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NEWS RELEASE

Innomech helps boost UK glass exports to China

Automation consultancy GB Innomech (Innomech) is developing a high-throughput inspection system that will enable the UK's leading specialised glass manufacturer to further improve product quality and meet fast-growing demand for its products world-wide, particularly from China and Taiwan.

The new system will automate the final inspection of glass frit or powder enabling an increase in output of 300%. The glass is used in a variety of industries from dental to electronics to the encapsulation of nuclear waste, where absolute quality, consistency and sizing of the product is paramount. Cera Dynamics needed a system it could trust to remove any out of specification material prior to despatches.

Innomech's new fully-automated system is designed to verify consistent production and provide Cera Dynamics with an efficient and accurate final inspection of glass frit prior to shipping. A vibratory feeder with a 200 kg capacity spreads the powdered material onto a moving belt, which is then illuminated under white light and imaged with a line scan camera fitted with a colour filter to detect any over-sized particles. The particle stream is carefully lit to avoid any potential false rejections caused from refracted light or reflections. Out of specification particles are automatically removed from the bulk as it passes over a series of pneumatically-powered diverters. The machine's capacity is 100 kg per hour, whereas the current manual process operates at 25 kg per hour.

"Cera Dynamics already operates 24 hour production but at times it can be difficult to keep pace with fast-growing and changing demands. Innomech is developing the perfect system to automate our final inspection process, increase throughputs and to guarantee quality. The new machine has also been specifically designed to be totally flexible and easy to clean, so we can quickly move from inspecting one specialist glass type to another, minimise lead times and further improve our overall manufacturing efficiency," said Mike Jones, Managing Director of Cera Dynamics.

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Notes to editors:

About GB Innomech

GB Innomech (Innomech) specialises in automating highly complex and labour-intensive manufacturing processes to maximise outputs, improve product quality and boost business performance. The company works with major international manufacturers in sectors such as pharmaceuticals, medical devices and environmental, as well as earlier-stage businesses looking to bring breakthrough technologies or products to market.

Innomech has a growing market reputation for solving the toughest of manufacturing problems by the early identification and management of risk, often cross-fertilising technologies and techniques from a range of industry sectors. All projects from initial feasibility studies through to building production-scale machines are conducted to high specification pharmaceutical industry standards and are designed to comply with GAMP5, FDA and other international standards.

The company was founded in 1990, is based at The Innovation Centre in Witchford, north of Cambridge and was awarded The Queen's Award for Enterprise 2009 to recognise its sustained growth in international markets.

For additional information about GB Innomech please visit or contact:

- www.innomech.co.uk
- Press enquiries to Simon McKay on +44 (0)1353 741075 or email to simonmckay@innomech.co.uk
- All other enquiries to Tim Mead at Innomech on +44 (0)1353 667394

About Cera Dynamics

Cera Dynamics Ltd is part of the James Kent group of companies, specialising in glass/ ceramic materials for a range of different market applications.

The company has developed several highly-specified glass compositions and has its own unique manufacturing process that offers an environmentally-conscious method of producing high-purity glass especially in situations where traditional methods would lose volatile components. Proprietary wet and dry-grinding and spray-drying systems are used to produce technical glass powders with customised particle-size down to sub-micron levels and in quantities from 1 kg upwards.

For further information please contact the James Kent Group on +44 (0)01782 744335 or visit www.jameskentgroup.com

Photographs

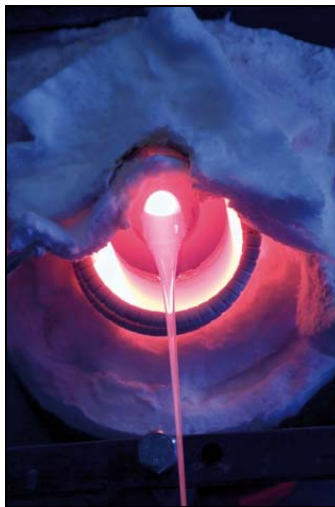
Print quality JPEGs of the images below have been sent attached to the original email or are also available on request from Simon McKay (details above):



- 1 Automation consultancy GB Innomech is developing a high-throughput inspection system for glass frit or powder that will enable specialist glass manufacturer Cera Dynamics to increase its output by 300%.



- 2 High purity glass frit or powders are used in a variety of end applications: from cosmetic dental fillers to encapsulation of electronics, where absolute quality, consistency and sizing of the product are paramount. Photo credit: © Exesios Photography



- 3 GB Innomech's high-throughput inspection system will enable Cera Dynamics to increase its output of glass frit four-fold. The powders are produced from highly-specified molten glass compositions – shown above being poured from a furnace – which are then solidified, shattered and ground to customised particle sizes. Photo credit: © Exesios Photography



- 4 Cera Dynamics has developed a unique range of fluoride glass frits as key components for white dental fillers, veneers and tooth implants. Photo credit: © Exesios Photography

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