

# Demand Moore Reliability

## Remote Vibration Monitoring at Alumina Refinery

One of the world's largest alumina refineries needed a solution to remotely monitor vibrations on their pumps. Their DCS system used MODBUS communications. Because of distance constraints, the customer wanted to split their pumps into three sections of seven pumps, with each pump having vibration monitoring instruments with 4-20mA outputs.

This problem was solved with the microNCS<sup>®</sup> MODBUS RTU Master and Distributed I/O System. Three microNCS units served as masters and 21 were CPMS slaves. Each slave was daisy-chained to a microNCS Master using RS485, which communicated via MODBUS/TCP to the DCS. Along with having the ability to be configured as a Master, the customer also appreciated the redundant MODBUS communications and the ease of future expansion that comes with the microNCS.

