



BSI Standards Publication

Use of plugs of bulk material in screw conveyors and product receivers for explosion isolation

National foreword

This Published Document is the UK implementation of CEN/TR 17838:2022.

The UK participation in its preparation was entrusted to Technical Committee EXL/23, Explosion and fire precautions in industrial and chemical plant.

The following technical report provides guidance on the efficacy of screw conveyors and material chokes that are required to act as explosion isolation devices.

It must be understood that if used to prevent explosion propagation, the transmission of ignition sources from upstream may still occur. It must also be understood that in operation, they can also create ignition sources due to long-term product compaction and exposure to frictional heating which, due to the very specific nature, is typically not covered by standard assessments.

It is therefore advised that if such process equipment is used to prevent explosion propagation that expert advice is obtained to ensure that it will not create an ignition source and the overall reliability is suitable for the risk.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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