

APPLICATION PROFILE

ALUMINUM PROCESSING

Industrial Hydraulics

Challenge: **ALUMINUM INGOT MACHINING**

Location: **ILLINOIS / KENTUCKY**

Flodraulic's RHM Division was called upon by a major machine tool OEM to design a hydraulic system for its customer operation of scalping and final shaping aluminum ingots. Large rolls of aluminum for can-making are the end customer's final product.

RHM engineered a skid package that included four hydraulic power units, accumulator banks and electrical controls, all carefully fitted and working in sync with one another. Hydraulic circuits provide just under 100hp of power to the system actuators. Lubrication circuits on the skid keep oil cool and clean, keeping the tooling lubricated. All motors, pumps and filters are fitted with a main and standby, ensuring that the system will not be shut down for years to come.

The aluminum scalper system creates power so the large aluminum ingots can be machined on top and bottom. The scalper provides power to clamp the ingot, while providing a film of oil on the roller bearings so the ingot "floats" on the rollers. It provides lubrication to the machine tool rotation, the same way a traditional RHM lube oil system would provide oil to lubricate a large bearing.

Because this system required all main and standby motors, pumps and filters, packaging was a challenge. RHM was able to package the entire system on a 30ft long by 8ft wide skid, which was 10ft shorter than the customer's specification. Smart engineering and packaging to exceed expectations!

