HYDRAULICS POWER OPTIMIZER

in Sheet Metal Processing Equipment & Hydraulics Presses

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- **GREATER ENERGY SAVINGS**
- **REDUCED WEAR**
- **ENERGY STORAGE SYSTEM**
- **ENERGY SAVINGS INCENTIVES**

GREATER ENERGY SAVINGS

- Variable frequency drive adjustment of pump speed based on system pressure, and maintained through PID controller.
- Pump speed is automatically adjusted to meet the load demand, achieving maximum power savings.
- Excess heating is eliminated, reducing the need for external cooling.
- Reduce heat load in the system, and reduce average noise emission from the hydraulics unit as a result of lower pump speed and smoother acceleration and deceleration.
- Improved equipment life by reducing system shock and extending the oil life.
- Energy storage device, eliminates pressure fluctuation due to excessive transient demand, and abrupt start-ups.

ADVANTAGES OF RETROFITTING

A typical sheet metal processing line, most of the hydraulics power is used during machine setup, and not much power is required during the processing run. However, the hydraulics system must remain running for the remainder of the operation, generating heat, noise and wasting valuable energy and requiring continuous cooling adding to energy waste. Additionally, most hydraulics system are equipped with a constant RPM motor, always running at nominal speed even if the machine only requires partial load or is idle.

The Hydraulics Power Optimiser System utilises a variable frequency drive and a pressure monitoring system coupled with an energy storage device, accumulator, sized to suit the operation. The pump speed is then optimised to match the system power demand reducing the overall system power consumption. Additionally, the noise level generated by the hydraulics pump is reduced due to reduced speed, and the cooling requirements are reduced as well

ADVANTAGES OF RETROFITTING

Reducing the pump speed during low demand cycles increases the life of the pump, and reducing the heating effects on the oil, resulting in increased equipment life, increased oil life, and reduced down time.

Receive up to $800/kw reduction of demand from your local power utility company, plus the satisfaction that you are doing your part in reducing green house gases, and helping the reduction of global warming effects.