桥弘数控科技（上海）有限公司
Spectrum control systems

TECHMATION 弘訊科技
Innovation in Motion
股票代码：603015

SCS800
Bending Machine Controller

折弯机数控系统

Continuous Upgrading Of Core Technology

Independent Production And Design Throughout The Entire Industrial Chain

Features of SCS800

- ☑ 18.5-inch industrial capacitive touchscreen
- ☑ Standard configuration of 6+1 axes (expandable to 8+1 axes)
- ☑ Support for additional expansion functionalities
- ☑ Hydraulic bending machine
- ☑ Fully electric bending machine
- ☑ Dual-pump controlled bending machine

🌐 https://www.spectrum-sys.cn   📞 南通弘讯：陈工 13739156445   上海桥弘：丁工 13661875475

Technical Specifications

☐ Overview
- Utilizes a high-sensitivity 18.5-inch industrial LCD touchscreen from Taiwan
- Customized EMC level 4 industrial computer board for stability and reliability
- Dual CPU system configuration for powerful computing and precise control
- Utilizes standard PLC+C Motion programming
- Supports standard EtherCAT communication expansion
- Linux operating system with support for instantaneous power failure

☑ Safety Functions
- System pressure safety check
- Mold pressure resistance safety check
- Anti-pinch function for slide (optional safety light curtain)
- Position limit setting check function
- Deceleration when slide and back gauge approach the lower mold
- Collision check between fingers, and between fingers and mold
- Emergency stop and return functions

☑ Editing Functions
- Products can be freely named (using letters+numbers)
- Ability to edit the customer affiliation of a product
- Product library supports storage of 2000 products
- Products support creation, duplication, searching and deletion
- Each product supports up to 100 work steps
- Work steps can be inserted, rearranged, duplicated and deleted
- Work steps support various bending methods, including free bending, position bending, bottom bending, flattening bending or large arc bending
- Support for handwheel debugging function, allowing adjustment results to be saved as work step positions
- Option to select the timing of back gauge movement
- Switch between external dimensions/internal dimensions
- Switch between block material/pallet material
- Support for delayed step change and IO step change
- Configurable activation or blocking of axis motion functions
- Adjustable axis speeds
- Customizable upper die library, lower die library and material library
- Ability to backup process parameters to USB drive

☑ Electrical Interfaces
- Power supply voltage: DC 24V
- ±0-10V input/output of analog signal
- Optical isolated I/O ports
- Encoder interface (differential)
- RJ45 interface
- USB interface

☑ Auto Calculation Functions
- Automatic calculation of bending position
- Automatic calculation of bending tonnage
- Automatic calculation of large arcs
- Automatic calculation of back gauge position
- Automatic calculation of deflection compensation
- Automatic calculation of correction values
- Automatic calculation of processed workpieces
- Automatic calculation of yield rate
- Automatic calculation of lead distance

☑ Auxiliary Functions
- Manual bending function
- Manual adjustment of axes
- Tool setting function
- Full automatic test run function
- Parameter search function
- Communication testing function
- Auxiliary input function for machine parameter adjustment
- Diagnostic monitoring function
- Online analysis function for motion curves
- Alarm notification function

☑ Production Managements
- Support for user login with different access levels
- Support for RFID login (optional)
- Support for shift-based quantity statistics, able to calculate production quantity per shift
- Traceability of production records

☑ Industry 4.0 Connectivity
- Support for 4G connectivity to cloud platforms
- Cloud platform capable of tracking product quantity and calculating PPH and PPM
- Cloud platform stores process data, operation records and alarm records for each product
- Support for workshop large screens to monitor machine utilization and yield rate

☑ Expanded Functions
- Dual machine or triple machine interlinking
- Two-axis front pallet material
- Support for auxiliary multi-axis extension for loading and unloading

☑ Controlling Functions
- Full servo control
- Position closed-loop control
- Velocity closed-loop control
- Jog control
- Handwheel control
- Synchronized positioning control

☑ Smart Notifications
- Maintenance notifications
- Oil pump malfunction detection
- Self-learning and diagnostic capabilities for valve assemblies
- Electrical self-diagnosis

☑ Power Calculations
- Support for power metering equipment (optional)
- Statistics of daily, monthly, quarterly and annual power consumption
- Calculation of product energy consumption