



TIME GROUP INC.
BEIJING TIME TECHNOLOGIES CO.,LTD.



WeChat code

TIME
WELDING & CUTTING

TIME Welder

Famous Brand of China



ISO9001 Quality System Certificated

ISO14001 Environmental Management System Certificated

OHSAS18001 Occupational Health and Safety Management System Certificated

CHINA CCC Certificated

CHINA Energy Conservation Product Certificated

Company Profile

BEIJING TIME TECHNOLOGIES CO., LTD.

Beijing Time Technologies Co., Ltd was established in 2001. It was a new company initiated by TIME Group with cooperation with Tsinghua unisplendour, Lenovo Group, Daheng Group, Stone Group and other companies, mainly engaged in development, production and sale of the inverter welder, large welding equipments, welding machine for special purpose, CNC cutting machines and arc welding robots. On March 31, 2006, Beijing Time Technologies Co., Ltd was listed on the Shenzhen Stock Exchange through agency share transfer system, which is the first listed company among the welder manufacturing industry in China. On October 26, 2006, Beijing Time initiated Third Market financing for implementation of target placement, providing better opportunities and conditions for rapid development of the company.

TIME Group Inc. adheres to the key principle "Technology, Industry and export are the lifeblood of TIME Group Inc." the State Secretary. Through development for many years, the company has formed a set of strict management system for technological development, products manufacturing, quality control, financial operation, marketing and customer service. At present, our welding machines passed the national "3C" certification and named "Beijing Famous Brand" for four consecutive years. In 1995, we passed the ISO9001 quality system certification. In 2008, we passed Environmental Management System (ISO14001:2004) and Occupational Health and Safety Management System (OHSMS18001:2001) certification. Therefore TIME Group Inc. becomes the first corporation in welder manufacturing industry in China who had passed the certification of above management systems. Among the welder enterprises in China, TIME Group Inc. is the only one who established the mobile postdoctoral center. There are more than 40 sale and service subsidiaries, sales and service network all over the country.

TIME Group Inc. started development, production and sales of IGBT inverter welder in 1993. Now all our produces are IGBT inverter welders. Adhere to the product development objective of "Domestic first-class, advanced in the world, seeking the first instead of the only" and along the development route of constantly digital, green, automation and innovative, TIME Group Inc. provides high-quality perfect welders to the society. Currently the IGBT inverter welders of TIME Group Inc. ranks for the first of domestic total sales. TIME Group Inc. has become the largest inverter welder R&D, manufacturing and sales enterprises for many years. There are over ten series and more than 70 kinds of welding machines. In 2003, TIME Group Inc. adopted digital DSP technology in the field of domestic welders, occupying the commanding heights of domestic welding technology. In October 2007, we formed the Jinan Time New ERA Technology Co., Ltd, which is now a wholly owned subsidiary of TIME Group Inc., mainly engaged in the development, production and sales of large welding equipment, special welders, CNC cutting machine. The large welding equipment of TIME Group Inc. has been widely used in wind power, boilers, pressure vessels and other industries. In 2013, our third generation TD series digital welders were pushed to the market by batch, occupying the commanding heights of the domestic digital welders.

In 2009, we invested several hundred million RMB in Jinan Hi-tech Development Zone for hundreds of acres of land for construction of the world's most advanced welder manufacturing base with annual output of 300,000 units. The base was officially put into production in 2013. After continuous exploration and research, the TIME welding robots went debut in 2010 Essen Welding Show, which got the market and user's attention at once. With years of experience in manufacturing of welders and auxiliary machinery, the reliability, integration capabilities of our robots and spare parts supply can be effectively guaranteed. TIME welder robots are perfect combination of sophisticated welding skills and efficient automation. In the same year, we promoted the development of civil welder market, introducing a full line of light and durable small welders, which reinforces TIME brand position in the field of civilian welder, broadening the application of TIME products.

Under the quality policy of "outstanding high-tech products, high quality, customer satisfaction," our welders provide a guarantee in electricity, water, shipbuilding, metallurgy, chemical industry, bridges, oil and gas, installation and many other construction industry, and were widely used in the "Three Gorges Project", "South-to-North Water Diversion", "Olympic Venue Construction" and other key projects. Benefiting from high technology and competition compared with similar foreign products, our welder have been exported to over 40 countries such as Russia, Netherlands, Australia, Thailand, Malaysia, Brazil, South Africa, Israel, India and so on since 2003.



Overview

Technology, Industry and Export are the lifeblood of TIME Group Inc.



Self Design Cooperation Creativity

TIME milestone

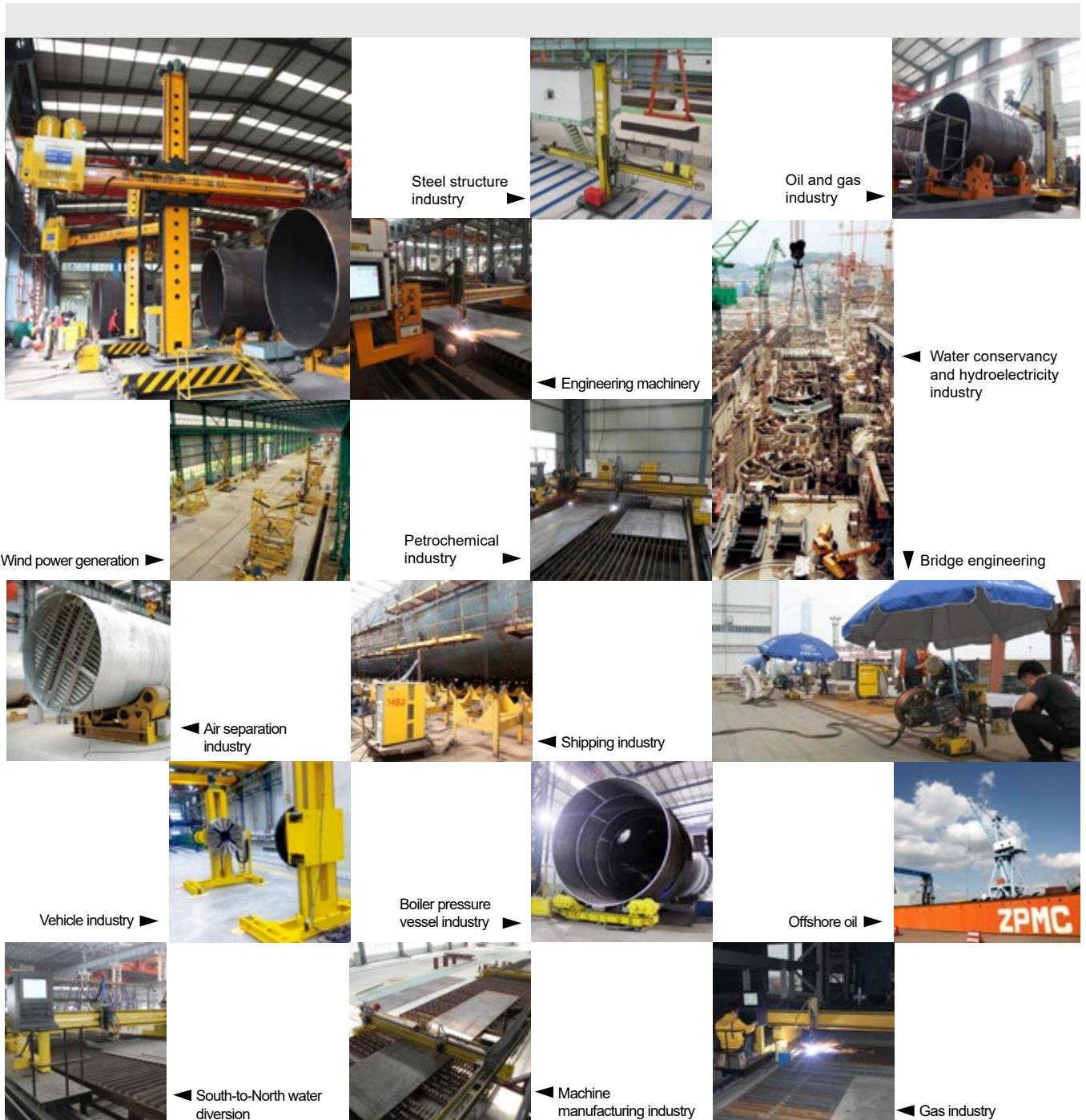
of development



- 2019 ● All digital DSP inverter welding machine are recognized by the industry, and opened up a new situation in the application of intelligent robot and Internet of things
- 2017 ● Double pulse gas shielded Welding machine enter the key industries in batches.
- 2015 ● Intelligent plant initially completed.
- 2013 ● New series of whole digital welding machine has been put into the market. TIME welding-industry park with yearly production capacity of 300,000pcs operated in 2013.
- 2010 ● Time Robot Showed at Essen Show 2010
- 2008 ● Passed the certificates of environment management system (ISO 14001: 2004) and Occupation Health Safety Management System (OHSMS 18001: 2001). Jinan Time welding industry park started.
- 2007 ● Time welding process laboratory was founded, which can provide users with full welding technologies plan. The company set up Jinan Time New ERA Technology Co.,Ltd. mainly engaging into the development, production, manufactory of large automatic welding and cutting equipment.
- 2006 ● Beijing Time Technologies Co.,Ltd was listed on the Shenzhen Stock Exchange and successful with directional collection.
- 2002 ● TIME launched large CNC cutting machine and automatic welding center equipment into the market. The welder with Time DSP full digital control technologies increased the technologies of the Time welder.
- 2001 ● TIME Group took the initiative and founded Beijing Time Technologies Co.,Ltd combining with Tsinghua unisplendour, Lenovo Group, Daheng Group, Stone Group etc.
- 1995 ● TIME became the first one passing ISO9001 quality system certificate, among China manufacturers of welding machine.
- 1993 ● TIME started development, production and sales of IGBT inverter welder.

Our client

After more than thirty years development, TIME's equipments have been widely used in power, water conservancy, shipbuilding, metallurgy, chemical industry, bridge, oil and gas, installation and other industries. We have clients all over the world, and TIME products play important roles in many giant projects.



Qualification



Membership certificate of China Electrical Equipment Industrial Association



Executive director unit of China Welding Association



Postdoctoral Workstation



Enterprise Credit Evaluation AAA-level Credit Enterprise



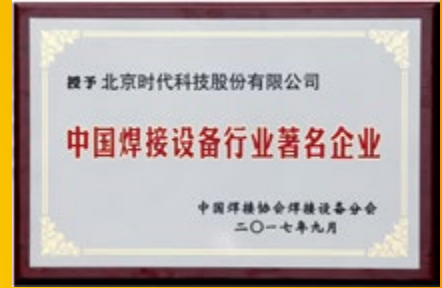
ISO9001 Quality Management System



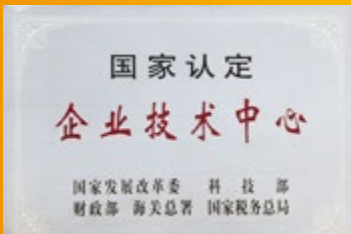
ISO14001 Environmental Management System



OHSAS18001 Occupational Health and Safety Management System



Famous enterprise in China welding equipment industry



National-Recognized Enterprise Technology Center



China Machinery Industry Science and Technology Award (TIME intelligent welding system)



Welding project training machine for the 43rd World Welding Competition



Membership certificate of China Association of Vocational Education



Member of China Petroleum Engineering Construction



Certificate of qualified supplier of China National Chemical Corporation



Material supplier certificate of CNPC



Outstanding contribution unit of chemical construction industry



3C certificate of products



CONTENTS

Manipulator

1

Rotator

5

Positioner

11

Welding equipment for heavy duty
pressure vessel

13

Cladding equipment

19

Automatic SAW equipment for inside pipe
welding at narrow space

23

Special customized welding equipment

25

TDC series CNC cutting machine

29

Manipulator

1. Standard TZ series manipulator

- Built in remote control interface, TIME manipulators can set up automatic welding center with TIME rotator, positioner and other auxiliary equipments.
- Modular structure, flexible configuration. Compatible with welding heads from different factories.
- Boom extension, trolley moving and column rotation adopt AC variable frequency speed regulation technology.
- The control cabinet and operator pendant can be switched to each other, convenient for operators.
- Welding oscillator, welding seam tracker and industrial monitor and so on are optional.
- Internal arm extension, double hanging brackets, manned platform, flux feeding and recovery system and fume extractors (open arc) etc. are optional.



Technical data

Boom lifting stroke (m)	2	3	4	5	6	7	8
Boom lifting speed (mm/min)	950						
Boom extension stroke (m)	2 ~ 4	2 ~ 6	3 ~ 7	3 ~ 8	3 ~ 8	3 ~ 8	4 ~ 8
Boom extension speed (mm/min)	100 ~ 1000 (VVVF)						
Maximum load capacity on boom end (Kg)	150						
Rotating angle of column (°)	± 180						
Rotating speed of column (r/min)	0.02 ~ 0.2 (VVVF)						
Column locking mode	Mechanical lock or Pneumatic lock						
Trolley moving speed (mm/min)	250 ~ 2500 (VVVF)						
Center distance of rail (mm)	P43/2000 (P43/2500 is used for 8 × 8 manipulator)						

Note: The above parameters are for TIME standard product configurations, and can be customized according to the customer's requirements.

Specification of manipulator

For example: TZ a-b × c

Meaning of the suffix:

a—manipulator type

b—boom lifting stroke

c—boom extension stroke

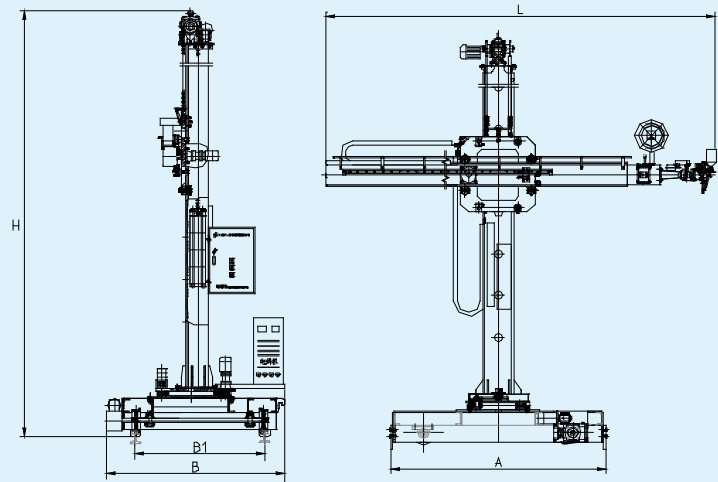
a: Omit, fixed without rotation

a=1:fixed and manual rotation

a=2:fixed and electric rotation

a=3: electric moving, without rotation

a=4:electric moving, electric rotation



Main dimensions

Specifications	A(mm)	B(mm)	B1(mm)	H(mm)	L(mm)
2 × 2	2300	2690	2000	4470	4330
3 × 3	2300	2690	2000	5470 (6290)	5330 (5840)
4 × 4	2300	2690	2000	6570 (7290)	6330 (6840)
5 × 5	2300	2690	2000	8290	7840
6 × 6	2300	2690	2000	9290	8840
7 × 7	2300	2690	2000	10290	9840

Optional cross slide

Model	ST1-E	ST2-E	ST3-E	ST1-H	ST2-H	ST3-H
Vertical stroke (mm)	100	200	300	100	200	300
Horizontal stroke (mm)	100	200	300	100	200	300
Moving speed (mm/min)	80 (constant speed)	80 (constant speed)	80 (constant speed)	50 ~ 500	50 ~ 500	50 ~ 500
Load capacity (Kg)	50	50	50	100	100	100

Note: E series cross slide is our standard product, and H series digital cross slide is mainly used with the welding manipulator controlled by PLC.

Welding head

Manufacturer	TIME	Lincoln	ESAB
Model	FD10 / FD11 / FD12	NA-3SF / NA-4 / NA-5SF	A2 / A6

Application example



Steel structure industry



Petrochemical industry

2. Special welding manipulator



Cantilever welding manipulator

Main features

- Equipped with welding tractor on the platform for outer-seam welding.
- Platform can be lifting to adapt to different diameter of workpieces.
- The whole machine can move along the guide rail, large scope of work.
- Platform size, load capacity and lifting stroke can be customized.



Gantry welding manipulator

Main features

- Platform has strong load capacity, safe and reliable.
- Welding angle is adjustable, and the welding torch can move longitudinally along the linear guide rail.
- Platform can be lifted to adapt to different diameter of workpieces.
- The whole machine can move along the guide rail, large scope of work.
- Platform size, load capacity and lifting stroke can be customized.



Welding manipulator with double hanging brackets



Welding manipulator with boom inner extension

Rotator

1. TR1 series self aligning welding rotator

- Automatic adjustment of roll swing angle.
- Gear meshing transmission, stable operation.
- Variable frequency stepless speed regulation, large starting torque.
- Remote control by operator pendant, simple and reliable.
- Electric linkage interface reserved for automatic welding, convenient for application.
- Electric travelling module and mechanical anti floating device are optional.
- Rotating conductive device is optional for steel roller.
- Wire operator pendant/wireless operator pendant are optional.
- Flexible configuration of power roller and idle roller.



Controller configuration



Wire operator pendant



Wireless operator pendant

Technical data

Model	Load capacity (T)	Roller linear speed (mm/min)	Diameter of workpiece (mm)	Motor power (kW)	Roller dimension (D × W)/mm
TR1-5T	5	100 ~ 1000	350 ~ 2500	1 × 0.25	φ 250 × 120 (PU roller)
TR1-10T	10		350 ~ 2500	2 × 0.25	φ 250 × 120 (PU roller)
TR1-20T	20		600 ~ 4000	2 × 0.37	φ 300 × 140 (PU roller)
TR1-30T	30		600 ~ 4500	2 × 0.37	φ 350 × 180 (PU roller)
TR1-40T	40		600 ~ 4500	2 × 0.55	φ 400 × 160 (PU roller)
TR1-50T	50		750 ~ 5000	2 × 0.75	φ 400 × 180 (PU roller)
TR1-60T	60		800 ~ 5000	2 × 0.75	φ 400 × 200 (PU roller)
TR1-80T	80		900 ~ 5500	2 × 1.1	φ 500 × 200 (PU roller)
TR1-100T	100		900 ~ 5500	2 × 1.5	φ 500 × 240 (PU roller)
TR1-150T	150		1000 ~ 6300	2 × 2.2	φ 550 × 320 (PU roller)

Note: The above parameters are for TIME standard product configurations, and can be customized according to the customer's requirements.

Application example



Nuclear industry



Boiler industry

2. TR2 series adjustable welding rotator

- Center distance can be adjusted by reserved screw holes.
- Variable frequency stepless speed regulation, large starting torque.
- Remote control by operator pendant, simple and reliable.
- Linkage interface reserved for automatic welding, convenient for application.
- Electric traveling module and mechanical anti floating device are optional.
- Rotating conductive device is optional for steel roller.
- Wire operator pendant / wireless operator pendant are optional.
- Flexible configuration of power roller and idle roller.



Technical data

Model	Load capacity (T)	Roller linear speed (mm/min)	Diameter of workpiece (mm)	Motor power (kW)	Roller dimension (D × W) / mm
TR2-5T	5	100 ~ 1000	250 ~ 1800	1 × 0.25	φ 250 × 120 (PU roller)
TR2-10T	10		300 ~ 3000	2 × 0.25	φ 250 × 120 (PU roller)
TR2-20T	20		350 ~ 3600	2 × 0.37	φ 300 × 180 (PU roller)
TR2-30T	30		600 ~ 4200	2 × 0.55	φ 350 × 200 (PU roller)
TR2-40T	40		600 ~ 4200	2 × 0.55	φ 400 × 220 (PU roller)
TR2-50T	50		850 ~ 5000	2 × 0.75	φ 450 × 280 (PU roller)
TR2-60T	60		850 ~ 5000	2 × 0.75	φ 450 × 280 (PU roller)
TR2-80T	80		850 ~ 5000	2 × 1.1	2 × φ 550 × 160 (PU roller)
TR2-100T	100		1000 ~ 5500	2 × 1.5	2 × φ 550 × 180 (PU roller)
TR2-150T	150		1000 ~ 6000	2 × 2.2	φ 620 × 240 (PU roller)
TR2-200T	200		1000 ~ 6500	2 × 4.0	φ 650 × 250 (Steel roller)
TR2-300T	300		1000 ~ 6500	2 × 5.5	φ 700 × 300 (Steel roller)
TR2-400T	400		1000 ~ 6500	2 × 7.5	φ 800 × 300 (Steel roller)
TR2-600T	600		1000 ~ 7000	2 × 11.0	φ 800 × 350 (Steel roller)

Note: The above parameters are for TIME standard product configurations, and can be customized according to the customer's requirements.

Application example



Petrochemical industry



Wind power

3. TRZ series hydraulic assembly rotator

- Normally work with TR2 series electric moving rotators for pipe pairing and welding.
- Each set of hydraulic cylinder can work independently or simultaneously, convenient and fast to adjust.
- Reserved screw hole is available to be selected to adapt to workpieces with different diameter.
- Roller base can be freely adjusted on the track to adapt to workpieces with different length.



Technical data

Model	Load capacity (T)	Dimension of roller (mm)		Width of roller (mm)	Diameter of workpiece (mm)
		Polyurethane	Steel		
TRZ2-5T	5	250	-	120	250 ~ 1800
TRZ2-10T	10	250	-	120	300 ~ 3000
TRZ2-20T	t20	300	-	140	350 ~ 3600
TRZ2-30T	30	350	-	180	600 ~ 4200
TRZ2-40T	40	400	-	220	600 ~ 4200
TRZ2-50T	50	450	-	280	850 ~ 5000
TRZ2-60T	60	450	-	280	850 ~ 5000
TRZ2-100T	100	-	510	240	1000 ~ 5000
TRZ2-200T	200	-	600	300	1000 ~ 7500

Note: The above parameters are for TIME standard product configurations, and can be customized according to the customer's requirements.

4. Special rotator



Long shaft type rotator

Main features

- Pairing and welding of thin-wall pipes.
- Monolithic or segmented structure.
- Axial deformation of pipes is not easy to happen when placed on it.
- Variable frequency stepless speed regulation, high running accuracy.
- Load capacity and length of the equipment can be customized.



Electric lifting rotator



Arm top-lifting assembly rotator



Lead screw adjustable rotator



Electric moving rotator

Positioner

1. TB1 seat type positioner

- DC speed regulation, manual turning for load capacity less than 300kg.
- Variable frequency speed regulation, electric turning for load capacity over than 300kg.
- Linkage interface reserved, convenient for use.
- Remote control by operator pendant, simple and reliable.
- Friction conductive device with elastic compensation function.
- Chuck, cooling system, etc are optional.



Technical data

Model	Load capacity (Kg)	Rotating speed (r/min)	Turning speed (r/min)	Turning angle (°)	Max load eccentricity (mm)	Max load gravity (mm)	Diameter of work table (mm)	Rotating motor power (kW)	Turning motor power (kW)
TB1-01	10/5	2 ~ 10	--	0 ~ 90	--	--	180	0.015	Manual
TB1-05	50/25	1-7/2 ~ 15	--	0 ~ 90	--	--	315	0.08	Manual
TB1-1	100/50	1-7/2 ~ 15	--	0 ~ 90	--	--	345	0.12	Manual
TB1-3	300/150	0.3 ~ 2.5	--	0 ~ 90	150	--	450	0.2	Manual
TB1-5	500	0.2 ~ 1.8	0.5	0 ~ 90	150	150	650	0.37	0.55
TB1-6	600	0.1 ~ 1	0.73	0 ~ 120	150	200	800	0.37	0.37
TB1-12	1200	0.09 ~ 0.9	0.35	0 ~ 120	200	250	1100	1.5	0.75
TB1-20	2000	0.09 ~ 0.9	0.36	0 ~ 120	200	300	1200	1.1	1.5
TB1-30	3000	0.06 ~ 0.6	0.27	0 ~ 120	200	300	1300	1.5	2.2
TB1-40	4000	0.06 ~ 0.6	0.24	0 ~ 120	200	300	1400	1.5	2.2
TB1-50	5000	0.05 ~ 0.5	0.24	0 ~ 120	200	300	1600	2.2	3.0
TB1-80	8000	0.05 ~ 0.5	0.25	0 ~ 120	200	350	1800	3.0	4.0
TB1-100	10000	0.05 ~ 0.5	0.24	0 ~ 120	200	400	2000	4.0	5.5
TB1-150	15000	0.02 ~ 0.2	0.15	0 ~ 90	200	500	2200	4.0	7.5
TB1-200	20000	0.04 ~ 0.4	0.15	-45 ~ 90	200	500	2500	2 × 2.2	2 × 3.0
TB1-250	25000	0.04 ~ 0.4	0.15	-45 ~ 90	200	500	3000	2 × 3.0	2 × 5.5
TB1-500	50000	0.02 ~ 0.2	0.15	-45 ~ 90	200	500	5000	2 × 7.5	2 × 11.0

Note: The above parameters are for TIME standard product configurations, and can be customized according to the customer's requirements.

2. Special positioner



Horizontal rotating table

Main features

- Used for head plate cutting, tube end hardfacing and vertical hardfacing and so on.
- Function of $n \times 360^\circ$ horizontal rotating.
- Linkage interface reserved, convenient for use.
- Remote control by operator pendant, simple and reliable.
- Worktable size and load capacity can be customized.
- Worktable size and rotating speed can be customized.



L type positioner

Main features

- Applicable for workpieces with large size.
- Function of lifting and $n \times 360^\circ$ turning.
- Load capacity covers 1T-10T.
- Linkage interface reserved. Remote control by operator pendant.
- Worktable size and lifting stroke can be customized.



The headstock and tailstock positioner

Main features

- Applied in welding of workpieces with complex structure.
- Function of $n \times 360^\circ$ rotating and $n \times 360^\circ$ turning.
- Lifting function is optional.
- Load capacity covers 1T-10T.
- Linkage interface reserved. Remote control by operator pendant.
- Worktable size and lifting stroke can be customized.

Welding equipment for heavy duty pressure vessel

1. TZH Heavy duty welding manipulator

- Good rigidity, good stability.
- Large load capacity on boom end, and small deflection.
- Many kinds of heavy duty welding heads available.
- Anti falling device of boom.
- Anti-overturning technology of trolley.
- Multiple electric protection function.
- Quick switch between local control and remote control.
- Whole digital centralized control system.
- Manned platform is optional.
- Flux feeding and recovery device is optional.



Technical data

Boom lifting stroke (m)	2	3	4	5	6	7	8
Boom lifting speed (mm/min)	1500						
Boom extension stroke (m)	2 ~ 4	2 ~ 6	3 ~ 7	3 ~ 8	3 ~ 8	3 ~ 8	4 ~ 8
Boom extension speed (mm/min)	100 ~ 1000 (VVVF)						
Max. load capacity on boom end (Kg)	500						
Column rotating angle (°)	± 180						
Column rotating speed (r/min)	0.02 ~ 0.2 (VVVF)						
Column locking mode	Mechanical lock and Motor brake						
Speed of trolley (mm/min)	250 ~ 2500 (VVVF)						
Center distance of rails (mm)	P43/2500						

Note: The above parameters are for TIME standard product configurations, and can be customized according to the customer's requirements.

2. TR3 series automatic anti-floating welding rotator

- Single top-lifting or twin top-lifting structure can automatically prevent axial movement of workpiece.
- The center distance between rollers can be adjusted by the reserved screw holes, and the base is equipped with mounting clamp.
- Variable frequency stepless speed regulation, large starting torque.
- Friendly human-machine interface.
- 2000A friction conductor with elastic compensation function.
- Reserved linkage interface for remote control and data sharing.



Technical data

Model	Load capacity (T)	Diameter of workpiece (mm)	Steel roller dimensions (D × W) / mm	Linear velocity (mm/min)	Motor power (kW)	Anti-floating accuracy (mm)
TR3-100T	100	φ 800 ~ φ 6000	φ 500 × 200	100 ~ 1000	2 × 2.2	≤ ± 2
TR3-150T	150	φ 800 ~ φ 6000	φ 500 × 250		2 × 3.0	
TR3-200T	200	φ 900 ~ φ 6000	φ 600 × 250		2 × 4.0	
TR3-300T	300	φ 900 ~ φ 6500	φ 700 × 300		2 × 5.5	
TR3-400T	400	φ 900 ~ φ 6500	φ 800 × 300		2 × 7.5	
TR3-600T	600	φ 1000 ~ φ 7000	φ 800 × 350		2 × 11.0	

Note: The above parameters are for TIME standard product configurations, and can be customized according to the customer's requirements.

3. TDMAW series CNC saddle welding

- Riding structure, stable and reliable.
- Four-axis CNC control system.
- Welds of multiple spatial curves applicable.
- Convenient teaching, automatic generation of welding track.
- Gravity compensation function, adjust the welding shape automatically.
- Wire feeder is fixed in rear, wire feeding through wire guide hose.
- Automatic welding seam rowing function make sure the sidewalls are fully welded.
- Splint type narrow groove welding torch.
- Military-grade, integrated weak conducting ring.
- Super large capacity, high temperature resistant and strong conducting ring.
- Compatible with various welding heads from different factories.



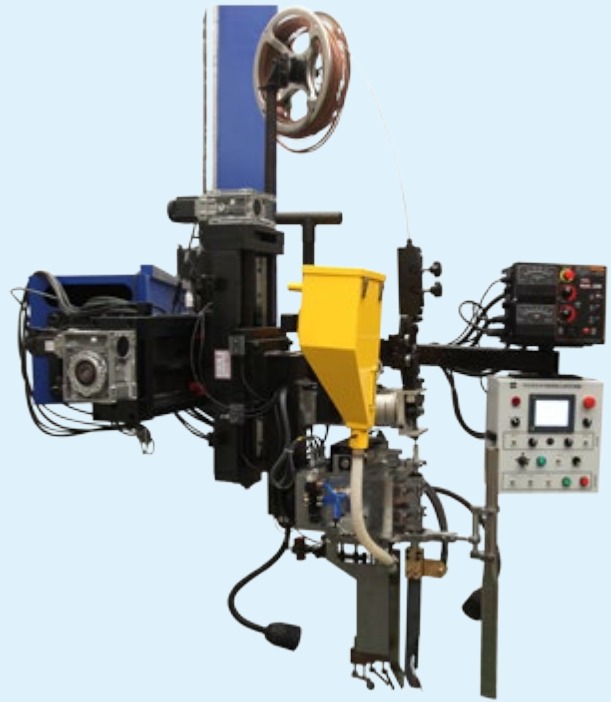
Technical data

Model	TDMAW-300	TDMAW-600	TDMAW-1000	TDMAW-1600
Outer diameter of nozzle (mm)	φ 100 ~ φ 300	φ 250 ~ φ 600	φ 450 ~ φ 1000	φ 850 ~ φ 1600
Height of nozzle (mm)	150 ~ 200	150 ~ 450	300 ~ 600	300 ~ 600
Pipe Dia. / Nozzle Dia.	≥3	≥3	≥3	≥3
Saddle value (mm)	≤50	≤50	≤90	≤180
Lifting stroke of torch (mm)	120	240	300	400
Preheating temperature (° C)	≤200	≤200	≤250	≤250
Deflection angle of welding torch (°)	± 15	± 15	± 15	± 15
Max. thickness of pipe (mm)	≤100	≤200	≤250	≤300
Rotating speed (r/min)	0.2 ~ 2	0.1 ~ 1.5	0.07 ~ 0.7	0.01 ~ 0.4
Wire diameter (mm)	φ 1.2 ~ φ 1.6	φ 2.4 ~ φ 3.0	φ 3.0 ~ φ 4.0	φ 3.0 ~ φ 4.0
Rated welding current (A)	400 or 630	630 or 1000	1000 or 1250	1000 or 1250
Duty cycle	60%	100%	100%	100%

Note: The above parameters are for TIME standard product configurations, and can be customized according to the customer's requirements.

4. FD11–350NG narrow gap welding head

- High efficiency welding of medium–thickness plate.
- Low comprehensive production cost.
- High qualification rate of weld flaw detection.
- Good mechanical properties of welded joints.
- Intelligent change of weld beads.
- Automatic deslagging of circumferential welding.
- Excellent sidewall welded function.
- Grouped mechanical tracking device.
- High precision deflection type narrow gap welding torch.
- Compatible with various of welding head from different factories.
- Friendly human–machine interface.
- Intelligent control system.



Technical data

Groove depth (mm)	350
Groove angle (°)	Circumferential seam: 1 ~ 2. Longitudinal seam: 3 ~ 5
Min. groove width (mm)	18 ~ 22
Diameter of workpiece (mm)	Inside welding: $\geq \phi 2000$. Outside welding: $\geq \phi 600$
Pass number per layer	Two on one layer (single on the first layer)
Load capacity of cross slide (Kg)	500
Cross slide stroke (mm)	Horizontal: 300. Vertical: 300
Cross slide speed (mm/min)	0 ~ 600(Servo speed regulation)
Tracking accuracy (mm)	Horizontal: $\leq \pm 0.2$. Vertical: $\leq \pm 0.5$
Deflection range of torch (°)	$\leq \pm 10$
Deflection speed of torch (r/min)	0 ~ 300
Deflection accuracy of torch (°)	± 0.01
Wire diameter (mm)	3.2 or 4.0
Wire straightening accuracy (mm)	$\leq \pm 1$ (The extension length of welding wire is 40mm)
Rated welding current (A)	1000 or 1250
Duty cycle	100%
Rated voltage (V)	44
Preheating temperature (° C)	300 (Seam nearby)

Note: The above parameters are for TIME standard product configurations, and can be customized according to the customer's requirements.

Application example



Boiler industry



Dryer (Paper-making machinery)



Nuclear power industry

Application example



Petrochemical industry



Narrow gap welding of stainless steel with ultra-high deposition rate (Exported to Japan)

Cladding equipment

1. Strip cladding welding head

- High deposition efficiency.
- Good anti-stripping performance.
- Low dilution rate.
- Welding beads and speed can be changed automatically.
- Automatic anti-floating and boom tracking technology.
- Spiral cladding and step cladding function.
- Electroslag cladding and submerged arc cladding function.
- Friendly human-machine interface.
- Whole digital centralized control system.



Selection principle of strip cladding welding equipment

- Pipe cladding: TZH heavy duty welding manipulator + TR3 anti-floating rotator + strip cladding welding head + welding power source.
- Dish head cladding: TZH heavy duty welding manipulator+TB1 positioner + strip cladding welding head + welding power source.
- Tube-plate cladding: TZH heavy duty welding manipulator + TB6 horizontal rotating table + strip cladding welding head + welding power source.
- Electroslag cladding: Magnetic control device is recommended.

Technical data

Model	TIME: TFD 30-ESK-75 or Soudokay: SK 30-ESK-75	TIME: TFD 60-ESK-75 or Soudokay: SK 60-ESK-75	TIME: TFD 125-ESK-300 or Soudokay: SK 125-ESK-300
Strip width (mm)	30	30, 60	30, 60, 90, 120
Min. inner dia. (mm)	Longitudinal seam: ϕ 380 Circumferential seam: ϕ 450	Longitudinal seam: ϕ 450 Circumferential seam: ϕ 650	Longitudinal seam: ϕ 650 Circumferential seam: ϕ 800
Welding current (A)	SAW: 380 ~ 500 ESW: 450 ~ 650	SAW: 650 ~ 950 ESW: 850 ~ 1250	SAW: 650 ~ 950 ESW: 850 ~ 1250
Arc voltage (V)	SAW: 27 ~ 32, ESW: 22 ~ 25		
Welding speed (mm/min)	SAW: 100 ~ 120, ESW: 110 ~ 130		
Wire feeder	TFD (TIME), NA-3SF (Lincoln), A6 (ESAB)		

Application example



Heavy duty industry (Exported to UAE)



Petrochemical industry



Nuclear industry

2. Small pipe inner wall hardfacing equipment

- Applied to chemical pipeline, piston rod and jack cylinder and other repair industries.
- 4-axes CNC control system, whole digital centralized control system.
- AVC tracking and automatic arc length setting of TIG mode.
- TIG welding with digital wire feeding, high speed arc oscillation.
- Function of welding beads memory and resuming welding at breakpoint.
- Spiral hardfacing/step hardfacing, linear hardfacing/ circumferential hardfacing, TIG or CO₂ hardfacing /MAG hardfacing are optional.



TIG hardfacing



MAG hardfacing

Technical data

Model	TIG	CO ₂ / MAG
Hardfacing length (mm)	1200 (Can be customized)	
Inner diameter of pipe (mm)	≥ φ 50	≥ φ 150
Outer diameter of pipe (mm)	φ 950(Can be customized)	
Weight of pipe (Kg)	Can be customized	
Thickness per layer (mm)	2.5 ~ 3.5 (one layer)	
Tungsten diameter (mm)	φ 4	--
Wire diameter (mm)	φ 1.2 (Solid wire)	φ 1.6 (Flux cored wire)
Arc striking mode	High frequency	Short circuit
Rotating speed (r/min)	0.01 ~ 2	
Rated welding current (A)	400	500
Duty cycle	60%	

Note: The above parameters are for TIME standard product configurations, and can be customized according to the customer's requirements.

3. Open arc/submerged arc hardfacing equipment

- Suitable for repairing of roll, wheel, milling roll and milling plate etc.
- Number of torches can be customized.
- 4-axes digital control system. Friendly human-computer interface.
- Heavy duty mandril with elastic compensation.
- Function of spiral hardfacing and step hardfacing, linear hardfacing and circumferential hardfacing.



Technical data

Workpiece	Roll / Wheel	Milling roll	Milling plate
Length of workpiece (mm)	≤5000 (Can be customized)	--	--
Weight of workpiece (T)	≤15 (Can be customized)		
Dia. of workpiece (mm)	100 ~ 1000	--	≤3500
Configurations	Servo power head + movable welding platform	Manipulator + positioner	Manipulator + positioner
Hardfacing mode	FCW / SAW	FCW	FCW
Main axis speed (r/min)	0.01 ~ 1 (Servo speed regulation)	--	--
Rotating speed of positioner (r/min)	--	0.01 ~ 0.2 (VVVF)	--
Worktable diameter (mm)	--	2000 ~ 3000	--
Boom extension speed (mm/min)	--	0.1 ~ 1000 (Servo speed regulation)	--
Wire diameter (mm)	φ 1.6 ~ φ 4.0 (Flux cored wire); φ 4.0 (Solid wire)		
Rated hardfacing current (A)	630, 1000, 1250		
Duty cycle	100%		

Note: The above parameters are for TIME standard product configurations, and can be customized according to the customer's requirements.

Automatic SAW equipment for inside pipe welding at narrow space

- Applied to petrochemical pipeline, gas pipeline, compressor, city water supply and drainage project, paper-making machinery etc.
- Longitudinal and circumferential seam SAW welding inside pipe with diameter not less than 300mm.
- High capacity DC motor and high-torch reducer to ensure stability of long-distance wire feeding.
- Unique multi wheel arc wire feeding device and two-way wire straightener to make sure the direction and directivity of welding wire.
- HD industrial camera can be configured to monitor the whole welding process remotely from multiple angles.
- Whole digital centralized control system, all the welding parameters and motion parameters can be preset and fine adjusted in real time.
- Automatic flux feeding and recovery system increases flux utilization and improves the working environment.



Technical data

Model	FD10-250c	FD10-320c	FD10-400c
Min. inner diameter (mm)	φ 250	φ 320	φ 400
Length of workpiece (mm)	≤2000	≤3000	≤4000
Stroke of cross slide (V × H) / mm	25 × 25	30 × 60	50 × 100
Wire diameter (mm)	φ 1.2 ~ φ 1.6	φ 2.4 ~ φ 3.0	φ 3.0 ~ φ 4.0
Wire straightening accuracy (mm)	≤ ± 1 (Extend 20 mm)	≤ ± 1 (Extend 30 mm)	≤ ± 1 (Extend 40 mm)
Seam type	Longitudinal	Longitudinal / circumferential	Longitudinal / circumferential
Rated welding current (A)	630	1000	1000
Duty cycle	100%		

Note: The above parameters are for TIME standard product configurations, and can be customized according to the customer's requirements.

Application example



Chemical industry (Exported to Russia)



Paper-making machinery industry



Petrochemical industry

Special customized welding equipment

1. Cartesian Robot

- Perfect match of mechanical structure with large-scale and flexible control system of robot.
- 5-axis linkage, welding range can be customized, high quality, high efficiency and low cost welding of workpiece with complex structure.
- High end load capacity, can carry submerged arc welding head, flux feeding and recovery system and weld sensors.
- Control system with function of starting point location, convenient teaching and anti-collision.

Application example



◀ Power industry



Engineering machinery ▶

2. Welding equipment for longitudinal seam

- Applied to plate welding, outer longitudinal seam welding of small pipes and inner longitudinal seam welding of large diameter pipes.
- Adopting pneumatic or cylinder compression devices, and each set of the copper key can be adjusted independently.
- Single side welding, two sides formation process.
- Back forced water cooling control the deformation effectively.
- Available welding methods: TIG, MAG, SAW etc.
- Various loading and unloading devices can be customized.
- Whole digital centralized control system, welding parameters can be preset, revised, stored and recalled.



Technical data

Model	Effective welding length (mm)	Diameter of workpiece (mm)	Thickness of workpiece (mm)	Speed of welding torch (mm/min)
ZF-500	525	75 ~ 730	1 ~ 6	50 ~ 2000 (Servo speed regulation)
ZF-1000	1125	115 ~ 730		
ZF-1500	1650	150 ~ 730		
ZF-2000	2025	180 ~ 850		
ZF-2500	2550	200 ~ 850		

Note: The above parameters are for TIME standard product configurations, and can be customized according to the customer's requirements.

3. Multi function circumferential welding equipment

- Applied to pipelines prefabrication, gas cylinders production, water – cooled motor case, small tanks and other industries.
- Workpiece types include pipe – pipe, pipe – flange, pipe – head plate, pipe – elbow, nozzle – pipe and so on.
- Composed of overturning servo power head, moving welding platform or digital manipulator, lifting idler and pneumatic tail frame.
- The single welding head or multiple welding heads can be flexibly configured to adapt to a variety of welding processes and can be equipped with various welding seam trackers.
- Welding positions can be horizontal circumferential seam, vertical circumferential seam and small TDMAW welding, and short longitudinal seam.
- Intelligent control system to achieve network management of welding process.
- Customized: effective welding length $\leq 6000\text{mm}$, workpiece diameter $\leq 1200\text{mm}$, weight $\leq 3\text{T}$.

Application example



Welding equipment of horizontal longitudinal seam, vertical circumferential seam, small TDMAW welding



Intelligent welding equipment with three welding process

4. Intelligent welding production management system

Basic function:

Solve the problem in traditional welding industries (boiler, pressure vessel, engineering machinery, and steel structure, etc) like difficult collection of welding process data, low efficiency of welding production management process, difficult to control welding quality, and lack of decision-making and analysis basis for welding production and so on.

Purpose:

- Through monitoring and management of the welding site remotely to control the production of the whole workshop in real time.
- Remote control of the welding parameters. Parameters can be sent, stored and modified remotely to control the welding quality of key parts effectively.
- Traceability of historical welding parameters. Production information of each welding bead, including welding line energy, groove information, welding seam tracking information and welding seam image of different welding position can be analyzed.
- Management of equipment and staffs. In charge of the operation of each welding machine in real time can reasonably distributes welding machine resources, which is convenient for maintenance and repair. Comprehensive assessment of workers can be achieved through the attendance system, switching time, effective welding time, welding parameter fluctuations and other indicators.

Technical methods

Perfect combination of welding equipment and industrial internet. It provides users with production management and after-sales service and other related help to improve the quality and efficiency through equipment data monitoring and friendly human-computer interface.

- Each automatic welding and cutting equipment is equipped with high-performance PLC of network interface.
- The fixed work station adopts data exchange controller and the portable equipment adopts wireless transmitter to form a distributed control network.
- Industrial computer for data collection and storage system, equipped with industrial liquid crystal display, using WINCC configuration software.
- It can connect 128 sets of automatic welding and cutting equipment, and share 50 sets of welding parameters.



Gas stove industry

TDC series CNC cutting machine

1. TDC I type CNC cutting machine

- The longitude rail is 23kg class rail. Latitude track is linear rail.
- AC servo driving, transmission adopts precision planetary gear reducer.
- Gantry frame structure beam, dual drive.
- Work with air/oxygen plasma cutting power source.
- Equipped with gas controller and gas distribution system. Function of automatic ignition, backfire arrest etc.



Technical data

Track width (mm)	4000	4500	5000	5500
Effective cutting width (mm)	3300	3800	4300	4800
Overall width of machine (mm)	4700	5200	5700	6200
Effective cutting length (mm)	(Rail length -2500) / Can be customized			
CNC system	TIME I; Hypertherm EDGE Connect			
Optional plasma power source	TDL1200; Powermax105, Powermax125, MAXPro200A			
Number of torch	According to customer's requirements			
Lifting stroke of torch (mm)	200			
Un-load speed (mm/min)	10000			
Cutting speed (mm/min)	Flame: 50 ~ 750. Plasma: as per plasma power source			
Cutting thickness (mm)	Flame: 6 ~ 160. Plasma: as per plasma power source			
Fuel gas	Ethyne / Propane			
Base	I-beam / cement base (Standard configuration is I-beam base)			
Longitudinal chain	Up drag chain or down drag chain (Standard is down drag chain)			

Note: The above parameters are for TIME standard product configurations, and can be customized according to the customer's requirements.

2. TDC II type CNC cutting machine

- The longitude rail is 43kg class heavy rail. Latitude track is linear rail.
- AC servo driving, transmission adopts precision planetary gear reducer.
- Heavy gantry frame structure beam, dual drive, suitable for workpiece with ultra width.
- Available with high power / definition plasma cutting power source.
- Thickness of flame cutting for carbon steel can be up to 300mm.
- Equipped with gas controller and gas distribution system. Function of auto ignition, backfire arrest etc.



Technical data

Track width (mm)	4000	4500	5000	5500	6000	6500	7000
Effective cutting width (mm)	3200	3700	4200	4700	5200	5700	6200
Overall width of machine (mm)	4800	5300	5800	6300	6800	7300	7800
Effective cutting length (mm)	(Rail length – 2500) / Can be customized						
CNC system	TIME I, Hypertherm EDGE Connect						
Optional plasma power source	XPR170, XPR300, HPR400XD, HPR800XD						
Number of torch	According to customer's requirements						
Lifting stroke of torch (mm)	200 or 300						
Un-load speed (mm/min)	10000						
Cutting speed (mm/min)	Flame:50 ~ 750, Plasma:as per plasma power source						
Cutting thickness (mm)	Flame:6 ~ 160 or 6 ~ 300, Plasma:as per plasma power source						
Fuel gas	Ethyne, Natural gas, Propane						
Base	H-steel or cement base (Standard configuration is H-steel base)						
Longitudinal chain	Up drag chain or down drag chain (Standard is down drag chain)						

Note: The above parameters are for TIME standard product configurations, and can be customized according to the customer's requirements.

Application example



Tunnel machinery industry



Petrochemical industry



Pressure vessel industry



Shipbuilding industry



Steel structure industry



Gas equipment manufacturing industry

3. TDC IV–A unlimited rotary type CNC bevel cutting machine

- Mainly used in shipbuilding, heavy duty pressure vessel and huge steel structure industry etc.
- Fixed angle and variable angle bevel of any geometric curve available.
- The longitude rail is 43KG class rail. Latitude track is linear rail.
- AC servo driving, transmission adopts precision planetary gear reducer.
- Heavy gantry frame structure beam, dual drive.
- Double anti–collision protection function of cutting torch.
- The rotary head adopts spatial linkage mechanism.



Technical data

Track width (mm)	4000	4500	5000	5500	6000
Effective cutting width (mm)	3100	3600	4100	4600	5100
Overall width of machine (mm)	4800	5300	5800	6300	6800
Effective cutting length (mm)	Rail length – 2500 (Can be customized)				
Deflection angle of cutting torch (°)	–45 ~ + 45				
Groove type	Groove–V, Groove–X or Groove–Y, Variable angle bevel				
CNC system	Hypertherm EDGE Connect				
Optional plasma power source	Hypertherm or Kjellberg				
Nesting software	Australia FastCAM software				

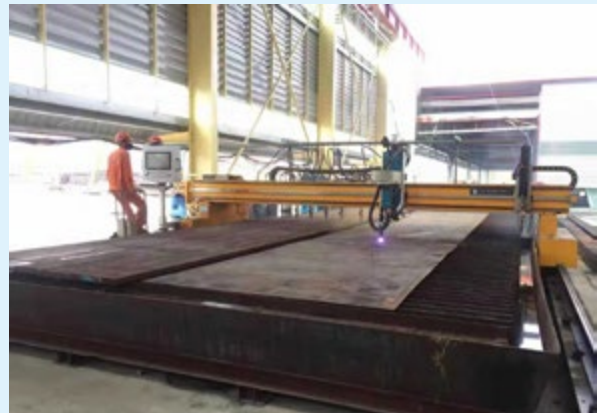
Note: The above parameters are for TIME standard product configurations, and can be customized according to the customer's requirements.

4. TDC IV – B bevel CNC cutting machine

- Economic CNC cutting machine for bevel cutting, mainly used in steel structure, pressure vessel, petrochemical and other industries.
- Electric adjustment of torch angle. The bevel angle can be preset.
- Anti-collision function of torch.
- Can work with XPR high definition plasma power source of Hypertherm, True Bevel technology.

Technical data

- Axis: 5
- Torch lifting stroke: 300mm
- Torch deflection angle: $\pm 45^\circ$
- Torch deflection precision: $\pm 1^\circ$
- Vertical cutting error: $\pm 0.5\text{mm/m}$
- Bevel cutting error: $\pm 1\text{mm/m}$
- CNC system: EDGE Connect Hypertherm
- Nesting software: Hypertherm ProNest



5. TDC – XY intersecting line CNC cutting machine

- Independent research and development to optimize CNC pipe system, configuring TIME application plug-in, excellent EGES DXF SAT and STL software compatibility.
- Client can enjoy special cutting process development and life-long technical services free.
- AC servo driving, transmission adopts precision planetary gear reducer.
- For workpiece of diameter 40–3000mm, length ≤ 6000mm, thickness ≤ 10mm, simple type TDC–XY3–B intersecting line cutting machine is recommended. The simple type machine can not cut bevel, it only meet the hole processing request of end section, elbow and shrimp joint.



Technical data

Model	TDC – XY
Effective cutting length (mm)	6000 (Can be customized)
Dimension (longitudinal track included) (mm)	7800 × 1800 × 1650 (Standard)
Cutting method	Flame or plasma
Lifting stroke of torch (mm)	200
Cutting speed (mm/min)	Flame: 20 ~ 700, Plasma: 500 ~ 3500
Cutting thickness (mm)	Flame: 6 ~ 60, Plasma: as per plasma power source
Control system	Industrial PC
Software	TIME PIPE
Working pressure of compressed gas (MPa)	≥ 7
Gas flow of plasma (L/h)	4500
Fuel gas	Acetylene / Propane

6. TDC–XF special pipe CNC cutting machine

- Independent research and development to optimize CNC pipe system with excellent EGES DXF SAT and STL software compatibility.
- Client can enjoy special cutting process development and life–long technical services free.
- AC servo driving, transmission adopts to precision planetary gear reducer.
- AutoCAD space programming system configurating TIME application plug–ins, can meet the cutting process requirements like rectangular, tapered, polygonal, oval–shaped pipe, and other special fittings.



Technical data

Model	TDC–XF
Effective cutting length (mm)	6000 (Can be customized)
Dimension (longitudinal track included) (mm)	7200 × 1350 × 2000 (Standard)
Cutting method	Flame or plasma
Cutting thickness (mm)	Flame: 6 ~ 60mm, Plasma: 2 ~ 14mm (standard)
Cutting speed (mm/min)	Flame: 20 ~ 700, Plasma: 500 ~ 3500
Control system	Industrial PC
Software	TIME PIPE
Max. piercing cutting thickness of plasma (mm)	14
Max. edge cutting thickness of plasma (mm)	18
Working pressure of compressed gas (MPa)	≥ 7
Gas flow of plasma (L/h)	4500
Fuel gas	Acetylene / Propane

7. CNC system

TIME I CNC system

- Support EIA code (G code), FastCAM, FreeNest, SmartNest, IBE and other nesting software.
- Graphic can be zoomed, rotation, mirrored and matrix arrangement, interactive arrangement, stacked arrangement.
- Work piece original size and seam size intuitive display simultaneously.
- Graphic calibration, any edge of steel plate can be used as reference for calibration.
- Self-diagnostic system, inspection easily and troubleshooting.
- USB in front panel, easy to transfer program.
- Oxygen gas, plasma, dusting, demo mode.
- Edge cutting of thick steel plate to reduce warm-up time.
- Automatic speed limit at the corner according to plate thickness so as to prevent over-burning effectively.



EDGE Connect Hypertherm CNC system

- Hypertherm's Phoenix 10 CNC software, Microsoft Window 10 embedded operating system.
- The operating control panel based on the software and with built-in PLC.
- Using the patented CutPro Wizard, easy to learn.
- On-screen software operator's Console (Soft OpCon).
- Customs cut charts can be created and controlled in the part program or made available to be CutPro Wizard.
- Enable on-screen real time monitoring of key process performance parameters while cutting.
- High-speed digital EtherCAT machine interface and communications with single wire connectivity.
- One touch access to supporting documentation including cutting optimization tip, consumable change instruction and diagnostic tools in multiple languages.
- CNC, plasma system and cutting machine diagnosis and repair can be done over the internet.



Technical data

Model	TIME I	EDGE Connect
Monitor	17" LED screen	19" touch screen
Processor	Industrial Arm9 chip	Intel Celeron J1900, Quad core
Memory	64M	4G
Program memory	256M	Solid state SATA drives \geq 120GB
External interface	USB, Support 16GB U disk	USB 2.0, 10/100M network interface
Operating system	-	Microsoft Windows10
Power	DC 24V	AC 220V \pm 10%
RFI/EMI shielding	Full shielding, grounding	Full shielding, grounding
Available axis	2 axes (Standard)	2 axes (Standard), 5 axes available

8. Optional plasma power source

TIME Air plasma cutting machine TDL series

- Whole digital control makes the machine with steady current, high concentration and high cutting quality. The max cutting through thickness of workpiece is 20% more than traditional familiar cutting machines.
- The success rate of arc ignition by lengthened 30M cutting torch is greater than 99%.
- Mess cutting function makes cutting easily without frequent arc striking.
- Marking before cutting is for precision cutting to avoid waste of the base metal.
- Non-high frequency arc striking, no-high frequency interference.
- Plasma gouging function makes cutting smooth and clean and avoid carbon carrying in seam caused by carbon arc gouging.



Technical data

Model	TDL 600	TDL 1200
Rated input voltage (V)	AC380V ± 15% 50/60Hz	
Rated input current (A)	9.8	29.4
Rated output capacity (Duty cycle=60%)	60A/104V	120A/128V
Rated no-load voltage (V)	307 ± 5%	320 ± 5%
Duty cycle	60%	
Range of output current (A)	20 ~ 60	30 ~ 120
Ignition current (A)	25	30
Max. cutting through thickness (mm)	35	50
Quality cutting thickness for carbon steel (mm)	20	35
Quality cutting thickness for stainless steel (mm)	15	30
Plasma piercing thickness (mm)	10	20
Net weight (Kg)	33	46
Dimensions (L × W × H) / mm	592 × 290 × 503	650 × 326 × 567

Hypertherm plasma power sources

Recommended model: Air plasma: Powermax45, Powermax65, Powermax85, Powermax105 and Powermax125. Oxygen plasma: MAXPro200. High definition plasma: XPR170, XPR300, HPR400XD, and HPR800XD etc.



POWERMAX125



MAXPRO200



XPR300

Technical data

Type	Model	Maximum piercing cutting thickness (mm)			Maximum cutting through thickness (mm)			Quality cutting thickness (mm)			Input power (kW)
		CS	SS	Al	CS	SS	Al	CS	SS	Al	
Air plasma	Powermax45	10	10	10	25	19	19	6	6	6	5.95
	Powermax65	12	12	12	25	20	20	8	8	8	9
	Powermax85	16	16	16	30	25	25	10	10	10	12.2
	Powermax105	22	22	22	38	32	32	12	12	12	16.8
	Powermax125	25	22	22	44	36	36	16	16	16	21.9
Long life of oxygen plasma	MAXPro200	32	25	25	75	75	75	25	20	20	37.4
High definition plasma	XPR170	40/35	22	25	60	38	38	-	-	-	35.7
	XPR300	50/45	38	38	80	75	50	-	-	-	63
	HPR400XD	50	45	45	80	80	80	38	38	38	80
	HPR800XD	50	75	75	80	160	160	38	75	75	160

Kjellberg plasma power source

Recommended model: similar laser plasma Hifocus, SF130, HF 160i, HF 280i, HF 440i, HF 600i etc.



FineFocus



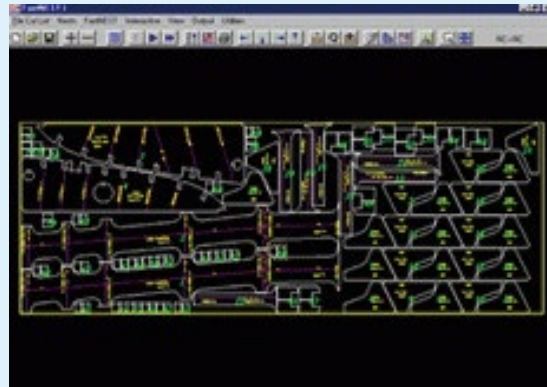
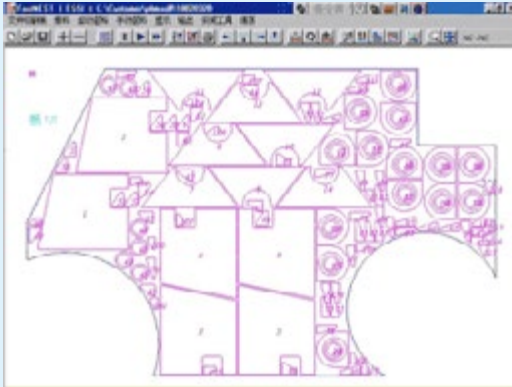
HiFocus

Technical data

Model	SF 130	HF 160i	HF 280i	HF 360i	HF 440i	HF 600i
Max. cutting thickness (mm)	40	50	70	80	120	160
Quality cutting thickness (mm)	1 ~ 32	38	50	60	80	120
Piercing cutting thickness (mm)	25	30	40	50	50	80
Cutting current (A)	35 ~ 130	10 ~ 160	10 ~ 280	10 ~ 360	10 ~ 440	10 ~ 600
Input power (kW)	28	33	67	87	127	87+93
Cooling mode of torch	Water cooled					

9. FastCAM fully automatic nesting software

Main function of FastCAM nesting software: CAD drawing, nesting, cutting programming, NC program verification and simulation, statistics of steel material and processing cost, NC and DXF/CAM/NC files conversion etc.



Main function of FastCAM drawing module:

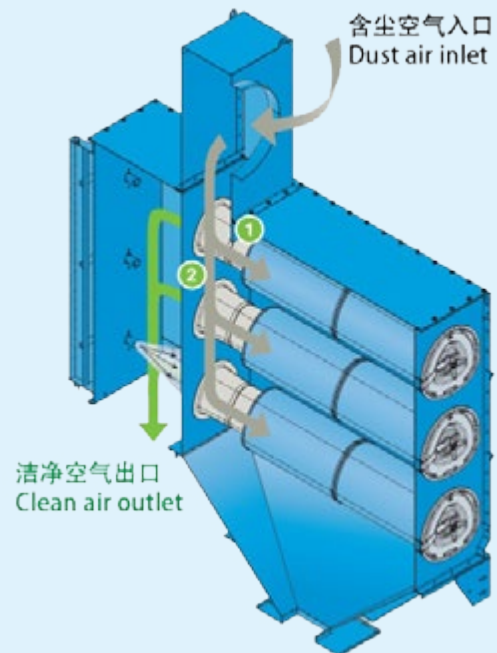
- Simple and convenient CAD drawing.
- AutoCAD optimization, solve problems of repeat cutting, cutting circle not round or cutting not closed, cutting machine jitter and so on.
- DXF/DWG graphics extraction, scattering and sorting: automatic and efficient connection between AutoCAD software and FastCAM software, batch loading of DXF/DWG drawings.
- Batch processing of cutting process: cutting seam automatic compensation, automatic fillet, outer corners/bullnose programming.
- Efficient cutting: any bridge cutting/chain cutting specially developed for plasma and laser cutting, matrix and chain cutting nesting for common line/chain cutting.

Function of FastNEST module:

- Multi nesting files including DXF/DWG/CAM/NC.
- Single or batch read or load of files for fast automatic nesting.
- Setting of automatic nesting of parts by rows, lines and matrix.
- Edit and manage the remaining sheet and nesting of remaining or irregular sheets.
- Automatic continuous nesting of single and multi template.
- Manually interactive nesting, the parts can be moved, rotated and turned freely.
- Automatic common – line nesting: designed for flame, plasma, laser and waterjet cutting.
- Plasma bridge cutting: specially for plasma, laser and waterjet cutting.

10. TDF series flux extractor

- Compact structure, small occupy, low installation and commissioning cost.
- Downflow structure of the machine body. The minimum operating resistance is obtained under the condition that the air flow rate is guaranteed.
- Replacing filter cartridge in cleaning air chamber, convenient and safe.
- Circulation system started automatically.
- The purified air is discharged by air duct and fan to protect environment and realize green production.



Technical data

Model	Processing air volume (m ³ /h)	Track width (mm)	Guide rail length (mm)	Input power (kW)	Number of filter (pieces)
TDF2-8	7000	3000 ~ 5000	≤ 15000	11.0	8
TDF2-12	10000	3000 ~ 5000	≤ 26000	15.0	12
TDF3-18	13000	5000 ~ 7000	≤ 26000	18.5	18
TDF4-24	16000	7000 ~ 10000	≤ 26000	22.0	24

Service

Sales & Services Network

There are more than 40 sales service organizations of TIME in China, to provide first-class products and services. Perfect pre-sales, sales and after-sales service guarantee your benefits.



Sales service network of TIME welder in China



According to the service idea "Sincerity-based customer first" and the service tenet "All for customer satisfaction", with manual and automatic reply method, we will accept service consultation, complain, business and other services from customers through telephone, fax, E-mail, visit and letters and so on.

Trust comes from promises. The customer's service center will insist on the service rules that 100% acceptance, 100% handling, 100% reply and 100% satisfaction to increase the working quality and satisfaction of customers. Through customer service commissioner, setting special services, provide well service for dealer, agents, and common consumers. "First question duty system" can make sure after customer bring forward the service requirements through calling 400 660 9391, it will be replied within time limit, to realize the promises and one station service.

The customer service center can provide full and professional maintenance training free for customers. It will set maintenance training for customers regularly, and can also provide technical training according to the request.

Activities



Visited Paton Electric Welding



Visited TWI



Essen Show in Germany



Worldskills China National Skills Competition



Beijing Essen Exhibition



TIME evening party



TIME Welding robot show in exhibition



Automation Welding in Malaysia



SAW in Indonesia

<http://www.timewelder.com>



TIME GROUP INC.

Beijing Time Technologies CO., Ltd.

Add: 17# Shangdi Kaituo Road, Haidian District, Beijing, 100085 China

Tel: 0086 10 62978011

Fax: 0086 10 62980814

Website:<http://www.timewelder.com>

E-mail: time-export@timegroup.com.cn