

618 Fusion Machines Fusion Capability for 6" IPS – 18" OD pipe (180mm – 450mm)

Patent No's. 5,814,182 6,212,748 6,212,747 6,021,832 Japanese Patent No 4285806 European Patent No 0903215 (other patents pending)



618

McElroy's 618 line of fusion machines come in multiple model configurations to meet the demands of your pipeline project. They will butt fuse pipe sizes from **6" IPS to 18" OD (180mm to 450mm)**. One of our best sellers, the **Rolling 618** bridges the gap between small and large diameter pipe fusion.

The **TracStar 618** offers a self-contained, self-propelled, track-mounted vehicle that can handle grades up to 30%. It is the number one choice on the job site for its ease of maneuverability and productivity gains. The **PitBull 618** is used for special applications where the wheeled or tracked vehicle is not needed.

All units incorporate the interchangeable 618 4-jaw carriage, which can be easily removed for in-ditch fusion. For tight installations, the outer fixed jaw and skid can be removed from the carriage converting it to a 3-jaw carriage for an even more compact fusion unit. These

machines can fabricate segmented ells with optional mitered inserts and are DataLogger® compatible.

New to the TracStar 618 is an option that allows automated control and monitoring over the heat, soak, fuse and cool cycles. The **Automated TracStar 618** system guides the operator through a step-by-step procedure for fusing pipe. It has a built-in data logging feature that keeps a record of each fusion joint, which allows you to verify joint integrity.

AVAILABLE WITH AUTOMATED CONTROL

McElroy's automated pendant accessory is the best in the industry and will help guide the user through the steps of the fusion process. The pendant even serves as a data logging device for verifying joint integrity.



Rolling 618

- Wheeled chassis for easy maneuvering on the job site
- Carriage can be easily removed for in-ditch use
- On-board generator for powering heater and other devices
- Gas-powered self-contained or electric models available
- Hydraulic pipe lift aids in loading and unloading pipe
- DataLogger® compatible
- Hydraulic Clamping available

TracStar® 618

- Self-contained, self-propelled, all-terrain
- Powered by a 20 HP liquid-cooled diesel engine
- Carriage can be easily removed for in-ditch use
- On-board generator for powering heater & other devices
- Dual hydraulic pipe lifts aid in handling pipe
- Fits in a standard long box truck bed for easy transport
- DataLogger® compatible
- Also available as an Automated fusion machine
- Hydraulic Clamping available

PitBull® 618

- Compact fusion for special applications
- Hydraulic Power Unit (HPU) sold separately
- DataLogger® compatible

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 132

DataLogger
To learn more about the DataLogger see
Page 108



Visit the Fusion Experts at www.mcelroy.com



Machine Type	Model No. *	Cylinder Force	Input Voltage Requirements	Minimum Power Requirements *	Plug Type **
--------------	-------------	----------------	----------------------------	------------------------------	--------------

Rolling 618

Includes fusion machine, facer, 12" IPS – 18" OD heater, insulated heater stand and lifting assembly. ***



Rolling	A1869101	High	N/A, On-Board Generator	N/A, Self-Contained Gasoline	N/A
Rolling	A1869102	Medium	N/A, On-Board Generator	N/A, Self-Contained Gasoline	N/A
Rolling	A1869103	Low	N/A, On-Board Generator	N/A, Self-Contained Gasoline	N/A
Rolling Electric	A1869104	High	220V - 240V, 50/60Hz, 3Ph	8.0KVA/7.4KW	F
Rolling Electric	A1869105	Medium	220V - 240V, 50/60Hz, 3Ph	8.0KVA/7.4KW	F
Rolling Electric	A1869106	Low	220V - 240V, 50/60Hz, 3Ph	8.0KVA/7.4KW	F

* A Hydraulic Clamping kit is available for all rolling 618 models, to purchase a machine equipped with this add **HC** to the end of the part number. For more information, see page 112.

TracStar® 618

Includes fusion machine, facer, 12" IPS – 18" OD heater, insulated heater stand and lifting assembly. ***



Tracked	AT1807402	High	N/A, On-Board Generator	N/A, Self-Contained Diesel	N/A
Tracked	AT1807401	Medium	N/A, On-Board Generator	N/A, Self-Contained Diesel	N/A
Tracked	AT1807403	Low	N/A, On-Board Generator	N/A, Self-Contained Diesel	N/A
Automated Tracked	AT1813202	High	N/A, On-Board Generator	N/A, Self-Contained Diesel	N/A
Automated Tracked	AT1813201	Medium	N/A, On-Board Generator	N/A, Self-Contained Diesel	N/A
Automated Tracked	AT1813203	Low	N/A, On-Board Generator	N/A, Self-Contained Diesel	N/A

* A Hydraulic Clamping kit is available for all TracStar 618 models, to purchase a machine equipped with this add **HC** to the end of the part number. For more information, see page 112.

PitBull® 618

Includes fusion carriage, facer, 12" IPS – 18" OD heater and insulated heater stand. HPU which includes extension hoses and lifting assembly sold separately. ***



In-ditch	AT1807502	High	220V - 240V, 50/60Hz, 1Ph,	3KW	C
In-ditch	AT1807501	Medium	220V - 240V, 50/60Hz, 1Ph,	3KW	C
In-ditch	AT1807503	Low	220V - 240V, 50/60Hz, 1Ph,	3KW	C
HPU	T1810901	N/A	240V, 60Hz, 1Ph	HPU 4.9KVA/4.8KW, PitBull + HPU 7.9KVA/7.8KW	G
HPU	T1810902	N/A	220V - 240V, 50/60Hz, 3Ph	HPU 5.2KVA/4.5KW, PitBull + HPU 8.2KVA/7.5KW	D

* 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.

*** 6" IPS - 12" DIPS heater sold separately.

Save Time and Increase Productivity

One of the more popular features of large-diameter MegaMc® fusion machines is the hydraulic clamping that tightens the jaw clamps. Now, users can retrofit their Rolling and TracStar 412s, as well as their Rolling and TracStar 618s and TracStar 500 Series IIs, with hydraulic clamping that replaces the standard manual crank clamp knobs.

See page 112



618 Accessories

Part No.	Description
----------	-------------

Spare 4.63" Facer Blade Set - 6 blades, screws and wrench

Economical blade must be positioned for different pipe sizes.	
T1208603	Standard blades.
T1208603C	Extended-life blades.

Spare 9.12" Facer Blade Set - 6 blades, screws and wrench

Spans the entire facer range without repositioning.	
T1812602	Standard blades.
T1812602C	Extended-life blades.

Spare Heater Plate Kit - Includes attaching screws and wrench

Plates have an anti-stick coating & are required for butt fusion.	
A1242108	Set of two 6" IPS - 12" DIPS plates.
A1852013	Set of two 12" IPS - 18" OD plates.

Pipe Support Stand - See page 103 for more information

1223201	Adjustable pipe stand to properly support, position and align pipe to be fused.
---------	---

PolyHorse™ - To learn more, see page 100 **NEW!**

1875502	PolyHorse with PowerAssist
1875501	Standard PolyHorse

Low Profile Rollers - To learn more, see page 104 **NEW!**

A1867501	Aids by reducing the drag on the pipe and protecting the pipe from damage. Case includes 40 complete roller assemblies.
----------	---

DataLogger® - To learn more, see page 108

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

Part No.	Description
----------	-------------

Stub End Holder - To learn more, see page 114 **NEW!**

1879101	Self-centering stub end holder to hold stub end for butt fusion.
---------	--

Spare 6" IPS - 12" DIPS Heater - 220-240V, 50/60Hz, 1Ph

S 1855502	Microprocessor-controlled with dial thermometer to monitor temperature. Includes heater plates insulated heater stand and stripper bars.
A T1813401	

Spare 12" IPS - 18" OD Heater - 220-240V, 50/60Hz, 1Ph

S 1852019	Microprocessor-controlled with dial thermometer to monitor temperature. Includes heater plates insulated heater stand and stripper bars.
A T1813301	

Pyrometer Kit

A218804	Accurately checks surface temperatures of heater.
---------	---

25' Hydraulic Extension Hoses

1219105	Set of four 25' hydraulic extension hoses required for in-ditch fusion. Extension hoses are included with PitBull HPU.
---------	--

25' Heater Extension Cord 240V, 1Ph, 15A

1219002	For use with non-automated machines when fusing in-ditch. Plug type C.
---------	--

In-Ditch Facer Stand

T1801101	Facer stand provides a convenient place to protect and store your facer out of the dirt and mud when fusing in-ditch.
----------	---

Part No.	Description
----------	-------------

Heat Shield

203009	For fusing two materials with different melt rates. Shields the faster melt rate materials from over melting.
--------	---

Shipping Container

1816502	For Rolling 618.
T5009101	For TracStar 618.

Auto-Only Accessories

Automated In-Ditch Extension Kit

T5002003	Set of four 25' hydraulic extension hoses, extension cable and pendant strap. This kit is required for automated in-ditch fusion.
----------	---

Spare Automated Pendant

T5007109	Spare user interface for Automated TracStars 28, 250, 412, 618 and 500.
----------	---

Spare Automated Control Box

T5001808	Spare control box for quick replacement. For use with Automated TracStars 28, 250, 412, 618 and 500.
----------	--

Spare Automated USB Thumb Drive & Adapter

AT5040101	Used for downloading fusion records from the Automated Pendant to a USB thumb drive.
-----------	--

SPARE HEATER LEGEND

S Heater for 618, PitBull & TracStar 618

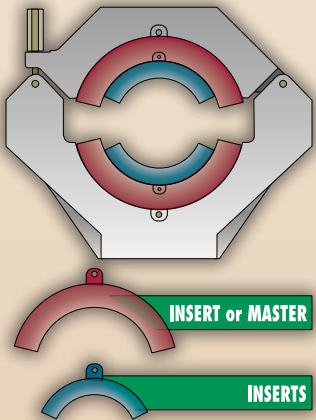
A Heater for Automated TracStar 618

Butt Fusion Inserts

Our cast inserts have been surface-hardened for longer life. 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.

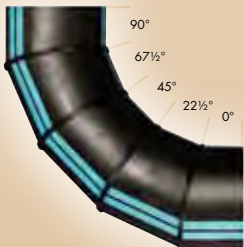
For JIS insert sizes, see page 126.



Mitered Inserts

Mitered inserts are used to fabricate segmented ells. Our standard miter is 11¼°, other mitered angles are available upon request.

Standard Ell Configuration
90° Ell 11¼° miter shown



Butt Fusion Inserts Set = 8 Inserts

All inserts below fit in 18" OD (457mm) Jaws		
Inserts	Pipe OD	Set No.
450mm	17.72 (450mm)	2418201
16" DIPS	17.40 (442mm)	2412117
16" OD	16.00 (406mm)	2412110
400mm	15.75 (400mm)	2412111
14" DIPS	15.30 (389mm)	2412215
14" OD	14.00 (355mm)	2412206
340mm	13.39 (340mm)	2411811
12" DIPS	13.20 (335mm)	2411826
12" IPS Master	12.75 (324mm)	2411810

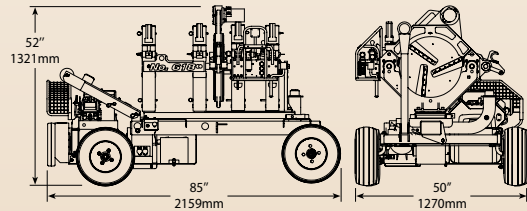
All inserts below require 12" IPS Master inserts		
315mm	12.40 (315mm)	1211202
10" DIPS	11.10 (282mm)	1207221
280mm	11.02 (280mm)	1207205
10" IPS	10.75 (273mm)	1207204
250mm	9.84 (250mm)	1213503
8" DIPS	9.05 (230mm)	1207107
225mm	8.86 (225mm)	1207010
8" IPS	8.63 (219mm)	1207104
200mm	7.87 (200mm)	1207009
7.125"/180mm OD	7.13 (180mm)	1207008
6" DIPS	6.90 (175mm)	1207020
6" IPS Master	6.63 (168mm)	1207007
160mm	6.30 (160mm)	1207011

11¼° Mitered Inserts Set = 4 Inserts & 1 Template

All inserts below fit in 18" OD (457mm) Jaws		
Inserts	Pipe OD	Set No.
16" OD	16.00 (406mm)	2420619
400mm	15.75 (400mm)	2420618
14" DIPS	15.30 (389mm)	24206122
370mm	14.57 (370mm)	24206125
14" OD	14.00 (355mm)	2420617
12" DIPS	13.20 (335mm)	24206110
12" IPS	12.75 (324mm)	2420615
315mm	12.40 (315mm)	2420614
10" DIPS	11.10 (282mm)	24206116
12" IPS Master	12.75 (324mm)	2411810

All inserts below require 12" IPS Master inserts		
280mm	11.02 (280mm)	1214284
10" IPS	10.75 (273mm)	1214232
250mm	9.84 (250mm)	1214235
8" DIPS	9.05 (230mm)	1214269
225mm	8.86 (225mm)	1214281
8" IPS	8.63 (219mm)	1214230
200mm	7.87 (200mm)	1214234
180mm	7.09 (180mm)	1214290
6" DIPS	6.90 (175mm)	1214275
6" IPS	6.63 (168mm)	1214228

Rolling 618 Gas Powered



CAPACITY

Fuses Pipe Sizes: 6" IPS – 18" OD pipe (180mm – 450mm)

WEIGHT

Machine: 1335 lbs (606Kg)
 4 Jaw Carriage Configuration: 445 lbs (202Kg)
 3 Jaw Carriage Configuration: 350 lbs (158Kg)
 Facer: 91 lbs (41.3Kg)
 6" IPS - 12" DIPS Heater: 28 lbs (13Kg)
 12" IPS - 18" OD Heater: 34 lbs (15.4Kg)

HYDRAULICS

System Pressure: 1200 PSI (82.74 BAR) Max.
 Hydraulic Reservoir Capacity: 6 Gallons (22.71 Liters)

ENGINE

Engine Type: 18 HP Air Cooled V-Twin
 Fuel Type: Gasoline
 Fuel Tank Capacity: 5 Gallons (18.92 Liters)
 Operational Tank Capacity: 8 Hours
 Starting System: Electric

ELECTRICAL

Input: None, self-contained
 AC Output: 2 receptacles 240V each

POWER

Heater Power: 3000 Watt
 Facer Power: Hydraulic

CHASSIS

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

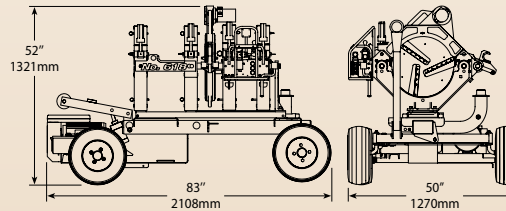
MOBILITY

Tires: High-flotation Inflatable Tires
 Transportation: Pulled via towing ring
 Lifting Lift points and lifting assembly

WARRANTY

Term: 3 Years, see page 5 for details

Rolling 618 Electric Powered



CAPACITY

Fuses Pipe Sizes: 6" IPS – 18" OD pipe (180mm – 450mm)

WEIGHT

Machine: 1100 lbs (498Kg)
 4 Jaw Carriage Configuration: 445 lbs (202Kg)
 3 Jaw Carriage Configuration: 350 lbs (158Kg)
 Facer: 91 lbs (41.3Kg)
 6" IPS - 12" DIPS Heater: 28 lbs (13Kg)
 12" IPS - 18" OD Heater: 34 lbs (15.4Kg)

HYDRAULICS

System Pressure: 1200 PSI (82.74 BAR) Max.
 Hydraulic Reservoir Capacity: 6 Gallons (22.71 Liters)

POWER

Heater Power: 3000 Watt
 Facer Power: Hydraulic
 Electric Motor: 5 HP

CHASSIS

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

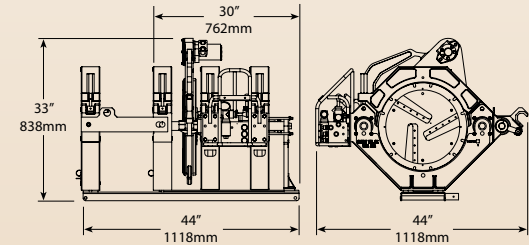
MOBILITY

Tires: High-flotation Inflatable Tires
 Transportation: Pulled via towing ring
 Lifting Lift points and lifting assembly

WARRANTY

Term: 3 Years, see page 5 for details

PitBull® 618



CAPACITY

Fuses Pipe Sizes: 6" IPS – 18" OD pipe (180mm – 450mm)

WEIGHT

4 Jaw Carriage Configuration: 445 lbs (202Kg)
 3 Jaw Carriage Configuration: 350 lbs (158Kg)
 Facer: 91 lbs (41.3Kg)
 6" IPS - 12" DIPS Heater: 28 lbs (13Kg)
 12" IPS - 18" OD Heater: 34 lbs (15.4Kg)

POWER

Heater Power: 3000 Watt
 Facer Power: Hydraulic

CHASSIS

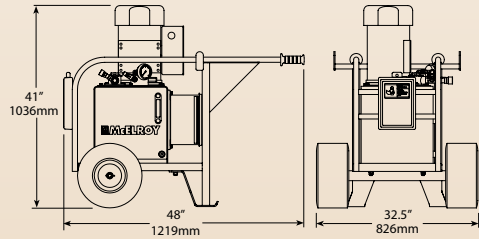
Frame: Welded steel construction

WARRANTY

Term: 3 Years, see page 5 for details

Note: All carriage weights are without facer and heater. Specifications subject to change without notice. Additional dimensions available on page 143.

HPU (Hydraulic Power Unit)



WEIGHT

Machine: 390 lbs (176.9Kg)

HYDRAULICS

System Pressure: 1500 PSI (103.42 BAR) Max.
 Hydraulic Reservoir Capacity: 10 Gallons (37 Liters)
 Pump Flow Rate 60 Hz: 6.1 gpm (23.1 Lpm)
 Pump Flow Rate 50 Hz: 5.0 gpm (18.9 Lpm)
 Fluid: Exxon Univis N46 or equivalent
 Filtration: 10 micron absolute

POWER

Power Requirement: 5.2KVA/4.5Watt

MOTOR

Electric: 5 HP

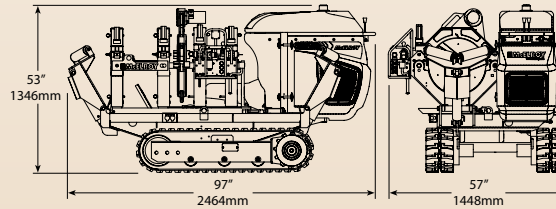
MOBILITY

Tires: High-flotation inflatable tires
 Transportation: Two wheel cart

WARRANTY

Term: 3 Years, see page 5 for details

TracStar® 618



CAPACITY

Fuses Pipe Sizes: 6" IPS - 18" OD pipe (180mm - 450mm)

WEIGHT

Machine: 2085 lbs (946Kg)
 4 Jaw Carriage Configuration: 445 lbs (202Kg)
 3 Jaw Carriage Configuration: 350 lbs (158Kg)
 Facer: 91 lbs (41.3Kg)
 6" IPS - 12" DIPS Heater: 28 lbs (13Kg)
 12" IPS - 18" OD Heater: 34 lbs (15.4Kg)

HYDRAULICS

System Pressure: 2000 PSI (137.90 BAR) Max.
 Hydraulic Reservoir Capacity: 8 Gallons (30.28 Liters)

ENGINE

Engine Type: 20 HP liquid cooled
 Fuel Type: Diesel
 Fuel Tank Capacity: 5 Gallons (18.92 Liters)
 Operational Tank Capacity: 8 Hours
 Starting System: Electric

ELECTRICAL

Input: None, self-contained
 AC Output: 120V & 240V, 60Hz, 15 Amp

POWER

Heater Power: 3000 Watt
 Facer Power: Hydraulic

CHASSIS

Frame: Welded steel construction
 Brake: Self-locking

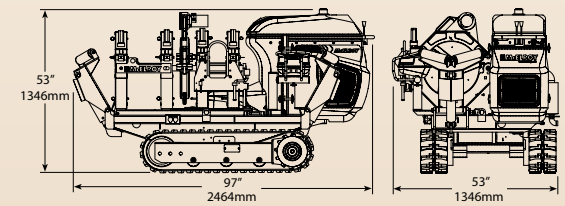
MOBILITY

Tracked: Rubber crawler tracks
 Transportation: Self-propelled
 Vehicle speed: 1.5 Mph Max.
 Lifting Lift points and lifting assembly

WARRANTY

Term: 3 Years, see page 5 for details

Automated TracStar® 618



CAPACITY

Fuses Pipe Sizes: 6" IPS - 18" OD pipe (180mm - 450mm)

WEIGHT

Machine: 2085 lbs (948Kg)
 4 Jaw Carriage Configuration: 445 lbs (202Kg)
 3 Jaw Carriage Configuration: 350 lbs (158Kg)
 Facer: 91 lbs (41.3Kg)
 6" IPS - 12" DIPS Heater: 28 lbs (13Kg)
 12" IPS - 18" OD Heater: 34 lbs (15.4Kg)

HYDRAULICS

System Pressure: 2000 PSI (137.90 BAR) Max.
 Hydraulic Reservoir Capacity: 8 Gallons (30.28 Liters)

ENGINE

Engine Type: 20 HP liquid cooled
 Fuel Type: Diesel
 Fuel Tank Capacity: 5 Gallons (18.92 Liters)
 Operational Tank Capacity: 8 Hours
 Starting System: Electric

ELECTRICAL

Input: None, self-contained

POWER

Heater Power: 3000 Watt
 Facer Power: Hydraulic

CHASSIS

Frame: Welded steel construction
 Brake: Self-locking

MOBILITY

Tracked: Rubber crawler tracks
 Transportation: Self-propelled
 Vehicle speed: 1.5 Mph Max.
 Lifting Lift points and lifting assembly

WARRANTY

Term: 3 Years, see page 5 for details