



Safety • Quality • Reliability

Technical Data Sheet

Solarcast-P

Cast Boosters



Description & Application

Solarcast-P Booster is made of a high explosive composition cast into a cardboard/plastic shell. Two longitudinal tunnels in the booster accommodate either a detonator or detonating cord. One tunnel has straight walls while the other tunnel is tapered with a detonator retention feature. This end of the tunnel is blocked at the top of the Booster. Detonating cord, signal tube or lead wires are protected from damage by a recessed well at the base of the booster.

Solarcast-P Boosters have a high density and a high velocity of detonation (VOD) to maximize performance. The Detonator retention feature enables safe removal of detonator if required.

Cast boosters are reliably initiated by No. 8 strength detonators or by detonating cords containing at least 5.0 g/m PETN (referred to the section - recommendation for use with Detonating Cord). These boosters have been specifically designed to provide reliable initiation of pumped, augered and packaged explosives. The main intended application for Cast boosters is for use with ANFO and Bulk explosives.

Technical Properties

Shell Colour	Orange
Nominal Density (g/cc)	1.55 ± 0.05
Velocity of Detonation (Km/Sec)	7.0 ± 0.5
Nominal Detonation Pressure GPa	19.0 ± 3
Water Resistance	Excellent
Oil Resistance	Excellent

Packaging

Export Packaging

Grammage	No. of Shells	Net Wt. / Kg	Gross Wt. / Kg
25	600	15.00	20.00
100	120	12.00	12.80
150	60	09.00	9.80
150	80	12.00	12.80
200	52	10.40	11.10
250	42	10.50	11.30
400	30	12.00	12.80
500	20	10.00	10.80
800	15	12.00	12.80

Domestic Packaging

Grammage	No. of Shells	Net Wt. / Kg	Gross Wt. / Kg
100	250	25.00	27.00
150	160	24.00	26.00
250	100	25.00	27.00
400	60	24.00	26.00

Other diameter / grams combinations can be offered on request.

Dimensions

Size	Diameter mm	Total Length mm
25g	20.5	105
100g	34.0	98
150g	40.0	98
150g	37.5	118
200g	42.0	118
250g	46.0	118
400g	56.5	118
500g	62.0	118
800g	79.0	118

Note : Other sizes can be made available on request.

Solarcast-P

Cast Boosters

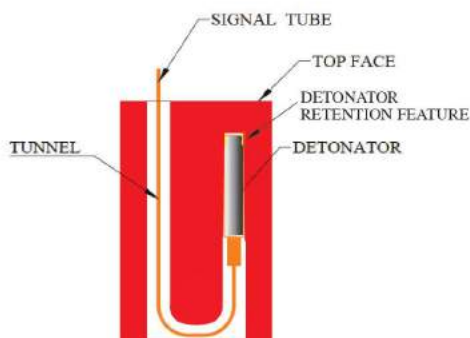
Recommendations for Use

With Delay Detonators

Insert the detonator through the straight wall of the booster and back through the other tunnel where it gets locked using the detonation retention feature as shown in Figure 1. Lower the complete assembly to the desired location in the blasthole. Avoid walking on the signal tube or lead wires as this is likely to cause damage. In all applications, ensure that the primer is completely immersed in the explosive it is intended to initiate. This can be achieved by either pulling the primer up into the explosive or suspending the primer well above floor of the hole during loading.

Large diameter packaged explosives should be lowered on top of the primers, rather than dropped from blasthole collar. The cord or tube downline should be kept taut during charging and stemming to prevent damage and minimise abrasion. However, if a primer begins to float on top of a rising column of bulk explosive, temporarily slacken the downline. Once the surface of the explosive column has risen past the primer, tension can be reapplied to the downline.

Figure 01
Detonator
placement
in Booster



Disclaimer

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*Images are just for reference and can be changed without any intimations.

Revision : 06 | Dated : 30.03.21

Figure 2.
Detonating cord
attachment



Recommendations for Use

With Detonating Cord

Solarcast-P Boosters are reliably initiated by :

1. Detonating Cord, which has a PETN charge mass of 5.0 g/m, with both tunnels of booster not having the plastic inner sleeve and without detonator retention feature.

2. Detonating cord which has a minimum PETN charge mass of 10.00 g/m and above, with both tunnels of booster having the plastic inner sleeve with detonator retention feature.

Ensure the Booster is securely attached to the detonating cord by passing the cord down through on tunnel having a straight wall. Then bring this cord to the exterior of booster wall to form a loop and then tie the cord, as shown in figure 2 and then lower the complete assembly to the desired location in the blasthole. Never use detonating cord with coreload at 5 g/m for single pass threading. Cut the detonating cord downline from its reel and adequately secure it at the blasthole collar. Charge the hole with explosives to the design level. For any subsequently boosters on the same downline, unfasten the detonating cord tail and thread the end of the cord through the straight walled tunnel. Resecure the cord tail, at the collar and slide or lower the booster to the desired location.

Storage & Handling

Cast boosters have a shelf life of 5 years in good storage conditions. These boosters should be stored in a cool, dry magazine licensed for 1.1D Explosives.

Shipping Information :

Authorised Name of Explosive	: SOLARCAST-P
Proper Shipping Name	: BOOSTERS, without detonator
Class / Div.	: 1.1D
UN No.	: 0042

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