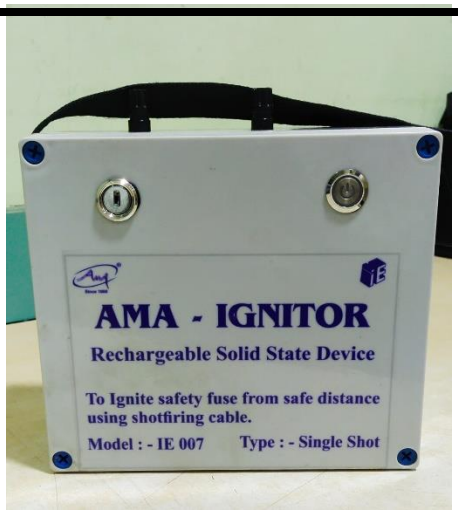


AMA-Ignitor Exploder

INTRODUCTION

Present practice in the mining industry since ages is that safety fuse of 1 to 2 mtr length is crimped to ordinary detonator at the blasting site and this combination is tied to non-electric detonator or detonating fuse. The blaster then ignite the safety fuse by a match stick or lighter and then run to the safety shelter (Blasting Shelter) which is about 100 to 200 mtr away from the blasting area. The safety fuse which has been ignited by the blaster manually slowly burn in a few minute and finally initiate the ordinary detonator which in turn initiate the non-electric detonator / detonating fuse and the blast takes place.

This present practice of in person manually igniting safety fuse is very unsafe as the blaster has to run for safety after igniting safety fuse and while running there is a chance of his falling down or not reaching to safety before the blast takes place. Many fatal accident have taken place in which the blaster was hit by fly rock as he could not reach blasting shelter and blast took place.

The two disadvantage of this present system is
(a) Blaster has to ignite the safety fuse in person and run for safety. It is highly unsafe practice
(b) Longer length of safety fuse has to be used so that it gives time for blaster to reach safety. Longer length mean more cost.

DESCRIPTION

To overcome both the above disadvantage we have invented **AMA-Ignitor Exploder** which does away with manual igniting and also reduce the cost by 95% as only 3inch safety fuse is required instead of 5ft (1.5 mtr) safety fuse used conventionally.

CONCEPT

AMA-Ignitor Exploder uses the concept of lighting / igniting the safety fuse with the help of electric arc formed between two electrodes which ignite the chemical powder in the safety fuse. To form an arc the device AMA-Ignitor Exploder is placed at a distance of 100 to 200 mtr and connected to the arc former i.e. ignitor by electric wire (shot firing cable) approved by the mining safety authority i.e. DGMS. One end of safety fuse is crimped one side to ordinary detonator and other end is inserted in the ignitor.

Once the blast circuit is complete and ready for blasting then the electric charge from the AMA-Ignitor Exploder is passed to the ignitor and thus arc is formed which ignite the chemical in the safety fuse whereby the safety fuse start burning and finally initiate the ordinary detonator.

This System of igniting the safety fuse from a safe distance by means of electric charge is invented for the first time in India. The equipment and system invented for the first time is under registration.

CERTIFICATE OF COMPLIANCE

THIS IS TO CERTIFY THAT

We hereby declare that the technical files of all the items in each product group of Complied with the requirements of the EMC Directive 2014/30/EU and Explosives Directive 2014/28/EU

Manufacturer
Name: INDUSTRIAL EXPLOSIVES PVT. LTD.

Address: Maimoon Chambers, Gandhibagh, Nagpur-440032, Maharashtra, India

Products: Ignitor Exploder - Rechargeable Solid-State Device

Model: IE 007 **Type: Single / Multi Shot**

Brand: AMA

Complies with the requirements applicable to it
The quality system file has been assessed, approved and is subject to continuous surveillance according to the Council Directive on EMC Directive 2014/30/EU and Explosives Directive 2014/28/EU

This certificate is issued under the following conditions:

1. It applies only to the quality system maintained in the manufacturing of above referenced models and it does not substitute the design or type examination procedures, if requested.
2. The certificate remains valid until the manufacturing conditions or the quality system are changed.
3. The certificate validity is conditioned by positive results of surveillance audits.
4. The CE mark as shown above can be used, under the responsibility of the manufacturer, after completion of an EC Declaration of conformity and compliance with all relevant EC Directives. The statement is based on a single evaluation of one sample of above mentioned product. It does not imply an assessment of the whole production.

Validity of this certificate can be verified at www.sigma-au.com

Certificate Number: SCPLXXXX

Date of initial registration	: XXXX2025	Date of Issue	: XXXX2025
Certificate Expiry	: XXXX2028	Recertification Due	: XXXX2028

Any significant changes in the design or process used to manufacture the products, or revisions to the standards referred above may require special audit by SIGMA CERTIFICATION PTY LTD. The product liability rests with the manufacturer or his representative in accordance with the applicable standards/directives.

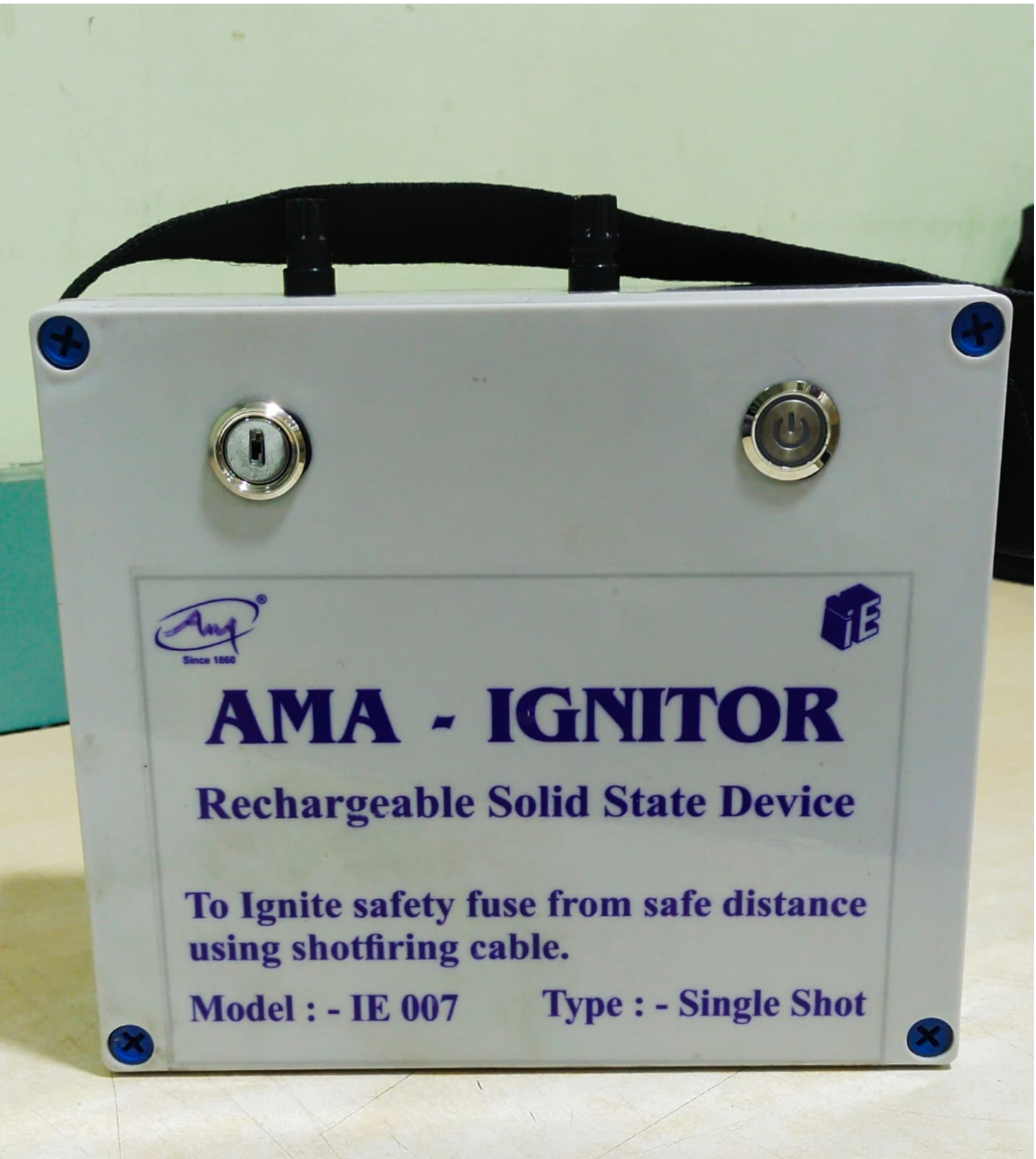
Registration is subject to the system being continually maintained to the above standard under regular surveillance, If surveillance does not take place when required, registration shall be removed.

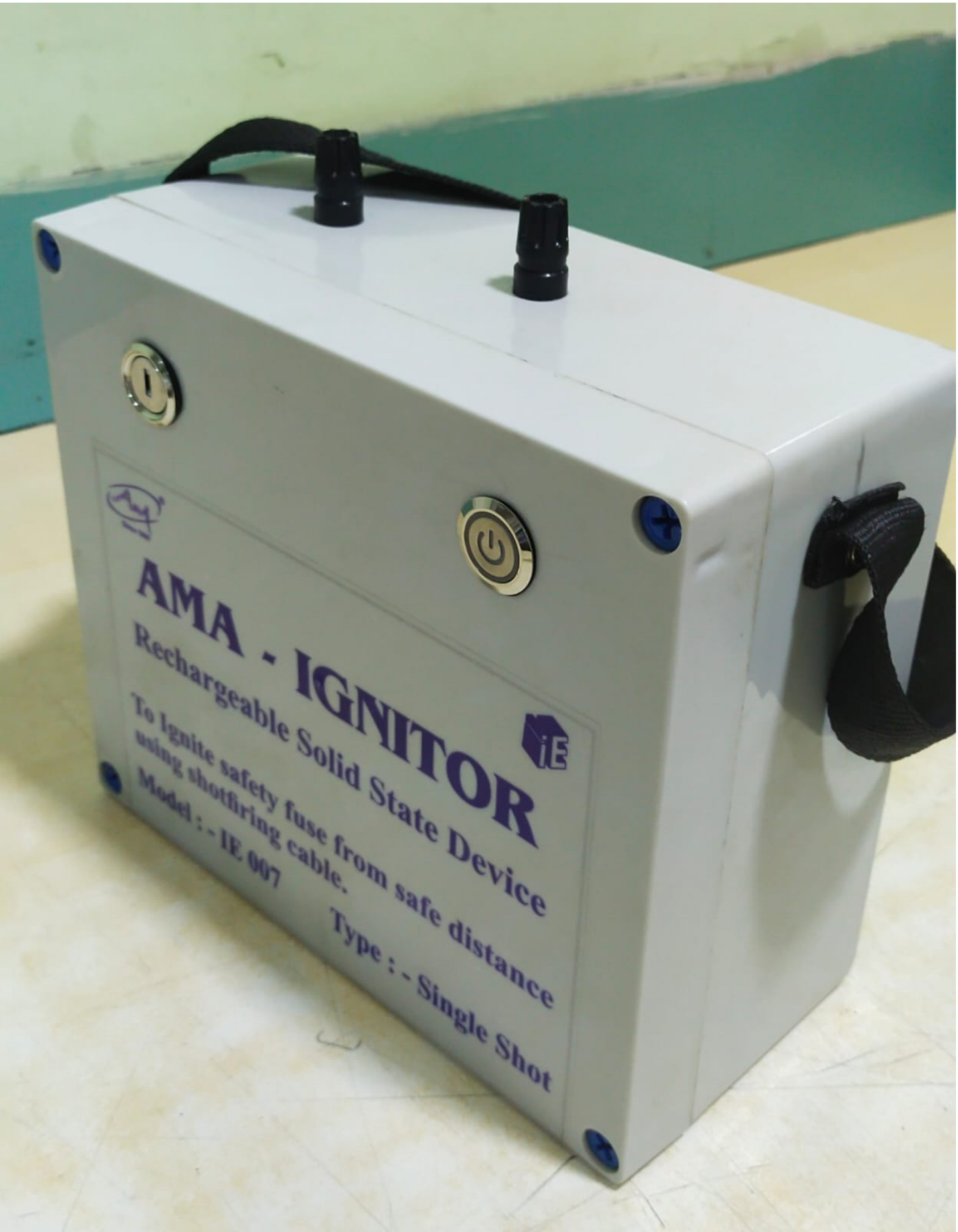
CE

Authorized Signatory

SIGMA CERTIFICATION PTY LTD
33, ROOKWOOD AVENUE,
COOPERS PLAINS,
QUEENSLAND 4108, AUSTRALIA.
E-mail: info@sigma-au.com
Web: www.sigma-au.com

Sigma CERTIFICATION


Since 1860
AMA - IGNITOR
Rechargeable Solid State Device
To Ignite safety fuse from safe distance using shotfiring cable.
Model : - IE 007
Type : - Single Shot


AMA - IGNITOR
Rechargeable Solid State Device
To Ignite safety fuse from safe distance
using shotfiring cable.
Model : - IE 007
Type : - Single Shot