GRUNDOBURST: Innovation & Power

With decades of pipe bursting experience, TT Technologies has produced the most advanced and capable line of static bursting equipment available today, the GRUNDOBURST G-series. The self-contained, hydraulically operated GRUNDOBURST makes bursting ductile iron and steel pipe possible. The system’s innovative design features save time and money. The GRUNDOBURST is easy to set up and operate. Minimal crews can burst and replace substantial lengths of pipe in a short amount of time. And because the system is trenchless, considerable trench work and costly restoration can be avoided.

### Specifications

**Pipe Size Ranges 4”—48”**

<table>
<thead>
<tr>
<th>Data/Description</th>
<th>Grundoburst 400G</th>
<th>Grundoburst Mini-400G</th>
<th>Grundoburst 800G</th>
<th>Grundoburst 1250G</th>
<th>Grundoburst 1900G</th>
<th>Grundoburst 2500G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rig size L x W x H (in)</td>
<td>56 x 22 x 20</td>
<td>24 x 20 x 14</td>
<td>67 x 28 x 26</td>
<td>91 x 42 x 34</td>
<td>112 x 45 x 30</td>
<td>116 x 50 x 30</td>
</tr>
<tr>
<td>Pit size L x W x H (in)</td>
<td>120 x 60 x 9</td>
<td>below pipe line</td>
<td>192 x 72 x 15</td>
<td>below pipe line</td>
<td>264 x 96 x 14</td>
<td>below pipe line</td>
</tr>
<tr>
<td>Weight (lbs)</td>
<td>1,235</td>
<td>441</td>
<td>3,197</td>
<td>6,883</td>
<td>7,319</td>
<td>9,039</td>
</tr>
<tr>
<td>Thrust at 250 bar (lbs)</td>
<td>61,822</td>
<td>61,822</td>
<td>57,551</td>
<td>88,800</td>
<td>160,963</td>
<td>237,173</td>
</tr>
<tr>
<td>Pull back at 250 bar (lbs)</td>
<td>89,924</td>
<td>89,924</td>
<td>172,878</td>
<td>285,057</td>
<td>427,137</td>
<td>573,263</td>
</tr>
<tr>
<td>Effective rod length (in)</td>
<td>28</td>
<td>21.5</td>
<td>39.5</td>
<td>72.0</td>
<td>91.0</td>
<td>96.0</td>
</tr>
<tr>
<td>Rod weight (lbs)</td>
<td>16.5</td>
<td>11</td>
<td>28.7</td>
<td>53.4</td>
<td>81</td>
<td>86.0</td>
</tr>
<tr>
<td>Hydraulic Power Unit For Motor</td>
<td>Diesel</td>
<td>Diesel</td>
<td>Diesel</td>
<td>Diesel</td>
<td>Diesel</td>
<td>Diesel</td>
</tr>
<tr>
<td>Output</td>
<td>74 hp at 2300 rpm</td>
<td>74 hp at 2300 rpm</td>
<td>74 hp at 2300 rpm</td>
<td>74 hp at 2300 rpm</td>
<td>74 hp at 2300 rpm</td>
<td>170 hp at 2000 rpm</td>
</tr>
<tr>
<td>Hydraulic pressure max. (psi)</td>
<td>3,626</td>
<td>3,626</td>
<td>3,626</td>
<td>3,626</td>
<td>3,626</td>
<td>3,626</td>
</tr>
<tr>
<td>Oil flow (gpm/min)</td>
<td>25-20</td>
<td>0-20</td>
<td>0-20</td>
<td>0-20</td>
<td>0-20</td>
<td>0-20</td>
</tr>
<tr>
<td>Oil tank capacity (gal)</td>
<td>24</td>
<td>24</td>
<td>53</td>
<td>53</td>
<td>61</td>
<td>250</td>
</tr>
<tr>
<td>Diesel tank capacity (gal)</td>
<td>12</td>
<td>12</td>
<td>15</td>
<td>15</td>
<td>29</td>
<td>44</td>
</tr>
<tr>
<td>Weight (lbs)</td>
<td>1,698</td>
<td>1,698</td>
<td>2,734</td>
<td>2,734</td>
<td>2,867</td>
<td>8,159</td>
</tr>
<tr>
<td>Size L x W x H (in)</td>
<td>55 x 26 x 53</td>
<td>55 x 26 x 53</td>
<td>56 x 28 x 73</td>
<td>56 x 28 x 73</td>
<td>66 x 33 x 65</td>
<td>106 x 55 x 95</td>
</tr>
</tbody>
</table>

Specifications subject to change at any time.
 Superior Static Process for bursting ductile iron & steel

TT Technologies Leads Industry in Innovation & Power

The GRUNDOBURST® static pipe bursting system is having a tremendous impact on the water, sewer and gas industries. Its innovative design features help contractors save time and money, and its versatility makes it ideal for a wide range of applications. There are six models available ranging in pullback force from 100,000 lbs. to 600,000 lbs. GRUNDOBURST models are designed for bursting 4-inch through 48-inch diameter pipe and larger.

**The Static Method**

During the static bursting process, specially designed bladed cutting rollers are pulled through an existing line by the hydraulically powered GRUNDOBURST unit. As the bladed cutting rollers are pulled through, they split the host pipe. An expander attached to the rollers forces the fragmented pipe into the surrounding soil while simultaneously pulling in the new pipe.

**Step #1**

First, QuickLock® bursting rods are pushed through the host pipe with the GRUNDOBURST, until they reach the launch pit. A flexible guide rod out front helps navigate the existing line.

**Step #2**

Once at the launch pit, the guide rod is removed and bladed cutting rollers, a bursting head, an expander and new HDPE are attached.

**Step #3**

The entire configuration is pulled back through the host pipe. The bladed cutting rollers split the existing line. The bursting head and expander displace the fragmented host pipe into the surrounding soil while the new HDPE is pulled in simultaneously.

The QuickLock bursting rods can be quickly removed one at a time at the exit as bursting is in operation, or, if the run is divided, the QuickLock rods can be installed into the next run as the first run is being completed.

**The GRUNDOBURST® System**

**The Static Bursting Process**

- Burst ductile iron & steel pipes
- Shallow bursting possible
- Automatic thrust and pullback
- Burst in both directions

**Patented QuickLock® Bursting Rods: a better connection**

Patented QuickLock bursting rods offer distinct advantages over standard screw-together stem systems:

- Easy and secure connection
- Self-aligning rods
- Virtually no cleaning, lubricating or maintenance
- Faster connection than screw-type rods
- Less wear than screw-type rods

Loading of the bursting rods is significantly easier and safer than thread screw-together stems as well. The GRUNDOBURST system employs a non-slip braking system to keep the QuickLock rods stable and properly positioned at all times. Threaded systems utilize a jaw assembly that allows stems to slip and move without warning. Plus with a stem system there is always the danger of thread joint overload and excessive wear on the jaw assembly increases the chances for breakdown and maintenance.

**QuickLock Flexibility: An Added Capability**

QuickLock Bursting Rods link together to form a flexible chain. This gives the configuration a maximum bend radius of almost 165 feet. This allows the GRUNDOBURST to work around offset pipe bends and joints where standard screw-together stem systems can’t.

**Flexible Guide Rod and Push Blade**

The flexible guide rod helps ensure smooth installation of the QuickLock rods through the host pipe.

For smaller diameter pipe, a pushing blade is used to split the host pipe first allowing the QuickLock bursting rods to be installed without resistance.

**Bladed Cutting Rollers**

The unique bladed cutting wheel/roller configuration is an essential part of the GRUNDOBURST’s success. The bladed wheels actually split the host pipe instead of ripping or tearing it like single fin-type static systems. The bladed wheel system is a very “clean” process that requires less power than other static systems and helps prevent potential damage to the product pipe. Various bladed rollers are available to split a wide range of pipe types and diameters.
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**for bursting ductile iron & steel**

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**GRUNDOBURST Advantages:**
- Burst ductile iron & steel pipes
- Shallow bursting possible
- Automatic thrust and pullback
- Burst in both directions
- No winch required
- Fast set up
- Easily transported

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