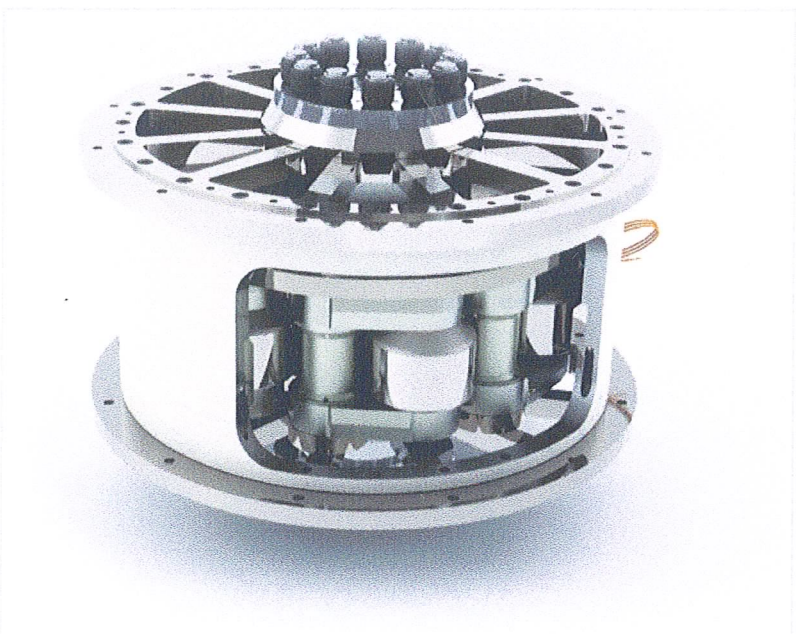
NEWS

14 Sep 2011

New low energy milling technology for GRP and other composites

Engineering specialist, the Gateshead-based International Innovative Technologies (IIT) has pioneered the new technology for the fine grinding of composites, raw materials and minerals into fine powders.

Innovations, Other Equipment



These include GRP and other composite materials as well as aluminium oxide, silicon carbide, glass and other minerals and aggregates.

Importantly, the low energy performance of the new mill has the potential to convert what may currently be regarded as waste material into commercial products for recycling and re-use. This is particularly the case in the GRP industry where IIT has successfully installed a milling plant in an established production facility for the recycling of scrap and waste GRP back into original products.

This process involves GRP waste first being converted into flakes using shredding equipment before secondary reduction is carried out in an IIT m-series mill which successfully converts the flakes into a fine powder of generally less than 100 microns for re-use in the primary batch for the manufacture of new GRP products.

Tests and production runs have shown that the inclusion of a percentage of this powdered material back into the primary batch for the re-injection of new products has no detrimental effect on GRP.

Compact and powerful, the centrifugal grinding mechanism of the m-series is extremely efficient with the vertical material flow path and special roller assembly ensuring that the force produced is translated into maximum particle grinding power.

The IIT grinding mill and ancillary particle sizing plant are ATEX compliant.

This new patented low energy milling technology that is capable of meeting the fine grinding requirements of composites and other hard materials will be introduced this year's Composites Engineering Show.

RELATED INFORMATION

New low energy milling technology for GRP and other composites

Automated Dynamics integrating use of laser-based heating method for fiber placement

3A Composites Core Materials launches new light PET core material

SPECIAL FEATURE

Biocomposites

Bio-based resins or fibers gain popularity. Those materials are now more widely use. WPC decking in the USA or Automotive interior door panels in Europe are two examples of their final use. Market now needs critical size production sites to allow spreading their use in other sectors or applications.

AGENDA

September 2011

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