

LatchTool Group

This 12-ton compression device is the archetype for innovative designs that will radically transform the power tool industry and OEM markets reliant on fluid power and motion control.

The discovery that ***o-ring seals can double as annular valves*** is the gateway to designs that reduces the size and weight of hydraulic actuators without sacrificing their power. Hydraulic systems using ***annular flow control*** provide substantial benefits:

- The reduction or outright elimination of valves including spool valves;
- Compact circuitry eliminating separate reservoirs, pumps and umbilical connections; and`
- Control based on direct fluidic responses to loads rather than sensing and responding to signals.

FastFlow® Microhydraulic Mechatronics Systems using **FastFlow®** valves are intrinsically more compact, cheaper to build, operate and repair and are safer environmentally. **FastFlow®** Microhydraulics use high water content hydraulic fluids which are four-times less compressible than traditional hydraulic fluids and they are fully contained within hermetically sealed manifolds.

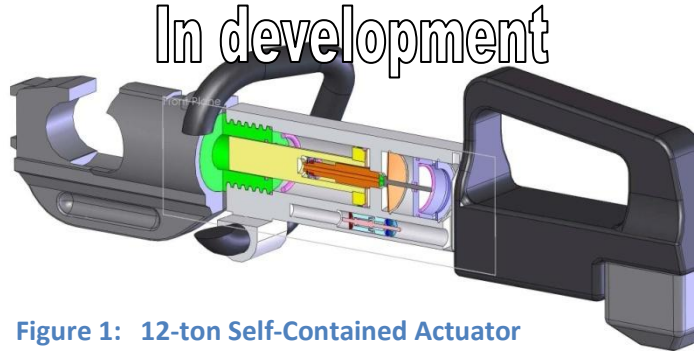


Figure 1: 12-ton Self-Contained Actuator