

# Copilot™

## Collaborative Welding Systems



### Quick Specs

#### Industrial Applications

Contract and OEM manufacturing of components for automotive, recreational vehicles, farm and construction machinery, marine, furniture, and more. Confab, worksite, and field fabrication.

#### Processes

MIG (GMAW), Accu-Pulse®, Versa-Pulse™\* and RMD®\*

\*With Auto-Continuum power source only.

#### Product Type

Collaborative welding robot or cobot provides a combined station for:

- A) Welding envelope
- B) Loading and unloading
- C) Programming
- D) Tool installation and change

#### MIG Gun Options

Air-cooled and water-cooled

#### Machine Dimensions (H x W x D)

84 x 48 x 52 in. (2,134 x 1,219 x 1,321 mm)

#### Payload Capacity

1,500 lb. (680 kg) with feet  
750 lb. (340 kg) on casters

#### Input Power

Copilot: 110 V  
See page 2 and 3 for Auto Deltaweld™ and Auto-Continuum™ requirements

**Copilot is our entry-level collaborative welding cell for welders new to robotic welding. It's available in air-cooled and water-cooled configurations.**

#### Entry-level collaborative welding cell.

Operator loads and unloads from a single station that can be shared with the robot envelope. Great for new-to-automation welding challenges and for experienced robotic welders who need affordability and the ability to address high-mix, low-volume operating scenarios in a small footprint.

#### Welding-centric software and programming that is easy to use.

**Ships partially assembled** with a video setup guide and instructions. Copilot is mounted on castor wheels for easy positioning and placement.

**Easy to relocate.** Relocate your cobot workstation in four easy steps: unplug equipment and raise leveling feet, push by hand, re-level feet, and plug in equipment.



Copilot air-cooled system with Auto Deltaweld™ 350 shown.

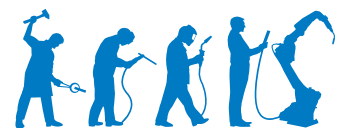
#### Miller recommends



Visit [HobartBrothers.com](http://HobartBrothers.com) for your filler metal solutions.



Major components except torches, consumables, and power supplies. Refer to specific component warranty for more information.



**Evolve Your Welding™**



#### Miller Welding Automation

An ITW Welding Company  
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Carol Stream, IL 60188 USA

#### Equipment Sales

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Email: [MWA.Sales@millerwelds.com](mailto:MWA.Sales@millerwelds.com)

#### MillerWelds.com



# Copilot™ Air-Cooled System

**Air-cooled Copilot is our basic unit for multiple materials – mild carbon and alloyed steels, stainless, aluminum\* – for weld schedules up to 300 amps at 100% duty cycle with 3-phase input power.**

**Programming puck** reduces the need to interact with the pendant.

**Tregaskiss® TOUGH GUN® CA3 robotic MIG gun** is engineered for accurate, reliable and repeatable performance that maximizes production uptime and throughput.

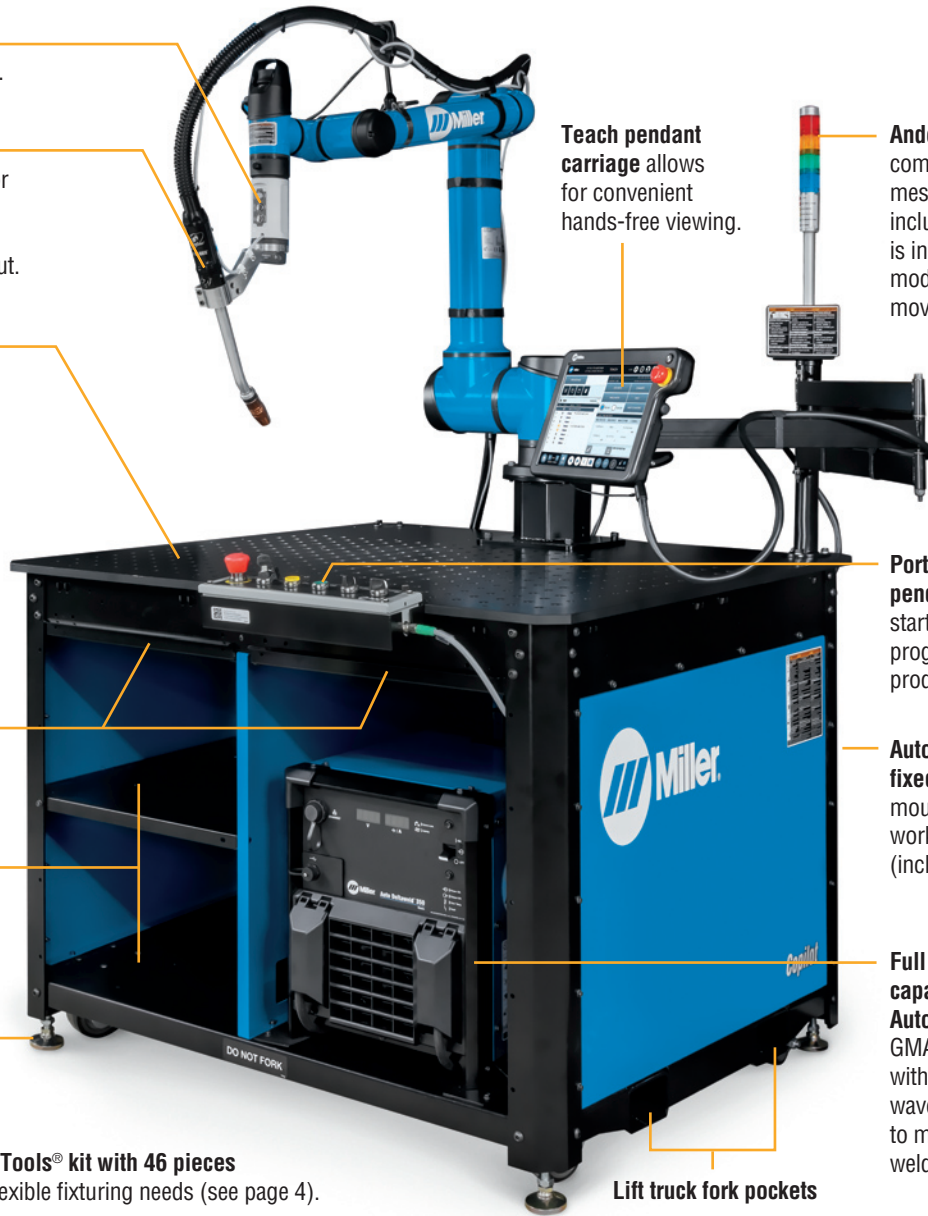
**Weld-ready tool surface** is 48 x 48 inches and outfitted with 5/8-inch tooling holes that are spaced 2 x 2 inches in a 42 x 30 inch pattern on center. Compatible with Bluco® and Strong Hand Tools®, among others.

*Note: Bluco® is a registered trademark of Bluco® Corporation. Strong Hand Tools® is a registered trademark of Strong Hand Tools®.*

**Debris catch trays**

**Extra storage**

**Caster wheels and leveling feet**



**Teach pendant carriage** allows for convenient hands-free viewing.

**Andon light stack** communicates messages to operator, including if system is in auto or teach mode, robot is moving, and error.

**Portable operator pendant** used for starting and stopping programs in production.

**Auto Deltaweld™ Basic fixed wire drive** mounted behind cobot works with spool holder (included) or bulk wire.

**Full complement of capabilities with Auto Deltaweld 350™.** GMAW power source with Accu-Pulse® and waveform capability to meet advanced welding requirements.

**Lift truck fork pockets**

**System includes a Strong Hand Tools® kit with 46 pieces** including clamps and stops for flexible fixturing needs (see page 4).

## Copilot™ Air-Cooled System Specifications

Input Power	Standard Arc Welding Configuration	Payload Capacity	Approximate Dimensions		Approximate Shipping Weight
Copilot: 110 V Auto Deltaweld™ 350: 208/230/460 V, 3-phase, or 230 V, 1-phase, 60 Hz	Arc welder: Miller Auto Deltaweld™ 350 or Auto-Continuum™ 350 Wire drive: Miller Auto Deltaweld™ Basic fixed wire drive Robotic air-cooled MIG gun: Tregaskiss® TOUGH GUN® CA3 with AccuLock™ consumables	1,500 lb. (680 kg) with feet 750 lb. (340 kg) with casters	Height: 84 in. (2,134 mm) Width: 48 in. (1,219 mm) Depth: 52 in. (1,321 mm)	Max. tool height: Contact Miller Load height: 37 in. (940 mm)	1,700 lb. (771 kg)

\*Some filler metal wires with lower column strength may need additional considerations for feeding. Discuss with our team what challenges the Copilot is ready to tackle.

## Copilot™ Water-Cooled System

Water-cooled Copilot provides the power for hotter and heavier welding challenges requiring up to 500 amps at 100% duty cycle – includes a Tregaskiss® I.C.E.® torch and Coolmate™ 1.3 with coolant.

**Programming puck** reduces the need to interact with the pendant.

**Tregaskiss® TOUGH GUN® CA3 robotic MIG gun with I.C.E.® technology** is engineered for accurate, reliable and repeatable performance that maximizes production uptime and throughput.

**Weld-ready tool surface** is 48 x 48 inches and outfitted with 5/8-inch tooling holes that are spaced 2 x 2 inches in a 42 x 30 inch pattern on center. Compatible with Bluco® and Strong Hand Tools®, among others.

*Note: Bluco® is a registered trademark of Bluco® Corporation. Strong Hand Tools® is a registered trademark of Strong Hand Tools®.*

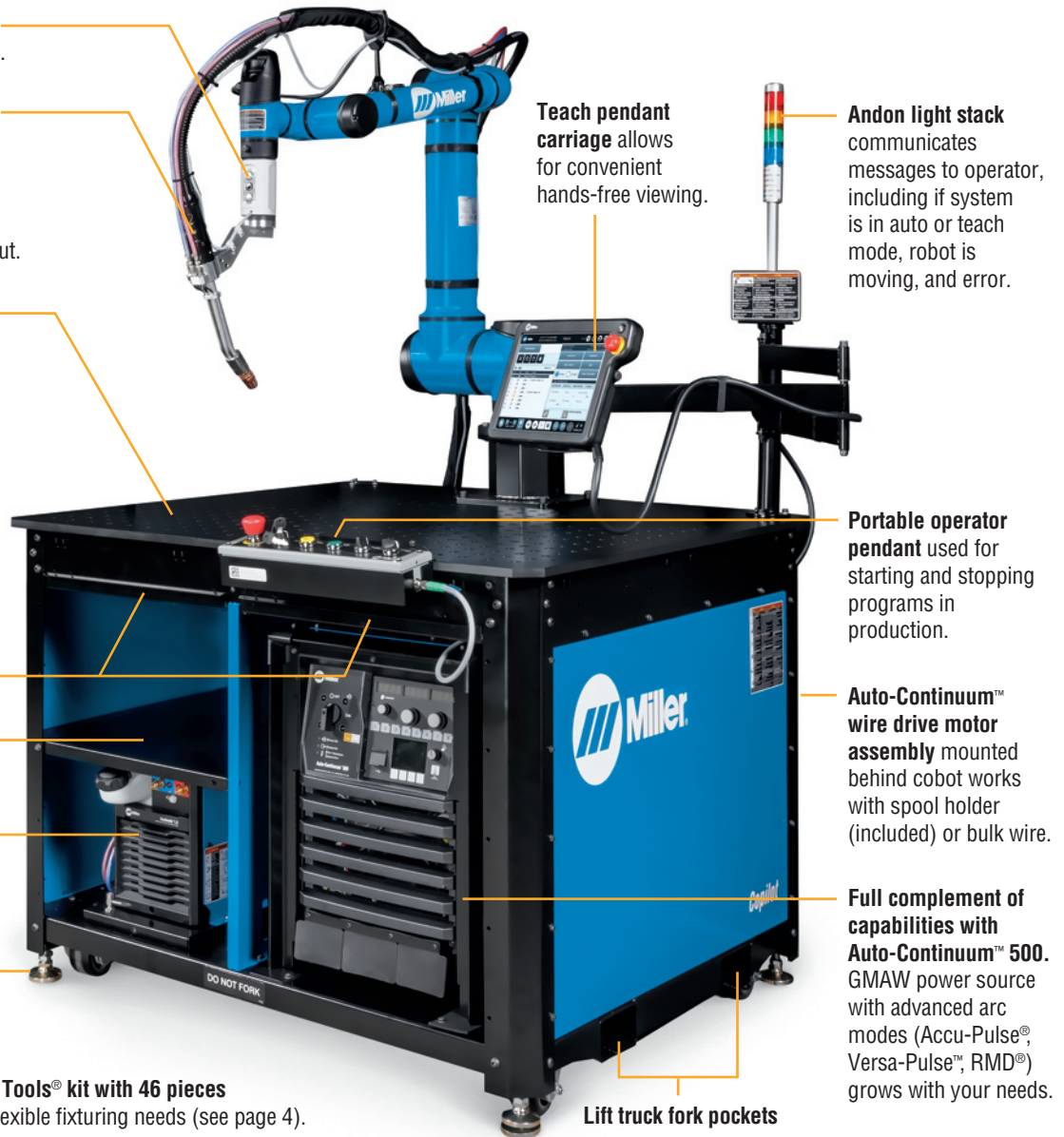
**Debris catch trays**

**Extra storage**

**Coolmate™ 1.3** provides added cooling for hotter applications. Water-cooled Copilot ships with four gallons of coolant 11.

**Caster wheels and leveling feet**

**System includes a Strong Hand Tools® kit with 46 pieces** including clamps and stops for flexible fixturing needs (see page 4).



**Teach pendant carriage** allows for convenient hands-free viewing.

**Andon light stack** communicates messages to operator, including if system is in auto or teach mode, robot is moving, and error.

**Portable operator pendant** used for starting and stopping programs in production.

**Auto-Continuum™ wire drive motor assembly** mounted behind cobot works with spool holder (included) or bulk wire.

**Full complement of capabilities with Auto-Continuum™ 500.** GMAW power source with advanced arc modes (Accu-Pulse®, Versa-Pulse™, RMD®) grows with your needs.

**Lift truck fork pockets**

## Copilot™ Water-Cooled System Specifications

Input Power	Standard Arc Welding Configuration	Payload Capacity	Approximate Dimensions		Approximate Shipping Weight
Copilot: 110 V Auto-Continuum™ 500: Auto-Line™ 230–575 V 3-phase, 50/60 Hz	Arc welder: Miller Auto-Continuum™ 500 Wire drive: Miller Auto-Continuum™ wire drive motor assembly Coolant system: Miller Coolmate™ 1.3 Robotic water-cooled MIG gun: Tregaskiss® TOUGH GUN® CA3 with I.C.E.® technology and AccuLock™ consumables	1,500 lb. (680 kg) with feet 750 lb. (340 kg) with casters	Height: 84 in. (2,134 mm) Width: 48 in. (1,219 mm) Depth: 52 in. (1,321 mm)	Max. tool height: Contact Miller Load height: 37 in. (940 mm)	1,700 lb. (771 kg)

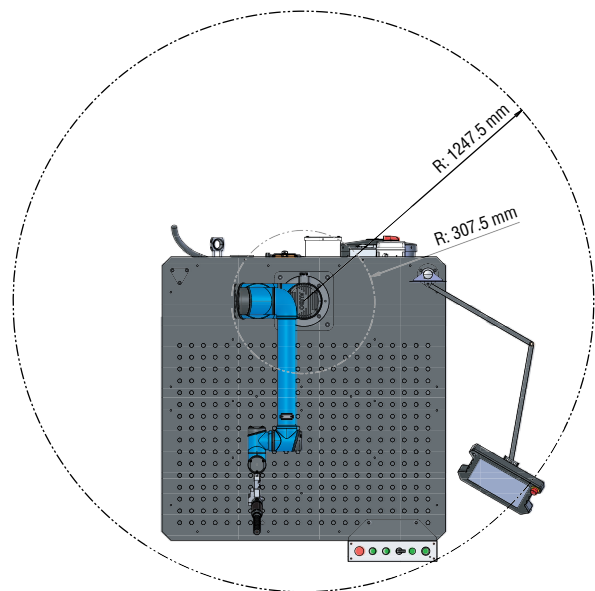


## Strong Hand Tools® Kit



All Copilot systems ship with a 46-piece Strong Hand Tools® kit that includes locating pins, pliers, clamps, edges, and blocks.

## Copilot™ Work Envelope



Note: Approximate dimensions, contact us if you are building tooling.

## Contact Us

Need help or have questions about your Cobot system? Our 24/7 service line can assist you when you need it most. Our service team can help you with operation questions, or to arrange preventative maintenance. The job plate on the back of your system will provide you with quick access to important information about your system.

**Miller Welding Automation** is your single point of contact for configuring and ordering your Cobot system.

**Continued technical support** can be counted on from Miller Welding Automation in Carol Stream, Illinois. Please call our hotline number: (630) 653-6819.

**Spare parts and wear items** are provided in your initial purchase of Cobot. Spare parts can be ordered from Miller Welding Automation.

## Ordering Information To order, call (888) 843-7693 or email [MWA.Sales@Millerwelds.com](mailto:MWA.Sales@Millerwelds.com)

System	Stock No.	Description	Qty.	Price
Copilot™ Air-Cooled Systems	951000110	Includes Auto Deltaweld™ 350, Auto Deltaweld™ Basic fixed wire drive, welding robot, TOUGH GUN® CA3 robotic MIG gun, integrated welding table, Strong Hand Tools® kit, and all required interconnecting cables		
	951000111 (Available in Canada only)	Includes Auto Deltaweld™ 500 (575 V), Auto Deltaweld™ Basic fixed wire drive, welding robot, TOUGH GUN® CA3 robotic MIG gun, integrated welding table, Strong Hand Tools® kit, and all required interconnecting cables		
	951000108	Includes Auto-Continuum™ 350, Auto-Continuum™ wire drive motor assembly, welding robot, TOUGH GUN® CA3 robotic MIG gun, integrated welding table, Strong Hand Tools® kit, and all required interconnecting cables		
Copilot™ Water-Cooled System	951000105	Includes Auto-Continuum™ 500, Auto-Continuum™ wire drive motor assembly, welding robot, TOUGH GUN® CA3 robotic MIG gun with I.C.E.® technology, Coolmate™ 1.3 (301617) with four gallons of coolant 11, integrated welding table with pullout shelf for Coolmate, Strong Hand Tools® kit, water lines, cable sleeve, and all required interconnecting cables		

Date:

Total Quoted Price:

Distributed by:

