

Loresco SC•3 is the *finest* earth contact backfill in the Loresco line of products. Loresco is already acknowledged around the world as a leader in cathodic protection. A dramatic breakthrough in over thirty years of research has now produced a super-conducting premium earth contact backfill called Loresco SC•3. Once again, Loresco defines the standard for quality and performance in the cathodic protection industry.

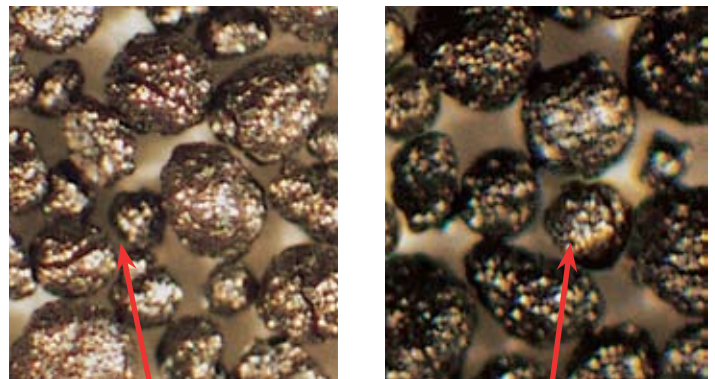
Loresco SC•3 is designed specifically for demanding anode systems which mandate a low resistivity medium. SC•3 is a dust free product and, according to EPA extraction tests, is extremely pure and complies with regulations governing buried products. Utilizing a modified industrial standard method for testing permeability (API RP-27), SC•3 will mitigate fluid interchange between aquifers. Loresco SC•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. **Then**, to further improve the bulk conductivity, the surfaces of the individual particles are *modified* to enhance the contact conductance. 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 SC•3 has a bulk density of 74 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.

The photo below is a magnification of Loresco SC•3



Particles Before Coating

Particles After Coating

## INSTALLATION

Loresco SC•3, due to its dust-free manufacture, 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 SC•3 has superb pumping qualities due to the addition of surfactants and when agitated in water, takes on the characteristics of heavy

mud. A recommended mix is seven gallons of water per one-hundred pounds. After installing SC•3, allow twenty-four hours settling time before energizing. The modified surface of the carbon particles coupled with the action of the surfactants in SC•3 will achieve positive electrical contact by settling. Vibrating or compacting is not necessary. See installation section in this catalog for additional pumping data.



Certified to  
NSF / ANSI / 60

### SC•3 WORKS

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

### Specify Loresco SC•3. It works.

**DRY VOLUME OF LORESCO TYPE SC3 REQUIRED VS. CYLINDRICAL HOLE SIZE**

HOLE SIZE	CUBIC FT. PER LINEAL FT.	LBS. TYPE SC3 PER FT.	FT. TYPE SC3 PER 100 LBS.	LBS. SC3 PER 100 FT. OF HOLE
4"	.087	6.4	15.70	640
6"	.196	14.3	6.99	1430
8"	.349	25.5	3.93	2550
10"	.545	39.8	2.51	3980
12"	.784	57.2	1.75	5720

### MATERIAL DESCRIPTION

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

### SPECIFICATIONS

<b>Fixed Carbon</b>	99.35%
<b>Ash</b>	0.6%
<b>Moisture</b>	0.05%
<b>Volatiles</b>	nil (950°C)*
<b>Bulk Density</b>	74 lbs. per cubic foot

- Predominantly round particles
- All particles surface modified for maximum electrical conductivity and high current applications
- Particle sizing to be dust free with a maximum particle size of 1mm
- Minimum calcination temperature of base materials is 1250° C
- Base materials are calcined under ISO 9002:2000 quality control
- Surfactants are added to assist pumping and settling
- 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*