Darda - general survey

Hydraulic rock and concrete splitters

• Splitting force up to 413 tons (4048 kn)
• Dust free
• Quiet performance
• Also applicable at places of difficult access
• Vibration free
• Easy handling
• Easy to transport
• Splits in seconds
• Controlled splitting
• Dimensionally accurate working

Darda GmbH
Im Tal 1, D-78176 Blumberg
Fon + 49 (0) 77 02 / 43 91 - 0
Fax + 49 (0) 77 02 / 43 91 - 12
info@darda.de
www.darda.de

We’ve got the power.

Darda - splitting cylinder

SPLITTER

C2-C12

Hydraulic pump units (portable)

<table>
<thead>
<tr>
<th>Type</th>
<th>Type of motor</th>
<th>Length mm</th>
<th>Order-No</th>
</tr>
</thead>
<tbody>
<tr>
<td>S7H</td>
<td>Air motor</td>
<td>46 88 600</td>
<td>8381 0503 4 7</td>
</tr>
<tr>
<td>S7H</td>
<td>Gasoline motor</td>
<td>46 88 600</td>
<td>8381 0503 54</td>
</tr>
<tr>
<td>S7H</td>
<td>Electric motor</td>
<td>40 88 600</td>
<td>8381 0503 59</td>
</tr>
<tr>
<td>S7H</td>
<td>Diesel motor</td>
<td>137 301 1180</td>
<td>8381 0502 40</td>
</tr>
</tbody>
</table>

Hydraulic pumps

<table>
<thead>
<tr>
<th>Type</th>
<th>Length mm</th>
<th>Order-No</th>
</tr>
</thead>
<tbody>
<tr>
<td>C4H</td>
<td>C4N</td>
<td>2309 110 31</td>
</tr>
<tr>
<td>C5H</td>
<td>C5N</td>
<td>2309 210 35</td>
</tr>
<tr>
<td>C6H</td>
<td>C6N</td>
<td>2309 320 40</td>
</tr>
</tbody>
</table>

Enlarging wedge sets

<table>
<thead>
<tr>
<th>Type</th>
<th>Diameter mm</th>
<th>Order-No</th>
</tr>
</thead>
<tbody>
<tr>
<td>C4H</td>
<td>C4N</td>
<td>2309 110 31</td>
</tr>
<tr>
<td>C5H</td>
<td>C5N</td>
<td>2309 210 35</td>
</tr>
<tr>
<td>C6H</td>
<td>C6N</td>
<td>2309 320 40</td>
</tr>
</tbody>
</table>

Special lubricant

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Order-No</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.50 kg</td>
<td>2297 0965 10</td>
</tr>
<tr>
<td>1.00 kg</td>
<td>2297 0964 10</td>
</tr>
<tr>
<td>1.50 kg</td>
<td>2297 0963 10</td>
</tr>
</tbody>
</table>

Darda Smith
Innstr. 1, D-78176 Blumberg
Fax = +49 (0) 77 03 47 | 43 | 71 - 8
Fax = +49 (0) 77 02 | 43 | 91 - 12
info@darda.de
www.darda.de

We’ve got the power.

Our distributor:
Advantages

Economical!
Blasting usually requires work stoppages and the installation of protective幄 and other safety equipment. This costs both time and money. With the Darda hydraulic rock and concrete splitter, blasting is not longer necessary. Therefore, there is no potential danger to the workforce or passers-by, and other work in the immediate surroundings can continue uninterfered.

Safe
Hydraulic splitting is a powerful and extremely safe alternative to other conventional demolition techniques. The Darda hydraulic splitter works on the principle of pressure water and high pressure forces, and this method eliminates shock waves, vibrations, dust and noise that large impact tools usually produce. Darda split and concrete splitters have been used in over 80 countries for the past 40 years. The high quality, reliability and durability of the equipment is unsurpassed.

How the splitter works
Conventional demolition techniques demand extreme accuracy. A single error will result in an explosive failure. However, because of their comparative strength, these materials are highly resistant to impact forces. For this reason, many industries and industries adopt a splitting technique that works from the inside of the material, because rock or concrete has a lower tensile strength. The Darda hydraulic splitter was designed to work safely and according to a safe and proven wedge principle.

The powerful and economic way to split rock and demolish concrete

Technical Details

A complete Darda rock and concrete splitter comprises 3 components:
1. one or several splitting wedges
2. one hydraulic pump unit
3. one set of high and low pressure hoses

Hydraulic splitting cylinder
The hydraulic splitting cylinder consists of a central valve, a cylinder, a front head and a wedge set (1 wedge and 2 corner wedges). The entire cylinder is made of higher quality steel and steel so that although the equipment is light, it is extremely durable. The cylinder wedges are also coated with a hard metallic (lubricated) layer in a specially developed honing process. This makes them more resistant to very high pressure and forces.

Hydraulic pump unit
Electric, oil, diesel or gas engines can be used to drive the high pressure pump units. The system pressure has been limited to 50 MPA (500 bar) by pressure testing valves. Both mobile and portable pump units are available. Depending on the pump model, up to 5 splitting cylinders can be controlled simultaneously.

Hydraulic hoses
High and low pressure hoses connect the split and the pump unit. Several splitters are to be connected, a distributor valve is attached to the end of the 10 m hose.

Multiplie applications

There are different types of splitting cylinders available for a variety of applications.

C35
C45
C9
C12

Special lubricant
During the splitting process the wedge is exposed to extremely high forces. This requires that the inner wedge and outer wedge surfaces be frequently lubricated. Tests carried out over an extended period of time proved beyond doubt that only our special lubricant is capable of significantly reducing the extreme friction. Owing to that, the use of Darda lubricating paste guarantees the highest splitting performance which 20 to 50% higher than any conventional lubricants are used.

Pressure shells
In a small diameter drill hole, the high splitting force acts on a very small area, exerting extreme surface pressure. In the case of too little rock reinforcement and water the most unfavorable conditions, attempts or splitting may merely compact the concrete, leaving an empty hole. Only slurry drilling or drilling with the hole and the reinforcing rods remains unaffected. In such cases, a large, heavy-duty pressure shell provides the necessary water. These are introduced into a 100 mm diameter core hole and anchor the wedge unit of the splitting cylinder. The splitting force in turn applies over a large area, resulting in a precise split and forcing the steel rods apart more effectively.

Entering counter wedges
If you need to enter the crack already made, simply remove the counter wedges initially used and replace with entering counter wedges. The crack can now be widened further, allowing heavy duty iron bars and other reinforcements to be set.