



CNC数控螺柱焊接系统

CNC stud welding machines



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KTS-1050 CNC



应用
Application



选项: 铣削、钻头
Option: Milling, drilling heads



相似图片 | Similar illustration

图中没有显示安全设备 | Illustration without safety device.



KTS-1050 CNC螺柱焊机系统虽然是最为基础的机型，但在自动化螺柱焊应用中仍能确保高精度、生产率和可靠性。性价比高，即使在中小批量生产的情况下也可实现盈利。

The KTS-1050 CNC stud welding machine is a CNC entry-level model which ensures utmost accuracy, productivity and reliability in automatic stud welding applications. The particularly favourable price/efficiency ratio enables profitable operation even with low and medium-scale manufacture.

产品特点

- 设备功能可根据实际需求增加；
- X-Y工作范围：750×1030 mm；
- 质量及精度「德国制造」；
- 适合所有螺柱焊接工艺；
- 使用图形编程系统控制；
- 高性价比；
- 采用高品质组件，使用寿命长；
- 符合欧盟机械指令2006/42/EC。

Product Highlights

- Equipment based on practical needs.
- X-Y working area 750×1030 mm.
- Quality and precision "Made in Germany".
- Suitable for all stud welding processes.
- Control unit with graphical programming system.
- Extremely favourable price/performance ratio.
- Long service life thanks to high-quality components.
- Complies with the EU Machinery Directive 2006/42/EC.

KTS-1050 CNC

KTS-1050 CNC	技术参数 Technical Data
焊接范围	M3-M10或Ø 2-8 mm的碳钢及不锈钢螺柱和销钉；M3-M10或Ø 2-8 mm的铝及铜合金螺柱和销钉。
Welding range	Studs and pins of steel and stainless steel from M3-M10 or Ø 2-8 mm in diameter and of aluminium and brass from M3-M10 or Ø 2-8 mm in diameter.
T型槽工作台面	1540 mm × 1000 mm
Clamping surface T-slot board	1540 mm × 1000 mm
X轴工作行程	750 mm
Working area X	750 mm
Y轴工作行程	1030 mm
Working area Y	1030 mm
Z轴工作行程 (伺服推动)	200 mm (气缸120 mm/净空高度300 mm)
Working area Z (servo drive)	200 mm (pneumatic slide 120 mm / clearance height 300 mm)
工作台负载	100 kg
Load capacity of T-slot board	100 kg
操作精度	± 0.15 mm
Operating accuracy	± 0.15 mm
重复精度	± 0.05 mm
Repeating accuracy	± 0.05 mm
定位速度	最高400 mm/s
Positioning speed	max. 400 mm/s
尺寸大小	1480×2050×1975 mm (宽×高×长, 不含控制系统)
Dimensions	1480×2050×1975 mm (w×h×d, without control system)
重量	1500 kg
Weight	1500 kg
配件/轴	滚珠丝杠驱动及闭环伺服电机驱动模块。(Z轴: 200 mm, 气动行程: 120 mm)
Appurtenances / Axes	Ball screw and servo motor drive module in closed loop. (Z-axis:200 mm, pneumatic welding stroke 120 mm)

可根据要求提供其他选项和定制解决方案 | Other options and customer-specific solutions are available upon request!



可配置多达四个焊头的焊接设备
Welding equipment for up to four welding heads.

选项: 气动地线夹
Option: Pneumatic power clamp

选项: 铣削、钻头
Option: Milling, drilling heads

KTS-1550 CNC



选项: 焊头转动轴
Option: Rotatable welding head axis



选项: 铣削、钻头
Option: Milling, drilling heads



不限制工作域下最多设定四个焊头。
No limitation in working range by up to four welding heads.



图中没有显示安全设备
Illustration without safety device.



这一款多用途的进阶版的CNC螺柱焊接系统可以全自动生产, 精准地焊接直径 \varnothing 3-10 mm及长度40 mm的碳钢和不锈钢螺柱及销钉。工作台机架和精确铣削的T型槽板面能提供最大的刚性, 确保连续操作保障高精度和准确性。

This versatile, medium format CNC stud welding machine allows steel and stainless studs and pins from 3 to 10 mm in diameter and 40 mm in length to be precisely and fully automatically welded. A welded machine frame and a precisely surface-milled T-slot board provide maximum stiffness. This helps to ensure high precision and accuracy at all times during continuous operation.

产品特点

Product Highlights

- 设备功能可根据实际需求增加;
- X-Y工作范围: 1050×1500 mm;
- 质量及精度「德国制造」;
- 适合所有螺柱焊接工艺;
- 使用图形编程系统控制;
- 高性价比;
- 采用高品质组件, 使用寿命长;
- 符合欧盟机械指令2006/42/EC。

- Equipment based on practical needs.
- X-Y working area 1050×1500 mm.
- Quality and precision "Made in Germany".
- Suitable for all stud welding processes.
- Control unit with graphical programming system.
- Extremely favourable price/performance ratio.
- Long service life thanks to high-quality components.
- Complies with the EU Machinery Directive 2006/42/EC.

KTS-1550 CNC

KTS-1550 CNC	技术参数 Technical Data
焊接范围	M3-M10或 \varnothing 2-8 mm的碳钢及不锈钢螺柱和销钉; M3-M10或 \varnothing 2-8 mm的铝及铜合金螺柱和销钉。
Welding range	Studs and pins of steel and stainless steel from M3-M10 or \varnothing 2-8 mm in diameter and of aluminium and brass from M3-M10 or \varnothing 2-8 mm in diameter.
T型槽工作台面	2080 mm × 1300 mm
Clamping surface T-slot board	2080 mm × 1300 mm
X轴工作行程	1050 mm [每个焊头 (最多四个) 均能达到工件范围]
Working area X	1050 mm [entire working area can be reached by each welding head (max. 4)]
Y轴工作行程	1500 mm
Working area Y	1500 mm
Z轴工作行程 (伺服推动)	200 mm (气缸120 mm/净空高度300 mm)
Working area Z (servo drive)	200 mm (pneumatic slide 120 mm / clearance height 300 mm)
工作台负载	150 kg
Load capacity of T-slot board	150 kg
操作精度	± 0.15 mm
Operating accuracy	± 0.15 mm
重复精度	± 0.05 mm
Repeating accuracy	± 0.05 mm
定位速度	最高370 mm/s
Positioning speed	max. 370 mm/s
尺寸大小	1780×2050×2575 mm (宽×高×长, 不含控制系统)
Dimensions	1780×2050×2575 mm (w×h×d, without control system)
重量	1900 kg
Weight	1900 kg
配件/轴	滚珠丝杠驱动及闭环伺服电机驱动模块。(Z轴: 200 mm, 气动行程: 120 mm)
Appurtenances / Axes	Ball screw and servo motor drive module in closed loop. (Z-axis:200 mm, pneumatic welding stroke 120 mm)

可根据要求提供其他选项和定制解决方案 | Other options and customer-specific solutions are available upon request!



可配置多达四个焊头的焊接设备
Welding equipment for up to four welding heads.



选项: 气动地线夹
Option: Pneumatic power clamp



选项: 铣削、钻头
Option: Milling, drilling heads

KTS-1550 CNC

KTS-1550 CNC 技术规格 | Technical Specifications

标准功能 (CNC)

- 采用特备的设计, 使设备机架结构更加稳固, 运行过程无晃动;
- 精确铣削的铝制T型槽板面;
- X、Y、Z轴带伺服电机的驱动模块是经过验证, 耐磨、精确及无齿隙游移的滚珠丝杠主轴;
- X、Y轴附有遮盖保护, 防止飞溅及碎片侵害;
- 结构紧凑、无间隙及高刚性的直线导轨;
- 电机控制的Z轴 (带有导轨移动的伺服电机), 在不改变焊头的情况下, 可焊接不同长度的螺柱;
- 符合GS/CE认证的安全标志, 前提是系统需配备符合欧盟机械指令98/37/EC的一体式围墙或光栅选项;
- 使用气动钳接地;
- 隔离工作区域, 确保最佳焊接效果。

MA-400-S CNC 控制单元使用圆形编程系统

- 工业用电脑主板包括看门狗、定时器电路、8 GB DDR3 记忆体、120 GB SSD硬碟、Intel Core I3 3.3 GHZ处理器、Intel® HD-Grafik 2500显示卡、DVD驱动器作备份;
- 带触摸板的薄膜键盘;
- IP67, 17英寸TFT显示屏;
- 操作系统WIN7/64 Bit。

标准设备 (螺柱焊接)

- BMS-10P数字电源 (可选配其他电源, 例如BMK-16i);
- 数字化的SK-5AP焊头配备显示屏及BWS-1快速转换设计, 方便快速转换其他螺柱尺寸;
- 配备用于标准螺柱的UVR-300送钉机, 包括M3-M8螺柱的快速转换模块;
- 送钉机/设备框架。

特殊设备

- 符合欧盟机械指令98/37/EC、可阻挡焊接飞溅、灰尘及噪音的一体式围栏;
- 可装配多个焊头 (最多4) 或加工装置如铣头、钻头;
- 焊头转动轴;
- 特殊工件的取料;
- 特殊螺柱的排序机构 (无法使用送钉机输送);
- 用于压紧弯曲金属板的气动装置;
- 喷雾装置;
- 光栅保护装置。

Standard features(CNC)

- Particularly stable design due to a welded machine frame. No shaky compromises.
- Precisely surface-milled aluminium T-slot board.
- X, Y, Z axis drive modules with servo motor via tested and proven, wear-resistant, precise and backlash-free ball screws.
- X, Y axis with cover for protection against welding spatter and chips.
- Compact and zero-clearance linear rail guides with high stiffness.
- Motorised Z axis (servo with spindle drive), e.g. Enabling the processing of various stud lengths without conversion of the welding head.
- GS/CE marking for tested safety, provided that the system is supplied with an optional one-piece casing or a light barrier according to the EU Machinery Directive 98/37/EC.
- Earth connection via pneumatic power clamp.
- Isolated working area ensuring optimum welding results at all times.

MA-400-S CNC control unit with graphical programming system

- Industrial PC with watchdog, 8 GB DDR3 RAM, 120 GB SSD, Intel Core I3 processor with 3.3 GHZ, Intel® HD-Grafik 2500, DVD drive for backup.
- Membrane keyboard with touchpad.
- IP67, 17" TFT display.
- Operating system WIN7/64 bit.

Standard features(stud welding)

- BMS-10P digital power source (other power source available as an option, e.g. BMK-16i).
- Intelligent SK-5AP welding head with digital display and BWS-1 quick-change system for easy and quick conversion to other stud sizes.
- Includes an UVR-300 universal feeder for standard studs, incl. conversion sets for stud sizes M3-M8.
- Feeder / equipment frame.

Special features

- One-piece casing as a protection against welding spatter, dirt and noise according to EU Machinery Directive 98/37/EC.
- Possibility to mount several welding heads (max. 4) or machining units such as milling, drilling heads, etc.
- Rotatable welding head axis.
- Pick-up station for special parts.
- Stud ejection station (insertion of individual studs without feeder).
- Pneumatic hold-down device for curved metal sheets.
- Spray unit.
- Light barrier/light curtain as safeguard.

KTS-1550-W CNC



选项: 焊头转动轴

Option: Rotatable welding head axis



选项: 铣削、钻头

Option: Milling, drilling heads



不限制工作域下最多设定四个焊头。

No limitation in working range by up to four welding heads.



这款多功能CNC螺柱焊机效能强大, 而且精度高。横向方式的行走有助处理更多不同工件。得益于XL的设计观点, 现在可以非常经济地生产更大尺寸的部件。工作台机架和精确铣削的T型槽板面确保最大的刚性, 这有助确保连续操作的高精度和准确性。

This versatile CNC stud welding machine features high performance and precision. The axis orientation in landscape format facilitates the handling of components. Thanks to the XL concept, it is now possible to even manufacture larger-sized parts at very economical conditions. A welded machine frame and a precisely surface-milled T-slot board provide maximum stiffness. This helps to ensure high precision and accuracy at all times during continuous operation.

图中没有显示安全设备

Illustration without safety device.

产品特点

- 设备功能可根据实际需求增加;
- X-Y工作范围: 1750×1300 mm;
- 质量及精度「德国制造」;
- 适合所有螺柱焊接工艺;
- 使用图形编程系统控制;
- 高性价比;
- 采用高品质组件, 使用寿命长;
- 符合欧盟机械指令2006/42/EC。

Product Highlights

- Equipment based on practical needs.
- X-Y working area 1750×1300 mm.
- Quality and precision "Made in Germany".
- Suitable for all stud welding processes.
- Control unit with graphical programming system.
- Extremely favourable price/performance ratio.
- Long service life thanks to high-quality components.
- Complies with the EU Machinery Directive 2006/42/EC.

KTS-1550-W CNC

KTS-1550-W CNC 技术参数 Technical Data	
焊接范围	符合DIN EN ISO 13918标准的M3-M10或Ø 2-8 mm的碳钢及不锈钢螺柱和销钉；M3-M10或Ø 2-8 mm的铝及铜合金螺柱和销钉。
Welding range	Stud welding machine for weld studs and pins as per DIN EN ISO 13918 made of steel and stainless steel from M3-M10 or Ø 2-8 mm in diameter and of aluminium and brass from M3-M10 or Ø 2-8 mm in diameter.
T型槽工作台面	2000 mm × 1850 mm
Clamping surface T-slot board	2000 mm × 1850 mm
X轴工作行程	1750 mm [每个焊头 (最多四个) 均能达到工件范围]
Working area X	1750 mm [entire working area can be reached by each welding head (max. 4)]
Y轴工作行程	1300 mm
Working area Y	1300 mm
Z轴工作行程 (伺服推动)	200 mm (气缸120 mm/净空高度300 mm)
Working area Z (servo drive)	200 mm (pneumatic slide 120 mm / clearance height 300 mm)
工作台负载	200 kg
Load capacity of T-slot board	200 kg
操作精度	± 0.15 mm
Operating accuracy	± 0.15 mm
重复精度	± 0.05 mm
Repeating accuracy	± 0.05 mm
定位速度	最高500 mm/s
Positioning speed	max. 500 mm/s
尺寸大小	2500 × 2050 × 2200 mm (宽 × 高 × 长, 不含控制系统)
Dimensions	2500 × 2050 × 2200 mm (w × h × d, without control system)
重量	2300 kg
Weight	2300 kg
配件/轴	滚珠丝杠驱动及闭环伺服电机驱动模块。(Z轴: 200 mm, 气动行程: 120 mm)
Appurtenances / Axes	Ball screw and servo motor drive module in closed loop. (Z-axis: 200 mm, pneumatic welding stroke 120 mm)

可根据要求提供其他选项和定制解决方案 | Other options and customer-specific solutions are available upon request!



可配置多达四个焊头的焊接设备
Welding equipment for up to four welding heads.

选项: 气动地线夹
Option: Pneumatic power clamp

选项: 铣削、钻头
Option: Milling, drilling heads

技术规格如有变更, 恕不另行通知。 | 请关注www.soyer.com.cn, 获取更多信息。

KTS-1550-W CNC

KTS-1550-W CNC 技术规格 Technical Specifications	
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标准功能 (CNC)

- 采用特备的设计, 使设备机架结构更加稳固, 运行过程无晃动;
- 精确铣削的铝制T型槽板面;
- X、Y、Z轴带伺服电机的驱动模块是经过验证, 耐磨、精确及无齿隙游移的滚珠丝杠主轴;
- X、Y轴附有遮盖保护, 防止飞溅及碎片侵害;
- 结构紧凑、无间隙及高刚性的直线导轨;
- 电机控制的Z轴 (带有导轨移动的伺服电机), 在不改变焊头的情况下, 可焊接不同长度的螺柱;
- 符合GS/CE认证的安全标志, 前提是系统需配备符合欧盟机械指令98/37/EC的一体式围墙或光栅选项;
- 使用气动钳接地;
- 隔离工作区域, 确保最佳焊接效果。

MA-400-S CNC 控制单元使用圆形编程系统

- 工业用电脑主板包括看门狗、定时器电路、8 GB DDR3 记忆体、120 GB SSD硬碟、Intel Core I3 3.3 GHZ处理器、Intel® HD-Grafik 2500显示卡、DVD驱动器作备份;
- 带触摸板的薄膜键盘;
- IP67, 17英寸TFT显示屏;
- 操作系统WIN7/64 Bit。

标准设备 (螺柱焊接)

- BMS-10P数字电源 (可选配其他电源, 例如BMK-16i);
- 数字化的SK-5AP焊头配备显示屏及BWS-1快速转换设计, 方便快速转换其他螺柱尺寸;
- 配备用于标准螺柱的UVR-300送钉机, 包括M3-M8螺柱的快速转换模块;
- 送钉机/设备框架。

特殊设备

- 符合欧盟机械指令98/37/EC、可阻挡焊接飞溅、灰尘及噪音的一体式围栏;
- 可装配多个焊头 (最多4) 或加工装置如铣头、钻头等;
- 焊头转动轴;
- 特殊工件的取料;
- 特殊螺柱的排序机构 (无法使用送钉机输送);
- 用于压紧弯曲金属板的气动装置;
- 喷雾装置;
- 光栅保护装置。

技术规格如有变更, 恕不另行通知。 | 请关注www.soyer.com.cn, 获取更多信息。

Standard features(CNC)

- Particularly stable design due to a welded machine frame. No shaky compromises.
- Precisely surface-milled aluminium T-slot board.
- X, Y, Z axis drive modules with servo motor via tested and proven, wear-resistant, precise and backlash-free ball screws.
- X, Y axis with cover for protection against welding spatter and chips.
- Compact and zero-clearance linear rail guides with high stiffness.
- Motorised Z axis (servo with spindle drive), e.g. Enabling the processing of various stud lengths without conversion of the welding head.
- GS/CE marking for tested safety, provided that the system is supplied with an optional one-piece casing or a light barrier according to the EU Machinery Directive 98/37/EC.
- Earth connection via pneumatic power clamp.
- Isolated working area ensuring optimum welding results at all times.

MA-400-S CNC control unit with graphical programming system

- Industrial PC with watchdog, 8 GB DDR3 RAM, 120 GB SSD, Intel Core I3 processor with 3.3 GHZ, Intel® HD-Grafik 2500, DVD drive for backup.
- Membrane keyboard with touchpad.
- IP67, 17" TFT display.
- Operating system WIN7/64 bit.

Standard features(stud welding)

- BMS-10P digital power source (other power source available as an option, e.g. BMK-16i).
- Intelligent SK-5AP welding head with digital display and BWS-1 quick-change system for easy and quick conversion to other stud sizes.
- Includes an UVR-300 universal feeder for standard studs, incl. conversion sets for stud sizes M3-M8.
- Feeder / equipment frame.

Special features

- One-piece casing as a protection against welding spatter, dirt and noise according to EU Machinery Directive 98/37/EC.
- Possibility to mount several welding heads (max. 4) or machining units such as milling, drilling heads, etc.
- Rotatable welding head axis.
- Pick-up station for special parts.
- Stud ejection station (insertion of individual studs without feeder).
- Pneumatic hold-down device for curved metal sheets.
- Spray unit.
- Light barrier/light curtain as safeguard.

KTS-2600 CNC



选项：焊头转动轴
Option: Rotatable welding head axis



选项：铣削、钻头
Option: Milling, drilling heads



不限制工作域下最多设定四个焊头。
No limitation in working range by up to four welding heads.

图中没有显示安全设备
Illustration without safety device.



这款大型CNC螺柱焊机效能强大，而且精度高。得益于XXL的设计观点，现时可生产大型尺寸的工件。工作机架和精确铣削的T型槽板面确保最大的刚性，这有助于确保连续操作的高精度和准确性。

This large-scale CNC stud welding machine features high performance and precision. Thanks to the XXL concept, it is now also possible to manufacture large-sized parts. A welded machine frame and a precisely surface-milled T-slot board provide maximum stiffness. This helps to ensure high precision and accuracy at all times during continuous operation.

产品特点

- 设备功能可根据实际需求增加；
- X-Y工作范围：1270×2600 mm；
- 质量及精度「德国制造」；
- 适合所有螺柱焊接工艺；
- 使用图形编程系统控制；
- 采用高品质组件，使用寿命长；
- 符合欧盟机械指令2006/42/EC。

Product Highlights

- Equipment based on practical needs.
- X-Y working area 1270×2600 mm.
- Quality and precision "Made in Germany".
- Suitable for all stud welding processes.
- Control unit with graphical programming system.
- Long service life thanks to high-quality components.
- Complies with the EU Machinery Directive 2006/42/EC.

KTS-2600 CNC

KTS-2600 CNC	技术参数 Technical Data
焊接范围	符合DIN EN ISO 13918标准的M3-M10或Ø 2-8 mm的碳钢及不锈钢螺柱和销钉；M3-M10或Ø 2-8 mm的铝及铜合金螺柱和销钉。
Welding range	Stud welding machine for weld studs and pins as per DIN EN ISO 13918 made of steel and stainless steel from M3-M10 or Ø 2-8 mm in diameter and of aluminium and brass from M3-M10 or Ø 2-8 mm in diameter.
T型槽工作台面	1800 mm × 3260 mm
Clamping surface T-slot board	1800 mm × 3260 mm
X轴工作行程	1270 mm [每个焊头（最多四个）均能达到工件范围]
Working area X	1270 mm [entire working area can be reached by each welding head (max. 4)]
Y轴工作行程	2600 mm
Working area Y	2600 mm
Z轴工作行程（伺服推动）	200 mm（伺服驱动）及125 mm（气缸）/300 mm（净空高度）
Working area Z (servo drive)	200 mm (servo drive) and 125 mm (pneumatic slide) / 300 mm (clearance height)
工作台负载	250 kg
Load capacity of T-slot board	250 kg
操作精度	± 0.15 mm
Operating accuracy	± 0.15 mm
重复精度	± 0.05 mm
Repeating accuracy	± 0.05 mm
定位速度	最高500 mm/s
Positioning speed	max. 500 mm/s
尺寸大小	2060×2050×3450 mm（宽×高×长，不含控制系统）
Dimensions	2060×2050×3450 mm (w×h×d, without control system)
重量	2500 kg
Weight	2500 kg
配件/轴	滚珠丝杠驱动及闭环伺服电机驱动模块。（Z轴：200 mm，气动行程：120 mm）
Appurtenances / Axes	Ball screw and servo motor drive module in closed loop. (Z-axis:200 mm, pneumatic welding stroke 120 mm)



KTS-2600 CNC

KTS-2600 CNC 技术规格 | Technical Specifications

标准功能 (CNC)

- 采用特备的设计, 使设备机架结构更加稳固, 运行过程无晃动;
- 精确铣削的铝制T型槽板面;
- X、Y、Z轴带伺服电机的驱动模块是经过验证, 耐磨、精确及无齿隙游移的滚珠丝杠主轴;
- X、Y轴附有遮盖保护, 防止飞溅及碎片侵害;
- 结构紧凑、无间隙及高刚性的直线导轨;
- 电机控制的Z轴 (带有导轨移动的伺服电机), 在不改变焊头的情况下, 可焊接不同长度的螺柱;
- 符合GS/CE认证的安全标志, 前提是系统需配备符合欧盟机械指令98/37/EC的一体式围墙或光栅选项;
- 使用气动钳接地;
- 隔离工作区域, 确保最佳焊接效果。

MA-400-S CNC 控制单元使用圆形编程系统

- 工业用电脑主板包括看门狗、定时器电路、8 GB DDR3 记忆体、120 GB SSD硬碟、Intel Core I3 3.3 GHZ处理器、Intel® HD-Grafik 2500显示卡、DVD驱动器作备份;
- 带触摸板的薄膜键盘;
- IP67, 17英寸TFT显示屏;
- 操作系统WIN7/64 Bit。

标准设备 (螺柱焊接)

- BMS-10P数字电源 (可选配其他电源, 例如BMK-16i);
- 数字化的SK-5AP焊头配备显示屏及BWS-1快速转换设计, 方便快速转换其他螺柱尺寸;
- 配备用于标准螺柱的UVR-300送钉机, 包括M3-M8螺柱的快速转换模块;
- 送钉机/设备框架。

特殊设备

- 符合欧盟机械指令98/37/EC、可阻挡焊接飞溅、灰尘及噪音的一体式围栏;
- 可装配多个焊头 (最多4) 或加工装置如铣头、钻头;
- 焊头转动轴;
- 特殊工件的取料;
- 特殊螺柱的排序机构 (无法使用送钉机输送);
- 用于压紧弯曲金属板的气动装置;
- 喷雾装置;
- 光栅保护装置。

Standard features(CNC)

- Particularly stable design due to a welded machine frame. No shaky compromises.
- Precisely surface-milled aluminium T-slot board.
- X, Y, Z axis drive modules with servo motor via tested and proven, wear-resistant, precise and backlash-free ball screws.
- X, Y axis with cover for protection against welding spatter and chips.
- Compact and zero-clearance linear rail guides with high stiffness.
- Motorised Z axis (servo with spindle drive), e.g. Enabling the processing of various stud lengths without conversion of the welding head.
- GS/CE marking for tested safety, provided that the system is supplied with an optional one-piece casing or a light barrier according to the EU Machinery Directive 98/37/EC.
- Earth connection via pneumatic power clamp.
- Isolated working area ensuring optimum welding results at all times.

MA-400-S CNC control unit with graphical programming system

- Industrial PC with watchdog, 8 GB DDR3 RAM, 120 GB SSD, Intel Core I3 processor with 3.3 GHZ, Intel® HD-Grafik 2500, DVD drive for backup.
- Membrane keyboard with touchpad.
- IP67, 17" TFT display.
- Operating system WIN7/64 bit.

Standard features(stud welding)

- BMS-10P digital power source (other power source available as an option, e.g. BMK-16i).
- Intelligent SK-5AP welding head with digital display and BWS-1 quick-change system for easy and quick conversion to other stud sizes.
- Includes an UVR-300 universal feeder for standard studs, incl. conversion sets for stud sizes M3-M8.
- Feeder / equipment frame.

Special features

- One-piece casing as a protection against welding spatter, dirt and noise according to EU Machinery Directive 98/37/EC.
- Possibility to mount several welding heads (max. 4) or machining units such as milling, drilling heads, etc.
- Rotatable welding head axis.
- Pick-up station for special parts.
- Stud ejection station (insertion of individual studs without feeder).
- Pneumatic hold-down device for curved metal sheets.
- Spray unit.
- Light barrier/light curtain as safeguard.

KTS-4000 CNC



XXXX螺柱焊接
XXXX Stud Welding



特大型号KTS-4000 CNC拥有2050 mm × 4200 mm (X·Y) 的工作范围来作任何种类的螺柱焊接。大尺寸螺柱如M12 × 50 mm 能使用送钉方式及均衡磁场焊接技术 (SRM®) 实现自动焊接。在特殊情况下, 该CNC焊机能加设选配装备, 如切割铣削装置, 为焊接范围作准备。

The XXXL KTS-4000 CNC stud welding machine with a useable working area of 2050 mm × 4200 mm (XY) allows stud welding in accordance with all known stud welding processes. Large-sized weld studs such as M12 × 50 mm can be fully automatically fed and optimally welding using the innovation SRM® welding process (stud welding in a radially symmetrical magnetic field). In special cases this CNC welding machine can optionally be equipped e.g. with a metal-cutting milling fixture which allows the welding area to be prepared.

产品特点

- 设备功能可根据实际需求增加;
- 质量及精度「德国制造」;
- 适合所有螺柱焊接工艺;
- 使用图形编程系统控制;
- 采用高品质组件, 使用寿命长;
- 符合欧盟机械指令2006/42/EC。

Product Highlights

- Equipment based on practical needs.
- Quality and precision "Made in Germany".
- Suitable for all stud welding processes.
- Control unit with graphical programming system.
- Long service life thanks to high-quality components.
- Complies with the EU Machinery Directive 2006/42/EC.

KTS-4000 CNC

KTS-4000 CNC 技术参数 Technical Data	
焊接范围	符合DIN EN ISO 13918标准的M3-M12或Ø 2-8 mm的碳钢及不锈钢螺柱和销钉；M3-M8或Ø 2-8 mm的铝及铜合金螺柱和销钉。
Welding range	Stud welding machine for weld studs and pins as per DIN EN ISO 13918 made of steel and stainless steel from M3-M12 or Ø 2-8 mm in diameter and of aluminium and brass from M3-M8 or Ø 2-8 mm in diameter.
T型槽工作台面	2200 mm × 4200 mm
Clamping surface T-slot board	2200 mm × 4200 mm
X轴工作行程	2050 mm [每个焊头 (最多四个) 均能达到工件范围]
Working area X	2050 mm [entire working area can be reached by each welding head (max. 4)]
Y轴工作行程	4200 mm
Working area Y	4200 mm
Z轴工作行程 (伺服推动)	200 mm (气缸120 mm/净空高度300 mm)
Working area Z (servo drive)	200 mm (pneumatic slide 120 mm / clearance height 300 mm)
工作台负载	250 kg
Load capacity of T-slot board	250 kg
操作精度	± 0.15 mm
Operating accuracy	± 0.15 mm
重复精度	± 0.05 mm
Repeating accuracy	± 0.05 mm
定位速度	最高500 mm/s
Positioning speed	max. 500 mm/s
尺寸大小	3000 × 2300 × 5500 mm (宽 × 高 × 长, 不含控制系统)
Dimensions	3000 × 2300 × 5500 mm (w × h × d, without control system)
重量	3500 kg
Weight	3500 kg
配件/轴	滚珠丝杠驱动及闭环伺服电机驱动模块。(Z轴: 200 mm, 气动行程: 120 mm)
Appurtenances / Axes	Ball screw and servo motor drive module in closed loop. (Z-axis: 200 mm, pneumatic welding stroke 120 mm)

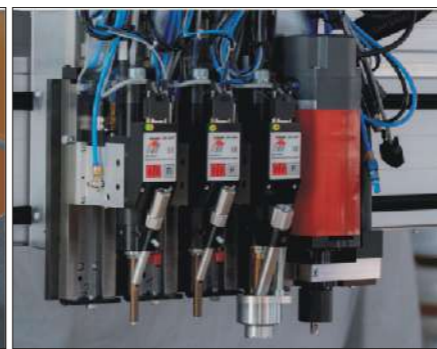
可根据要求提供其他选项和定制解决方案 | Other options and customer-specific solutions are available upon request!



可配置多达四个焊头的焊接设备
Welding equipment for up to four welding heads.



选项: 气动地线夹
Option: Pneumatic power clamp



选项: 铣削、钻头
Option: Milling, drilling heads

技术规格如有变更, 恕不另行通知。 | 请关注www.soyer.com.cn, 获取更多信息。

KTS-4000 CNC

KTS-4000 CNC 技术规格 Technical Specifications	
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标准功能 (CNC)

- 采用特备的设计, 使设备机架结构更加稳固, 运行过程无晃动;
- 精确铣削的铝制T型槽板面;
- X、Y、Z轴带伺服电机的驱动模块是经过验证, 耐磨、精确及无齿隙游移的滚珠丝杠主轴;
- X、Y轴附有遮盖保护, 防止飞溅及碎片侵害;
- 结构紧凑、无间隙及高刚性的直线导轨;
- 电机控制的Z轴 (带有导轨移动的伺服电机), 在不改变焊头的情况下, 可焊接不同长度的螺柱;
- 符合GS/CE认证的安全标志, 前提是系统需配备符合欧盟机械指令98/37/EC的一体式围墙或光栅选项;
- 使用气动钳接地;
- 隔离工作区域, 确保最佳焊接效果。

MA-400-S CNC 控制单元使用圆形编程系统

- 工业用电脑主板包括看门狗、定时器电路、8 GB DDR3 记忆体、120 GB SSD硬碟、Intel Core I3 3.3 GHZ处理器、Intel® HD-Grafik 2500显示卡、DVD驱动器作备份;
- 带触摸板的薄膜键盘;
- IP67, 17英寸TFT显示屏;
- 操作系统WIN7/64 Bit。

标准设备 (螺柱焊接)

- BMS-10P数字电源 (可选配其他电源, 例如BMK-16i);
- 数字化的SK-5AP焊头配备显示屏及BWS-1快速转换设计, 方便快速转换其他螺柱尺寸;
- 配备用于标准螺柱的UVR-300送钉机, 包括M3-M8螺柱的快速转换模块;
- 送钉机/设备框架。

特殊设备

- 符合欧盟机械指令98/37/EC、可阻挡焊接飞溅、灰尘及噪音的一体式围栏;
- 可装配多个焊头 (最多4) 或加工装置如铣头、钻头等;
- 焊头转动轴;
- 特殊工件的取料;
- 特殊螺柱的排序机构 (无法使用送钉机输送);
- 用于压紧弯曲金属板的气动装置;
- 喷雾装置;
- 光栅保护装置。

技术规格如有变更, 恕不另行通知。 | 请关注www.soyer.com.cn, 获取更多信息。

Standard features(CNC)

- Particularly stable design due to a welded machine frame. No shaky compromises.
- Precisely surface-milled aluminium T-slot board.
- X, Y, Z axis drive modules with servo motor via tested and proven, wear-resistant, precise and backlash-free ball screws.
- X, Y axis with cover for protection against welding spatter and chips.
- Compact and zero-clearance linear rail guides with high stiffness.
- Motorised Z axis (servo with spindle drive), e.g. Enabling the processing of various stud lengths without conversion of the welding head.
- GS/CE marking for tested safety, provided that the system is supplied with an optional one-piece casing or a light barrier according to the EU Machinery Directive 98/37/EC.
- Earth connection via pneumatic power clamp.
- Isolated working area ensuring optimum welding results at all times.

MA-400-S CNC control unit with graphical programming system

- Industrial PC with watchdog, 8 GB DDR3 RAM, 120 GB SSD, Intel Core I3 processor with 3.3 GHZ, Intel® HD-Grafik 2500, DVD drive for backup.
- Membrane keyboard with touchpad.
- IP67, 17" TFT display.
- Operating system WIN7/64 bit.

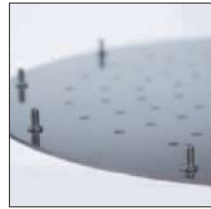
Standard features(stud welding)

- BMS-10P digital power source (other power source available as an option, e.g. BMK-16i).
- Intelligent SK-5AP welding head with digital display and BWS-1 quick-change system for easy and quick conversion to other stud sizes.
- Includes an UVR-300 universal feeder for standard studs, incl. conversion sets for stud sizes M3-M8.
- Feeder / equipment frame.

Special features

- One-piece casing as a protection against welding spatter, dirt and noise according to EU Machinery Directive 98/37/EC.
- Possibility to mount several welding heads (max. 4) or machining units such as milling, drilling heads, etc.
- Rotatable welding head axis.
- Pick-up station for special parts.
- Stud ejection station (insertion of individual studs without feeder).
- Pneumatic hold-down device for curved metal sheets.
- Spray unit.
- Light barrier/light curtain as safeguard.

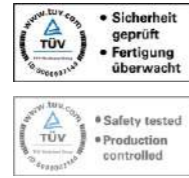
PTS-500 NC



应用
Application



操作示教
Teach-in operation



PTS-500 NC螺柱焊机可以实现所有螺柱焊接工艺精确及全自动焊接直径为3-10 mm及长度达40 mm的螺柱及销钉，适用于所有螺柱焊接工艺。

The PTS-500 NC stud welding machine allows studs and pins from 3-10 mm in diameter and 40 mm in length to be precisely and fully automatically welded in accordance with all known stud welding processes.

产品特点

- 通过操纵杆进行最简单的示教操作；
- X-Y工作范围：500×350 mm；
- 新员工培训期非常短；
- 无需Windows技能；
- 无需编程知识；
- 可以通过外部PC进行编程；
- 符合欧盟机械指令2006/42/EC；
- 性价比非常高；
- 应用型专利号：DE 20 2009 012 369.3；
- 质量及精度「德国制造」。

Product Highlights

- Very easy Teach-in operating mode via a joystick.
- X-Y working area reaches 500 mm×350 mm.
- Very short training period for new staff.
- No previous Windows know-how necessary.
- No prior knowledge of program languages required.
- Programming through external PC possible.
- Machine complies with the EU guideline for machinery 2006/42/EC.
- Very favourable price/performance ratio.
- Protected by utility model No. DE 20 2009 012 369.3.
- Quality and precision "Made in Germany".

PTS-500 NC

PTS-500 NC	技术参数 Technical Data
焊接范围	直径为M3-M10或Ø 2-8 mm的碳钢、不锈钢、铜及铝合金的螺柱和销钉；直径为M3-M10或Ø 2-8 mm的铝和铜合金螺柱和销钉。
Welding range	Studs and pins of steel and stainless steel from M3-M10 or Ø 2-8 mm in diameter and of aluminium and brass from M3-M10 or Ø 2-8 mm in diameter.
T型槽工作台面	600 mm×375 mm
Clamping surface T-slot board	600 mm×375 mm
X轴工作行程	500 mm
Working area X	500 mm
Y轴工作行程	350 mm
Working area Y	350 mm
工作台负载	50 kg
Load capacity of table board	50 kg
操作精度	± 0.15 mm
Operating accuracy	± 0.15 mm
重复精度	± 0.05 mm
Repeating accuracy	± 0.05 mm
定位速度	最高100 mm/s
Positioning speed	max. 100 mm/s
输入电源	230 V, 50/60 Hz, 10AT
Mains supply	230 V, 50/60 Hz, 10AT
压缩空气压力	5-7 bar
Compressed-air supply	5-7 bar
尺寸大小	1500×1950×1050 mm (宽×高×长, 不含控制系统)
Dimensions	1500×1950×1050 mm (w×h×d, without control system)
重量	260 kg
Weight	260 kg



PTS-500 NC从手动设备到全自动螺柱焊接系统的简单解决方案



PTS-500 NC: A simple step...from hand units to fully automated stud welding systems.

MA-400S



基于PC的实时控制系统
PC-based real-time control system.



这个CNC控制系统内含有专为SOYER® KTS CNC螺柱焊机设计的图形编程系统。由单个工件到大量生产，它始终保持高性能，保证产品质量。因为所有有关的数据能通过CNC控制系统显示、监控及分析。

This CNC control system with graphic programming system is specifically designed for SOYER® KTS CNC stud welding machines. It guarantees an invariably high quality performance from individual components to mass production. This is because all the relevant data is displayed, monitored and evaluated on the monitor of the CNC control system.

产品特点

- 多语言程序版本；
- 支持最多8/4轴（伺服/步进）；
- 支持所有螺柱焊接工艺（储能、拉弧）及送料装置（送钉机输送、导槽进钉、单个取钉）；
- 监控所有轴的运行误差，并在发生错误时自动关闭电机（仅限伺服型）；
- 支持宏编程；
- 零点偏移（所有焊头、单个焊头、所有零件、单个零件）；
- 再焊接选项（单个螺柱、多个螺柱、从某个位置）；
- 焊头自动设定操作（仅限Z轴）；
- 将焊接参数传输至焊机（仅限BMS-10P及BMK-16i）；
- 系统需求：IBM兼容至少2 GHz的PC（建议奔腾2.4 Ghz或其他兼容系统），MS Windows 98/2000/XP。

Product Highlights

- Multilingual program version.
- Supports up to 8/4 axes (servo / stepper).
- Supports all welding processes (CD, DA) and feeding devices. (feeders, launching ramps, pickup stations)
- Monitoring of all axes with respect to contouring errors and automatic motor switch-off in case of errors (only servo type).
- Support for macro programming.
- Zero point shift (all welding heads, individual welding heads, all parts, individual parts).
- Reweld option (individual studs, several studs, from a certain position).
- Automatic setting operation for welding heads. (Only with Z axis)
- Transmission of the welding parameters to the welding device. (only BMS-10P and BMK-16i)
- System requirements: IBM compatible PC with at least 2 Ghz (Pentium 2.4 GHz or compatible system recommended), MS Windows 98/2000/XP.

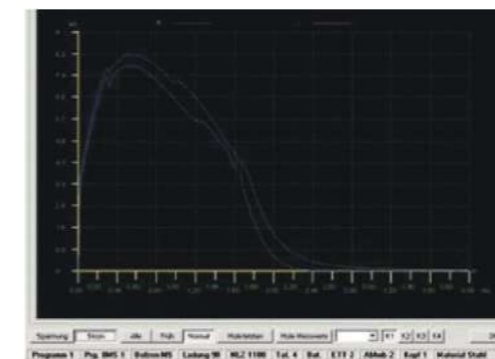
MA-400S

带有图形编程的MA-400S CNC控制系统能直接从数据终端输入所有焊接参数。操作极为便利，并且可以高精且准确地执行复杂的焊接任务。

The MA-400S CNC control system with graphical programming system allows all welding parameters to be entered directly from a data terminal. Working processes are considerably facilitated and complicated welding tasks can be carried out with a high degree of precision and accuracy.



支持所有SOYER® 于2001年起所生产的KTS-CNC机（伺服型及步进型）。
Support for all SOYER® KTS-CNC machines (servo type and stepper type) manufactured as from 2001.



焊接时自动传输最后的监测值。
Automatic transmission of the last measurement values during welding operations.



直接从控制台远程控制SOYER® 的BMS-10P及BMK-16i焊机。
Remote control of the BMS-10P and BMK-16i SOYER® welding devices via the console.



所有焊机上的子菜单均能直接远程控制对话。
All submenus of the welding devices can be reached directly via the remote control dialogue.