



Maintenance free negative discharge sparker specially designed for small vessel operations.

Description

INNOVATIVE PRESERVING ELECTRODE MODE

The Geo-Source 200 light weight is designed for operation with the Geo-Spark 1000 Pulsed Power Supply using the "Preserving Electrode Mode". This patented concept consists of using a NEGATIVE electric discharge pulse, instead of a positive electric discharge pulse.

Note that working with a negative pulse is NOT the same thing as reversing the polarity of an antique power supply, which is generating a positive pulse.

MAINTENANCE FREE ELECTRODES 5 YEAR GUARANTEE

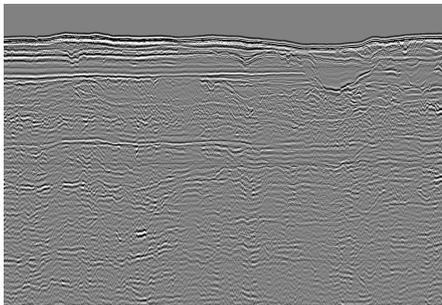
The Preserving Electrode Mode reduces the tip wear to practically zero. You can shoot day after day, week after week, month after month with practically NO tip maintenance.

OPTIMUM ACOUSTIC REPEATABILITY

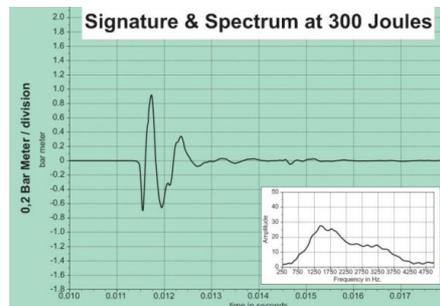
Zero tip wear is essential for the repeatability of the acoustic pulse, which depends largely on a constant, unaltered electrode surface.

Operational Features

- Specially designed for small vessel surveys.
- Can be handled by one person.
- Water depths from 2 to 500 m.
- Penetration to 200 - 300 ms below seabed depending on geology.
- Vertical resolution of 10 - 30 cm.
- You don't need to trim tips during the survey - electrodes do NOT burn off.
- Successfully employed in wind farm surveying, coastal engineering, sand search, site and route surveys and many others.



Geo Spark 200 and Multi-channel streamer.



broad signal spectrum at suitable power.



No wear of the tips even after 3 years of use.

Additional Features

CONTROL OF ALL SPARKER PARAMETERS

The effective source depth is 15-20 cm. A constant source depth at 1/4 of the wavelength is essential in order to optimize the constructive interference between the primary pulse and surface ghost. But this can be easily customized by the user with the use of extensions, for instance, in situations where penetration should be a priority.

SOURCE GEOMETRY AND CONFIGURATION OF THE TIPS

The electrode modules are evenly spaced in a planar array of 0.50 m x 1.00 m. This geometry not only enhances the downward projection of the acoustic energy, it also reduces the primary pulse length, since all tips are perfectly in phase. Each tip has an exposed surface of 1.4 mm, suitable for maximum 10 Joules per tip and with this configuration gives an excellent pulse over the 100 - 1000 Joule power range.

FLEXIBLE AND FLOATING HV TOW CABLE

A flexible, floating power/tow cable with the standard length of 25 m is available by default. This dedicated coaxial HV cable contains 4 leads of 6 mm² plus outer braiding of 24 mm². It is designed to have a low self-inductance in order to preserve the high di/dt pulse output of the power supply. The wet side of the cable is terminated with two special HV connectors to the electrode modules and a ground connector to the frame. Connecting or disconnecting the cable to the sparker takes less than ten minutes. The cable weights only 35 kg and is easy to handle by one person. For large vessels we recommend the use of the standard [50 m floating HV Power cable on reel](#).

Specification

Dimensions (cm) & Weight 110 (L) x 100 (W) x 60 (H) for 45 kg

Number of Tips 200

Operation Depth (m) 0 - 500

Dominant Frequencies 1250 - 1750 Hz (at 400 J)

Better if used with [Geo-Spark 1000](#), [Geo-Spark 2000](#), [8E single-channel Streamer](#), [24 multi-channel streamer](#)

Recommended interface system [Mini-Trace II](#) or [Multi-Trace Server](#)

Power Requirements 5kVA generator (for the Power Supply)

We are always pushing for improvements, so equipment specifications can change without notice. Please keep in contact with support to stay in tune with the developments.