## Discuss Group P12: Cryogenic Fluid Pumping Applications

- Discussion Group Leaders:
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## Suggested Topics:

- Calculating efficiency, power & considerations
- Condition monitoring
- Cryogenic pump system components
- Accessories to cryogenic pump systems
- Shaft supports: bushings, bearings
- Rotordynamics
- Balance requirements for rotating components
- Bearing life and how to extend it
- Materials of construction & specifications
- Preventative maintenance (PM) requirements
- Vibration standards & monitoring
- Pump testing requirements & applicable test tolerances
- Troubleshooting
- Pump installation steps and challenges
- Pump sizing for various cryogenic applications
- Motor sizing for cryogenic pumps
- Different kinds of cryogenic pumps and where they should be applied
- Cryogenic pump specific speed
- Marine & floating applications for cryogenic pumps
- Submerged motor design and its benefits
- Hazardous area classification for cryogenic pumps & systems
- Preservation and long-term storage of cryogenic pumps
- System design requirements
- Pressure vessel design
- Cryogenic pumping applications
- Pros and cons of conventional pump design versus Cryogenic submerged pump
- Pump columns/column diameters determination and benefits