



engineered systems

C A S E S T U D Y

System: Rotadest® - Rotary Film Evaporator

Customer:

A global metals and technology group that specializes in:

- Fabrication of precious metals and alloys for industrial, semiconductor, and medical applications
- Reprocessing and recycling products containing precious metals
- Manufacture of precious metal catalysts for the chemical and environmental industries
- Manufacture of precious metal chemicals
- Manufacture of high active pharmaceutical agents (organic and inorganic)

Process Issue:

The customer had experience with glass-lined steel equipment using lab-scale rotary-film evaporators. They wanted to scale-up their processes. Manufacturing was also under pressure to improve their yields using new technology developed at their headquarters.

Customer Specifications:

- Rugged service requirements
- Reliable equipment
- Product visibility and purity
- Standardized design at large scale

DDPS Solutions:

The Rotadest is uniquely suited to handle the stringent application requirements at hand. It is designed for a wide variety of evaporation and drying operations, including general purpose solvent removal and recovery, isolation of heat sensitive products, crystallization, and drying powders. All wetted parts are highly corrosion resistant (QVF Borosilicate 3.3 glass, PTFE, or PFA). This assures high-grade purity of the product, no metallic catalytic sites, and maximum process visibility. In addition, the unit can operate under vacuum or at atmospheric pressure.

2001 Order

The first set of equipment ordered was a dual 100-L Reactor System and 100-L Rotadest. Prior to this order, there was no borosilicate glass process equipment in the facility. The evaporator controls were retrofitted by Rosenmund in Charlotte and upgraded to be US, XP rated. The system was completed in late 2002 and has been operating successfully since.

2004 Order

Due to the success of the equipment ordered in 2001, the company purchased a 100-L Rotadest unit with dual 50-L Receivers and a spare 50-L Flask. Aside from the good relationship that was established earlier, key factors to the company's decision to choose DDPS for the project were benefits such as glass visibility, US support, product reliability, and the international standardization plan.

Competitive Advantage:

DDPS' collective sales effort, which included understanding customer requirements, answering questions in a timely fashion, and product support played a significant role in winning the order. The installation, factory testing, and process guarantee were additional factors that helped position DDPS as a single-source solution.

