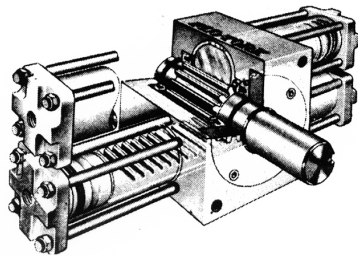
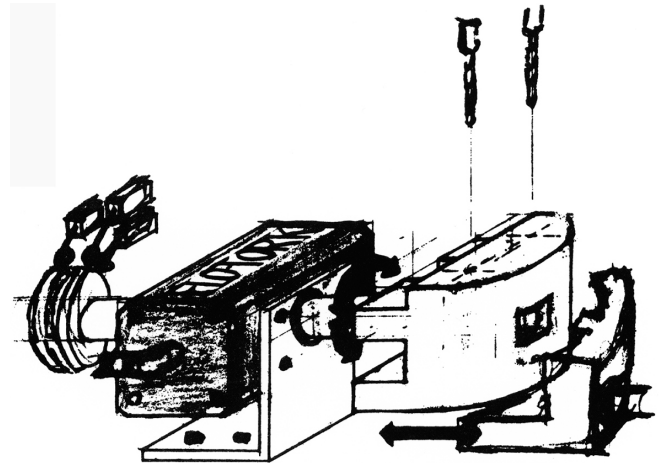
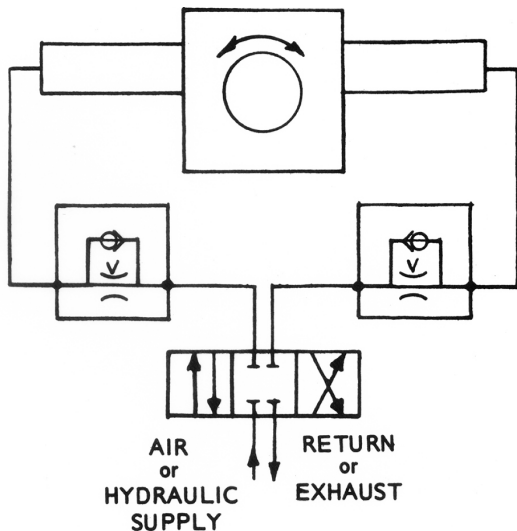


VERSATILE TOOLING ROLL-OVER APPLICATION



The Actuator

The actuator could be air or hydraulic and of hollow shaft or double end solid shaft design. The rotation would probably be 180° but could be as much as 360°. The mounting could be a standard face mount or bottom mount.



The Application

The application is quite versatile and can be utilized in a number of different operations such as drilling, reaming, or tapping holes, pressing bearings or bushings, etc. It is most effective where the operation is performed on two or more sides of a symmetrical part. The actuator is mounted on a work surface which could slide between a load station and work station. Tooling which holds the work piece is mounted on one end of the actuator shaft and is supported during the operation by a fixture mounted on the work surface. The work piece is rotated to the desired position by energizing a 3-way closed center valve to direct air or oil to the actuator piston. The desired position is detected by a limit switch off a cam arrangement mounted on the opposite shaft end which signals the valve to shift. The exact position is determined in the fixture by a shot pin or other locking device. The number of positions could include two or three operating positions plus a load-unload position.

Advantages

Increases production rate by reducing operator handling time between operations, lowers rollover tooling design costs, and increases utilization of work station.