



Conform-A-Chucks and Conform-A-Arbors are a revolutionary new concept in hydraulic holding devices. Conceived, developed and patented by Hydra-Lock Corporation, Conform-A-Chucks and Conform-A-Arbors are truly the **PROBLEM SOLVERS FOR THIN-WALLED PARTS.**

These unique holding devices will grip out-of-round parts securely without changing the original free state shape and average center. Safely holds thin-walled parts for turning, grinding, boring, honing or other machining operations without squeezing them round.

Conform-A-Chuck holding a rough-turned cylinder liner for boring without squeezing part round.

A typical example is holding a Diesel Engine Cylinder Liner for a boring operation. Approximate size is 5" diameter $\pm .010$ tolerance x 10" long which has been rough machined. These parts are normally .008 to .010 out-of-round. Cylinder liners have traditionally been difficult parts to hold due to the skirt ends being so easily deformed. Conform-A-Chuck is able to locate on this rough machined surface and establish an average center line so that the resulting bore will be within .001" or less total geometry when the part is removed from the chuck. Conform-A-Chucks are fast becoming the standard to hold this type of problem part. By locating on the entire surface, the chuck is able to support the weak skirt and withstand tool pressure. If required, Conform-A-Chuck can be designed to produce either a bell-mouthed, straight or choke condition at the flange end.

Hydra-Lock Corporation has recently come out with a patented remarkably high expanding/contraction design for Arbors and Chucks. This design allows averaging the true centerline of rough castings handling parts that are out of round .100 inches or more. For turning, boring, grinding or other machining operations without distorting the part, expansion or contracting can exceed .25 inches or more.

This concept works equally well for single point boring, multiple tool boring, honing, and grinding.