

Case Study - Aluminum



Wabco ELX Railway Valve Body

Original Design

- ◆ 2.5 lb. sand casting
- ◆ 319 alloy aluminum
- ◆ Annual volume 24,000 units
- ◆ 12 cored holes



Product Improvement

- ◆ Weight reduction of 1 pound
- ◆ Machining reduction of over 55%
- ◆ Hole positions within .010" and standard deviation of .001" - .002"
- ◆ Combined 3 different casting versions into 1 raw casting
- ◆ Cosmetic enhancements over sand casting

Overall Component Cost Savings of \$24.75 each