Dredge Pump Application & Operation

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This 4-hour course provides an introduction to the design, performance, selection, operation and troubleshooting of centrifugal slurry pumps in dredging applications.

Topics include:

- Slurry pump basics
 - Theory vs. practice
 - Design and construction
 - Performance curves
 - The pump-system interaction
- Suction performance
 - o Cavitation
 - NPSHA and NPSHR
 - o Design factors
- Solids effect on pump performance
 - Settling Slurries
 - Non-Settling slurries

- Pump wear performance factors
 - Operating conditions
 - o Materials
 - o Hydraulic design
- Transient operation and troubleshooting
 - Startup and shutdown
 - Multiple pump systems
 - o Water hammer
 - o System stability