



Engineering & Systems



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## 焊缝跟踪系统

WELDING SEAM TRACKER

## 焊接摆动系统

WELDING OSCILLATOR

## 弧高控制系统

ARC-HEIGHT CONTROL

## 等离子粉末堆焊系统

PLASMA HARDFACING WELDING SYSTEM

## 电热墩机

THE ELECTRIC UPSETTING MACHINE

## 切割消耗件

CUTTING ACCESSORIES

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# VULCAN C 公司简介 COMPANY PROFILE

韩国独资渤洱康自动化设备（上海）有限公司，是一家专业生产销售焊缝跟踪系统、焊接摆动器、弧高控制器、电热镦机以及等离子粉末堆焊等设备的厂家。我们拥有完善的管理体系，产品均通过ISO9001：2000质量体系的认证与CE认证。

公司拥有丰富的生产经验和成熟的服务经验，本着：开拓创新、追求卓越、诚挚守信、优良服务的经营理念，竭诚为广大国内外的企业提供高科技、高品质、高效率的产品，为国内企业发展做出贡献。

VULCAN automation equipment (Shanghai) co., LTD., comes from South Korea and now we are in shanghai. Is a company specializing in the production of sales, welding seam tracker, welding oscillator, arc height controller, electric upsetting machine and plasma hardfacing welding equipment. we have a complete management system, products have passed ISO9001: 2000 quality system certification and CE certification.

Company has a stable production experience and mature service experience, in line with: the development innovation, the pursuit of excellence, sincere and trustworthy business philosophy, good service, wholeheartedly for the general domestic and foreign enterprises to provide high-tech, high-quality, high efficiency products, contribute to the domestic enterprise common development.

## 目录 Contents

01 公司简介  
COMPANY PROFILE

02 弧高控制器  
ARC-HEIGHT CONTROL

03 焊缝跟踪系统  
WELDING SEAM TRACKER

11 焊接摆动器  
WELDING OSCILLATOR

13 自动跟踪小车  
WELD AUTO CARRIAGE

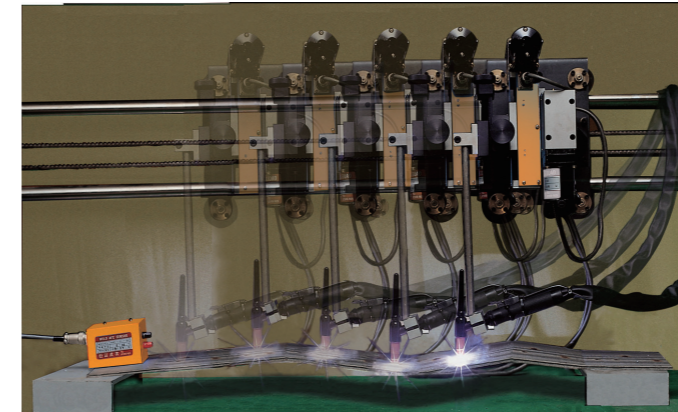
15 电热镦机  
ELECTRIC UPSETTING MACHINE

16 等离子粉末堆焊  
PLASMA HARDFACING WELDING SYSTEM

17 应用实例  
APPLICATION

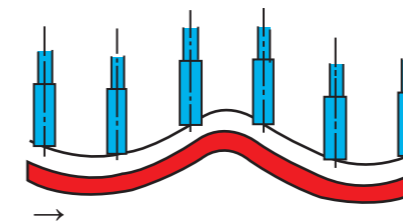
18 其他产品  
OTHER PRODUCTS

## 弧高控制器 ARC-HEIGHT CONTROL



<数字式 VAHC>

### 特点 Features



- 弧高控制器是由电弧传感器检测电弧电压的变化，自动调节工件与焊枪之间的电弧距离，从而使电弧高度保持一致，保证良好的焊接质量；
- 弧高控制器适用于多种焊接方法，如TIG焊，等离子焊接，等离子切割等，用户根据不同的焊接仅需要更换传感器即可；
- 弧高控制器带有连接外部设备的接口，可与其它自动化或半自动化设备联动控制，实现无人化控制。
- The customer does get the fine welding with Arc height control of Hangil, which keeps the Arc's distance between work-piece and torch by monitoring the change in ARC voltage with Arc sensor.
- The Arc-height Control can be applicable to process, such as GTAW, plasma welding, plasma cutting by replacing the sensor without any additional device.
- The Arc-height Control has interface for automation or unmanned systems to the other equipments.

### 规格 Specification

| 型号 Model                     | VAHC                     |
|------------------------------|--------------------------|
| 高度设定 Height Setting          | 弧焊高度记忆 Arc Hight Memory  |
| 偏差设定 Deviation Setting       | Avc:0.1~3v               |
| 输入信号 Input Data              | 数字量 Digital Number       |
| 自动/手动功能 Auto/manual Function | 有 Yes(选配)                |
| 远程控制 Remote Control          | 有 Yes                    |
| 延时引弧 Start Delay             | 有 Yes                    |
| 伸出 Stick-out                 | 有 Yes                    |
| 滑块行程 Slide Stroke            | 70mm                     |
| 力矩 Moment                    | 70kg-cm                  |
| 速度 Speed                     | 100mm/min                |
| 适用焊接方法 Application Welding   | GTAW, PAW, PACT          |
| 输入功率 Input Power             | 1ø, 110/220V, 50/60HZ,2A |

焊缝跟踪器 WELDING SEAM TRACKER



● 原理 Principle

- 焊缝跟踪器是由传感器,控制器和滑块三大部分组成,通过控制器控制,由精密传感器探测焊接坡口和焊接工件的变形值。
- 通过滑块驱动焊枪快速,精确的移动;
- 焊缝跟踪系统能修正由于焊接工件误差和热变形问题,实现自动焊接;
- 该系统具有保护紧急停止功能,防止在厚度较薄的焊接工件上传感器偏离,以避免产生焊接缺陷;
- 焊缝跟踪器可以和其它自动化系统或半自动化操作系统共同使用组成一个高品质焊接系统;
- 由于使用数字化程序控制,可在比较差的焊接条件下实现最满意的焊缝跟踪。
- The Seam Tracker is consists of a precision Sensor, Controller and Slide. The sensor does probe the weld seam and the Controller does control the change value on the work-piece.
- The welding torch is guided rapidly and exactly by moving the Slides.
- The Seam Tracker can calibrate the error caused by the work-piece deformed itself and the welding heat.
- There is a stop function to prevent the deviation of the Sensor from a thin work-piece. So, the welding defect can be avoided.
- The Seam Tracker can be compatibly used with other automatic system or unmanned system.
- All the controlling is done in digital and program, so the unit does show the good performance in the tough environments.

- 焊缝跟踪系统能识别定位焊;
- 能形成标准焊道;
- 按焊缝末端定位探测,可设定焊接完成时间。
- 换向跟踪功能和多种控制功能;
- 容易设置左右换向功能;
- 焊缝偏离保护和当焊枪偏离焊缝时自动停止;
- 可以与自动或半自动化设备一体化;
- 由于所有功能都是由程序控制,很容易操作。

- The Seam Tracker has the function for sensing the tack welding;
- A uniformed welding bead is produced;
- There is the function to make the time of weld end programmed because the tracker can sense the edge of work-piece;
- There are several priority functions as well as the reverse tracking;
- The tracker has the right/left reverse function for easy installation;
- The tracker has the function to prevent the deviation of the sensor from the welding seam. If the deviation occurs on the seam, the tracker stops automatically;
- The tracker can work on the other semi or full automatic system;
- All the functions are programmed for easy control.

● 特点规格 specification

标准规格 Standard Type

| 型号 Model                    | VS-05   | VS-10  | VS-20            |
|-----------------------------|---|--|------------------|
| 额定载荷 Rated loading capacity | 25Kgf   | 50Kgf  | 100Kgf           |
| 跟踪范围 Tracking Range         | X,Y Each 100mm  | X,Y Each 200mm   | X,Y Each 200mm   |
| 跟踪速度 Tracking speed         | 250mm/min   | 250mm/min  | 170mm/min        |
| 精度 Accuracy                 | ±0.25mm   | ±0.25mm  | ±0.25mm          |
| 允许承载力矩 Allowable moment     | 700Kg-cm  | 1400Kg-cm  | 3700Kg-cm        |
| 适用焊接方法 Application welding  | GTAW  | SUBMERGED  | SUBMERGED TANDEM |
| 驱动电机 Driving motor          | 高精度直流电机 DC Precision Motor  |  |                  |
| 驱动链 Driving method          | 电机驱动装置 → 减速器 → 滚珠丝杆 → 焊缝跟踪器<br>Motor Drive → Reducer → Ball Screw → Seam Tracking |  |                  |
| 控制功能 Function Of Control    | 人工控制 Manual   | 上,下,左,右运动,以及急升动作<br>Up, Down, Left, And Right Movement, Pull-up Movement   |                  |
|                             | 自动控制 Automatic  | 上,下,左,右运动,以及急升动作,定位焊探测,焊缝接头末段位置探测(可超过1.2m),远距离控制功能,正常工作,应急工作,强制识别,强制探测停止以及左右换向功能。<br>Right/both/left, Pull-up, Tack Detection, end-detection 1.2, Remote Control Function, Ok-out Detection, Em-out, Forced Difference, Forced Stop Function Of The Detection, Reverse Function, Left / Right. |                  |
| 输入电源 Input Power            | AC110/220V,1Ø, 50/60Hz, 2A  |  |                  |
| 附件(选配) Option               | 远端控制盒 VCN-R 焊枪调整机构 TORCH ADJUST(VTA-05C,10C)                                      |  |                  |

特殊规格 Special Type

| 型号 Model                    | VS-01   | VS-30   |  |
|-----------------------------|---|---|--|
| 额定载荷 Rated loading capacity | 8Kgf  | 100Kgf  |  |
| 跟踪范围 Tracking Range         | X,Y Each 70mm   | X,Y Each 300mm  |  |
| 跟踪速度 Tracking speed         | 250mm/min   | 170mm/min   |  |
| 精度 Accuracy                 | ±0.125mm  | ±0.25mm   |  |
| 允许承载力矩 Allowable Moment     | 70Kg-cm   | 4000Kg-cm   |  |
| 适用焊接方法 Application Welding  | GTAW  | SUBMERGED TANDEM  |  |
| 驱动电机 Driving Motor          | 步进电机 Stepping Motor   | 高精度直流电机 DC Precision Motor  |  |
| 驱动链 Driving Method          | 电机驱动装置 → 减速器 → 滚珠丝杆 → 焊缝跟踪器<br>Motor Drive → Reducer → Ball Screw → Seam Tracking |   |  |
| 控制功能 Function Of Control    | 人工控制 Manual   | 上,下,左,右运动,以及急升动作<br>Up, Down, Left, And Right Movement, Pull-up Movement  |  |
|                             | 自动控制 Automatic  | 上,下,左,右运动,以及急升动作,定位焊探测,焊缝接头末段位置探测,远距离控制功能,正常工作,应急工作,强制识别,强制探测停止以及左右换向功能。<br>Right/both/left, Pull-up, Tack Detection, end-detection, Remote Control Function, Ok-out Detection, Em-out, Forced Difference, Forced Stop Function Of The Detection, Reverse Function, Left / Right. |  |
| 输入电源 Input Power            | AC110/220V,1Ø, 50/60Hz, 2A  |   |  |
| 附件(选配) Option               | 远端控制盒 Remote Control (VCN-R),焊枪调整机构 Torch Adjust(VTA-05C,10C)                     |   |  |

### ◆ 控制器 CONTROL UNIT



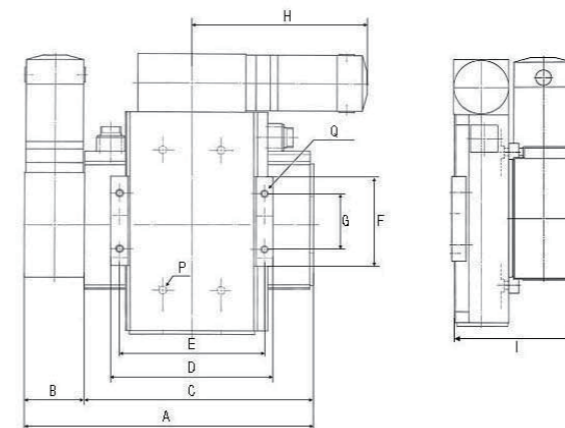
#### ● 特点 Features

- 全新的型号电缆接口在设备背部，美观实用；
  - 全新的型号底部用强力磁铁固定，方便拆装；
  - 传感器的感应信号传输到控制器，控制器分析后做出相应的处理，使焊枪上下左右移动；
  - 带有输入/输出和遥控器接口，可接相应的设备和系统；
  - 所有功能由程序控制器，很容易得到想要的焊接参数；
  - 控制器有程序保护功能，集成上锁功能；
  - 可靠的装置，采用噪音保护回路。
- The new model cable interface in the back of the equipment, beautiful and practical;
  - The new model is fixed with a strong magnet at the bottom, easy to assemble and disassemble;
  - The control does arrange the sensed signal from the probe sensor and then put the suitable respond out such as up/down/left/right;
  - The connectors for input/output and remote control are attached for interface to the relative equipment or system;
  - All the functions are programmed so as to easily get the welding parameters the customer wants;
  - For the protection of the programmed functions, there is the lock function integrated in the control;
  - It is a high reliable unit to adopt a noise protection circuit.

#### ● 规格 Specification

|                       |                            |                |   |
|-----------------------|----------------------------|----------------|---|
| 型号 Model              | VCN-14                     | 功能<br>FUNCTION | 手动控制，自动控制，定位焊探测。焊缝接头末端位置探测，焊接时间设定，强制识别，可设定左/右双向功能，向下优先功能，左/右选择功能，右/左优先功能选择，左右反向功能，反向跟踪功能，焊接偏离、停止检测功能，OK-OUT信号检测功能，EM STOP-OUT，遥控功能，所有功能程序控制和程序保护功能。 |
| 功率 Power              | AC 110/220V, 1Ø 50/60HZ,2A |                |   |
| 重量 Weight             | 4.5kg                      |                |   |
| 连接电缆 Connecting Cable | 2m×4pcs                    |                |   |
| 尺寸 Size               | (W×H×D)<br>295 × 115 × 200 |                |   |

### ◆ 滑块 SLIDE UNIT



| MODEL  | A   | B  | C   | D   | E   | F   | G   | H   | I   | P        | Q         |
|--------|-----|----|-----|-----|-----|-----|-----|-----|-----|----------|-----------|
| VS-01S | 179 | 36 | 143 | 72  | 72  | 22  | 60  | 90  | 88  | 4-φ5.5DR | 4-M5 TAP  |
| VS-05S | 300 | 62 | 238 | 168 | 150 | 96  | 60  | 182 | 130 | 4-φ9.0DR | 4-M8 TAP  |
| VS-10S | 436 | 62 | 374 | 200 | 180 | 126 | 76  | 188 | 150 | 4-φ11DR  | 4-M10 TAP |
| VS-20S | 508 | 64 | 404 | 234 | 210 | 192 | 164 | 199 | 170 | 4-φ11DR  | 4-M10 TAP |
| VS-30S | 604 | 64 | 540 | 234 | 210 | 192 | 164 | 199 | 170 | 4-φ11DR  | 4-M10 TAP |

#### ● 特点 Features

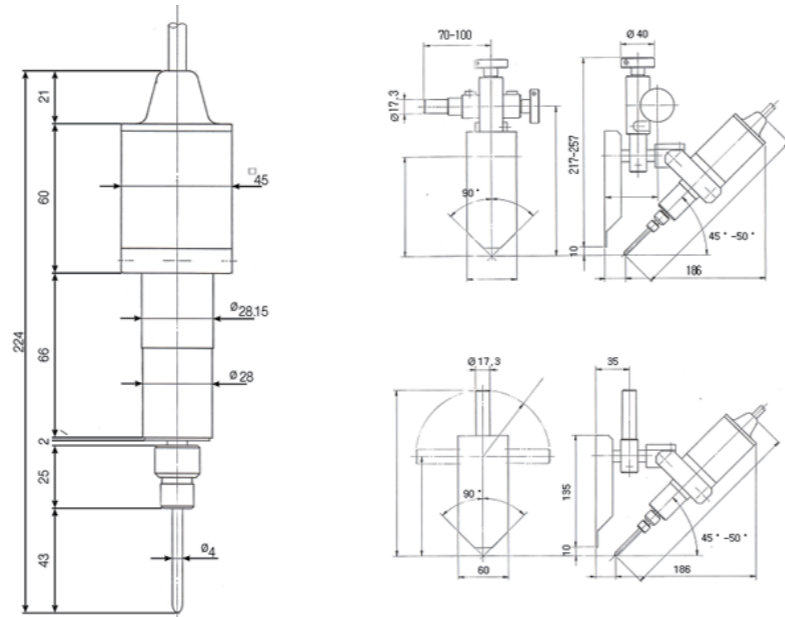
- 滑块使用高精度直流电机和滚珠丝杆，能快速，灵敏地改变人工检测输入的偏差值。
- 滑块体采用铝合金制造，重量很轻。
- The unit is manufactured with precise DC motor and ball screw so it does respond correctly to minute change.
- The body of the slide is cast into AL alloys for reduction of the weight.

#### ● 规格 Specification

| 型号 Model   | 额定载荷 Rated loading capacity | 行程 Stroke | 速度 Speed  | 力矩 Moment | 重量 Weight |
|------------|-----------------------------|-----------|-----------|-----------|-----------|
| VS 01-70C  | 8kgf                        | 70mm      | 100mm/min | 70kg-cm   | 3.5kg     |
| VS 05-100C | 25kgf                       | 100mm     | 250mm/min | 700kg-cm  | 12kg      |
| VS 10-200C | 50kgf                       | 200mm     | 250mm/min | 1400kg-cm | 18kg      |
| VS 20-200C | 100kgf                      | 200mm     | 170mm/min | 3700kg-cm | 29kg      |
| VS 30-300C | 100kgf                      | 300mm     | 170mm/min | 4000kg-cm | 32kg      |

### ◆ 传感器 PROBE SENSOR (HP03L-C)

#### ● 尺寸图 Dimensions



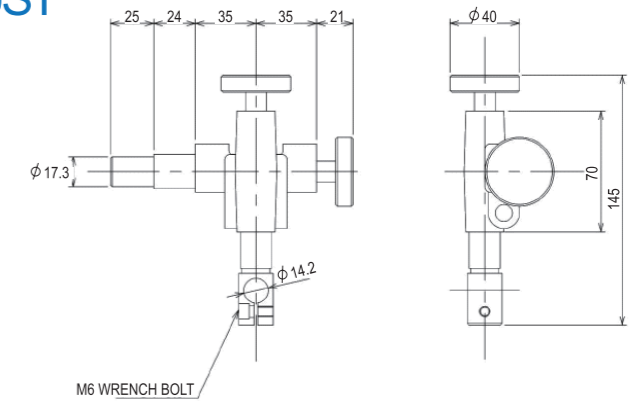
#### ● 特点 Features

- 由传感器直接探测焊接坡口偏差, 并将信号传输到控制单元;
- 由于传感器能同时控制上下左右是否有定位焊及焊缝末端等焊接坡口状况, 所以能在较差的焊缝条件下获得高品质的焊缝;
- 传感器广泛适用于角焊缝, 对接焊缝以及对搭接高度大于1.2mm的搭接焊缝。
- The Sensor of touch type does probe the seam conditions and send the sensed signals out to the Control Unit.
- The operator can get a good quality of welding under the worse seam conditions, because, at the same time, the Sensor can probe all the directions; up, down, left, right and the edge of work-piece.
- The Sensor can work perfectly on cornered fillet, grooved butt, 1.2mm thickness of lap welding

#### ● 规格 Specification

|                            |                 |
|----------------------------|-----------------|
| 型号 Model                   | HP03L-C         |
| 精度 Accuracy                | ±0.25mm(±0.1mm) |
| 适用焊接方法 Application Welding | GMAW,SAW(GTAW)  |
| 重量 Weight                  | 520g            |

### ◆ 传感器调整机构 SENSORADJUST



#### ● 规格 Specification

|                             |               |
|-----------------------------|---------------|
| 型号 Model                    | THL/THR       |
| 行程 Stroke                   | X,Y Each 40mm |
| 重量 Weight                   | 0.58kg        |
| 额定载荷 Rated Loading Capacity | 3.0kgf        |

#### ● 特点 Features

- 该机构能精密地调整传感器上, 下, 左, 右位置, 制造时已保证左右方向对称移动;
- 焊枪沿传感器调整机构反方向移动, 以传感器调整位置作为0点。
- This is a kind of device moving the Sensor finely to up, down, left, and right, being manufactured symmetrically according to the direction of the installation.
- Since the zero point of the torch is based on the SENSOR, the torch does move to the other direction when the Adjust works.

### ◆ 远端控制盒 REMOTE CONTROL



#### ● 特点 Features

- 便携式人工控制盒;
- 如在窄小空间内跟踪焊缝或大型设备上能够实现远距离控制。
- This is a portable operating manual box connecting to the Control Unit.
- The Remote Control can be used to operate the seam tracker installed at a narrow space or a heavy equipment.

#### ● 规格 Specification

|           |  |
|-----------|--|
| 型号 Model  | VCN-R  |
| 重量 Weight | 550g   |
| 电缆 Cable  | 3m(标准) 可按客户要求增加<br>3m(standard) or longer on request |
| 尺寸 Size   | W×H×D=100×120×45                                     |

◆ 附件(选配) ACCESSORIES OPTION



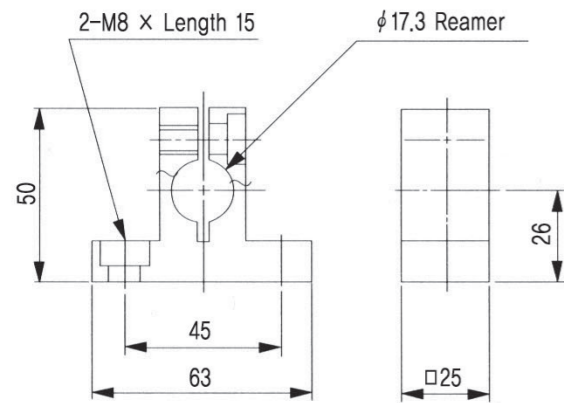
感应器探头&探针  
PROBE SENSOR CAP&TIP



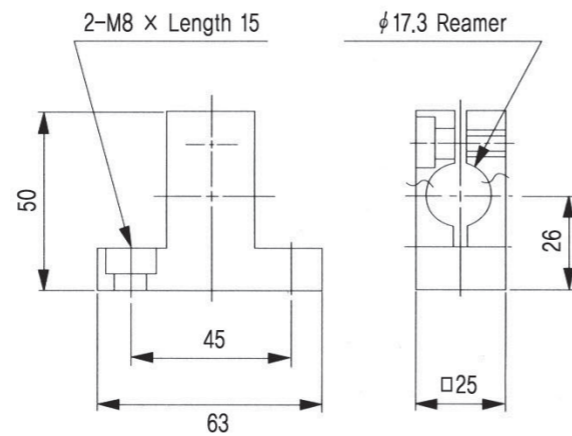
其他选配附件  
ACCESSORIES OPTION

● 特点 Features

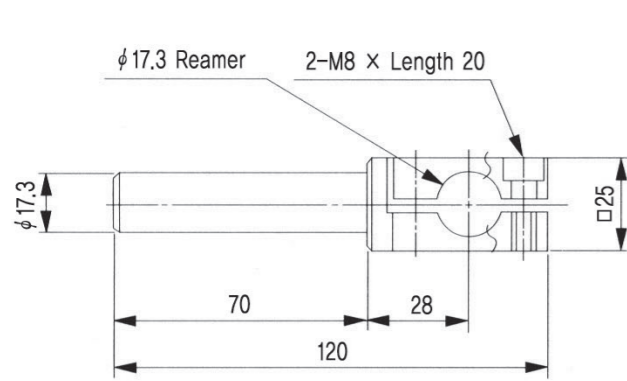
- 附件为铝合金制造, 所夹持的不锈钢管规格为 $\phi 17.3\text{mm} \times t2.0\text{mm}$  (厚)
- The following drawings are regarding the parts for installation, which are made from Aluminum Alloys, and stainless pipe  $\phi 17.3\text{mm} \times t2.0\text{mm}$  is additionally needed.



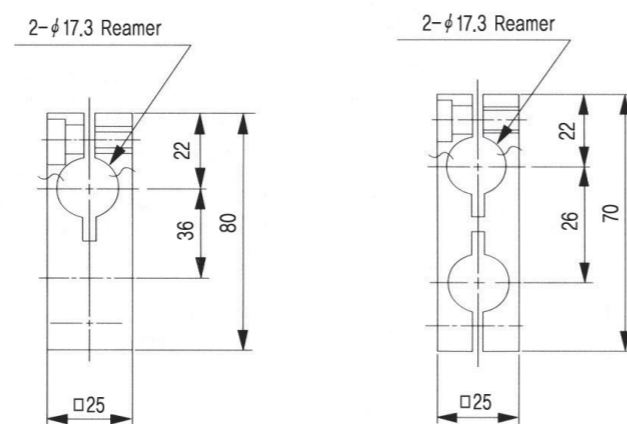
① T-HOLDER(T17-1)



② T-HOLDER(T17-2)



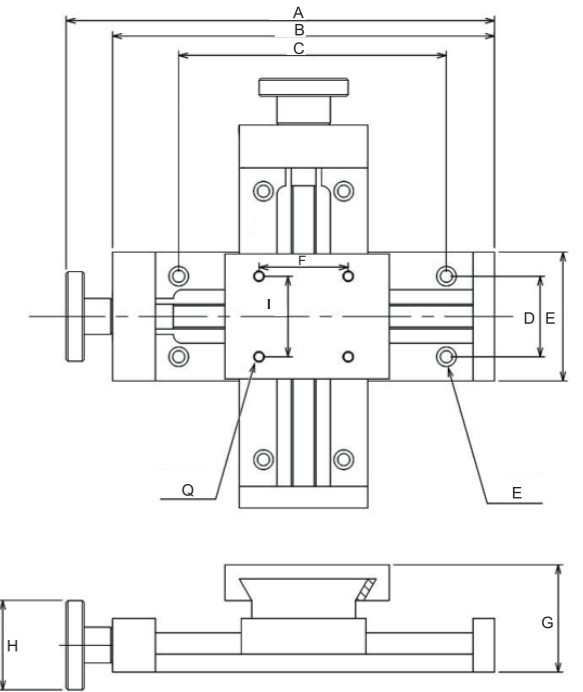
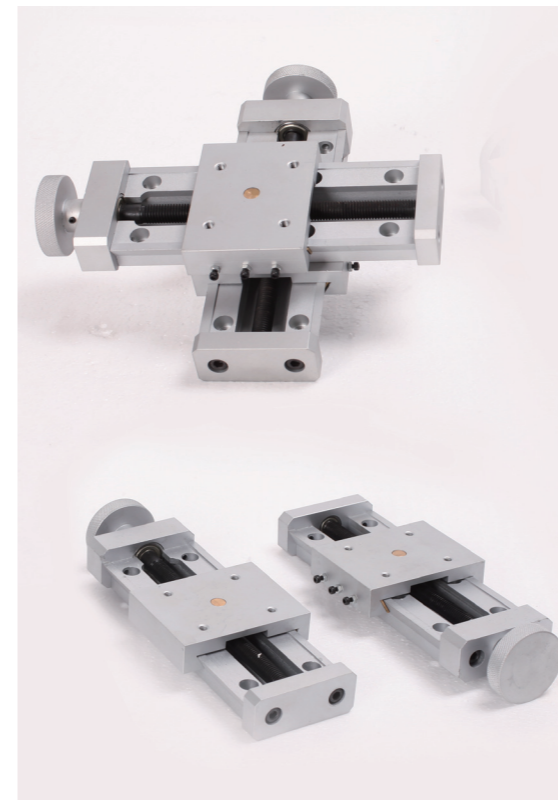
③ TORCH CLAMP(TC 17-1)



④ BAR HOLDER(B17-1)

⑤ BAR HOLDER(B17-2)

焊枪调整机构 TORCH ADJUST



| MODEL  | A   | B   | C        | D  | E  | F  | G  | H   | I  | P                        | Q        |
|--------|-----|-----|----------|----|----|----|----|-----|----|--------------------------|----------|
| HTA-05 | 240 | 214 | 50×3=150 | 45 | 72 | 45 | 60 | ø50 | 50 | ø 8-6.8 DR<br>ø 11C-BORE | 4-M6 TAP |
| HTA-10 | 290 | 260 | 56×3=168 | 56 | 90 | 56 | 70 | ø60 | 60 | ø 8-6.8 DR<br>ø 14C-BORE | 4-M8 TAP |

● 特点 Features

- 该机构可完成焊枪与工件之间的精密调整。
- This is a device to move the welding torch finely to up, down, left and right.

● 规格 Specification

| 型号 Model                    | VTA - 05C       | VTA - 10C       |
|-----------------------------|-----------------|-----------------|
| 额定载荷 Rated Loading Capacity | 16 Kgf          | 40 Kgf          |
| 行程 Stroke                   | X, Y Each 100mm | X, Y Each 130mm |
| 力矩 Moment                   | 350Kg - cm      | 900Kg - cm      |
| 重量 Weight                   | 2.4Kg           | 4.5Kg           |

焊接摆动器 WELDING OSCILLATOR



\* 设备的颜色可以选择蓝色或者橙色  
\* Color can choose blue or orange

<直线往返式 VTW-L>



\* 设备的颜色可以选择蓝色或者橙色  
\* Color can choose blue or orange

<钟摆式 VTW-A>

规格 Specification

|                             |  |
|-----------------------------|--|
| 型号 Model                    | VTW-L  |
| 速度 Spec                     | 0~1,500mm/min(0~100%,1%setting unit function)  |
| 控制方式 Control Method         | 数字 CPU 程序 Cpu Digital Program  |
| 摆距 Center Moving            | 滑块行程的变化范围5~95mm可选择幅度:每个0.1mm<br>Range Slide Stroke Between 5~95mm, Optional Stage, Unit: Every 0.1mm |
| 摆幅 Amplitude Range          | ±0~40mm, 最小单位: 0.1 mm  |
| 停留时间 Dwell Time             | 左, 中, 右0~2.0sec, 最小单位: 0.1sec<br>Left/center/right 0~2.0sec, Unit:0.1 Sec Each                       |
| 远端控制 Remote Control         | 有 Yes (选配)   |
| 滑块行程 Slide Stroke           | 100mm  |
| 额定载荷 Rated Loading Capacity | 5Kgf   |
| 力矩 Moment                   | 350Kg -cm  |
| 输入功率 Input Power            | 1Ø, AC110/220V, 50/60Hz, 2A  |

规格 Specification

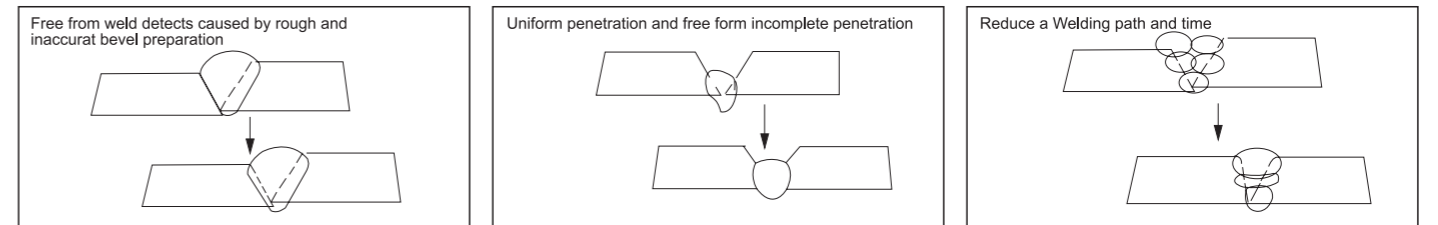
|                                |  |
|--------------------------------|--|
| 型号 Model                       | VTW - A  |
| 摆动周期 Number Of Vibrations      | 20 ~150 Cycle  |
| 摆动角度 Degree Of Vibrations      | 0~±5°  |
| 摆动控制 Controlling Of Vibrations | 人工(模拟) Manual (Analog)   |
| 停止功能 Stop Function             | 左, 中, 右3个位置都可选择停止工作(中间位置停止工作是自动的)<br>3point Selection Type :left/right/center (Stopping At The Center Automatically) |
| 停止时间 Stop Time                 | 0~2sec   |
| 远端控制功能 Remote Control Function | 有 YES (选配)   |
| 输入功率 Input Power               | 1Ø, AC110/220V,50/60Hz, 2A   |

特点 Features

- 全新的型号电缆接口在设备背部, 美观实用;
- 全新的型号底部用强力磁铁固定, 方便拆装;
- 可以一次焊接中完成多层焊, 由于焊透深度相等, 所以焊池表面清洁;
- 由于焊道中部熔透小, 适用于环缝焊或薄板背面焊接;
- 由于熔池稳定, 焊弧很好的分布于焊接接头两侧, 所以不至产生咬边或焊偏等缺陷, 保证焊接质量;
- 有多种摆动程序, 能达到满意的效果。

- The operator can get welding effects on multi deposits and the OSCILLATOR does make the welding bead clean and uniformed;
- It is a proper solution to get a good back bead in the thin circle welding, because weld penetration is thin at the center;
- Since the welding pool and the arc in both sides is stable, the undercut and overlap are prevented to reduce the welding defects;
- There are several weaving program to make the effects like an old hands at welding;
- The new model cable interface in the back of the equipment, beautiful and practical;
- The new model is fixed with a strong magnet at the bottom, easy to assemble and disassemble.

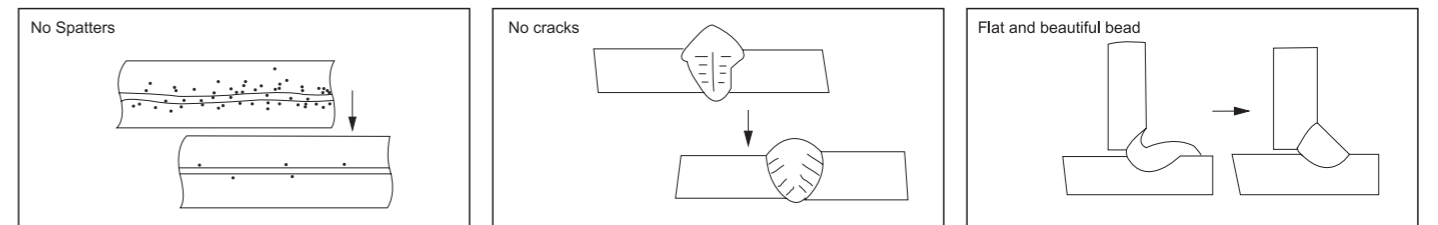
使用效果比较图 Efficiency



• 避免了由于坡口粗糙和不精确而引起的焊接不良

• 相同的熔透, 无不完全熔透

• 减少焊层, 缩短时间

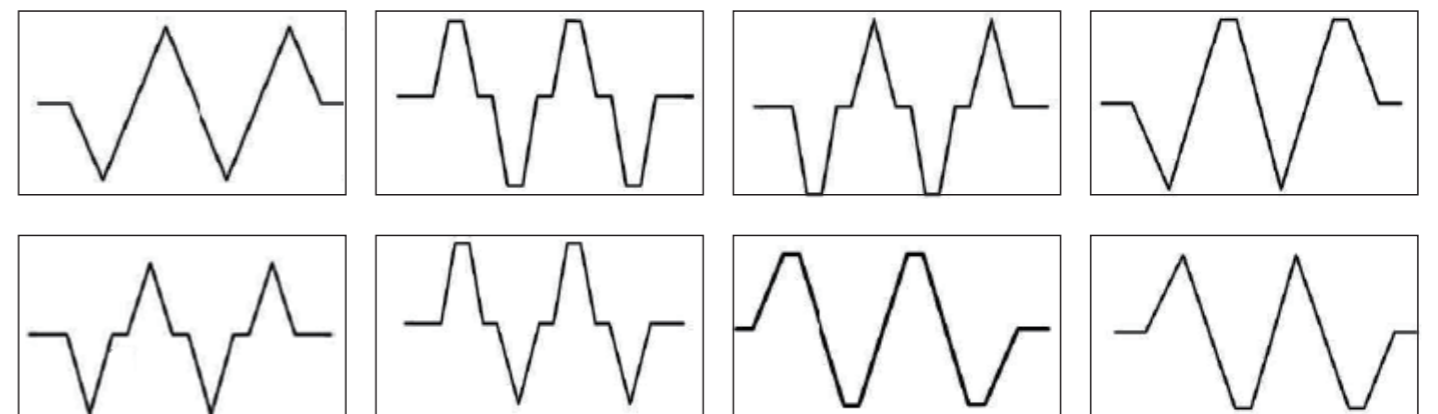


• 无焊渣

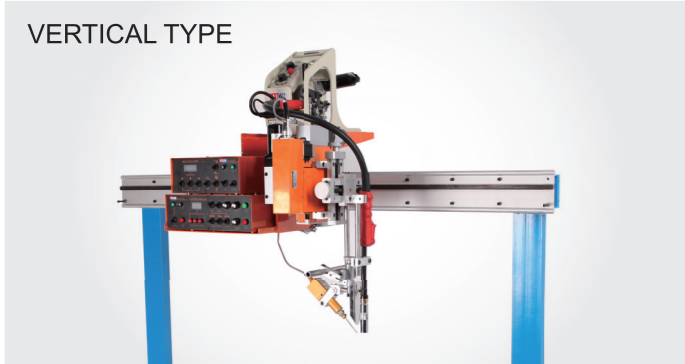
• 无裂缝

• 平整而美观的焊缝

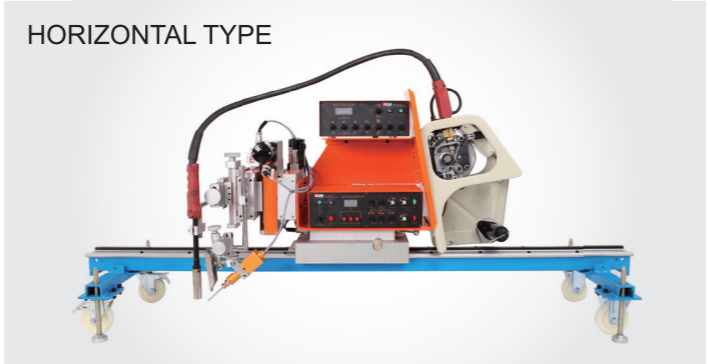
摆动模式 The pattern of operation program



自动跟踪小车 WELD AUTO CARRIAGE



立式自动跟踪小车



卧式自动跟踪小车

特点 Features

- WELDCAR-2000是根据焊接装置的构造,焊接方法和焊接位置的不同而设计出来的一个自动化设备;
- 使用了重型铝合金使得它的性能和寿命得以保障;
- 轨道标准长度为1.8m长,可根据工件规格及用户要求加长;
- 该产品可根据焊接方法及使用用途,安装焊接摆动器,焊缝跟踪系统,实现自动化;
- 控制系统操作方便,仅打开启动开关一次就能按焊接程序自动完成从起弧开始焊接到收弧收弧作业完成的全部焊接过程。

- WELD CAR 2000 is a kind of carriage which is designed to easily install and operate in consideration of the welding equipments, welding process and welding position.
- We guarantee the durability on the rail for carriage, which is made of heavy duty Aluminum.
- The standard rail is 1.8m long but the longer extension is available.
- The customer can make the carriage into automatic system by equipping it with oscillator and seem tracker according to the welding Process.
- The carriage control has an automatic sequence system and the work-piece is welded in one cycle when the start switch is ON.

规格 Specification

|        |                        |              |
|--------|------------------------|--------------|
| 型号     | Model                  | WELDCAR-2000 |
| 额定载荷   | Reted Loading Capacity | 120kgf       |
| 允许承受力矩 | Allowabel Moment       | 4000kg-cm    |
| 驱动马达   | Driving Motor          | DC90V, 30W   |
| 最大移动   | Max Movement           | 2000mm/min   |
| 轨道长度   | Rail Length            | 1.8m         |
| 驱动方式   | Driving Method         | Rack&pinion  |
| 适用焊接方法 | Application Welding    | GMAW ·GTAW   |

机头部分 HEAD PART



Only Seam Tracker

标准跟踪小车



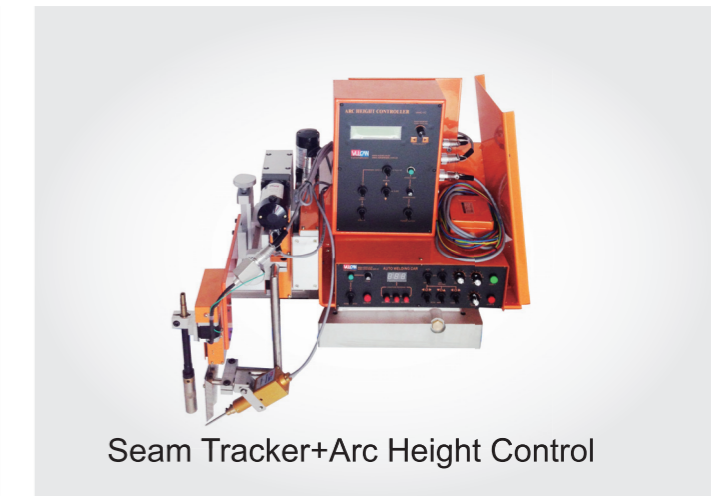
Seam Tracker+L Type Oscillator

自动跟踪小车+L型摆动器



Seam Tracker+A Type Oscillator

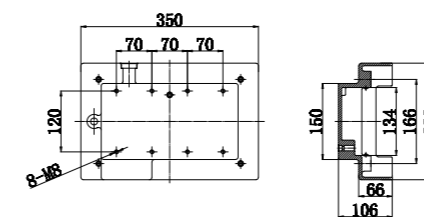
自动跟踪小车+A型摆动器



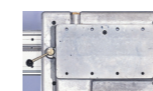
Seam Tracker+Arc Height Control

自动跟踪小车+弧高控制器

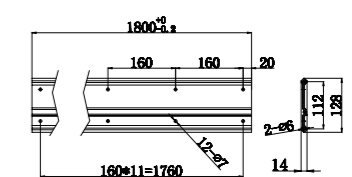
尺寸图 Dimensions



Carriage Box



|    |        |           |
|----|--------|-----------|
| 型号 | Model  | VCB-2000C |
| 重量 | Weight | 8.4kgf    |



Rail

|                |        |           |
|----------------|--------|-----------|
| 型号             | Model  | VCB-2000R |
| 标准长度Basic Unit |        | 1.8米      |
| 重量             | Weight | 5.2kgf    |



电热锻机 THE ELECTRIC UPSETTING MACHINE

● 设备简介 Equipment introduction

电锻机主要对锻造材料进行加热后，把棒料的一部分进行加热并加工制作成理想形状的设备，最终产品主要用于发动机气门以及汽车后轮（后桥）轴等，电锻机属于预备成型设备。

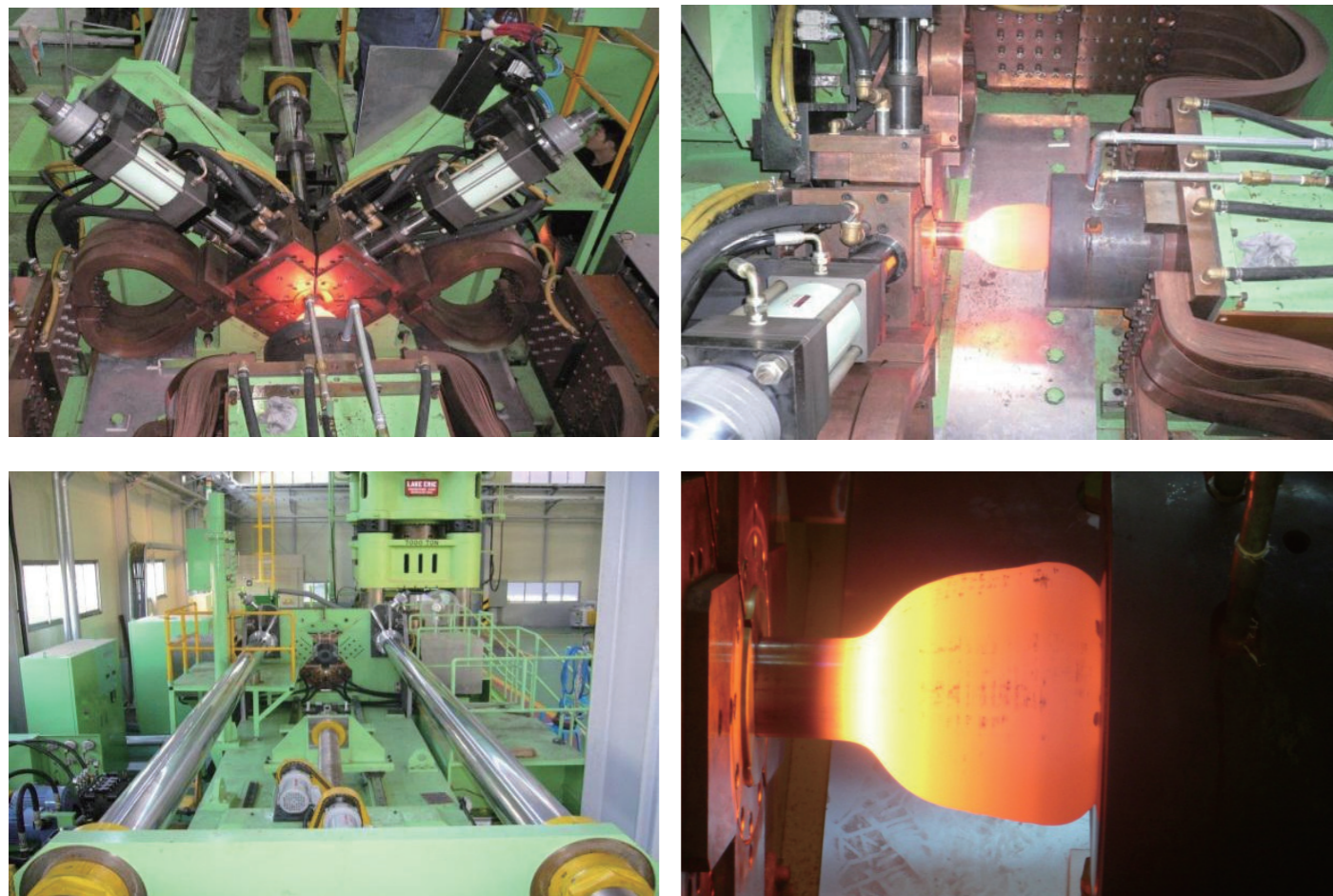
Electric upsetting machine mainly for forging material after heating, the barstock part of the heating and processed into ideal shape of the equipment, the end product is mainly used for engine valve and car rear wheel, rear axle shaft, electric upsetting machine belongs to prepare molding equipment.

● 规格 Specification

本设备的技术规格适用于制作材料直径为,35MC,42MC,46MC, 50MC, 60MC, 70MC, 80MC, 90MC, 98ME 的产品。

This Equipment specification is to produce 35MC, 42MC, 46MC, 50MC, 60MC, 70MC, 80MC, 90MC, 98ME.

● 业绩照片 Performance photos



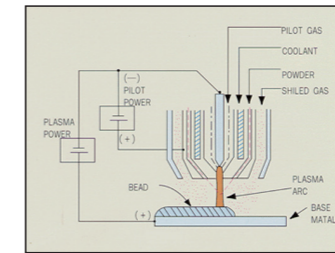
等离子粉末堆焊系统 PLASMA HARDFACING WELDING SYSTEM

● 设备简介 Equipment introduction

-等离子弧堆焊是利用等离子弧为热源，以焊丝或合金粉末作填充金属的一种堆焊工艺；  
-与其他常规热源堆焊相比，等离子堆焊有很多优点。

-The plasma is the source of heat in hardness by powder welding, the powder is used as hardfacing material;  
-There are lots of features in comparison with another hardfacing welding

P.T.A.原理图  
P.T.A. Rrinciple



● 堆焊金属工件 Product Display



● 多用途堆焊系统 Multipurpose Welding



● 阀门堆焊系统 Valve Unit

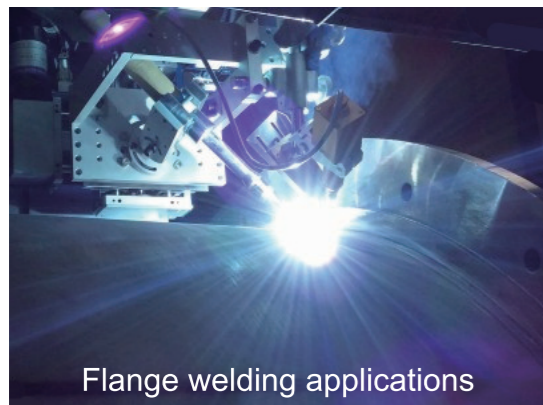




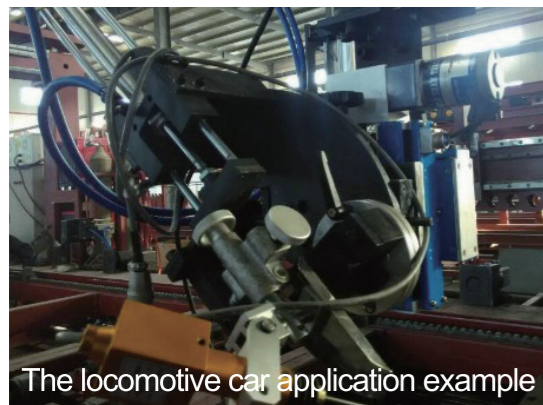
弧高控制器应用实例



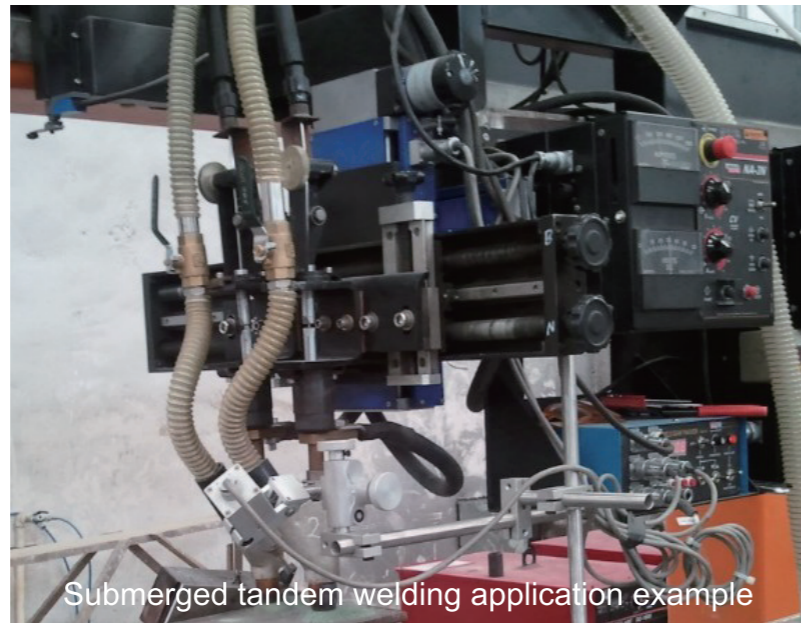
H型钢焊接应用实例



法兰焊接应用实例



机车车厢焊接应用实例



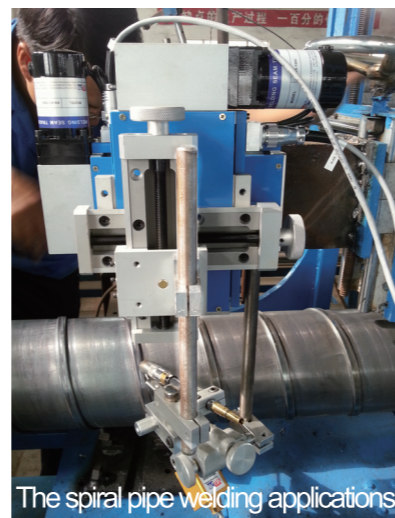
双枪埋弧焊应用实例



压力容器焊接应用实例



油箱焊接应用实例



螺旋管焊接应用实例



**CUTTING ACCESSORIES**  
**切割消耗件**

**PLASMA CUTTING PART**

等离子切割配件

- KOIKE
- HYPERTHERM
- ESAB
- TANAKA
- Kjellberg

**GAS CUTTING PART**

气体切割割嘴

- GAS CUTTING TIP (KOIKE-TYPE)
- GAS CUTTING TIP (106-D7, 103-D7)

**PLASMA AIR PART**

空气等离子切割配件

- OTC D-12000
- P-80A

**LASER CUTTING PART**

激光切割配件

**CUTTING SPARE**

其他切割配件

- PLASMA ACCESSORIES PART  
等离子切割附件部分
- PLASMA MANUFACTURED LIST  
等离子切割产品辅具

**GAS CUTTING SPARE**

气体切割配件

**MARKING SPARE**

划线消耗件