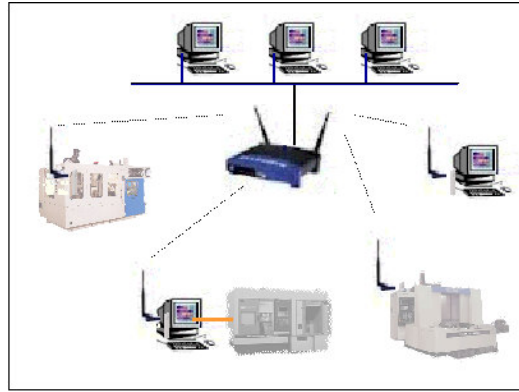


WIRELESS DNC

- Ideal to eliminate difficult wiring
- Ideal for frequently moved machines
- Suitable for direct connection with machine tools
- Suitable for PC connected to machine tool
- Integrates with RS232 machine interface
- Direct connection for Ethernet machine interface

The SEIKI SYSTEMS Wireless DNC has been developed for situations where direct wiring may be difficult or costly, or where machines are frequently moved.

The Wireless DNC System provides wireless communications between each CNC and a centralised remote PC. For the system to operate, a centralised wireless access point is installed in an Ethernet network connecting to the remote PC and each machine tool is equipped with a wireless access point. For machine tools with an RS232 interface, the wireless access point is integrated to a serial interface module which is then connected to the CNC by an RS232 cable.



Direct DNC Software

The CNC screen is used to call programs from the remote PC or return edited programs to the remote PC. All programs on the remote PC are stored directly in a Windows Explorer filing structure eliminating the need for any special database.

A log book is automatically generated recording the time and date of each program transfer.

The DNC Module also includes additional features:-

PC Directory - Operators can view the contents of the remote PC directory on the CNC screen (ideal for work queues or operator instructions).

Folder Change - Operators can use the CNC screen to change to different folders on the remote PC.

Password - Folder changes using the CNC screen can be password protected.

Multiple Download - Operators can use the CNC screen to download all files in folder in a single action (ideal for using part numbers to call for associated programs or creating work queues).

Multiple Upload - Operators can upload multiple files in a single action (ideal for master and sub programs for whole file comparison with original).

Program Return Verification - Operators can return a program twice and receive confirmation message (overcomes operators walking to PC to check).

Work Queues - Operators can view a file or folder created on the PC containing work queue instructions.

Fanuc Data Server Support - Automatic routing of main memory files (RS232) and data server files (Ethernet) for downloading a composite NC program (includes composite file return for comparison).

Additional Information

1. Facilities Included on "Host" PC.

a) NC Text Editor (for program creation and editing). Features "compare" facility for acceptance of machine tool edits.

b) Local RS232 communication software for portable devices such as paper tape punches, walk disks, etc

2. Machine Tools Without RS232 Interfaces.

Behind The Reader (BTR) units can be supplied to provide RS232 interface, but the CNC must as minimum be equipped with editing facilities.

Set Up Module

- Set and store communication parameters (ie, baud rate, parity, handshake, etc) for each machine tool.
- Set name of standard access directory (ie, default directory) for each machine tool
- Set "keywords" used by each CNC for transfer request
- Set additional directories (eg, unproven, tool offsets) together with password for access

Alternative Configurations

If additional functionality is required such as a higher level DNC, viewing drawings or machine monitoring, it is necessary to provide a PC by the machine with one of Seiki Systems higher level systems installed. In this event a wireless system can be used between the CNC and the PC or between the local PC and the system server. Contact Seiki Systems for details.

Consideration for Wireless DNC

- The centralised wireless access point should ideally have "line of sight" to each individual machine based access point (ie, may need to be installed at a high point).
- Wireless Ethernet is not good at penetrating walls, metal objects, etc.
- Older CNC machines with non configurable buffers may need to be run at lower transmission rates.

System Requirements

- Host PC minimum specification:-
Pentium II - 500Mhz / 128Mb RAM / Hard Disk / SVGA Screen / Keyboard / Mouse.
- Win 98, NT, 2000, XP.
- Wireless access point on each machine.
- Centralised wireless access point on PC network.
- Power supply for wireless access points.
- Each CNC to be equipped with editing facility and RS232 interface for input / output.
- Seiki Systems Direct DNC Software.

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Seiki Systems TECHNICAL DATA