

ELECTRICAL CONTROL SOLUTION FOR SHEET METAL EQUIPMENT SOLUTION



TRUSTED TECHNICAL SERVICE

ELECTRICAL CONTROL SOLUTION FOR SHEET METAL EQUIPMENT SOLUTION

SYNTEC



CONTENT

About Syntec	/	01
Grooving Machine	/	03
Press Brake	/	07
Bending Center	/	07
Electric Press Brake	/	09
Hydraulic Press Brake	/	11
Hydraulic Torsion Bar Press Brake	/	14
Value-added Service	/	16
Other functions	/	16
Integration Solution	/	17

About Syntec

26⁺

26 years of service
experience

1

One-station
service

50⁺

Global Service
Locations

NO.1

PCbaseNo.1

- SYNTEC 26 years' experience in motion control R&D services PC Base No.1.
- Autonomous system with one-station service.
- Provide automation products & industrial internet total solution with hardware and software.
- More than 50 service locations worldwide.
- Taiwan team independent research and development, strength leading multi-brand manufacturers
- Complete ecosystem, ensuring rapid integration.



Syntec CO., LTD was established in 1995, cultivated in machine tool and automation controller' s software & hardware research and development. Syntec has stood as the most influent controller supporter in Asia market. Being as the practitioner of Syntec smart manufacturing, Leantec has integrated the specialists in Syntec group and smart manufacturing. On the ground of the experiences in machine tool and smart manufacturing, Leantec could support complete, professional solutions about informatization, automation, intellectualization to increase cooperate efficiency and build strong market competition.

LEANTEC CO., LTD (LEANTEC) was found in 2013 by Syntec Group. Based on years of cultivation in control technique, Leantec dedicated itself to provide complete solutions to smart manufacturing for clients. Ranging from industry robots, web service, automation integration, electromechanical module and smart manufacturing accessories (smart edging, smart gripper), Leantec could increase the production efficiency, quality and industry upgradation.

Our Vision: Trusted Technical Service

Our Mission: Complete Solution to Smart Fact



Grooving Machine

High Level Serial Controller

- Serial structure provides great motion control.
- Easy axial expansion with support up to 18 axes control.
- I/O plate expansion and easy disassembly. Support up to 256 I/O.
- Compact size for reduced product control cabinet volume.
- Built-in package servo tuning function, fast modifying servo parameter.
- Selective handwheel solution, supporting external AD/DA port selective solution to meet more demands.



FC-B



HC-15C



Handweel

High Performance Servo Package Solution

- Serial driver with simple wiring.
- All in one design with compact size.
- Support internet analyze tool to fast examine after-sale problem.



SYNTEC Serial Servo Motor

2D Graph Design and Convenient Input Function

- 2D graph design immediately produce groove width, depth, front and back data. (WYSIWYG)
- Mass modification through convenient input function, editing the processing data rapidly.



2D Graph Design



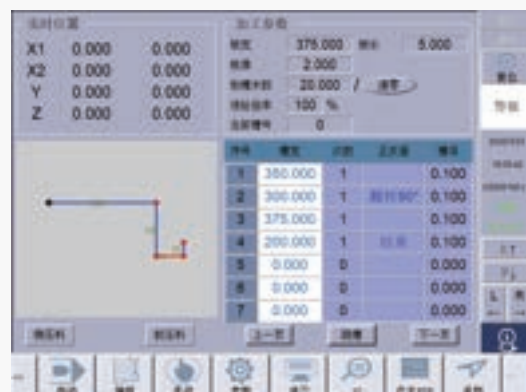
Convenient Input

DXF Import Function and MES Docking Function

- DXF file import system could fast preview and one-click program generation, meeting the offline design demand.
- Scan and produce program through scanner gun, or interfacing with MES to access data applications.



Scans access
processing program



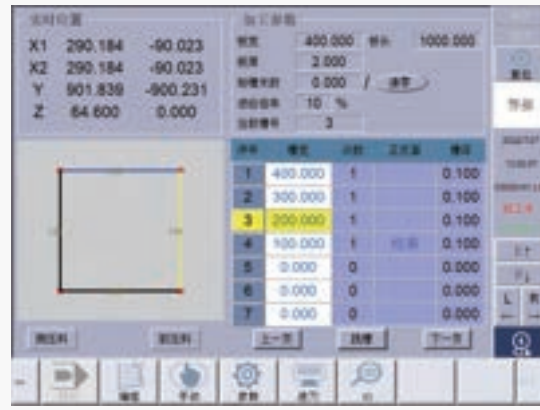
Scan and Load

Dynamic Simulation

Color change during processing, dynamic simulation of which process is the current process.



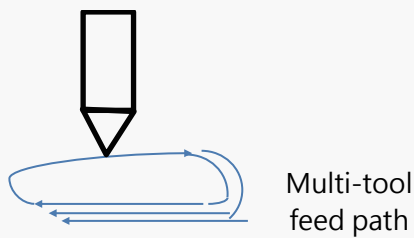
Second Step Graph



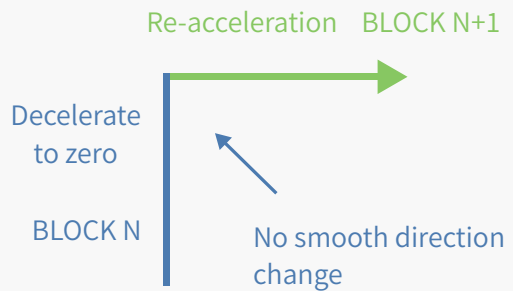
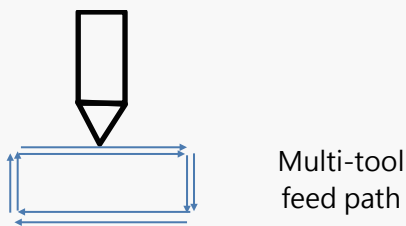
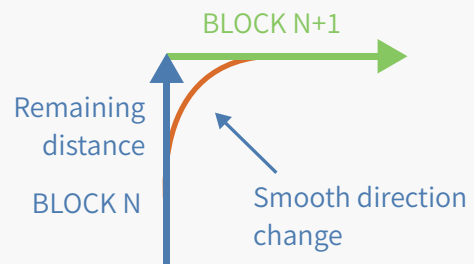
Third Step Graph

Advance Tooling and Smooth Direction Changing

Gate path machining, improving machining efficiency by about 20%.



Traditional way comparison



Smooth Direction Change Schematic Diagram

Same Depth Groove Setting Function

No need to differentiate between deep and shallow grooves, one click to set the groove depth.



One Key Same Depth

Setting Result

Other Special Functions

- Smart feed management, extending the tool lifespan.
- Online conversion between Chinese and English for foreign tutor convenience.
- Provide secondary development tools, developing value-added functions without programming.
- Provide users making value-added product development and protect industry-specific process knowledge.



Grooving Software Base

Bending Center

Hardware Solution

- 15 inches touch screen controller with serial communication agreement.
- Serial absolute servo solution. The coordinates power-off memory, no need to return to the original point.
- All-in-one drive solution, more space-saving power distribution.
- Support several group I/O solution for easy expansion.
- Support handwheel solution to adjust the position more convenient.



15 Inches Touch Screen

- Selective keyboard/mouth operation.
- Selective external connection computer screen solution.
- Selective grating interface.
- Selective external AD/DA.
- Support network port and RS485 interface.



I/O



Handwheel



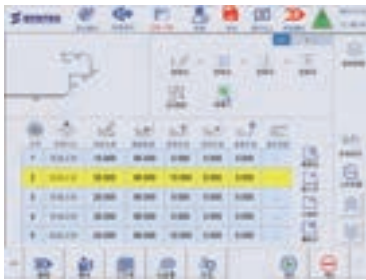
All in One Serial Servo





2D Graph Design

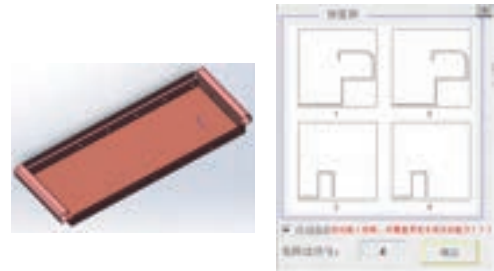
Directly select bending side. Order programming with 2D graphics in real time.



2D Graph Design

3D Graph Import Function

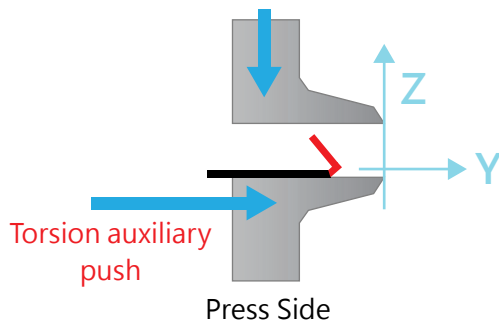
Support STEP file import with one key produce processing file.



3D Import

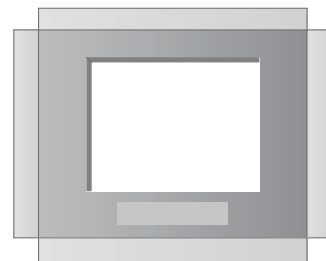
Torque Push Function

Provide torque auxiliary push when bending great board and thick board. Prevent work piece move from processing, which infect shape quality.



Empty Plate 4 Sides Location Processing Function

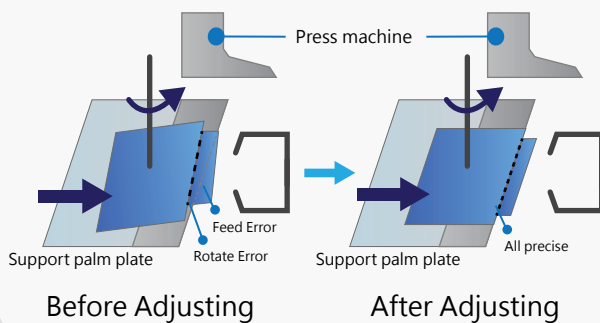
The empty plate could locate through algorithm, achieving one-time processing.



Eccentric Press

Online Adjust Function

It can automatically pause when running the program, adjust the size deviation with the handwheel, write the adjusted position with one click, and operate according to the bending steps to ensure that the material is adjusted in place at one time.



Other Software Function

- Provide automatic tooling algorithm to automatically calculate the required tool combination.
- Support up to 18 axial control.
- Handwheel simulation function could provide direct handwheel simulation to processing program.
- Support optional function for raster ruler.
- Support multiple feed methods for different board application.
- Provide C axis autonomous deviation calculation. One click correction Function.
- High openness of the system, convenient to do supporting function upgrade with the surrounding.

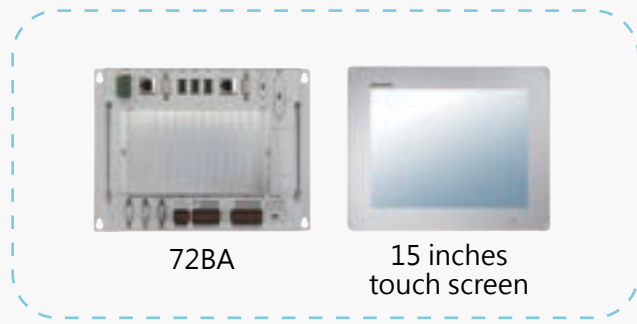
Electric Press Brake

Hardware Solution

- 10 inches and 15 inches touch screen optional function.
- Serial absolute servo solution. The coordinates power-off memory, no need to return to the original point.
- All-in-one drive solution, more space-saving power distribution solution.
- Support several group I/O solution for easy expansion.
- Support handwheel solution to adjust the position more convenient.
- Optional grating and deflection compensation functionality available.
- Support network port and RS485 interface.



Suspension Arm Box



72BA

15 inches
touch screen



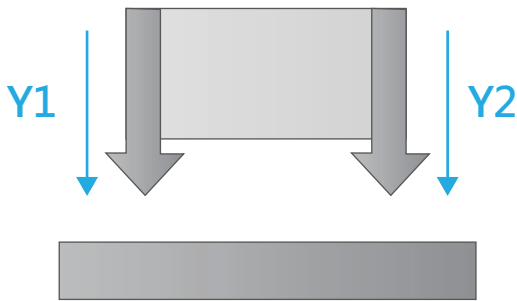
Serial Absolute Package Servo





Double Side Simultaneous Move Algorithm

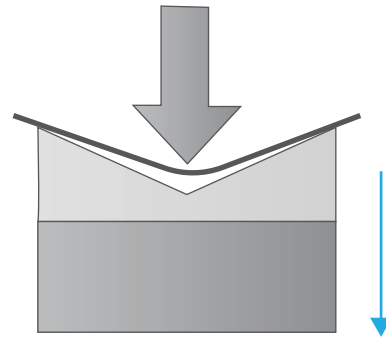
- The higher double side speed is, the better simultaneous move has. The whole synchronization error is less than 0.01mm.
- Reset and emergency stop synchronous protection, expandable multi-cylinder synchronization.



Good Synchronization and Fast Speed

Torque Limit Function

- Torque control for bending and clamping to protect the mold.
- Easy to operate.

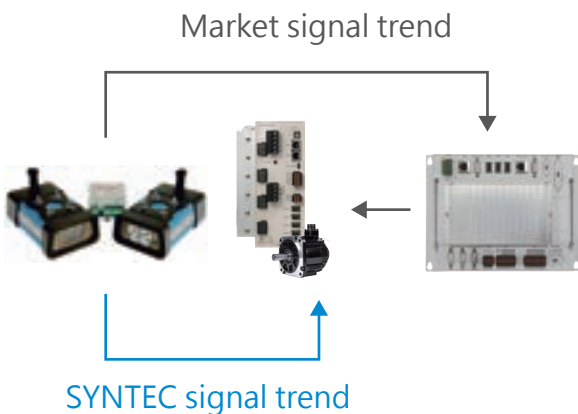


- Constant torque to close the mold, convenient for mold alignment.
- Real-time pressure monitoring during the process for safety protection.

Motor Torque Protection

Safe Lenticular More Sensitive

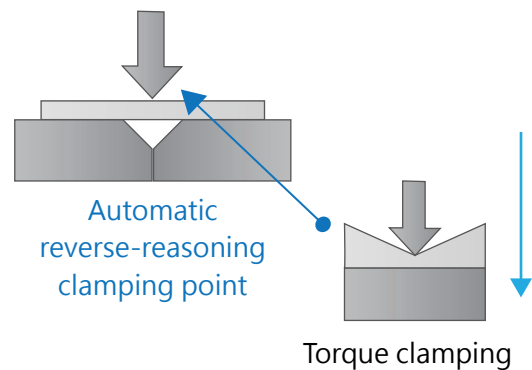
The safety lenticular signal enter driver with faster stop.



Safe Signal Connection Diagram

Clamping Enabled by One Click

- After clamping, enabled automatic reverse-reasoning clamping point position by one click.
- More precise processing results, more convenient for customers.



Torque Clamping Schematic Diagram

Hydraulic Press Brake

Hardware Solution

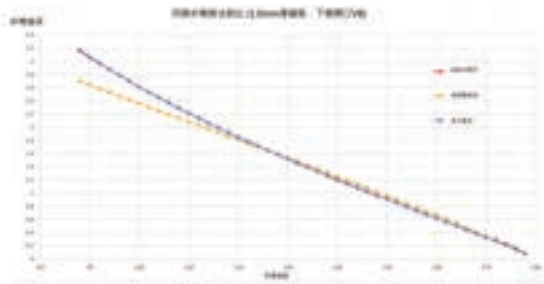
- 15 inches touch screen controller with the support up to 18 axes.
- Serial absolute servo solution with coordinates power-off memory, no need to return to the original point.
- All in one driver solution with more space saving electronic distribution.
- Standard with 16 inputs and 12 outputs, expandable with 2 sets of grating interfaces.
- Expandable 4 DA and 2 AD interface.
- Support network port and RS485 interface.





Bending Special Processing Algorithm

Align to outstanding processing algorithm. Provide process library and mold library. Precisely process.



Bending Algorithm Is Better

Assist Bending Process

Provide assistant bending trolley function in bending system. All in one controlling solution is smarter.



Bending and Trolley All in One Machine

2D Graph Design

More fast and convenient 2D graph design function. All bending angles and lengths are entered at once, and bending steps are automatically generated and checked for interference.



2D Graph Design



Interference Check

VR/ Clamp Point Navigation Function

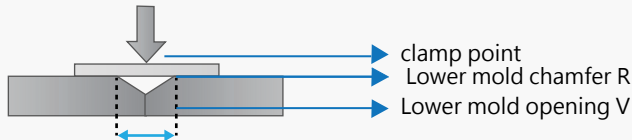
Quickly achieve precise bending angles from 90 degrees to 135 degrees.

- Bend 90 degrees and 135 degrees inaccurate.



- General operation.

only rely on the master's experience to slowly correct the parameters.



- The SYNTEC automatically calculates the recommended V/R/clamping point compensation values based on the bending results and writes them in with one click.



Graphical Simulation and Table Programming

Provide graphical simulation to make the bending easier. Table programming could complete all setting with one page.



Processing Simulation

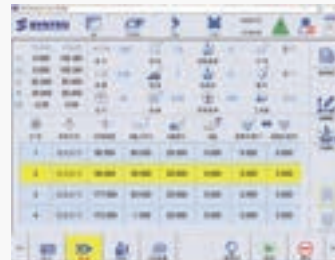


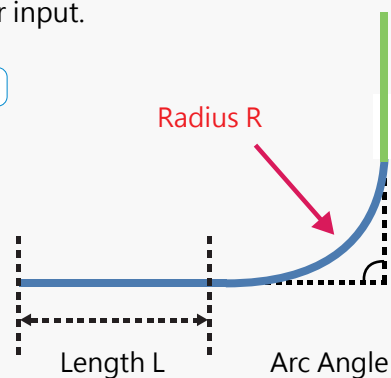
Table Programming

Curved Bending is More Convenient

The data could complete processing based on paper input.

- Data can be entered according to the drawing.

- Arc angle.
- Arc radius.
- Length L.
- Number of arc segments.
- Direct compensate arc bending angle.



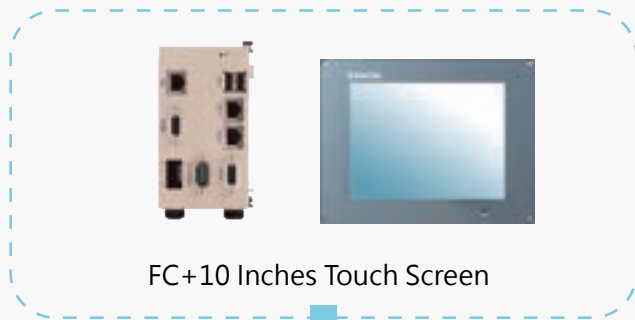
Hydraulic Torsion Bar Press Brake

Hardware Solution

- 10 inches touch screen optional solution.
- Serial absolute servo solution has higher reaction.
- Optional deflection compensation.
- Optional electronic caliper.



Special Software



FC+10 Inches Touch Screen



Economical Servo



Support Double Y Axis

Supports dual Y torsion axis control, which can easily adjust the balance and angle deviation on both sides.



Double Y-Axis Torsion Shaft Function

Electronic Caliper Function

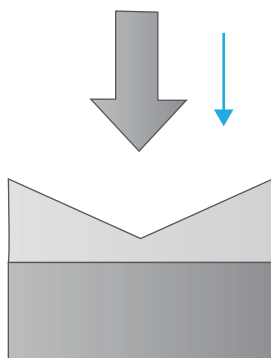
Support electronic caliper function. Set the lift height at each step to improve processing speed.



Electronic Caliper

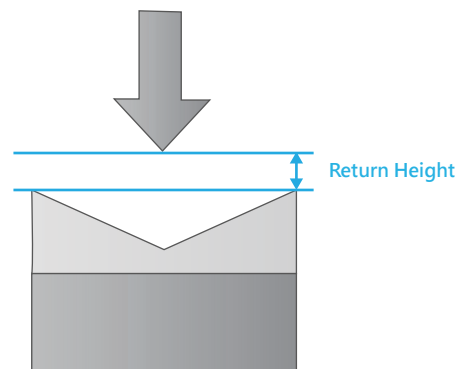
Slow Bending

Slow bending provides more reaction time. The processing is safer.



Return Height

Lenticular position feedback to adjust the return height to increase work efficiency.





Value-added Service

High Software Openness

Develop the operation interfaces based on customer demand.



Data Online

You can monitor the status and output of the machine on the cell phone and connect to the ERP of the site.



Other Functions

Bending Machine Other Functions

- Support 7+1 axis and above solution.
- Coordinate power off recall and do not need to zero.
- Provide the product model base/mold base, which could store 999.
- Angle multi-step programming.
- Internal and external radius algorithm.
- Single side/ multiple side angle compensation function.
- Mold safety area protection.
- Great arc automatic calculation.
- Smart avoidance.
- High level bending pressure algorithm.
- Deflection compensation.
- Select auxiliary bending trolley.
- Select 2D graph design.
- Standard with Chinese and English language. (can be extended to multiple languages)

Integration Soltion

Plate Metal Solution

Provide laser cutting, sheet metal slotting, bending, welding, polishing and other peripheral electronic control solutions.



SYNTEC Laser Cutting Solution



SYNTEC Sheet Metal Grooving Solution

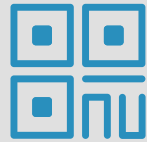


SYNTEC Sheet Metal Bending Solution





Remote Transportation



Scan and Process



MES Docking



Mechanical Arm

Metal Bending Solution



SYNTEC Sheet Metal Welding Solution



SYNTEC Sheet Metal Polishing Solution



TAIWAN

Taiwan (Hsinchu)

SYNTEC Technology Co., Ltd
ADD : No.25, Yanfa 2nd Rd., East Dist.,
Hsinchu City 300, Taiwan (R.O.C.)
TEL : +886-3-6663553
FAX : +886-3-6663505
EMAIL : sales@syntecclub.com.tw

Taichung

SUN-CNC Co., Ltd
ADD : No. 22, Lane 428, Section 1, Fengyuan
Boulevard, Fengyuan District
TEL : +886-4-2537731
TAX : +886-4-25349224

TANLU-CNC Co., Ltd
ADD : No. 42, Jingming Road, Xitun District,
Taichung City, Taiwan (R.O.C.)
TEL : +886-4-23102626
TAX : +886-4-23102636

Tainan

ADD : No. 218, Denan Road, Rende District,
Tainan City, Taiwan (R.O.C.)
TEL : +886-6-2796707
TAX : +886-6-2796705

CHINA

Jiangsu

SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd
ADD : Building B, No.9 Chunhui Road,Suzou Industrial
Park,China
TEL : 0512-69008860
FAX : 0512-65246029

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd WuXi
Office**
ADD : 8906, Yuye Network Building, 68 Exploration
Road, Huishan District, Wuxi City, Jiangsu Province,
China
TEL : 15295664580

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd
Changzhou Office**
ADD : Room 2217, Yatai Fortune Center, No. 1
Huayuan Street, Hutang Town, Wujin District,
Changzhou City, Jiangsu Province, China
TEL : 18168828572

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd
Xuzhou Branch**
ADD : Room 1503, South of Territorial Sea Office
Building, No. 66, Kunpeng Road, Xuzhou Economic
Development Zone, Jiangsu Province, China
TEL : 13656201020

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd
NanJingBranch**
ADD : Room 712, Research Building 1, Lianggang
Park, 117 Suyuan Avenue, Jiangning District, Nanjing
City, Jiangsu Province, China
TEL : 025-52717702
FAX : 025-52717710

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd
NanTong Branch**
ADD : Room T3-1301, No. 108, Gangzha District,
North Street, Nantong City, Jiangsu Province, China
TEL : 0513-89077025
FAX : 0513-89072057

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd
NanTong Branch Yanchen Office**
ADD : Room 401, building 13, phase 9, Zhongnan
Century City, Yandu District, Yancheng City, Jiangsu
Province
TEL : 18625235150

Shaanxi

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd XiAn
Branch**
ADD : Room 1 1328, Building 4, Yicui Garden I
Duhui, No. 10, South Tangyan Road, Xi'an
High-tech Zone
TEL : 029-88287423

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd BaoJi
Office**
ADD : Room 1702, Unit 3, Building 8, Dongling Xinsihji,
Binhe North Road, Jintai District, Baoji, Shaanxi
Province, China

Guangdong

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd GuangDong
Branch**
ADD : Factory 201or 301, Building A, No.10 Nanjiang
Third Road, Zhujiang Street, Nansha District, Guangzhou
City
TEL : 020-39089367
FAX : 020-39089791

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd DongGuan
Branch**
ADD : 0769-81661ing 1, Mobile Group, No. 522, Zhen
'an East Road, Chang'an Town, Dongguan City,
Guangdong Province, China
TEL : 0769-81660318

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd GuangZhou
Branch**
ADD : Room 404, Building 2, Seven Friendship Building,
No. 8 Luojiajun Section, Fuyi Road, Dalong Street,
Panyu District, Guangzhou City, Guangdong Province
TEL : 020-34583040
FAX : 020-34583220

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd ChangPing
Branch**
ADD : Floor 5, Huilong Building, No. 8, Zhanqian 1st
Road, Banshi Village, Changping Town, Dongguan City,
Guangdong Province, China
TEL : 0769-82826802
FAX : 0769-82826820

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd ShenZhen
Branch**
ADD : 406, Block E, Haowei new material industrial
park, No. 8, Qinglan 1st Road, Zhukeng community,
Longtian street, Pingshan District, Shenzhen,
Guangdong
TEL : 0755-84320380
FAX : 0755-84559490

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd JiangMen
Branch**
ADD : Room 02, 7th Floor, Torch Building, Hi-Tech
Zone, 288 Jinou Road, Jianghai District, Jiangmen City,
Guangdong Province - China
TEL : 0750-3762143

Henan

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd LuoYang
Branch**
ADD : Room 704, Runsheng Building, Intersection of
Heluo Road and Sanshan Road, Hi-Tech Zone, Luoyang,
Henan Province, China
TEL : 0379-65110352
FAX : 0379-65110352

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd
ShiJiaZhuang Office**
ADD : 4-3-801, Reyi Community, No. 8 Huaxing Road,
Qiaoxi District, Shijiazhuang City, Hebei Province, China
TEL : 18622728669
FAX : 0379-65110352

AROUND THE WORLD

Malaysia

ADD : No.2, Jalan Astana 1D, Bandar Bukit Raja, 41050
Klang, Selangor, Malaysia.
TEL : +603-33115887
EMAIL : sales.malaysia@syntecclub.com

Thailand

ADD : 78/38 Kheha Romklao Rd., Khlong Song Ton Nun,
Lat Krabang, Bangkok, 10520
TEL : +662-006-5738
EMAIL : thanawat@syntecclub.com.tw

Vietnam

ADD : 3F, No. 36, A4 Street, Ward 12, Tan Binh District,
Ho Chi Minh City, VietNam
TEL : +84839332829
FAX : +842822535556
EMAIL : andynge@vnsyntec.com.vn

Turkey

ADD : Küçükbakkalköy Mah. Vedat Günyol Cd. Defne Sok.
No:1 D:1502 Flora Residence,34750 Atasehir/Istanbul, Türkiye
TEL : +90-216-2662475
EMAIL : daisy.cheng@syntecclub.com.tw

USA (South California)

ADD : 2841 Saturn St. #D, Brea, CA 92821
TEL : +1909-551-0187
EMAIL : info@syntecamerica.com

Indonesia

PT. OTOMASI BERSAMA INDONESIA
ADD : Ruko Arcadia Mataram Blok B, No 15, Kelurahan
Cibatu, Kecamatan Cikarang selatan, 17530, Indonesia
TEL : +6221 2210 4832
EMAIL : yulius@otomasti.co

India (Distributor)

Luna Technologies Pvt. Ltd.
ADD : W-200 ,TTC Industrial Estate , Khairni ,
Thane Belapur Road , Navi Mumbai -400708
TEL : +91-22-617786110
E-mail : sales@lunabearings.com

Fujian

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd XiaMen
Branch**
ADD : Floor 3, No. 2, Jixiang West Road, Xinmin Town,
Tong'an District, Xiamen City, Fujian Provinc
TEL : 0592-7191901
FAX : 0592-7220536

Zhejiang

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd HangZhou
Branch**
ADD : 1202, Unit 2, Building 1, Dikai Building, No.471
Jincheng Road, Xiaoshan District, Hangzhou City,
Zhejiang Province, China
TEL : 0571-82751187

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd HangZhou
Branch Jinhua Office**
ADD : Room G204, No. 1729, Dongshi North Street,
Xinshi street, Wucheng District, Jinhua City, Zhejiang
Province
TEL : 1589-0026533

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd WenZhou
Branch**
ADD : 1205-3, Honghai building, Ouhai District,
Wenzhou City, Zhejiang Province
TEL : 0577-86158619

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd NingBo
Branch**
ADD : Room 1207, Ivy league Building, No.262, Lane
416, Zhaohui Road, Jiangdong-District, Ningbo City,
Zhejiang Province, China
TEL : 0574-87750305

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd WenLing
Branch**
ADD : Room 509, Haocheng Service Building, No. 838,
Wanchang Middle Road, Chengdong Street, Wenling
City, Taizhou City, Zhejiang Province, China
TEL : 0576-86119106
FAX : 0576-86119106

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd YuHuan
Office**
ADD : Room 302, Unit 2, Building 1, Hualong Times
Square, 226 Provincial Road, Chunmen Town, Yuhuan
County, Taizhou City, Zhejiang Province, China
TEL : 13088636567

Chongqing

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd ChongQing
Branch**
ADD : 1007, Building 4, No.62, East Section of Taishan
Avenue, Yubei District, Chongqing
TEL : 023-67913296
FAX : 023-67634382

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd ChengDu
Office**
ADD : ADD : Room102, Unit 1, Building 24, Jiazhaoye
Modern City, No.898, Section 2, Xingxing Road,
Dongsheng Street, Shuangliu District, Chengdu City,
Sichuan Province, China
TEL : 18302866229

Tianjin

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd TianJin
Branch**
ADD : No.37, Area A, Qiao Rulifeng Garden, No.7
Wailuan West Road, Xiqing District, Tianjin, China
TEL : 022-23739192

Shandong

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd JiNan
Branch**
ADD : 502, Unit 3, Building 11, Luneng Kangqiao, No.
28, Sankongqiao Street, Tianqiao District, Jinan,
Shandong
TEL : 0531-85907208
FAX : 0531-85905708

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd QingDao
Office**
ADD : Room 1004, Unit 2, Building 14, Jinri Zidu,
Tianshan Road, Chengyang District, Qingdao,
Shandong
TEL : 18663779803

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd TengZhou
Office**
ADD : 13 households, row 1, Xiaokang village, Yucai
Road community, Beixin street, Tengzhou City,
Shandong Province
TEL : 15098706233

Hubei

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd WuHan
Branch**
ADD : 2003-2006, Building A, Optics Valley
International, Jiayuan Road, No.456 East Luoyu Road,
Hongshan District, Wuhan City, Hubei Province, China
TEL : 027-87638876
FAX : 027-87204137

Liaoning

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd ShenYang
Branch**
ADD : Room 1212, Tianxin Building, 17 Jianshe West
Road, Tiexi District, Shenyang City, Liaoning Province,
China, China
TEL : 18698806526

Anhui

**SYNTEC TECHNOLOGY(Suzhou)CO.,Ltd ShenYang
Branch**
ADD : Room 1005, block B, Wanda Ginza, rongchuang
Mae, Binhu, Hefei, Anhui Province,China.
TEL : 0551-63814183
FAX : 0551-63814183



SYNTEC Technology Co., Ltd.
No.25, Yanfa 2nd Rd., East Dist.,
Hsinchu City 300, Taiwan (R.O.C.)

☎ 886-3-6663553

☎ 886-3-6663505

✉ sales@syntecclub.com.tw

Suzhou SYNTEC Equipment Co.,Ltd.
No. 9th, Chun Hui Road, Suzhou
Industrial Park, Jiangsu Province

☎ 86-512-69008860

☎ 86-512-65246029

✉ service@syntecclub.com.cn



<http://www.syntecclub.com.tw>

Copyright © SYNTEC Technologies Corp.
©2023.06_rev.1 (PRINTED IN TAIWAN)

*SYNTEC reserves the right to revise catalog information at any time without notice due to typographical errors or any errors.