

Fulling Motor

www.fullingmotor.com

About us

Changzhou Fulling Motor Co. Ltd. is an ISO9001 professional manufacturer.

As a joint venture of Germany-Swiss-China, Changzhou Fulling Motor Co., Ltd was established in year 2001. We are a professional motor manufacturer in Changzhou city, China. Production capacity exceeds more than 6 millions motors per year. Our Company offers three major series of products: Hybrid stepper motors, DC brushless motors, Gear motor and the motor driver.

Changzhou Fulling Motor Co., Ltd also has several joint venture companies who specialized in the production of AC Servo motor, PM stepper motors, and DC gear motors. We sell nearly 7 million motors from our joint venture partners to customers Worldwide every year. We export our motors to more than 30 countries such as Italy, Germany, United States.

20 years experience behind our stepper & DC Brushless motors . Working together, growing together!

2001

Established

2004

ISO9001 certified

2008

IATF16949
(TS16949)

2015

Move to current building



Future planning

June, 2024

Plant area : 45000 m²

Production capacity :
150 million motors/Y





Company Philosophy

Our Vision

Become a world-class manufacturer of control motors and a provider of system integration solutions.

Our Mission

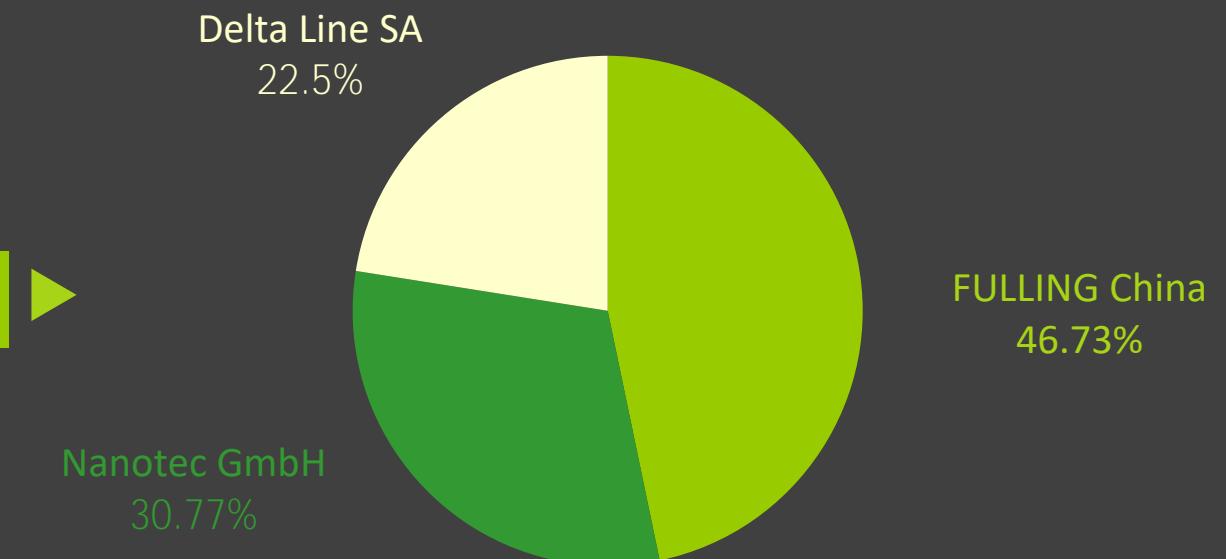
Create value for customers and provide the best industry solution.

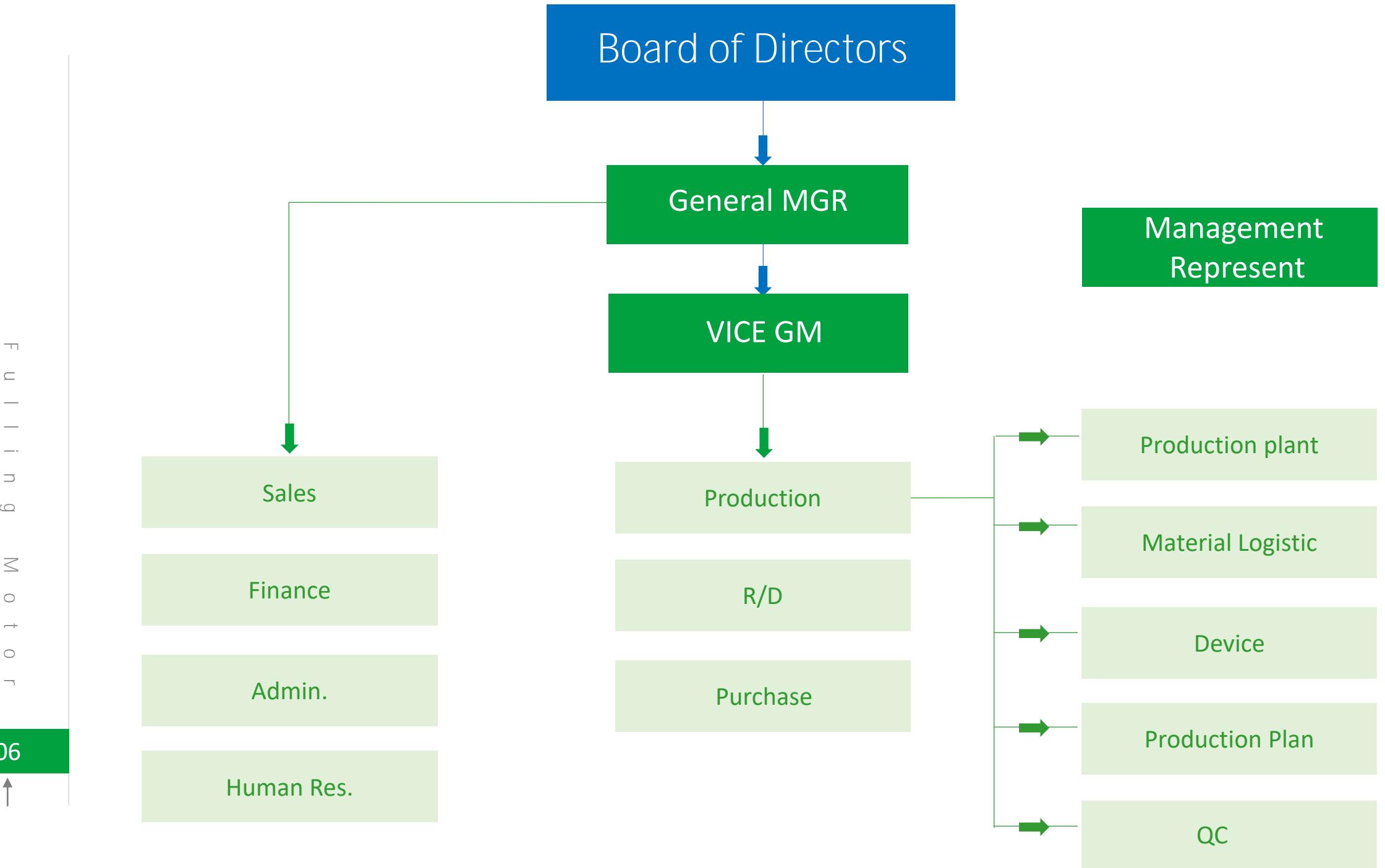
Our Values

Responsibility, Integrity and Win-win.

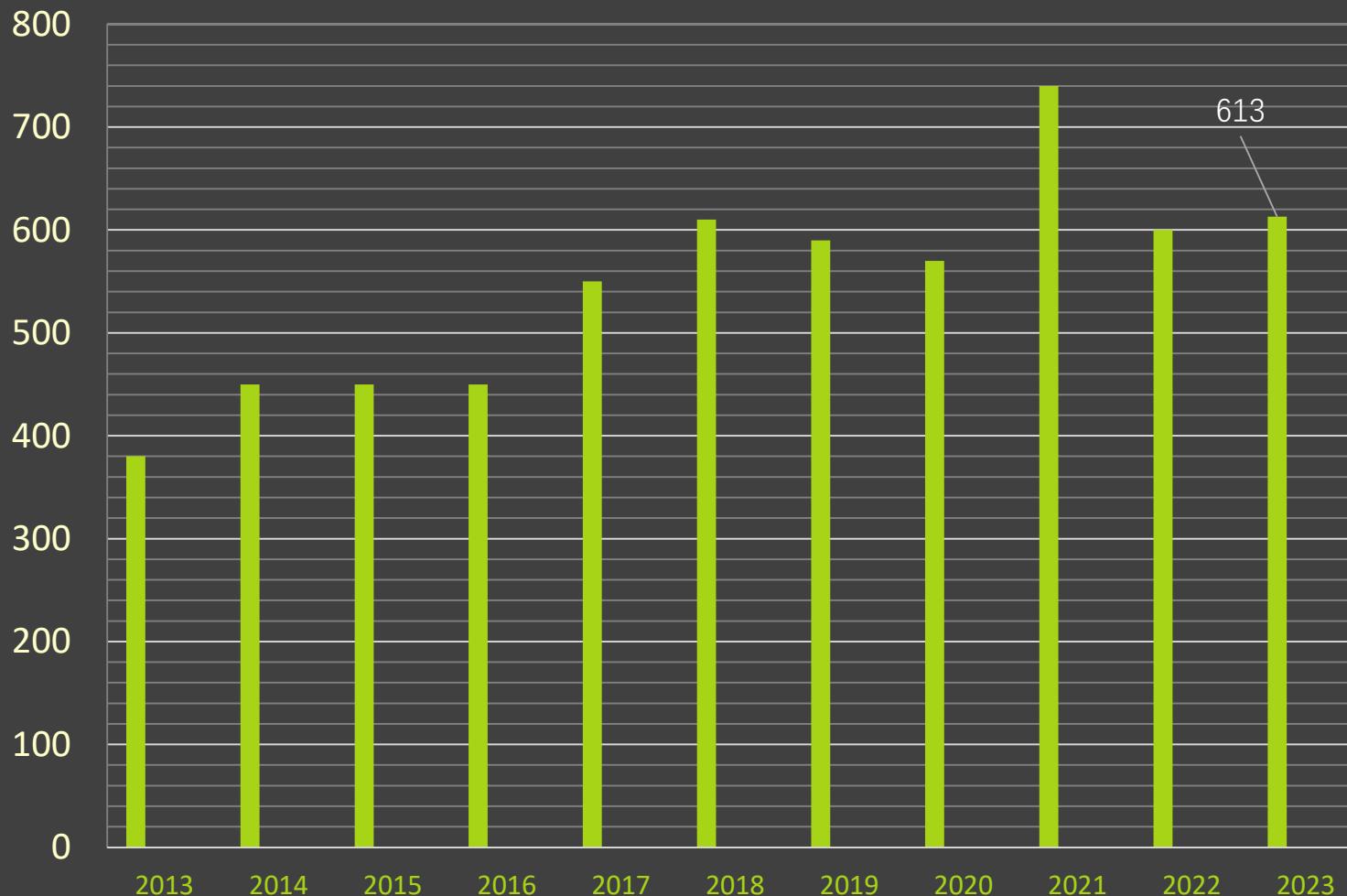
Fulling Organization

Board of Directors / Share Holders

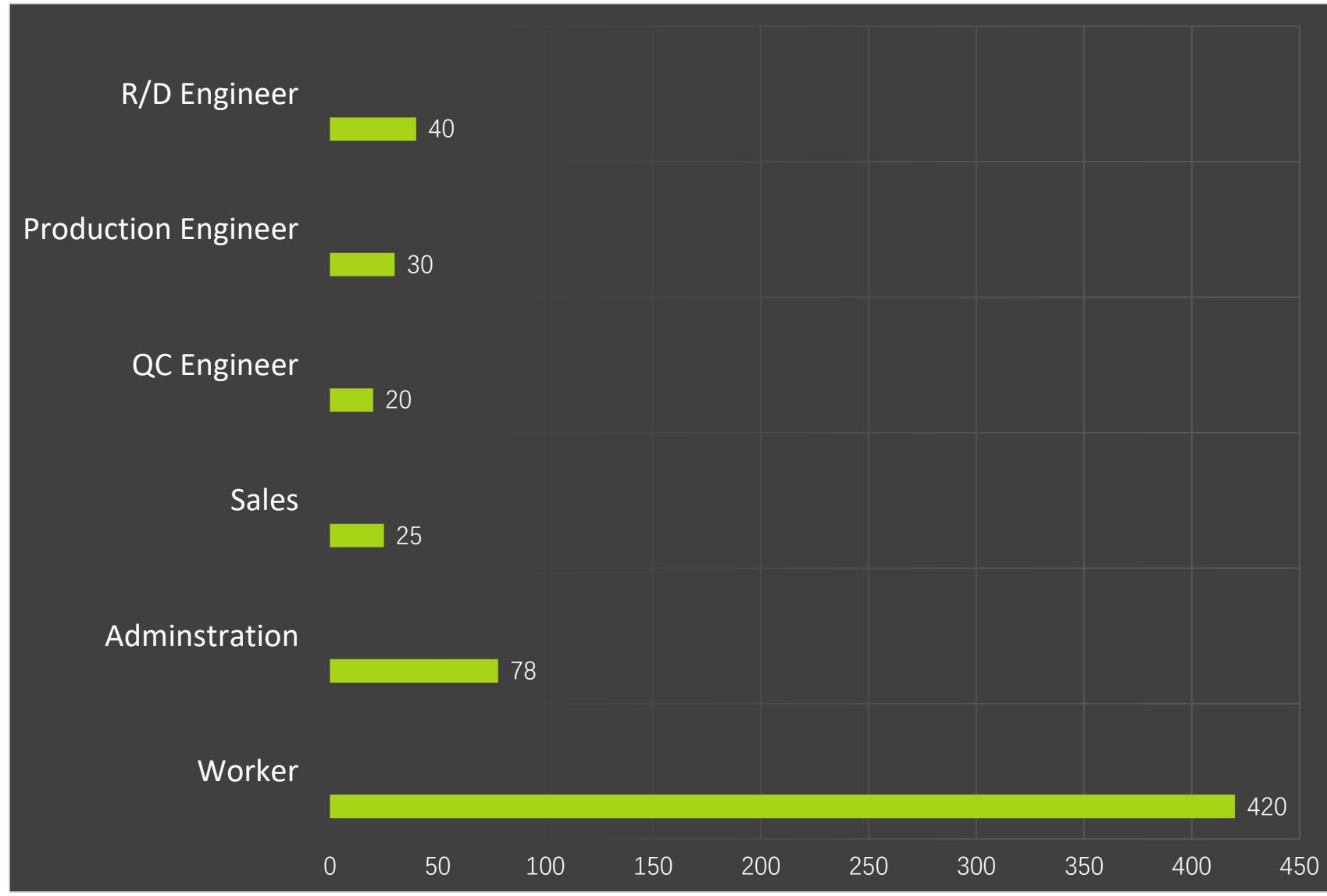




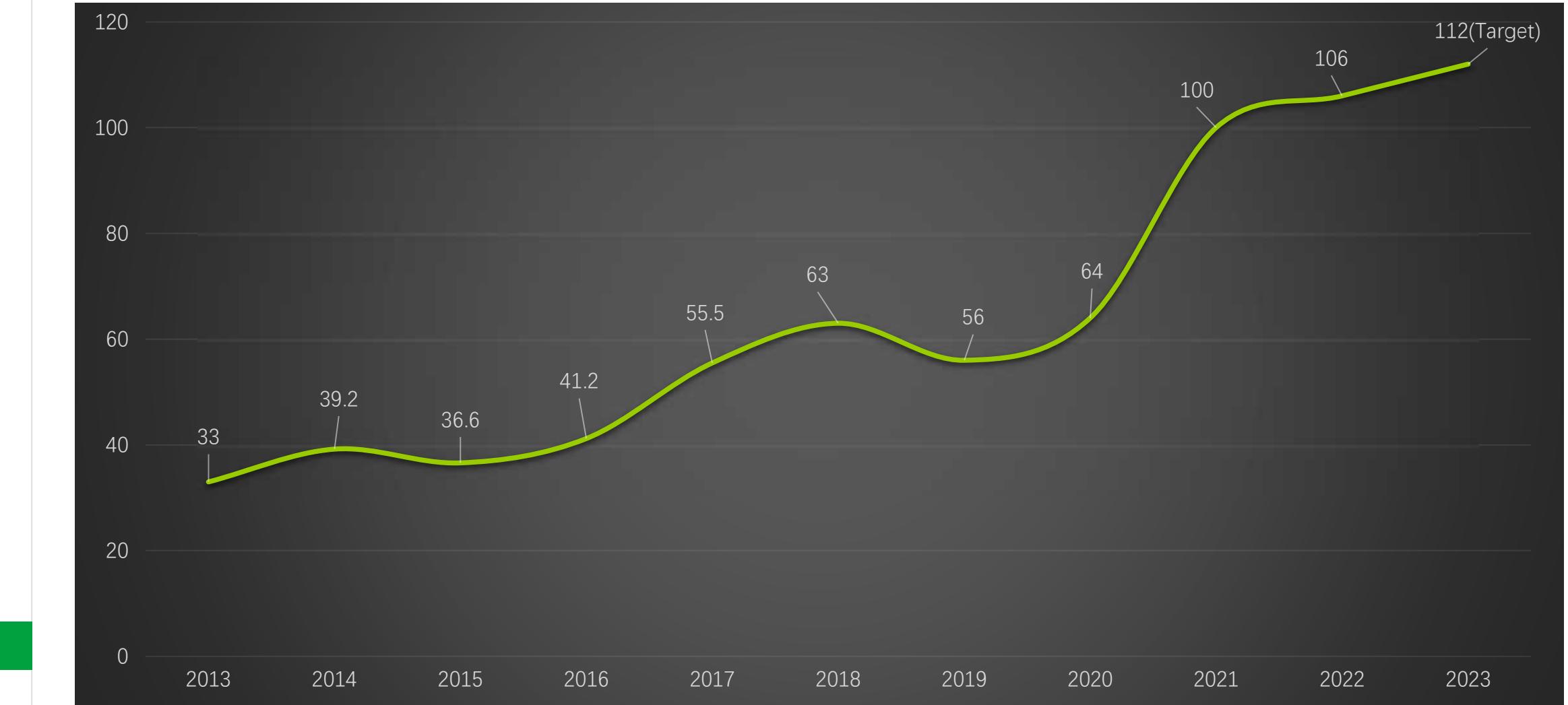
Employees



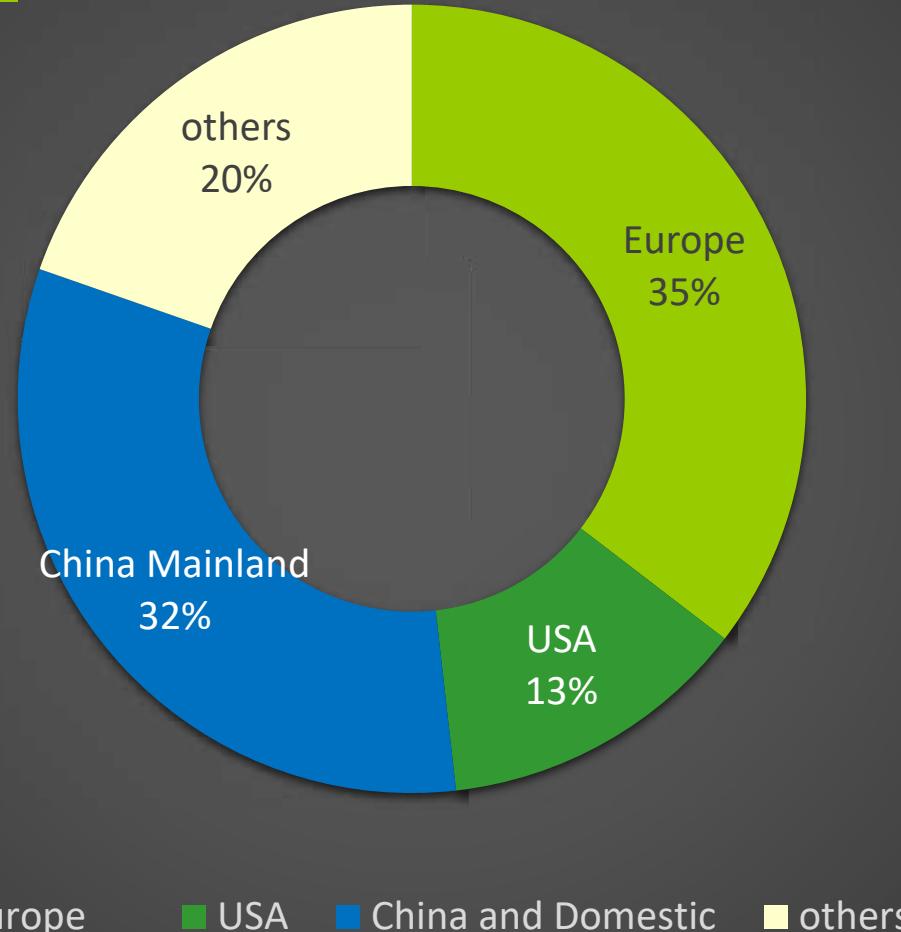
Human Resource



Sales in Million USD



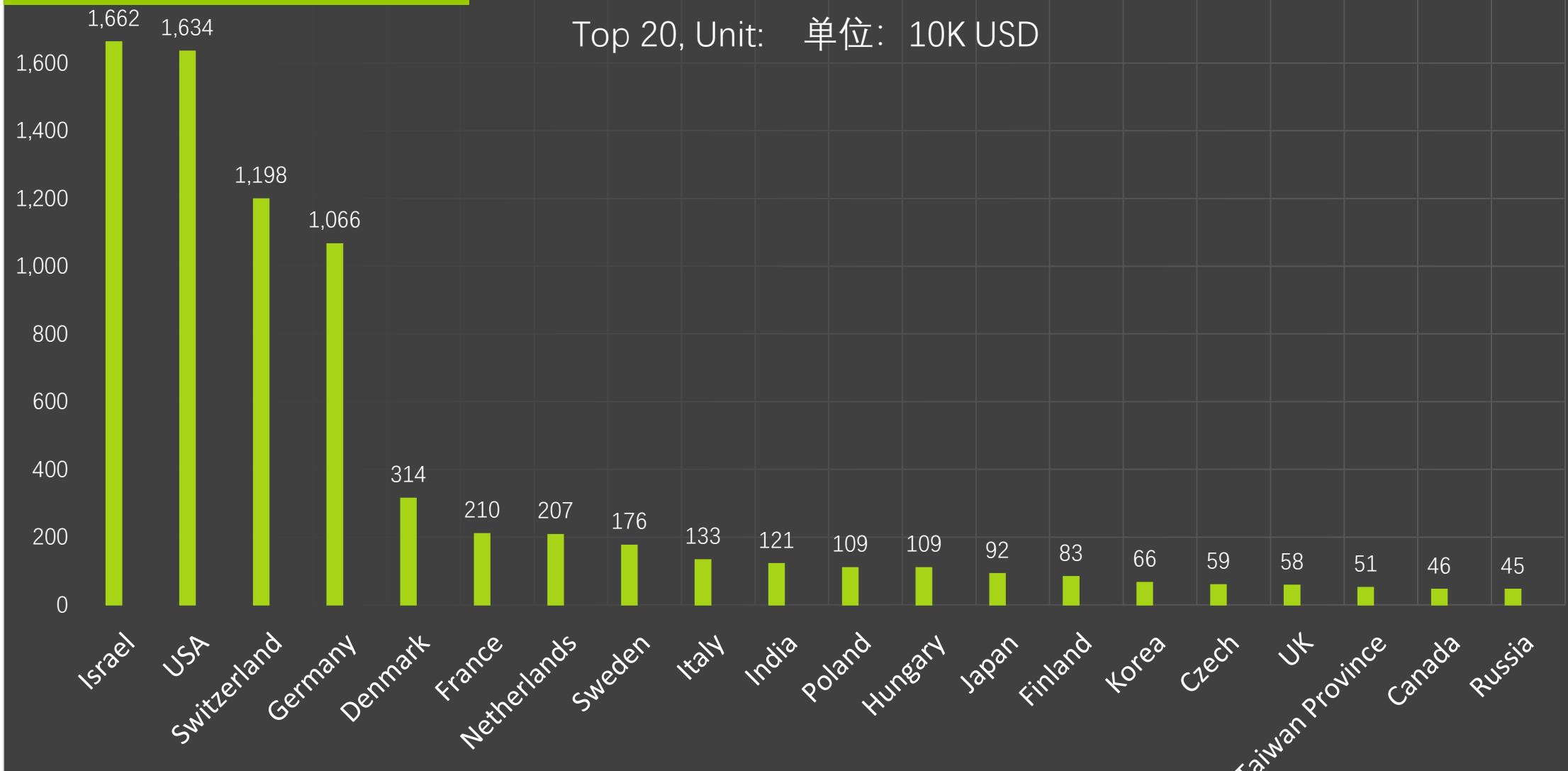
Markets



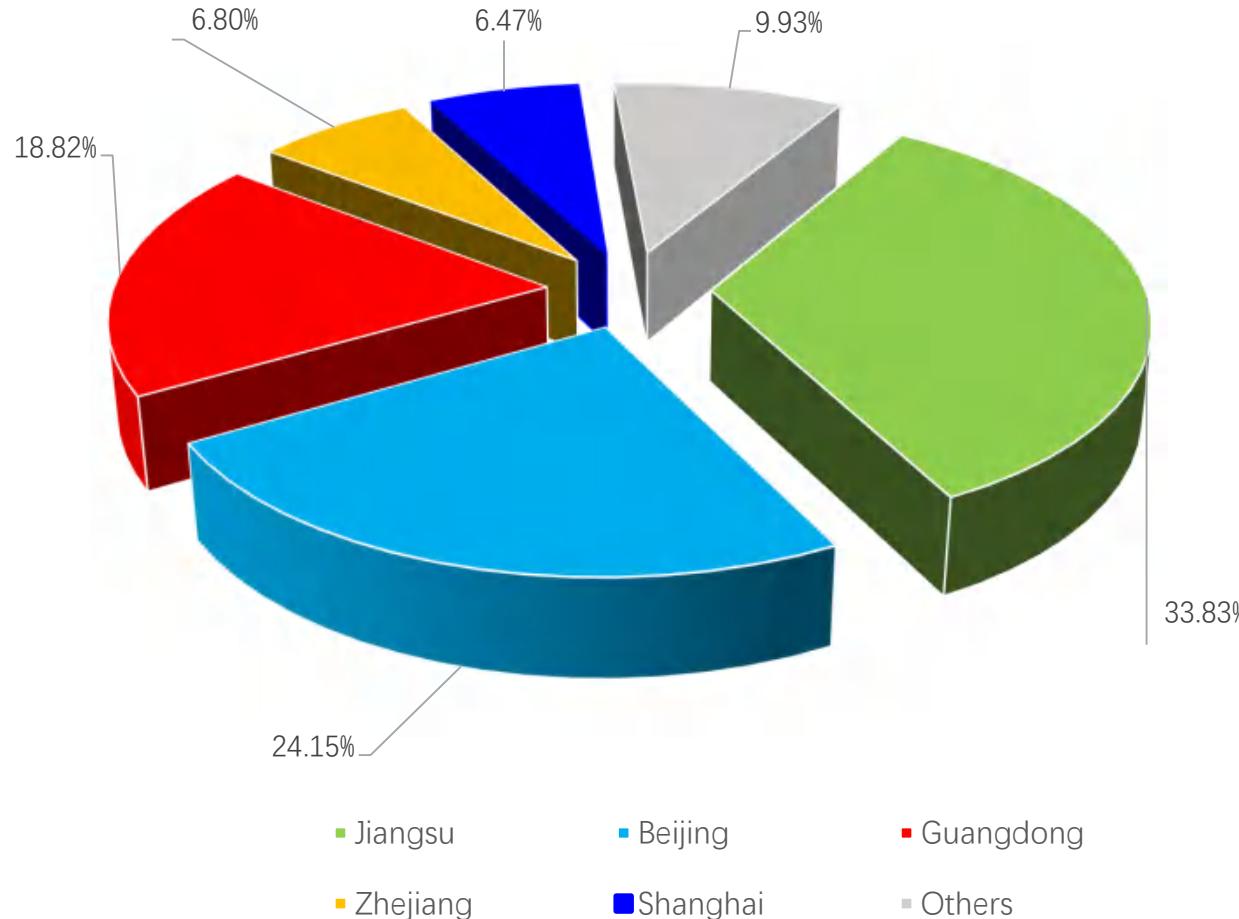
International



Top 20, Unit: 单位: 10K USD



Domestic



ISO 9001

from 2004
certified
by TUV

1

IATF16949

(TS16949)
from 2008
certified
by TUV

3

RoHS
compliance
from July 2005



Certification





Risk Assessment Report on Hazardous Substances under EU REACH

Product Name: Hybrid Stepping Motor & DC Brushless Motor
 Type / model: FL51BL39-12V-2483A-01
 Company Name: CHANGZHOU FULLING MOTOR CO., LTD.
 Assign Date: 2019-05-15
 Report Date: 2019-06-04

Hangzhou REACH Technology Group Co.,Ltd ©2008-2018
 Address: L1F Building 1, Dongqian Hi-Tech Park, 288 Qiaoyi Road, Binjiang District, Hangzhou, China
 Tel: 0571-87066661 Mr. Charles Chang / Website: www.cirs-group.com

All products of Fulling Motor are CE certified, with ROHS & REACH compliance.

Certification



NDMM2.E300294 - INCOMPLETE ROTATING MACHINES AND ROTATING MACHINE PARTS - COMPONENT

Incomplete Rotating Machines and Rotating Machine Parts - Component

See General Information for Incomplete Rotating Machines and Rotating Machine Parts - Component

CHANGZHOU FULLING MOTOR CO LTD

E300294

69 KUNLUN RD

CHANGZHOU, JIANGSU 213022 CHINA

Incomplete Motor Parts, Model(s) FL42BLSH04-24V-30113A-IP54-02, FL86BLS105-48V-30570A-02

Motor parts (Class B), use on GP, Model(s) FL86BLS105-48V-30570A, FL86BLS71-1-10P, FL86BLS71-2-10P, FL86BLS71-3-10P, FL86BLS71-4-10P, FL86BLS98-1-10P, FL86BLS98-2-10P

Motor parts (Class F), use on GP, Model(s) FL80SV93-60V-3000

Motors (Class B), Model(s) 23H50414-01, 23H50414-02, 23HS2415, 23HS2415-01, 23HS3414, 23HS5414-01, 23HS55401-02, 23S31-0650-80000-13, FL42STH33-4004B, FL42STH42-5004B, FL57STH115-6504B, FL57STH115-6504B-02, FL57STH41-5604B-01, FL57STH41-5604B-02, FL57STH56-5604B, FL57STH56-5604B-01, FL57STH76-6504A, FL57STH76-6504B, FL57STH76-6504B-01, FL60STH145-6504B-H, FL86STH118-JAT-2003B, FL86STH118-JAT-2004B, FL86STH156-JAT-2003B, FL86STH156-JAT-2004B

Motors (Class F), Model(s) FL863P127-4003B, FL863P127-4003B-01, FL863P97-4003B, FL863P97-4003B-01, FL865TH118-7004B, FL865TH118-7004B-01, FL865TH156-7004B, FL865TH156-7004B-01, FL865TH80-7004B, FL865TH80-7004B-01

Stepper Motor, Model(s) PMX2320-J10-SHS-02

Marking: Company name, catalog designation and the Recognized Component Mark on the smallest unit container in which the product is packaged.

Last Updated on 2019-08-29



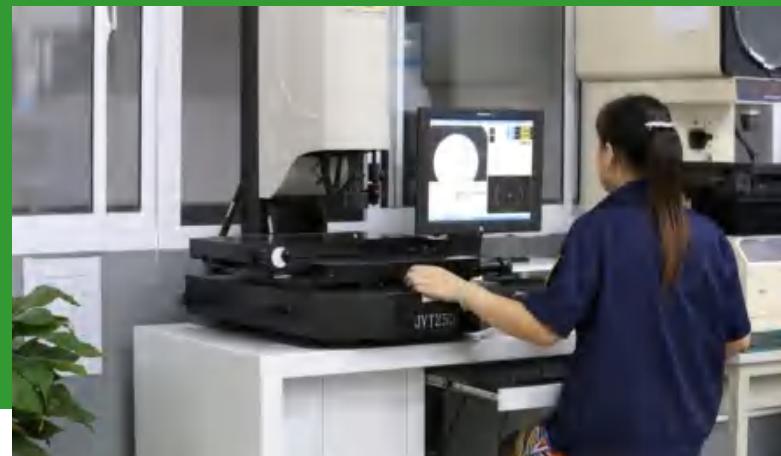
Part of products are UL certified for USA market

Certification

Quality Control Equipments

Testing devices

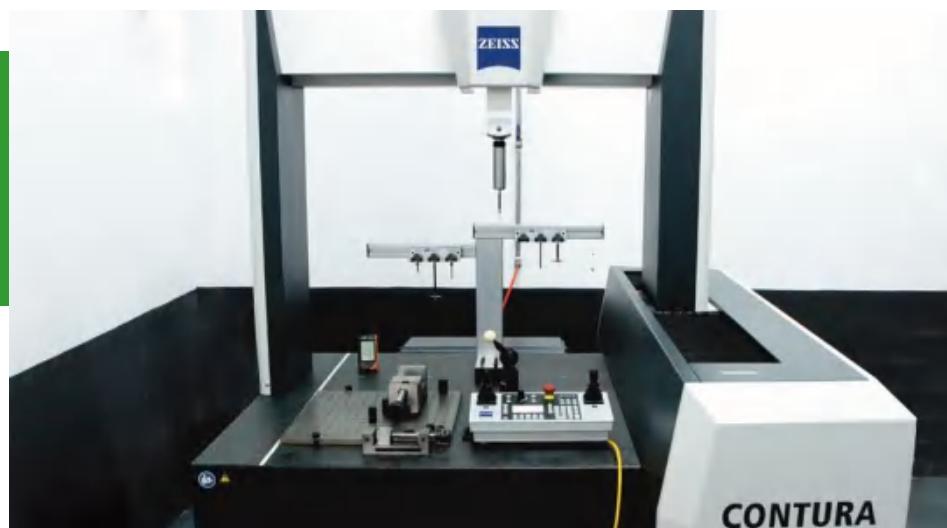
- RoHS tester
- Bearing tester
- Copper wire tester
- Magnet tester
- Temperature & humidity tester
- Shock & Vibration tester
- Noise tester
- Hardness tester



Quality Control Equipments

Testing Device

- 3D tester (Zeiss)
- Speed-torque tester (Magtrol)



Quality Control

- Production final test
 - Insulation resistance
 - Dielectric strength
 - Resistance /phase
 - Inductance /phase
 - Holding torque
 - Direction testing
- Running test
 - Max. running frequency at no load
 - Smooth running
 - Noise and vibration
- Appearance testing
 - Output shaft
 - Lead wires
 - Mounting dimension (flange, screw holes)
- Quality control additional test
 - Frequency vs torque curve
 - No load temperature rising
 - Detent torque



Production



■ Fulling Motor

HB Stepping Motor:

300'000pcs/month

Dc Brushless Motor:

250'000pcs/month

■ Partner Company

PM Stepper motor:

500'000pcs/month

DC Motor & Gearbox

50'000 pcs/month

Product line

4 Stators
Winding
Machine



Automatic
Lathe



CNC
Turning
Center



CNC
Tapping
Center



Product line



Automatic Honing Robot



Automatic Assembly Line

Product line

Servo Motor

- 38 mm rated power 50-100W
- 60 mm rated power 200-400W
- 80 mm rated power 750-1000W
- 100 mm rated power 1000-1500W
- 110 mm rated power 1500-2000W
- 130 mm rated power 2000-3000W



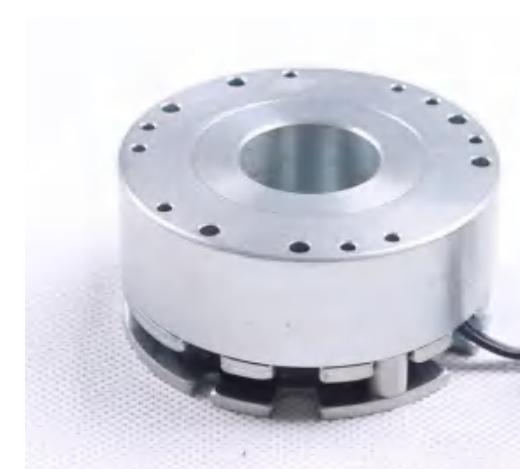
Accessories of Servo motor

- Encoder option:

Optical encoder, Magnet Encoder

Incremental or absolute encoders

- Brake



Accessories of Servo motor

- Precision Planetary gearbox
- multiple gear ratio
- Backlash < 30Arc



Product line

Frameless Motor

- 50 mm rated power 151-183W
- 70 mm rated power 250-366W
- 85 mm rated power 440-732W
- 115 mm rated power 570-620W

Application: Robotics



Product line

BLDC motors

22 mm length 45 – 70 mm

28 mm length 26mm – 38mm – 77mm

32 mm Outer-Rotor motor

33 mm length 38mm – 80 mm

36 mm length 57mm

42 mm length 41mm - 61mm – 100mm

45 mm Outer-Rotor motor

57 mm length 54mm - 74mm - 94mm – 115mm

80mm length 105mm

86 mm length 58mm - 71mm - 98mm – 125mm



Product line

Out Rotor BLDC Motor

- 20 mm length 14mm
- 32 mm length 16-18mm
- 45 mm length 18-27mm
- 60 mm length 38-42mm
- 90 mm length 27-41.5mm
- Compacted size, high torque



Product line

Slotless BLDC Motor

- 14 mm length 36mm
- 16 mm length 41mm
- 19 mm length 59mm
- 22 mm length 60mm
- 24 mm length 59.5mm
- 28 mm length 62mm
- 30 mm length 65mm
- 40 mm length 80mm
- Max speed: 50000RPM



Product line

Economical BLDC Motor

- 24 mm length 30mm
- 28 mm length 38-48mm
- 36 mm length 30-65mm
- 38 mm length 58mm
- 42 mm length 60-66mm
- 48 mm length 68mm
- 80 mm length 55-85mm

Option: Integrated driver



Product line

Ultra flat Stepper NEW

- 20 mm step angle 1,8°
- 28 mm step angle 1,8°
- 35 mm step angle 1,8°
- 39 mm step angle 0,9° - 1,8°
- 42 mm step angle 0,9° - 1,8°
- 57 mm step angle 0,9° - 1,8°
- 60 mm step angle 1,8°
- 86 mm step angle 1,8°
- 110mm step angle 1,8°
- 3 Phase Stepper size 42,57,86, 110 mm



Holding torque from 17,5
mNm to 30 Nm

Product line

Linear Actuator

- 20 mm force 46N
- 28 mm force 50-210N
- 35 mm force 70-350N
- 42 mm force 152-369N
- 56 mm force 500-1200N



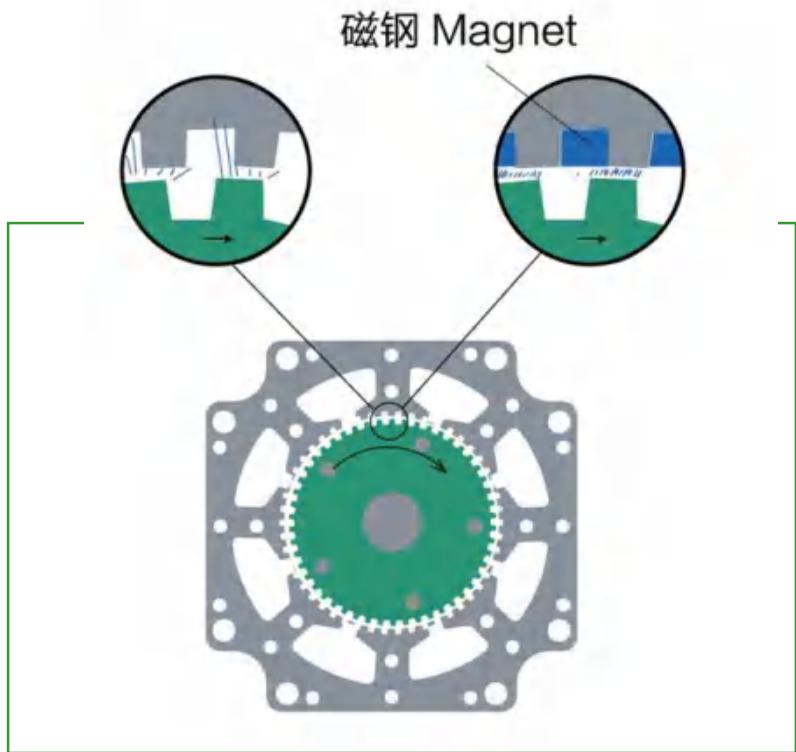
Stepper Motor with Integrated Driver

- 20 mm inner hole: 3mm
- 28 mm inner hole: 5mm
- 35 mm inner hole: 8mm
- 42 mm inner hole: 8mm
- 57 mm inner hole: 12mm
- 86 mm inner hole: 16mm

Product line

Enhanced Torque Stepper Motor

- 57STEN
- 60STEN
- Torque boost 30%~40%



Waterproof Stepper Motor

- 42 mm
- 57 mm
- 60 mm
- 86 mm
- IP65



Product line

Motor driver

12V~75V , 0.1A~6A

Open loop and close loop

Communication interface :

R-485 / CANopen / E-EtherCAT

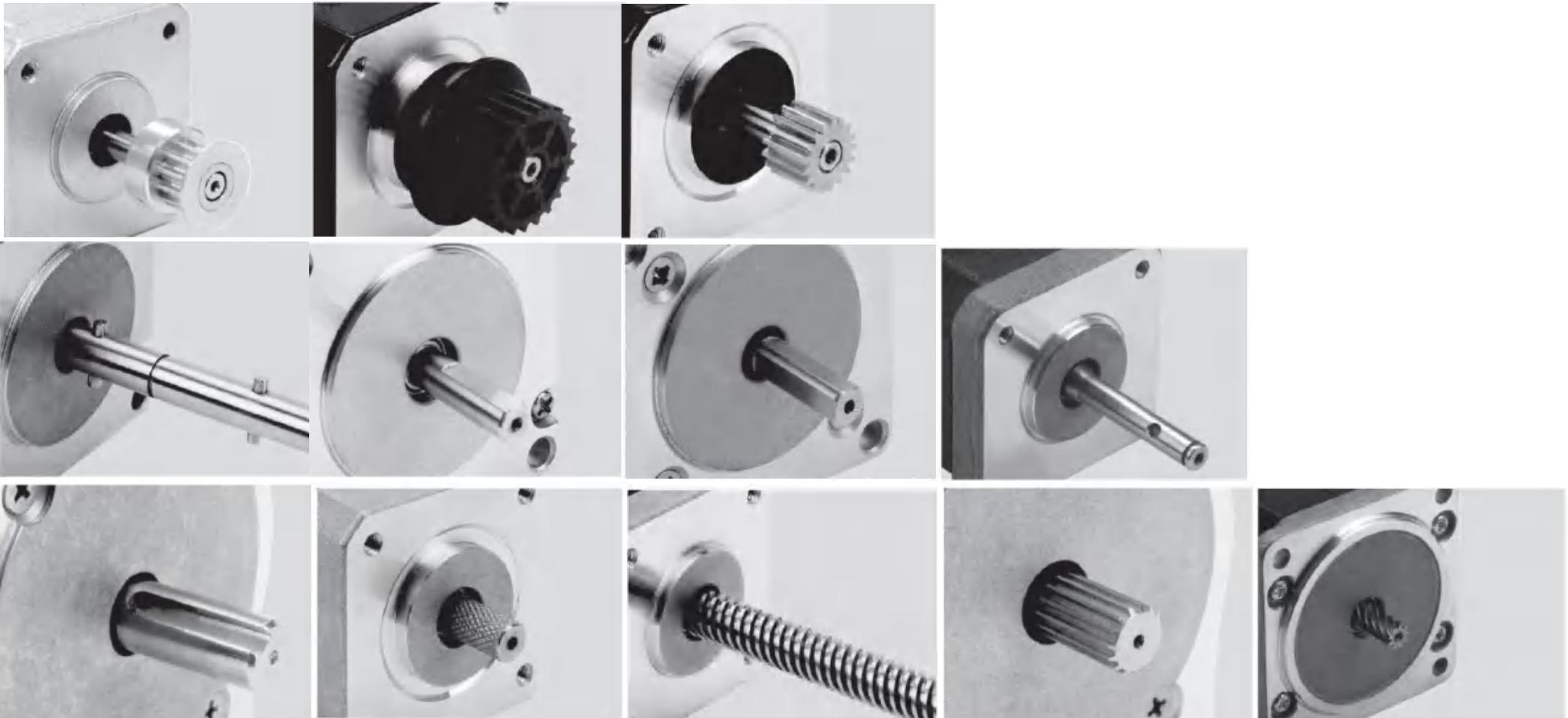


Motor with Integrated Driver



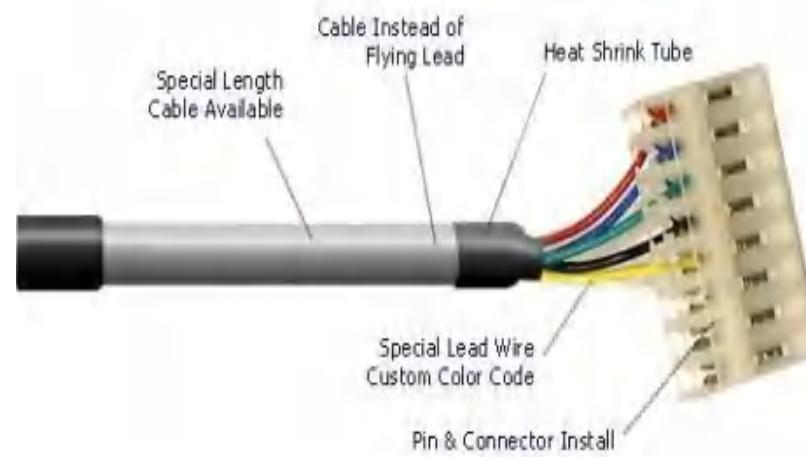
Product Customization

Shaft (diameter , double output , hole , flats , screw.....)



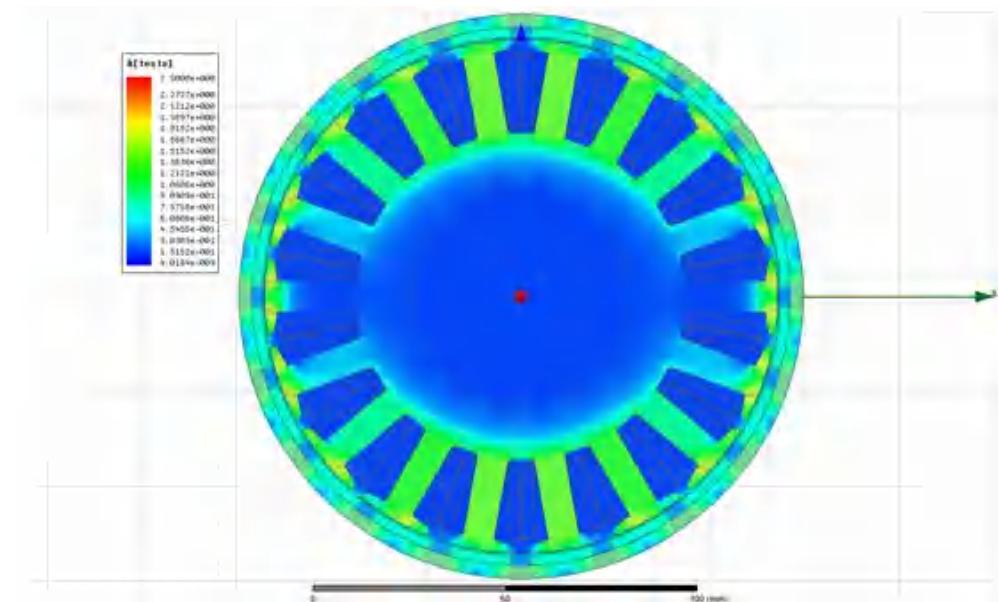
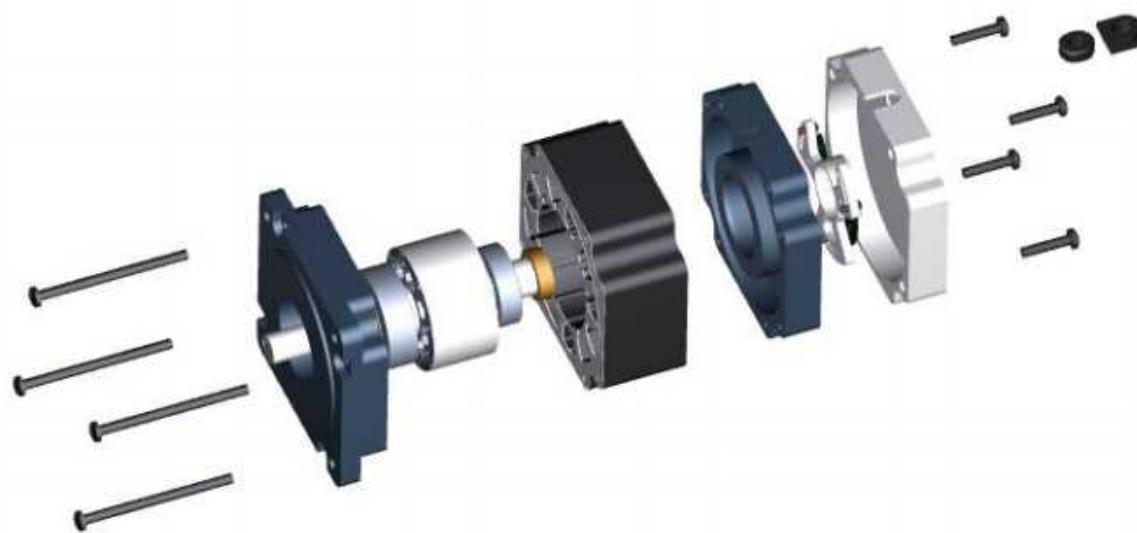
Product Customization

Cables (color, tube, Shield cable, length, connector....)



Customized Design

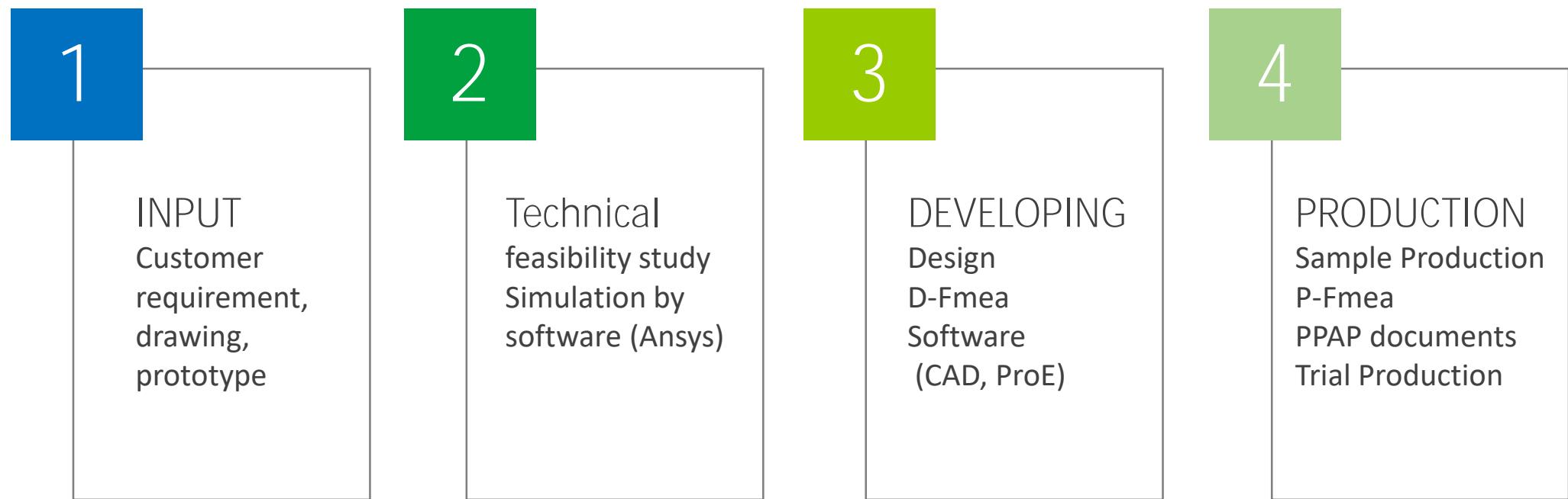
Fulling Motor can develop all kinds of stepping motor, BLDC motor, Ac motor, to match customer demands. Our strong R/D team will be available for any special request.



Product Developing

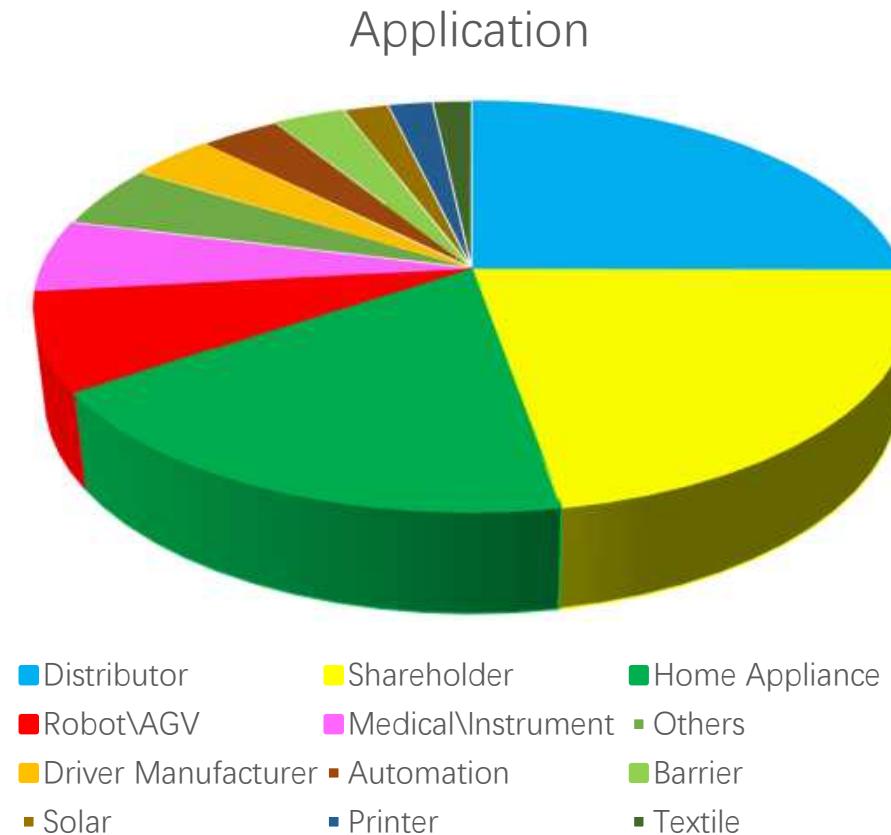
The developing process is under the management of PTC® Windchill®.

JIULING MOTOR CO., LTD.



Market Segments

Applications	
Distributor	25.06%
Shareholder	22.20%
Home Appliance	18.26%
Robot\AGV	7.70%
Medical\Instrument	5.65%
Others	5.01%
Driver Manufacturer	3.67%
Automation	3.58%
Barrier	3.17%
Solar	1.99%
Printer	1.98%
Textile	1.72%



Market Segments

- peripherals
- office automation
- telecommunication
- reprographic and printing machines
- machine tools
- industrial automation
- machines for wood working
- car instruments and servo controls
- sewing machines
- machines for textile and clothes sectors
(knitting, shoe)
- machines for farm and food industries
- machines for packing and wrapping and finishing.
- laboratory, measuring, electromedical instruments
- Lighting systems for leisure / music industry



Customers and Applications

F u l i n g M o t o r

- Lawn mower & swimming pool cleaner
- Robotics
- Wheels and blade/brush
- 500'000 motors/y
- 42BL41 Custom
- 57BL70 Custom



Customers and Applications

- AGV
- Smart logistics
- Driving wheels, lifting, rotating
- 20,000 pcs/year
- 86BLC Custom
- Gearbox, encoder, brake, etc. are optional



Customers and Applications

- Solar
- 63mm BLDC motor with planetary Gearbox
- UV Protection
- UL approval
- IP 65 waterproof
- 25 Years Lifetime



Customers and Applications

- Door opening system
- Elevator doors
- Doors actuator
- 200'000 motors/y
- 57BL Custom



Customers and Applications

- GE Medical, Roche
- Ultrasound Imaging
- Biochemistry analyzer
- Diagnostic Workstation
- Breath pump



Customers and Applications

- SMT Machine
- Printer



Customers and Applications

- Auto door, Barrier
- Outer rotor BLDC motor



Customers and Applications

F u l i n g M o t o r

- Robotic arm
- Robot dog
- Frameless motor



Customers and Applications

- Faurecia, Volvo, Alfa Romeo...
- Seat pump
- Door system
- SCR pump

Customized 51mm BLDC motor controls the front lip of Giulia, when speed of the car exceeds 100km/h, it can generate an additional 100kg of downforce



International sales

Sales offices

Jiuling Motor

50



- Austria
- Sweden
- South America
- Benelux
- Finland
- Japan
- France
- Hungary
- Germany
- Italy
- India
- Israel
- Norway
- Poland
- Switzerland
- USA
- Spain
- Australia
- United Kingdom
- Russia
- TAIWAN CHINA

THANK YOU