



CRYOGENIC INSULATION

Infigro has a highly efficient portable perlite plant which is used to produce expanded loose-fill perlite on customers' sites at any location world-wide. The staff have many years experience in the operation of this portable perlite plant. They also have vast experience in the pneumatic conveying of expanded perlite which, in order to avoid break down of the particles, has special requirements. Our operators are highly skilled in the techniques required to prevent the occurrence of voids during the placing of the perlite insulation, including the use of vibration equipment where specified. Strict health, safety and environmental procedures are followed and the plant is operated in accordance with ISO 9000 quality management standards. This expansion process creates countless cells in the glassy particles, which account for the excellent thermal insulation properties of expanded perlite.

The superior insulation characteristics, especially at low temperatures, as well as the fact that perlite is stable and inert, makes it the ideal material for use in cryogenic insulation applications. Infigro has insulated more than fifty cryogenic units by means of the portable plant on-site method. These include air separation units, heat exchangers, liquid nitrogen, oxygen, natural gas storage vessels, pipe ducting and marine tanker ships. We have successfully completed contracts where perlite insulation volumes in excess of 5000 cubic metres have been required and where the product was pumped up to heights of 70 metres. The prestigious project engineering companies we have worked with include Air Liquide, Air Products, BOC, BSL Industries, MEI, Messer Fedgas, Spie Batignolles and L&C Steinmuller.

Genulite® M45®

Infigro's Genulite® M45® grade of expanded perlite is manufactured specifically for use as an insulation medium in cryogenic applications. The company has the ability to manufacture the product in accordance with the customers exact quality specifications.

"Infigro has the ability, expertise and flexibility to operate competitively throughout the world at short notice".

Our portable plant is of modular design, which allows for easy transportation and quick erection on site. Our operation is totally independent requiring only the basic site services such as electricity supply.

A TYPICAL SPECIFICATION FOR GENULITE® M45® IS REFLECTED BELOW:

- Loose fill bulk density of 40-55 kg per cubic meter
- Compacted bulk density of 50-76 kg per cubic meter
- Maximum increase in bulk density on compaction of 38%
- Thermal conductivity
 - Atmospheric pressure: (hot face temperature 20°C / Cold Face temperature -183°C) less than 0.028 W/m°C.
 - Gas pressure below 1 micron Hg: (hot face temperature 30°C / Cold Face temperature -196°C) less than 0.0025 W/m°C.
- Particle size to suit customer requirements

