

RELIABILITY | ACCURACY | EFFICIENCY

Eric Yong
B.Eng(Hons)Engineer

21 Sungei Kadut Street 4 Singapore 729048

Address: NO.1888,Jiyin Avenue,
Jiangning Development Zone,Nanjing
Tel.: 025-85097068
Post Code: 211102
Electronic mail: robot@estun.com

www.estun.com



WeChat

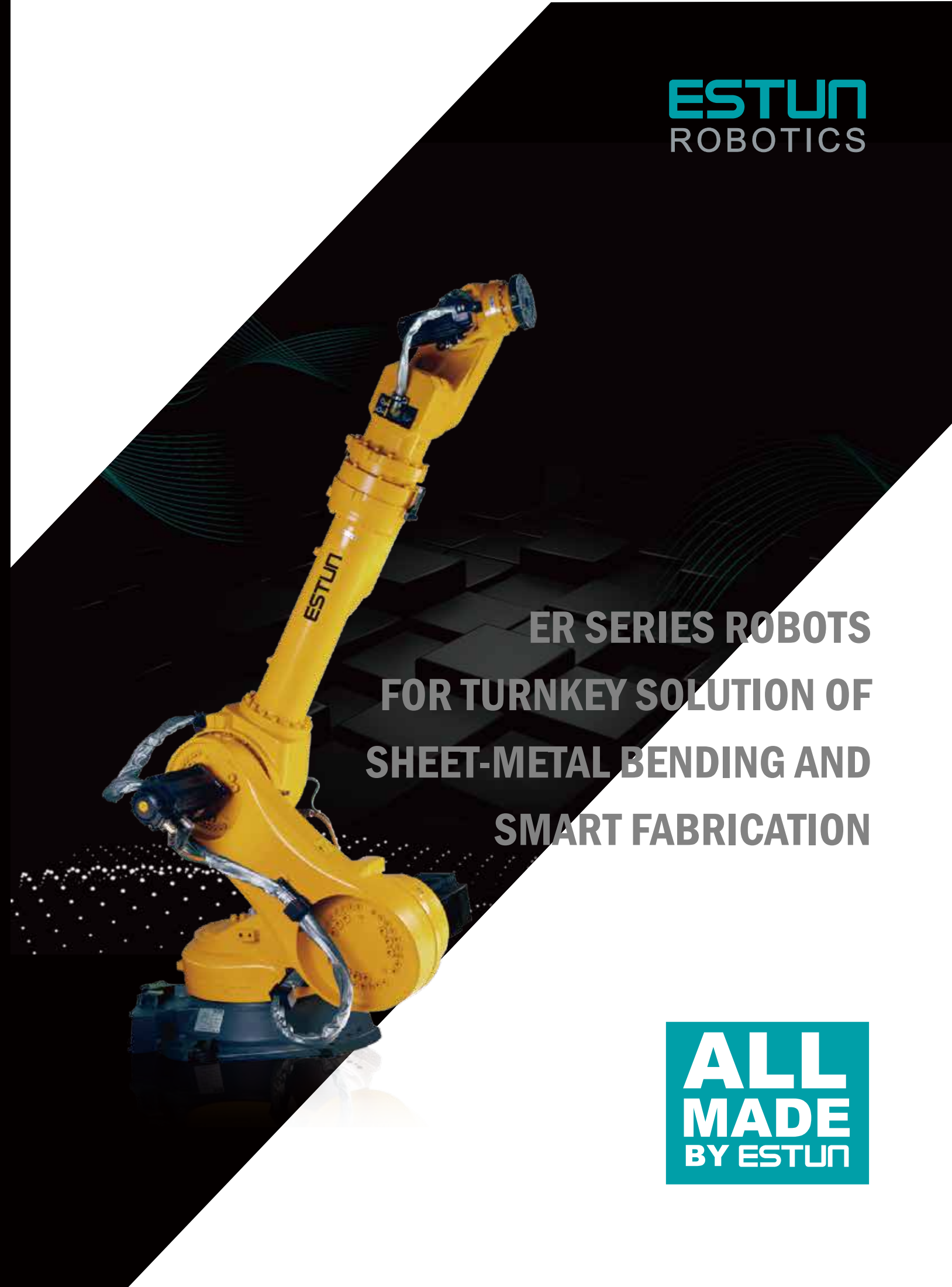


Home

ESTUN
ROBOTICS

ER SERIES ROBOTS
FOR TURNKEY SOLUTION OF
SHEET-METAL BENDING AND
SMART FABRICATION

**ALL
MADE
BY ESTUN**





ER SERIES INDUSTRIAL ROBOTS

Nanjing ESTUN Automation Company is the pioneer of high-end core function parts of smart equipment manufacturer as well as industrial robot and smart manufacturing system provider. ESTUN takes its advantages of self-developed techniques and core function parts to transform into a leading enterprise of domestic robot industry. ESTUN earns competitive position in international industrial marketplace by its excellent R&D team and farsighted management group.

With its unique advantages of self-developed techniques and core function parts, ESTUN sets the key goal to scale the production of industrial robot. ESTUN is making great efforts to seize the once-in-a-generation opportunity of new industrial revolution and robotics industry, to sustain great responsibility of national robot industry development, to gain a place in the international robot field, and dedicated to become a powerful practitioner of Made in China Dream.

ESTUN covers a total production line from core function parts to system integration with its whole series industrial robots, including 6-axis versatile robot, 4-axis palletizing robot, SCARA robot and DELTA robot. ESTUN robot covers the payload range from 4kg to 450kg and the applications including welding, handling and palletizing, load and unload, polishing, painting and assembly. You are welcome to consult, visit, and cooperate at any time, for all series robots including customized ones.



Introduction	03
Solutions	04
Units	06
Flexible Production Line	06
ESTUN Autolist Bending Off-line Programming Software	07
ESTUN Manufacture System	08
Sheet-metal Smart Factory& MES Whole Solution	09
Applications	10

CONTENTS

BENDING ROBOT

ER20-1780

ER30-1900

ER80-2565-BD

ER130-2865-BD

ER220-2605

Max.
load capacity
20 kg

Max.
load capacity
30 kg

Max.
load capacity
80 kg

Max.
load capacity
130 kg

Max.
load capacity
220 kg



kg Weight
245
Installation
Ground
IP54

kg Weight
290
Installation
Ground
IP54

kg Weight
740
Installation
Ground
IP54

kg Weight
950
Installation
Ground
IP54

kg Weight
1400
Installation
Ground
IP54

MOTION RANGE

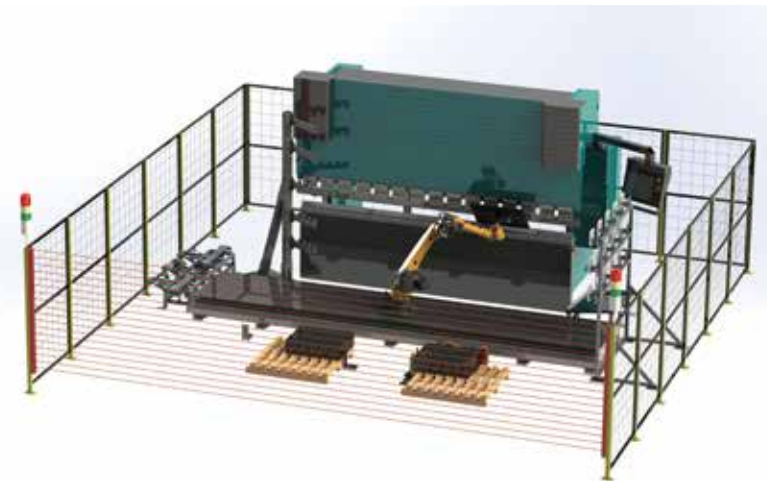
MAX. SPEED

1	$\pm 180^\circ$	1	$\pm 180^\circ$	1	$\pm 180^\circ$	1	$\pm 180^\circ$	1	$\pm 180^\circ$
2	$-95^\circ \sim +160^\circ$	2	$-60^\circ \sim +140^\circ$	2	$-67^\circ \sim +150^\circ$	2	$-70^\circ \sim +90^\circ$	2	$-53^\circ \sim +78^\circ$
3	$-170^\circ \sim +80^\circ$	3	$-165^\circ \sim +80^\circ$	3	$-190^\circ \sim +66^\circ$	3	$-200^\circ \sim +68^\circ$	3	$-193^\circ \sim +78^\circ$
4	$\pm 180^\circ$	4	$\pm 360^\circ$	4	$\pm 170^\circ$	4	$\pm 200^\circ$	4	$\pm 360^\circ$
5	$\pm 140^\circ$	5	$\pm 130^\circ$	5	$\pm 130^\circ$	5	$\pm 125^\circ$	5	$\pm 118^\circ$
6	$\pm 360^\circ$	6	$\pm 360^\circ$	6	$\pm 360^\circ$	6	$\pm 360^\circ$	6	$\pm 360^\circ$
1	185°/s	1	143°/s	1	110°/s	1	112°/s	1	114°/s
2	185°/s	2	131°/s	2	105°/s	2	106°/s	2	105°/s
3	190°/s	3	144°/s	3	130°/s	3	106°/s	3	109°/s
4	355°/s	4	247°/s	4	215°/s	4	180°/s	4	190°/s
5	360°/s	5	316°/s	5	160°/s	5	175°/s	5	125°/s
6	585°/s	6	287°/s	6	205°/s	6	188°/s	6	273°/s

Solutions

As an expert in sheet-metal process area, ESTUN develops bending software package Smart Robot Bending and provides a whole solution of bending workstation, sheet-metal flexible production line, sheet-metal smart factory, etc., with ESTUN's ER series robot and MES system.

ER20/ER30 Small-sized Sheet-metal Process Solution



Compact flexible bending unit provides high cost-effective solution for smart process of small-sized work piece.



Suitable Dimension:

- Size: $\leq 1000\text{mm} \times 800\text{mm}$
- Weight: $\leq 8\text{Kg}$

ER80 Medium-sized Sheet-metal Process Solution



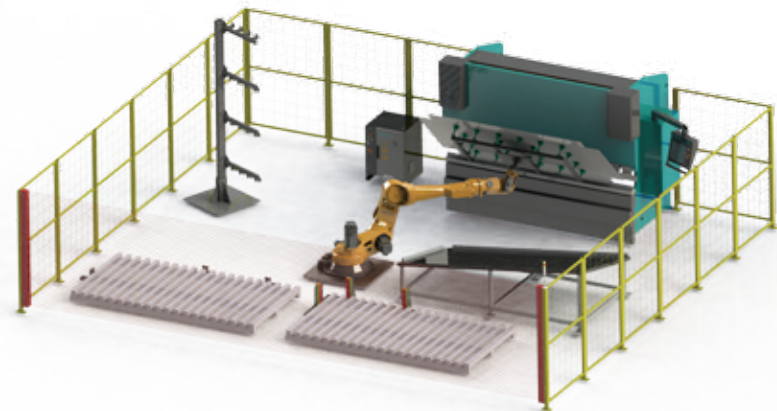
The first 6-axis bending robot in the world, optimized design according to bending working condition, faster and more precise.



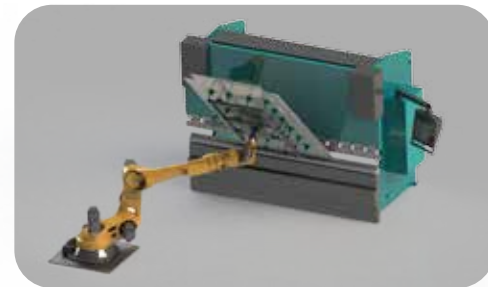
Suitable Dimension:

- Size: $\leq 2500\text{mm} \times 1250\text{mm}$
- Weight: $\leq 40\text{Kg}$

ER130 Large-sized Sheet Metal Process Solution



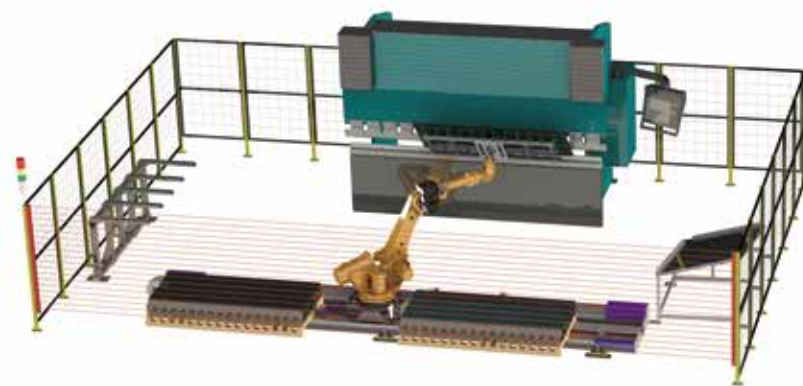
A specially designed bending robot is perfectly suitable for large-sized work piece, process.



Suitable Dimension:

- Size: $\leq 3000\text{mm} \times 1500\text{mm}$
- Weight: $\leq 70\text{Kg}$

ER220 Heavy Sheet-metal Process Solution



By using caterpillar track and cooperative technology, ER220 can provide their owners brand new solutions which are lower labor costs and much higher production efficiency of heavy sheet metal processing.

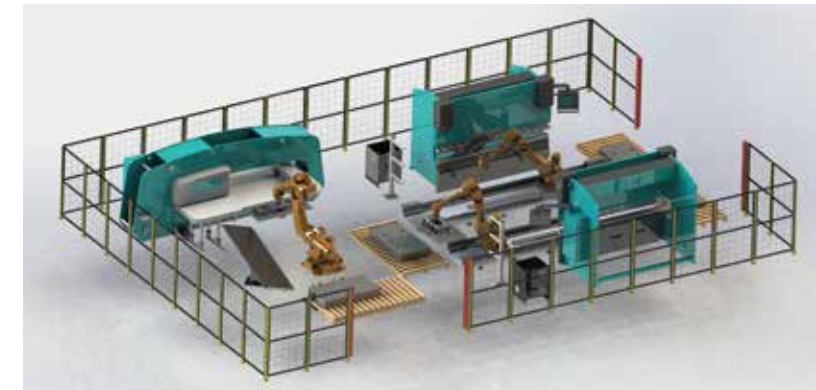


Suitable Dimension:

- Size: $\leq 5000\text{mm}$
- Weight: $\leq 120\text{Kg}$

Units

Punching&Bending Smart Process Unit



automatic robot bending unit with utmost flexibility and intelligence, greatly save work labor and improve product quality.



Configuration

- Turret Punch + Robot Bending
- Laser + Robot Bending
- Turret Punch + Laser + Robot Bending

Flexible Production Line

Flexible Sheet-metal Smart Production Line



Sheet-metal smart production line adopts robot instead work labor.



Configuration

- MES+turret punch(or laser)+robot bending+spot welding+robot TIG+production line board+robot painting

ESTUN Autolist Bending Off-line Programming Software

ESTUN offline bending programming software allows direct import of drawing and automatically convert it to robot bending program without teaching manually, which greatly reduces programming time. The software can match with different types of work piece.



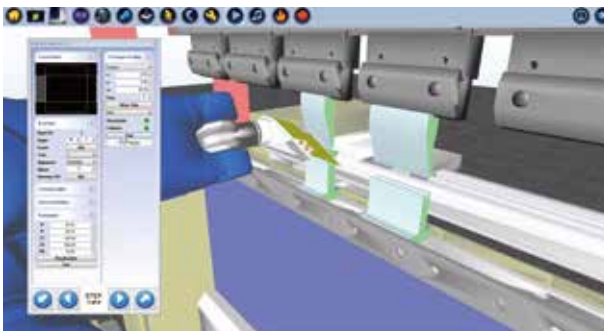
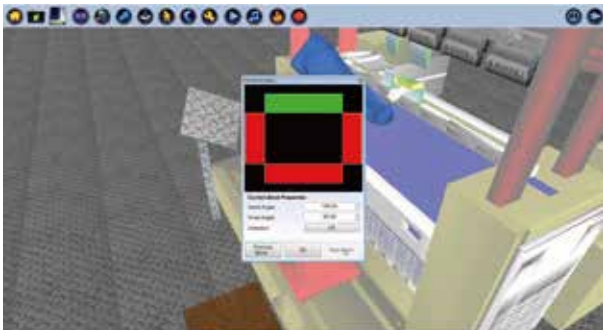
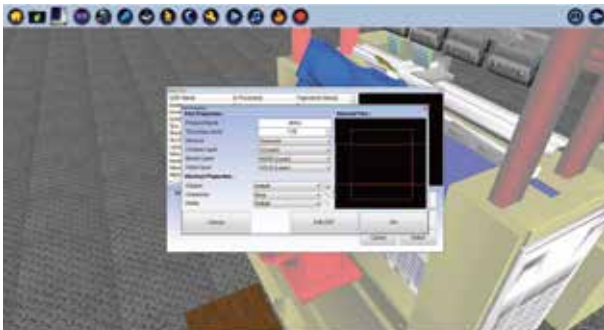
Import Drawings To PC



Program Automatically

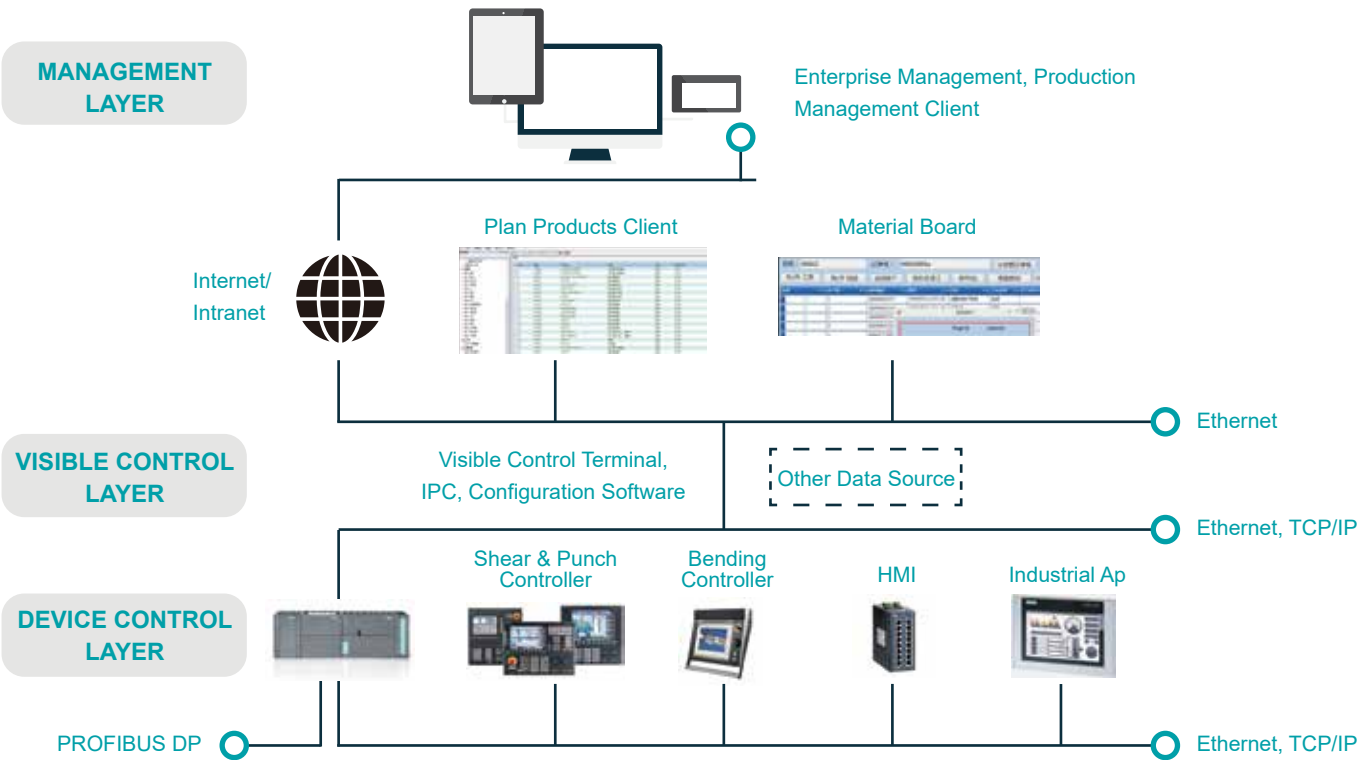


Automatic Robot Bending



ESTUN Manufacture System

- PDM, ERP provide product process and order information to MES. MES sends introductions and feedback.
- Movable management client terminal based on public and private cloud platform decreases permanent assets investment and increases management efficiency.
- Use trepanning and APS to increase the use ratio of raw material and efficiency of equipment, while maintain precision.
- MES can send drawings and NC programs to the controller automatically, thus improve the production rhythm.
- Ethernet and PROFIBUS ensure the interconnection of all equipment, the real-time data acquisition and tracking of process.
- Combined robot with AGV uncoiler, palletizing and handling decrease the use of work labor and increase the safety and efficiency.



Distributed Io



RFID



Shear Machine



Turret Punch



Bending Machine



Welding Robot



Painting Robot



Teach Pendant



Code Scanner



AGV



Visual Probe

Sheet-metal Smart Factory& MES Whole Solution

Turnkey Project

Automation equipment and core function parts

- Industrial robot, plc
- Machine tool controller such as siemens, delem, etc.
- Integrated station and production line

MES system and hardware equipment

- Mes system with intellectual property
- Professional r&d team.
- System architecture for multiple fields
- Industrial pc, pda, code scanner gun, rfid

Project and technical support

- Overall plan and distributed implement
- Professional team and implementation method.
- National coverage service network
- Good reputation with 100% availability.

MES Whole Solution

Planning

- drawings, SOP, NC
- BOM, process routine.
- customized planning, pre-planning
- paperless order
- custom order feedback
- plan board

Quality Management

- quality plan
- quality mission
- defect and cause management
- SPC procedure control
- quality board



Production Execution

- process inter-locking
- shop floor logistics and material management
- automatic counting output of product and working hours
- Tracking and trace
- productivity Kanban

Data Acquisition

- machine tool controller
- product process
- 5 production key elements
- bar-code, RFID
- board, report form
- data analysis

Applications



Communication Cabinet



Metal Furniture



Switch Box



Medical Equipment



Elevator Door



Tool Cabinet



Spinning Equipment



Electrical Cabinet



High-voltage Electrical Cabinet



New Energy Vehicles