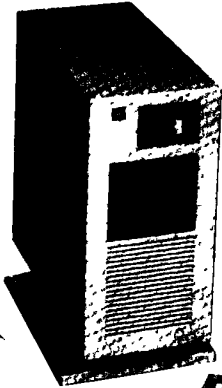


# Bailey® infi 90™

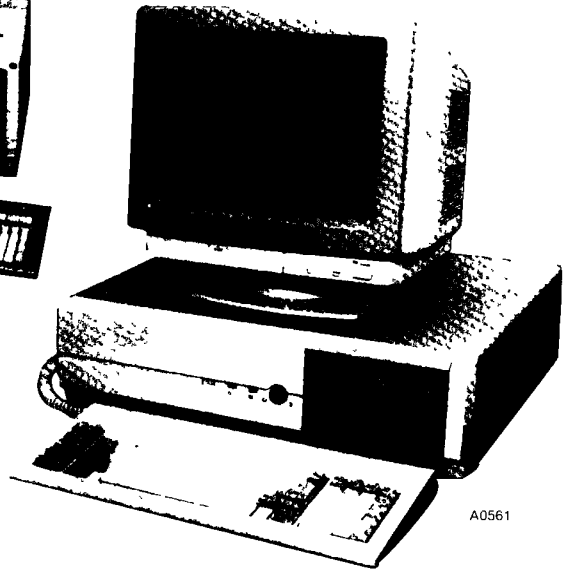
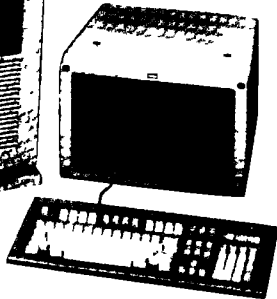
## Specification

### E96-800

## Engineering Work Station



A0562



A0561

The Bailey Engineering Work Station (EWS) is a computer system that provides remote or direct access to your NF 90 process control system and smart devices. EWS allows an operator to configure, monitor, trend, document, modify and verify NF 90 configurations and process activities.

The EWS is a versatile tool designed for the needs of any modern process facility. With an extensive list of optional hardware and software items, the EWS

can be customized to suit your particular requirements. Additionally, you can convert an IBM® AT, COMPAQ™ 386 16 or notebook 301 (an 80386 based pc) into an EWS, enabling it to interface with your NF 90 system.

Several software packages designed exclusively for EWS, are available to fit the needs of any system

CAD	Uses color graphic displays to design document and monitor the system
TEXT	A menu driven package to configure or monitor the system
LADDER	Uses Ladder Logic diagrams to design document, and monitor the system
DATA SHEET	Provides a link between the system and SYMPHONY™ software
SLDG	Offline configuration utility for the Management Command System (MCS)

BATCH 90™ Create batch control using descriptive natural statements

SMARTPORT™ Provides a communications environment for Bailey smart transmitters Allows configuring, monitoring and data acquisition capabilities for up to 525 smart devices per database

PCV Kt to convert an EWS into an operator console Provides monitoring and control of up to 500 tags and includes logging and group graphic and trend displays

When combined with the plotter option of the EWS system the Bailey Engineering Work Station generates control drawings and configuration drawings The graphics printer option can be used to produce module specific catalog and functional block cross reference lists

## Features

- **The plant at your fingertips** - EWS helps you design process control configurations define hardware configurations, edit process parameters set system operating modes, tune process parameters and monitor the process
- **Create a command center** Use a Bailey Engineering Work Station and a standard RS 232 C cable to supervise your NF 90 process control system from your desk or from the factory floor
- **Flexible** Connect the Engineering Work Station to a NF 90 Serial Port Module (SPM) and gain access to the modules with a single Process Control Unit (PCU) and to Bailey smart transmitters Connect the same cable to a NF 90 Computer Interface Unit (CIU), and gain access to the Plant Communication Loop (PCL) and all the PCUs on the communication highway
- **Easy document control** - With the EWS you can maintain system configurations on floppy disks or on a hard disk, and produce hardcopy prints or plots Configuration data can be stored from NF 90 modules smart transmitters or disk files to the screen a printer, a spreadsheet program or to other disk files EWS supports standard file maintenance capabilities to copy delete compare, rename and catalog data files
- **On-line or off-line process management** - The Bailey Engineering Work Station operates both on-line and off-line With the EWS system on-line you can monitor or troubleshoot NF 90 system performance With the system off-line you can design and configure system operation with or without module hardware
- **Versatile software packages** A software package for every need use CAD color graphics to configure or monitor your system or to obtain trend data, use TEXT to download a configuration or to upload to system hardware use LADDER Logic Programming to configure or monitor your system use Batch 90 to create batch control use SLDG to configure the MCS, use DATA SHEET to create a link between your system and SYMPHONY software use SMARTPORT to configure tune and monitor Bailey smart transmitters
- **System and user shape libraries** - Create and store frequently used configurations or macro shapes in your own user library or call up shapes or functional codes provided in a standard system library NF 90 hardware modules use familiar standard control symbols to define process control software

™ SYMPHONY is a trademark of Lotus Development Corp

1 COMPAS is a trademark of Compaq Computer Corp

Registered trademark of Intel Corp

Registered trademark of International Business Machines Corp

## Description

Several versions of the Engineering Work Station are available:

**HBAT01 02** Basic industrial AT operating at 8 MHz with 640 kbytes RAM, one 1.2 Mbytes floppy disk drive, 20 Mbytes hard disk enhanced controller, two serial ports, two parallel ports, and EWS enhancements\*. The HBAT01 is available for 110 V ac applications and the HBAT02 is available for 220 V ac applications.

**HEWS01.02** Basic 386 operating at 16 MHz with 2000 kbytes (2 Mbytes) RAM, one 1.2 Mbytes floppy disk drive, 42 Mbytes hard disk, enhanced controller, one serial port, two parallel ports, and EWS enhancements\*. The HEWS01 is available for 110 V ac applications and the HEWS02 is available for 220 V ac applications.

\*EWS enhancements include CAD Software, the Basic Graphics Card, and math coprocessor chip. Refer to Table 1.

TABLE 1 Hardware Required to Convert Existing Systems

Program	Computer C H H 03 B E M6 A W P 6 T S A Q	Req. DOS version or greater	Minimum extended near RAM Memory kbytes	Minimum Hard Disk Size		Monitor		Communication Port		SPECIAL REQUIREMENTS						
				10 Mbyte	30 Mbyte	Color	Monochrome	Serial	Parallel	Graphics Card CGA/EGA	Basic Graphics Card	Printer	Modem	Plotter	Mouse	
CAD	X X	3.0	640	X		X		X	U	X			R	O	O	R
TEXT	X	3.0	640	O		O	X	X	O	O			R			
LADDER	X X	3	640	O		O		X	O	J						
Display Shop	X X X	3.1	140	X		O	X	X	U	X						
Basic X	X X X	3.1	640	X		O	X	X	O	O			R	U		
SLDG	X X X	3	640	X		X		O		X	X	O				R
SMARTPORT	X X X	2	640			X		X	O	X			R	O		
PLV	X	3	1000		X	X		X		X	X	P		L		

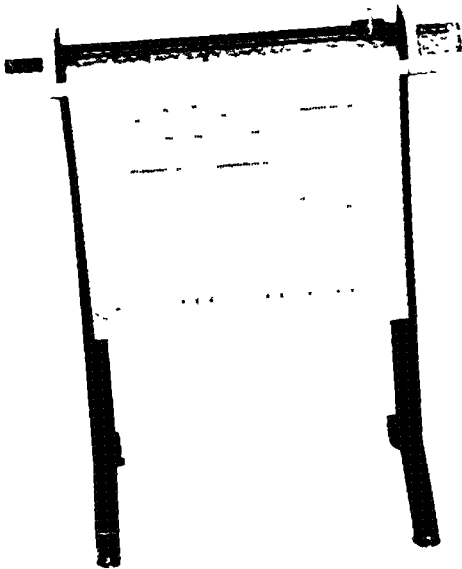
X Required  
O Optional  
R Recommended

- \* Can be used with two floppy disk drives (10 Mbyte hard disk recommended)
- \*\* 10 Mbyte minimum. Larger required for large MCS configurations
- \*\*\* PCV requires a special high resolution on EGA card

## Engineering Work Station Configurations

With the Engineering Work Station you have several options to configure the backbone of the system to fit your individual needs. Depending upon your software requirements you may select a graphics printer

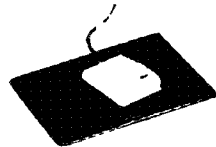
or plotter for hard copy output and a mouse for convenient input of graphic data. A serial port connects the computer hardware to the Serial Port Module or the Computer Interface Unit.



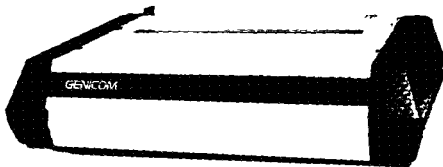
HPLT01  
Plotter

A0563

HMSE01  
Mouse



A0562



NPRT02  
Graphics Printer

A0564

## Engineering Work Station Software

Nomenclature	Description	Nomenclature	Description
H KT01/02	Computer A ded Draw ng	SBLC PC01 0X	Batch 90
STXT PC01 0X	Text	SLDG PC01 0X	MCS Off ne Logg ng Database Graph cs
SLAD PC01 0X	Ladder Log c	SEEK PC01 XX	SMARTPORT
SSYM PC01 0X	SYMPHONY	HPCK01	Process Contro V ew

## Hardware Accessories

Nomenclature	Description	Nomenclature	Description
HBAT01.02*	Ba ey ndustr a AT w th 640 kbytes RAM, one 1 2 Mbytes f op py 20 Mbytes hard d sk enhanc ed co rd sp ay two ser a ports, two para e ports and EWS enhancements (CAD Software Ba ey Graph cs Card and math coprocessor ch p)	HPLT02	Pen p otter for metr c A1 / A2 s ze draw ngs
		HPRT01	Dot matr x pr nter
		HPRT02	Pr nter (requ red for graph cs CAD d sp ays)
HEWS01/02*	Ba ey 386 w th 2000 kbytes RAM one 1 2 Mbytes i oppy 42 Mbytes hard d sk enhanced co rd sp ay two ser a ports one para e port and EWS enhance ments (CAD Software Ba ey Graph cs Ca rd and math coprocessor ch p)	HMSE01	Mouse
		HMOD01	1200 baud modem
		HCBL01 10 or 25***	RS 232 ser a port cab e con nect FWS to SPM C.U or a modem
H KT01**	A ows convers on of BM XT to Ba ey EWS	HCBL02	Nu d modem cab e (25 feet) connect a modem to an SPM or C L
H KT03**	A ows convers on of BM AT to Ba ey EWS	HCBL03	Y ser a port cab e adapter (25 feet) connect EWS to p otter and mouse
HCDQ01	ncorporates the H KT03 nto a Compaq Computer	HCBL05	Pr nter cab e (6 feet) connect EWS to HPRT01/02
H KT04**	A ows convers on of Compaq 386 16 or nte 301 (80386 based) to Ba ey EWS		
HPLT01	Pen p otter for C and D s ze draw ngs		

\*Ava ab e for e ther 110 V ac or 220 V ac app cat ons

\* A so ncudes CAD/TEXT software

\*\*\*Suff x nd cates cab e ngth n feet

## Specifications

<b>Balley Engineering Work Stations</b>		
	<b>IHBAT01/02 (AT)</b>	<b>IHEWS01/02 (386)</b>
<b>Power Requirements</b>		
<b>AC Operating Voltages</b>		
<b>North America</b>	90 137 V 50 60 Hz	100 125 V 47 63 Hz
<b>Other</b>	180 259 V 50 60 Hz	200 250 V 47 63 Hz
<b>Hardware</b>		
<b>RAM Memory</b>	640 kbytes	2000 kbytes
<b>Diskette Drive</b>	1 2 Mbytes	1 2 Mbytes
<b>Fixed Disk Drive</b>	20 Mbytes	42 Mbytes
<b>Monitor</b>	Enhanced Color Display	Enhanced Color Display
<b>Microprocessor</b>	Intel 80286	Intel 80386
<b>Processor Clock Speed</b>	8 MHz	16 MHz
<b>Math Coprocessor</b>	Intel 80287	Intel 80387
<b>Graphics Adapters</b>	Enhanced Graphics Balliey Graphics	Enhanced Graphics Balliey Graphics
<b>Power Supply</b>	192 Watts max	220 Watts max
<b>Environmental</b>		
<b>Ambient Temperature</b>		
<b>System On</b>	0 to 55°C (32 to 120°F)	15 to 32°C (60 to 90°F)
<b>System Off</b>	0 to 55°C (32 to 131°F)	34 to 60°C (93 to 140°F)
<b>Humidity</b>	8% to 80% non condensing	5 to 85% non condensing
<b>Certification</b>	CSA certified for use as process control equipment in an ordinary (nonhazardous) location	

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



For a complete list of licensees representatives and  
affiliates in over 50 countries worldwide contact

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