

# Dynasty® 210 DX

TIG/Stick Welding  
Power Source



## Quick Specs



### Industrial Applications

Precision fabrication  
Heavy fabrication  
Pipe and tube fabrication  
Aerospace  
Aluminum ship repair  
Anodized aluminum fabrication

### Processes

AC/DC TIG (GTAW)  
Pulsed TIG (GTAW-P)  
Stick (SMAW)

**Input Power** 120–480 V, 1-phase or 3-phase power

**Amperage Range** 1–210 A (DC)  
2–210 A (AC)

**Rated Output** 210 A at 18 V, 60% duty cycle

**Net Weight** 22.7 kg (50 lb.)

**Upgradeable and expandable.** Front panel memory card data port provides the ability to easily upgrade software and expand product features.

**Pro-Set™** eliminates the guesswork when setting weld parameters. Use Pro-Set when you want the speed, convenience and confidence of preset controls. Simply select the feature and adjust until Pro-Set appears on the display.

**Sleep timer** conserves electricity. This programmable feature will power down the machine if it sits idle for a specific time.

**Auto-Line™ power management technology** allows for any input voltage hookup (120–480 V) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.

**Cooler Power Supply (CPS).** An integrated 120-volt dedicated-use receptacle to power the Coolmate™ 1.3. The power switch on the Dynasty also activates the receptacle to help prevent torch failure.

**Cooler-On-Demand™** feature operates the auxiliary cooling system only when needed, reducing noise, energy use, and airborne contaminants pulled through the cooler.

**Blue Lightning™** high-frequency (HF) arc starter for non-contact arc initiation. Provides more consistent arc starts and greater reliability compared to traditional HF arc starters.

**Wind Tunnel Technology™** protects internal electrical components from airborne contaminants, extending the product life.



**Meter calibration** allows digital meters to be calibrated for certification.

**Fan-On-Demand™** power source cooling system operates only when needed, reducing noise, energy use and the amount of contaminants pulled through the machine.

### AC/DC Stick Features

**DIG** control allows the arc characteristics to be changed for specific applications and electrodes. Lower the DIG setting for smooth running electrodes like E7018 and increase the DIG setting for stiffer, more penetrating electrodes like E6010.

**Hot Start™** adaptive control provides positive arc starts without sticking.

**AC frequency** control adds additional stability when stick welding in AC for smoother welds.

WELD READY

See page 4 for  
package contents


### AC TIG Features


**Independent amplitude/amperage** control allows EP and EN amperages to be set independently to precisely control heat input to the work and electrode.


**Balance** control provides adjustable oxide removal which is essential for creating the highest quality aluminum welds


**Frequency** controls the width of the arc cone and can improve directional control of the arc.

### AC Waveforms

 **Advanced squarewave**, fast freezing puddle, deep penetration and fast travel speeds.

 **Soft squarewave** for a soft arc with maximum puddle control and good wetting action.

 **Sine wave** for customers that like a traditional arc.

 **Triangular wave** reduces the heat input and is good on thin aluminum. Fast travel speeds.

### DC TIG Features

**Exceptionally smooth** and precise arc for welding exotic materials.

**Pulse.** Pulsing can increase puddle agitation, arc stability and travel speeds while reducing heat input and distortion.



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



### ITW Welding – BV

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# Specifications (Subject to change without notice.)



Welding Mode	Input Power	Welding Amperage Range	Rated Output	IP Rating	Phase	Amps Input at Rated Load Output, 50/60 Hz						Max. Open-Circuit Voltage	Dimensions	Net Weight	
						120 V	208 V	240 V	400 V	480 V	KVA				KW
TIG (GTAW)	208–480 V	2–210 A (AC) 1–210 A (DC)	210 A at 18.4 V, 60% duty cycle	IP23	3-phase	—	16	14	9	7	6.0	5.8	80 VDC (11 VDC*)	H: 346 mm (13.6 in.) W: 219 mm (8.6 in.) D: 569 mm (22.5 in.)	22.7 kg (50 lb.)
					1-phase	—	28	24	14	12	5.8	5.8			
	120 V	2–210 A (AC) 1–210 A (DC)	125 A at 15 V, 60% duty cycle		1-phase	26	—	—	—	—	3.2	3.1			
Stick (SMAW)	208–480 V	5–210 A	160 A at 26.4 V, 60% duty cycle	3-phase	—	17	15	9	7	6.1	5.8	80 VDC (11 VDC*)	H: 346 mm (13.6 in.) W: 219 mm (8.6 in.) D: 569 mm (22.5 in.)	22.7 kg (50 lb.)	
				1-phase	—	29	25	15	12	6.0	6.0				
	120 V	5–100 A	90 A at 23.6 V, 60% duty cycle	1-phase	28	—	—	—	—	3.3	3.3				

\* Low OCV sense voltage for stick and Lift-Arc™ TIG.

Certified by Canadian Standards Association to both the Canadian and U.S. Standards. All CE models conform to the applicable parts of the IEC 60974 series of standards.

## Coolmate™ 1.3



- Dynasty® models with CPS turn Coolmate 1.3 on and off
- Power indicator light
- Fluid level sight window
- Rustproof polyethylene-molded coolant tank and filler spout
- Efficient fin and tube heat exchanger
- Filter and coolant filling spout are conveniently located
- Brass-body, positive displacement rotary vane pump provides consistent coolant flow and pressure rating with long pump-life expectancy

Input Power	Maximum Current Draw	Rated Cooling Capacity	Tank Capacity	Dimensions	Net Weight
115 V, 60 Hz	4.7 A (60 Hz)	1,470 W (5,020 Btu/hr.) 1 L/min. (1.1 qt./min.)	4.9 L (1.3 gal.)	H: 320 mm (12.6 in.) W: 219 mm (8.6 in.) D: 620 mm (24.4 in.)	23.2 kg (51 lb.)

## Genuine Miller® Accessories



### Small Runner™ Cart 301318

Designed for Maxstar 210/280, Dynasty 210/280, STH 270 and STi 270, with or without cooler. Cart features single cylinder rack, cable holder and foot pedal holder.



### MH Running Gear 018035026

Designed for Maxstar 210/280, Dynasty 210/280, STH 270 and STi 270, with or without cooler. Easy-to-maneuver two-wheel cart with single cylinder rack, cable holder and storage area.



### Coolmate™ 1.3 300972

Designed to integrate with Maxstar 280 and Dynasty 210/280. For use with water-cooled torches rated up to 280 amps. 4.9 L (1.3 gal.) capacity.

## Memory Cards

### Memory Card Expansion

**301151** 14-Pin Automation Expansion  
Provides the ability to access common automation functions through the 14-pin connection.

**301152** 14-Pin Modbus® Expansion  
Provides the ability to access basic and advanced functions through the 14-pin connection.

**301328** Hot Wire Power Supply Expansion  
Provides the ability to access common hot wire TIG power supply functions.

### Memory Card (Blank) 301080

Blank memory card for transferring data from computer to machine.

## Remote Controls and Switches



### Wireless Remote Foot Control 300429

For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine.



### RFCS-14 HD Foot Control 194744

Maximum flexibility is accomplished with a reconfigurable cord that can exit the front, back or either side of the pedal. Foot pedal provides remote current and contactor control.



### RCC-14 Remote Contactor and Current Control 151086

14-pin plug Side-to-side rotary-motion fingertip control fastens to TIG torch using two hook-and-loop straps.



### RCCS-14 Remote Contactor and Current Control 043688

14-pin plug Up-and-down rotary-motion fingertip control fastens to TIG torch using two hook-and-loop straps.



### SHRC-14 Remote Control

**058040019** 5 m (16.4 ft.)

**058040020** 10 m (32.8 ft.)

**058040021** 20 m (65.6 ft.)

Single-hand control for current only.



### RHC-14 Hand Control 242211020

Miniature hand control for remote current and contactor control.



### Wireless Remote Hand Control 300430

For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine.



### RMS-14 On/Off Control 187208

Momentary-contact switch for contactor control. Rubber-covered pushbutton dome switch ideal for repetitive on-off applications.

## Tungsten

Tungsten	Amp Range	2% Ceriated (AC/DC)	2% Lanthanated (AC/DC)
1.6 mm (1/16 in.)	70–150 A	WC116X7	WL2116X7
2.4 mm (3/32 in.)	140–250 A	WC332X7	WL2332X7
3.2 mm (1/8 in.)	225–400 A	WC018X7	WL2018X7
4.0 mm (5/32 in.)	300–500 A	WC532X7	WL2532X7

# Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Dynasty® 210 DX	907686003	Includes 2.4 m (8 ft.) power cord and gas connection kit		
Dynasty® 210 DX, 4 m Air-Cooled Weld Ready Package	029083216	Includes 2.4 m (8 ft.) power cord, 5 m (16.4 ft.) work cable with clamp, 4 m (13.1 ft.) Miller® WP-26S4AXFD 200 A TIG torch, 3 m (10 ft.) gas hose, 5 m (16.4 ft.) electrode cable with holder, and USB with owner's manuals		
Dynasty® 210 DX, 4 m Water-Cooled Weld Ready Package	029083159	Includes 2.4 m (8 ft.) power cord, 5 m (16.4 ft.) work cable with clamp, 4 m (13.1 ft.) Miller® WP-280S8AAFD 280 A TIG torch, 3 m (10 ft.) gas hose, 5 m (16.4 ft.) electrode cable with holder, Small Runner™ cart, Coolmate™ 1.3 with coolant, and USB with owner's manuals		
<b>Accessories</b>				
Small Runner™ Cart	301318			
MH Running Gear	018035026	MH two-wheeled cart with cylinder rack		
Coolmate™ 1.3	300972	115 V, 60 Hz, <b>CE</b> . <i>Requires coolant</i>		
Adapter Cord	255814	Supplies power to 115 V cooler ( <i>not required for Coolmate 1.3</i> )		
Industrial Coolant	043810	3.78-liter plastic bottle ( <i>must be ordered in quantities of 4</i> )		
Memory Card Expansion	301151 301152 301328	14-pin automation expansion 14-pin Modbus® expansion Hot wire power supply expansion		
Memory Card (Blank)	301080			
Stick Welding Cable Kit	058066040	200 A, 35 mmq, 5 m (16.4 ft.)		
Work Cable with Clamp	057014148 057014149	300 A, 50 mmq, 3 m (9.8 ft.) 300 A, 50 mmq, 5 m (16.4 ft.)		
TIG Torch				
Tungsten		See page 3		
Helmet				
Gas Hose				
<b>Remote Controls</b>				
Wireless Remote Foot Control	300429	Foot control with wireless 27.4 m (90 ft.) operating range		
RFCS-14 HD	194744	6 m (20 ft.), heavy-duty foot control		
RCC-14	151086	8 m (26.5 ft.), remote current/contact side-to-side rotary control		
RCCS-14	043688	8 m (26.5 ft.), remote current/contact up-and-down rotary control		
SRHC-14	058040019 058040020 058040021	5 m (16.4 ft.), single-hand remote control for current only 10 m (32.8 ft.), single-hand remote control for current only 20 m (65.6 ft.), single-hand remote control for current only		
RHC-14	242211020	6 m (20 ft.), remote current/contact hand control		
Wireless Remote Hand Control	300430	Hand control with wireless 91.4 m (300 ft.) operating range		
RMS-14	187208	8 m (26.5 ft.), momentary-contact switch for contactor control		

Date:

Total Quoted Price:

Miller recommends  consumables

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