OIL WELL EXPLOSIVES

Gelatin Nitroglycerin Dynamite

Product Description
OIL WELL EXPLOSIVES (OWE) have been designed for extreme application of well fracturing and casing recovery of oil and gas wells. The high energy in OWE provides the user with superior performance in well stimulation. OWE will withstand 700 psi (1600 feet of hydrostatic head pressure) for 24 hours with full energy release.

Application Recommendations
• Minimum diameter is 32 mm (1-1/4 in).
• Minimum detonator is No. 8 strength.
• Storage at elevated temperatures and/or high humidity for 12-18 months can reduce the performance of OWE dynamite depending on the diameter. Consult your Dyno Nobel representative for specific recommendations.
• Storage at elevated temperatures and/or high humidity for 1 to 6 months can reduce the performance of Oil Well Explosives depending on the diameter. Consult your Dyno Nobel representative for specific recommendations.
• Dynamites are susceptible to sympathetic detonation when applied in very wet conditions where boreholes are closely spaced and/or where geological conditions promote this effect. Consult your Dyno Nobel representative for recommendations where these conditions exist.
• Care should be exercised in the selection of an initiation system. Consideration should be given to well depth, charge weight and sleep time. Consult your Dyno Nobel representative for recommendations and/or guidance.

Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density (g/cc) Avg</td>
<td>1.35</td>
</tr>
<tr>
<td>Energy (cal/g)</td>
<td>1,225</td>
</tr>
<tr>
<td></td>
<td>(cal/cc)</td>
</tr>
<tr>
<td>Relative Weight Strength a</td>
<td>1.39</td>
</tr>
<tr>
<td>Relative Bulk Strength a, b</td>
<td>2.30</td>
</tr>
<tr>
<td>Velocity (m/s)</td>
<td>6,400</td>
</tr>
<tr>
<td></td>
<td>(ft/s)</td>
</tr>
<tr>
<td>Detonation Pressure c (Kbars)</td>
<td>138</td>
</tr>
<tr>
<td>Water Resistance</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

* All Dyno Nobel Inc. energy and gas volume values are calculated using PRODET™ the computer code developed by Dyno Nobel Inc. for its exclusive use. Other computer codes may give different values.
* ANFO = 1.00 @ 0.82 g/cc
* Unconfined @ 50 mm (2 in) diameter.

Hazardous Shipping Description
Explosive, Blasting, Type A, 1.1D, UN 0081 II
OIL WELL EXPLOSIVES

Transportation, Storage and Handling

• The user of this product (or any other explosive product) should not leave or abandon undetonated charges in the ground. The leaving or abandoning of undetonated charges constitutes misuse of the product for which Dyno Nobel and its distributors are not responsible.
• OIL WELL EXPLOSIVES must be transported, stored, handled and used in conformity with all applicable federal, state, provincial and local laws and regulations.
• For maximum shelf-life, OIL WELL EXPLOSIVES must be stored in cool, dry and well-ventilated magazines. Dynamite that is stored under warm wet and/or humid conditions can deteriorate quickly, minimizing shelf-life. Dynamite inventory should always be rotated by using the oldest materials first. For recommended good practices in transporting, storing, handling and using this product, see the booklet “Prevention of Accidents in the Use of Explosive Materials” packed inside each case and the Safety Library publications of the Institute of Makers of Explosives.

<table>
<thead>
<tr>
<th>Diameter x Length</th>
<th>Quantity per Case</th>
<th>Nominal Case Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm</td>
<td>in</td>
<td>kg</td>
</tr>
<tr>
<td>50 x 200</td>
<td>2 x 8</td>
<td>34</td>
</tr>
</tbody>
</table>

• Oil Well Explosives are available in a wide variety of sizes. Custom sizes are subject to surcharge and may require longer than usual lead times.
• Note: All weights are approximate.
• Check with your local Dyno Nobel representative should you have any questions.

Case Dimensions

45 x 34 x 15 cm  17⅛ x 13⅝ x 8¼ in

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