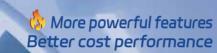


# FTECHMATION 弘訊科技 Innovation in Motion 弘訊科技 股票代码: 603015

# **SCS680 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 SCS680**

- 15.6-inch industrial capacitive touchscreen
- Standard configuration of 4+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 15.6-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 ex-
- 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 lig-
- 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+n-
- Ability to edit the customer affiliation of a prod-
- Product library supports storage of 2000 produ-
- 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 st-
- Option to select the timing of back gauge move-
- Switch between external dimensions/internal dimensions
- Switch between block material/pallet material
- Support for delayed step change and IO step ch-
- 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 • Electrical self-diagnosis
- 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

**✓** Controlling Functions

Synchronized positioning control

Smart Notifications Maintenance notifications

Oil pump malfunction detection

Self-learning and diagnostic ca-

**✓** Power Calculations

ipment (optional)

onsumption

Support for power metering equ-

Statistics of daily, monthly, quar-

• Calculation of product energy c-

terly and annual power consum-

pabilities for valve assemblies

Position closed-loop control

Velocity closed-loop control

Full servo control

Handwheel control

Jog control

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