

## TECHNICAL DATA SHEET

|         |                                                  |
|---------|--------------------------------------------------|
| PRODUCT | <b>DIGITAL TEST UNIT</b>                         |
| MODEL   | <b>DTU-500</b>                                   |
| SERIES  | <b>SERIE DTU</b>                                 |
| API     | <b>CERTIFIED ACCORDING TO API SPECIFICATIONS</b> |



Digital hydrostatic pressure test unit is the most common standard testing equipment with digital pressure and temperature graph chart recorder with a 0.15% accuracy. Air operated liquid pressure pump with a variety of models on pressure that ranges from 500 PSI to 65,000 PSI, with several flow rates.

Designed for Hydrostatic, Burst, Booster, Hydro, Injection, Leak Detector, Pressure Calibration and More.

DTU Series are used in most industries including Oil & Gas for: Pressure & Certifications on Pipes, Valves, Hoses, Vessels, Spools, Instrumentation controls, etc.

### FEATURES/BENEFITS

- Creates customized pressure test reports and certificates..
- Real-time pressure & temperature monitoring and reporting.
- Windows based touchscreen tablet.
- Compact control panel design
- USB data interface
- Air operated liquid pump (60-100 Psi driven) 24-56 SCFM
- All Stainless anti-corrosive (Structure and all components)
- ESI technologies USB transducer & software
- Unit weight: 60 pounds - Dimensions: 20"L X 16" W 20"H
- HS Code: 8413.50.0000
- Certificated according to API specifications
- For use with all liquids: Water, hydraulics, oils, glycol, etc.

### PERFORMANCE DATA

|                      |                                 |
|----------------------|---------------------------------|
| Output Flow          | 7.9 GPM (30 LPM)                |
| Max Output Pressure  | 500 psi (35 bar)                |
| Air Supply - Driven  | 60-100 Psi (24-56 SCFM)         |
| Air Inlet Port       | 1/2" female NPT                 |
| Inlet Liquid Port    | 1/2" female NPT                 |
| Outlet Pressure Port | 1/4" female NPT                 |
| Bleed Port           | 1/4" female NPT                 |
| Pump Brand & Ration  | SC-Hydraulic Ratio 5:1          |
| Temperature          | Recommended: 200°F (Max. 400°F) |



## DIGITAL CHART RECORDER

- Records and graphs pressure & temperature.
- USB Plug for data download/upload & easy device connection  
The ESI allows the user to measure up to 16 pressure and temperature inputs simultaneously and create customized test reports. ▀ Up to 5Hz – 5 Readings per Second
- Easy setup, configuration and reporting. The software interface allows for real-time pressure and temperature recording using a 10" anti-glare touchscreen tablet.
- Easy Software Interface for Real-Time Pressure & Temperature Monitoring & Reporting
- Digital test report shareable via USB and wireless
- **Multiples Languages:** English, Spanish, German, Chinese Italian, Portuguese, French.
- Chargeable with up to 6 hours of battery life
- 110 V Female Connection for standard Shop Power (220-240V to 110-120V voltage convert device available with over 150 country style plugs) EURO, Africa, UK & Asia



### SPECIFICATIONS

Model DTU Recorder

Test pressure 500 Psi

Test pressure 35 Bar

|          |           |
|----------|-----------|
| Pressure | Accuracy: |
| 500 Psi  | 0.15%     |

ESI Technology Ltd  
THE MANUFACTURER OF THE FOLLOWING EQUIPMENT FOR CUSTOMISED  
PRESSURE AND TEMPERATURE TRANSDUCERS & TRANSMITTERS

Test Certificate

Test Object Identification

|              |                      |                |                      |
|--------------|----------------------|----------------|----------------------|
| Customer:    | INSERT_CustomField_1 | Time Held:     | INSERT_CustomField_4 |
| Test Object: | INSERT_CustomField_2 | Test Pressure: | INSERT_CustomField_5 |
| Test Date:   | INSERT_CustomField_3 | Part No.:      | INSERT_CustomField_6 |

Certification Information

|                   |                       |                   |                      |
|-------------------|-----------------------|-------------------|----------------------|
| Used Cal. Device: | ESI- Digital Recorder | Test Source:      | INSERT_CustomField_7 |
| Serial No:        | INSERT_Sensor1_Serial | Equip. Cal. Date: | INSERT_CustomField_8 |

Temperature serves as indication only

Test Technician: INSERT\_CustomField\_9      Signature: \_\_\_\_\_

Test Witness: \_\_\_\_\_      Signature: \_\_\_\_\_

ESI Technology Ltd, Digital Pressure & Temperature Chart Recorders  
www.hydrorex.com - Made in USA

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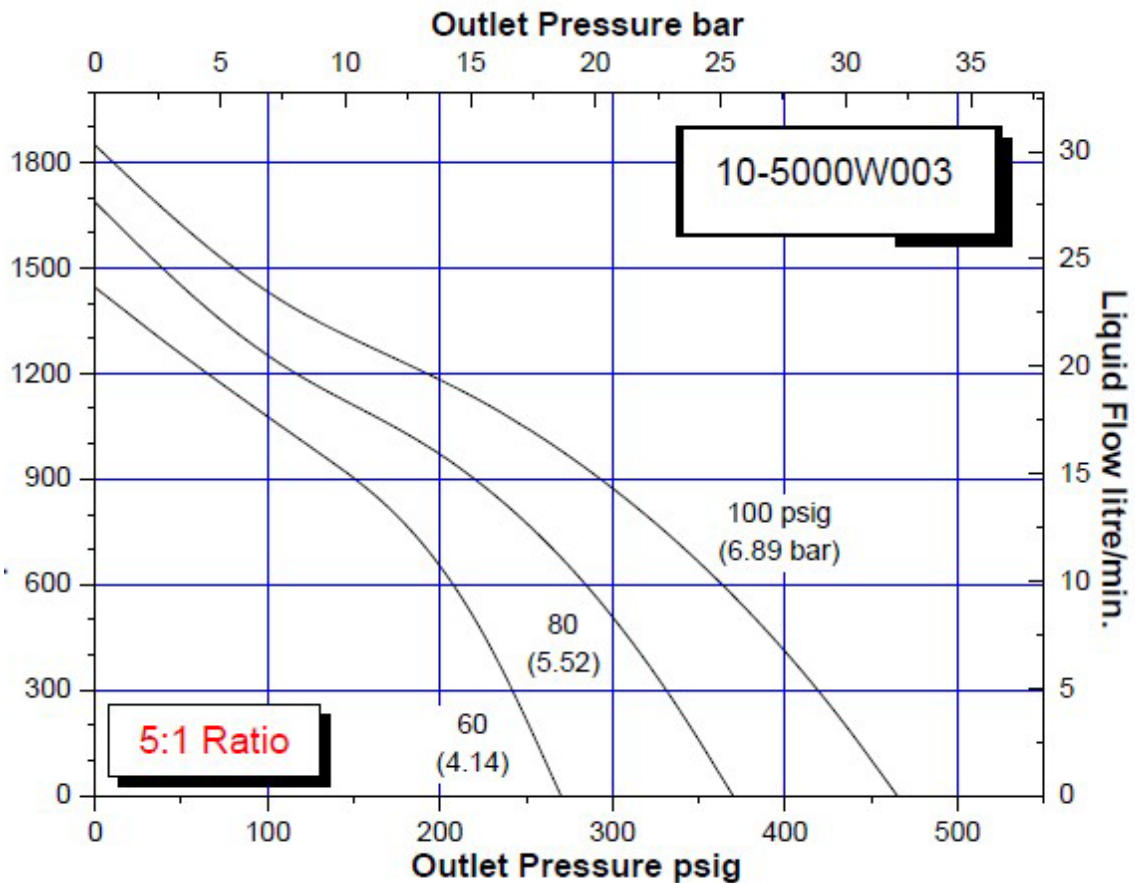
### DIGITAL TEMPERATURE

|                                |                                                                                                          |
|--------------------------------|----------------------------------------------------------------------------------------------------------|
| Other Pressure Ranges:         | PSI, bar, mBar, MPa, Pa, mH2O, mmHg, atm, kg/cm2, kPa                                                    |
| Accuracy NLHR:                 | ≤ ± 0.15% of span BFSL                                                                                   |
| Temperature Ranges:            | °F or °C                                                                                                 |
| Operating Ambient Temperature: | 32°F to +115°F                                                                                           |
| Storage Temperature:           | -4°F to +140°F                                                                                           |
| Temperature Effects:           | ±1.5 %FS total error band for -14°F to +176°F. Typical thermal zero and span coefficients ±0.015 %FS/ °C |

### OPTIONAL

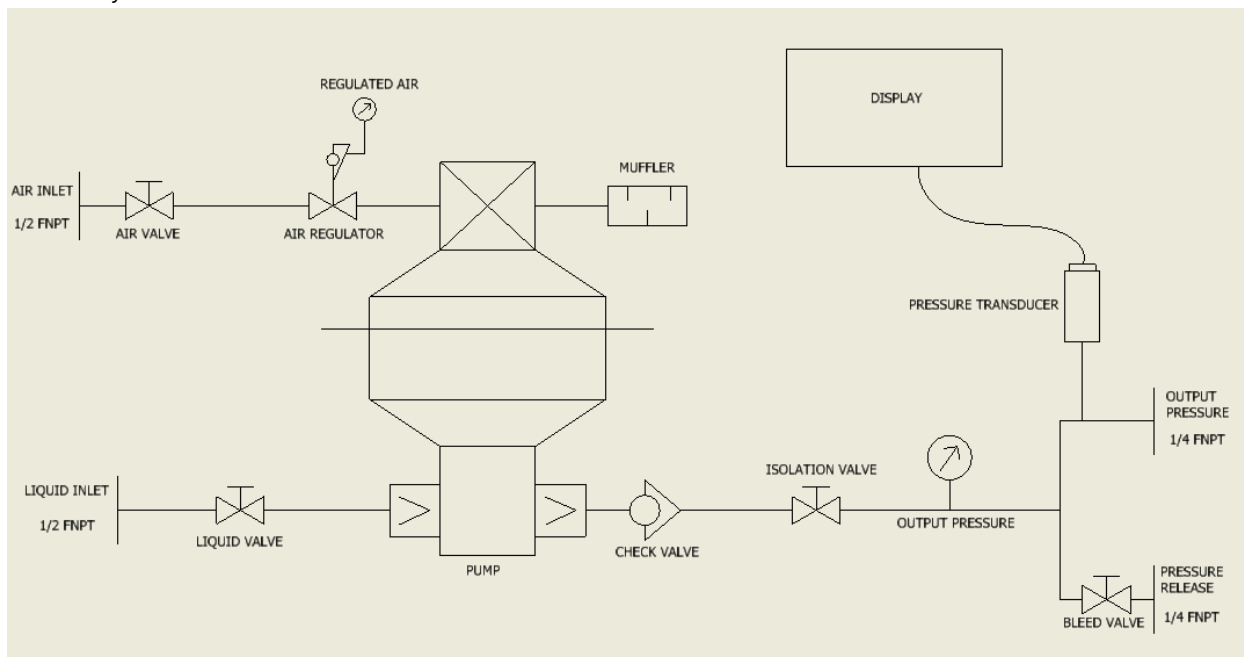
- Multiple pressure inlets/sensors for best accuracy pressure
- Multiples test stations
- Pump for liquid or gases
- With liquid tank
- Dual pumps for high and low
- Double acting pumps
- All covers (test cabinet style)
- With small test chamber
- With stand (standard operation height)
- Custom paint color.

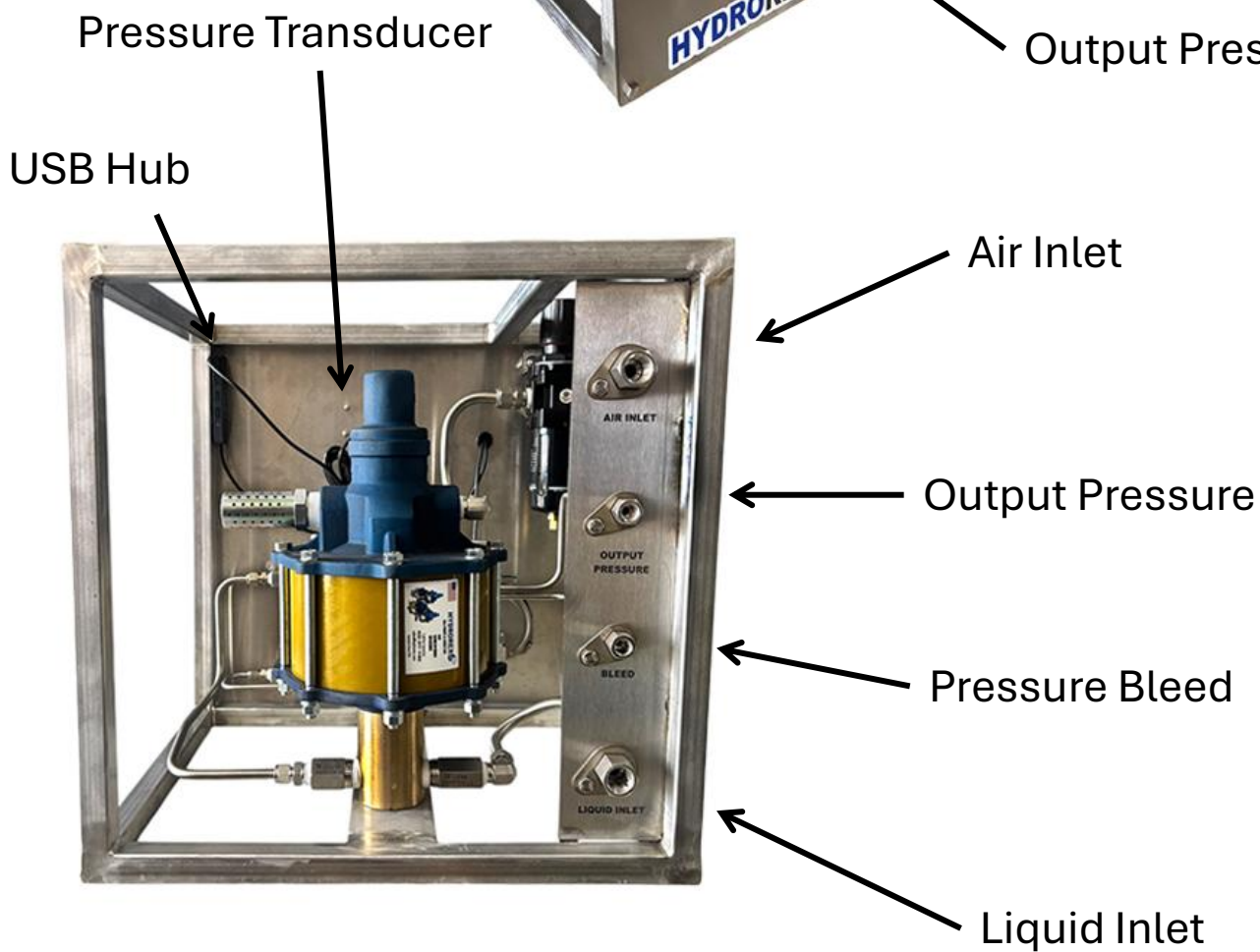
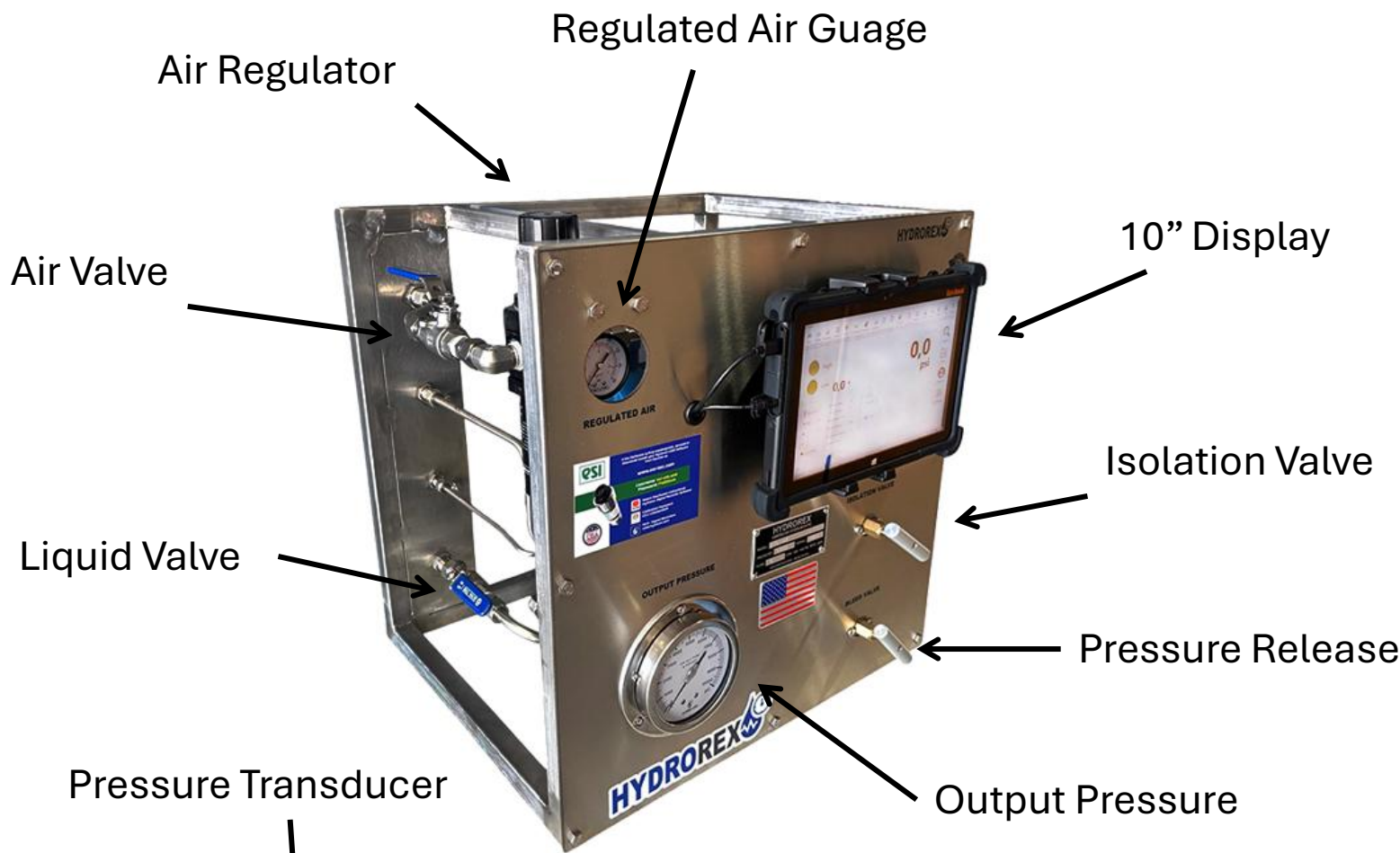
## FLOW CURVE RATIO 5:1



## GENERAL PRODUCT INFORMATION

- When operating from 0 to rated hydraulic pressure, air consumption will be approximately **24-56 scfm** of free air at 100 psi output. At lower air pressures and higher hydraulic pressures air consumption will be reduced proportionately to flow rates indicated.
- The DTU Series "Dry Lube" pump does not require an air line lubricator.
- Contact Hydrex for pressure gauges calibration / certificate.
- Maintenance parts for future repairs, all components & accessories can be found on our website [www.hydrex.com](http://www.hydrex.com).



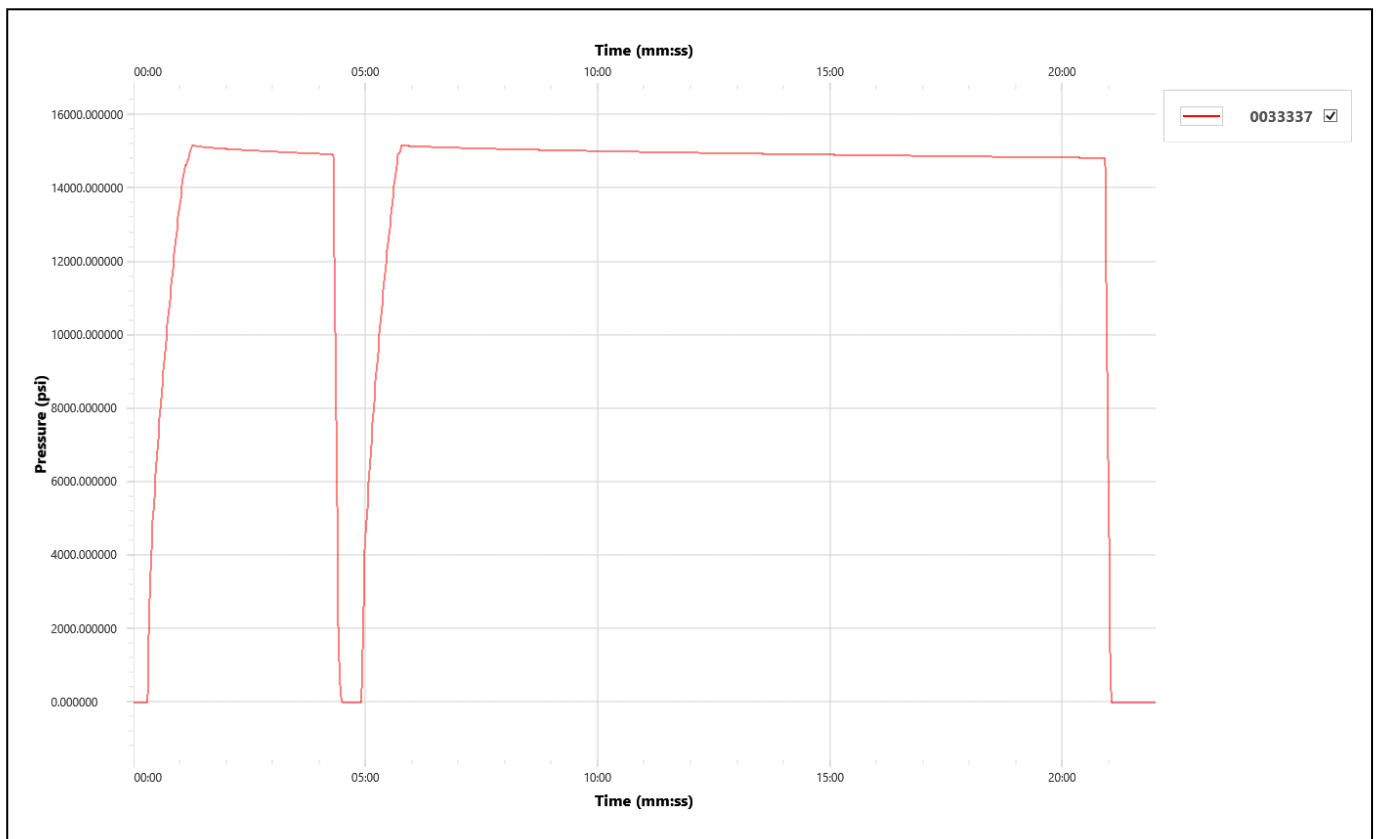


Test Object Identification

|              |                    |                |            |
|--------------|--------------------|----------------|------------|
| Customer:    | National Oil Varco | Time Hold:     | 15 Minutes |
| Test Object: | Hydraulic Spool    | Test Pressure: | 12550 PSI  |
| Part No:     | Spool-5365         | Serial No.:    | SP5364     |

Certification Information

|                   |                    |                 |               |
|-------------------|--------------------|-----------------|---------------|
| Used Cal. Device: | ESI-USB            | Cal of ESI-USB: | 01/12/2025    |
| Serial No:        | 143S657            | Test Date:      | 08/07/2025    |
| Manufacturer:     | ESI Technology Ltd | Test Engineer:  | Scott Mueller |



Temperature serves as indication only

Tester: Elia GutierexSignature: Elia Gutierrez

Project Engineer: \_\_\_\_\_

Signature: \_\_\_\_\_