

Co-operation profile details from Enterprise Europe East of England

10 GB 41n8 3G5U - A rapid, portable system of crushing fluorescent tubes on site Technology collaboration OFFER

Abstract

A UK environmental company offers an innovative system that crushes used fluorescent tubes quickly & safely on site. The EC marked system improves the health & safety of workers and minimises the bulk of used lamps at customer premises before removal to a recycling plant. Advantages include ease of use, reduced storage and minimal environmental emissions associated with transport. The company seeks commercial partners active in the disposal/collection/recycling of fluorescent tubes.

Description

The European Directives on Waste Electrical and Electronic Equipment (WEEE) requires businesses to separate, collect and recycle used lamps, such as fluorescent tubes which contain mercury. In practice, most of these hazardous lamps are stored in large coffins (which may contain thousands of tubes of different shapes and sizes, some of which may break or be fractured and cause a hazard to employees), and then typically once or twice a year, transported in bulk to an approved recycling plant. Apart from the issue of safety to on-site workers this solution maximises the transport miles needed to meet this EU legislation.

Now a UK company offers an alternative solution that provides a simple, rapid, highly portable and safe method of crushing fluorescent tubes on site. The proven machine has been tested for safety and is fully conformant with equipment supply requirements, and operates at well below Workplace (Occupational) Exposure Limits.

The UK company are the exclusive European distributor of the machine. They offer customers who generate large quantities of fluorescent tubes an extremely cost effective system for on-site crushing. In addition they supply replacement bags and filters, as well as a service to treat/reprocess the crushed material at their UK treatment plant. Here they clean the mercury dust from the fragmented material, and segregate glass and aluminium. These materials are then fully recycled and the mercury recovered.

Many of their European/overseas customers use Transfrontier Shipment Regulation documentation to transport crushed lamps back to the approved UK treatment plant the volume reduction resulting in very significant savings for transport cost.

Innovative Aspects:

The key benefits to customers of the new machine are significant storage space savings (approximately 90% by volume compared with whole tubes) reduced costs and transport requirements a reduced carbon footprint and the prevention of hazardous emissions of mercury.

The versatility and speed of the machine enables Recycling Company partners to efficiently crush on site and then move onto the next location on a milk round basis. This reduces transport requirements, means far fewer trips to a bulking or recycling site and therefore reduces cost. The system gives them a competitive edge and enables them to provide a better value service to customers.

Target partner expertise sought:

The UK company is seeking waste management/recycling organisations that are active in the disposal of used fluorescent lamps interested in using this novel tube crushing system. They are also seeking larger end users (e.g. airports, governmental organisations, factories, hospitals, oil refineries, schools etc) interested in adopting the system on-site. The collaboration sought includes one or more of the following:

- " Licence agreement
- " Commercial Agreement with Technical Assistance

Country of origin: United Kingdom

Listed under: Environment \ Safety and Security

Key dates:

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To find out more, contact Enterprise Europe East of England on 08457 1716 15 (select option 4) or email us at enterprise.europe@businesslinkeast.org.uk quoting ref 10 GB 41n8 3G5U