



Transform Polystyrene...

into this...

and save this!



**Polystyrene Disposal Problem**

Expanded polystyrene (EPS) is a widely used packaging material possessing excellent thermal, impact and waterproof properties. EPS is used for transporting and protecting all types of chilled or fragile products.

However, for many food processors, manufacturers, retailers, local authorities and wholesale markets, the disposal of used EPS can be expensive in terms of transport and landfill costs.

**Solution - Thermal Densification**

The Styromelt™ reduces the volume of polystyrene by approximately 95%, forming small dense blocks which are sterile, easy to handle and can be stored indefinitely then sold for incineration or for the production of fuels.

The densified blocks can also be sold and remade into new products like coat hangers, picture frames, replacement hardwood and garden furniture.

**Features and Benefits:**

- Processed blocks can be sold for recycling into new products or fuels.
- Can dramatically reduce waste management and transport costs.
- Styromelt™ compaction rate is up to 5 times greater than hydraulic compaction.
- In-situ sterilisation of plastic material means blocks can be stored indefinitely.
- Recycling polystyrene instead of throwing it away saves precious landfill space.
- Process is virtually silent running.
- Integrated fume extractor.
- IP56 rated for external use.

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Load Polystyrene

Quick Cycle Time

Remove End Product

**For more information visit [www.styromelt.com](http://www.styromelt.com)**

# Purex Styromelt™ Polystyrene Thermal Densifier



## Why Choose Styromelt™

Many companies who handle or generate waste polystyrene will benefit from a Styromelt system. For example:

- Fish merchants will save on the collection/incineration costs of used fish boxes.
- Manufacturers will save on expensive skip hire, waste management and transport costs.
- Local authorities will save on landfill costs and Styromelt™ can help to achieve recycling targets.
- There is also a benefit to the environment as landfill volume is reduced.



Before and After Compaction

### Benefits of Thermal Densification over Hydraulic Compaction.

Hydraulic compactors do not deal with EPS contaminated with blood, organic matter or other similar materials and liquids which can attract vermin and disease.

In-situ sterilisation of plastic material means the product can be stored indefinitely. It also has no odour and therefore does not attract vermin.

Plastic has 'memory' and this can induce blockages, particularly if material is wet.

EPS is melted into a compact, solid block which cannot spring back to shape or block the system.

Hydraulic compactors normally require a full time operator.

Minimal training is required for any person to quickly use the Styromelt™

The degree of compaction is limited (approx 30-50%) and the compacted material can create dust and other airborne or surface litter pollution.

The Styromelt™ compacts EPS to approximately **95%** of its original size without creating any dust, mess or disruption.

Expensive moving parts inside the compactor can become damaged if foreign objects are accidentally put into the machine.

The Styromelt™ has no moving parts which could be damaged or need replacing. Ability to deal with contaminants such as metal, stone and glass without damage or failure.

Hydraulic compactors are generally slow, noisy and labour intensive.

The Styromelt™ can compact a full load of EPS in approximately 1.5 hours, it is virtually silent running and once loaded, the Styromelt™ can be left to work without supervision.

## Technical Specification

- Voltage and Power Requirements: 3 phase 400vac 50Hz 32A
- Standard units come complete with a 4 metre trailing lead 4mm<sup>2</sup> 3 core + E
- Main Heating Plates: Energy efficient heating coils in each of the 2 plates
- Tray Heating Plate: 3 x Energy efficient heating coils
- Sound Rating: 52dBA
- Index of Protection: IP56
- Weight: 347kg
- Height: 2.3m
- Width (including fume extraction unit): 1.64m
- Depth: 1.2m
- Loading Capacity: 2 cubic metres.
- Fume Extraction Unit: Single phase 230vac variable speed 1 stage brushless blower 0.45kW F.L.C. 1A Max.
- Fume Extraction Filters: Specialised Labyrinth™ pre filter and a main chemical filter.



Other products are available please call for further details. All information subject to change without prior notice.

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