0.10	1.5	2.9	3 ~ 5	60	2 x 6"	20	3/4" BSP	6	435x200x115
	BM-H-1012	0.20	2.9	5.9	7.5 ~ 10	100	10"	20	1" BSP	10	425x365x200
	BM-H-1215	0.28	4.2	8.4	12.5 ~ 15	100	12"	20	1" BSP	15	525x390x215
	BM-H-1418	0.39	5.9	11.8	15 ~ 20	100	14"	20	1" BSP	18	575x430x285
	BM-H-1428	0.44	6.6	13.2	20 ~ 25	200	14"	20	1-1/4" BSP	23	580x420x290
	BM-H-1490	0.72	10.8	21.6	25 ~ 30	250	14"	20	1-1/2" BSP	32	560x625x300
	BM-H-1680	0.90	13.4	26.9	30 ~ 50	250	16"	20	1-1/2" BSP	37	560x625x320
BM-H-1890	1.06	16.0	31.9	50 ~ 75	300	18"	20	2" BSP	55	655x795x390	

*Available With Different Voltage & Frequency

*Available With Hydraulic Fans, Flame Proof Applications, Motor Pump & Filter Assembly

A hydraulic press is a machine press using a hydraulic cylinder to generate a compressive force. The hydraulic press depends on Pascal's principle-the pressure throughout a closed system is constant. One part of the system is a piston acting as a pump, with a modest mechanical force acting on a small cross-sectional area; the other part is a piston with a larger area which generates a correspondingly large mechanical force.

Types H-Frame, C-Frame, 2-Pillar and 4-Pillar

Capacity Upto 500 Tons

Applications

Bush Pressing, Crimping, Swaging, Shearing, Bending, Stamping, Embossing Clamping, Riveting, Flaring, Straightening, Blanking, Coining, Pressing, Punching

Safeties

- Two Hand Safety
- Safety Light Curtain
- Job Sensor
- Emergency Off
- Over Pressure / Load Trip

Control Panels

- Relay Logic Based
- PLC / Touch Screen

Quality Control Decision Making

- Load Cell / Pressure Transducer
- Load Vs Displacement Graphs
- Torque & Angle Control

Data Acquisition & Logging

- Pressure, Load, Time, Displacement, Flow
- Operator Identification
- Data & Time Stamp
- Rejection Data
- USB / Data Logger / PC / SCADA / NI



HYDRAULIC SYSTEM For Paper Mills

BM

Benchmark Machines

Hydraulic System
For Paper Presses
& MG Touch Roll

Hydraulic System
For Swimming Roll
& Calender Roll

Hydraulic System
For Bi-Nip



Hydraulic System
For Suction
& Film Press

Centralised Oil
Lubrication Systems

Hydraulic System
For Pope Reel



HYDRAULIC POWER PACK



HYDRAULIC CYLINDER



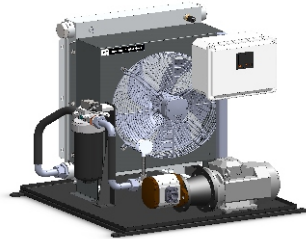
HYDRAULIC JACK



WORM GEAR SCREW JACK



AIR COOLED OIL COOLER



INDEPENDENT OIL COOLING SYSTEM



WATER COOLED OIL COOLER



HYDRAULIC PRESS



HYDRAULIC SYSTEM FOR PAPER MILL



HYDRAULIC SYSTEM FOR SUGAR MILL



HYDRAULIC PUMPS AND MOTORS



HYDRAULIC VALVES & MANIFOLD BLOCKS



HYDRAULIC ACCESSORIES

INDUSTRIES WE SERVE

Paper Mills, Rolling Mills, Steel Plants, Cement Plants, Die Casting Units, Automobile Industries, Furnace Industries, Machine Tool Industries, SPM Manufacturers, Construction Sites, Agriculture, Etc