



Alternate Energy Systems, Inc.

Natural Gas Backup Systems for the Glass Industry

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INTERNATIONAL TRADE FAIR FOR GLASS
PRODUCTION • PROCESSING • PRODUCTS

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**21-24 OCTOBER 2014
DÜSSELDORF, GERMANY**



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Natural Gas Backup Systems
Natural Gas Standby Systems
Natural Gas PeakShave Systems

Float Glass – Container Glass
Fiber Glass – Ceramics



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**Produce Natural Gas Replacement
when Supply is interrupted.**

**Produce Natural Gas Replacement
when Supply is less than Demand.**

**Produce Natural Gas Replacement
when Pressure is too low.**



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BENEFITS

- **Directly compatible with Natural Gas**
- **No Equipment Changeover**
- **No Production Interruption**
- **Local Fuel Storage**
- **Environmentally Friendly**
- **Automatic Operation**



Typical System Configuration:

- **Local Fuel Storage**
- **LP Vaporizer**
- **LP Vapor / Air Blender**
- **Automatic Gas Properties Control**
- **Control and Monitoring Equipment**



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Typical System Components



Local Fuel Storage



Liquid Transfer Pumps



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Typical System Components



Vaporizer



LP-Vapor / Air Blender



Examples:



Standby System at a
Fiber Glass Plant

Storage Tanks

Compressor

Vaporizer

LP/Air Blender

Transfer Pumps

Installation at a Fiber Glass Plant



Examples:



Standby System at a
Float Glass Plant

LP/Air Blender

Vaporizer

Installation at a Float Glass Plant



Examples:



Standby System at a
Ceramics Plant

LP/Air Blender

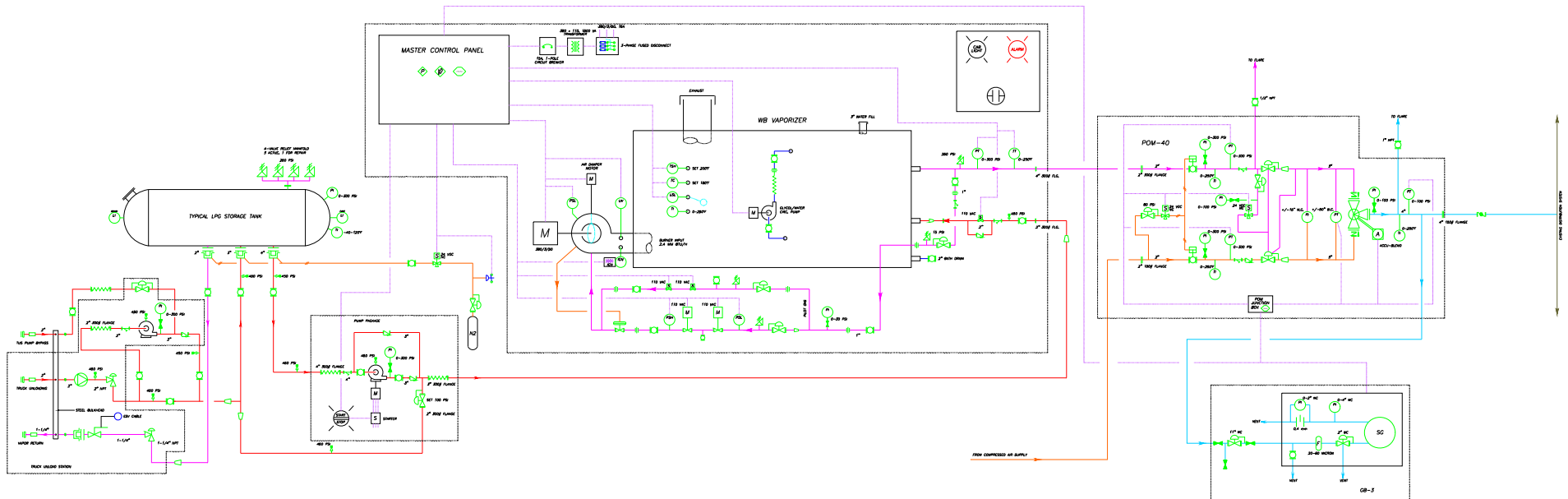
Vaporizer

NatGas Tie-In

Installation at a Ceramics Plant



Examples:



Piping & Instrumentation Diagram



Some of Our Glass Plant Installations





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