









Dimension™ 650 with ArcReach Technology

Part No. MR907618001

Bigger Capabilities in a Smaller Package





GAME-CHANGING TECHNOLOGIES CAN STOP YOU FROM WASTING HOURS EVERY DAY.

ArcReach welding technology minimises the non-valueadded time spent walking to and from the power source and maximises arc-on time, weld quality and job site safety.



APPLICATIONS

Fabrication and Construction Heavy Manufacturing Maintenance/Repair Pressure Tank/ Vessel Fabrication Shipbuilding Refineries and Foundries Railcar Manufacturing Earth-moving Equipment Manufacturing

PROCESSES

MIG (GMAW) Stick (SMAW) TIG (GTAW) Flux-cored (FCAW) Air Carbon Arc Cutting and Gouging (CAC-A) Submerged arc (SAW)















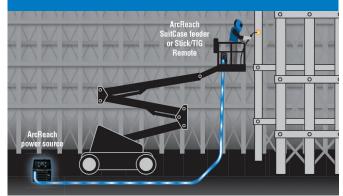


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ArcReach technology uses the existing weld cable to communicate welding control information between the feeder or remote and power source. This technology eliminates the need for control cords, and their associated problems and costs





INCREASED UPTIME

The Dimension 650 and ArcReach wire feeders and remotes have been extensively fieldproven and deliver the performance you need with ruggedly constructed internal components.

> No more expenses related to maintaining or replacing easily damaged control cords.



MORE JOBSITE PRODUCTIVITY & EFFICIENCY

ArcReach capabilities eliminate the time spent tracing weld cables hundreds of feet back to the power source because weld operators can make adjustments at the ArcReach wire feeder or remote.



IMPROVED JOB SAFETY

The chances of slip, trip or fall injuries are decreased because ArcReach technology allows weld operators to make parameter changes at the wire feeder/ remote instead of having to travel through multi-story and cluttered jobsites back to the power source.



MAXIMUM FLEET COMPATIBILITY

Maximize fleet compatibility and get the benefits of ArcReach when you pair Dimension 650 welders and ArcReach feeders with other ArcReach compatible products.



EXCEPTIONAL ARC **PERFORMANCE**

Dimension 650 systems maximise weld quality, reduce training time and minimise weld defects even while using weld cables that are hundreds of feet long.

SUPERIOR ARC PERFORMANCE

The optimised stick and TIG performance specifically meets the needs of open root pipe welding and helps reduce training time and increases quality. Starts maintain root opening and prepared edge and stops limit arc marks outside of the heat-affected zone.



MORE OPERATOR CONTROL

More control for weld operators with quick, easy adjustments at the wire feeder / remote.

- > Inadvertent parameter changes by other jobsite workers can be easily avoided.
- > Return to previous weld process faster.
- > Decrease the chance of an incorrect weld process being used.

















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ARCREACH SUITCASE 12 FEATURES

SETTING THE STANDARD FOR PERFORMANCE

Heavy-duty drive motor with tachometer control provides wire feed speed that is accurate and consistent from the start of the weld to the finish and from one weld to the next, which provides consistent arc quality. Front panel has trigger hold, wire jog, and gas purge for easy operator access. Wide voltage range for small and large wires with no contactor chatter or arc outages.

SET VOLTS & WIRE SPEED FEED REMOTELY

The simple interface on the feeder allows operators to adjust parameters at the point of use with no control cords.

EASY PROCESS CHANGEOVER

Simply connect the ArcReach SuitCase feeder to your weld lead and you are ready to go. The power source automatically switches settings to run conventional wire processes.

EASY SOLUTION FOR TRADITIONAL WIRE PROCESS

Add the flux-cored capability of the Dimension 650 for fill and cap passes for increase productivity.

DURABLE DESIGN REDUCES DOWNTIME

Impact-resistant case and the elimination of feeder control cords provides a solid solution to last in harsh environments.



ARCREACH STICK/TIG REMOTE

COMPLETE REMOTE CONTROL

Portable and lightweight, the ArcReach® Stick/TIG Remote paired with a Dimension 650 power source allows you to change weld settings at your work area, saving a trip to the power supply. No extra control cord to purchase, maintain, string or unstring — saving time and money.

COMPATIBLE WIREFEEDERS

S-74S - STANDARD



20 SERIES - BASIC



20 SERIES - DIGITAL



*ArcReach capabilities are not available when used with the S-74S or 20 Series Wirefeeders.

















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MULTI-PROCESS CAPABILITY

Provides versatility and outstanding arc performance in CV (MIG), CC (Stick, TIG, CAC-A) and SAW modes.

GOUGING MODE

Provides 800 Amps of usable power, a full 650 amps of power at 100% duty cycle. Perfect for heavy gouging with 9.5mm carbons.

BUILT-IN ARC CONTROL

Allows the operator to get in tight without sticking the electrode. An electrode compensation circuit ensures consistent arc control performance regardless of the electrode size.

VRD FUNCTIONALITY

Comes with integrated Voltage Reduction Device (VRD), compliant with AS1672.2 2007 Category C Environment. End of weld reaction time < 300mS.

IMPROVED ARC PERFORMANCE

Three wire modes (GMAW/ FCAW/SAW) for simplified setup and optimised arc performance.

- Solid and flux-cored wires with gas offer exceptional short-arc MIG precision to weld thin metals with less risk of distortion or burn-through, and premium flux-cored welding with gas.
- > Flux-cored (self-shielded) welding performance is exceptional, especially with wires commonly found in infrastructure construction.
- > Sub arc mode provides capability to retrofit into nondigital sub arc applications.

FAN-ON-DEMAND™

Power source cooling system operates only when needed - reducing noise, energy use and the amount of contaminants pulled through the machine.

WIND TUNNEL **TECHNOLOGY**

Internal air flow that protects electrical components and PC boards from dirt, dust, debris greatly improving reliability.

WITHSTAND HARSH **ENVIRONMENTS**

All-aluminium constructions helps the machine resist corrosion for long life. 82mm ground clearance keeps the machine away from water, mud and dirt to protect interior components.

14-PIN RECEPTACLE

Provides quick, direct connection to Miller 14-pin wirefeeders and accessories.

REMOTE VOLTAGE CONTROL

Allows operator to change Voltage from feeder.

COMPATIBLE WITH INSIGHT CORE™

Simple internet-based welding information solution.

3 YEAR WARRANTY

For details, refer to Miller's True Blue warranty statement.

	OUTPUT F	RATINGS		AMPERES INPUT	AT RATED OUT	PUT	IP RATING	DIM. (MM)	WEIGHT
PROCESS	Current A	Volt DC	Duty Cycle %	400V 50Hz 3 Phase	kW	kVA	IP23S This equipment	L: 803 W: 424	71.7kg
TIG	650 750 815	34 34 34	100 60 25	37.4 43.2 46.9	24.2 28.2 30.6	25.8 29.8 32.5	is designed for outdoor use.	H: 716	
Stick	650 750	44 44	100 60	47.4 55	30.9 35.8	32.8 38.2			
MIG, Subarc, Gouge	650 750 815	44 44 44	100 60 25	47.4 55 60.2	30.9 35.8 39.1	32.8 38.2 41.8			

















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ORDERING INFORMA	TION - AVAILABLE BASE PACKAGES			
OPTION 1				
POWER SOURCE				
MR907618001	Dimension™ 650 with ArcReach®			
WIREFEEDER (ALTE	RNATIVE WIREFEEDERS LISTED BELOW)			
MR301456	ArcReach® SuitCase 12 Voltage Sensing Wirefeeder			
REQUIRED ACCESS	ORIES			
AA74-0/10	Interconnecting lead kit (10m) with earth clamp, power cable & gas hose			
BEQ4015AH8EMC	Bernard 440 Amp MIG gun with rotatable long 45 deg. neck, 4.6m cable, 1.2 tip			
HA801AR	Argon regulator & flow gauge			
MR190300	0.9 / 1.2 mm "V" groove roll kit for solid wires			
OPTION 2				

DOV	VED	COL	JRCE
FUV	VER.	301	JRUE

MR907618001 Dimension™ 650 with ArcReach®

WIREFEEDER (ALTERNATIVE WIREFEEDERS LISTED BELOW)

MR300616 S-74S wirefeeder - standard

REQUIRED ACCESSORIES

REQUIRED ACCESSORIES		
AM264-0/10	Interconnecting lead kit (10m lug) with earth clamp, power cable, remote cable & gas hose	
BEQ4015AH8EMC	Bernard 440 Amp MIG gun with rotatable long 45 deg. neck, 4.6m cable, 1.2 tip	
HA801AR	Argon regulator & flow gauge	
MR151027	Drive roll kit 1.2mm V-groove	

OPTIONAL ACCESSORIES

MR242211020	RHC-14 remote hand current control
MR300430	Wireless hand control & 14 pin receiver
MR300429	Wireless foot control & 14 pin receiver
MR301072	14 pin InsightCore™ module
MR301499	20 Series wirefeeder basic
MR301499001	20 Series wirefeeder digital
BEQ4010AR8EMC	Bernard 400 Amp MIG Gun with fixed medium 45 deg. neck, 3m cable 1.2 tip
MR132957	1.2mm knurled "V" groove drive roller for hard-shelled cored wires for ArcReach® SuitCase 12 wirefeeder. (2 reqd. Inlet guide installed)
MR132955	1.6mm knurled "V" groove drive roller for hard-shelled cored wires for ArcReach® SuitCase 12 wirefeeder. (2 reqd. Inlet guide installed)
MR301325	ArcReach® Stick/TIG Remote

ADDITIONAL PACKAGES & DRIVE ROLLERS ARE AVAILABLE. FOR INFORMATION CALL CUSTOMER SUPPORT ON 1300 300 884.





