

## **Outsourcing Economics Explained ---**

### Guide to the Many Advantages of Outsourcing to Abrasive-Form

Many companies fail to consider the complete picture when trying to determine if outsourcing provides a more preferable route to pursue rather than keeping their creep feed grinding operation in-house. In this white paper, we will examine the range of factors that determine an accurate cost-benefit analysis, including cost, delivery, quality, flexibility, and risk reduction.

#### **Cost Advantages**

Abrasive-Form will optimize your creep feed grinding operation to wring costs out of the process. Abrasive-Form brings many advantages to bear on this process.

- Abrasive-Form has 26 years of experience and many capable experts in creep feed grinding, which is the central focus of the company.
- Abrasive-Form brings expertise in several disciplines including engineering, the best in supplies procurement, and efficient operational management.
- Your company benefits from Abrasive-Form's cross-training over several industries rather than managing with the limited problem solving techniques of one industry's isolated environment.
- Abrasive-Form can easily design fixtures to process multiple parts simultaneously, rather than be constrained to sequential operation processing or batch processing.
- Abrasive-Form can coordinate with upstream suppliers such as foundries to design details into rough parts that make manufacturing easier down the road without affecting the design or quality of finished parts.
- Abrasive-Form operates with a much lower overhead structure than most large OEMs, thus having a far lower 'loading factor' to its direct labor costs
- Outsourcing to Abrasive-Form means eliminating the \$500,000 cost of buying a creep feed grinder. Add to that figure the cost to locate and electrify each machine on your shop floor and your company's savings could easily be in the range of \$600,000 per unit. In addition:
  - Your company will save on the annual cost of machine maintenance and repairs.

- Abrasive-Form's electrical and mechanical maintenance staff has over 20 years of experience that is put to work to avoid any downtime.
  - Your company will not need to maintain an inventory of spare parts for machine repair.
  - Abrasive-Form always has backup machines to process your job such that there is never a job queue for machine repair or other reasons. This eliminates all the costs of investing in backup machines.
  - By relying on Abrasive-Form's machines, your company also eliminates the costs of maintaining stocks of consumable items such as wheels, dressing tools, coolant, lubricating oils, hydraulic fluids, filters, etc. This also eliminates time-consuming and irritating purchasing tasks for minor cost supplies.
  - Abrasive-Form can bundle the purchase of consumable supplies with other customers' needs thus achieving far greater purchasing power and lower unit costs for supplies.
  - Abrasive-Form maintains an extensive consumables inventory minimizing the chance that a stock-out will cause an interruption in service.
  - Your company also eliminates the costs of hiring full time employees, both operators and supervisors, to run the machines and the considerable costs of training personnel to become grinding specialists. (Note: Abrasive-Form feels that it takes at least three years experience for an operator to reach full efficiency production capabilities.) By shouldering direct labor costs, Abrasive-Form also minimizes your company's labor-related overhead costs.
- There will be no need for your company to pay for an expensive learning curve to reach optimum output levels. Abrasive-Form's experienced personnel can climb this curve much faster.
  - Your company will no longer need to devote expensive manufacturing floor space to creep feed grinding tasks.
  - Your company eliminates costs for work-in-progress when it outsources to Abrasive-Form, postponing expenses until finished parts are received. This eliminates the need for cash investment until far later in a manufacturing cycle.
  - Leaving the grinding to Abrasive-Form enables your company to focus energies on other manufacturing problems and/or to concentrate on core competencies.

- Abrasive-Form can guarantee cost reductions in multi-year contracts by employing continuous improvement techniques on your application.

### **Delivery Advantages**

- Abrasive-Form's application engineering group has many years of experience in minimizing the lead time to get a project up and running. This lead time compression will enable your company to get a product to market quickly allowing your company to take full advantage of a greater portion of the component's "life cycle". Your company will not lose volumes because fixturing and tooling was not prepared in time.
- Abrasive-Form's in-house staff of toolmakers can perform all tooling repairs promptly. Abrasive-Form also stocks many wearable fixture components in-house.
- Abrasive-Form has over 50 qualified machine operators on staff. Your company's project will not suffer due to vacations, illnesses or turnover because staff backups are in place.

### **Quality Advantages**

- Usually, Abrasive-Form requires more stringent tolerances on part production than customers require.
- Abrasive-Form provides the quality documentation that is required by your company and can use the computer system of your company's choice.
- Your company can lock in maximum scrap costs by downloading this responsibility to Abrasive-Form.

### **Flexibility Advantages**

- Abrasive-Form will communicate production status and deliveries to your company in any combination of phone, fax, e-mail, or Internet updates
- Your company can save on ancillary operations such as deburring, heat treating, non-destructive testing, etc., by having Abrasive-Form manage these functions seamlessly into the total cycle time.
- Abrasive-Form will do whatever it takes to meet your company's delivery requirements and routinely schedules operators to work through holidays, vacations, and weekends to meet special delivery requests.

- Abrasive-Form will almost always be able to use your company's tooling since its 38 creep feed grinding machines have a wide range of working envelopes.
- Abrasive-Form has the floor capacity to actually take delivery of your company's complete grinding machine and fixtures for processing parts in the shortest possible time period, if needed.

### **Reduction of Risk Advantages**

- Your company can eliminate the risks of uncertain parts volumes by outsourcing an application to Abrasive-Form. This eliminates the nightmare of purchasing a complete machining system(s) only to find out that the life of an application is much shorter than the time used to payback an initial investment.
- Your company can mitigate the impact of not achieving an originally projected production rate that was used to justify capital expenditures.
- Your company can eliminate the risk that a project volume will double or triple and necessitate additional equipment purchases. Abrasive-Form has plenty of available capacity to keep pace with a fast-growing project.

For a job quote and/or return-on-investment projection for a particular outsource project, contact [Sales@Abrasive-Form.com](mailto:Sales@Abrasive-Form.com).