

Arc stud welding equipment.

The MICROMARK drawn arc stud welding unit : This line of stud welding equipments is a unique, fully programmable, microprocessor-controlled stud welding system with great versatility and near-perfect reliability. Features include : 9 memories, immediate digital verification of all weld parameters, diagnosis of weld and system deviations, self-monitoring system, computer/printer connection, large display.... In other words, you'll get a perfect weld every time - or no weld at all. And in either case, you'll know why.

MicroMark 2100



THOMAS

Welding systems

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| <u>Weldable studs:</u> | Ø 3 - Ø 22 (M24) in Steel and Stainless Steel |
| Stud Welding current | 100 A to 2100 A |
| Stud Welding time | 12 mS to 1400 mS |
| Stud Welding Range | Ø 3 - Ø 22 (M24) |
| Short Cycle Range | M 3 to M 12 |
| Duty cycle | up till 60 studs / min. |
| Incoming power | 400 V - 63 A |
| Size (w x h x l) | 520 x 730 x 820 mm |
| Protection | IP 21 |
| Insulation Class | 1 |
| Optional | 2 outputs with separate settings |

Standard Features

- **The High Level Digital Advantage** Possibly the most popular feature of the MicroMark series. Our microprocessor-based systems are proven to be more reliable and repeatable than conventional systems, since the equipment itself monitors, controls and display the quality of each weld it makes. Features include: diagnosis of each weld and system deviations, self-monitoring system, current & voltage tolerance ranges adjustable, large display, Lift check mode (lift & plunge time measurement), permanent record of 400 last welds parameters.
- **Communication** This allows an external device to download all weld parameters and functions of the welder. There are two different schemes supported:
 - Powerful control scheme using RS-232 communication for downloading weld parameters. (PC or Printer)
 - A PLC can achieve sophisticated control of the welder using discrete I/O lines (optional features). This can include changing weld schedules, identifying specific errors and collecting welds quality data, etc.
- **Pilot arc Adjustment** : The Pilot Arc is the part of the weld sequence, which starts the arc. Typically this setting does not need to be adjusted. However, there are some special circumstances where it is beneficial to adjust it.
- **Hammer mode** assists in penetrating rust, mill scale or even paint.
- **High Strength Steel** Developed for advanced high strength steels..
- **Multi-Gun** is the ability to expand with multiple output ports. This is beneficial when there is a need for multiple stud sizes that a single operator must install.
- **Memory Presets** The memory preset module (9 memories) can store ALL information related to a weld schedule. This includes the main weld current parameters, programmable pilot arc, gas mode and limits.

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Welding systems

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- **Feature Locking** *Eliminates concerns about unwanted parameter adjustments. This feature can lock all, some or none of the MicroMark features. To access a locked feature, a password must be entered.*
- **Maintenance Tracker** *This feature counts the actual number of welds. The user can set an alert or notification point*

Additional Standard Features

- *Measurement of lift & drop time welding guns, integrated self-protective device in case of excess temperature, phase failure control, weld counter, multilingual operator guidance, function tests without welding, ...*

Optional Features

- **Auto Feed** *The MicroMark series welders have been designed with auto-feed in mind. The power supply directly controls the gun and the feeder bowl. This can work with hand held, production or robotic applications.*
- **Integrated Gas Arc** *This allows for welding using shielding gas instead of flux and ferrule combination. Gas arc is also required for welding alloys such as aluminum. Pre-flow and Post-flow values are controlled.*

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Welding systems

A – 68 HD Gun

This handy, electronically controlled gun with automatic length compensation and continuous hydraulic damping is designed for universal use.

This compact gun is ideal for fielding welding work.

Features

- *Centric gun bowl due to ball guide system and special processing technology.*
- *Compact and rugged for heavy duty use.*
- *New designed damping system.*
- *Precision ball guide protected from weld spatter.*
- *Automatic length compensation ensured by new type of lift mechanism.*
- *Lift adjustable (from 0 to 5 mm) in steps of 0.25 mm.*
- *Extensive accessories (stands, special stud chuck, ferrule grip, foot plates, etc.) enable optimal adaptation to the respective welding task.*



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| Stud Welding Range | Ø 3 to Ø 22 mm (M 24) |
| Stud Length | Any length |
| Welding process | Drawn Arc |
| Plunge settings | Infinitely adjustable |
| Lift settings | 0 - 5 mm (step : 0,25 mm) |
| Plunge Dampener | Hydraulic |
| Cables length | 2,5 meters |
| Cables Section | 95 mm ² |
| Protection: | IP 2x |
| Weight | 1,9 Kg. (without cable) |