

Highlights

ABB's Produce^{IT} Batch software product is a batch production management product. Produce IT Batch is a comprehensive solution for configuring recipes and batch equipment, scheduling, monitoring and controlling both multi-product and multi-path batch production following the ISA[®] S88.01 and IEC 61512 standards. Several features of ISA S88.02 have been incorporated in Produce IT Batch, including mode and status information on the batch procedure blocks.

Produce IT Batch also provides automatic arbitration of batch resources at runtime and the collection and storage of batch records for historical data analysis optimizing plant production capabilities.

Produce IT Batch is tightly integrated with ABB controllers. Third party controllers are integrated through OPC[™]. Produce IT Batch combines the best features of earlier existing batch products with the latest technology in batch innovations.

Produce IT Batch is seamlessly integrated with the human system interface (HSI) Operate^{IT}™ Process Portal B1.0, through navigation within a unified user interface, message integration through alarm/event management, and user profile recognition.

Produce IT Batch provides features, such as user verification and supervisory approvals, in support of FDA 21 CFR Part 11 and operation within regulated manufacturing environments.

Produce IT Batch meets market standards in batch automation through unique features including batch scheduling, batch operation, batch integration with HSI, batch history, equipment configuration, and recipe configuration.

Performance Characteristics

User Interface

| Feature | Characteristic/Value |
|---------------------|---|
| Graphics system | SL-GMS, same as Operate IT Process Portal B1.0 |
| Standard displays | Batch overview, unit overview, recipe procedure diagram |
| Standard faceplates | Batch status, block status, unit information |
| Profile settings | User profile controls access rights, stores column arrangements and widths on list displays such as batch overview. |

Capacities

| Feature | Characteristic/Value |
|-------------------------------|--|
| Recipes | License limited, maximum limited only by hard disk size |
| Recipe procedure levels | User choice to strictly support S88.01's 4 levels or unlimited nesting of procedure levels. Strict S88.01 option provides syntax checking for predefined levels. |
| Equipment | License limited, maximum limited only by hard disk size |
| Phases | Maximum limited only by hard disk size |
| Phase parameters | Maximum is the number supported by specific controller. <i>See controller documentation for additional information.</i> |
| Reports | Number of configured reports are limited only by hard disk size |
| Security | Access rights assigned to one of 9 access levels. Unlimited batch users, each assigned to one of 9 access levels. User groups also supported |
| Batch ID, Campaign ID, Lot ID | Maximum of 31 characters combined from following set (A-Z, a-z, 0-9, _). |

Architecture

| Feature | Characteristic/Value |
|-------------------------------|--|
| Structure | Client/Server |
| System | Add on to Operate IT Process Portal B1.0 |
| Batch server | 1 batch server per Industrial IT system |
| Batch server redundancy | One-to-one, optionally licensed; hub between servers recommended |
| Client support | Up to 60 concurrent clients per batch server, license limited |
| AC 800F / Freelance 2000™ * | Utilizes Operate IT integration with AC 800F and Freelance controllers and the Freelance FPX function block for the phase execution in the controllers |
| AC 800 M/C* | Utilizes Operate IT OPC Connect and the equipment procedure template |
| Advant / MOD 300* | Utilizes Operate IT integration with Advant MOD 300 controllers and the TCL Server |
| Sattline* | Utilizes Operate IT OPC Connect and the equipment procedure template |
| Symphony / Harmony | Utilizes Operate IT integration with Symphony/Harmony bridge controllers to the PHASEX function code |
| Symphony / Melody* | Utilizes Operate IT integration with Symphony/Melody controllers |
| Other controller connectivity | Utilizes the Operate IT OPC Connect, batch function phase driver, and the controller configuration tool |
| Historian | Internal Batch Historian for simple applications and optionally Inform IT™ Enterprise Historian for advanced batch production history, batch to batch analysis, reporting and archiving. |

Note: * Controller support depends on Operate IT Process Portal B1.0 add-on release schedules and may require a Produce IT Batch 1.2 service pack. Contact your ABB Sales representative for the most current information on Produce IT Batch compatibility and release schedule.

Performance

| Feature | Characteristic/Value |
|---------------------------------------|--|
| Batch procedure execution | 30 procedure block transitions/second typical where transition means the completion of one procedure block and the start of the next procedure block |
| Batch phase start of controller phase | 2 seconds typical for Batch to send command to controller and Batch to receive confirmation feedback from controller phase |
| Display call-up | 2 seconds typical |

Note: All times/rates are typical and dependent on the connected systems and system load.

Supported System Software Levels

| System | Version Levels |
|--|--|
| AC 800F/Freelance 2000 controllers DCP 02, DCP 10, DFC 02 | Freelance/AC 800F Connect; Version 6.2 SP 2 Engineering Tools: Control ^{IT} (DigiTool) 6.2 SP 2 |
| AC 800 M/C | OPC Connect; Control IT TM AC 800M/C version 2.2 or later |
| Advant/MOD 300 controllers AC460 and SC | MOD 300 Connect; Version 2.0/0 (V 14.5 or later) Engineering Tools: AdvaBuild V3.1 (NT based) or AdvaBuild 2.9 (UNIX based). |
| Sattline | OPC Connect; Version 2.3 or later |
| Symphony/Harmony bridge controllers | Harmony/I90 Connect; Compatible BRC (firmware D.1 or later) Engineering Tools: BDM 6.0 or later |
| Symphony/Melody controllers | Melody Connect Engineering Tools: Composer for Melody Version 1.51D or later |
| Other controller connectivity | Controller supplied OPC server compliant with Operate IT Process Portal B1.0 OPC Connect requirements |
| Inform IT Enterprise Historian | Batch Version 1.2/0 interfaces to Enterprise Historian Version 3.2/0 Batch Version 1.2/1 interfaces to Enterprise Historian Version 3.2/1 |
| Note: It is recommended that the latest controller firmware is used where possible. | |

Supported Software

| Characteristics ¹ | Requirements |
|--|--|
| Operating system ² | Operate IT Process Portal B1.0 Windows [®] 2000 with SP 2 and Q301625 Security Roll-up Patch Professional or Server as required below |
| Database ³ | Microsoft [®] SQL Server 2000 TM |
| Defragmentation application | Diskeeper (either running on a scheduled basis or manually started) |
| Spreadsheet application (for custom reports) | MS Excel 2000 |
| Virus scanner | McAfee Virus Scan |

- Notes:** 1. Refer to the Installation instruction received with the product for further requirements.
2. Both the Batch server and XML server require Windows 2000 Server.
3. Batch server has a minimum requirement of SQL Server 2000 Standard Edition.

Recommended Hardware Configuration

General PC Requirements

| Characteristics | Requirements |
|----------------------|---|
| Network connector | Ethernet TM (IEEE 802.3) compliant (TCP/IP); best performance achieved with 100 Mbps requiring 100BaseT (required for all new installations); 10 Mbps acceptable with 10BaseT or 10Base2 |
| CD-ROM reader | 2X (min.) |
| Video adapter | 4 Mb (min.) Resolution: 1280x1024 minimum |
| Ports | 2 serial, 1 parallel |
| Mouse | 2-button bus mouse; 3-button preferred |
| Floppy disk drive | 3.5 in., 1.44 Mb |
| Accessories, options | Refer to Operate IT Process Portal B1.0 Data Sheet |

Produce IT Batch Client with Operate IT Process Portal B1.0 Applications on a PC

| Application | Software/Servers | Requirement |
|---|------------------|--|
| Produce IT Batch Client/ Process Portal Client | PC CPU | 1.0 GHz or faster recommended; 450 MHz minimum |
| | Hard disk | 10 GB minimum |
| | RAM Memory | 384 MB recommended, 256 MB minimum |
| | Windows 2000 OS | Professional (minimum), Server also supported |

Note: Produce IT Batch Client is supported with all other combinations of Operate IT Process Portal B1.0 applications. See the Operate IT Process Portal B1.0 Data Sheet for detailed PC requirements.

Produce IT Batch Server with Operate IT Process Portal B1.0 Server on a PC

| Application ¹ | Software/Servers | Requirement |
|---|-------------------------|--|
| Produce IT Batch Server/ Process Portal Server | PC CPU ² | 1.5 GHz or faster recommended; 450 MHz minimum |
| | Hard disk | 30 GB or greater, 7200 rpm |
| | RAM Memory ² | 1 GB recommended, 512 MB minimum |
| | Windows 2000 OS | Server required |

Notes: 1. Produce IT Batch Server includes Produce IT Batch Client. The recommended configuration for Produce IT Batch server is with Operate IT Process Portal B1.0 Mirror Server only. In systems comprising multiple PCs, the Product IT Batch server is not supported in any combination on the same PC with the Operate IT Historian server or Configuration server. For non-redundant systems, the Produce IT Batch server may be combined with an RTDS server. For single PC systems, the Product IT Batch server may be combined with an RTDS server and configuration server but not with an Operate IT Historian server.

2. A system having between 31 and 60 clients requires 1.5 GHz or faster PC CPU and 1 Gbyte or greater RAM memory.

For current operating system and hardware requirements, refer to the Introduction and Installation Instruction before starting installation.

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For more information, contact us at Batch@us.abb.com

For the latest information on ABB visit us on the World Wide Web at <http://www.abb.com>



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