

# 1648 Fusion Machines

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



## MegaMc® 1648

The **MegaMc® 1648** machine will butt fuse pipe sizes from 16" OD to 48" OD (450mm to 1200mm). 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 (See pg 140)
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### MegaMc® 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 147.

**GENERATOR**

To size your generator see  
[Page 147](#)

**CYLINDER FORCE**

For help selecting a cylinder force see  
[Page 137](#)

**DataLogger**

To learn more about the DataLogger see  
[Page 108](#)

**IN-CLASS FUSION TRAINING**

Operator Training and Qualification, or Troubleshooting and Rebuild courses are available.  
[www.mcelroy.com/university](http://www.mcelroy.com/university)



**ONLINE RESOURCES**

Videos available on your desktop, or mobile device.  
[www.mcelroy.com/university](http://www.mcelroy.com/university)

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



3615708	Standard blades.
3615708C	Extended-life blades.
3615708T	5" carbide blades for abrasive materials. Must be positioned for different pipe sizes.

**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 100 for more information



4823901	Heavy-duty pipe stand.
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Part No.	Description
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**NEW! MegaMc® Rollers** - To learn more, see page 102



4842401	Aids by reducing the drag on the pipe and protecting the pipe from damage. Supports 12" IPS - 54" IPS pipe.
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**NEW! MegaMc® PolyHorse®** - To learn more, see page 98



4834001	Pipe-handling system for 20" to 48" OD (500mm to 1,200mm) pipe.
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**MegaMc™ Pipe Stand** - To learn more, see page 99



Powered pipe stand with lateral and vertical movement for 36"- 65" (900mm - 1600mm) pipe.	
6513501	Gas-powered
6513502	Diesel-powered

**Stub End Holder** - To learn more, see page 117



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
DL13501	<b>NEW!</b> DataLogger 4 English Package*

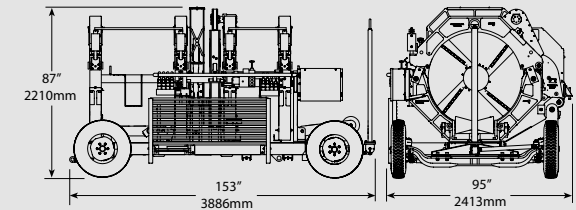
\* Other languages available. See page 108 for details.

**Pyrometer Kit**



A218804	Accurately checks surface temperatures of heater.
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**MegaMc® 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)  
 Spreader Bar: ..... 275 lbs (124.7Kg)

**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 7 for details

Specifications subject to change without notice.  
 Additional dimensions available on page 144.

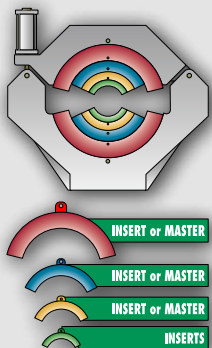
# 1648 Butt Fusion & Mitered Inserts

## 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.

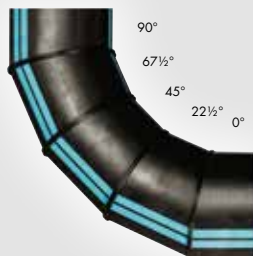
**NOTE:** Other sizes of inserts are available upon request. Contact your McElroy representative about inserts to fit your needs.



## 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)	4813127	N/A
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	N/A
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



