#### The Leader of Domestic Motion Control Solution Provider

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## **ADTECH**

## **Product Selection Guide**



SCARA Robot



**Motion Controller** 



Servo Motor/Driver



**Industrial Robot** 





ADTECH (SHENZHEN) TECHNOLOGY CO., LTD. was established in 2002. As the leader of domestic motion control solutions provider, ADTECH had been build up the motion control, motor drive, CNC control system application and industrial robots in total four major products. ADTECH products are widely used in industrial robots, printing and packaging, metal processing, light textile, home, electronic equipment, special machine tools and other fields, become the representative brand in the field of motion control industry application.

Companies in key cities across the country set up a liaison office and service centers, and gradually establish a global sales and service network, products have been exported to Europe and the United States, the Middle East, Southeast Asia, Hong Kong and Taiwan, 103 countries and regions.









Shenzhen Head office

Shenzhen sales centre

ADTECH GongMing factory Automation Production Line

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## PULSE TYPE 6 AXIS MOTION CONTROLLER



AMC1600P SUPPORT 6 AXIS 36 INPUT 30 OUTPUT

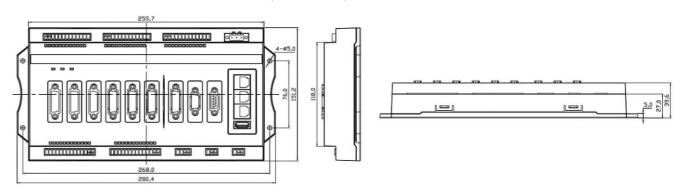
#### **Product specifications**

	MODEL	AMC1600P
	SWITCH INPUT	24 GENERAL DIGITAL INPUT +12 LIMIT SIGNAL INPUT
	INPUT VOLTAGE	24V
	GENERAL INPUT MIN CURRENT	2mA
INPUT	GENERAL INPUT MAX CURRENT	8mA
	ISOLATION VOLTAGE	3750 rms
	ISOLATION METHOD	OPTICAL COUPLING ISOLATION
	OPTICAL COUPLING INPUT DELAY	< 0.1MS
	SWITCH OUTPUT	24 DIGITAL OUTPUT +6 SERVO CLEAR OUTPUT
OUTPUT	OUTPUT SIGNAL TYPE	DRAIN OUTPUTS
OUTPUT	ANALOG DA OUTPUT	2 GROUPS
	RATED CURRENT	1A (single group max current up to 2A)
PULSE	CHANNEL	6 AXIS
	MAX PULSE FREQUENCY	2MHz
	OUTPUT SIGNAL TYPE	5V DIFFERENTIAL OUTPUT
	ENCODER FEEDBACK	6 GROUP AB PHASE Z PHASE
	OUTPUT METHOD	PULSE + PULSE \ PULSE + DIRECTION
	USB	1
	LVDS	/
	RS232	1
	RS485	1
PORT	NETWORK PORT	3
	SD	1
	HANDHELD BOX	1
	HANDWHEEL	1
	CAN	1
	STORAGE TEMPERATURE	-20 ℃ — 80 ℃
APPLICATION	WORKING TEMPERATURE	-10 °C — 50 °C
ENVIRONMENT	STORAGE HUMIDITY	0% — 95%
	WORKING HUMIDITY	20% — 95%

#### Product configuration

NAME	DESCRIPTION
НМІ	SUPPORT MODBUS COMMUNICATION SCREEN
SERVO	ADTECH (QS7/QX)SERVO
MOTOR	ADTECH (MRMH/MRMG SERY)SERVO MOTOR

#### Structure installation dimensions(Unit: mm)



#### **INDUSTRY APPLICATION**

DISPENSING、GLUE PLASTIC、PAINTING、BRUSH MAKING、CUTTING、LOCKING SCREW and so on.



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## **EtherCAT Bus controller**



AMC3000E IEC61131-3 programming can support 32 axis Bus



AMC2000E IEC61131-3 programming can support 16 axis Bus

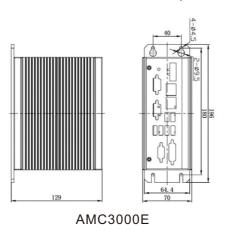
#### **Product specifications**

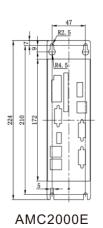
Storage	Capacity	4GB	2GB
	100 M Ethernet port	1	2
	1000M Ethernet port	3	1
	VGA	1	1
	HDMI	1	1
	DVI-D	1	1
Interface	USB	5(USB 2.0) 1(USB 3.0)	4(USB 2.0)
	LED	Power, ALARM RUN	HDD
	RS232	2	1
	RS485	2	1
	RS422	1	1
	CAN□	1	1
	Slot	2	1
Motion control	Controlling axis	32 axis	16 axis
WIGHTON CONTROL	Motion control period	1ms	1ms
	Maximum axis group	16 group	8 group

#### **Product configuration**

Name	AMC2000E AMC3000E
Interface	Support standard RTU, MODBUS and TCP/IP MODBUS support page
	EM2118 8 channel digital output leakage
IO module	EM1118 8 channel digital input NPN
	EM8200 EtherCat adapter
Bus servo driver	Refer to EM and QXE series servo driver and motor selection
Motor	Refer to EM and QXE series servo driver and motor selection

#### Structure installation dimensions(Unit: mm)





#### AMC3000E wiring diagram



#### Application industry





## **ADTECH CNC9810V Controller**



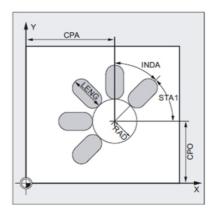
## **System Additional Functions:**

#### 1. Speed forward processing

Pre reading tools path by the CNC system, automatic analysis operation processing speed, ensure smooth transitions in the process, avoid speed caused the vibration of machine tool, especially for the processing to achieve a flexible cutting small segments and improves processing speed and performance, system maximum number of read-ahead is 3000, can meet all kinds of complex Processing track.

2.Add common processing technology CAM function, through the parameters provided by the rapid completion of circular processing requirements.

3.Breakpoint memory settings Power failure memory function, the process of abnormal withdrawal of the system when the program can be permanently memorized line number, coordinates and other information, start again can choose to continue from the breakpoint processing, abnormal exit, including system power outage, Breakpoint memory is divided into position memory and state memory, the location of the system memory can breakpoint to the subroutine call and loop program, the state memory for the direct recovery of the state at the breakpoint processing, suitable for large file carving and no subroutine call.



- 4. Cross file program calls the function and the same workspace program calls the function. subroutines can be saved in a separate file, like a feature-when processing multiple times in a single product can be the same graphic saved as a NC files, called in the main program, the primary process simple and flexible
- 5. With class b macro functions, and Arch set of macro variables, some variables have the power to save, system status registers can also be accessed through the macro addresses
- 6.Macro programming grammar is fully compatible with the C programming language, such as the IF, ELSE, WHILE, GO TO and the function call, fully support small round enclosed operator, small square enclosed operator, big enclosed operator, annotation support /line /, block / \* \* / programming writing style.
- 7. The system has a variety of compensation functions: backlash compensation, pitch error compensation, tool radius compensation, tool length compensation.
- 8. System is an open structure design of internal resources can be accessed through the address, module manufacturers to develop interface provided, manufacturers can design their own modules, such as the auxiliary control, tool storage control features (such as disc cutter, knife blade, double z-tool, tool change with several cylinders).
- 9. The system has an automatic tool setting function, and a cutter detection function. Effectively ensure the processing accuracy and product qualification rate.
- 10. Convenient and efficient system debugging, the entire Chinese parameters to support the English language, most of the parameters of the factory has been set up, just modify a few parameters related to machine characteristics can work, the same machine can also debug a good machine system data backup First, into the same new model into the fast completion of the system data set. Significant savings in system settings work, to facilitate mass production, backup data archiving can also be used for future maintenance.



## **AVS** series vision position system

#### **Product Introduction**

Positioning fast and precision, the system stable and efficient, easy to operate

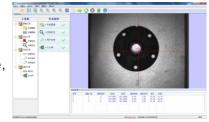


#### **Function Introduction**

- Support Gigabit Ethernet, USB and so on the many kinds of different cameras
- Support array CCD camera
- •Short time of system positioning
- Support online or offline inspection
- Support RS232, Ethernet and so on many kind of communication interface
- Consistent with OPC standard

#### Software specification:

- Positioning algorithm can reach 1/64 pixel, output position, rotation Angle and scaling
- Support for multiple cameras collecting at the same time, and positioning
- Support for different resolutions, different camera interface
- Support import local images, emulates camera collecting function
- Provide tools for edge positioning and area positioning
- Edge positioning, can quickly positioning figure clear object, and can calculate any rotation Angle;
- Regional positioning, suitable for irregular shapes, low contrast object;
- Provide scale calibration, the calibration tool with mapping coordinates, can be converted into real physical pixel units, and to correct lens and perspective distortion.
- Drag and drop software operation, intuitive and efficient, to quickly build a set of visual positioning
- Supports Ethernet, serial communication mode for file reading and writing, you can quickly locate the results output to the external control of system or file system
- Support the new process, save, and read, and can save to local file, apply directly when loaded again without setting



#### **Vision System Components:**

Vision controller + Industrial Camera + Lens + Light source + Controller of light source + CCD Data cable + USB encryption dog

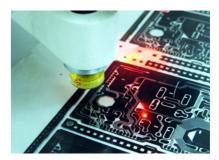
#### **Product Configuration:**

System Type	Name	Model	Description	Quantity				
	Vision controller	AVS1100	Industrial PC + Smart card +Vision software	1				
	Industrial camera	300 thousand, 2 million, 5 m	nillion pixel can be selected, refer 《Vision system selection table》	1				
	Lens	Refer 《Lens sel	ection table》	1				
Single Camera System	Light source	Refer 《Light so	urce selection table》	1				
	Controller of light source	Refer 《Controller of light source selection table》						
	CCD Data Cable	3M,5M,7M can be selected, refer 《Vision system selection table》						
	Encryption dog	USB Encryption dog, Blue Label of Laser printing.						
	Vision controller	AVS1100	Industrial PC + Smart card +Vision software	2				
	Industrial camera	300 thousand, 2 million, 5 million pixel can be selected, refer $\langle\!\langle Vision\ system\ selection\ table \rangle\!\rangle$						
	Lens	Refer 《Lens sel	ection table》	2				
Double Camera System	Light source	Refer 《Light source selection table》						
	Controller of light source	Refer 《Controlle	er of light source selection table》	1				
	CCD Data Cable	3M,5M,7M can b	e selected, refer 《Vision system selection table》	2				
	Encryption dog	USB Encryption	dog, Blue Label of Laser printing.	2				

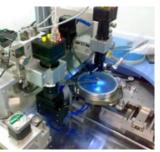
#### Applications:



Robot industrial of pick and place and palletizing



PCBA electronic Industrial



LED Industrial



Dispensing Industrial



**Cutting Industrial** 



# Motion Control Platform ADT-TV5600DJ









#### **Control function**

- ◆ 2-6 Axis interpolation, Space linear, Space arc, Space oval.
- Using the algorithm of speed forward, Automatic arc corner speed.
- Support : Modbus ASCII、Modbus RTU and Modbus TCP communication protocol.
- Support designed to solve the problem of Non-standard process LUA script functions.
- Axis of rotation radius compensation.

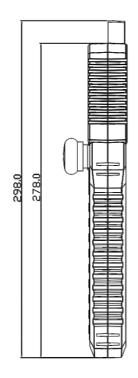
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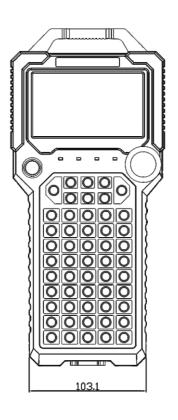
- ◆ All the OMC8848 are poto-isolator, input voltage 12-24V.
- Output type: NPN open collector 5-24VDC, Rated current 0.5A, Max current of single road 1A.
- Every axis hardware plus or minus limit, or home and stop, start button (Limit input can be set up as a general purpose invalid input).

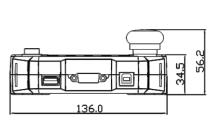
#### Dispensing machine application industry

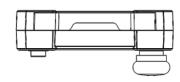
- Acoustic industry: Speakers, Buzzer, Acoustics, Headphones.
- Inductance industry: Small transformer, SMT transformer, Inductance, Relays, Small coil motors.
- Communications : Mobile phone keys, Cell phone casing adhesive, Interphone, Telephone, Fax machine.
- Computers, Digital products, Digital cameras, MP3, MP4, Electronic toys, Adhesive.
- Switches, Connectors, Wire, Plug wire.
- Electronics: Integrated circuits, LCD screens, Potting glue machine.
- Optics: Optical lens, Bald, Magnetic.
- Battery: The battery box of sealant, Battery shell potting glue machine, Battery back cover dispensing machine.
- Craft: Trademark fixed adhesive, Sign a glue machine, Small adorn article point crystal glue.
- Auto parts electronics industry: Car doors and Windows and glass glue.

#### Dimension Unit: (mm)









TV5600DJ Structure Diagram



# RC400 4 Axis Robot Drive & Control System



#### **Function Introduction**

- 8 inch touch screen;
- SCARA robot dedicated operation definition;
- ◆ AR language support robot, G-code programming;
- Support for absolute, incremental brand motor at home and abroad, includingSanyo, Panasonic, Tamagawa, motor specifications pick;
- Advanced vibration suppression techniques, processing more stable;
- Parameter self-tuning technology, no longer have to worry about theparameter debug;
- Circular interpolation of 3D space technology;
- Continuous motion speed adaptive technology;
- Spline teach technology;
- Direct support to three-dimensional simulation display on the handset;
- SCARA flexible calculation of coordinate transformation and pose.
- $\bullet$  Supports a variety of communication methods, network, USB,U  $\dots$  ...
- ◆ The built-in soft-PLC (IEC61131-3) < option package >;
- NURBS interpolation technique < option package >;
- Off-line programming
- Remote monitoring
- System testing, Diagnostics, alarms, operation log

#### Specifications of products

		Model		RC400			
		Disp	olay	8 Inch			
splay		Teaching	method	Data input by manual(coordinate value input) Cartesian coordinate teaching. Offline teaching(Input data outside)			
Flex Pendantdisplay		Tracking pro	ogram input	AR language			
		Data	cable	3M			
		Size/w	veight	355mmX248X70mm(teaching dependent) / about 2kg			
		Power	supply	24V DC			
		Data exchai	nge method	USB			
			Control axis	4 axis			
		Dr	ive motor type	AC servo motor(Support TAMAGAWA,PANASONIC,SANYO,ADTECH etc.)			
	Axis control function	Supp	ort encoder type	Incremental/ absolutely AB phase encoder			
		Posit	ion control period	8K/16K			
		Movement	/ servo control function	linear interpolation, arc interpolation, continuous tracking, all kinds of acceleration and deceleration Arch movements			
		Cod	ordinate system	Joint coordinate system, Cartesian coordinate system			
Driver and control all-in-one machine		Pos	ition unit setting	Degree.mm			
mac		Off	line movements	total absolutely control position (need not homing original poin)			
one	Drogram	Progr	am environments	AR language			
<u>-</u> i-	Program	St	orage method	U-disk, SD cards			
ol al		Standard	I/O input	34 channel			
ontr	External input and output	I/O	I/O output	27 channel			
Ö Ö			RS-232	3 channel			
ran		Output	Ethernet	1 channel			
rive		communication	LVDS port	1 channel			
			USB (2.0)	2 channel			
			Output size	400mmX260mmX160mm (controller)			
			Weight	10 Kg			
	Basic		Power cable	1.5M			
	specification		Power supply	220V AC			
			king temperature	0~40 degree			
			orking humidity	under 90% RH			
		Stor	age temperature	-10~65 degree			

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m 3}$ 



## 4-axis Motion Controller (touch screen) ADT-TP3540

#### **Motion Controller**

ADTECH Motion controllers adopt industrial advance & high-speed microprocessor ARM, VLSI programmable device FPGA. By far, our motion controllers have been successfully applied on hundreds kinds of machines in more than 50 countries and nations.

#### **Functions**



Applies 400MHz main frequency, 32 bits of RISC CPU; 4-axis servo/step control; Kinds of single-axis or multi-axis motion, it can work without PC;

High resolution true color display 5.6 inch display can supply user with a friendly human-machine interface;

U disk connection It can make more convenient to exchange data with other equipments;

R232 serial port makes the controller can communicate with any equipments which is compatible with standard R232;

I/O ports 32 channels of optical coupling input, 16 channels of optical coupling output, 4 channels of pulse/direction signal output;

Super program memory capacity, up to 256M, which can meet kinds of programs' running and processing easily;

Random 2-4 axes hardware linear interpolation, random 2 axis software arc/oval/continuous interpolation.

#### Features

- ◆ 5.6 inch high resolution true-color display;
- 4-axis servo/step control;
- Adopts ARM9 processor, the main frequency be up to 400M;
- 32 channels of digital input;
- 16 channels of digital output, with short circuit protection, the max output current be up to 1A;
- Multi communication interface: RS232, U disk, USB;
- ◆ Linear acceleration/deceleration.

#### Accessories



USB download line



Terminal board



#### **Applications**

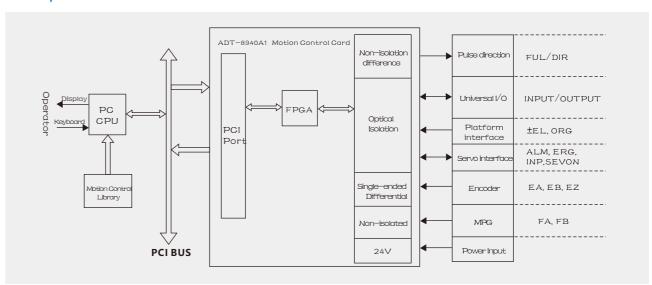
Electronic automation processing, assembly, testing, semi-conductor, LCD processing, checking; laser cutting, engraving, laser marking; biological and medical auto-sampling and processing equipment, special CNC machine tools.

## **Motion Control Card**

#### Summarization

Motion control card is designed for step and servo motor control, which is installed in PC. (It is similar to graphics card and base on PC platform). Motion control card and PC consist of the master-slave structure: PC is in charge of human-computer interface's management and other management. (Such as computer outer input, pictures indicate, internet communication, etc.); Motion control card is in charge of all details of motion control aspect. (Such as acceleration and deceleration processing, pulse output, linear and circular interpolation, origin limits monitoring, complicated track control, etc.)

#### Principle Structure



#### **Applications**

Engraving machine, cutting machine, laser engraving, laser cutting, graphic machine, dispensing machine, welding machine, drilling machine, punch machine, automatic detection of electronic fitting, automatic detection of press, cutting and welding of semiconductor, all kinds of NC cutting, industrial robot, measure of space coordinates, biological and medical autosampling and processing equipment.



#### Features Reference Sheet for Multi-axis Motion Control Card

	PCI bus							RTEX bus
Pictures					9 11 9 11 9 11			
Model	ADT-8920A1 ADT-8940A1	ADT-8940G1	ADT-8948A1	ADT-8949G1	ADT-856	ADT-8960	ADT-8912A1	ADT-6943A1
Number of axis	2/4	4	4	4	9	9	12	32
Digital input	24/40	36	32	36	48	32	89	16*N
Digital output	12/16	32	32	32	32	16	24	16*N
Encoder	0/4	4	4	4	9	9	12	32
Line interpolation	Any 2-4 axis	Any 2-4 axis	Any 2,3 axis	Any 2-4 axis	Fixed 2-6 axis	Any 2-6 axis	Any 2-12axis	Any 2-6 axis
Circular interpolation	Software arc	Software arc	Hardware arc	Any 2,3 axis	Hardware arc	Software arc	Software arc	
Hardware cache	2M hardware cache achieved	2M hardware cache achieved	One command cache achieved	Ten thousand segment massive cache	One command cache achieved	2M hardware cache achieved		512 segment cache
Pulse frequency	2MHz	2MHz	4MHz	5MHz	4MHz	2MHz	2MHz	8MHz
Basic functions	T, S -type acceleration and deceleration; to achieve changing speed and target position; hardware stop function; multiaxial with move/stop at the same time; hardwheel function	T, S-type acceleration and deceleration; to achieve changing speed and target position; hardware stop function; multiaxial with move/stop at the same time; latched position; handwheel function	Symmetric and asymmetric T, S-type acceleration and deceleration; continuous interpolation function; variable ring function; to achieve changes in the speed and target postition; fixed or non-fixed line speed mode; postition latch function; handwheel function; handwheel function; signal filtering	Symmetric and asymmetric 1, S, E, C -type deceleration; speed forward, continuous interpolation function; spline function; aprile function; position latch functions; to achieve changes in the speed and target position; multiple processes simultaneously control function; multiple processes simultaneously signal filtering	Symmetric and asymmetric T, S-type acceleration and deceleration; continuous interpolation; to achieve echanges in the speed and target position; variable ring function; multi-mode automatic homing; manual deceleration function; signal filtering.	T. S-type acceleration and deceleration; to achieve change speed and target position; hardware stop function; latched position; manual deceleration function; with 16 configurable input / output 10; handwheel function	T, S-type acceleration and deceleration are deceleration; arbitrary 2-12 axis linear interpolation; to achieve change speed and target position; probe function; B-channel high-speed probe in response to input.	T, S-type acceleration and deceleration; support position, speed and torque control modes; position latch function; to achieve changes in the speed and target position; stop, deceleration stop, pause function; mandiately stop, deceleration stop, pause function; closed loop control; servo parameters to read and write; monitoring the monitoring the servo parameters.

## **Servo Driver**

#### **ADTECH Servo Series**

Accumulation: The independent research and development experience of six years of servo products. Design Maturity, Scale Production, Rigorous Testing, Quality Assurance, Cost-Effective.

Control variety: Position control, Speed control, Torque control; Position/Speed, Position/Torque mixed control, New-Four sections of the internal velocity and internal position control, which achieved speed and location of the segment control.

Variety of models: Power from 100W to 5500W; Low-inertia, Middle-inertia, High-inertia; Voltage have 220V single -phase, 220V three-pahse, 380V three-phase series products.

High performance: Rest to 3000RPM time less than 20MS, seismic capability, short response time. Operation easy: Adopt the current loop, velocity loop, position loop closed-loop control, adaptive ability; serial RS-232 communications, computers, real-time monitoring of operating waveforms and operating results.

Passed certificates: ISO9001, CE.

#### Related Product Introduction

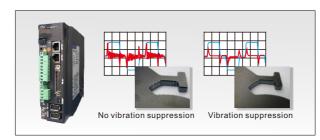
#### QXM Series Servo Drives(High Performance)

Power range: 0.1kw-3kw

QX series servo drives into the forefront of the current world servo control technology, its excellent driving performance reached the international advanced level.

#### Vibration suppression

- Use notch filter technology, respectively, to achieve mechanical high / low frequency resonance suppression.
- The introduction of a unique inverted superposition algorithm to achieve the end of the vibration suppression motion



QXM

#### QS7 Series Servo Driver (Universal Type)

Power range: 0.1KW~5.5KW

Voltage input: AC200V-230V, use single-phase/two-phase or three-phase input

Position/Speed/Torque control mode;

Built-in single axis positioning control function (degree of control, zero return, auto-loop positioning control, position teaching):

Support Modbus communication protocol, multi-axis bus control (communication interfaces: RS-485/RS-232)

Perfect Protection Function: over-current, over-voltage, over-heating and encoder bug, etc.



QS7

#### QS2 Series Low-Voltage Servo Driver

Power range: 0.1KW - 0.4KW

Voltage input: 24-80V DC,

Built-in variety of algorithms, rich control mode, easy to setup, perfect protection, compact size, cost-effective  $\frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{2} \left( \frac{1}{2} \right) \left( \frac{1$ 

Support Modbus communication protocol, multi-axis bus control (communication interfaces: RS-485/RS-232)



Q52

#### **Applications**

CNC equipment, textile machinery, automation equipment, woodworking engraving machine, spring making machine, brush making machine, etc.



## **Servo Motor**

#### **ADTECH Servo Motor**

High-Overload Ability: three times overload to prevent the abrupt burn motor; Low Temperature: the temperature is less than 60 degrees in the rated speed & torque; Low Noise: running noise is less than 38dB in the rated speed & torque.

#### **Related Product Introduction**

#### **ACH Series Standard Servo Motor**

Power Range: 0.2KW~5.5KW; Torque Range: 0.63~15.0N.m; Speed Range: 1000r/min~3000r/min; Customized Products: Brake, Oil seals; Axis Type: Round shaft, Keyway.



## MRMS Series High-performance AC Servo

Power Range: 0.2KW-1KW Torque Range: 0.63-3.3NM Speed Range: 3000r/min Customized Products: Brake, Oil Seal

Axis Type: Round Shaft, Keyway



#### ACL Series Low-Voltage AC Servo Motor

Power Range: 0.1KW-0.4KW Torque Range: 0.22-1.27NM Speed Range: 3000r/min-4500r/min Customized Products: Brake, Oil Seal Axis Type: Keyway



#### **ACN Series Servo Motor**

Power Range: 0.05KW-0.2KW Torque Range: 0.16-0.64NM Speed Range: 3000r/min-4500r/min Customized Products: Oil Seal Axis Type: Keyway



## **Step Motor/Driver**

#### Step Motor and Step Driver

ADTECH provides solution for all series step motor/step driver. We developed high-performance step motor & driver based on using DSP system & making space vector; sine wave current output smoothly, motor noise suppression & vibration effectively; low heat, high-speed and torque output improve motor; prolong using life; in especially, reduce the low/medium frequency vibration greatly, improve low-speed steady; at the same time, the exquisite design, improve integration, reduce size and weight of product, which can matching the corresponding model of the domestic and international brands.

#### Related Product Introduction

#### Step Driver:

2-phase Step Driver:

Current Range: 2.0A~8.0A;

Voltage Range: 20VAC~60VAC; 24VDC, 40VDC, 80VDC; Subdivision: Provides 15 grades of the general micro-step subdivision setting value, the maximum subdivision no. is



#### 3-phase Step Driver:

Current Range: 2.0A~8.0A;

Voltage Range: 80VAC~110VAC; 24VDC, 40VDC, 80VDC; Subdivision: Provide 15 grades of the general micro-step Subdivision setting value, the maximum subdivision no. is



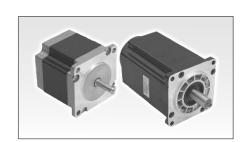


#### Step Motor:

2-Phase Step Motor: Size Range: 42~130MM Holding Torque: 0.21~40N.m



3-Phase Step Motor: Size Range: 56~130MM Holding Torque: 0.45~35N.m





## **Industry Application Controller CNC Spring Controller**

As a built multi subdivision standard industrial for CNC application control system, ADTECH launching advanced solutions for specified industrial. On a mature of leading motion control platform, ADTECH provide the solution of industry application controller for clients! In especially, Motion control system for spring making machine, brush making machine, dispensing machine, CNC cutting machine, welding machine, spraying machine, laser making machine and so on, which are reach to the leading level in domestic, and it wins a widely reputation of customers.

#### Features

- Adopt form programming, easy to operation
- Support on-line programming easy to debugging
- Probe with fast response to ensure high-precision
- Complete information system
- Can be extended to external MPG and easy to debug for large machine
- Support USB transfer, U disk copy and easy to upgrade and copy program
- Support Chinese-English shift, with high-adaptability
- Cam, sending lines turn-core work simultaneously with sending wire precision ±0.01mm & accuracy ±0.1 degrees of camshaft & the spindle of turn-core. Each rotating shaft has no zeroing function alone.

#### Related Product Introduction

#### ADT-TH08HA-D01 2-3 Axis Controller for **Compression Spring Machine**



5.7 Inch industrial LED display; English/Chinese interface, applicable to different countries: Support 2-3 axis servo control; Support 4-8 groups of probe cylinders: Specifically to 8 type compression spring machinery;

MPG debugs processing

#### ADT-CNC820B-A02 4 Axis ADT-CNC820B-B02 6 Axis **Controller for Spring Machine**



15 inch color LCD display; Command form programming, display in English /Chinese with simple & intuitive programming; Support directly editing to input data for programming after move each axis to target location By MPG or panel;

#### ADT-TH08R-A02 2~4 Axis Controller for **Compression Spring Machine**

function:



10.4 inch Industrial color LCD English/Chinese interface, applicable to different countries; Support 2-4 axis servo control; Support 4-8 groups of probe cylinders with quick response; MPG debugs processing & test processing function;

#### ADT-TH1204-b00 12 Axis Controller for **Spring Machine**



Command form programming, display in English /Chinese with simple & intuitive programming;

Support directly editing to input data for programming after move each axis to target location;

Support online editing -can support real-time control without shut down when processing;

Support multi-axis working simultaneously with linear mode precision ±0.01m, rotating mode precision ±0.1 degree. Each rotating shaft has no zeroing function alone.

## **Brush Making Controller**

#### **Features**

- · Support english operation system;
- Tufting speed can reach 700 hole / min;
- Support self-colored and bicolor hair planting;
- Maximum storage of 2000 processing files with each up to 100,000 holes;
- Flash function enables fast and convenient copy of processing files among different machinery;
- Support hand-held box operation;
- Short circuit protection for output, with long product life;
- Be able to adjust the main shaft processing speed by controller;
- Be able to control the height of hair-planting, suitable for various different workpiece;
- Signals of each control shafts are lead out independently, it is convenient to connect the wire;
- With various of processing type, and applied to different situiation, Automatic, semi-automatic test-work processing mode are optional;
- Various of editing function, user input data in simple and fast;
- Support user data, automatic generation, simple and easy to use.

#### Related Product Introduction

#### ADT-ZM210 2 Axis Brush Making Controller



Self-colored display screen,240\*128 resolution; Support self-colored and bicolor

hair planting; Tufting speed can reach 500 holes/ min:

Maximum storage of 2000 processing files with each up to

#### ADT-ZM300B 3 Axis Brush Making Controller

700 holes.



5.7 inch LCD self-colored display

3 axis step and servo motor control;

Tufting speed can reach 700 holes/ min:

Maximum storage of 2000 processing files with each up to 100,000 holes.

#### ADT-ZM400B 4 Axis Brush Making Controller



5.7 inch LCD self-colored display screen

Support self-colored and bicolor hair planting;

Tufting speed can reach 700 holes/ min;

Maximum storage of 2000 processing files with each up to 100,000 holes.

#### ADT-ZM310 3 Axis Brush Making Controller



Self-colored display screen,240\*128 resolution; 3 axis step and servo motor control Maximum storage of 2000 processing files with each up to 100,000 holes;

Support Z axis 360 degree unlimited rotation.

#### ADT-ZM410 4 Axis Brush Making Controller



5.7 inch LCD self-colored display screen;

4 axis step and servo motor control;

Tufting speed can reach 700 holes/ min:

Maximum storage of 2000, processing files with each up to 100,000 holes.

#### ADT-ZM410Y 4 Axis High-speed Toothbrush Making Controller



5.7 inch LCD self-colored display screen:

2+2 axis step and servo motor control:

Tufting speed can reach 700 holes/ min;

Maximum storage of 2000 processing files with each up

to 100,000 holes.



## ADT-ZM500B 5 Axis Brush Making Controller



5.7 inch LCD self-colored display screen;

5 axis step and servo motor control; Tufting speed can reach 700 holes/ min:

Maximum storage of 2000 processing files with each up to 100,000 holes.

## ADT-ZM510 5 Axis Brush Making Controller



5.7 inch LCD self-colored display screen;

5 axis step and servo motor control; Tufting speed can reach 700 holes/ min:

Maximum storage of 2000 processing files with each up to 100,000 holes;

Be able to control the height of hairplanting ,suitalbe for various shape of workpiece.

#### Color Touch Screen Series

## ADT-ZM620 4-6 Axis Brush Making Controller



10.4 inch color LCD display

4-6 axis step and servo motor control:

Support mutil-head for tufting and

Through the pedal switch for unloading workpieces, safe and convenient operation;

Main shaft processing speed can be adjust by programming, work table speed can also be adjusted with it synchroly.

#### ZM220—Brush Making Controller



5.6inch true-color display, touch screen, friendly interface; Slim volume, simple structure, easy to wire;

2 axis step and servo motor control; Support U disk read and write, program updates;

Easy and convenient to teach, support CSV directly importing processing data and MPG teach; Support interpolation processing and index acceleration/deceleration movement;

Support software/hardware limit with more safe & reliable system; Graphic pattern teach with intuition & convenience;

Support processing path display track;

#### ZM320- Brush Making Controller



5.6inch true-color display, touch screen, friendly interface; Slim volume, simple structure, easy to wire;

3 axis step and servo motor control; Support U disk read and write, program updates;

Easy and convenient to teach, support CSV directly importing processing data and MPG teach; Support interpolation processing and index acceleration/deceleration movement:

Support software/hardware limit with more safe & reliable system; Graphic pattern teach with intuition & convenience; Support processing path display

track;

#### ZM420- Brush Making Controller



5.6inch true-color display, touch screen, friendly interface; Slim volume, simple structure, easy to wire;

4 axis step and servo motor control; Support U disk read and write, program updates;

Easy and convenient to teach, support CSV directly importing processing data and MPG teach; Support interpolation processing and index acceleration/deceleration movement:

Support software/hardware limit with more safe & reliable system; Graphic pattern teach with intuition & convenience;

Support processing path display track:

## **Dispensing Controller**

#### **Features**

- Support three axis space straight line interpolation, two axis arc and ellipse interpolation etc;
- Real time multi-task control technology and hardware interpolation technology ensure high reliability;
- 3340: 32 lines input, 16 lines output; 8848: 34 lines input, 18 lines output; 8860: 86 lines input, 40 lines output; 3540: 32 lines input, 16 lines output; 8540: 25 lines input, 8 lines output, fully optical coupling control, excellent anti-interference performance
- Support control of 4-8 adhesive injecting terminals;
- Use speed perspective arithmetic, automatic smooth corner speed, ensuring smooth process;
- Have abundant instruction sets: motion instructions such straight line, arc, single point and ellipse, and instructions such as port output, waiting input, delay pause, selecting glue gun, resetting motor, etc;
- Advanced editing functions such as batch modification, array copy, graph shift, graph zooming, automatic rounding and common graph library ect.
- Importing computer graphs: convert the graphs in the computer to PLT files or TCF files or G code files, and then convert to process files of adhesive injecting machine through the controller; each process file can save 100,000 process points
- Graph display function: display the graphs in the process files intuitively and display the process track dynamically in real time;
- Track lag adhesive open and advance adhesive close function, eliminating the adhesive stacking problem at the start point and end point;
- •Wire drawing function: eliminating glue adhesive problem
- •Support cycle processing, single processing, automatic processing and step processing ect
- File instruction and edit function, provide advanced edit functions such as batch modification, array copy, graph shift, graph zooming and automatic rounding; common graph library is also available;
- Flash memory reading-writing function: read and write process files in flash memory disk;
- Convenient help system, calling out help document by pressing shift+F1 in any interface.

#### **Related Product Introduction**

## ADT-TV5500DJ 2-4 Axis Dispensing Controller (Split Type)



3D processing graphic, support PLT,TCF file;

Support instruction edit function and match with common graphic library; Smooth track motion, speed perspective arithmetic;

Have abundant instruction sets, be able to satisfy all kinds of complex dispensing processing; Hight performance-price.

## ADT-TP3340DJ 2-4 Axis Dispensing Controller



5.7 inch touch display screen, interface intuitionistic and clear;

Data input by instructed type, operation simple and easy to study; Support PLT format graphic leading-in function, simpled complex track

Support double-head dispensing more efficient;

With processing graph display function, file storage room reach 256M

#### ADT-TP3540DJ 2-4 Axis Dispensing Controller



5.6 inch color display, touch type, friendly interface;

Thinnest volume, convenient connection;

Support single-double head dispensing;

Data input by instructed type, operation simple and easy to study;

Support PLT,TCF file,function, simpled complex track motion;

With processing graph display function.

## Full-automatic visual dispensing coating



controller

Adopt visual positioning, graph zooming, ensuring the accuracy of dispensing;

Adopt ADT-8860+PC(or notebook) +CCD program

Support motion graph editing and instruction and imposition positioning



## Flame/Plasma Cutting Controller

#### Features

- Flame/plasma/laser integration;
- All of controller support G code format, HC4500 also can support TYPE3, HC8200 can support ESSI code;
- Process modularizaion, user can change the modularizaion of processing move from software;
- Be able to support wire handheld box, HC6500 can suport wireless romote, convenient to testing;
- Support USB communication, flash copy, convenient to program update and copy;
- All of controller have english and chinese, HC4500, HC6500, HC4300 can support language of any country in the world:
- Software and hardware limited and alarming function, more safe;
- Customization software and hardware;
- Multi- graphics library function.

#### **Related Product Introduction**

## ADT-HC4500 Flame/Plasma Cutting Controller



7 inch industrial color display, ARM processing technology, low power consumption, low cost solution; Perfect flame/plasma technology, cut sewing and backlash compensation functions; Support type 3 format;

Friendly human-machine interface, editable graphics library, graphic transform, mutil-language design, online help system:

Outage and breakpoint memory, back, select point and select line practical function;

Large storage space, easy to handle big program operation.

## ADT-HC6500 Popular Type Gantry Flame/Plasma Cutting Controller



10.4 inch LCD display, ARM processor technology;
Perfect flame/plasma/dusting alignment/ plasma mark processing, gas compensation etc;
Friendly human-machine interface, editalbe graphic libraries, vary graph,multi-language design as well as online helps system;
Pause, continue, breakpoint &power failure memory,backward,forward and other practical functions;
Support wireless control by long distant

#### ADT-HC8200 High-end Type Gantry Flame/ Plasma Cutting Controller



The system adopts industrial computer as the processing core and windows operating system, multi-task, mutil-window and multi-thread technology, highly speed processing, conveniently operation and intuitivism;

15 inch industrial level LCD display, plenty information;

Perfect flame/plasma/dusting alignment/ plasma mark processing gas compensation etc;

Friendly human-machine interface, editalbe graphic libraries, vary graph, multi-language design as well as online helps system;

Pause, continue, breakpoint &power failure memory,backward,forward and other practical functions;

Super large storage space, can easily running big procedure.

## **Wood Processing CNC Controller**

#### **Features**

- After over half a century's development, woodworking machinery industry has established a complete system from education, research, development, manufacturing, testing to sales in China. The industry has become one of the important technical equipment industries in our country, playing an important role in the national economy.
- Wood processing has become a stable process system, with the degree of specialization continuously increasing. The rapid development of computer applications and CNC industry, have had an important role on wood processing technology for innovation, wood processing industry system changes, as well as the development of production processes and product design engineering, promoting woodworking machinery from a purely mechanical products over to automation and intelligent products.
- CNC technology in the future will go more deeply into many other process areas of the wood processing

#### Deficiencies and problems in the industry

In CNC process of today's woodworking machinery industry, CNC process of woodworking lathe and milling machine is one of the most important content. CNC woodworking lathe and milling system currently used in the vast majority of the industry is not developed specifically for the woodworking industry, so there are many shortcomings and problems:

- 1. some using SCM, poor stability
- 2. System process is imperfect, not professional
- 3. Low processing efficiency
- 4. High cost for such control systems, and professional staff required for operation

reliability

#### Related Product Introduction

#### MCK300A Wood Processing CNC Controller



- MCK300A Wood Processing CNC Controller is developed based on Adtech powerful strength.

  1.Adopt ARM9 processer and high performance FPGA motion chip, with excellent stability and
- 2.7inch LCD color screen, friendly display interface
- 3. Support woodworking lathe and milling technology, simple operation
- 4.Graphical display and processing real-time tracking function, can intuitively display graphic shape in processing document
- 5.The system supports two-pole control, and support pole once and multiple reciprocating processing technology, can greatly improve the efficiency of woodworking lathe and milling machining processing
- 6.DXF importing processing function, simplify generation process of processing document
- 7.Adopt laser shape scanning directly generate processing code, greatly reduce the operating requirements of the workers
- 8.USB communication function, support U disk process file copy and upgrade system, easy maintenance
- System diagnostics function make customers can self-diagnose some of the hardware
   Wireless remote control

#### Vision

Adtech is a leader in the field of motion control in China, not only approved by customers but also favored by many partners. Our company is trying to build the leading brand in the industry. MCK300A Wood Processing CNC Controller is built on the base of Adtech years of research and development strength. It has comprehensive functions, friendly interface, stable performance and easy to operate. It can greatly improve the efficiency of woodworking milling process, greatly reduce the operating requirements of the workers, is a highly cost-effective control system, will shine in woodworking CNC areas.



## **Turning /Lathe CNC Controller**

#### **Features**

- With USB, flash and RS232COM communication etc., many kinds of communication modes, can easily realize different data transmission and software update. With network interface, the system supports remote monitoring and transmission process of DNC file;
- Open CNC platform, capable of customization system according to specific requirements;
- With complete self-diagnostic function, internal and external real-time display, it will show alarm if any exception:
- Support additional panel and external handheld box operation, it's convenient to cutter aligner for customers;
- Macro-variable, programming of macro definition, enable to many kinds of logical relation. Support macro programming with parameter being used, more covenient to user;
- DXF + G code template function, switching the DXF file to G code for processing automatically;
- Teaching function: teaching+simple command programming, adopt table teaching mode, easy and direct viewing;
- Graphic simulation function: display processing program's graph as well as tool's moving track in actual movement, simulate cutting tool process with the machine not running to check whether the program we edit is correct;
- Multi-interface option: support multi-language interface display, auto alarm when breakdown. Abundant process information display of process time, numbers;
- Parameter tabulate: The I/O address can be set randomly when the right data is put in the address of configuration table;
- Built-in PLC core, functions extending flexible.

#### Related Product Introduction

#### ADT-CNC4620 2 Axis Turning /Lathe CNC Controller



2 axis servo/step motor control; Good HMI design; Adopt embedded high speed processor and professional customized FPGA motion chip; Comprehensive function, support standard G code, DXF file and Macro function;

With large capacity storage, convenient to customers; Adopt high speed high accuracy algorithm to process to get good process effects.

## Milling/Drilling CNC Controller

#### **Features**

- U disk reading function, can be simulated as electronic hard drive to read edit and process datas, satisfying all kinds of large program's workpiece processing;
- High process speed, can reach 20m/min;
- Complete, direct viewing of system running status, help user find problems in time, solve the problems easily;
- Support handheld box and extensional panel, convenient to operate;
- Support powerful B type macro resolving function, convenient for customers to develop their own motion control programs;
- DXF + G code template graph resolving;
- MST code external self define edit, easy to extend customers' fucntions;
- 3D graph simulation function;
- Power down save function, password protection function, screensaver function and so on;
- Fully compatible with FANUC, mitsubishi G code and many kinds of CAM software( such as masterCAM, UG and so on.);
- Built-in PLC core, functions extending flexible.

#### Related Product Introduction

#### 3-6 axis NC module



3-6 axis step/servo motor control; Adopt embedded high speed processor and professional customized FPGA motion ship;

NC core adopt preliminary treatment perspective track smooth treatment; Run smoothly, can get good process effect;

Comprehensive function, support standard G code, DXF file and macro function;

Support multi-computer link through Ethernet, and apply in automatic production line assembly line work; Equip with IO expansion bus (basic module output 40 points, input 50 points);

## ADT-CNC4640 4 Axis Milling/Drilling CNC Controller



4 axis servo/step motor control;

Good HMI design; Adopt embedded high speed processor and professional customized FPGA motion chip;

Comprehensive function, support standard G code, DXF file and Macro function;

With large capacity storage, convenient to

With smart teaching, convenient and easy to use;

Adopt high speed high accuracy algorithm to process to get good process effects; With high speed network data interchange

#### ADT-CNC4940 4 Axis High Grade Milling/ Drilling CNC Controller



10 inch big LCD screen;

4 axis servo/step motor control; Good HMI design;

Adopt embedded high speed processor and professional customized FPGA motion chip;

With open interface, flexible to extend; Comprehensive function, support standard G code, DXF file and Macro function;

With large capacity storage, convenient to customers; Adopt high speed high accuracy algorithm to process to get good process effects;

With high speed network data interchange interface.

## ADT-CNC4980 8 Axis Milling/Drilling CNC Controller ADT-CNC4960 6 Axis Milling/Drilling CNC Controller



10 inch big LCD screen;

6 axis servo/step motor control; Good HMI design;

Adopt embedded high speed processor and professional customized FPGA motion chip;

With open interface, flexible to extend; Comprehensive function, support standard G code, DXF file and Macro

With large capacity storage, convenient to customers;

Adopt high speed high accuracy algorithm to process to get good process effects; With high speed network data interchange



## **Punching CNC Controller**

#### **Features**

- Support multi-language option, cost effective;
- With CAM template guide edit function, easy to use;
- Support CAM file resolving process;
- Macro-variable, programming of macro definition, enable to many kinds of logical relation. Support macro programming with parameter being used, more covenient for user to program;
- With complete self-diagnostic function, internal and external real-time display, it will show alarm if any exception.

#### **Related Product Introduction**

#### NCT-02 2 Axis Punching CNC Controller



Support X Y 2 axis motion;

Easy to learn, friendly interface, convenient operation;

Can preview process track and real-time following;

Support twice relocation and clamp avoid function, realize palte no dead zone process;

With single punch, continuous punch, step punch etc. different kinds of punching mode, increase the process efficiency:

Can recognize CAD convert code, compatible with usual punching machine software code, support CAM template programming;

With complete self-diagnostic function, internal and external real-time display, it will show alarm if any exception.

#### NCT-04 4 Axis Punching CNC Controller



Add T axis die change control and C axis die rotary control;

Max support 36 working position, can customize mould library;

 ${\it Easy to learn, friendly interface, convenient operation;}$ 

Can preview process track and real-time following;

Support twice relocation and clamp avoid function, realize palte no dead zone process;

With single punch, continuous punch, step punch etc. different kinds of punching mode, increase the process efficency;

Can recognize CAD convert code, compatible with usual punching machine software code, support CAM template programming;

With complete self-diagnostic function, internal and external real-time display, it will show alarm if any exception.

## **CNC Engraving Control System**

#### Features of System

- ◆ Support Multi-language ,More economic
- CAM mode guiding editing function, easy to use
- Support CAD file explanation processing
- ◆ Macro-Variable、Macro definition Programming, realize kinds of logical relationship. Support to evoke the Macro-program with parameter, make more convenient to program.
- Complete Self-diagnose function, Real –time display the Status of Internal/External. Once abnormal, alarms.

#### Product's Introduction

#### **DK300A 3 Axis CNC Engraving System**



Control Axis, control X, Y, Z, axis, µm interpolation accuracy

Support several kinds of communications (USB,U disk, RS232COM), easy for user to realize different data transmitting and software upgrade.

With network port, support remote control and DNC file transmitting processing

Open platform, customize the system according to customer's demand

Complete Self-diagnose function, Real display the Status of Internal/External. Once abnormal, alarms Support to use Additional Panel and Handheld Box, convenient for Tool Setting

Macro-Variable、Macro definition Programming, realize kinds of logical relationship. Support to evoke the Macro-program with parameter, make more convenient to program.

DXF+G code mode function, change the DXF to G code processing automatic

Support the generated working file by MasterCAM, Type 3, ArtCam, UG, PROE software;

Pre-treat motion processing with rapid and intelligent speed, processing stable;

Teaching Function: Teaching+Command Program, apply the form teaching means, simple and direct Graphic Simulation Function: Show the graphic of processing program and tool's moving track when in actual running; without control machine's running but do the processing of simulation tool path; check editing processing program true or false.

Multi-Interface Options

Supports multilingual interface display, automatic fault alarm. Rich processing information display, processing time, number of pieces

Parameter Tabular: Randomly sets the Input/output Address, only need to write the corresponding value in the Address Bar of the configuration table.



## Color screen series key machine system

#### Color screen series key machine system

With 7 inch color LCD display screen, humanized operation interface, beautiful, information and clear, easy to operate; Supports 2-4 axis stepper & servo motor control.

Support U disk read and write, to support hard and soft limit, support handwheel function; functional diversification, can process a variety of mainstream keys, easy customization;

Key parameters inputing use CAM way to simplify the programming step, the program inside needn't enter the key process parameters:

Tips can be refered while operating system, use easily; increasing 26 letters of the alphabet code , can handle both coded numbers and letters .

#### KY260A CNC key machine system



Using ARM + FPGA high-end hardware platform to improve stability and efficiency of the system itself; Supports two-axis milling and general milling teeth function, can process simple accessories of lockmaking industry;

With the functions of key -coded jump-select processing, custom processing, screening generated, conditional judgment, special processing, automatic grouping, automatic generation, etc;

The specific products which is based on milling system development, with the characteristics of low cost, functional, versatile, high efficiency, small size, easy to operate, easy to use, etc;

Can be processed with lines according to the special requirements of customers;

#### KY360A CNC key machine system



Using ARM + FPGA high-end hardware platform to improve stability and efficiency of the system itself; Most of common key can be processed in key processing industry, as keys with within bilateral, external bilateral, snake, double-deck, etc; Can process common accessories of lockmaking industry;. With the functions of key-coded jump-select processing, custom processing, screening generated, conditional judgment, special processing, automatic grouping, automatic generation, etc; The specific products which is based on milling system development, with the characteristics of low cost, functional, versatile, high efficiency, small size, easy to operate, easy to use, etc; Can be processed with lines according to the special requirements of customers;

#### KY460A CNC key machine system



Using ARM + FPGA high-end hardware platform to improve stability and efficiency of the system itself; Most of common key can be processed in key processing industry with double power head, as keys with within bilateral, external bilateral, snake, double-deck, etc; Can process common accessories of lockmaking industry;

With the functions of key -coded jump-select processing, custom processing, screening generated, conditional judgment, special processing, automatic grouping, automatic generation, etc;

The specific products which is based on milling system development, with the characteristics of low cost, functional, versatile, high efficiency, small size, easy to operate, easy to use, etc;

Can be processed with lines and the new special key customization according to the special requirements of customers;

## **Scara Robot Applications**



PCBA Plug



Logo inspection



Screwing



Loading



High speed transportation



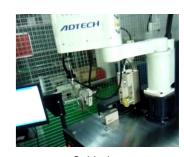
Plug-in machine PCB loading



Shear injection nozzle



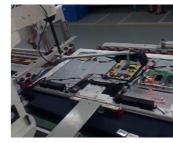
Deburring



Soldering



Visual sorting



Barcode scanning



Screwing



## **Robots Instant Selection Table**

	Mode	el	AR3215	AR4215	AR5215	AR6520	AR7520	AR8520	AR61030	AR7225	FR5215	TR3208	TR4208	TR5208	Mode	el	SD500	SD700
	Diagra	am	ADTECH	лотесн	AUTECH	лотесн	лотесн	ADTECH	AOTECH	ADTECH	Лотесн	лотесн	ADTECH	ADTECH	Diagra	ım	ADTECH	лопесь
	Speci	es	SCARA	Specie	es	Vertical multi-joint	Vertical multi-joint											
1	Number o	faxes	4	4	4	4	4	4	4	4	4	3	3	3	Number o	faxes	6	6
	Arm len	ngth	300mm	400mm	500mm	600mm	700mm	800mm	600mm	700mm	550mm	300mm	400mm	500mm	Arm len	gth	500mm	700mm
	Vania	Arm length	100mm	200mm	300mm	300mm	400mm	500mm	200mm	400mm	250mm	100mm	200mm	300mm		J1	±170°	±170°
	X axis	Rotation range	±127°	±127°	±127°	±130°	±130°	±130°	±135°	±130°	±180°	±127°	±127°	±127°		J2	±115°	±115°
Axis	V and a	Arm length	200mm	200mm	200mm	300mm	300mm	300mm	400mm	300mm	300mm	200mm	200mm	200mm	Range of	J3	+40° <b>~</b> -220°	+40° <b>~</b> -220°
speci -ficatio	Y axis	Rotation range	±142°	±142°	±142°	±140°	±140°	±140°	±150°	±140°	±180°	±142°	±142°	±142°	motion	J4	±185°	±185°
	Zaxis	Route	150mm	150mm	150mm	200mm	200mm	200mm	300mm	250mm	150mm	80mm	80mm	80mm		J5	±125°	±125°
	R axis	Rotation range	±360°	±360°	±360°	±360°	±360°	±360°	±360°	±360°	±360°					J6	±360°	±360°
		X axis	600°/s	600°/s	600°/s	375°/s	300°/s	250°/s	375°/s	375°/s	528°/s	600°/s	600°/s	600°/s		J1	375°/s	250°/s
		Y axis	600°/s	600°/s	600°/s	600°/s	600°/s	600°/s	375°/s	600°/s	381.8°/s	375°/s	375°/s	375°/s		J2	375°/s	185°/s
Highe	st speed	X, Y-axis synthesis	5.2m/s	6.3m/s	7.3m/s	7.1m/s	6.8m/s	6.6m/s	6.5m/s	7.7m/s	7.1m/s	4.45m/s	5.5m/s	6.5m/s	Maximum	J3	430°/s	290°/s
		Z axis	1.3m/s	1.3m/s	1.3m/s	1.1m/s	1.1m/s	1.1m/s	1.4m/s	1.21m/s	1.3m/s	0.83m/s	0.83m/s	0.83m/s	speed	J4	460°/s	460°/s
		R axis	1667°/s	1667°/s	1667°/s	1500°/s	1500°/s	1500°/s	1000°/s	1500°/s	1666.7°/s					J5	460°/s	460°/s
Sta	ndard Cy	cle Time	0.5s	0.45s	0.5s	0.6s	0.6s	0.6s	0.65s	0.45s	0.4s	0.5	0.45	0.5		J6	600°/s	600°/s
		X, Y-axis	±0.01mm	±0.01mm	±0.01mm	±0.015mm	±0.015mm	±0.015mm	±0.02mm	±0.015mm	±0.01mm	±0.01mm	±0.01mm	±0.01mm	Repea		±0.02mm	±0.03mm
posi	peat tioning	Z axis	±0.01mm	±0.01mm	±0.01mm	±0.01mm	±0.01mm	±0.01mm	±0.015mm	±0.01mm	±0.01mm	±0.01mm	±0.01mm	±0.01mm		Rated	3kg	3kg
acc	uracy	R axis	±0.005°	±0.005°	±0.005°	±0.005°	±0.005°	±0.005°	±0.005°	±0.005°	±0.005°				Wrist load	Maximum	5kg	5kg
F	ated / ma	ax load	2kg/5kg	2kg/5kg	2kg/5kg	5kg/10kg	5kg/10kg	5kg/10kg	10kg/20kg	2kg/5kg	2kg/5kg	2kg/5kg	2kg/5kg	2kg/5kg	Maximum allowable	J5	35Nm	35Nm
R axis a	allows loa	ıd moment of	0.01 kg·m2	0.01 kg·m2	0.01 kg·m2	0.05 kg·m2	0.05 kg·m2	0.05 kg·m2	0.5kg·m2	0.01 kg·m2	0.01 kg·m2				instantaneous torque	J6	24Nm	24Nm
	rtia (Rate		0.04 kg·m2	0.04 kg·m2	0.04 kg·m2	0.2 kg·m2	0.2 kg·m2	0.2 kg·m2	1 kg·m2	0.04 kg·m2	0.04 kg·m2				User sign	al line	0.14 sq * 16 lines	0.14 sq * 16 lines
	Jser sign		0.2sq * 16 lines, 8 outputs, 6 inputs		0.2sq * 16 lines, 8 outputs, 6 inputs	Users p	ipe	Ф4*4roots	Ф4*4roots									
	Users p	pipe	Ф6*2 roots	Φ6*2 roots	Ф6*2 roots	Ф6*2 roots	Φ6*2 roots	Ф6*2 roots	Installa	tion	Suits, flip, side-mounted	Suits, flip, side-mounted						
	_imit prot	ection	Software limit Mechanical limit (X, Y, Z axis)	Software limit Mechanical limit (X, Y, Z axis)	Software limit Mechanical limit (X, Y, Z axis)	Software limit Mechanical limit (X, Y, Z axis)	Software limit Mechanical limit (X, Y, Z axis)	Software limit Mechanical limit (X, Y, Z axis)	Software limit Mechanical limit (X, Y, Z axis)	Software limit Mechanical limit (X, Y, Z axis)	Software limit Mechanical limit (X, Y, Z axis)	Software limit Mechanical limit (X, Y, Z axis)	Software limit Mechanical limit (X, Y, Z axis)	Software limit Mechanical limit (X, Y, Z axis)	Limit prote	ection	Software limit Mechanical limit	Software limit Mechanical limit
	Weigl	ht	13.1kg	13.3kg	13.6kg	24.3kg	25kg	26.5kg	32.8kg	20.7kg	21kg	11.5kg	11.8kg	12.1kg	Weigh	nt	28Kg	30Kg



## **SA1400 Welding Robot**

#### SA 1400

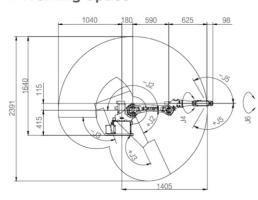
#### Product Introduction

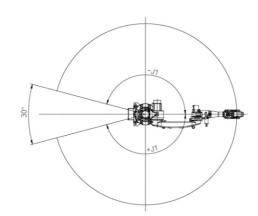
SA Series robots are compact, small and lightweight, ideal for welding application due to its high stability. It can realize high welding-path accuracy, considerably reduce welding cycle-time, and extend the lifetime of tubes and cables. In addition, SA Series robots can fit in narrow working space and can be floor mounted, inverted or tilted in any angle.

#### Main Applications

- Arc welding
- Material handling
- Cutting
- Palletizing

#### Working Space





#### Technical Specifications

Model	SA 1400			
Wrist Payload	6 kg			
Max Working Radius	1405 mm			
DOF	6			
	J1	150° /s		
	J2	150° /s		
Max Speed	J3	160° /s		
Wax opeca	J4	360° /s		
	J5	320° /s		
	J6	360° /s		
	J1	± 165°		
	J2	+65° ~-180°		
Max Operation Area	J3	+160° ~-110°		
iviax Operation Area	J4	± 170°		
	J5	± 120°		
	J6	±360°		
The Max Moment Allowable Torque	J5	54 Nm		
The Max Moment Allowable Torque	23 Nm			
Weight	143 kg			
Position Repeatability	± 0.05 mm			
Working Temperature		0~45℃		
IP Protection Level of Robot		IP40		
IP Protection Level of Control Cabin	et	IP30		



## 6-axis robot control system



#### **RX600 SERIES**

- EtherCAT, POWERLINK bus-type
- Load range : 5-270 kg

#### **Basic specifications**

	Ctable input valence. Three phase 200VAC FOLI- or 220VAC FOLI-				
	Stable input voltage: Three-phase 380VAC 50Hz or 220VAC 50Hz				
	Power supply: 20KVA ( max )				
Electric	Power frequency: 50Hz				
	Ambient temperature : 0 - 40℃				
	Environment humidity: 45 – 80% RH				
	Number of axes: maximum expansion of 12				
	Advanced multiprocessing control system				
Control	Advanced Robot Editing Language				
	Portable, open, and extensible				
	Pre-installed software, and supply a CD-ROM				
	Emergency safety shutdown				
Safaty	Two - channel safety circuit with detection				
Safety	Three starter				
	Reserved external security interface				
Digital	24 VDC or Relay signal				
	EtberCAT				
Field bug	POWERLINK				
Field-bus	CANopen				
	EthereNet/IP				

#### **Applications**









Spot welding robot + Arc welding robot

Handling robot

Palletizing robot

Stamping and bending robot



## Full automatic template sewing machine







#### Operating parameters of automatic template sewing machine

Equipment type	ADT-M8 Template sewing range: 700mm*1200mm	ADT-M9 Template sewing range: 800mm*1500mm		
Program inp	out equipment:USB or computer USB data line	Lubricating oil:common sewing-machine oil		
Program me	emory carrier:EPROM internal storage	Motor power:750W direct drive servo motor		
Memory pro	ogram quantity:999 files	Compressed air pressure:0.3-0.6mpa		
Rotating sh (KHS20-SM	uttle:2times of rotating shuttle //P KHS20-RMP)	Compressed air flow:0.1-0.4m³/min		
Sewing spe	ed:the highest measured speed is 2800rpm	Rated power:single phase AC220V/50-60HZ		
Needle:DPx	x5(7-17#) DPx17(9-22#)	Consumed power:1.2-2.2KW		
Needle gau	ge:0.5mm-8mm	Prompt:it must be equipped with voltage stabilization equipment if network voltage fluctuation voltage exceeded10%		

#### Template solution process



lacksquare 1

## **ADTECH**

#### Letsew Smart Template Sewing Machine - a multi-functional special machine

# Quilting for cotton and feather jacket

Quilting for front and back body and sleeve pattern, automatic stitch with stable performance, the efficiency can be 10 times more than manual operation.



can be stitching any pattern with fancy stitch line and high efficiency performance.



different shirt and blouse collar stitching with standard uniform.



applied to mass production of cuff, pocket patch, badages, belt loops and other small size program.



Pocket single side or double sides openning stitching without manual position



0.1cm stitch width mostly applied to patch pocket, shirt placket and back yoke dart.

#### Letsew Smart Template Sewing Machine - a multi-functional special machine



Placket zipper, decoration zipper and pocket zippers stitching without skilled workers also get good performance



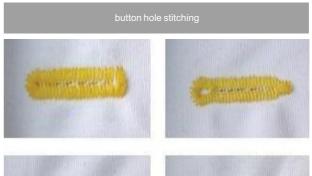
Precise stitching waist band for casual, jeans and business trousers

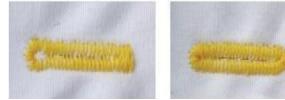


different foabric joint stitching and all kinds of darts stitching



All kinds of zipper, zipper pocket decoration etc. are not required skilled workers.





different size and style button holes stitching won't need manual position



attached different shape patch and also extral embroidery easy

## **ADTECH**

Application: suitable for sewing plat garments such as cotton or feather jacket, children, fashion, casure and sports wear









leather products: all kinds of purse, cases, cushion, mats and jackets.













Application: suitable for domestic textile automatic stitching









**Application:** suitable for baby wearings automatic stitching









**Application:** suitable for hat, shoes, toys and other special accessories and program stitching



## **ADTECH Gantry Welding Robot**



Model: BK-CHLM100\*45

Features: According to the product needs, can be arbitrarily welded the trajectory and speed, you can weld any one or more sections of the curve combination, in order to achieve the best results of the weld, using imported linear walking module, to achieve welding torch precise positioning and work.

**Device parameters:** 

Working range: X axis travel: 2500MM,

Y axis travel: 700MM, Z axis travel: 200MM

**U-axis:** 370-degree rotation

Welding speed: 10-100MM / S, welding thickness: 0.5-25MM

Welding power: According to the product process

requirements, matching CO2 gas protection MIG, TIG and Plasma welding machines

**Equipment size:** 1500 \* 700 \* 2000 (L \* W \* H)

**Applicable work piece:** the furniture industry, automobile

and motorcycle bicycle accessories industry, lighting industry, sanitary ware, sports equipment and other hardware industries.

























