

**Industry:** Automotive Supplier  
**Application:** Broaching  
**Material(s):** Hard Alloy Steel  
**Product(s):** VBU Wringer with Chip-Tote® Conveyor Infeed

### Situation

- BorgWarner in Muncie, IN produced helical gears for transmissions from a hard alloy steel utilizing high-viscosity (320 SSU) lubricant. They were experiencing heavy oil carryout costs and the resulting high disposal costs from contaminated chips.

### Mayfran Solution

- VBU wringer with a Chip-Tote infeed conveyor, with the output from the wringer collected in a chip bin.

### Key Features

- The continuous operation allowed BorgWarner to recover 40 gallons of oil per shift, process over 6 tons of steel per week.

### Customer Benefits

- BorgWarner estimated their daily savings at close to \$500 / day due strictly to the reduced cutting oil consumption; additional disposal cost savings were realized.

### Outcome

- The rapid return on investment (less than a year) encouraged BorgWarner to install a second similar system.

# Application Profile

## Recovering Oil from Broaching

