

PRODUCT GROUP:

GRAPHITISATION INDUSTRYBAR

Vision Electric busbar at ERFTCARBON

ERFTCARBON GmbH & Co KG is an independent German company, located in Grevenbroich, close to Cologne and Duesseldorf.

High quality carbon and graphit products are sold to steel, aluminium and silicon industry. Customers worldwide value the high quality of the ERFTCARBON products.

In 1998 ERFTCARBON decided to install a new production technology to improve the quality of their graphite electrodes. The total graphitisation plant was renewed in 3 steps to allow constant delivery without interruption.

Medium voltage switchgear, transformer-rectifier units and a complete secondary busbar system was installed over a 3 years period.

The secondary busbar system provides the connections between rectifiers and graphitisation furnaces. According to the production schedule current for the single furnaces are switched on-off periodically. The total order reached a value of 1.8 m € consisting of:

- Layout and detail engineering
- Material supply for the busbar system
- Installation and start-up



For further information please contact:

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The material supply for the busbar system included the following:

- Feeder from rectifiers: collection of DC at the different poles.
- Distribution of current using a 800 x 150 mm per pole aluminium busbar.
- Feeding of the single graphitisation furnaces via 2,2 m long aluminium flexibles with a cross section of 120 000 mm² each.
- Watercooled interface plates connecting flexibles and furnace head with an explosive bonded copper layer.
- Flexible cross-over bridges with two explosive clad, watercooled copper-aluminium interfaces.
- Fixing, insulated screw connections and busbar insulation and supports.

Special welding and mechanical treatment and the production of flexibles was outsourced at EMS Elektro Metall Schwanenmuehle, a worldwide leading company in this industry.

Installation and welding at side was executed by GSB Gesellschaft für elektrische Ausrüstungen, Grevenbroich, specialized in installation of heavy busbar systems and rectifier/transform units.

The scope of supply and services of Vision Electric included the total project management and was done to the complete satisfaction of ERFTCARBON.

Project Data:

Customer :	ERFTCARBON, Grevenbroich
Projectleader at ERFTCARBON :	Mr. Werner Haenel
Sector of industry :	Graphitisation
Total value :	1.75 m €
Aluminium bars :	122.000 kg
Aluminium flexibles :	51.900 kg
Copper / Aluminium interfaces :	54.500 kg
Execution time :	1998 - 2000



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