FASTechnologies, Corp.
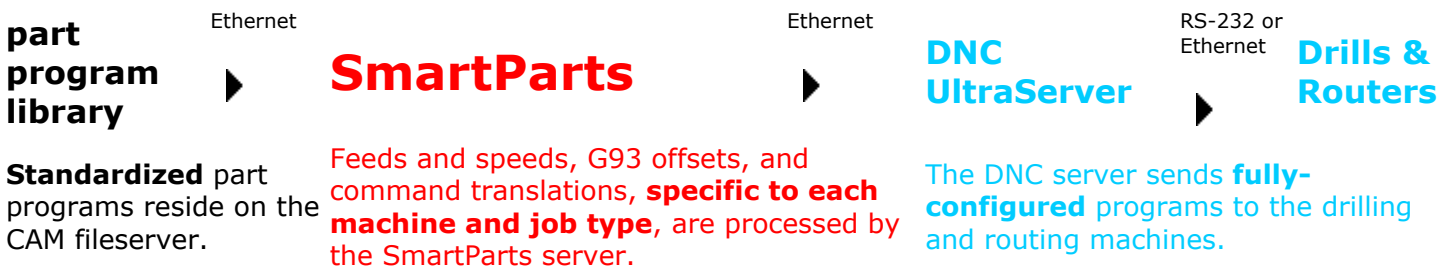## your drill & rout technology experts

SmartParts™

The Drilling Process Manager – Perfect Drilling Made Simple

SmartParts automatically fine-tunes your CNC drill and rout programs, as they're being send to your CNC drilling machine. This automated "just in time" adjustment allows intelligence to be added to the part programs, to improve both the control and flexibility of the drilling process.

part program library　Ethernet　▶　**SmartParts**　Ethernet　▶　**DNC UltraServer**　RS-232 or Ethernet　▶　**Drills & Routers**

Standardized part programs reside on the CAM fileserver.

Feeds and speeds, G93 offsets, and command translations, **specific to each machine and job type**, are processed by the SmartParts server.

The DNC server sends **fully-configured** programs to the drilling and routing machines.

SmartParts features

- Automate and reduce operator input and reduce it to minimum
- Reduce **set-up times**
- Improve drill-room operating efficiency and reduce scrap
- Process control feeds & speeds
- Processes CNC programs per-machine - allows full use of each machine's drilling capabilities
- Provides advanced machining functions
- Program tuning for different machines
- Reduces dependency on CAM scripting
- Web kitting for machine cassetting

Automate all operator inputs

- Feed & Speed tables
- Machine offsets (G93)
- Special machining – slots, circles
- Tracking – Machine specific ID & operator ID
- Kitting – Tool requirements
- Cassetting – Direct Control
- Implements process changes immediately
- Pecking commands

Smart drilling and routing from FASTechnologies
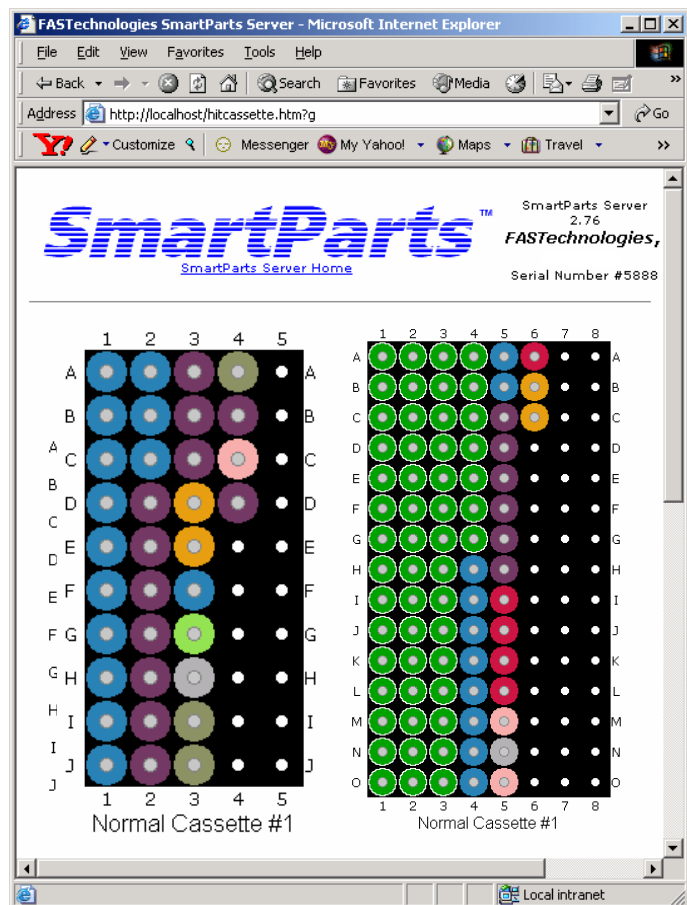
general

The SmartParts drilling parameter control module offers a central "command-post" for all drilling process parameters. The parameters are applied to downloaded part programs on a per-machine-type, per-part-type basis, allowing each part type to be drilled using the optimum capabilities of each available machine and spindle.

parameter control

This SmartParts module allows you to define up to 10,000 unique drilling processes. Each drilling process calls out a specific set of feed, speed, and related parameters for each type of machine on your production floor. When a part program is downloaded, the feed and speed parameters are automatically applied for that part's process type, running on the specific type of machine, which downloaded the part. The drilling parameter control module even handles separate parameters for normal drilling, slot drilling, and special-series high-copper content drilling.

legend drilling
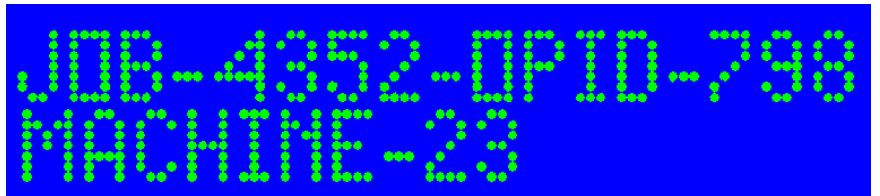
If you want to know which drilling machine and operator drilled each panel, then the SmartParts legend-drilling module is for you. The legend-drilling module drills a machine and operator names directly into each panel, creating on-panel documentation of the drilling activity. The function is definable on a per-panel basis, so it may be located and oriented as needed. The legend may also be selectably omitted in cases where space limitations prohibit using the function. The user may select and format each legend from a variety of available functions.

The choices are:
- Operator Name, i.e. "Jeff B"
- Machine Alias, i.e. "Excellon 14"
- DNC Server Number and/or Port Number, i.e. "0106"
- Time of download, i.e. "22:04"
- Date of download, i.e. "03-24-96"
- Filename, i.e. "04173788.00A"

identical slots regardless of the CNC

The nibbled slot-drilling module for SmartParts converts G85 commands into individual XY coordinates, using the latest algorithms. By centralizing this slot processing function in the SmartParts server, you can eliminate the different slotting characteristics caused by the software in your different CNC controllers. This results in uniform slot drilling quality, and simplified job scheduling.