

## PART MANUFACTURE

For more than a decade, Orbital Energy Services has specialized in design and manufacture of parts as an alternative to the OEM in a variety of industries and applications. Our 100% guaranteed aftermarket parts have saved customers substantial amounts of money—money which translates immediately to the bottom line in the form of reduced operating and/or capital expenses.

Today's business climate demands strict cost controls to maintain competitiveness. Let us increase your margins by replacing your machine's OEM parts with aftermarket parts manufactured by Orbital Energy Services.

### THE REVERSE ENGINEER PROCESS

**SAMPLE RECEIVED** - Whether it's a stock item or an item made to order for a special application, the process begins with a new or used sample received by Orbital Energy Services.

**REVERSE ENGINEERING** - After receiving your sample, we confirm all required properties using our state of the art equipment; properties such as dimensions, hardness, and material composition.

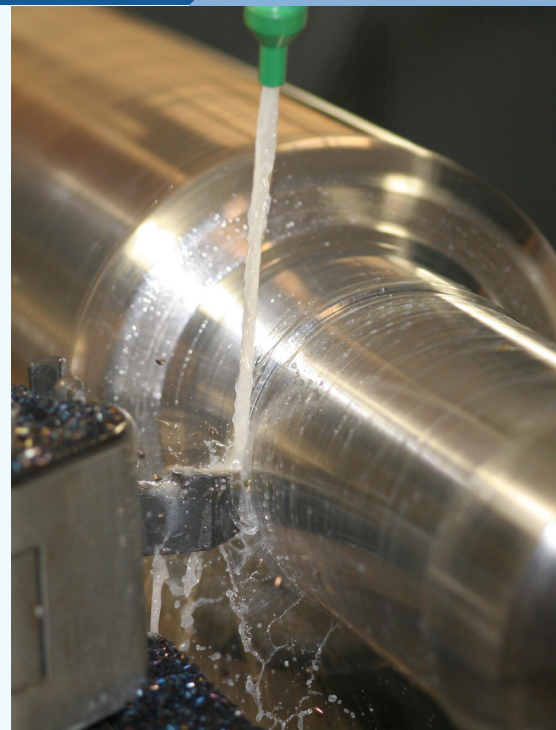
**DESIGN** - From the reverse engineering data, a detailed CAD manufacturing drawing is created in accordance with international design standards.

**PRICE ESTIMATE** - A price estimate is provided to the customer for the finished part. Typically, savings are in the range of 15-30% over the OEM part. More savings can be realized as production quantities increase.

**MANUFACTURE** - After agreement on the design and price, Orbital Energy Services manufactures the part, keeping the customer updated on status along the way. After passing a stringent quality inspection, parts typically ship the same day.

### DURABILITY IMPROVEMENTS

Orbital Energy Services has developed and proven material upgrades to increase durability and prolong component life, depending on the application. One process, a weld application of a **stellite alloy** to component wear areas, results in superior wear and corrosion resistance. In addition, Orbital Energy Services has complete in-house **gas nitriding** capability. Gas nitriding is a surface hardening process, where nitrogen is added to the surface of steel parts using dissociated ammonia as the source. Gas nitriding develops a very hard case in a component at relatively low temperature, without the need for quenching. As a result, a very high strength product with extremely good wear resistance can be produced, with little or no dimensional change. Bottom line - these material enhancements translate into increased durability and service life and ultimately, reduced maintenance cost.



800-607-2838

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