

1648 Fusion Machines

Fusion Capability for 16"OD – 48" OD pipe (450mm – 1200mm)



1648

The **MegaMc® 1648** machine will butt fuse pipe sizes from **16" OD to 48" OD (450mm to 1200mm)**. It was designed to serve the large-diameter needs of the water and sewer industry. Growth in the water industry has fueled the demand for the 1648. The machine allows for butt fusion of most fittings without special holders or removal of the outer jaw. Mitered inserts are available for fabricating ells. McElroy's unique semi-automatic control system requires only one operator. Hydraulic power assists all fusion functions including the complete operation of the jaws, pipe lifts, heater and facer.

- 4-jaw construction
- Hydraulic clamping
- Hydraulic pivoting heater and facer
- DataLogger® compatible
- Dual hydraulic pipe lifts

Machine Type	Model No.	Cylinder Force	Heater Power	Minimum Power Requirements *	Plug Type **
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1648 Includes fusion machine, facer, heater and lifting assembly.					
Rolling	A4800806	High	220V - 240V, 50/60Hz, 3Ph	45KVA/43.8KW	J
Rolling	A4800807	Medium	220V - 240V, 50/60Hz, 3Ph	45KVA/43.8KW	J

* This is the minimum generator requirement at sea level, see your generator supplier or refer to the generator sizing form on page 145.

** Refer to the plug type reference chart on page 139 for your correct plug type.

MACHINE PLUG TYPE
To find the right electrical plug type see **Page 139**

GENERATOR
To size your generator see **Page 145**

CYLINDER FORCE
For help selecting a cylinder force see **Page 136**

DataLogger
To learn more about the DataLogger see **Page 108**



Visit the Fusion Experts at www.mcelroy.com

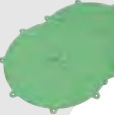
Part No.	Description
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Spare Facer Blade Set - Includes 8 blades, screws and wrench



3615708	Standard blades.
3615708C	Extended-life blades.

Spare Heater Plate Kit



A6311805	Set of 2 plates with anti-stick coating required for butt fusion. Kit includes attaching screws and wrench.
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Pipe Support Stand - See page 103 for more information



4823901	Heavy-duty pipe stand.
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MegaMc® Pipe Stand - To learn more, see page 102 **NEW!**



Gas-powered pipe stand with lateral and vertical movement.	
6513501	36" - 65" pipe sizes

Part No.	Description
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Stub End Holder - To learn more, see page 115



4812601	Holds stub end for butt fusion.
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DataLogger® - To learn more, see page 108



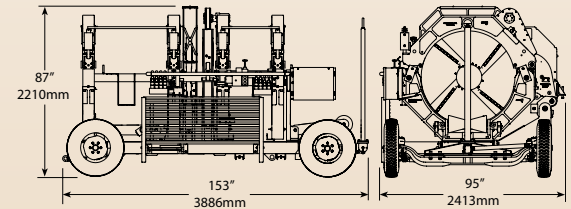
Used to record and document fusion process parameters.	
DL6303	Wireless DataLogger
DL6304	Wired DataLogger NEW!

Pyrometer Kit



A218804	Accurately checks surface temperatures of heater.
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1648



CAPACITY

Fuses Pipe Sizes: 16" OD - 48" OD pipe (450mm - 1200mm)

WEIGHT

Machine: 8800 lbs (3992Kg)
 Facer: 775 lbs (351.5Kg)
 Heater: 600 lbs (272.2Kg)

HYDRAULICS

System Pressure: 1500 PSI (103 BAR) Max.
 Hydraulic Reservoir Capacity: 33 Gallons (125 Liters)
 Motor: 10 HP, 3 Phase, 240V

POWER

Heater Power: 35,000 Watt
 Facer Power: Hydraulic

CHASSIS

Frame: Welded steel tube construction
 Front Axle: Articulating
 Brake: Mechanical

MOBILITY

Tires: 7.0 - 15, 60PSI Max.
 Transportation: Pulled via towing ring
 Lifting Lift points and lifting assembly

WARRANTY

Term: 3 Years, see page 5 for details



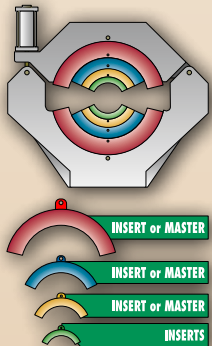
Specifications subject to change without notice.
 Additional dimensions available on page 143.

1648 Butt Fusion & Mitered Inserts

Butt Fusion Inserts

Our inserts are made from a high strength aluminum alloy and have been surface-hardened for longer life. Fabricated inserts are constructed out of precision laser-cut carbon steel and are normally lighter in weight than cast inserts. All inserts are serrated for maximum grip on the pipe. Inserts are made for one size pipe only. Not all inserts fit directly in the jaws. Some inserts nest inside other inserts, called master inserts.

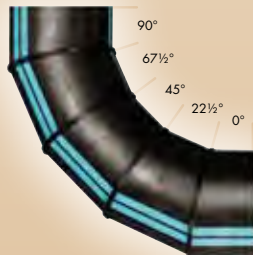
NOTE: Other sizes of inserts are available upon request. Contact your McElroy representative about inserts to fit your needs.



Mitered Inserts

Mitered inserts are used to fabricate segmented ells. All inserts are surface hardened for longer life and are serrated for maximum grip on the pipe.

Standard Ell Configuration
90° Ell 1 1/4° miter shown



Butt Fusion Inserts Set = 8 Inserts

All inserts below fit in 48" (1219mm) jaws			
Inserts	Pipe OD	Cast	Fabricated
1200mm	47.25 (1200mm)	N/A	4819501
42" DIPS	44.50 (1130mm)	N/A	4821201
1100mm	43.30 (1100mm)	N/A	4813127
42" OD	42.00 (1067mm)	4813104	4827501
1000mm	39.37 (1000mm)	4813111	4819601
36" DIPS	38.30 (973mm)	N/A	4821101
36" OD Master	36.00 (914mm)	4813006	N/A

All inserts below require 36" OD Master			
900mm	35.43 (900mm)	N/A	3629401
34" OD	34.00 (864mm)	3603532	N/A
32" OD	32.00 (813mm)	3603512	3629501
800mm	31.50 (800mm)	3603509	3629601
30" OD	30.00 (762mm)	3603515	3629701
28"/710mm OD	28.00 (710mm)	3603418	3619705
26" OD	26.00 (660mm)	3606614	3629801
24" DIPS	25.80 (655mm)	3606617	3629901
630mm Master	24.80 (630mm)	3606604	N/A

All inserts below require 36" OD & 630mm Master			
24" OD	24.00 (610mm)	2411604	2402301
22" OD	22.00 (560mm)	2411919	N/A
20" DIPS	21.60 (549mm)	2411922	N/A
20" OD	20.00 (508mm)	2412010	N/A
500mm	19.69 (500mm)	2412011	N/A
18" DIPS	19.50 (495mm)	2412023	N/A
18" Master	18.00 (457mm)	2411708	N/A

All inserts below require 36" OD, 630mm & 18" OD Master			
450mm	17.72 (450mm)	N/A	2418201
16" DIPS	17.40 (442mm)	2412117	N/A
16" OD	16.00 (406mm)	2412110	N/A

1 1/4° Mitered Inserts Set = 4 Inserts & 1 Template

All inserts below fit in 48" (1219mm) jaws		
Inserts	Pipe OD	Cast
42" OD	42.00 (1067mm)	4813115
36" OD	36.00 (914mm)	4813010
36" Master	36.00 (914mm)	4813006

All inserts below require 36" OD Master		
32" OD	32.00 (813mm)	3603526
800mm	31.50 (800mm)	3603523
30" OD	30.00 (762mm)	3603520
28" OD	28.00 (710mm)	3603529
26" OD	26.00 (660mm)	3606623
24" DIPS	25.80 (655mm)	3606620
630mm	24.80 (630mm)	3606610
24" OD	24.00 (610mm)	3606613
630mm Master	24.80 (630mm)	3606604

All inserts below require 36" OD & 630mm Master		
20" DIPS	21.60 (549mm)	2421257
20" OD	20.00 (508mm)	2421217
18" DIPS	19.50 (495mm)	2421251
18" OD	18.00 (457mm)	2421215
16" DIPS	17.40 (442mm)	2421245

