



Kenneth Brown and Andrew McClaine

Hydrogen Storage in a Rechargeable Slurry

Team

- Ken Brown—Managing Partner—BS Engineering from Yale, MBA from Harvard—marketing, business development, product management
- Andy McClaine—Managing Partner, CTO—BS Engineering from Trinity, MSME from Stanford—project management, research
- Dave Bowen—Contractor—BS Engineering from Liverpool, MSME from Grad Inst.—high temperature processes, research, reactor design

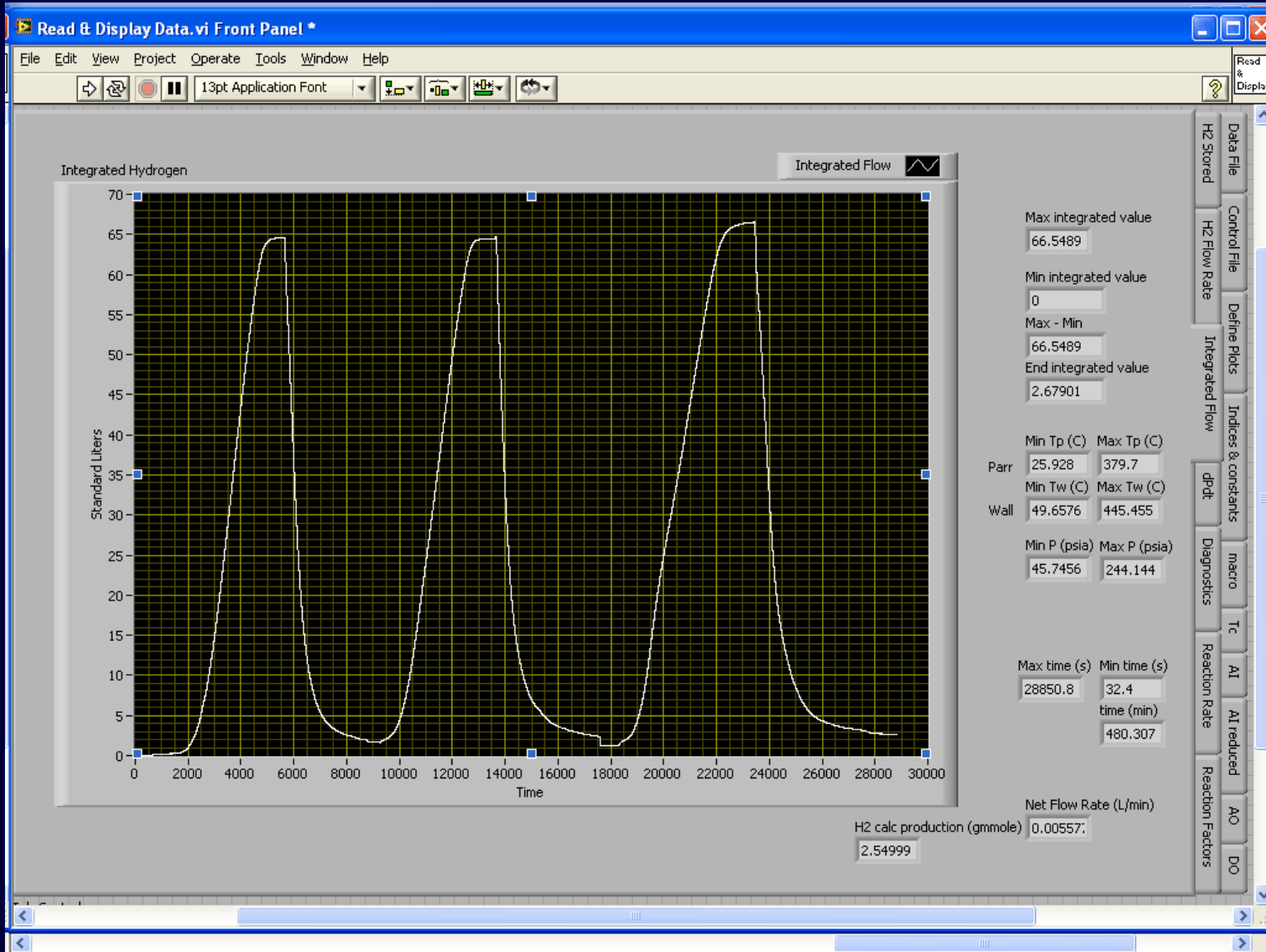
IP

- US Patent 7052671—Storage, Generation, and Use of Hydrogen May 30, 2006
- Patent Application, US 2070227899, Storing and Transporting Energy, Pub date Oct 4, 2007

Safe Hydrogen's Technology

- Slurry of Magnesium/Magnesium Hydride—a liquid
- Safe—no reaction with H₂O or air
- Absorbs and desorbs H₂
- Delivers H₂ for <\$3 per kg, equivalent to <\$3US per US gallon or <.60 Euros per liter
- Capital cost for storing electricity <\$35 US per kWh or <26 Euros per kWh
- Uses today's infrastructure

Key cost driver



Electricity Storage with Slurry



Wind Turbine



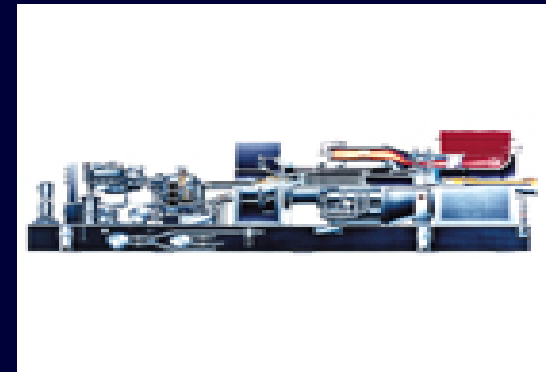
Tank Farm



Electric Distribution



Electrolyzer



Gas Turbine



Slurry Transport by road, rail, or barge

Hydrider—To Charge Slurry



Dehydrider—To Discharge Slurry



Storage Cart and Compressor



First Uses

- Store intermittent electricity
Wind, Solar, and tidal
- Utility Battery
- Deliver H₂ to fueling stations

Contact Information

- Safe Hydrogen, LLC
30 York Street
Lexington, MA 02420
USA
Ken Brown, Managing Partner 1-781-572-0334
Andy McClaine, Managing Partner 1-781-572-0335
www.safehydrogen.com