

Parr 6750 Proximate Interface

Simple Data Handling for Proximate Analysis of Coal



The proximate analysis of a coal sample is a tedious procedure involving several separate weights and the handling of data from several sources as needed to calculate Air-Dry Moisture, Total Moisture, Volatile Matter, Fixed Carbon and Ash. The 6750 Proximate Interface is an advanced microprocessor system, which simplifies the collection, storage, calculation, and reporting of data needed during the proximate analysis of coal, coke and related fuel.

Parr Instrument Company has redesigned and significantly enhanced the 6750 Proximate Interface for proximate analysis, including many new features desired by users of the 1750 model. The new 6750 has the ability to function as a Proximate Analyzer, an ADL Interface, a Total Moisture Interface and a Balance Interface. As compared to a PC, the unit is compact, inexpensive and robust. The Interface weighs only 4.5 pounds and measures 11 inches wide, 5 inches tall, and 9 inches deep, saving precious bench top space.

Numerous Capabilities

Operating seamlessly with current laboratory equipment, the 6750 Proximate Interface will:

- Collect and store all individual weights obtained during the steps required to determine moisture, volatile matter, ash, Btu's and Sulfur
- Manage up to 1000 samples
- Coordinate and organize data as it becomes available



- Calculate the resulting proximate analysis for each sample on any of four reference bases: As-Determined (AD), As-Received (AR), Dry (DRY) or Dry, Ash-Free (DAF)
- Convert and report Btu and Sulfur values to selected moisture reference bases
- Act as a remote Air Dry Loss, Total Moisture Interface or Balance Interface
- Support data entry, storage and reporting for Free Swelling Index (FSI) and Ash Fusion along with the more traditional mass loss or calorimetric based measurements
- Transmit all results to a network printer, any 40 or 80-column printer, as well as a central computer.
- Obtain a printout or report of the proximate analysis, Btu and Sulfur values for each sample.
- Produce final or preliminary reports at any time for any sample ID.

Simplify Data Entry and Organization

Any order may be used for weighing and treating samples. The 6750 Proximate Interface will accept data from a digital balance as generated; organizing and storing it in the correct order, under operator assigned sample IDs. If desired, an automatic data entry system is available.



Sample weights may also be entered manually using the touch screen keyboard on the console. After each weighing, the entry will be shown on a LCD display of the 6750 Proximate Interface for confirmation before it is entered into memory. The operator will then use the touch screen keyboard to identify each entry test (moisture, ash, volatile matter, Btu or air dry loss) or function (tare, gross or final weight) to which the data applies. The 6750 Proximate Interface will prompt the operator to identify each entry with a

valid sample ID. Several selectable options are available to speed data entry procedures by allowing the operator to enter consecutive tare and gross weights automatically with a minimum number of keystrokes.

Weights used to determine Air-Dry Loss (ADL) or Total Moisture may also be entered manually. Alternatively, the ADL or Total Moisture value can be calculated and entered separately as a percent.

From Raw Data to Attractive Reports

Many options are available to the user to create the desired reporting format. The user can select from a variety of pre-programmed options to obtain either complete or partial

reports for individual samples or for a full range of tests. A memory management system will clear the test report memory when desired. Data for up to 1000 samples can be entered before results must be withdrawn to make room for additional data. All data is stored in non-volatile Flash ROM based memory.

There are five options for transferring data from the 6750 Proximate Interface:

- Directly to a printer via the RS232C port
- Manually transfer the data using a Compact Flash card
- Link to a network printer using the Ethernet port
- Establish a connection using a web browser
- Connect using an ftp site

Parr 6750 Proximate Interface Report - Microsoft Internet Explorer

Address: http://192.168.0.5/cgi-bin/report.cgi?FULLPROX-0000003.fnl.csv

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=====
Parr 6750 Proximate Interface                      Revision 041222030110
Sample ID FULLPROX-0000003                         Preliminary Report
Printed 01/04/2005 11:54
=====
Tare          ADL      Moisture  Ash      VM      FC      BTU      Sulfur
2218.0        15.6908  17.6908  16.7701  17.7709  8.4008
Gross         6711.0   16.6925  18.6741  17.7709  0.9856
Final        5975.9   16.6101  17.7347  17.2878
=====
Basis
=====
As-Determined 16.36   8.23   4.46   40.05  47.26  12495  2.25
As-Received  23.24          3.73   33.49  39.53  10451  1.88
Dry           4.86          43.63  51.50  13615  2.45
Dry Ash-free  45.87  54.13  14311  2.58
=====
Free Swelling Index      6.5
=====
Ash Fusion Temperature C (Reducing)
=====
Initial Deformation      2190.0
Softening                 2219.0
Hemispherical            2236.0
Fluid                    2261.0
=====
Ash Fusion Temperature C (Oxidizing)
=====
Initial Deformation      2654.0
Softening                 2716.0
Hemispherical            2747.0
Fluid                    2773.0
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Seamless Integration

The 6750 Proximate Interface does not require a special oven, furnace, or analytical balance. All drying and ashing operations are performed in the same oven and furnace normally used for standard ASTM proximate analyses. The 6750 Proximate Interface can be installed in a variety of configurations and the user will want to choose the proper installation procedures for his or her planned setup.

Each 6750 Proximate Interface is equipped with three bi-directional communications ports; an RS232C printer port, an RS232C balance port and an Ethernet network connection.

Normally, the RS232C printer connection will be used in conjunction with a stand-alone printer. The user has the ability to configure parameters within the 6750 Proximate Interface to operate with any existing printer. The Parr 1757 Printer is a simple, compact option if a stand-alone printer is desired. A cable to connect the 6750

Proximate Interface to the 1757 Printer is supplied with the printer. Alternatively, the user may print to a network printer using the Ethernet connection.

The balance port is used to accept sample weights directly from an analytical or top-loader balance. The Interface allows the user to choose from a wide variety of standard balance configurations or to establish parameters specific to their laboratory balance. Parr is able to supply cables for common balance connections.

An Ethernet network connection is used when the 6750 Proximate Interface will be installed in conjunction with a calorimeter and / or ADL or Total Moisture interface devices. Additional 6750 Proximate Interfaces may be connected to the network, configured as ADL or Total Moisture interface devices at some remote location. In this system, the primary 6750 Proximate Interface can then be configured to retrieve ADL or Total Moisture weights from the remote 6750 Proximate Interface devices.



If the 6750 Proximate Interface is connected to a Parr Calorimeter via an Ethernet communications network, sample weights for heats of combustion determinations will be transferred automatically to the calorimeter. Determined Btu and Sulfur values can then be transferred back to the 6750 Proximate Interface for incorporation in final reports. If the 6750 Proximate Interface is not connected to a calorimeter controller, Btu and Sulfur values can be entered directly through the touch screen. The 6750 Proximate Interface is compatible solely with the line of 6000 Series instruments.

Contact our sales staff at 1-800-872-7720, for additional information on the newest member of the 6000 Series instruments.

Ordering Guide

6750EA	Proximate Interface, 115V/230V, 50/60Hz
6750EB	Proximate Interface, 230V, 50/60Hz
A1816E2	Printer Cable (for use with 1757)
A1880E	25 pin DP S-T
A1881E	25 pin DP Null
A1882E	25 pin DS S-T
A1883E	25 pin DS Null
A1884E	9 pin DP S-T
A1885E	9 pin DP Null
A1886E	9 pin DS S-T
A1887E	9 pin DS Null

The Parr Warranty

Parr Instrument Company (Parr) pressure reactors and associated products are designed and manufactured only for use by or under the direct supervision of trained professionals in accordance with specifications and instructions for use supplied with the products. For that reason, Parr sells only to professional users or distributors to such users. Parr produces precision equipment and associated products which are not **intended for general commercial use.**

Exclusive Warranty

To the extent allowed by law, the express and limited warranties herein are the sole warranties. **Any implied warranties are expressly excluded**, including but not limited to implied warranties of merchantability or fitness for a particular purpose.

Express Warranties

Subject to the above Conditions, Parr expressly warrants that its products:

Are as described in the applicable Parr sales literature, or as specified in Parr shipping documents.

Will function as described in corresponding Parr sales bulletins, or for specifically engineered assemblies, as stated in the sales proposal and purchase agreement.

Will remain free from defects in materials and workmanship for one year from date of delivery of the product to the original purchaser/user. **Note** that there is no guarantee of a service life of one year after delivery.

Limitations on the Parr Warranty

As to the original purchaser/user and to the distributors to such users, Parr limits its liability for claims other than personal injury as follows:

Replacement or repair. With respect to express warranties herein, Parr's only obligation is to replace or repair any parts, assemblies or products not conforming to the warranties provided herein.

Disclaimer of consequential damages. In no event shall Parr be liable for consequential commercial damages, including but not limited to: damages for loss of use, damages for lost profits and damages for resulting harm to property other than the Parr product and its component parts.

Due to their fragile nature, glass parts are not warranted beyond incoming inspection at user's facility.



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