

## SAFELY CHARGING SOLIDS INTO REACTORS

## THE CLIENT'S NEEDS

An existing client wanted to increase production rates and improve safety during solids charging by eliminating the need to open the reactor manway during operation to feed solids into their toxic product mixture.



Powder Pump system installed on reactor / Glass overheads and control panels



Solidworks drawing of skid mounted reactor system

## OUR SOLUTION

As a worldwide leader in glass-lined reactor manufacturing and solids handling technology, De Dietrich Process Systems was ideally suited to work with the client's engineering and design team to provide a process system to meet these requirements.

DDPS proposed a completely pre-assembled, skid mounted system that included a 500 gallon OptiMix reactor with an integrated Powder Pump system, glass reactor overheads and real-time process sampling for improved quality control.

## **RESULTS & BENEFITS**

Following successful DDPS supported installation and start-up, the customer was able to double production rates and can now charge solids into the reactor without opening its manway. This not only prevents the loss of reactor inertion integrity, but also stops the exposure of operators to the harsh internal environment of the reactor during processing.

Solids can also now be charged at a controlled rate which allows the new, real-time pH monitoring system to inform them when the reaction has been optimally completed.





