Hydro-Pac Inc.
A High Pressure Company

- Founded in 1972
- Manufacturer of Hydraulically Driven Intensifiers
- High Pressure Hydrogen Compressors
Hydrogen Compressor Cost Reduction Topics

- Standardize Configuration and Fueling Strategy
- Simple Designs and Proven Technologies
- Identify Economical Hydrogen Compatible Materials
- Specify Well Ventilated Sites with Remote Controls
Standardize Configuration and Fueling Strategy

- Limit the number of compressors and stages
- Narrow the range of supply and discharge pressures
- Select a flow and standardize

Diagram:
- Inlet
  - Fill Storage Using Compressor
  - Equalize Tank from Storage
  - Top off with Compressor if necessary
- Storage
- Tank
Simple Designs and Proven Technologies

- Variable speed drives
- Double ended intensifiers
- Water cooled cylinders
- Flexible operational envelopes
- Stop and start under load
Material Research / Installation Requirements

- Limited material data available to designers
- Latest material recommendations from Japan
- Electric and hydraulic component costs
- Control box location