# TECHNICAL DATA SHEET



## STONECUTTER TM

## **Ammonium Nitrate Nitroglycerin Dynamite**

<b>Properties</b>	\$ #10
Density (g/cc) Avg	1.02
Energy <sup>a</sup> cal/g (cal/cc)	842 (859)
Relative Weight Strength <sup>b</sup>	0.96
Relative Bulk Strength <sup>b</sup>	1.19
Velocity <sup>c</sup> m/sec (ft/sec)	1,730 (5,675)
Detonation Pressure <sup>c</sup> (Kbars)	8
Gas Volume <sup>a</sup> (moles/kg)	36
Water Resistance	Poor
Fume Class	Not used for underground

- a 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.
- <sup>b</sup> ANFO = 1.00 @ 0.82 g/cc
- <sup>c</sup> Unconfined @ 22 mm (7/8 in) diameter

### **Product Description**

STONECUTTER is a customized, ammonium nitrate nitroglycerin dynamite. A plastic or paper coupler, attached to one end of each cartridge, allows easy assembly into a continuous length. Optional spacer cartridges allow reduction in explosives load, maximum energy distribution and simplify loading. STONECUTTER was developed for use in the production of dimension stone. Low density, velocity and energy combine for good shearing effect, reduced after blast residue and will not discolor stone

#### **Application Recommendations**

- Linear charge weight: 22 mm ( $^{7}/_{8}$  in) = 0.41 kg/m (0.27 lbs/ft)
- · Minimum detonator is No. 8 strength
- Minimum detonating cord is 1.5 g/m (7.5 gr/ft) coreload
- Minimum temperature is -40°C or -40°F
- ALWAYS trace columns with detonating cord securely attached to each cartridge when using optional spacers or when column length exceeds 2 m (6 ft) long.
- ALWAYS decouple the explosive charge. That is, select larger borehole diameters to reduce borehole pressure. Always stem to minimize air blast and plug the borehole above the explosive column to prevent stemming from filling the air space.

**Hazardous Shipping Description** 

Explosive, Blasting, Type A, 1.1D, UN 0081 II



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## STONECUTTER ™

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### Transportation, Storage and Handling

- STONECUTTER must be transported, stored, handled and used in conformity with all applicable federal, state, provincial and local laws and regulations.
- For maximum shelf-life, dynamite must be stored in cool, dry and well-ventilated magazines. 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.

Product	Borehole Diameter (in)				
Diameter (in)	1 <sup>7</sup> / <sub>8</sub>	2 1/2	2 3/4	3	3 1/2
7/8	6,189	2,930	2,287	1,824	1,221
7/8		53,372	41,657	33,223	22,253

Stonecutter alone.

Stonecutter with detonating cord trace along its length.

#### **Packaging**

Diameter	x Length	Linear Charge Weight		Qty / Case		Nominal Case Weight	
mm	in	kg/m	lbs/ft	Case	Туре	kg	lbs
22 x 400	<sup>7</sup> / <sub>8</sub> x 16	0.48	0.32	100	11G	20	45
22 x 600	<sup>7</sup> / <sub>8</sub> x 24	0.51	0.35	60	95G	19.5	43
32 x 400	1 ¼ x 16	0.98	0.66	44	2G	16	35
44 x 400	1 ¾ x 16	1.67	1.125	20	2G	13.6	30

- · Note: All weights are approximate.
- Diameter as labeled for 22 mm (.875 in) is nominal inside diameter. Actual outside diameter is 23 mm (0.90 in).

#### **Case Dimensions**

11G	44 x 36 x 18 cm	17¾ x 14¼ x 7¼ in
95G	67 x 35 x 12 cm	26½ x 13¾ x 4¾ in
2G	45 x 34 x 16 cm	17¾ x 13¾ x 6¾ in

## **ADDITIONAL INFORMATION –** Visit **dynonobel.com** for Brochures and Case Studies related to this product.



