

Discussion Group P12 - Cavitation/NPSH (Field Problems)

Leaders:

- Bruno Schiavello (Flowserve)
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- Patrick Green (LyondellBasell)
- David Henry (Marathon Petroleum)
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- Francesco Annese (Baker Hughes, a GE Company)
- Greg Curtin (Chevron)
- Ron Adams (Sulzer Pumps)

Suggested Topics for Discussion:

- Unexpected cavitation erosion
- Key parameters to consider for Root Cause Analysis when experiencing cavitation damage
- NPSHR, NPSHA, NPSH margin
- Performance loss due to insufficient NPSHA (margin)
- NPSH 40,000 hours
- Cavitation erosion rate and impeller life assessment
- Impact of dissolved and/or entrained gas
- Pumping hot water or hydrocarbons
- Reliability of operating with low NPSHA on hydrocarbons
- High cavitation-resistant materials
- Common types of pump cavitation, including: sheet cavitation, suction recirculation induced vortex cavitation, corner (vortex) cavitation, and tip vortex cavitation
- Suction specific speed
- Field cases (suggested by audience) : Quick fix and ultimate solution