

Loresco RS•3 is the newest and most innovative super conducting earth contact backfill in the Loresco product line. RS•3 combines the characteristics of superior low resistivity and high bulk density with a remarkably rapid sinking ability to provide the latest in conductive carbon backfill technology. Because of the new rapid sinking ability RS•3 is able to achieve maximum compaction quickly. Rapid sinking allows for a faster construction completion time and faster energizing of the anode system. Rapid sinking allows for pouring when pumping is not an option. RS•3 is able to handle the demands of stringent field requirements. This is the first time a conductive carbon backfill combining pumping ability and pouring ability has been available in one bag. RS•3 is manufactured under a new process which creates a new surface with superior conductive properties. This manufacturing process is exclusive to conductive carbon formulations designed for cathodic protection. The new manufacturing process ensures the impressed current anode and RS•3 system have increased electronic flow performance to further increase the life of the anode system. Loresco RS•3 is produced specifically for cathodic protection applications using an exclusive multi-step process.

**First**, a very high quality base carbon with desired characteristics is selected. **Next**, this carbon is calcined to a minimum temperature of 1250° C under very exacting and controlled standards. This step results in

semi-graphitized carbon particles with excellent conductivity. All particles shaped and surface modified for maximum electrical conductivity and high-current applications. **Then**, to further improve the bulk conductivity, the surfaces of the individual particles are *modified* to enhance the contact conductance in a process exclusive only to the corrosion industry. This breakthrough in surface alteration ensures maximum electronic current transfer with positive anode contact. **Finally**, a specially formulated surfactant is added to reduce particle surface tension for compact settling under water.

Loresco RS•3 has a bulk density of 68 lbs per cubic foot. The fixed carbon content is greater than 99% by weight. The bulk density and high fixed carbon content coupled with the assured low resistivity medium allows for longer groundbed life at a lower operating cost.

## INSTALLATION

Loresco RS•3, due to its manufacturing process, is simple to install by either mixing and pumping or by pouring dry. With deep anode systems, pumping from the bottom up is recommended. Loresco RS•3 has superb pumping qualities due to the addition of surfactants and when agitated in water, takes on the characteristics of super heavy mud. Time before energizing is greatly reduced after installing RS•3. The modified surface of the carbon particles coupled with the action

of the surfactants in RS•3 will achieve positive electrical contact by settling. Vibrating or compacting is not necessary. See installation section on page 34 in this catalog for additional pumping data.

### RS•3 WORKS

Loresco RS•3 represents technology developed exclusively for high current cathodic protection installations. RS•3 will satisfy all functioning requirements for a premium earth contact backfill.

### Specify Loresco RS•3. It works.

#### DRY VOLUME OF LORESCO TYPE RS3 REQUIRED VS. CYLINDRICAL HOLE SIZE

HOLE SIZE	CUBIC FT. PER LINEAL FT.	LBS. TYPE RS3 PER FT.	FT. TYPE RS3 PER 100 LBS.	LBS. RS3 PER 100 FT. OF HOLE
4"	.087	5.9	16.90	590
6"	.196	13.3	7.50	1330
8"	.349	23.7	4.21	2370
10"	.545	37.1	2.70	3710
12"	.784	53.3	1.88	5330

### MATERIAL DESCRIPTION

Loresco RS•3 is a surface modified, blended, and sized carbon backfill with surfactants.

### SPECIFICATIONS

<b>Fixed Carbon</b>	99.4%
<b>Ash</b>	0.5%
<b>Moisture</b>	0.1%
<b>Volatiles</b>	nil (950°C)*
<b>Bulk Density</b>	68 lbs. per cubic foot

- All particles shaped and surface modified for maximum electrical conductivity and high-current applications
- Particle sized to facilitate pumping and pouring applications with rapid settling
- Maximum particle size 2.5mm
- Minimum calcination temperature of base materials is 1250° C
- Base materials are calcined under ISO 9002:2000 quality control
- No de-dusting oils are used during the manufacture of base particles

*Typical values shown above. Specifications subject to changes without notice.*

*\*Hydrogen / hydrocarbons nil due to calcination temperature in excess of 1200° C*