

ASEA MANIPULATOR

12-13-78 - RBE

All of the manipulator hardware ordered, has been received, and the unit is completely functional.

Jaws were made to fit the standard gripper to clamp on the end of centerfire Barrel blanks. The manipulator was programmed to simulate the machine loading of an Ajax upsetter, to demonstrate the unit's capabilities. The very successful test consisted of picking up a 1.031 - 1.036" Ø blank about 20" long, from "V" blocks, and after some demonstration maneuvering, the bar was inserted through a 1.063" hole, a distance of 12". The machine capability in both strength and accuracy appears much better than advertised.

A dial test stand has been built to check the O. D. position accuracy on a series of M/742 Receivers, as they are picked up and clamped internally with the ASEA designed gripper. From the test data we can determine what, if any, surface position feedback into the manipulator computer, might be necessary for individual Receivers, to assure relatively constant material removal during polishing. This test work has been started.

The polishing development area has now been moved to building 72-1 & a floor layout is being circulated. A protection wall or barrier will be necessary to insure the safety of curious people as this work progresses. The (2) surplus Devine polishing jacks that were part of the semi-automatic Shotgun Receiver radius polishers will be used for part of this work. Transfer arrangements are under way.

Two additional machines plus a dust collector remain to be procured. Acme has quoted, however their equipment appears more cumbersome and not as versatile as the Devine equipment observed during a recent visit. Devine's quote will be in shortly. Both prices are comparable.