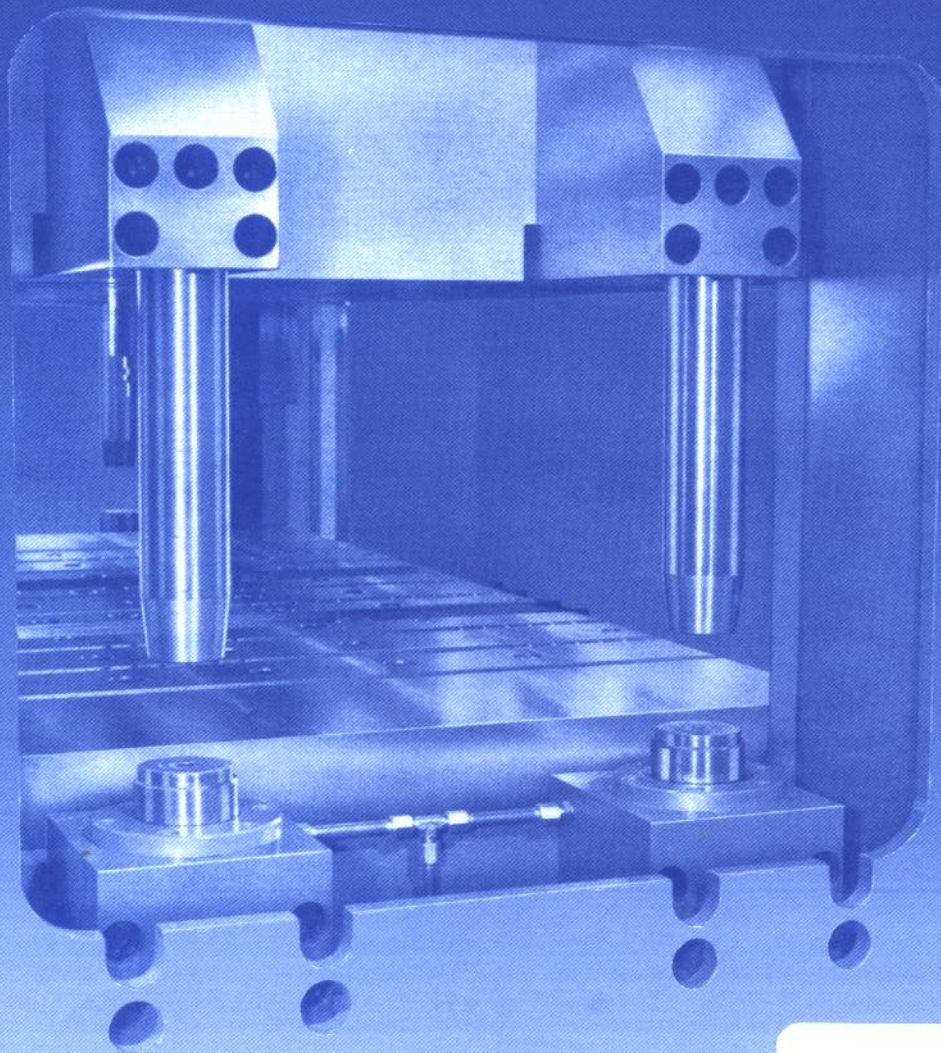


# THE HYLATECHNIK PARALLEL CONTROL SYSTEM For Hydraulic Presses

- Keeps press ram in parallel at all times
- Permits use of severe off-center loads
- Permits simultaneous use of unequally loaded dies
- Increases life of press and tooling
- Reduces wear



**IC** Fluid  
Power  
Inc.

ON THE LEADING EDGE OF TECHNOLOGY

P.O. Box 97, Rossford, Ohio 43460 U.S.A  
Tel: (419) 661-8811 Fax (419) 661-8844

**The Hylatechnik parallel leveling device preserves the life of presses and machine tools. It increases economic return on the equipment and increases the quality of the work pieces.**

Often the Press Manufacturers or Tool Makers are asked to design a press/die with severe off-center loads. The off-center load forces the slide to tilt, placing high side thrust loads on the slide, gibs and frame. The result is abnormal wear of gib and slide liners, improper die alignment, reduced die life and lower part quality. Hylatechnik has overcome this problem with the Parallelism Equalizer system.

**Here's How It Works!**

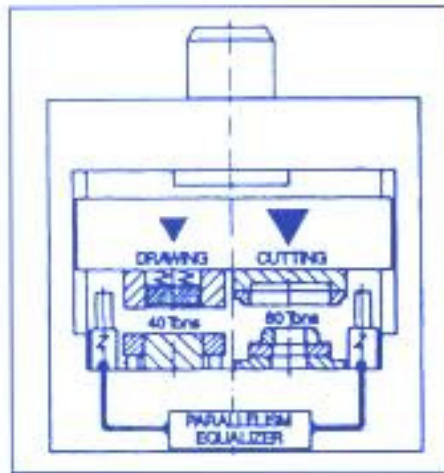
The Hylatechnik Parallelism Equalizer consists of four cylinders set beneath the ram and connected to a specially designed metering system. The instant the cylinders come in contact with the ram oil in the cylinder flows to the metering system. The metering system prevents any of the cylinders from moving ahead of the rest. This assures parallelism.

**Proven Technology!**

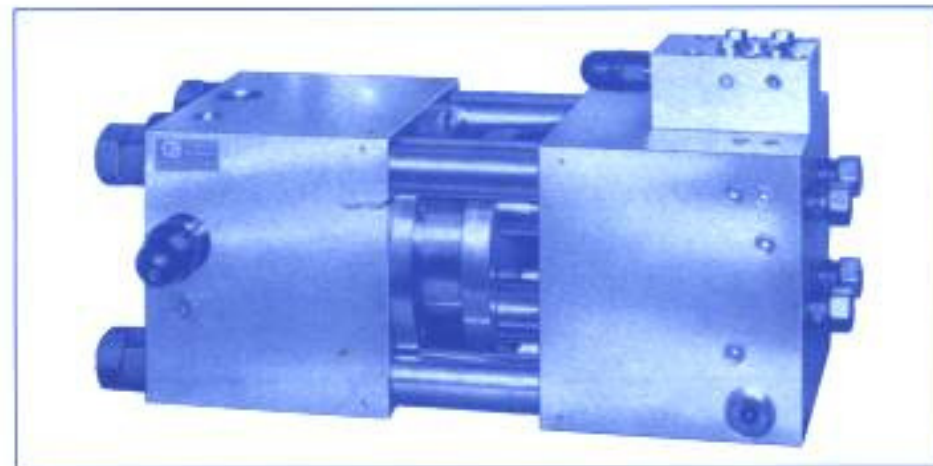
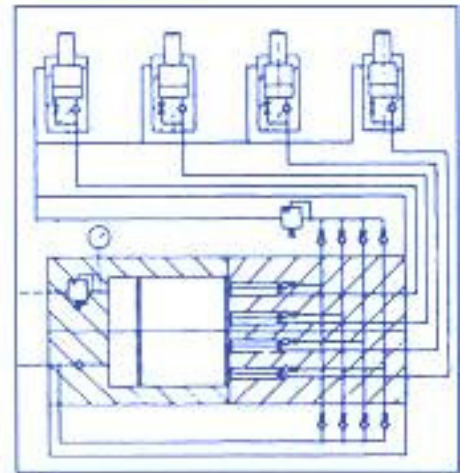
The Hylatechnik Parallelism Equalizer permits the placement of tools with off-center load conditions without twisting the ram to non-acceptable conditions. Press and tool life is increased and common use of cutting, drawing, trimming, and contouring tools become possible.



Control Cylinders - Four control cylinders are typically used, one at each corner of the press bed. On narrow presses and press brakes, two cylinders are used.



Hydraulic Diagram - The system eliminates asymmetrical ram positioning by means of hydraulically balancing and counteracting offset loads. Sudden load changes (e.g. blanking or piercing) and loads that vary with press stroke, are all compensated for.



Volume Divider - The control unit is called the volume divider and consists of 4 dosing pistons acting on a main central piston. The resistance offered by the central piston is adjustable and this arrangement prevents the side of the ram that meets less resistance from advancing ahead of the other side. A special valve system employed means that no additional arrangements are required to compensate for a leakage. Therefore, a hydraulic power unit is not required. Only an air supply is required, connected to an air vessel which in turn is connected to the volume divider.



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