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Turbo-Finish

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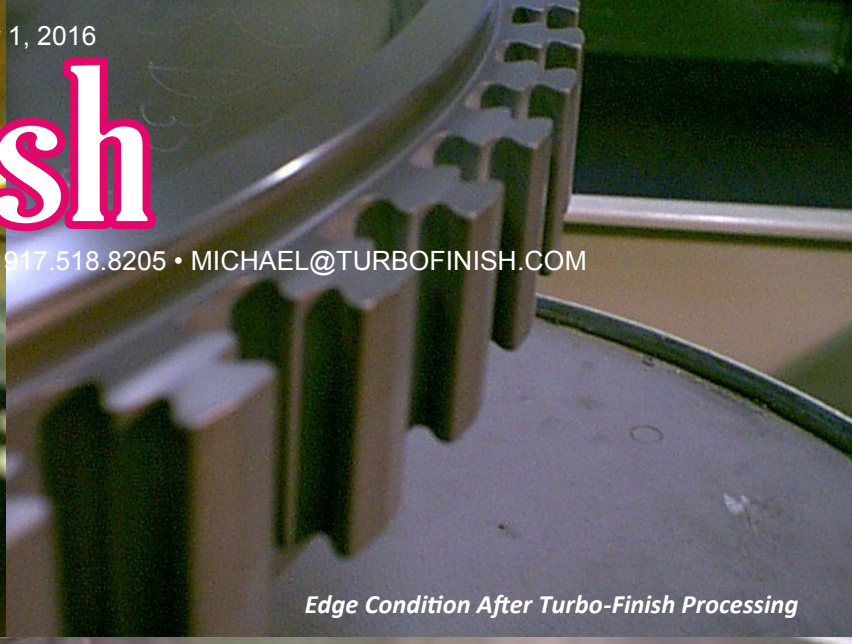
Edge Condition Before Turbo-Finish Processing



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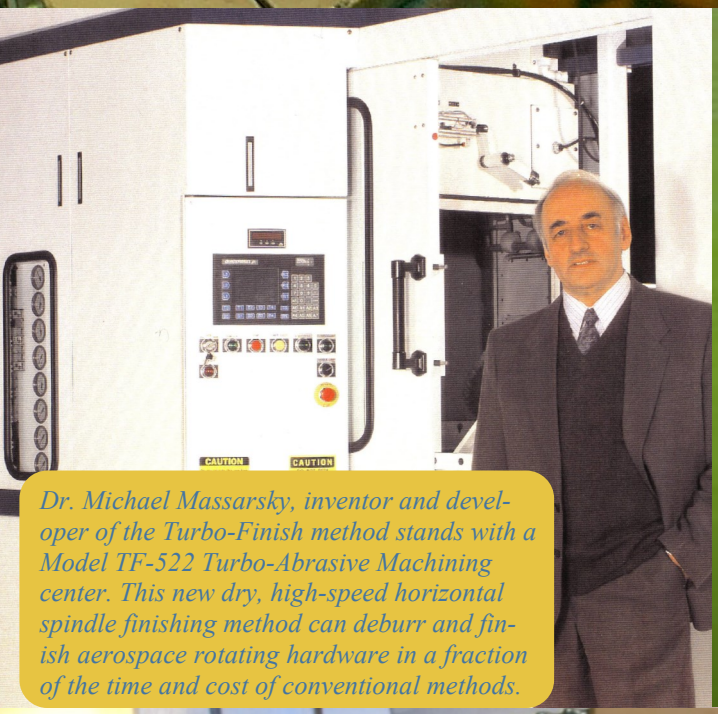
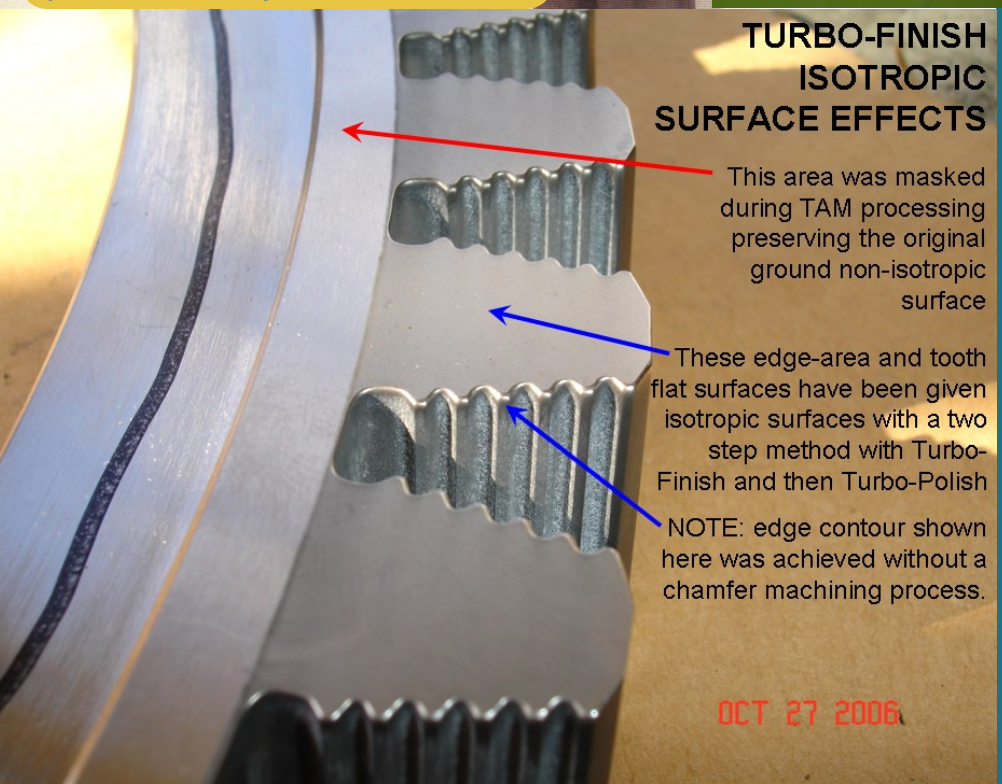


Dr. Michael Massarsky, inventor and developer of the Turbo-Finish method stands with a Model TF-522 Turbo-Abrasive Machining center. This new dry, high-speed horizontal spindle finishing method can deburr and finish aerospace rotating hardware in a fraction of the time and cost of conventional methods.

Dry Isotropic Surfacing option. *In addition to its automated high-speed deburring and edge contour of component features, Turbo-Finish can also be used to produce isotropic surfaces with low micro-inch surface values. These types of surfaces aid visual inspection and can help to extend service life by mitigating crack propagation.*



PROCESS BENEFITS

- Very rapid deburring, radiusing, and surface conditioning of complex parts, replacing or minimizing manual deburring. procedures with controllable machining processes.
- No part-on-part contact or impingement.
- Reduces manual process or cycle times from hours to minutes.
- Uniformity. Complete abrasive envelopment of parts means all exposed exterior surfaces and features will be free abrasive machined. Unlike processes with hand-held tools or directional streams of abrasive media, all features of the part are processed uniformly and simultaneously.
- Repeatability. Part-to-part and lot- to-lot variations can be eliminated or minimized. Uniformity of surface effects on features of parts is also enhanced.
- Compressive stresses and metal improvement can be developed on critical part areas to enhance metal fatigue resistance.
- Special microtextured surfaces can be generated that have enhanced bonding receptivity as substrates to many types of coatings and plating.
- Low-temperature material removal. Unlike many traditional grinding processes, physical characteristics of the outer surface layer of metal are not changed by process-generated temperature shifts on surface of metal.
- Random surface-finish pattern means greater compatibility with coating and plating processes than linear patterns developed with traditional grinding methods.