DESCRIPTION
The Flexilite-MC system has been developed as a unique method for superior insulation of the upper section of ingot moulds used for the casting of steel. This system uses several materials from the Unifrax range of high temperature insulation products. At the core of this system is Flexilite-MC Felt, a specially developed 1260°C grade felt product that utilises our patented silica-magnesia chemistry. The fibre used in the manufacture of Flexilite-MC Felt has high solubility in simulated body fluids and meets the European and German regulatory requirements.

GENERAL CHARACTERISTICS
The Flexilite-MC System has the following outstanding characteristics:

- High temperature stability (up to 1260°C)
- Low thermal conductivity
- Excellent handling strength
- Ease of installation and removal
- Lightweight (installed by one person)
- Superior flexibility (corrugated moulds)
- Improved yield and productivity
- Proven service record

TYPICAL APPLICATIONS
- ‘Hot top’ insulation for steel ingot moulds

Any new and/or special use of these products, whether or not in an application listed in our literature, must be submitted to our technical department for their prior written approval.
PRODUCTS
An advanced manufacturing process is employed for the production of Flexilite-MC Felt combined with a specialist treatment method. The result is a unique product that combined superior flexibility and excellent thermal insulation properties. A precise tolerance specification provides a lightweight felt with advanced handling characteristics.

The felt is bonded to the mould surface using Flexilite-MC Cement. This bespoke, silica based adhesive, has been developed for the demands of this application. Flexilite-MC Cement is ideally suited for bonding the felt on to the metallic substrate. Joints in the felt are normally compressed during installation to form a seal.

Extra sealing can be obtained by placing Flexilite-MC Paper over the joint to complete the installation. The 2mm thick paper is supplied in a convenient strip roll, 50mm wide and 10 metres long. It is cemented in place using Flexilite-MC Cement.

INSTALLATION
Flexilite-MC Felt is normally used at a thickness of 18 or 25mm and is supplied in pre-cut pieces to improve the handling process and reduce installation time on to the mould. Custom packaging allows ease of handling and simplifies fitting on site. Bonding to the ingot mould is achieved using Flexilite-MC Cement. It is supplied ready to use, but may require some mixing before use to guarantee product uniformity. Drying is dependent upon ambient temperature conditions.

To complete the installation, a strip of Flexilite-MC paper is cemented over the joints in the felt using Flexilite-MC Cement. The removal of Flexilite-MC Felt after use is simple and effective, providing a smooth surface to the steel ingot. A shorter cooling period is obtained for the moulds, which also require less cleaning between each cast providing improved mould utilisation.

Details of these products can be found on separate product information sheets.

HANDLING INFORMATION
A Material Safety Data Sheet has been issued describing the health, safety and environmental properties for the products in this system, identifying the potential hazards and giving advice on handling precautions and emergency procedures. This must be consulted and fully understood before handling, storage or use.

Information contained in this publication is for illustrative purposes only and is not intended to create any contractual obligation. Further information and advice on specific details of the products described should be obtained in writing from a Unifrax Corporation company (Unifrax España, Unifrax France, Unifrax GmbH, Unifrax Italia, Unifrax Limited, Unifrax s.r.o.). Unifrax maintains a continuous programme of product development and reserves the right to change product specifications without prior notice. Therefore, it maintains at all times the responsibility of the customer to ensure that Unifrax materials are suitable for the particular purpose intended. Similarly, if, as materials not manufactured nor supplied by Unifrax are used in conjunction with or instead of Unifrax materials, the customer should ensure that all technical data and other information relating to such materials has been obtained from the manufacturer or supplier. Unifrax accepts no liability arising from the use of such materials. All sales made by a Unifrax Corporation company are subject to that company’s Terms and Conditions of Sale, copies of which are available on request.