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Deltaweld 350/500 Systems

MIG Welding Systems

Quick Specs

Heavy Industrial Manufacturing
Advanced manufacturing
Transportation and earth moving vehicles
Pressure vessels and pipes
Structural steel fabrication
Sheet metal fabrication
Light-gauge tube and sheet

Processes
MIG (GMAW)
Flux-cored (FCAW)
Accu-Pulse® MIG (GMAW-P)
High-deposition MIG (HD-MIG)
RMD®

Input Power	400 V, 3-phase, 50/60 Hz
Rated Output	Deltaweld 350: 350 A @ 60% Deltaweld 500: 500 A @ 100%
Output Range	Deltaweld 350: 20-425 A, 10-38 V Deltaweld 500: 30-650 A, 10-44 V

The new standard in advanced manufacturing, fully featured straight out-of-the-box. ONE system to tackle ANY job.

Intellx Elite feeder
- Designed for durability - The strongest and most durable drive system on the market, ensuring consistent and reliable wire feeding regardless of the environment.
- Designed for productivity - Loaded with weld processes to increase the deposition rate on thicker material and eliminates the need for a TIG root run on pipe applications.
- Designed for quality ensurance - Equipped with tools to ensure that correct weld parameters are used.

Easy to use
EZ-Set simplifies parameter setup based on material thickness, removing complexity.
EZ-Set can be applied to all the advanced weld processes featured in the Deltaweld system.

WFS
MATERIAL THICKNESS

Pulse capable
Accu-Pulse offers a more forgiving arc and compensates for variations in operator technique, providing a wider operating window.

Insight Core™
Insight Centerpoint™

Optional Welding Intelligence™ weld monitoring system. Get more done, produce higher-quality welds and control costs. See page 4 for more information.

Deltaweld 500
with Running Gear and Cooler

Weld programs:
The system provides out-of-box weld programs for:
- Steel
- Stainless steel
- Aluminium
- Nickel
- Copper - nickel
- Silicon - bronze
- Titanium

TRUE BLUE® 3YR. WARRANTY

Power source is warranted for three years, parts and labor.

Miller®

Deltaweld® 350/500 System Processes

The Deltaweld system is designed for advanced manufacturing and is equipped with weld processes developed by Miller to increase productivity and/or increase the quality of the weld. Programs have been developed to suit applications such as:

- Out of position welding with solid and flux cored wires.
- High deposition on thick material.
- Pipe root and gap filling on thin materials.
- Low spatter and adaption to poor parts fit-up.

Best For	Standard Spray	HD MIG	Accu-Pulse	Short Circuit	RMD
Deposition	A	A	A	D	D
Gap filling	D	D	B	A	A
Low heat input	D	C	B	A	A
Out-of-position welds			A	B	B
Low spatter	A	A	A	C	B
Thick metals	A	A	A	D	D
Thin metals			B		
Increased travel speed	A	A	A	B	C

HOT → COLD

Accu-Pulse®

A Miller unique Pulse process suitable for majority of industrial welding applications Most adaptive arc, compensating for less perfect fit-up and "tip-to-work piece" variations on any plate thickness. Designed for all weld positions

High-deposition MIG (HD MIG)

- Higher deposition rate and higher travel speed on thicker materials.
- Better bead appearance and less material distortion.

RMD®

- Extremely low heat input.
- Can replace TIG welding on pipe root applications.
- Ideal for bridging gaps on thin materials.

Deltaweld® 350 Specifications (Subject to change without notice.)

CV DC 3 Phase

Process	Output rating			Amps input at rated output (50 Hz)	Dimensions (including lifting eye)	Net weight (kg)
	Current (Amperes)	Voltage (DC)	Duty cycle (%)	400 VAC		
GMAW (MIG)	300	29	100	15.2	H: 568 mm W: 390 mm D: 740 mm	52
	350	31.5	60	19.2		
	425	35.3	30	25.6		

Deltaweld® 500 Specifications (Subject to change without notice.)

CV DC 3 Phase

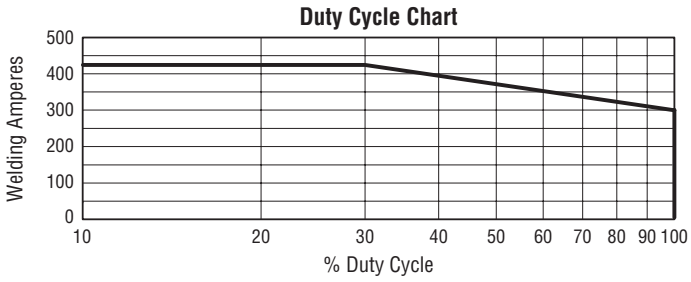
Process	Output rating			Amps input at rated output (50 Hz)	Dimensions (including lifting eye)	Net weight (kg)
	Current (Amperes)	Voltage (DC)	Duty cycle (%)	400 VAC		
GMAW (MIG)	500	39	100	33.4	H: 567 mm W: 390 mm D: 804 mm	66
	575	43	60	41.5		
	650	44	25	48.4		

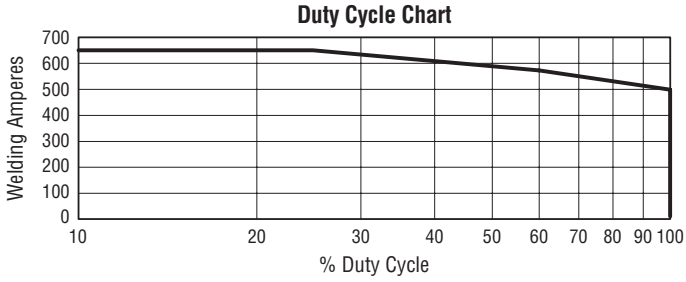
Intellx™ Feeder Specifications (Subject to change without notice.)

CV DC

Input Power	Welding Power Source	Input Welding Circuit Rating	Wire Feed Speed	Dimensions (H x W x D)	Net weight (kg)
50 VDC	Deltaweld 350 or 500	600 A at 113 VDC, 60% duty cycle	1.3 - 20 m/min.	413 x 314 x 708 mm	20.3

Deltaweld® 350/500 Performance Data





Intellx™ Elite feeder features

Accu-Mate™ connection (for Miller power lin) aligns the gun perfectly in the drive-roll carrier – preventing the gun from being pulled loose and providing consistent wire feeding. A Euro-connector is included in the delivery.

Drive rolls and guides are common with other Miller® industrial feeders (use existing, not new parts).

Inlet guide and intermediate guide installation is toolless.

Rotatable drive assembly allows operator to rotate the drive, eliminating severe bends in the wire feed path. This extends gun-liner life and aids in feeding difficult wires.

- Full color LCD display
- Weld sequence control
- Trigger select
- Trigger dual schedule
- Memory slots
- Locks and Limits
- Remote voltage
- Arc control
- Insight Centerpoint Premium compatible
- EZ-Set
- Out-of-Box programs
- Auto thread and auto purge
- XR plus push-pull gun compatible

Soft keys to easily navigate menus

Full-color LCD screen to simplify the setup and operation of a fully featured feeder

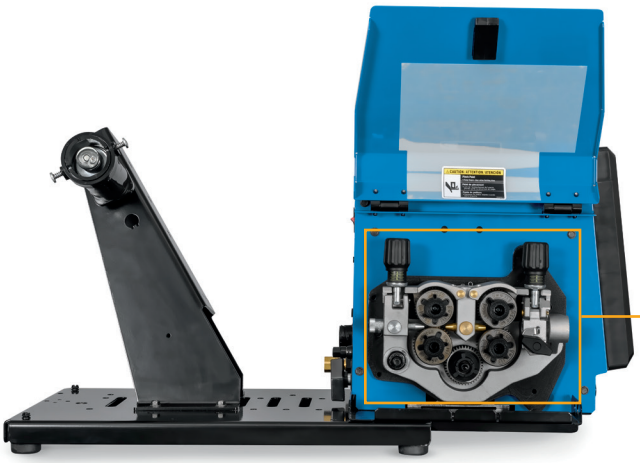
Arc control to fine tune welding arc

Memory buttons for quick program recall

Trigger connections for standard MIG gun and XR-Aluma-Pro™ Plus

Intellx™ Elite feeder
Drive mechanism

- Rotatable drive
- Wire jog and purge
- Optional spool cover available
- Optional feeder swivel
- Optional running gear for feeder



Heavy duty drive system
Four drive rolls

Insight Welding Intelligence™

With an Insight weld monitoring system you can get more done, produce higher-quality welds and control costs.

Insight Core™

Insight Core is an easy-to-use welding information solution that gives visibility into your operation so you can improve productivity.

- **Measure welding productivity**. See each welder's arc-on time to set baselines, plan improvements and measure goals.
- **View easy-to-understand reports**. Dashboards show trends and develop reports. Compare welders, cells and plants.
- **Identify welding costs**. Make improvements to reduce expenses.
- **Easily install and use**. Just connect it to the internet. View secure data on any web-connected device anywhere.

Insight Centerpoint™ (Purchased license(s) of Centerpoint required.)

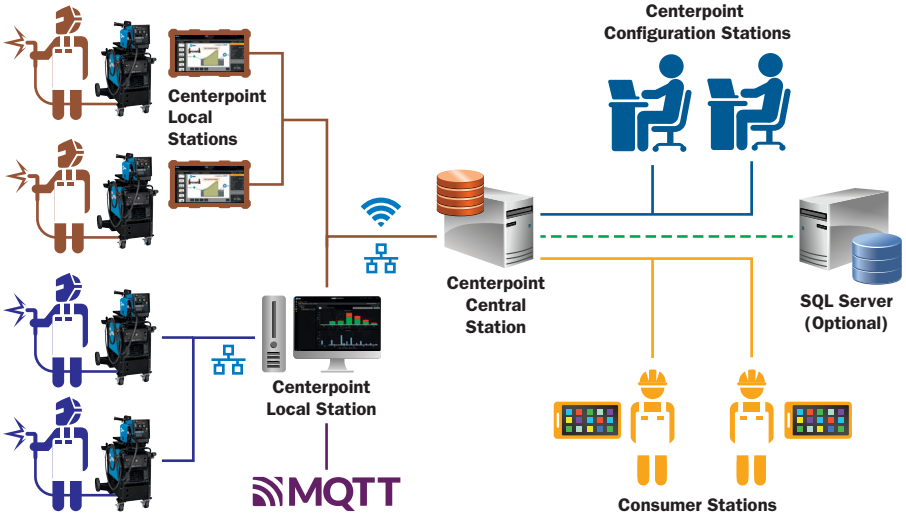
On-premises application providing productivity/utilization metrics, capture of welding parameters, operator weld sequence governance, and integration with enterprise IIoT solutions. Scalable to end user needs.

- **Measure welding productivity**. See each welder's arc-on time to set baselines and plan improvements. Capture activities to understand downtime reasons.
- **Govern operator tasks**. Through an easy-to-use operator interface direct welding and non-welding tasks to follow standard work practices, reduce out of sequence welds, and prevent missing welds.
- **Reduce training costs**. Utilize Centerpoint as the "Digital Mentor" to train new welders on proper production steps freeing up senior personnel for more productive activities.
- **Configure weld process remotely**. Full fleet management allows configuration of Deltaweld settings from Centerpoint.

Modes of operation

- **Basic mode** included at no cost.
- **Premium mode** requires a purchased capability key for each Deltaweld.

301485 Centerpoint v10 Single License
301703 Centerpoint Basic Capability Activation
301490 Centerpoint Premium Capability Activation



Deltaweld 350 / 500 system - proposed packages

Deltaweld 350 package

Part number	Description
907853001	Deltaweld 350
301705	Deltaweld Intellx Elite feeder
7500000005	Deltaweld cooler
7600000001	Deltaweld running gear
7400000021	Water cooled interconnection cable, 3 meters

Deltaweld 350 with Insight Centerpoint package

Part number	Description
907853003	Deltaweld 350 with Insight Centerpoint
301705	Deltaweld Intellx Elite feeder
7500000005	Deltaweld cooler
7600000001	Deltaweld running gear
7400000021	Water cooled interconnection cable, 3 meters

Deltaweld 500 package

Part number	Description
907854001	Deltaweld 500
301705	Deltaweld Intellx Elite feeder
7500000005	Deltaweld cooler
7600000001	Deltaweld running gear
7400000021	Water cooled interconnection cable, 3 meters

Deltaweld 500 with Insight Centerpoint package

Part number	Description
907854003	Deltaweld 500 with Insight Centerpoint
301705	Deltaweld Intellx Elite feeder
7500000005	Deltaweld cooler
7600000001	Deltaweld running gear
7400000021	Water cooled interconnection cable, 3 meters

XR™ Plus Push-Pull Guns

XR-Aluma-Pro™ Plus Guns
Air-Cooled
301575 4.6 m
301574 7.6 m
301739 10.7 m

Water-Cooled
301576 4.6 m
301577 7.6 m
301740 10.7 m

Available in air- or water-cooled versions in multiple lengths for extended reach with trouble-free, reliable feeding.

Aluminum-series-specific tension setting ensures smooth wire feeding performance with 4000 or 5000 series aluminum wires.

Replaceable feed cable liner is designed to provide consistent arc performance. It also reduces parts cost and service time by allowing a simple means of removing and replacing liner and not the complete feed cable.

Isolated common knurled drive roll helps reduce wear, reducing down time and cost.

Easy-to-rotate self-seating head tube allows for better access into tight spots, providing excellent current transfer.

Serviceability. These guns feature a full-length hook-and-loop seamed leather jacket with integrated strain reliefs for easy cable maintenance and protection. Additionally, the Aluma-Pro Plus guns feature quick con nections between the control cable and electrical components (trigger, motor, potentiometer).

Specifications (Subject to change without notice.)

Model	Welding Current Rating	Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions (H x W x D)	Net Weight (Gun only)
XR-Aluma-Pro Plus (Air-cooled)	300 A at 100% duty cycle	1.8–23 m/min. dependent on feeder used	0.8–1.6 mm aluminum wire Requires gun wire kit **230708** to run 1.6 mm wire	H: 127 mm W: 64 mm D: 432 mm	1.1 kg
XR-Aluma-Pro Plus (Water-cooled)	400 A at 100% duty cycle	1.8–23 m/min.			1.3 kg

Drive Roll Kits and Guides

Select drive roll kits from chart below according to type and wire size being used. Drive roll kits include four drive rolls, necessary guides and feature an anti-wear sleeve for inlet guide.

Wire Size	V-groove for hard wire	U-groove for soft wire or soft-shelled cored wires	V-knurled for hard-shelled cored wires	U-cogged for extremely soft wire or soft-shelled cored wires (i.e., hard facing types)
0.6 mm	**087132**	–	–	–
0.8 mm	**046780**	–	–	–
0.9 mm	**046781**	**044750**	**046792**	–
0.9 and 1.2 mm	**227061***	**244293**	–	–
1.0 mm	**191917**	–	–	–
1.1/1.2 mm	**046782**	**046785**	**046793**	**083319**
1.3/1.4 mm	**046783**	**046786**	**046794**	–
1.6 mm	**046784**	**046787**	**046795**	**046800**
1.8 mm	–	–	–	–
2.0 mm	–	**046788**	**046796**	**046801**

**Included with Intellx feeders. Drive roll is dual-size reversible with one 0.9 mm and one 1.2 mm groove.*

Drive Roll Kits and Guides

Wire Guides

Wire Size	Inlet Guide	Intermediate Guide
0.6–1.0 mm	**221030**	**056206**
1.2–1.3 mm	**221030**	**056207**
1.6–2.0 mm	**221030**	**056209**
2.0–3.2 mm	**229919**	**056211**

Note: When ordering hard wire kits, retain factory-supplied inlet guide

Nylon Guides for Feeding Aluminum

Wire Size	Inlet Guide and Intermediate Guide Kits
0.9 mm)	**293928**
1.2 mm	**293929**
1.6 mm	**293930**

Note: U-groove drive rolls are recommended when feeding aluminum wire.

Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Power source				
Deltaweld 350	**907853001**			
Deltaweld 350 with Insight Centerpoint	**907853003**	Prepared for Insight Centerpoint (activation key required)		
Deltaweld 500	**907854001**			
Deltaweld 500 with Insight Centerpoint	**907854003**	Prepared for Insight Centerpoint (activation key required)		
Feeder, cooler and running gear				
Deltaweld feeder	**301705**	Including Euro-adaptor and drive rolls		
Deltaweld cooler	**7500000005**			
Deltaweld running gear	**7600000001**	For single gas cylinder (optional dual gas cylinder available)		
Interconnection cables				
Air cooled interconnection cable, 3 m	**7400000016**			
Air cooled interconnection cable, 5 m	**7400000017**			
Air cooled interconnection cable, 8 m	**7400000018**			
Air cooled interconnection cable, 15 m	**7400000019**			
Air cooled interconnection cable, 25 m	**7400000020**			
Water cooled interconnection cable, 3 m	**7400000021**			
Water cooled interconnection cable, 5 m	**7400000022**			
Water cooled interconnection cable, 8 m	**7400000023**			
Water cooled interconnection cable, 15 m	**7400000024**			
Water cooled interconnection cable, 25 m	**7400000025**			
Optional accessories				
Handle Deltaweld (just needed if no swivel is ordered)	**7600000006**			
Swivel Deltaweld 500	**7600000007**			
Swivel Deltaweld 350	**7600000013**			
Wheel Kit Intellx Elite feeder	**7600000008**			
Spool cover	**057607**			
Suspension hook	**058435**			
Return cable kit, 400 A, 70 mm², 5 m	**57014340**			
Coolant 3.8 l	**043810**			

Date: **Total Quoted Price:**

Miller recommends Elga® consumables

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Miller®
The Power of Blue®

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