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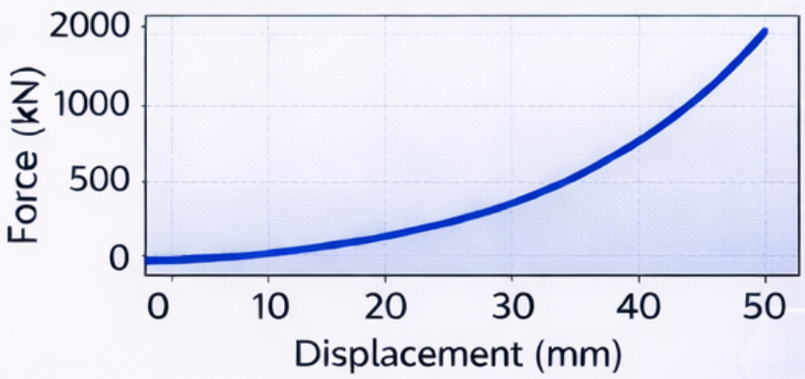
SERVO HYDRAULIC PRESS MACHINE

(with load & displacement monitoring)

FEATURES

- Machine Design as per ISO 13849-1
- Machine is as per the standard
  EN 16092-1, EN 16092-3, EN 60204-1
- Risk Assessment done as per ISO 12100
- Capacity options:
  20 Ton / 30 Ton / 50 Ton / 65 Ton
- Rapid Speed 250mm/sec
- Feed Speed 25mm/sec
- Face and Fingerprint, Biometric machine
  Access System – Admin, Supervisor, Operator
- Swiss make Load Cell
- Linear Transducer
- Latest PLC & HMI based control
- Safety Category 4 Light Curtain

Graphical Representation of Force to Displacement



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Why to go for Servo Hydraulic Press Machine instead of Conventional Hydraulic Press Machine?

1. Save your Energy = Save your money!

Per year Saving = Rs. 9,48,00/-

By Taking following Example & doing simple calculation we got to know:

Assume a Press Tonnage of 30Ton (300KN)

- Rapid Stroke 400mm @ 200mm/s
- Feed Stroke 60mm @ 20mm/s
- Pressure applying dwell time 1sec
- So, Running cycle time (Forward and Reverse Stroke) = 10 sec
- Loading & Unloading Time of Assembly parts = 12 sec

Rated Power Consumption of Conventional Press = 20KW

Energy consumption in KWh = 20KWh = 20 units/hr

Rated Power Consumption of Servo Press = 15KW

- As, Servo stops during Manual Loading & Unloading time
- So, effective Energy Consumption in KWH = 15KWh * 10 sec / (10 sec + 12 sec) = **6.81 units / hr**

So Per hour Energy Saved = **20 units – 6.81 units = 13.18 units**

Per day units saved = 24hrs * 13.18 units = 316 units

Considering Cost of Electricity (Avg. of Govt. Supply and Generator Supply) = 10 Rs/unit

Cost saving per day = 316 unit * Rs. 10/- = Rs. 3160/-

Per year Cost saving (running of 300 days) = 300days * Rs. = **Rs. 9,48,00/-**

Apart from above saving,

- Our High-Speed machine has **15 % to 20%** increased Production output.
- Lesser Energy required for cooling of hydraulic Fluid. So, added Saving
- Power on Demand (Motor run only when Hydraulic Cylinder is moving)
- **Very Efficient Solution.** (Motor speed varies as per Rapid and Feed movements)
- Lower Carbon Footprint.

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2. Less heating of Hydraulic Fluid

- Pump only rotates when Hydraulic Cylinder in motion. While in Conventional Machine, it runs continuously generating heat of Hydraulic Fluid.
- Less Wear of Rubber & Seals parts of Cylinder and Pump.
- Longer Period of Hydraulic Fluid Changeover. *(Twice the time)*
- Cooling System end run for less time, So Again Power Saving of Cooling Unit.

3. Low Noise Generation

- Lower dB noise so motor runs at variable speed.
- Motor only runs when Hydraulic Cylinder is moving. So Maximum time, no noise generation.

4. Lesser Maintenance Required

- As Machine Motor & Pump is running only when Hydraulic Cylinder is moving. So the lifetime of products increased.
- Wear out of components will be Lesser.

HYDRAULIC PUMP

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