

## Exel™ DS2

Blasting machine for Exel™ detonators



The Exel™ Start DS2 is a blasting machine for the safe initiation of Exel™ detonators. It consists of an energy source (battery), a voltage converter, a capacitor for energy accumulation, an electrode, and pushbuttons to effect initiation. The electrical energy is converted to a powerful spark, which the electrode emits into the inside of the Exel™ tube to initiate the shock-wave reaction.

The Exel™ Start DS2 is powered by a standard 9 V alkaline battery that lasts for at least 500 initiations. When the charging button is pressed, the capacitor is charged up to 2500 V. Pressing the firing button then emits a powerful spark that initiates the Exel™ tube. Note that the charging button must be kept depressed throughout, or else the capacitor will be discharged over an internal resistance. It is easy to change the electrode.

### Technical Properties

Product	Exel™ Start DS2
Function range	From -25 °C to +70 °C
Charging time	Less than 10 seconds
Voltage (V)	2500
Capacitance (uF)	0,2
Weight (g)	275
Dimensions (W x L x H) (mm)	65 x 155 x 36
Service life of electrode	approx. 500 initiations
Battery type	9 V alkaline (6LR61)

### How to use the Exel™ Start DS2

Cut off the sealed end of the Exel™ tube using the Exel™ Start's DS2 built-in tube cutter. Place the end of the tube on the electrode, and push in the tube completely. Press the button marked "CHARGING", and keep it depressed. When the green LED lights, the blasting machine is ready to initiate the round. Keeping the "CHARGING" button depressed, press the button marked "FIRING". This discharges the energy in the capacitor into the electrode, which emits a powerful spark that initiates the Exel™ tube.

If, for some reason, the initiation has to be aborted, simply release the "CHARGING" button and pull the Exel™ tube off the electrode. The capacitor will discharge automatically.

### Changing the electrode

The electrode should be replaced after every 500 firings (approx.). To replace the electrode, unscrew the chuck completely. Observe how the old electrode is fitted, and then remove it.

Fit the new electrode, making sure it is inserted correctly. Fit back the chuck and tighten well by hand. The machine is now ready for use.

### Changing the battery

The battery cover is on the back of the machine. Using a Phillips screwdriver, remove the 4 screws that secure the battery cover.

Remove the old battery and fit a new 9 V alkaline battery type 6LR61, or corresponding type. Take care not to pinch or jam the conductor.

N.B. If the Exel™ Start DS2 is to be used in very cold weather (down to -40 °C), DEXPLOC recommends using a type U9VL lithium battery instead.

Fit back the cover and tighten the 4 screws properly.

## **Changing the blade in the tube cutter**

Unscrew the two screws on the machine's protective arm and remove the cover that holds the blade in place. Remove the old blade and replace it with a new one. Screw back the cover securely.

## **General preventive maintenance**

Keep the Exel™ Start DS2 blasting machine clean and dry. Dirt and moisture on the electrode can cause initiation to fail. Each time a round is fired, traces of carbon black from the tube are deposited on the electrode. Such deposits should be removed regularly using a small, soft brush wetted with methylated spirit, for instance.

## **Spare parts**

Spare parts such as electrodes and blades for the Exel™ Start DS2 can be ordered from DEXPLOC.

## **Disclaimer**

© 2021 DEXPLOC A/S. All rights reserved. All information contained in this document is provided for informational purposes only and is subject to change without notice. Since DEXPLOC A/S cannot anticipate or control the conditions under which this information and its products may be used, each user should review the information in the specific context of the intended application. To the maximum extent permitted by law, DEXPLOC A/S specifically disclaims all warranties express or implied in law, including accuracy, non-infringement, and implied warranties of merchantability or fitness for a particular purpose. DEXPLOC A/S specifically disclaims, and will not be responsible for, any liability or damages resulting from the use or reliance upon the information in this document.

The word DEXPLOC with associated logo are trademarks of DEXPLOC A/S.