# Shock\*Star MS

PRODUCT INFORMATION BROCHURE

**SHOCK\*STAR MS** series in-hole delays are available in a sequence of 31 delays from instantaneous (0 ms) to 1,000 ms.

They are designed to be used as down-hole detonators for the initiation of cast boosters and high explosives.

In-hole delays can be equipped with a J-hook\* for compatibility with detonating cord initiation or can be initiated by another electric or non-electric detonator.



### BENEFITS

- 720 mg base charge.
- Excellent delay time accuracy ensures greater than 99% probability of in-sequence initiation.
- Manufactured with yellow shock tubing for easy differentiation from surface detonators when inspecting the connected blast pattern.
- High impact protection.

### PROPERITES

#### Delay sequence

Delay #	0	1	2	3	4	5	6	7
Nominal delay (ms)	0	25	50	75	100	125	150	175
Delay #	8	9	10	11	12	13	14	15
Nominal delay (ms)	200	225	250	275	300	325	350	375
Delay #	16	17	18	19	20	21	22	23
Nominal delay (ms)	400	425	450	475	500	550	600	650
Delay #	24	25	26	27	28	29	30	
Nominal delay (ms)	700	750	800	850	900	950	1,000	

\* This product dose not come with J-hook attached.





Tenaga Kimia-Austin Detonator Sdn. Bhd. (580221-P) (formerly known as Tenaga Kimia-Ensign Bickford Sdn Bhd)

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### STANDARD TECHNICAL DESCRIPTION

DETONATOR			
Detonator shell material	Aluminum		
Base charge	720 mg		
Water pressure resistivity	0.3 MPa / 7 days		
Temperature range for application	from -30 °C to +60 °C		
Shelf life (storage conditions)	2 years (-30 °C to +40 °C, R.H. max. 65%) in original, sealed package		
Label marking	Delay #, Detonator type, Delay ms, ST length, Order number		
SHOCK TUBE			
Velocity of detonation	2,000 ± 100 m/s		
Color	Yellow		

### STANDARD PACKAGING DETAILS

Shock tube	Packaging 1.1B UN 0360	Packaging 1.4S UN 0500		
length (m)	Units / Box	Units / Box		
3.6	140	100		
4.8	100	80		
6	100	70		
7.2	80	50		
9	80	50		
12	50	40		
15	40	30		
18	35	20		
21	30	20		
24	30	20		
27	25	20		
30	25	15		

SHOCK\*STAR MS detonators are packaged in cardboard carton of outer dimension 385x235x282 mm.

Contact your local Austin Powder representative for further information.

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