McElroy’s 412 line of fusion machines come in multiple model configurations to meet the demands of your pipeline project. They will butt fuse pipe sizes from 4” IPS to 12” DIPS (110mm to 340mm). The Rolling 412 changed the industry when introduced as the first fully self-contained fusion machine in the world. The TracStar 412 added all-terrain mobility to the unit setting a new industry standard.

The TracStar 412 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 412 is used for special applications where the wheeled or tracked vehicle is not needed.

All units incorporate the interchangeable 412 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 412 is an option that allows automated control and monitoring over the heat, soak, fuse and cool cycles. The Automated TracStar 412 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.

**Rolling 412**
- 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® 412**
- 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
- 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® 412**
- Compact fusion for special applications
- Hydraulic Power Unit (HPU) sold separately
- DataLogger® compatible

Visit the Fusion Experts at www.mcelroy.com
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
### Accessories

**412 Accessories**

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

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

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

- **1875502** PolyHorse with PowerAssist
- **1875501** Standard PolyHorse

**Spare Facer Stand**

- **T1201101** Facer stand provides a convenient place to protect and store your facer out of the dirt and mud.

**DataLogger®** - To learn more, see page 108

- **DL6303** Wireless Datalogger
- **DL6304** Wired Datalogger

**Spare Heater Plate Kit**

- **A1242108** Set of 2 plates with anti–stick coating required for butt fusion. Kit includes attaching screws and wrench.

**Pipe Support Stand** - See page 103 for more information

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

**Spare Heater 220-240V, 50/60Hz, 1Ph** See legend below

- **S 1242112** Microprocessor controlled with dial thermometer to monitor temperature. Includes heater plates insulated heater stand and stripper bars.
- **A T1213301**

**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.

**Spare Heater 4.63” Facer Blade Set** - 6 blades, screws and wrench.

- **T1208603** Standard blades.
- **T1208603C** Extended-life blades.

**Spare 6.13” Facer Blade Set** - 6 blades, screws and wrench.

- **T1208610** Standard blades.
- **T1208610C** Extended-life blades.

**Spare Heater 220-240V, 50/60Hz, 1Ph** See legend below

- **S 1242112** Microprocessor controlled with dial thermometer to monitor temperature. Includes heater plates insulated heater stand and stripper bars.
- **A T1213301**

**DataLogger®** - To learn more, see page 108

- **DL6303** Wireless Datalogger
- **DL6304** Wired Datalogger

**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.

**Heat Shield**

- **203007** For fusing two materials with different melt rates. Shields the faster melt rate materials from over melting.

**Spare Heater Plate Kit**

- **A1242108** Set of 2 plates with anti–stick coating required for butt fusion. Kit includes attaching screws and wrench.

**25’ Heater Extension Cord 240V, 1Ph, 15A**

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

**Spare Heater Plate Kit**

- **A1242108** Set of 2 plates with anti–stick coating required for butt fusion. Kit includes attaching screws and wrench.

**Shipping Container**

- **1816502** For Rolling 412.
- **T5009102** For TracStar 412.

**Spare Heater Legend**

- **S** Heater for 412, PitBull & TracStar 412
- **A** Heater for Automated TracStar 412
Butt Fusion & Mitered Inserts

**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.*

### Butt Fusion Inserts

**Set = 8 Inserts**

**All inserts below fit in 12” DIPS 13.20” (335mm) Jaws**

<table>
<thead>
<tr>
<th>Inserts</th>
<th>Pipe OD</th>
<th>Set No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>12” IPS Master</td>
<td>12.75 (324mm)</td>
<td>Inc w/pkg</td>
</tr>
</tbody>
</table>

**All inserts below require 12” IPS Master insert**

<table>
<thead>
<tr>
<th>Size</th>
<th>Pipe OD</th>
<th>Set No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>315mm</td>
<td>12.40 (315mm)</td>
<td>1211202</td>
</tr>
<tr>
<td>10” DIPS</td>
<td>11.10 (282mm)</td>
<td>1207221</td>
</tr>
<tr>
<td>280mm</td>
<td>11.02 (280mm)</td>
<td>1207205</td>
</tr>
<tr>
<td>10” IPS</td>
<td>10.75 (273mm)</td>
<td>1207204</td>
</tr>
<tr>
<td>250mm</td>
<td>9.84 (250mm)</td>
<td>1213503</td>
</tr>
<tr>
<td>8” DIPS</td>
<td>9.05 (230mm)</td>
<td>1207107</td>
</tr>
<tr>
<td>225mm</td>
<td>8.86 (225mm)</td>
<td>1207010</td>
</tr>
<tr>
<td>8” IPS</td>
<td>8.63 (219mm)</td>
<td>1207014</td>
</tr>
<tr>
<td>200mm</td>
<td>7.87 (200mm)</td>
<td>1207009</td>
</tr>
<tr>
<td>7.125”/180mm OD</td>
<td>7.13 (180mm)</td>
<td>1207008</td>
</tr>
<tr>
<td>6” DIPS</td>
<td>6.90 (175mm)</td>
<td>1207020</td>
</tr>
<tr>
<td>6” IPS Master</td>
<td>6.63 (168mm)</td>
<td>1207007</td>
</tr>
<tr>
<td>160mm</td>
<td>6.30 (160mm)</td>
<td>1207011</td>
</tr>
</tbody>
</table>

**All inserts below require 6” & 12” IPS Master inserts**

<table>
<thead>
<tr>
<th>Size</th>
<th>Pipe OD</th>
<th>Set No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5” IPS</td>
<td>5.56 (141mm)</td>
<td>809409</td>
</tr>
<tr>
<td>140mm</td>
<td>5.51 (140mm)</td>
<td>809428</td>
</tr>
<tr>
<td>5.375”</td>
<td>5.38 (137mm)</td>
<td>809411</td>
</tr>
<tr>
<td>5.25”</td>
<td>5.25 (133mm)</td>
<td>809410</td>
</tr>
<tr>
<td>125mm</td>
<td>4.92 (125mm)</td>
<td>809413</td>
</tr>
<tr>
<td>4” DIPS</td>
<td>4.80 (122mm)</td>
<td>809315</td>
</tr>
<tr>
<td>4” IPS</td>
<td>4.50 (114mm)</td>
<td>809408</td>
</tr>
<tr>
<td>110mm</td>
<td>4.33 (110mm)</td>
<td>809305</td>
</tr>
</tbody>
</table>

### 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

**11¼” Mitered Inserts**

**Set = 4 Inserts & 1 Template**

**All inserts below fit in 12” DIPS 13.20” (335mm) Jaws**

<table>
<thead>
<tr>
<th>Inserts</th>
<th>Pipe OD</th>
<th>Set No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>12” IPS Master</td>
<td>12.75 (324mm)</td>
<td>Inc w/pkg</td>
</tr>
</tbody>
</table>

**All inserts below require 12” IPS Master insert**

<table>
<thead>
<tr>
<th>Size</th>
<th>Pipe OD</th>
<th>Set No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>280mm</td>
<td>11.02 (280mm)</td>
<td>1214284</td>
</tr>
<tr>
<td>10” IPS</td>
<td>10.75 (273mm)</td>
<td>1214232</td>
</tr>
<tr>
<td>250mm</td>
<td>9.84 (250mm)</td>
<td>1214235</td>
</tr>
<tr>
<td>8” DIPS</td>
<td>9.05 (230mm)</td>
<td>1214269</td>
</tr>
<tr>
<td>225mm</td>
<td>8.86 (225mm)</td>
<td>1214281</td>
</tr>
<tr>
<td>8” IPS</td>
<td>8.63 (219mm)</td>
<td>1214230</td>
</tr>
<tr>
<td>200mm</td>
<td>7.87 (200mm)</td>
<td>1214234</td>
</tr>
<tr>
<td>180mm</td>
<td>7.09 (180mm)</td>
<td>1214290</td>
</tr>
<tr>
<td>6” DIPS</td>
<td>6.90 (175mm)</td>
<td>1214275</td>
</tr>
<tr>
<td>6” IPS</td>
<td>6.63 (168mm)</td>
<td>1214228</td>
</tr>
<tr>
<td>160mm</td>
<td>6.30 (160mm)</td>
<td>1214239</td>
</tr>
<tr>
<td>5” IPS/140mm</td>
<td>5.56 (141mm)</td>
<td>1214242</td>
</tr>
<tr>
<td>125mm</td>
<td>4.92 (125mm)</td>
<td>12142108</td>
</tr>
<tr>
<td>4” DIPS</td>
<td>4.80 (122mm)</td>
<td>1214287</td>
</tr>
<tr>
<td>4” IPS</td>
<td>4.50 (114mm)</td>
<td>1214226</td>
</tr>
<tr>
<td>110mm</td>
<td>4.33 (110mm)</td>
<td>1214255</td>
</tr>
</tbody>
</table>
Rolling 412 Gas Powered

**CAPACITY**
Fuses Pipe Sizes:.......................... 4”IPS – 12”DIPS (110mm – 340mm)

**WEIGHT**
Machine:.................................................. 1225 lbs (556Kg)
4 Jaw Carriage Configuration:.............. 359 lbs (163Kg)
3 Jaw Carriage Configuration:................ 261 lbs (118.4Kg)
Facer:...................................................... 62 lbs (28.1Kg)
Heater:................................................... 24 lbs (10.9Kg)

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

**ENGINE**
Engine Type:............................... 18HP 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:........................................... 3000 Watt

**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 412 Electric Powered

**CAPACITY**
Fuses Pipe Sizes:.......................... 4”IPS – 12”DIPS (110mm – 340mm)

**WEIGHT**
Machine:.................................................. 915 lbs (415Kg)
4 Jaw Carriage Configuration:.............. 359 lbs (163Kg)
3 Jaw Carriage Configuration:................ 261 lbs (118.4Kg)
Facer:...................................................... 62 lbs (28.1Kg)
Heater:................................................... 24 lbs (10.9Kg)

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

**ENGINE**
Engine Type:............................... 3000 Watt
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:........................................... 3000 Watt

**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® 412

**CAPACITY**
Fuses Pipe Sizes:.......................... 4”IPS – 12”DIPS (110mm – 340mm)

**WEIGHT**
4 Jaw Carriage Configuration:.............. 359 lbs (163Kg)
3 Jaw Carriage Configuration:................ 281 lbs (118.4Kg)
Facer:...................................................... 62 lbs (28.1Kg)
Heater:................................................... 24 lbs (10.9Kg)

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

**CHASSIS**
Frame:................................................. Welded steel tube construction
Front Axle:........................................ Mechanical
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

---

Note: All carriage weights are without facer and heater. Specifications subject to change without notice. Additional dimensions available on page 143.
**Specifications 412**

**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 Unvios N46 or equivalent
- Filtration: 10 micron absolute

**POWER**
- Power Requirement: 5.2KVA/4.5Watt

**MOBILITY**
- Tires: High-flotation Inflatable Tires
- Transportation: Two wheel cart

**WARRANTY**
- Term: 3 Years, see page 5 for details

---

**TracStar® 412**

**CAPACITY**
- Fuses Pipe Sizes: 4"IPS – 12"DIPS (110mm – 340mm)

**WEIGHT**
- Machine: 2000 lbs (907Kg)
- 4 Jaw Carriage Configuration: 359 lbs (163Kg)
- 3 Jaw Carriage Configuration: 261 lbs (118.4Kg)
- Facer: 62 lbs (28.1Kg)
- Heater: 24 lbs (10.9Kg)

**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, 15Amp

**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® 412**

**CAPACITY**
- Fuses Pipe Sizes: 4"IPS – 12"DIPS (110mm – 340mm)

**WEIGHT**
- Machine: 2000 lbs (907Kg)
- 4 Jaw Carriage Configuration: 359 lbs (163Kg)
- 3 Jaw Carriage Configuration: 261 lbs (118.4Kg)
- Facer: 62 lbs (28.1Kg)
- Heater: 24 lbs (10.9Kg)

**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