

## Solutions Provided

**Cascade Automotive Finishing Centers provide solutions to a wide range of internal and external finish problems, including:**

- ☑ Removal of feathered edges on O-ring grooves;
- ☑ Elimination of burrs in hydraulic valve bores;
- ☑ Controlled radius generation on machined edges;
- ☑ Removal of heat treat scale from castings;
- ☑ Removal of core sand from ferrous and aluminum castings
- ☑ Removal of carbon smut surface residues from lost foam casting processes;
- ☑ Polishing component surfaces, externally and internally.

*Your company's contact info here.*

## Environmental Concerns?

Iowa Engineered Processes is committed to protecting the environment and our customers. Cascade systems use biodegradable and environmentally safe compounds. Plus, Cascade systems operate at less than 80 decibels.

### **FREE TRIAL RUN AND FEASIBILITY STUDY**

If you would like to see what the Cascade Process can do for your toughest parts, please call to arrange a no-cost, no-obligation trial run and feasibility study today. You'll be glad you did.



## IOWA ENGINEERED PROCESSES

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**IOWA ENGINEERED PROCESSES**

## Cascade Automotive Finishing Centers

*Providing Solutions....*



**Consistent, high-precision deburring, polishing & cleaning of castings and machined parts...  
*inside and out!***

## How it Works!

Cascade System automated finishing centers rely on a unique, patented process that combines a controlled “cascade” of media with high-frequency vibration to consistently remove burrs and other blemishes.

Parts to be finished are first manually or robotically loaded into the unit, where they are held firmly in place by custom-designed fixtures. The unit then rapidly oscillates the pieces at 3/16” while a “*Cascade*” of media and liquid cleaning compound is introduced to flow around *and through* the parts.

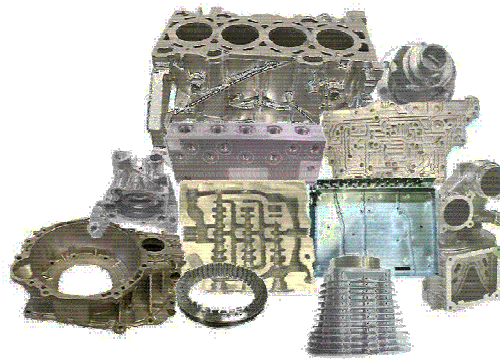
As the workload oscillates, the media inside each part is impacted by the part’s internal surfaces. This dynamic process creates rapid vibrations within the media as energy is repeatedly transferred from the part to the media, and the result is rapid, predictable bur removal and edge radius generation. The same process takes place on the external surfaces of the part. At the same time, all surfaces are further cleaned by the liquid constituent in the media.

In the end, even the most intricate internal passageways have smoother, cleaner surfaces than can be accomplished with conventional finishing technologies.

## Advantages: Driving down the cost of production!

**Increased productivity:** The Cascade System automated finishing center can finish parts in a fraction of the time required by traditional methods and has virtually eliminated re-work to eliminate burrs on internal surfaces for leading companies in several industries.

**Reduced labor costs:** With the Cascade System, nearly any machining center can be equipped to clean, deburr and finish your parts—without requiring additional workers. In many cases you can reduce your workforce.



**Reduced energy costs:** Energy efficient Cascade Systems cost pennies to operate as opposed to other options. In many instances the Cascade System can eliminate the need for a separate parts washer leading to greater energy & labor savings.

**No part-to-part contact:** You avoid the distortion, dimensional changes and damaged parts that can occur when parts collide in process.

## Advantages Continued

**Repeatable, predictable cycle times:** Because cycle times do not vary on comparable loads, a Cascade System finishing center is the ideal choice for operations using manual and automated handling or robot fixturing. You can accurately predict and schedule production operations.

**Greater capacity with a wide range of applications:** The Cascade System works well in high or volume and critical parts applications. Versatile Cascade Systems can effectively process parts large and small; heavy or light.

**Customized service:** Every Cascade System automated finishing center is developed specifically to meet particular finishing needs, so cycle times and sizes are established according to the physical configuration and weight of the parts being finished. We build to your specifications.

**Solution Provided!** If you’re spending too much time and money re-working your machined components to eliminate burr and edges in the internal and external passageways, you are not alone. The fact is, design engineers are specifying increasingly tighter tolerances all the time, and traditional finishing processes just aren't up to the task. *That’s why Iowa Engineered Processes’ Cascade System is the right choice for your operations. Call us today! 319-334-7274*