

Brooks® Smart DDE Software

GENERAL FEATURES:

- Easy integration in your control software
- Bi-directional on-line data linkage
- RS-485 multidrop interconnection
- Baud rate from 1200 up to 19.2K
- COM 1 ... 9
- RS-485 switch line can be selected

INTRODUCTION

The Smart DDE is a Dynamic Data Exchange software product from Brooks Instrument. It allows you to make bi-directional links between your Windows-based applications and the Brooks® SLA and S-Series mass flow products.

Smart DDE is designed and thoroughly tested with most commonly used programs such as Microsoft® Excel (and Microsoft Word) and data acquisition programs such as TestPoint™ and LabVIEW™ (example given, see Figure 1). In addition Windows® programming languages such as C++, Visual Basic and SCADA programs from suppliers such as Allesco® and Millennium Systems International® work seamlessly with Smart DDE.

These programs offer process control and monitor solutions to a variety of industries, including the petrochemical, pharmaceutical, food and semiconductor industry as well as universities and technical institutes.



Figure 1 – Brooks Smart DDE Supported Mass Flow Products

Thousands of Brooks SLA and S-Series mass flow products have already been installed and are under successful operation since their introduction to the market in 1994. Customers using these products, and customers who consider new installations, will benefit from the addition of this versatile tool, called: “Brooks Smart DDE”

Brooks® Service Software

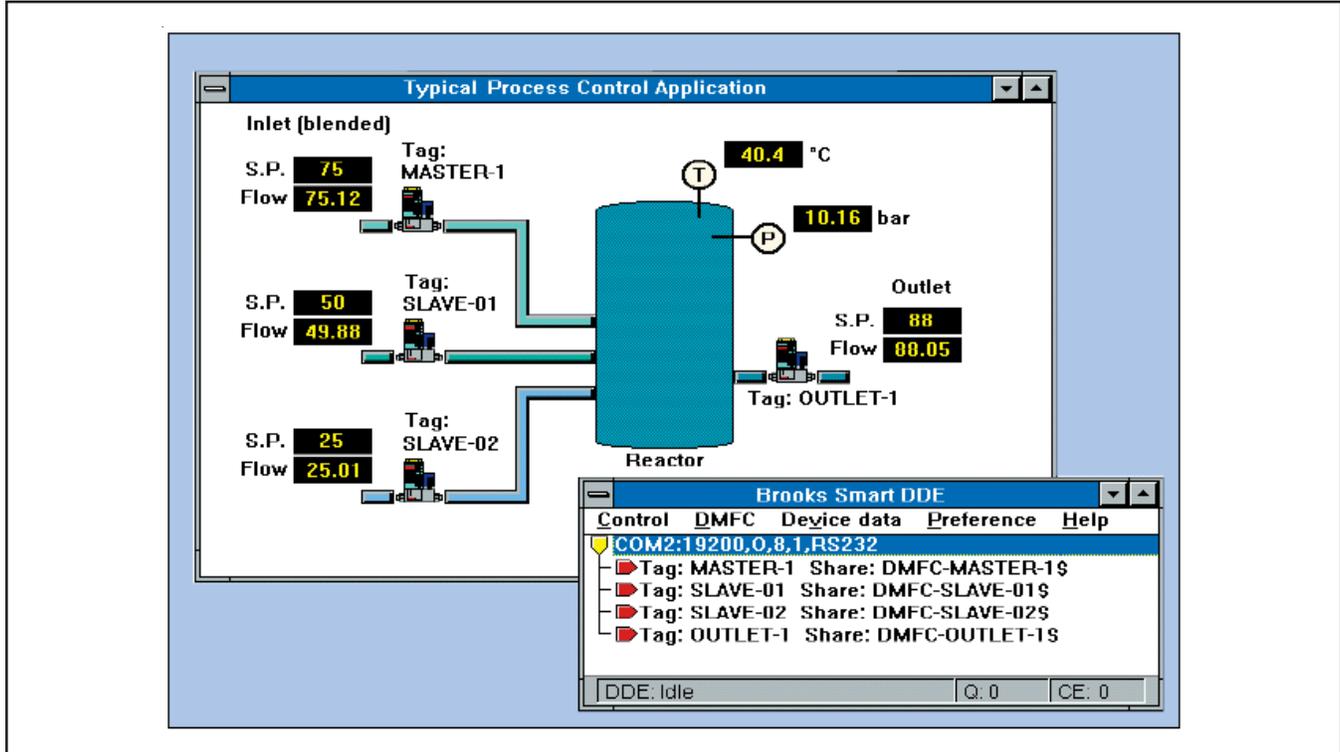


Figure 2 Example of Test Point and Lab View

DESIGN FEATURES

1. User-friendly and powerful Dynamic Data Exchange software program providing control and monitor capability between Brooks mass flow products and Windows based high level applications software.
2. Operates via RS-485 multidrop interconnection.*
3. Communication settings supporting: COM 1...COM 9, baudrate: 1200 up to 19.2K.
4. In case of manual switching RS-485 converters or interface boards, RS-485 switch lines can be selected.
5. Bi-directional on-line data linkage using Windows programming languages such as C++ and Visual Basic.
6. Eliminates communication issues between your Windows based application and the protocol of the Brooks Mass Flow products.

BENEFITS

1. Most commonly used control and monitor device data fields of the Brooks mass flow products can be selected and linked to your Windows based application.
2. Useable for (re)configuration purposes or process control applications with on-line communication and/or data logging functions.
3. Make process control using a standard PC easy with little to no additional hardware cost.
4. Supports a wide range of automatic and manual switching RS-485 converters and interface boards.
5. Combines the Brooks mass flow products with your other instrumentation into process control and monitor software. With Smart DDE you have a powerful tool, which allows you to link data bi-directionally into your Windows based application(s).
6. No knowledge is required of the HART®-based command protocol. With Smart DDE you will get direct access to the required data fields.

Data Sheet

DS-SW-DDE-MFC-eng

March, 2008

Brooks® Service Software

OPERATION

Smart DDE runs under the Microsoft Windows environment. The Brooks SLA and S-Series mass flow products can be used with analog or digital communications. When set up for the latter, RS-485 bus interconnection with up to 32 devices per COM-port can be accomplished easily. In addition, an analog output flow signal remains available simultaneously for ease-of-use when digital communication is selected. The transmission speed (baud rate) can be selected from 1200 up to 19.2K baud (for more detailed information, please refer to the product Data Sheets DS-TMF-5800S-MFC-eng and DS-TMF-SLA5800-MFC-eng).

The Smart DDE program is a process control and monitor interface between the Brooks Digital Mass Flow Meters/Controllers for the 58xxS, SLA58xxS and SLAMfxxS Series and applications supporting DDE. The Smart DDE program from Brooks Instrument operates in the background. Starting the program is an easy task: Start Smart DDE from the Program Manager used under Microsoft or from your Windows application and activate or confirm the required links.

All functions necessary for setting up, maintaining and changing DDE-links can be called from your client application. These functions can be visualized when diagnostics are required. The established links and the status bar provide the details. The HELP file informs you when needed. Write protection prevents unauthorized data entry or handling, and the password can be changed. The Smart DDE product is available on a CD-ROM. In addition you will get an installation and operating manual, which lists all details.

SYSTEM REQUIREMENTS

- Microsoft Windows 98 (SE)
- Microsoft Windows 2000 (With SP4)
- Microsoft Windows XP (With SP2)
- Microsoft Windows Vista
- CD-ROM
- A serial (RS-232) and/or multidrop (RS-485) communication port. Otherwise an external RS-485 connector, connected to an RS-232 port or a USB to RS-232 converter.

WINDOWS APPLICATIONS, E.G.

- Microsoft EXCEL and Word
- LabVIEW, TestPoint, InTouch
- Programming in C++, Visual Basic and
- SCADA programs from suppliers such as Allesco® and Millennium Systems International®

Brooks® Service Software

BROOKS LOCAL AND WORLDWIDE SUPPORT

Brooks Instrument provides sales and service facilities around the world, ensuring quick delivery from local stock, timely repairs and local based sales and service facilities.

Our dedicated flow experts provide consultation and support, assuring successful applications of the Brooks flow measurement and control products.

Calibration facilities are available in local sales and service offices. The primary standard calibration equipment to calibrate our flow products is certified by our local Weights and Measures Authorities and traceable to the relevant international standards.

START-UP SERVICE AND CALIBRATION

Brooks Instrument can provide start-up service prior to operation when required.

For some process applications, where ISO-9001 Quality Certification is important, it is mandatory to verify and/or (re)calibrate the products periodically. In many cases this service can be provided while replicating actual process conditions, and the results will be traceable to the relevant international quality standards.

CUSTOMER SEMINARS AND TRAINING

Brooks Instrument can provide customer seminars and dedicated training to engineers, end users and maintenance persons. Please contact your nearest sales representative for more details.

HELP DESK

In case you need technical assistance:

Americas ☎ 1-888-554-FLOW
Europe ☎ +(31) 318 549 209 Within Netherlands ☎ 0318 549 290
Asia ☎ +011-81-3-5633-7100

Due to Brooks Instrument's commitment to continuous improvement of our products, all specifications are subject to change without notice.

TRADEMARKS

Allesco Allesco Corp.
Brooks Brooks Instrument, LLC
Brooks Service Suite Brooks Instrument, LLC
HART HART Communications Foundation
LabVIEW National Instruments
Millennium Millennium Systems Int.
Microsoft Microsoft Corporation
Pentium Intel Corporation
TestPoint Capitol Equipment Corp.
Windows Microsoft Corporation



Brooks Instrument
407 West Vine Street
P.O. Box 903
Hatfield, PA 19440-0903 USA
T (215) 362-3700
F (215) 362-3745
E-Mail BrooksAm@EmersonProcess.com
www.BrooksInstrument.com

Brooks Instrument
Neonstraat 3
6718 WX Ede, Netherlands
T 31-318-549-300
F 31-318-549-309
E-Mail BrooksEu@EmersonProcess.com

Brooks Instrument
1-4-4 Kitasuna Koto-Ku
Tokyo, 136-0073 Japan
T 011-81-3-5633-7100
F 011-81-3-5633-7101
E-Mail BrooksAs@EmersonProcess.com

