

High Performance Dedicated Arc Welding Robot with 1374mm reach

TA-1400WG

TAWERS
The Arc Welding Robotic Solution

FEATURES & BENEFITS:

- **EAC Technology:** Embedded Arc Control Technology - A common 64-bit control platform and interface operating 140-250x faster than conventional systems provides remarkable new high-performance Pulse and CV (SP-MAG) welding

TAWERS™ arc welding robots are the culmination of years of research combining the new line of high performance TA series manipulators with the latest generation WG welders fused together using EAC™ technology. The next generation in robotic welding solutions is offered in a broad range of models to maximize your productivity through world-class advancements unique to the TAWERS platform.

TAWERS robots are optimized for speed with larger motors and drives, increased acceleration and a high rigidity FEA optimized design. Exceptionally high maximum robot speeds maximize your performance by driving down cycle times.

These advances combined with innovative robot welder communication, industry leading welding technologies and effective software and hardware improvements create powerful new solutions for your arc welding challenges.

Feature and Benefit Summary

Embedded Arc Control Technology

A common 64-bit control platform and interface operating 140-250x faster than conventional systems provides remarkable new high-performance Pulse and CV (SP-MAG) welding solutions.

Ultra-low Spatter via SP-MAG

New welding process brings together the major benefits of Pulse and CV welding processes into one process – low heat input, low susceptibility to arc blow, wide process windows across entire amperage range, excellent thin material and gap capability.

Groundbreaking Feedback Control

Produces extremely fast, near real-time control of the welding arc with no performance compromise, superior gap handling, while maintaining wide process windows during low or high speed welding.

Arc Data Monitor

A high resolution arc data monitoring system whose effectiveness is enhanced by virtue of the superb stability of the wire feed and arc control is designed into every TAWERS robotic arc welding solution.

TAWERS WELDER

The 64 bit TAWERS robotic welding solution control platform is designed to increase your welding quality while boosting your production capabilities with exciting new technologies.

Revolutionary Welding Process SP-MAG

SP-MAG is a new welding process developed out of industry needs for a more versatile CV welding process. Where conventional and even high-end CV processes have tried to produce low-spatter, high-speed weldings – they have missed the mark ultimately demanding more amperage levels or slower welding speeds to achieve their goals. TAWERS has successfully met these challenges by bringing together the major benefits of Pulse and CV into one process SP-MAG...

- Ultra low spatter levels
- Low heat input
- Low susceptibility to arc blow
- Wide process windows across entire amperage range
- Excellent thin material and gap handling capability

Ultra Low Spatter Process SP-MAG

Spatter is the enemy of every company, big or small. The TAWERS solution takes aim at not only the arc physics that generate spatter, but also other factors that directly impact spatter generation. SP-MAG combined with advances in welding arc starting and ending have led to an extreme decrease in the amount of spatter generated during the entire welding process. Extensive testing has shown that a switch from conventional CV to SP-MAG could result in a savings of...

- 100-150 lbs of less spatter generated per arc (200A, 60 per cent arc on, 80 per cent eff., 1 shift 240 days/yr)
- 100-150 lbs less wire purchased per arc
- Reduced or eliminated secondary cleanup operations saving manpower, floor space and limiting total work in process