

1.1 – Pyrophoric Material Dispensing System

Project Overview – CPS collaborated with sister division ICS to design, build and install this system. The system was designed in accordance with client User Requirement Specification (URS) to discharge the contents of the drum while containing the process, to 1) protect the Operator from the toxic product, 2) Prevent product from exposure air as it spontaneously ignites with oxygen exposure and 3) minimize equipment exposure to the corrosive product. The Drum Inverter is located within a Containment Isolator all three objectives. The system is classified as an Occupational Exposure Band (OEB) 4 to achieve product containment of no more than 1 to 10 microgram/cubic meter/8 hour TWA. The Drum Dumper inverts product drum to discharge them into inerted downstream processes.

Fabrication: CPS is a vertically integrated company and all fabrication and controls for this project were designed and built in our state-of-the-art bright metals facility in Springfield, MO. No fabrication work or services were outsourced to produce this product.

Automation: Control of the system was integrated by our in-house automation department and system hardware built and tested in our panel shop. All equipment in the system was integrated for seamless synchronization and includes handshake communication with upstream client provided devices.

Statistics

Date: 2008

Location: Southern Texas, USA

Total Order Value: \$460,000

Duration of Project: 8 months

