



World Class Cleaning Solutions

# CASE STUDY

## Engine Rebuild Facility

### Customer Details:

**Product:** AquaVantage® 515 DD

**Parts Cleaned:** Engine parts

**Removing What:** Removing heavy carbon

**Scenario:** “In Process” cleaning of engine parts as they rebuild the engines using the engine blocks and parts to put back in the large trucks, ships, etc. or to resell them

### Customer’s Current Process:

**Current Chemistry:** Zep Safety Sense (Caustic Powder)

**Concentration:** Roughly 10%

**Washer Type:** Roughly 250 gal medium-sized blue Axe spray washers

**Specific Metals:** Cast Iron, Steel, etc.

**Temperature:** 170°F (76.7°C)

**Time:** 30 minutes

**Rinse Water Temp:** 170°F (76.7°C)

**Rinse Water Number and Time:** 1 for 30 minutes

**Dry:** 150°F (65.6°C) for 5 minutes

**Tank life:** Measured in months-up to 6 months

**Customer Improvement Requested:** They wanted our product to work as good or better than the Zep product in removing heavy carbon soils and also be less caustic and harmful to the workers



### BHC Recommended Process:

**Chemistry:** AquaVantage 515 DD

**Concentration:** 12%

**Temperature:** 170°F (76.7°C)

**Time:** 30 minute wash/rinse

**Rinse Water Temp:** 170°F (76.7°C)

**Rinse Water Number and Time:** 1 for 30 minutes

**Dry:** 150°F (65.6°C) for 5 minutes

**Tank Life:** Now up to 6 months

**Results:** Engine parts are cleaner than when using the Zep Safety Sense. The 515DD cleaned the carbonized soils better. The workers were happy with our non-caustic chemical which did not harm the workers at all after touching the parts after the wash and rinse. The 515DD had a significantly less odor than the Zep Safety Sense

**Reason BHC Won:** Formula 515DD removed the heavy carbon soils better than the Zep Safety Sense, and it was also much easier on the workers than the Zep product