

# Brooks® Smart DDE Software

Service Software



Smart DDE Supported Mass Flow Products

## Smart DDE, Dynamic Data Exchange Software for Brooks GF40/GF80, SLA, S-Series Mass Flow Products and Model 0254 Electronics

### Overview

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® GF40/GF80, SLA and S-Series mass flow products as well as the Model 0254 secondary electronics devices.

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.

Thousands of Brooks GF40/GF80, SLA and S-Series mass flow products have already been installed and are under successful operation. Customers using these products will benefit from the addition of this versatile tool, called: "Brooks Smart DDE".

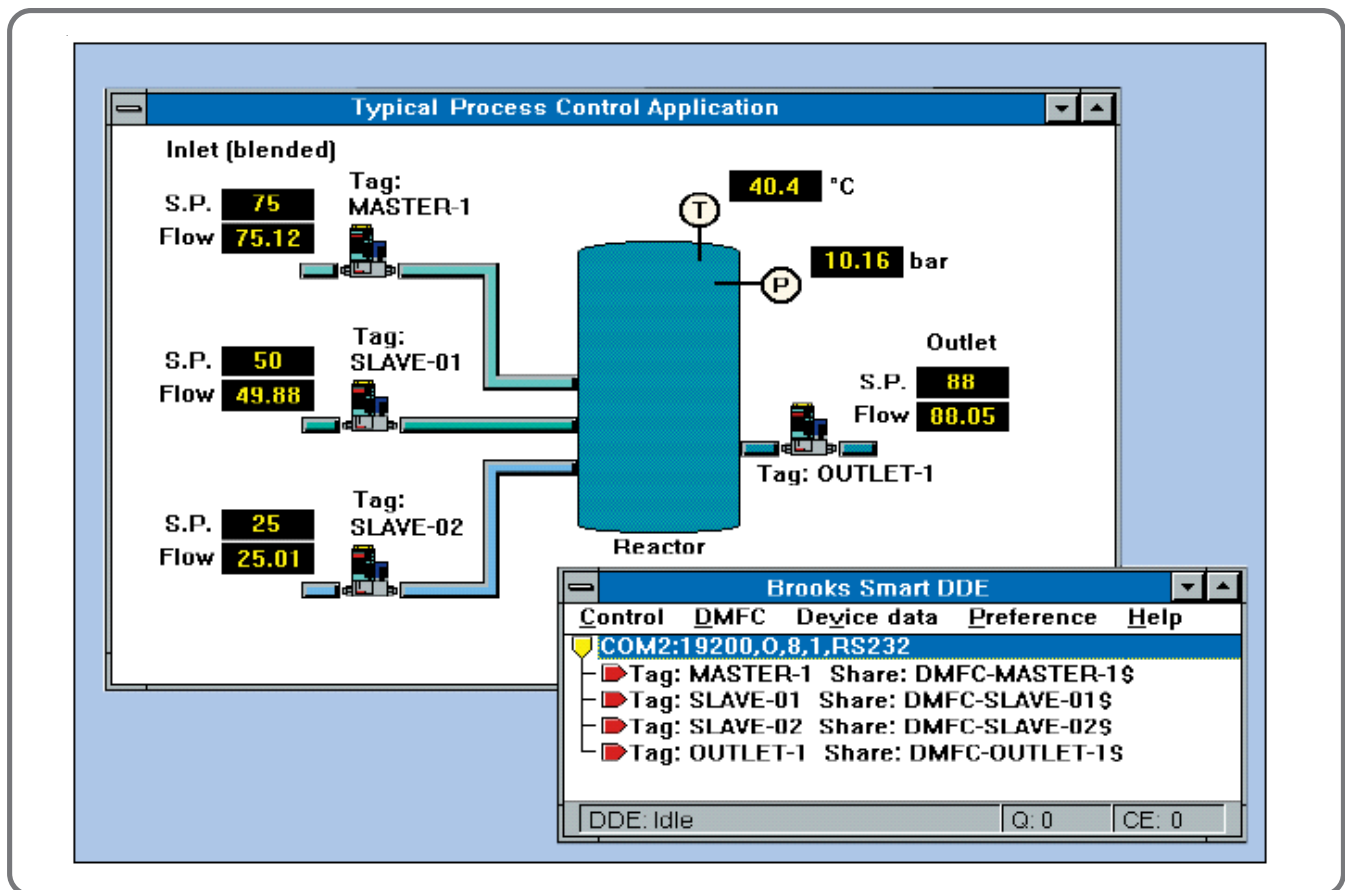
### Product Features

- 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

## Features & Benefits

Features	Benefits
User-friendly and powerful Dynamic Data Exchange software flow products program providing control and monitor capability between Brooks mass flow products and Windows-based high level applications software.	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.
Operates via RS485 multidrop interconnection*.	Useable for (re)configuration purposes or process control applications with on-line communication and/or data logging functions.
Communication settings supporting: COM 1...COM 9, baudrate: 1200 up to 19.2K.	Make process control using a standard PC easy with little to no additional hardware costs.
In case of manual switching RS485 converters or interface boards, RS485 switch lines can be selected.	Supports a wide range of automatic and manual switching RS485 converters and interface boards.
Bi-directional on-line data linkage using Windows programming languages such as C++ and Visual Basic.	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).
Eliminates communication issues between you Windows-based application and the protocol of the Brooks Mass Flow products.	No knowledge is required of the HART® based command protocol. With Smart DDE you will get direct access to the required data fields.

\* RS232 point-to-point capability is also possible using an external RS485 to RS232 adapter.



Example of Test Point and Lab View

## Operation

Smart DDE runs under the Microsoft Windows environment. The Brooks GF40/GF80, SLA and S-Series mass flow products can be used with analog or digital communications. When set up for the latter, RS485 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 following product data sheets:

DS-TMF-GF40-MFC-eng

DS-TMF-GF80-GF81-Series-MFC-eng

DS-TMF-SLA5800-Series-RevB-MFC-eng

DS-TMF-SLAMf-Series-RevB-MFC-eng

The Smart DDE program is a process control and monitor interface between the Brooks mass flow/ electronics for the Models GF40/GF80, SLA58xxS, SLAMfxxS, and 0254 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 (RS232) and/or multidrop (RS485) communication port. Otherwise an external RS485 connector, connected to an RS232 port or a USB to RS232 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 and Support

Brooks is committed to assuring all of our customers receive the ideal flow solution for their application, along with outstanding service and support to back it up. We operate first class repair facilities located around the world to provide rapid response and support. Each location utilizes primary standard calibration equipment to ensure accuracy and reliability for repairs and recalibration and is certified by our local Weights and Measures Authorities and traceable to the relevant International Standards.

Visit [www.BrooksInstrument.com](http://www.BrooksInstrument.com) to locate the service location nearest to you.

### START-UP SERVICE AND IN-SITU 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 under in-situ 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.

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

### TRADEMARKS

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