

## DUF<sub>6</sub> Conversion Project Hood Assemblies

MCE was contracted by the design agent, AREVA NP, for the design, fabrication, inspection, testing, packaging, and delivery of 14 transfer hood assemblies, 4 cylinder fill hoods, and 2 bed load hoods for the DUF<sub>6</sub> Conversion Project facilities in Paducah, Kentucky, and Portsmouth, Ohio.

A typical hood assembly is a Bosch aluminum structural frame system in a box configuration, skinned with aluminum sheets for sides and tops, transparent lexan for doors and lids, and stainless sheet panel floors. Each hood is supplied with a task light internal to the hood.

The transfer and bed load hoods each feature an exhaust duct with a backdraft damper to ensure negative air flow during the operator's work activities. The transfer hood and bed load hood both are floor-mounted and use modified 55-gallon drums in their process functions.

The drums are inserted or extracted from the hood via gravity roller conveyors. Once inside the hood, the drums are stationed atop accountability scales providing data to the end user.

The cylinder fill hood installation arrangement is from the bottom side of an operating deck in the host plant. Being suspended from the ceiling, an oxide cylinder is inserted from the back and below into the hood through the containment curtains attached to the hood.

Once inside the hood, sliding lexan doors give the operator access to the work area from a work platform in front of the hood.



**Client: AREVA NP  
Lynchburg, Virginia**