SOUZOC

CASE STUDY

Kitz Valve





Kitz Ball Valve

- Tecnocrom has coated 3 balls to a field test
- Hard chrome
- Electroless nickel + dry lubricant
- TripleHard chromium
- Application: Electronic recycling factory in Belgium
- Environment: Nitric acid (very strong)
 + elevated temperature 70-80 C





Cr6 Coated Ball Valve

- During the process occurs some crystallisation between the ball and the seat
- Seat material is very hard ceramic (PIC)
- Crystallisation eats hard chrome coating
- Valve starts to leak
- There is a wear problem



Electroless Nickel + Dry Lubricant Coated Ball Valve

- Nitric acid eats all electroless nickel
- Nedox coat spaying on top of electroless nickel
- There is a corrosion problem



TripleHard Coated Ball Valve

- According to the customer, TripleHard is the best coating in that application
- Valve has worked more than 1,5 years in at the real environment field
- Both corrosion and wear resistance are really good