JOHNEX ECONOTRIM BUTTBUSTER is a one-piece custom length bright yellow semi rigid coiled charge designed for rapid charging of perimeter boreholes in underground mines.

APPLYIATION
Specifically designed for delivering smooth walls and a safer controlled blast in development headings and shaft sinking.

FEATURES AND BENEFITS
- High energy flared end eliminates the need for a separate primer.
- High velocity of detonation (VOD) minimizes geological stress and reduces overbreak to an average of 4%
- Decoupled charge produces precision shearing which minimizes the need for rebogging
- Charging time is reduced by up to 50%
- Reduces scaling times substantially (50%-70%)
- Reduces shotcrete coating by an average of 30%
- Precision blasting provides improved safety in ground control and reduces potential rockfall
- Oxygen balanced explosive (no nitroglycerine)
- Prefitted retention spiders eliminate the need for stemming
- Jumbo downtime is reduced due to precision shearing and less scaling
- Waterproof
- Vastly superior shelf life to comparable perimeter products
- Customised charges are manufactured to suit individual borehole depths

PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>NOMINAL DENSITY (g/cm³)</th>
<th>COILS PER CASE</th>
<th>TO SUIT BORE HOLE DEPTH (m)</th>
<th>DIAMETER (mm)</th>
<th>VOD (m/s)</th>
<th>PRIMER LENGTH (mm)</th>
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<tbody>
<tr>
<td>Econotrim Buttbuster 200</td>
<td>1.04</td>
<td>24</td>
<td>2.4</td>
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</table>

Relative Weight Strength: 131%*
Relative Bulk Strength: 139%*
Explosive Class: 1.1D  UN Number: 0082

*Relative Weight Strength and Relative Bulk Strength are calculated using an in-house Thermodynamic code. This traditional way of calculating energy is directly related to density and does not take into account the distribution of energy.

JOHNEX ECONOTRIM BUTTBUSTER is available in low strength (LS) for softer geologies, and medium strength (MS) for harder geologies.

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STANDARD PACKAGING
ECONOTRIM BUTTBUSTER is supplied in 25kg cases.

STORAGE AND HANDLING
ECONOTRIM BUTTBUSTER should be stored in a cool, dry, high explosives magazine licensed for Class 1.1D explosives.

SHELF LIFE
When stored in ideal conditions ECONOTRIM BUTTBUSTER has a shelf life of 10 years.

SAFETY
Although ECONOTRIM BUTTBUSTER is oxygen balanced, users should ensure that adequate ventilation is provided prior to re-entry to the blast site. As with all explosives, ECONOTRIM BUTTBUSTER can be initiated by shock, friction or mechanical impact and should thus be handled and stored with care.

ADDITIONAL INFORMATION
Recommended Perimeter Borehole Spacing 600-700mm
Recommended Perimeter Borehole Collar 400 - 500mm
Recommended Burden 600-700mm
Recommended Burden Hole Collar (ANFO) 600-700mm

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