The Dresser Natural Gas Solutions (NGS) Model 5 Transfer Prover, equipped with the SmartProve™ Interface Cable, is a fully integrated, computer controlled system that can test the combined accuracy of the Dresser NGS rotary gas meter and the Dresser NGS Micro Corrector; model IMC/W2 integral mount and model MC2 instrument drive mount.

**Features**

Meter and corrector are tested simultaneously as a complete gas measurement system - no need to test separately. The test is:

- Fast
- Automatic
- Easy
- Accurate

The Fast Prove feature reduces testing time by as much as 90%. Combined system accuracy is tested quickly. Real time corrected and uncorrected volume pulses are routed through both the serial port and the pulse output connector of the integral Micro Corrector.

The high frequency proving option allows the user to test the accuracy of the basic meter when the SmartProve cable is connected to the serial port of the integral Micro Corrector.

The proving system performs “smart” functions:

- Reads Micro Corrector configuration parameters such as meter type, meter size, base temperature, base pressure, etc.
- Optimizes test time to the shortest possible time required for a valid accuracy test at each flow rate.
- Automatically changes the Micro Corrector in and out of Fast Prove Mode.
- Calculates pulses per test (PPT), flow rate and test volume automatically for each test.

The prover operator only has to press the START button to initiate the test, which is then automatically performed at all the pre-selected test flow rates.
The SmartProve™ Interface Cable:

- Functions as a conduit between the meter/corrector and the transfer prover
- Is equipped with four outputs that connect to:
  - The serial communications port of the Micro Corrector
  - The communications port of the PC
  - The Pulser Connector located on the Field Meter Junction Box of the transfer prover
  - The pulse/telemetry output connector on the Micro Corrector
- Is equipped with a box that has four LED indicators:
  - Three indicators show the type of Micro Corrector output pulses currently being sent to the transfer prover
    - Uncorrected
    - Corrected
    - High Frequency
  - One indicator shows that the prover interface cable is connected to the proving system correctly, and also blinks on and off corresponding to input pulses as received from the Micro Corrector.

To fully utilize the capabilities of the SmartProve™ Interface, the following key elements are required:

- The Dresser Model 5 Transfer Prover
- An external pressure reference source (optional, not provided with the Model 5 Transfer Prover)
- The SmartProve™ Interface Cable
- Version 9.0 Windows® Model 5 Prover software
- Laptop or PC used to run the prove or Windows XP or higher operating system installed

Required Prover Operator Selections:
The transfer prover operator is only required to make the following selections concerning the test settings:

- Micro Corrector (MC) Type
  - Integral
  - Wall/ID Mount
- Type of meter output
  - Corrected fast Prove Mode
  - Uncorrected Fast Prove Mode
  - Corrected Standard Mode
  - Uncorrected Standard Mode
  - HF (Meter Only)
- MC COM Port
  - Communications port on the PC that will be used to communicate with the Micro Corrector
- Prover test flow rates
  - Up to 5 flow rates can be selected as a percentage of meter maximum flow rate

Minimum Computer System Requirements:

- Windows XP, Windows 7 operating systems
- Pentium 4, 1500 MHz processor with at least 256 MB of RAM
- 100 MB of free hard drive space on the PC
- Two RS-232 compatible serial ports; or one RS-232 serial port and a USB to serial converter; or two USB to serial converters
- NOTE: The SmartProve Interface package includes one USB to Serial Converter.