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Hydraulic Swing Clamps

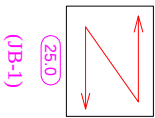
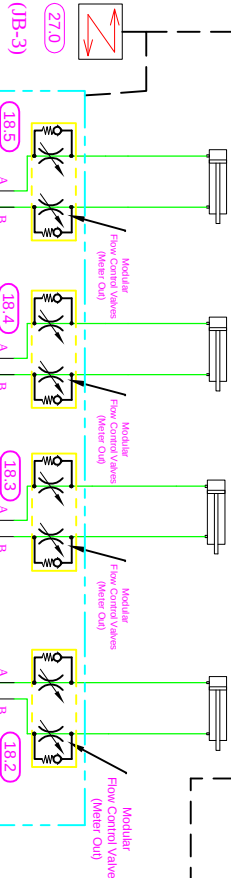
Double Acting Cylinder
Cylinder Bore $\phi=70\text{mm}$
Piston Rod Dia $\phi=45\text{mm}$
Stroke Length $L=350\text{mm}$

In Build Pressure Transmitter
In Build LVDT Cylinder

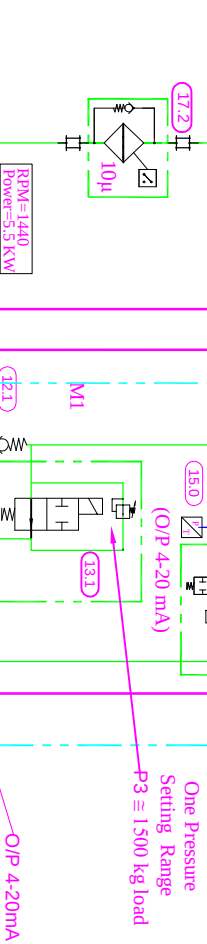
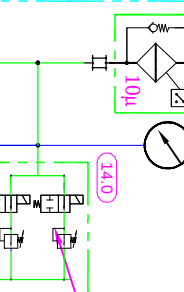
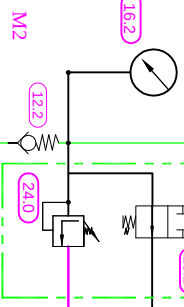
22.1

* With Base Frame

COLOR	SIZE
	1/4" PIPE
	1/2" PIPE
	3/4" PIPE
	1" PIPE



27	Junction Box (JB-3)	1
26	Junction Box (JB-2)	1
25	Junction Box (JB-1)	1
24	Relief Valve	1
23	Pump	1
22	Double Acting Cylinder	2
21	High Pressure Hose	3
20	Flow divider	1
19	Flow Control Valve	1
18	4/3 Way D.C. Valve	4
17	Pressure line Filter 10 Micron	1
16	Pressure Gauge	2
15	Pressure Transmitter	1
14	2 Position Set P.r. Relief Valve	1
13	Pressure relief Valve cum unloading	1
12	Check valve	2
11	Bell Housing & Coupling	1
10	Electric Motor	1
9	Gear Pump (Duplex)	1
8	Suction Strainer	2
7	RTD	1
6	Temperature Gauge	1
5	Drain Valve	1
4	Level Switch	1
3	Level Gauge	1
2	Filler Breather	1
1	Tank (Capacity 200 Ltrs)	1



Flow=5 LPM
Press=210 Bar
Flow=10 LPM
Press=100 Bar

Oil Specification
Hydraulic oil
VG- 46

Loading System

200 Lit.Tank
Capacity

Drain

Item Code.	Item Description	Qty
1	Tank (Capacity 200 Ltrs)	1
2	Filler Breather	1
3	Level Gauge	1
4	Level Switch	1
5	Drain Valve	1
6	Temperature Gauge	1
7	RTD	1
8	Suction Strainer	2
9	Gear Pump (Duplex)	1
10	Electric Motor	1
11	Bell Housing & Coupling	1
12	Check valve	2
13	Pressure relief Valve cum unloading	1
14	2 Position Set P.r. Relief Valve	1
15	Pressure Transmitter	1
16	Pressure Gauge	2
17	Pressure line Filter 10 Micron	1
18	4/3 Way D.C. Valve	4
19	Flow Control Valve	1
20	Flow divider	1
21	High Pressure Hose	3
22	Double Acting Cylinder	2
23	Pump	1
24	Relief Valve	1
25	Junction Box (JB-1)	1
26	Junction Box (JB-2)	1
27	Junction Box (JB-3)	1

The diagram illustrates a process control system for a tank. The tank has a capacity of 1000 Ltr and is equipped with two 4 kW heaters. The system includes various sensors and control elements:

- RTD (Resistance Temperature Detector):** Labeled (7.0), it monitors the tank temperature.
- Pressure Sensors:** Labeled (8.1) and (8.2), they monitor the pressure within the tank.
- Flow Control:** A flow rate of 2-50 lpm is maintained, controlled by a valve (24.1) and a pump (23.0).
- Control Loop:** The system is set at 200 Bar. It includes a proportional controller (P) and a flow rate of 4-20 mA.
- Pumps and Motors:** The system features a 40 hp pump (27.0) and a 28.0 hp motor (M).
- Valves and Actuators:** Various valves (e.g., 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0, 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0, 23.0, 24.0, 25.0, 26.0, 27.0, 28.0, 29.0, 30.0, 31.0, 32.0) and actuators are shown throughout the system.
- Heaters:** Two 4 kW heaters are used to maintain the tank temperature.
- RTD (Resistance Temperature Detector):** Labeled (7.0), it monitors the tank temperature.
- Pressure Sensors:** Labeled (8.1) and (8.2), they monitor the pressure within the tank.
- Flow Control:** A flow rate of 2-50 lpm is maintained, controlled by a valve (24.1) and a pump (23.0).
- Control Loop:** The system is set at 200 Bar. It includes a proportional controller (P) and a flow rate of 4-20 mA.
- Pumps and Motors:** The system features a 40 hp pump (27.0) and a 28.0 hp motor (M).
- Valves and Actuators:** Various valves (e.g., 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0, 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0, 23.0, 24.0, 25.0, 26.0, 27.0, 28.0, 29.0, 30.0, 31.0, 32.0) and actuators are shown throughout the system.

Brake Oil (Model No ELF2731)

- Viscosity @40 Deg C = 90 cst
- Viscosity @100 Deg C = 10.5-12cst
- Density @29.5 Deg C = 0.825g/cm²

Main Hydraulic System

32	Junction Box	1
31	Air radiator	1
30	Low pressure line filter (10μ)	1
29	Ball housing & Coupling	1
28	Electric Motor	1
27	Pump	1
26	Tank	1
25	Control Valve Manifold	1
24	High Pressure Hose	2
23	Flow meter	1
22	Pressure Gauge (0-280bar)	1
21	Unloading Valve	1
20	Pressure Transmitter	1
19	Check valve	1
18	Pressure line filter 5μ	1
17	Pressure line filter 5μ	1
16	High pressure line hose	1
15	Ball Housing & Coupling	1
14	Electric Motor	1
13	Internal Gear Pump	1
12	Suction Hose	1
11	Suction Ball Valve	1
10	Baffle Plate	1
9	Heater	2
8	Suction Strainer	2
7	RTD	1
6	Temperature Gauge	1
5	Drain Valve	1
4	Level Switch	1
3	Level Gauge	1
2	Filler Breather	1
1	Tank (Capacity 500 Ltrs)	1
Item Code	Item Description	Qty