



FFL Licensed

Call 1- 844-623-7998  
 Visit us at [www.isofinishing.com](http://www.isofinishing.com)

## Mechanical Surface Improvement

*ISO Finishing* is an isotropic mass finishing job shop specializing in high energy polishing & micro-precision surface improvement. Our vast experience and individualized approach to each job makes *ISO Finishing* the perfect choice in applications where critical surface refinement is essential. Many Medtech, OEM and Firearm manufacturers recognize the value of using the **Centrifugal Barrel Finishing (CBF)** process in transforming their machined, stamped or molded components into the highest quality finished products. These required levels of surface improvement and repeatability make CBF one of the most versatile finishing methods available.



## ISO Finishing is the Ideal Choice for:

- Medical Device Manufacturers
- OEM's
- Firearm Industry
- Laser, Waterjet, and Stamping houses
- Aerospace Industry
- Injection Molders (metal, plastic, rubber)
- Dental and Orthodontics manufacturers
- Automotive and Motorsports

## Standard Finishing Methods:

CBF finishing is a cost effective alternative to electro polishing, lapping or drag finishing. When combined with our experience, on staff engineering and proprietary formulations, we are able to offer finishes that are on par with more expensive finishing methods.

Surface Roughness Produced by Common Methods										
Ra $\mu$ m	250	125	63	32	16	8	4	2	1	1
Grinding	█		█		█		█		█	
<b>Barrel Finishing</b>	█		█		█		█		█	
Honing	█		█		█		█		█	
Electro-Polishing	█		█		█		█		█	
Polishing	█		█		█		█		█	
Lapping	█		█		█		█		█	
Superfinishing	█		█		█		█		█	
Common	█		█		█		█		█	
Less Frequent	█		█		█		█		█	

## Key Characteristics of CBF Finishing:

- Removes unwanted machining burrs and micro imperfections while maintaining all initial complex geometries and tight dimensional tolerances.
- Leaves no residue on surface of finished component.
- Excellent for finishing most materials including titanium, aluminum, stainless steel, plastics, rubber, brass, and ceramics.



## What are Centrifugal Barrel or High Energy Machines?

CBF machines are like a ferris wheel gone mad! There are four barrels that rotate on a one-to-one ratio around a larger planetary gear. The rapid rotation creates up to 30 G's of force on the parts and media sealed within each barrel. Having each barrel continually rotating ensures the media works the part uniformly with a non-directional (isotropic) texture. By adjusting the formula of media, compounds, levels, speed and duration, we are able to fine tune a "recipe" specific to your finish requirements.



## What size parts are a good fit for centrifugal barrel finishing?

*ISO Finishing* can handle parts from .06" x .06" x .06" up to 6" x 6" x 18" and smaller diameters of 2" x 2" x 24". By having a mix of seven unique CBF machines, ranging from 1.0 cu. ft. up to 5.5 cu. ft., *ISO Finishing* will match your parts and desired finish with the appropriate, most cost effective machine.

## Why ISO Finishing makes the best choice as your finishing partner

*ISO Finishing* is a privately held company with a family business culture that is committed to delivering uncompromising quality and the highest level of customer service available anywhere. We are small enough to be personal and agile, with the experience, equipment and trained finishing professionals able to handle anything from simple prototype runs up to large ongoing OEM production runs in the millions of parts. We have short lead times with many jobs turning in just 1-3 days. We're a great, cost saving alternative to adding your own in-house equipment or source for overflow volume to meet your customers' tight lead time requirements.

## What if the parts just need to be deburred?

*ISO Finishing* has a variety of four vibratory bowls able to handle parts up to 1" x 8" x 8". These traditional units are key in allowing us to finish delicate parts not well suited to other finishing methods..



## Free Sample processing

Call *ISO Finishing* or visit [isofinishing.com](http://isofinishing.com) for free sample processing.



For more information call 1- 844-623-7998 or visit us at [www.isofinishing.com](http://www.isofinishing.com)  
 Located at: 50 South Medina Street • Loretto, MN 55357 • Office: 763-273-1052 Fax: 763-493-2990



**FFL Licensed**