

Company Introduction



www.advantorr.com
www.gnbvac.com

Quick Facts



- Located in Elk Grove, CA
- Founded in 1968
- Approx. 95 employees
- Production of Vacuum Valves, Chambers, vacuum manifolds and UHP weldments
- Specialized in welding and machining of steel and aluminum
- Distribution of KL Advantorr vacuum components
- Onsite Engineering
- ISO9001 certified



Timeline

Timeline of GNB Corporation



GNB's Production Facility



- 70,000 square foot (7000 square meter) facility
- Specialized in welding of stainless steel, carbon steel and aluminum. (TIG, MIG, SubArc)
- Orbital welding for LOD and UHP weldments
- Class 1000 (ISO 6) and class 100 (ISO 5) cleanrooms
- ASME CWI (certified welding inspectors) on site
- non-destructive testing (ultrasonic and Dye penetrant inspection)
- CNC machining up to 168"sq. (4267mm sq.) / turning 108" (2743mm)
- Bead blasting and plate graining in house



Built for Vacuum Production

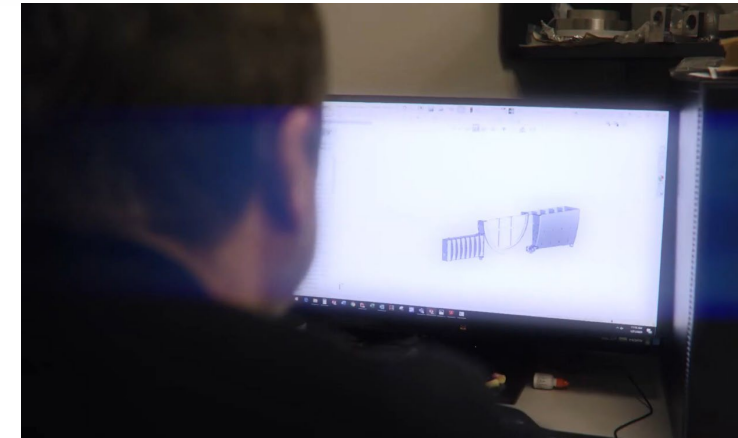
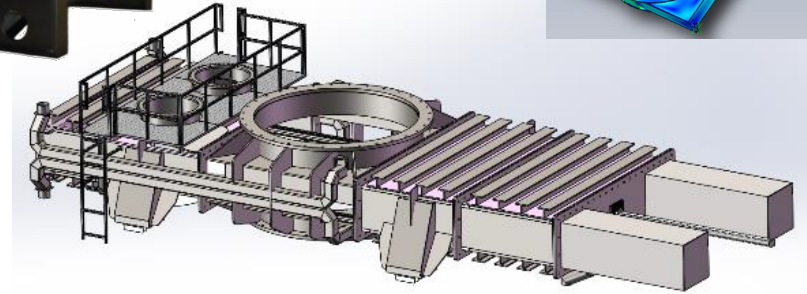
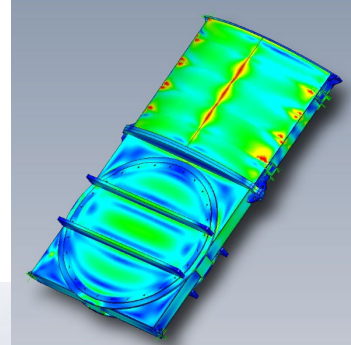
- Helium Leak test is Standard for all components
- Bakeout and RGA available
- Cleaning equipment for vacuum components
- Partnership with local suppliers for chemical cleaning and electro polishing



Clean RGA Scan	
9.5x10 ⁻⁹ Torr	8/11/17-2326-012
-30C	
80 hours under vacuum	
1.0x10 ⁻⁹	
1.0x10 ⁻⁸	
1.0x10 ⁻⁷	
1.0x10 ⁻⁶	
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GNB Engineering

- 10 full time design engineers
- Solid Works CAD software
- FEM stress and deflection calculations
- Design of ASME pressure vessels (U-Stamp)
- Thermal Calculations
- Specialized in water cooling for high temp. valves and chambers
- Flow calculations
- Experts in value engineering to reduce costs of vacuum components



GNB Vacuum Valves

- Gate, Angle and Slit Valves
- Standard sizes from 4" (ISO100) to 72" (1.8m) available
- Custom valves up to 4meter diameter
- Stainless, Mild Steel and Aluminum construction
- Sealing technology from rough vacuum to UHV
- Water cooling features for high temperature processes
- Unique designs for harsh environments
- Pneumatic, Electric, Hydraulic and Manual actuators



GNB Chambers

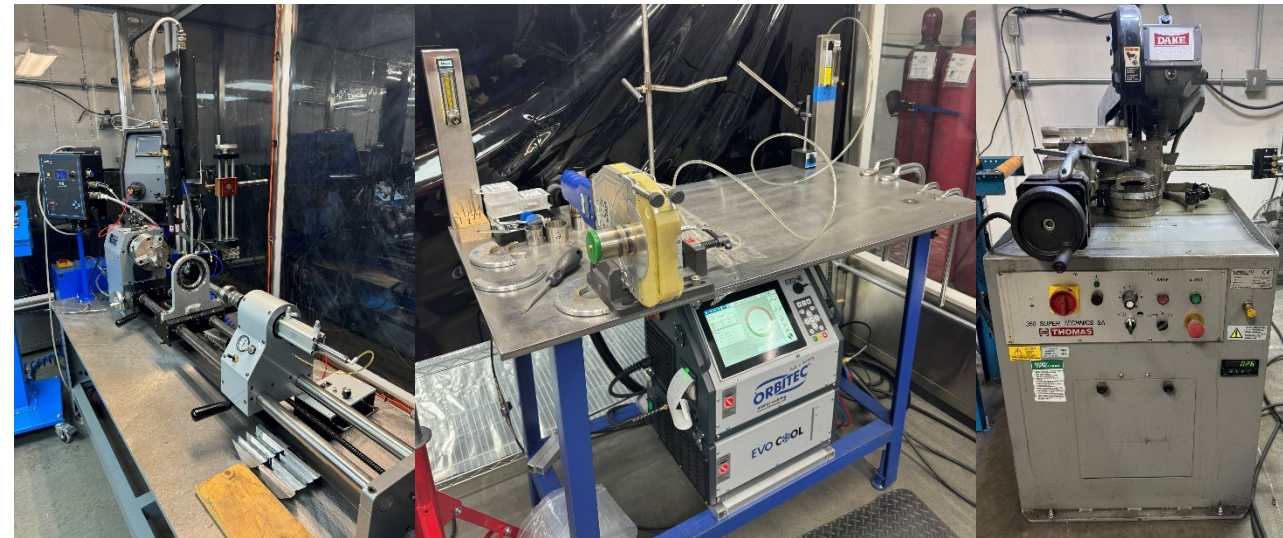
- Small to very large chambers
- Built to print or completely engineered to specification
- Sealing surfaces are machined after welding
- Steel or Aluminum construction
- Water cooling options. (tracing, double wall)
- Different surface finishes (mill finish, blasted, grained, e-polish,..)
- Can be cleaned for UHV service



GNB Semiconductor Products

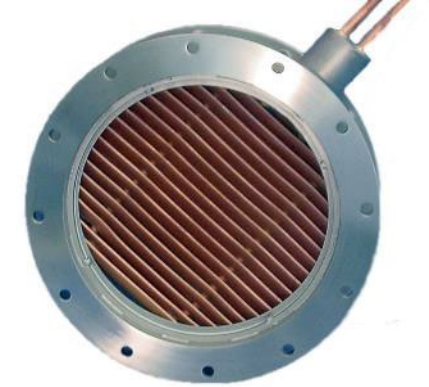
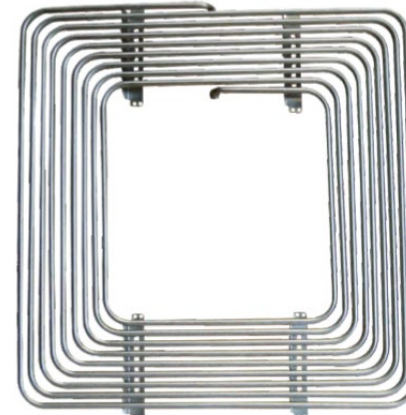


- Saw Cutting Parts Per Length (.5" up to 6")
- Orbital, Lathe, and Manual Welding
- DI Wash Station and Nitrogen Drying
- Vacuum Leak Check Parts at 10X-9
- Custom Engraving (Up to 10" Flange)
- Nitrogen Filled, Vacuum Sealed Bags Inside Class 1000 and 100 Cleanroom



GNB Baffles and Cryo Products

- Platen and Shroud for Thermal Vacuum Systems
- Multi Coolant Baffles
- Liquid Nitrogen traps
- Cold Traps
- Heat Shields
- Meissner Coils



Questions?



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