

TROJAN® SPARTAN® SR™

Technical
Information



Shock Resistant Cast Booster



Product Description

TROJAN SPARTAN SR cast boosters are detonator sensitive, high density, high energy molecular explosives available in three sizes designed to optimize initiation of all booster detonator sensitive explosives.

In addition to the internal through-tunnel and detonator well, the TROJAN SPARTAN SR (Shock Resistant) cast booster has an internal sleeve to protect the circuit board in electronic detonators and is designed specifically for use with Dyno Nobel's DigiShot®, DigiShot® Plus, SmartShot®, and DigiShot® Plus 4G electronic detonators. The TROJAN SPARTAN SR can, however, also be used with any detonator (minimum length = 8.89 cm / 3.5 in) that may require additional protection from high shock, water hammer, effects during decking, corner operations or in certain geologies.

The TROJAN SPARTAN SR (Shock Resistant) cast booster also incorporates the unique Caplock™ feature which holds the detonator in place more securely and makes it more difficult for the detonator to be pulled out of capwell position while it is being lowered into the borehole. Even with this new Caplock feature, the detonator can still be removed if necessary.

Properties

SDS
#1108

Density	(g/cc) Avg	1.65
Velocity	(m/sec)	7,550
	(ft/s)	24,800
Detonation Pressure	(Kbars)	235
Water Resistance	6 months with no loss of sensitivity	
Shelf Life Maximum	5 years (from date of production)	
Maximum Usage Temperature*	65°C (150°F)	

*Never expose explosive materials to sources of heat exceeding 66°C (150°F) or to open flame, unless such materials or procedures for their use have been recommended for such exposure by the manufacturer.

All Dyno Nobel Inc. energy and gas volume values except Velocity and Detonation Pressure are calculated using PRODET™ the computer code developed by Dyno Nobel Inc. for its exclusive use. Other computer codes may give different values.

Velocity and Detonation Pressure are the result of empirical methods during May 2009.

IMPORTANT!!! WARNING!!!! IMPORTANT!!!!

**NEVER USE A DETONATOR LESS THAN
8.89 CM / 3.5 in LONG WITH THE
TROJAN SPARTAN SR CAST BOOSTER.
MISFIRES MAY RESULT.**

Hazardous Shipping Description

UN 0042 Boosters, 1.1D PG II



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Product Description continued

TROJAN SPARTAN SR cast boosters are formulated from the highest quality PETN and other high explosive materials ensuring reliability, consistency and durability in all blasting environments.

The fluorescent yellow container makes the TROJAN SPARTAN booster more visible on the blast site and reduces the possibility of misplaced charges.

Application Recommendations

- **NEVER** force the detonator into the through-tunnel, the detonator-well or otherwise attempt to clear these areas if obstructed. If the through-tunnel or detonator-well does not accommodate the detonator, do not use the booster. Notify your Dyno Nobel representative.
- **ALWAYS** use a detonator with a minimum length of 8.89 cm (3.5 in). The detonator well length is 10.2 cm (4.0 in).
- Extremely low temperatures do not affect the performance of cast boosters with commercial detonators. Low temperatures do affect detonators and detonating cord. Be certain your initiation system is suitable for your application in extremely low temperatures. Cast boosters are more susceptible to breakage during handling in extremely cold temperatures.

Transportation, Storage and Handling

- Dyno Nobel cast boosters must be transported, stored, handled and used in conformity with all federal, state, provincial and local laws and regulations.
- For maximum shelf life (5 years), Dyno Nobel cast boosters must be stored in a cool, dry, well ventilated magazine. Explosive inventory should be rotated. Avoid using new materials before the old.

Packaging

Unit Weight		Unit Dimensions				Case Quantity	Gross Weight/Case	
g	oz	Length		Diameter			kg	lbs
		cm	in	cm	in			
150	5.5	11.9	4.7	3.6	1.4	95	18.9	41.8
350	12	11.9	4.7	5.0	2.0	49	16.9	39.5
400	14	11.9	4.7	5.5	2.2	40	17.6	38.8
450	16	11.9	4.7	5.8	2.3	36	17.3	38.1

Note: All weights and dimensions are approximate.

Case Dimensions

42 x 33 x 14 cm

16 ½ x 13 x 5 ½ in

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