Your Optimized Rig

The Right Equipment to Make YOUR Rig Safe and Profitable
ANTITRUST POLICY STATEMENT FOR SPRAY POLYURETHANE FOAM ALLIANCE MEETINGS

• It is and shall remain the policy of the Spray Polyurethane Foam Alliance (“SPFA”), and it is the continuing responsibility of every SPFA member company, SPFA meeting or event participant, as well as SPFA staff and leadership to comply in all respects with federal and state antitrust laws. No activity or discussion at any SPFA meeting or other function may be engaged in for the purpose of bringing about any understanding or agreement among members to (1) raise, lower or stabilize prices; (2) regulate production; (3) allocate markets; (4) encourage boycotts; (5) foster unfair or deceptive trade practices; (6) assist in monopolization; or (7) in any way violate or give the appearance of violating federal or state antitrust laws.

• Any concerns or questions regarding the meaning or applicability of this policy, as well as any concerns regarding activities or discussions at SPFA meetings should be promptly brought to the attention of SPFA’s Executive Director and/or its legal counsel.
Rig Purchase Considerations

• No “One Size Fits All” Solution

• Rig Supplier Should Be a Business Consultant

• Difficult Equipment Upgradeability

• Product Support/Warranty
What Size Rig?
Environment
Applications

- Residential
- Commercial
- Roofing
- Slab Jacking
- Specifications
  - Temperatures
  - Pressures
Materials

- Foam
  - Open Cell
  - Closed Cell
  - Roofing

- Polyurea
  - Specifications
    - Temperatures
    - Pressures
Component Selection

- Proportioner
- Hose/Spray Gun
- Material Supply Package
- Genset
- Compressor
- PPE
- Heater
Proportioners

- **Drive**
  - Electric
  - Hydraulic
  - Air
  - Integrated
- **Power**
  - 1ph. Vs 3ph
- **Pressure**
  - Low (2000 psi)
  - High (3500 psi)
- **Heat**
  - Delta “T” Requirements
- **Hose Length**
  - 200’ vs 300” vs 400’
Spray Hose

- Spray Hose
  - ½” vs 3/8” vs ¼”
  - Combination
- Pressure
  - Low Pressure (2000 psi)
  - High Pressure (3500 psi)
- RTD (Resistance Temperature Detector)
  - Location
Spray Gun

- Air Purge
  - Fusion AP
  - P2
- Manual Purge
  - GX-7
- Liquid Purge
  - Fusion CS
Material Supply System

- Material Packaging/ Volume Requirements
  - Totes
    - Stick Pump
    - Diaphragm Pump
    - Wall Mount vs Tote Mount
  - 55 Gallon Drums
    - Stick Pump
    - Diaphragm Pump
      - Wall Mount vs Drum Mount
  - 30 Gallon Drums
    - Stick Pump
    - Diaphragm Pump
      - Wall Mount vs Drum Mount
Proper Power

• Calculating Requirements (1ph vs 3ph)
• Main (220v)
  – Proportioner
    • Primary Heater Size
  – Air Compressor
  – Heater
• Minor (110v)
  – Air Dryer
  – Heater/Air Conditioner
  – Lights, Outlets, Tools, Etc.
Power Source

• Generator
  – 30KW vs 40KW vs 60KW
    • Reactor(s), Air Compressor, Heater/Air Conditioner, Air Dryer, Lights, Tools, Ambient Air Pump

• Shore Power
  – Licensed Electrician
  – 1ph or 3ph
  – Shore Cable
    • Correct Size?
  – Brown Power
Proper Air

- Calculating CFM Requirements
  - Spray Gun
  - Transfer Pumps
  - Respiratory Protection
    - Hood vs Mask
      - 1 or 2 Worker System
    - Cool Tubes
  - Pneumatic Proportioner
  - Pneumatic Tools
Air Compressor

- Compressor Types
  - Piston
  - Screw/Rotary Screw
  - Hydrovane

- Continuous Run

- Air Filtration
  - Stage 1 Water Separator
  - Stage 2 Refrigerated Air Dryer
  - Stage 3 Coalescing
Person Protective Equipment

• Respirators
  – SAR Supplied Air Respirator
    • High Pressure (filtration panel)
      – Single vs Dual
      – Full Face Respirator
      – Hood
    • Ambient Systems
      – Single vs Dual
  – APR Air Purifying Respirator
    • Half and Full Face Respirators
      – P100 Organic Vapor Cartridge
Layout

- Separate Compartment
  - Work Area/Gen Room
- Weight Distributed
  - Balanced Full/Empty
- GVWR
  - CDL Requirements
    - Tow Vehicle
Recap

- No “One Size Fits All” Solution
- Rig Supplier Should Be a Business Consultant
- Little “Trade-in” Value
- Very Hard to Upgrade Individual Pieces of Equipment
Visit Us in Booth 703

Visit Us in Booth 407
Spray Foam Equipment Technology

Tryg Waterhouse
Equipment Line-up

- Portable/Touch-up:
  - E-8p
  - E-10

- Entry Level:
  - A-2
  - E-20

- Mid Production:
  - E-30
  - H-30

- High Production:
  - H-40/50

- Turnkey:
  - E-30i
  - H-30
Reactor 2 Models

Electric
- E-30

Hydraulic
- H-30/40/50

Electric Integrated
- E-30i
Advancing the Industry!

- Harder to spray bad foam
- Eliminate the blame game
- Minimize down time
Reactor 2 Features

Inlet Temp/Pressure Sensor
Graco Insite

2-track
### Insite Dashboard

#### Last Reactor Data

- **Dec 19, 2013 10:17:16 AM**

#### Data and Location

- **Temp A (Actual/Setpoint) (°F)**: 116 / 115, 150 / 140, 103 / 103, 110 / 107
- **Temp E (Actual/Setpoint) (°F)**: 115 / 115, 142 / 140, 103 / 103, 109 / 107

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<th>Date</th>
<th>Daily Power On Time (hours)</th>
<th>Daily Cycle Count</th>
<th>Cycle Count (Resettable)</th>
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## Job Log

### Job Log Details

- **Date**: 2014-01-03 13:15:13

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## Reporting: Daily Usage

### Daily Usage Table

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### EVENT LOG

**Event Code: DE0X**

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GPS: Spray Rig

100291 Graco Test Unit (355233050329639)
Address: 801 Ramsey St NE, Minneapolis, MN, US
Last GPS Time: Tue, 29 Oct 2013 14:59:18 GMT
## Daily Report

### Data for: October 3, 2013

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October 4, 2013, 6:00 AM
Remote Reporting Technology

• Graco partnered with 2-track Solutions, LLC
• Using cellular signal to connect & send data to cloud server
• $34.99-$39.99 monthly data rate
What’s the End Result?

Easier Operation

Improved Durability

Easier Troubleshooting