

PC Configuration - Flowline B

PC network configuration of the Flowline following a Nextmove PC upgrade to Nextmove E100. This was a popular upgrade to overcome Nextmove PC obsolescence

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Summary

Setup follows the format of FlowlineA with two independent machines with independent control systems. In FlowlineB, the MH (Multi-Head) side Industrial PC is replaced with a small footprint Windows XP machine.. The Saw side PC is a much smaller DOS based system, containing DOS boot and network software to map a drive and run its control software from a shared directory on the MH side computer.

Both PCs have a network port and are connected through a 5 port switch located in the MH cabinet

Folder Structure

MH Setup Files	Saw Setup Files	MH Front End Software	Saw Front End Software
*.mul initialisation files	*.saw initialisation files	written in vb.net	
c:\	d:\	c:\multiwinmulti.exe	d:\saw.exe

Location of folder structure of MH side can be changed in masterdir.saw. See https://stuga.dokit.app/wiki/Masterdir_File

i ...To keep the root directory clear of files and to avoid permission issues, the storage directory for the MH initialisation and setup files was changed from c:\ to c:\multi.

Saw Side PC

- Arcom ACEpc running DOS
- 8Mb Flash Drive containing ROM-DOS to boot up
- Uses NetBEUI or TCP-IP to share all setup data from MH side PC
- Maps d:\ to MH SAW shared directory for all control software
- Old units available for loan
- Instructions in dokit for re-flashing drive and programming TCP-IP https://stuga.dokit.app/wiki/Manual:ACE_PC
- Serial port COM1 used to send instructions to Smartmove/1 or Nextmove ESB Motion control card
- Serial Port COM2 used for printer
- Located in Saw console



MH Side PC

- ACER revo
- Windows XP,
- Uses TCP-IP to share all setup data from MH side PC and share a folder for batch writing
- Connects via USB to Nextmove E100 motion control card to control Machining centre axes and IO
- Located in a box next to machining centre door



⚠ ...This setup has an inherent obsolescence problem - The DOS PC can only map to Windows XP or lower. If the MH side PC needs to be replaced, a system for interfacing DOS to Windows 10 is needed. this has been successfully done with a NAS box with a shared SAW folder. Both DOS and Windows 10 PCs map to it