



## **Polymer Coating Systems**



### **Automatic Coating of Cold Forgings with Water Based Lubricants**

The Sterling approach has been to use a compact dial (rotary) style machine or combination of dial machines which can be automatically loaded and unloaded. Parts introduced into the system are first “washed” by “dipping” them into a heated water bath. The number of “wash” cycles is determined by the size and weight of the parts to be coated. The water temperature is controlled by an adjustable electric heater. Next, the parts are then allowed to “drip” dry before they are introduced into the “coating” bath. The coating material tank, usually stainless steel, is provided with heat controls, fluid level indicators, and fluid agitation. Again, the the time that the part is in the “coating” solution is determined by it’s size, weight, and the specifications of the coating manufacture. Before the coated part is automatically unloaded it is introduced into a circulating “heated air” drying chamber. Sometimes, supplemental electric heaters are placed near the part as it is moved through the drying chamber. Finally, the coated and dried part is automatically unloaded from the machine.

The Sterling machines are manufactured on a steel common base. With this approach the completed machine including all piping and wiring is shipped as a total unit and requires very little on-site installation. We traditionally use an Allen Bradley PLC controller and a “touch screen” operations interface. Most functions are pneumatic. However, if a particular function requires a more sophisticated approach, a hydraulic or servo controlled axis can be provided. All machines are provided with (2) sets of technical manuals and recommended spare parts.

If you have any questions do not hesitate to contact us.