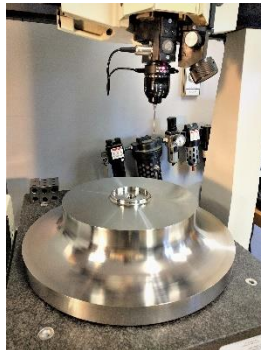


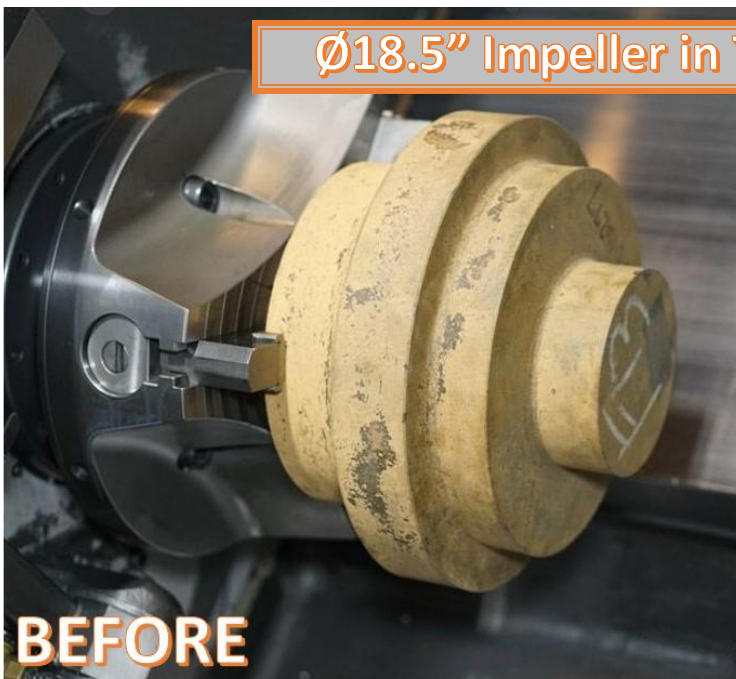
SUMMARY:

Solid Machine performs **precision CNC turning** on well over **40,000 parts per month** including turbocharger impellers, compressor impellers, shafts, shrouds, sleeves, diffusers, bearing cartridges, bushings, spacers, housings, volutes, turbine rotors, pumps, blades/vanes, and custom hardware **up to $\text{\O}28.0''$ (710mm)**.

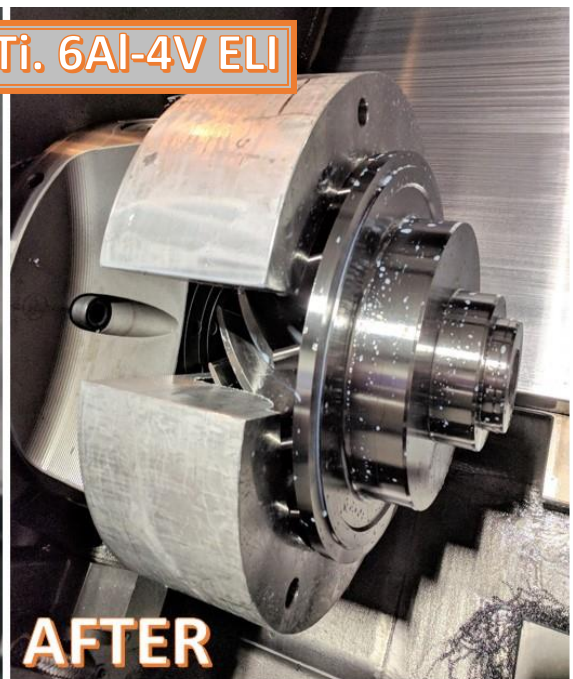
Whether you need a **complex prototype** or **high-volume production**, contact us to experience the difference Solid Machine can make in bringing your product or vision to life.



$\text{\O}18.5''$ Impeller in Ti. 6Al-4V ELI





BEFORE



AFTER

SOLUTIONS & SPECIFICATIONS:

Max Diameter:	28.0" (710mm)
Max Length:	18.0" (450mm)
Max Weight:	2,000 lbs. (910 kg)
Materials:	<ul style="list-style-type: none"> • Aluminum: 2618, 6061, 7075, 7175, 300 series castings • Steel: Stainless (15-5, 17-4, 13-8, 300/400 series), Duplex (2205), Nitronic 50 (XM-19), Alloy, Carbon • Titanium: 6Al-4V, 6Al-4V ELI, Beta-C, 6Al-6V-2Sn, 6Al-2Sn-4Zr-6Mo • Nickel-Based: Inconel (625, 718), Monel 400, Hastelloy C-276, Waspaloy
Tolerances:	+/- 0.0001" to 0.0002" depending on the feature, alloy, etc.
Turning Capabilities:	<ul style="list-style-type: none"> • Contour, form, taper, or straight turning • Parting/cutting • Facing • Threading (external or internal) • Internal Forming • Boring • Drilling • Counterboring • Countersinking • Pocketing • Profiling • Reaming • Tapping • Labyrinth seals  <p>Nitronic 50 (XM-19)</p>
Add'l Internal Capabilities:	<ul style="list-style-type: none"> • High-speed, simultaneous 5-axis milling • CMM inspection for reverse engineering or in-depth dimensional analysis • Manual machining, assembly, saw cutting, and project management • Design for Manufacturability (DFM) services
Subcontracted Services:	<ul style="list-style-type: none"> • Additive manufacturing • Balance & overspeed testing • NDT via FPI or MPT • Wire, plunge, or sinker EDM • V-tooth or curvic couplings • Spline grinding • Polygon grinding • Brazing or welding • Shot peening • Polishing or vibratory finishing • Heat treatment • Ultrasonic testing • Plating processes such as anodizing, black oxide, nitriding, electroless nickel plating, chromate, passivation. • Laser scanning  <p>Centrifugal Chiller Compressor Impeller in 6061 Aluminum</p>
Lead Time:	Quoted on a job by job basis, but typically under 4 to 6 weeks ARO.
Software:	MasterCAM®, SolidWorks®, Concepts NREC MAX-PAC™, CAMplete Truepath
File Formats:	We have yet to receive a model or drawing file we could not open. Try us...we've got you covered.