Application: Material Removal

Industry: Primary Metal Suppliers
Products Used: FANUC M-710*i*

Robot skims dross from zinc galvanizing metal bath.

Challenges:

Eliminate the ergonomic and safety problems associated with the manual skimming of dross from the surface of a zinc galvanizing bath.

Solution:

FANUC Robotics provided a turnkey robotic drossing system that included a FANUC Model M-710*i* robot mounted upon a manual floor track complete with metal splash guarding. The system also included a custom designed skimming tool that the robot used to rake the dross on the molten metal surface all to one corner of the bath. The robot then performed motions to lift the dross out of the bath and deposit the dross into a nearby dross pot. An electrically interlocked safety fence was also provided to automatically shut the robot down, allowing for easy operator access for dross pot replacement.

On average the robot fills two dross pots every hour. The customer is very pleased with the improvement in metal quality that is the direct result of the very consistent skimming job that the robot is constantly performing.