

VIAFOAM®

» SUSTAINABLE FOAMED BITUMINOUS ASPHALT CONCRETE

- › Products can contain 100% recycled material
- › Low energy requirement
- › Reduced emissions
- › Cost effective

The VIAFOAM® system utilizes proven foamed bitumen technology and in conjunction with the versatility of CEMEX's mobile cold mix plant, can produce materials to suit a wide range of applications.

VIAFOAM® products can include up to 100% recycled aggregate for use in both the base and binder courses of pavement construction. Once manufactured some products may be stored for several weeks prior to surfacing operations commencing.

As the recycling waste material and reclaimed asphalt assumes greater importance, their processing as a cold mix asphalt material provides positive environmental benefits including reduced demand for aggregates, lower energy usage and reduced emissions. CEMEX's mobile, cold mix plant represents an extremely flexible and cost effective solution in dealing with these materials and, when operating in conjunction with the company's mobile crushing plant, provides a comprehensive recycling package.

As the VIAFOAM® system involves a cold mix process, there are considerable energy savings and the emissions associated with the manufacture of hot materials are avoided.

The unit is self contained and, when working in conjunction with CEMEX's mobile crushing plant, provides a total recycling solution.

SYSTEM ELEMENTS

The mobile cold mix plant can commence production within hours of arriving on site. Operating as an independent and self contained unit, it is fully equipped with its own loading shovel, power source, bitumen storage tank, silo and other ancillary equipment.

The versatility of this compact and highly mobile system enables relatively small material stockpiles to be processed. However, with an output of up to 100tph larger schemes are easily catered for.

OPERATION

The VIAFOAM® system utilizes computer control for the addition and monitoring of all mix components. Dependent on application, this will include aggregate feed rates, filler/cement addition, moisture content modification and the addition of foamed bitumen.

The bitumen spray bar employs a combination of pressurized air, water and an in-nozzle foaming technique that results in the bitumen volume increasing by up to a factor of 15.

CEMEX has also worked in close partnership with pavement design establishments in the UK to assist with this part of the process. The company also has strong links with the Transport Research Laboratory (TRL).

› Regional depot stocks

Where materials are utilized as required for footways, car parks, haunching works, cycle ways etc

› Satellite (ex-situ) manufacture

Remote to a surfacing contract – materials are brought in from the site, processed and returned for the resurfacing works

› Local Authority/term maintenance depots

The comprehensive recycling package – utilizing highway arising waste streams for the manufacture of a re-surfacing material

› Processing of stockpiled road plannings

Planned local authority maintenance schemes

› National network

Encompassing an extensive network of quarries, plants, railheads, depots and wharves, CEMEX is able to provide a comprehensive and fully integrated materials supply service to customers throughout the UK

PERFORMANCE

INNOVATION

QUALITY

DURABILITY

TECHNOLOGY

ASSURANCE

SUPPORT

PROFESSIONALISM

SERVICE

EFFICIENCY

SUSTAINABILITY

CRUSHING PLANT

»» MOBILE AND FLEXIBLE SERVICE

- › *Mobility*
- › *Flexibility*
- › *Process a wide range of materials*
- › *Cost effective*
- › *Efficient solution*

CEMEX'S mobile crushing plants have been specifically designed to provide such a service and are also able to provide an integrated recycling capability when working in conjunction with the company's mobile cold mix, foamed asphalt plant.

OPERATION

The plants are independent and self contained, being fully equipped with their own operatives, loading shovel, power source, dust suppression and other ancillary equipment. They have the ability to commence operations within a few hours of arriving on site.

With a throughput of some 100tph, the crushing units comprise a swinging hammer impactor with a crusher bypass that enables fines separation thereby reducing the fines element of the final product.

The simplicity of the crushing chamber ensures a blockage free operation enabling even relatively fresh asphalt to be processed. When used on asphalt, the nature of the crushing action simply shears the binder matrix between the aggregate particles rather than actually crushing the aggregate.

Although the Ammann asphalt granulators have been specifically developed for crushing asphalt, they also have the flexibility to process other waste materials such as concrete, glass, bricks and blocks.

APPLICATIONS

Application have included:

- › **Waste asphalt/road plannings**
 - Hot mix asphalt recycling
 - Sub-base/capping materials
 - VIAFOAM® feedstock
- › **Glass cullet**
 - Aggregate replacement in asphalt materials
 - Glasphalt®
- › **Concrete block wastes**
 - Recycled aggregate for use in new block manufacture
- › **Clean concrete**
 - Sub-base/capping materials
 - Recycled concrete aggregates
- › **Concrete /brick**
 - Sub-base /capping materials
- › **Local Authority/term maintenance depots**
 - Sub-base
 - VIAFOAM® feedstock

The units come with all the necessary health, safety and environmental documentation and authorization.

HEALTH AND SAFETY

A complete asphalt COSHH health and safety datasheet is available on request or to download from our website www.cemex.co.uk/asphalt.

SUSTAINABILITY

As one of the UK's largest suppliers of building material solutions, CEMEX is committed to sustainable development across the business. The principal operations of our business are raw materials extraction, processing, re-using, recycling and distribution of building materials.

CEMEX embraces the challenges of sustainable development, in striving to be socially, economically and environmentally responsible in everything we do to safeguard the needs of future generations. And from a commercial perspective, a sustainable approach will allow CEMEX to continue as a preferred supplier to the industry, to drive further efficiencies and ensure long term resources. To deliver this promise we track the following indicators:

1. Reducing emissions
2. Improving efficiency of production and logistics
3. Developing innovative new products and services
4. Engaging employees
5. Increasing transparent dialogue with stakeholders
6. Measuring and controlling impacts
7. Contributing to sustainable communities

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