

Discuss Group P11: Cryogenic Fluid Pumping Applications

- Discussion Group Leaders:
 - Dag Calafell (Techincal Opus Soltions, LLC)
 - Vinod Patel (KBR)
 - Lonn Hall (Ebabr Intl)
 - Bill Bailey (Nikkiso Cryo Inc.)
 - David Loughman (Nikkios Cryo Inc.)
 - Yousef Jarrah (Nikkiso Cryo Inc.)
- 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