



# No.1648

The **MegaMc® No.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 No.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.

- Four 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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**No.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 114.

\*\* Refer to the plug type reference chart on page 107 for your correct plug type.

**MACHINE PLUG TYPE**  
To find the right electrical plug type see  
**Page 107**

**GENERATOR**  
To size your generator see  
**Page 114**

**CYLINDER FORCE**  
For help selecting a cylinder force see  
**Page 105**

**DataLogger**  
To learn more about the DataLogger see  
**Page 78**



Visit the Fusion Experts at [www.mcelroy.com](http://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 82 for more information



4823901	Heavy duty pipe stand 6500 lbs cap.
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**Stub End Holder** - See page 111 for stub end size capability



4812601	Holds stub end for butt fusion.
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**DataLogger®** - To Learn More See Page 78



DL6303	Used to record and document fusion process parameters.
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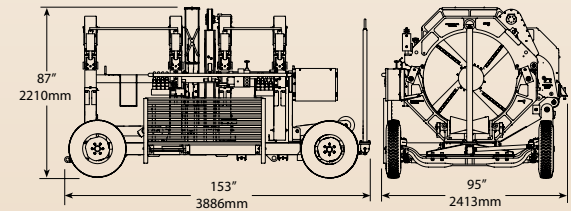


**Pyrometer Kit**



A218803	Measures surface temperature of heater.
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**No. 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 (103.42 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 & lifting assembly

**WARRANTY**

Term: ..... 3 Years see page 7 for details



Specifications subject to change without notice

### Butt Inserts

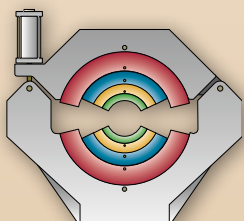
#### Set = 8 Inserts

Inserts are made for one size pipe only and are required for pipe sizes less than 48" OD. Some inserts may be purchased as a fabricated or cast insert. Not all inserts fit directly in the jaws. Some inserts nest inside other inserts, called master inserts.

#### CAST vs FABRICATED

Cast 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 rolled components to ensure proper alignment in the jaws. They are normally lighter in weight than cast inserts. All inserts are serrated for maximum grip on the pipe.

#### FAB = Fabricated Inserts



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

#### All inserts below fit in 48" jaws

Inserts	Pipe OD	Set No.
48" JAW	48.00 (1219mm)	N/R
1200mm <b>FAB</b>	47.25 (1200mm)	4819501
42" DIPS <b>FAB</b>	44.50 (1130mm)	4821201
42" OD	42.00 (1067mm)	4813104
42" OD <b>FAB</b>	42.00 (1067mm)	4827501
1000mm	39.37 (1000mm)	4813111
1000mm <b>FAB</b>	39.37 (1000mm)	4819601
36" DIPS <b>FAB</b>	38.30 (973mm)	4821101
36" OD <b>Master</b>	36.00 (914mm)	4813006

#### All inserts below require 36" OD Master

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

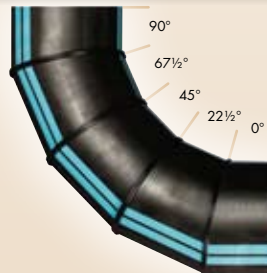
#### All inserts below require 36" OD & 630mm Master

24" OD	24.00 (610mm)	2411604
24" OD <b>FAB</b>	24.00 (610mm)	2402301
22" OD	22.00 (560mm)	2411919
20" DIPS	21.60 (549mm)	2411922
20" OD	20.00 (508mm)	2412010
500mm	19.69 (500mm)	2412011
18" DIPS	19.50 (495mm)	2412023
18" <b>Master</b>	18.00 (457mm)	2411708

#### All inserts below require 36" OD, 630mm & 18" OD Master

450mm <b>FAB</b>	17.72 (450mm)	2418201
16" DIPS	17.40 (442mm)	2412117
16" OD	16.00 (406mm)	2412110

### Mitered Inserts



#### Standard Ell Configuration 11¼° miter shown

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.

Inserts are made for one size pipe only. Some inserts nest inside other insert called master inserts.



#### Set = 4 Inserts & 1 Template

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

#### All inserts below fit in 48" jaws

Inserts	Pipe OD	Set No.
42" OD x 11¼°	42.00 (1067mm)	4813115
42" OD x 11¼° <b>FAB</b>	42.00 (1067mm)	4819701
1000mm x 11¼° <b>FAB</b>	39.37 (1000mm)	4820101
36" OD x 11¼°	36.00 (914mm)	4813010
36" OD x 11¼° <b>FAB</b>	36.00 (914mm)	4819801
900mm x 11¼° <b>FAB</b>	35.43 (900mm)	4820001
34" OD x 11¼° <b>FAB</b>	34.00 (864mm)	4819901
36" <b>Master</b>	36.00 (914mm)	4813006

#### All inserts below require 36" OD Master

32" OD x 11¼°	32.00 (813mm)	3603526
32" OD x 11¼° <b>FAB</b>	32.00 (813mm)	3631601
800mm x 11¼°	31.50 (800mm)	3603523
800mm x 11¼° <b>FAB</b>	31.50 (800mm)	3630201
30" OD x 11¼°	30.00 (762mm)	3603520
30" OD x 11¼° <b>FAB</b>	30.00 (762mm)	3631701
28" OD x 11¼°	28.00 (710mm)	3603529
28" OD x 11¼° <b>FAB</b>	28.00 (710mm)	3631801
26" OD x 11¼°	26.00 (660mm)	3606623
24" DIPS x 11¼°	25.80 (655mm)	3606620
630mm x 11¼°	24.80 (630mm)	3606610
24" OD x 11¼°	24.00 (610mm)	3606613
630mm <b>Master</b>	24.80 (630mm)	3606604

#### All inserts below require 36" OD & 630mm Master

20" DIPS x 11¼°	21.60 (549mm)	2421257
20" OD x 11¼°	20.00 (508mm)	2421217
18" DIPS x 11¼°	19.50 (495mm)	2421251
18" OD x 11¼°	18.00 (457mm)	2421215
16" DIPS x 11¼°	17.40 (442mm)	2421245

