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We’ve got the power.

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

Hydraulic pump units (portable)

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Hydraulic hoses

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Enlarging counter wedges

Pressure shells

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Order-No

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Order-No

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Special lubricant

<table>
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<td>0.50 kg</td>
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<td>1.00 kg</td>
<td>33910982 10</td>
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<td>25.00 kg</td>
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Our distributor:

C2-C12

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• Splitting force up to 413 tons (4048 kn)
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The powerful and economic way to split rock and demolish concrete

Hydraulic rock and concrete splitters provide a powerful and extremely cost-effective alternative to other conventional demolition techniques. Hydraulic splitting means controlled splitting, and this method eliminates shock waves, vibrations, dust and noise that large impact tools usually produce. DARDA rock and concrete splitters have been used with a great success 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 destroy rock and concrete by using an external force. However, because of their compressive strength, these materials are highly resistant to impact forces. For optimal results, one should adopt a splitting technique that works from the inside of the material, because rock on concrete have a lower tensile strength. The DARDA hydraulic splitters were developed to do this and work according to a safe and proven wedge principle.

Advantages

Economical
Boasting usually requires work stoppages and the installation of protective walls and other safety equipment. This costs both time and money. With DARDA high-performance rock and concrete splitters, this is not necessary. Therefore, there is no potential danger to the workforce or passers-by, and other work in the immediate surroundings can continue unaffected.

Safe
Hydraulic splitting means controlled demolition. The entire force development is always under full control. There is no danger of flying debris, vibrations or even explosions.

Environmental-friendly
When using the DARDA hydraulic splitting technique, there are no unpleasant side effects like vibrations and dust. Even noise emission is extremely low, which means that, all in all, this demolition technique is particularly environmentally-friendly. That is why the DARDA splitter is indispensable in densely populated areas or inside buildings.

Durable
Thanks to the extremely robust design, the DARDA rock and concrete splitter can withstand even the toughest conditions. Its durability is quite exceptional. Therefore, no routine maintenance is required. Yet another cost-saving factor.

Autonomy
DARDA splitters and pump units are easy to transport. Operators no longer depend on heavy machinery, e.g. excavators, for their transport to the demolition site. Therefore, even the smallest workplace is no longer a problem.

Easy to use
The splitters are extremely easy to operate. The lightweight design enables an operator to work on a splitting job single-handedly. Even unskilled workers can learn to use the DARDA splitter in a very short time.

Controlled demolition
DARDA hydraulic rock and concrete splitters enable you to work with a precision that cannot be achieved when using conventional demolition methods. The desired direction of the split and size of material to be removed can be determined beforehand. The portion of a structure that ought to remain intact is not affected by the splitting process.

Technical Details

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

Hydraulic splitting cylinder
The hydraulic splitting cylinder consists of a control valve, a cylinder, a front head and a wedge set (1 wedge and 2 counter wedges). The entire cylinder is made of highest quality aluminium and steel so that although the equipment is light, it is still extremely durable. The counter wedges are also coated with a hard metal (stellite) layer in a specially developed hardening process. This makes them more resistant to very high pressure and forces.

Max. applications

<table>
<thead>
<tr>
<th>Type of splitting cylinder</th>
<th>C55</th>
<th>C45</th>
<th>C9</th>
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<td>Primary splitting</td>
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<tr>
<td>Secondary splitting</td>
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<td>Underwater demolition</td>
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<tr>
<td>Enlarging secondary splitting</td>
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<td>Enlarging primary splitting</td>
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<td></td>
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<td>C9</td>
</tr>
<tr>
<td>Rock splitting in mining or splitting rock for other purposes</td>
<td></td>
<td></td>
<td></td>
<td>C9</td>
</tr>
<tr>
<td>Secondary splitting of large boulders</td>
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<td></td>
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<tr>
<td>New splitting of porous concrete</td>
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<tr>
<td>Splitting</td>
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<td>Use in blocks in the natural stone industry</td>
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</table>

DARDA lubricating paste guarantees the highest splitting performance which is 20 to 250% higher than if conventional lubricants are used.

Pressureshells

In a small diameter drill hole, the high splitting force acts on a very small area, exerting extreme surface pressure. In the case of heavily steel-reinforced concrete and under the most unfavourable conditions, attempts at splitting may narrowly compact the concrete, leaving an oval hole. Only short drills develop around the hole and the reinforcing rods remain unaffected. In such cases, two large, heavy-duty pressure shells provide the necessary remedy. These are introduced into a 100 mm diameter core hole and enclose the wedge set of the splitting cylinder. The splitting force is now applied over a large area, resulting in a precise split and forcing the steel rod apart more effectively.

Enlarging counter wedges

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