AUTO-DRILL LINE

HAS BEEN SIGNED & SENT TO THE VENDOR 12-13-78 - REE

The order for a turnkey chip system to collect chips, recover their retained oil, and do all preliminary oil filtration to being cont to Bridgeport today. It was accompanied by a 5-page dissertation on the research involved in choosing the vendor. It is anticipated that the fabrications to be cast into the floor concrete, will be available for installation in April 1979, to the wendor's drawings.

Sandwik was visited on 12/5 when they were starting life tests on .906° \emptyset Ejector drills on 11.9° blanks of $1\frac{1}{2}$ ° \emptyset C-1140 Mod. steel. These will become useable 870-12-30 GFM blanks after turning. The test heads were fabricated from Sandwik's choice of carbides, which differ from our specs. In a surprise to them, they were able to drill over 300% further , than they had predicted. These results may make Sjector Drilling with its throw-away heads, an attractive alternative, to replace the proposed twin-jet two-flute spade type drills which require regrinding.

The Wagner Saw people were also contacted on this trip, to review the inclusion of of their controls into the overall automation. Considerable thought must be given to the handling of emergency steps for any reason. plus the subsequent start-up sequencing, to avoid cutter breakage or handling jam-ups.

All the operating units, no matter what source, will be tied together electrically from one main operating console for automatic operation. Complete system emergency stop buttons will be placed in several convient locations, within the area. In addition, each will be functional in a manual mode from its own panel.

> W. stated 17/21/78 Aug 1 17 Jun 201