



World Class Cleaning Solutions

# CASE STUDY

## Inconel and Titanium Rotating Parts: FPI Prep.

### Customer Details:

**Product:** Aerospace Engines

**Parts Cleaned:** Rotating Jet Engine Parts

**Removing What:** Mostly coolants, lubricants, FPI/Zyglo

**Why are parts degreased:** Parts must be cleaned after every operation by a GE approved cleaner to a GE spec.

### Customer's Process BHC Replaced:

**Current Chemistry:** AquaVantage® 1990 GD

**Concentration:** 5%

**Washer Type:** 1 Kemec, 5 Better Engineering, 3 Stoelting, all cabinet washers.

**Specific Metals:** Inconel, Titanium

**Temperature:** 140°F-150°F (60°-66°C)

**Time/Line Speed:** 10 min. Wash, 10-minute rinse

**Customer Improvement Requested:** Initially looking for better cleaning pre-FPI Cleaning in Kemec washer. Kemec washer was moved in plant closer to FPI Cell and after Zyglo adhesion to the component was poor. The washer itself was reviewed and no mechanical issues were found with washer. AquaVantage® 3887GD was evaluated and Zyglo adhesion improved dramatically. Then tested AquaVantage® 3887 GD in a Stoelting and Better Engineering washer.

### BHC Implemented Process:

**Chemistry:** AquaVantage® 3887 GD

**Concentration:** 5%

**Temperature:** 140°F (60°C)

**Time/Line Speed:** 10 Min. Wash, 10 Minute Rinse

**Dry:** 15 Minutes

**Results:** Improved wetting of the FPI/Zyglo solution on the part surface

**Reason BHC Won:** Switched over all washers to AquaVantage® 3887GD from AquaVantage® 1990GD

