



CMB Screens and Feeders

Designed, Developed and Manufactured by CMB International





CAD Illustration of a 1.5m x 4m vibrating grizzly feeder. The feeder which has a capacity of 500 tph, has been constructed and delivered to a site in West Africa.

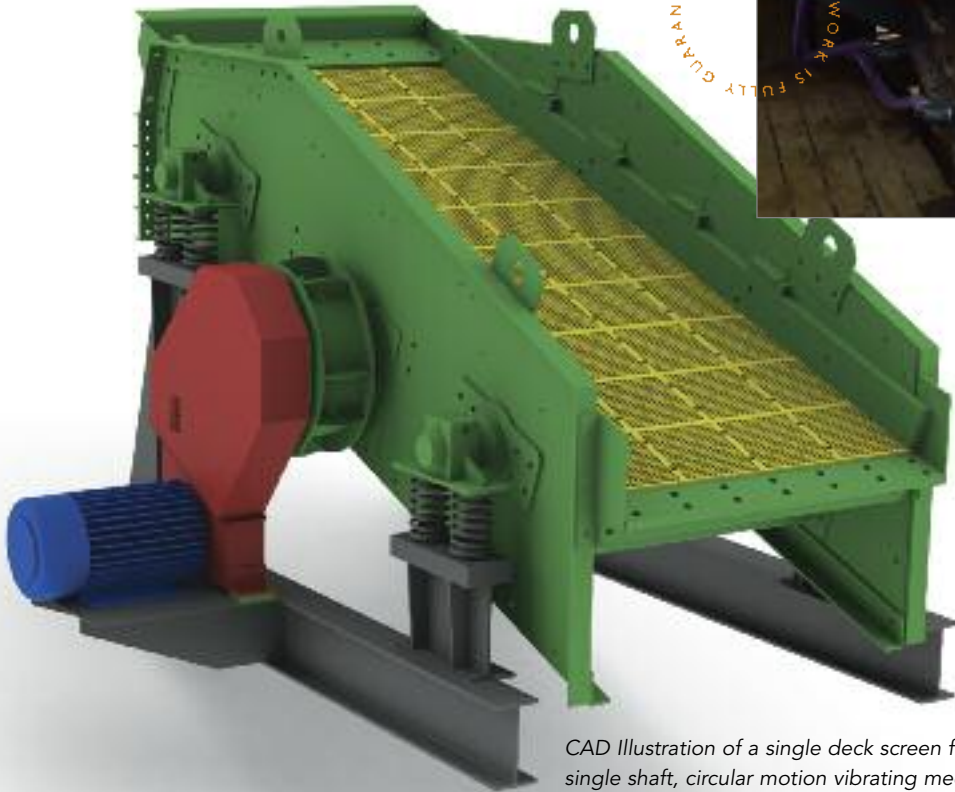


INTRODUCTION

CMB offer a comprehensive range of vibrating screens and feeders specifically designed for the aggregates market.

Our equipment can accommodate whatever screening media is specified by our customer (wire cloth, polyurethane, rubber punch plate etc.)

We will custom-design a screen or feeder to fit your application, whether new or existing.



CAD Illustration of a single deck screen featuring a single shaft, circular motion vibrating mechanism.



1.8m x 5m double deck screen working in a sand and gravel plant, Dereham, Norfolk.

Product features:

- Robust construction
- Welded joints are kept to a minimum
- Screens are all bolted construction
- Circular or linear motion



INCLINED SCREENS - FEATURES AND BENEFITS

CMB bespoke screens will be constructed to fit your new or existing application. Sizes range from 900 x 1800 (6' x 3') to 2700 x 9400 (30' x 9'). One, two, three or four deck screens are available.

- 1 Replaceable discharge lips. These can be fitted with a variety of liners, for example; rubber, mild steel, abrasion-resistant steel etc.
- 2 Heavy-duty, stress-relieved decks which can be rubber covered. A variety of decks can be fitted dependent on the material to be screened (woven wire, polyurethane, rubber etc.).
- 3 Angles bolted to the top and bottom of the sideplates greatly increase their strength.
- 4 High-strength friction grip bolts are used in the construction of the screen providing reliable but easily replaced connections.
- 5 Standard SPC belt drive.
- 6 Pivoting motor base supplied as an option (reduces load on belts starting, driving and stopping).
- 7 Motors can be fitted with plug break starters to briefly run screen in reverse when stopping. This ensures smooth screen run-down.
- 8 Precision laser-cut sideplates ensure a high-quality, fatigue-resistant product.
- 9 Spring bases can be supplied as fixed or pivoting thus enables screen to be positioned at different angles to suit application.

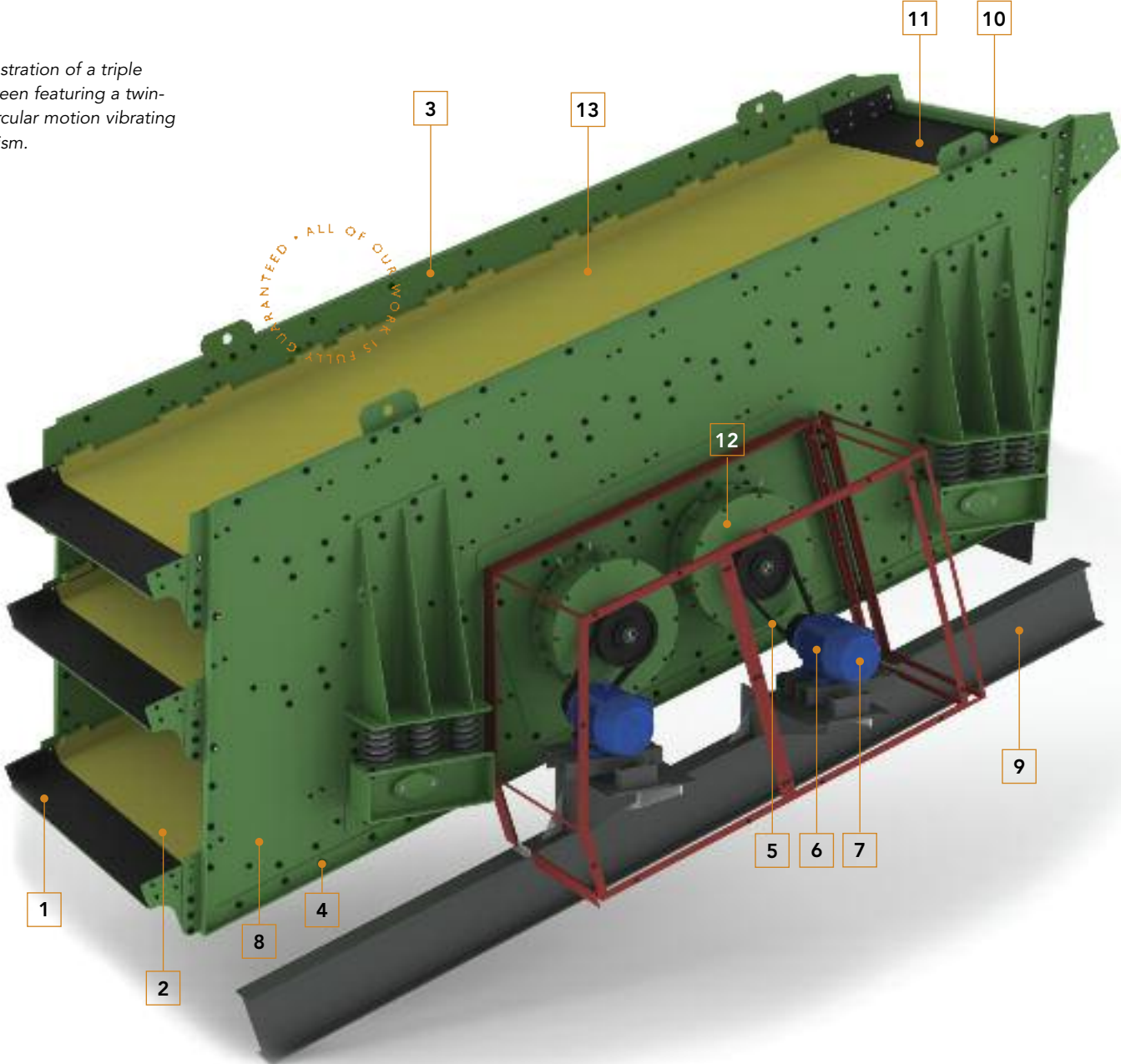


1.8m x 7m double deck feeder for Lafarge Aggregates, South Derbyshire.

- 10 Feed box evenly distributes material on to deck of screen reducing wear.
- 11 Replaceable liners fitted to feed box and discharge lips.
- 12 Robust grease-lubricated vibrating unit provides powerful circular motion along complete length of screen.
- 13 Can be used for finished screening but is also suitable for scalping duty.



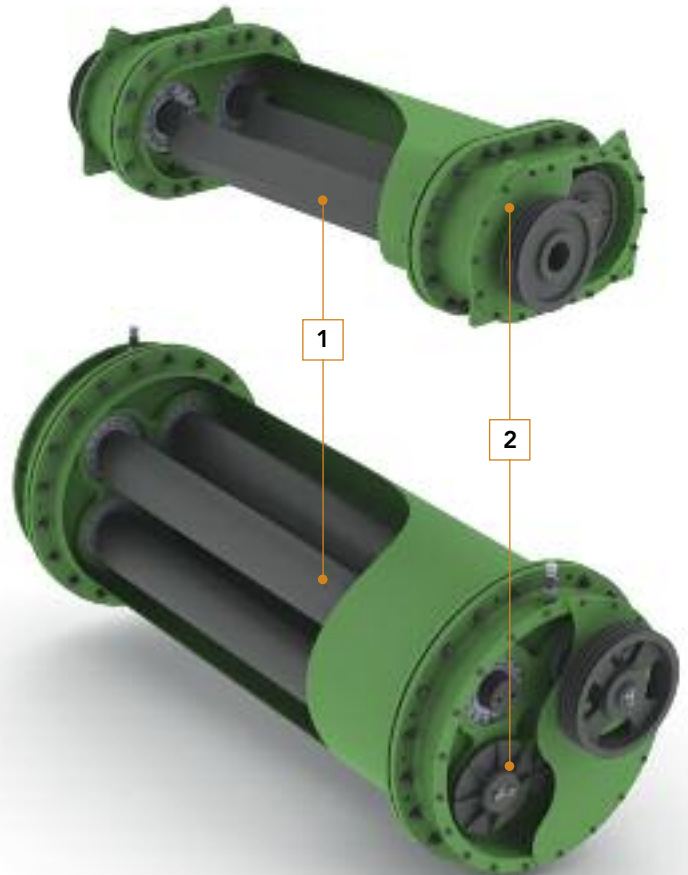
CAD Illustration of a triple deck screen featuring a twin-shaft, circular motion vibrating mechanism.



HORIZONTAL SCREENS - FEATURES AND BENEFITS

Horizontal or low-angle screens are ideal where height is critical. One, two, three or four decks are possible. The screens can be used for sizing or scalping applications. The size range is 1220 x 2500 (4' x 8') to 1500 x 9600 (8' x 30').

- 1 The straight line vibrating motion is produced by two or more eccentric shafts geared together. By varying the timing of the gears, the vibrating motion can be fine-tuned to assist optimum screening of various aggregates.
- 2 Oil lubricated vibrator unit. Counter-weighted shafts are geared together and mounted on spherical roller bearings.
- 3 Coil springs efficiently isolate the screen from its supporting structure.
- 4 Friction checks built into the screen supports efficiently retard the screen during shut-down thus reducing forces transmitted to surrounding structures.
- 5 Generous height between decks allow for easier screening media changes.



- 6 When spraybars are required, they can be built into the screen side-plates eliminating spraybar supports, thus improving maintenance access.
- 7 Decks are rigidly constructed from generously sized box section. Unlike I section, box section eliminates trapped material which causes wear to the cross member.



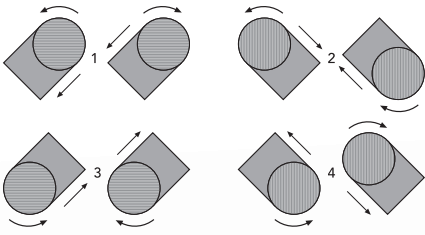
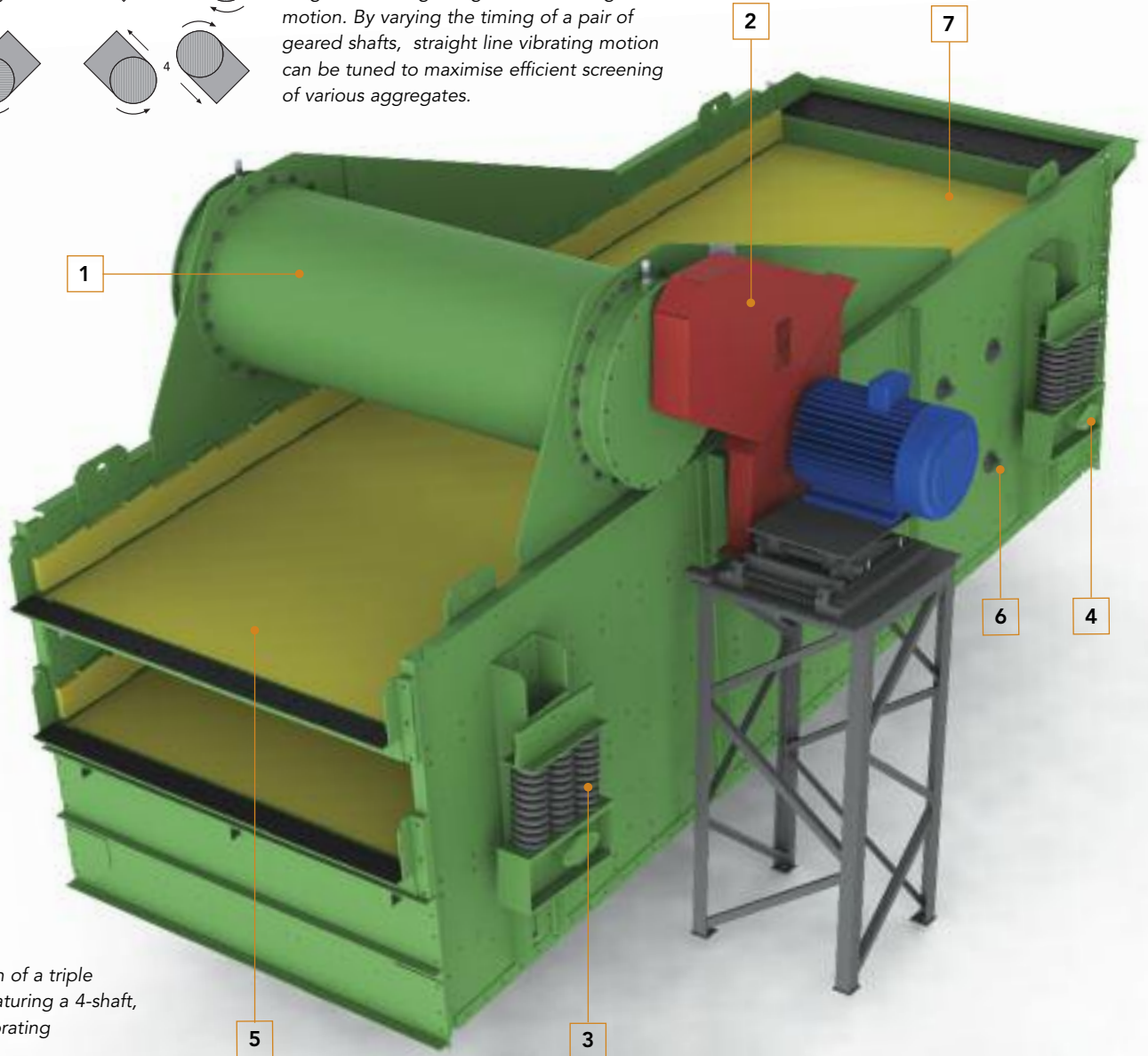


Diagram showing straight line vibrating motion. By varying the timing of a pair of geared shafts, straight line vibrating motion can be tuned to maximise efficient screening of various aggregates.



CAD Illustration of a triple deck screen featuring a 4-shaft, straight line vibrating mechanism.



VIBRATING FEEDERS - FEATURES AND BENEFITS

CMB vibrating feeders combine scalping and feeding in a single operation. Providing a regulated flow of material to primary crushers, CMB feeders can be custom-built to suit your installation and requirements.

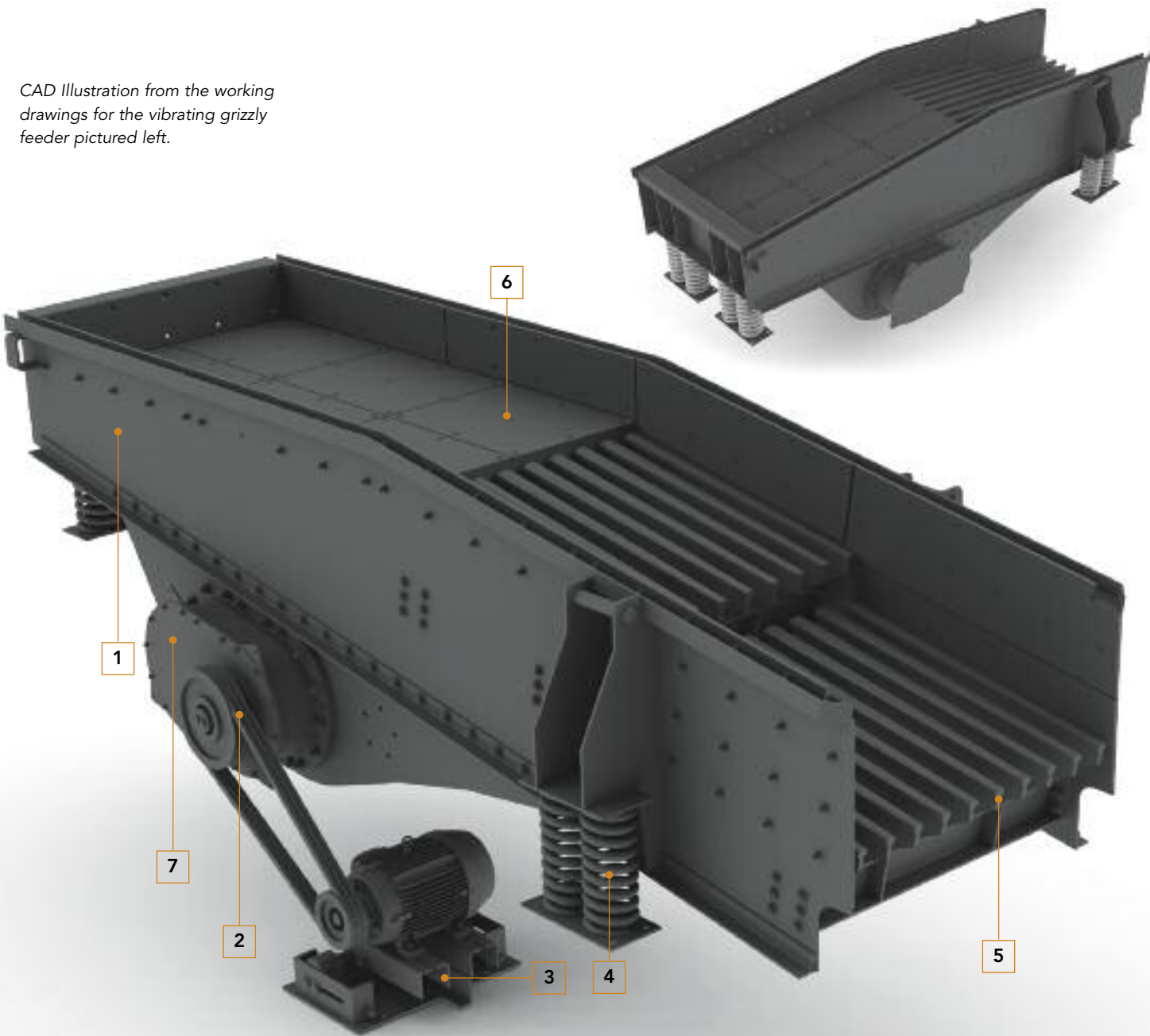
- 1 Massive frame with heavy side members and I beam cross-members.
- 2 Variable speed drive available via inverter drive.
- 3 Motor and pivoting base.
- 4 Robust springs designed to isolate the feeder from its supporting structure, capable of supporting the feeder and a full material load.
- 5 Cast manganese steel grizzly bars can be individually removed or adjusted to meet changes in scalping material specifications.
- 6 Equipped with 400 Brinell abrasion resistant liners as standard. Stainless steel can be used for sticky materials.
- 7 Oil-lube vibrating unit comprises two parallel counterweighted offset shafts. This produces a motion which is 45° to the plane at the feeding surface.



The construction and installation of a 1.25m x 4.25m vibrating grizzly feeder. The client Tarmac, Derbyshire, replaced their existing Pegson feeder. The unit feeds a 36" x 46" jaw crusher.



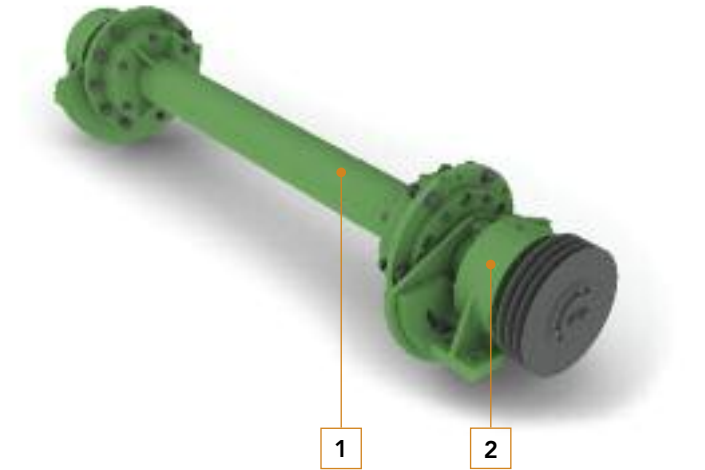
CAD Illustration from the working drawings for the vibrating grizzly feeder pictured left.



FOUR-BEARING SCREENS - FEATURES AND BENEFITS

CMB four-bearing screens feature rugged construction and a positive circular vibrating motion. They are ideal as scalpers for large aggregates or as screens for difficult, sticky materials. This screen can be offered as a direct replacement for Niagara screens.

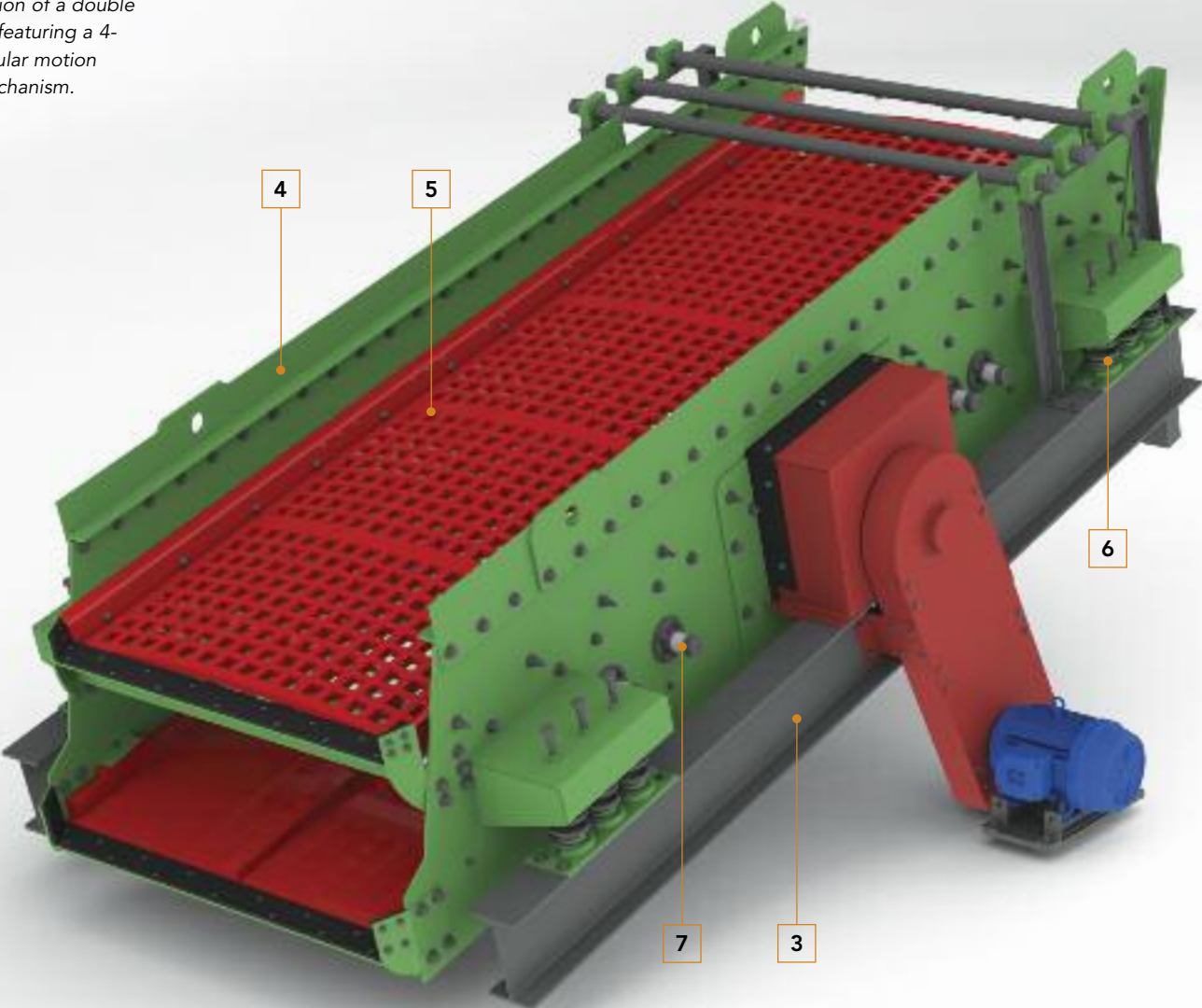
- 1 Alloy steel counterweighted eccentric shaft, precision machined to fine tolerances.
- 2 Grease lubricated, spherical bearings are protected by a combination of labyrinth and vee-ring seals.
- 3 Screen sub-frame is supported on anti-vibration rubber mounts to minimise the load transmitted to the supporting structure.
- 4 Precision laser-cut sideplates.
- 5 Screen trays can be furnished to support any type of screening media.
- 6 Heavy duty adjustable coil springs support the live frame.
- 7 Spraybars can be supplied as required.



1.5m x 4.267m double deck screen constructed for Lafarge, Leicestershire.



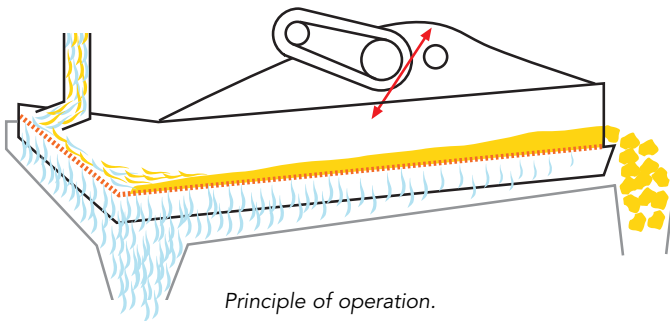
CAD Illustration of a double deck screen featuring a 4-bearing, circular motion vibrating mechanism.



DEWATERING SCREENS - FEATURES AND BENEFITS

CMB dewatering screens are designed to efficiently remove moisture from sand and coal slurries.

- 1 Rear wall drain, sloping at 45°, this feature is fitted with slotted dewatering panels. Incoming slurry is fed down this slope thus maximising initial water removal.
- 2 Main deck of screen slopes upwards at 5°. The incoming slurry forms a 'cake' of material which acts as a filter bed to ensure maximum retention of solids.
- 3 On-board electric motor and guards eliminate the need for cumbersome on-site supports.
- 4 Pivoting spring pedestals allow for quick angle changes.
- 5 Optional bed divider can be supplied when it is desired to dewater two products on one deck.
- 6 Twin shaft oil-lubricated linear action vibrator transmits high G force for maximum dewatering.



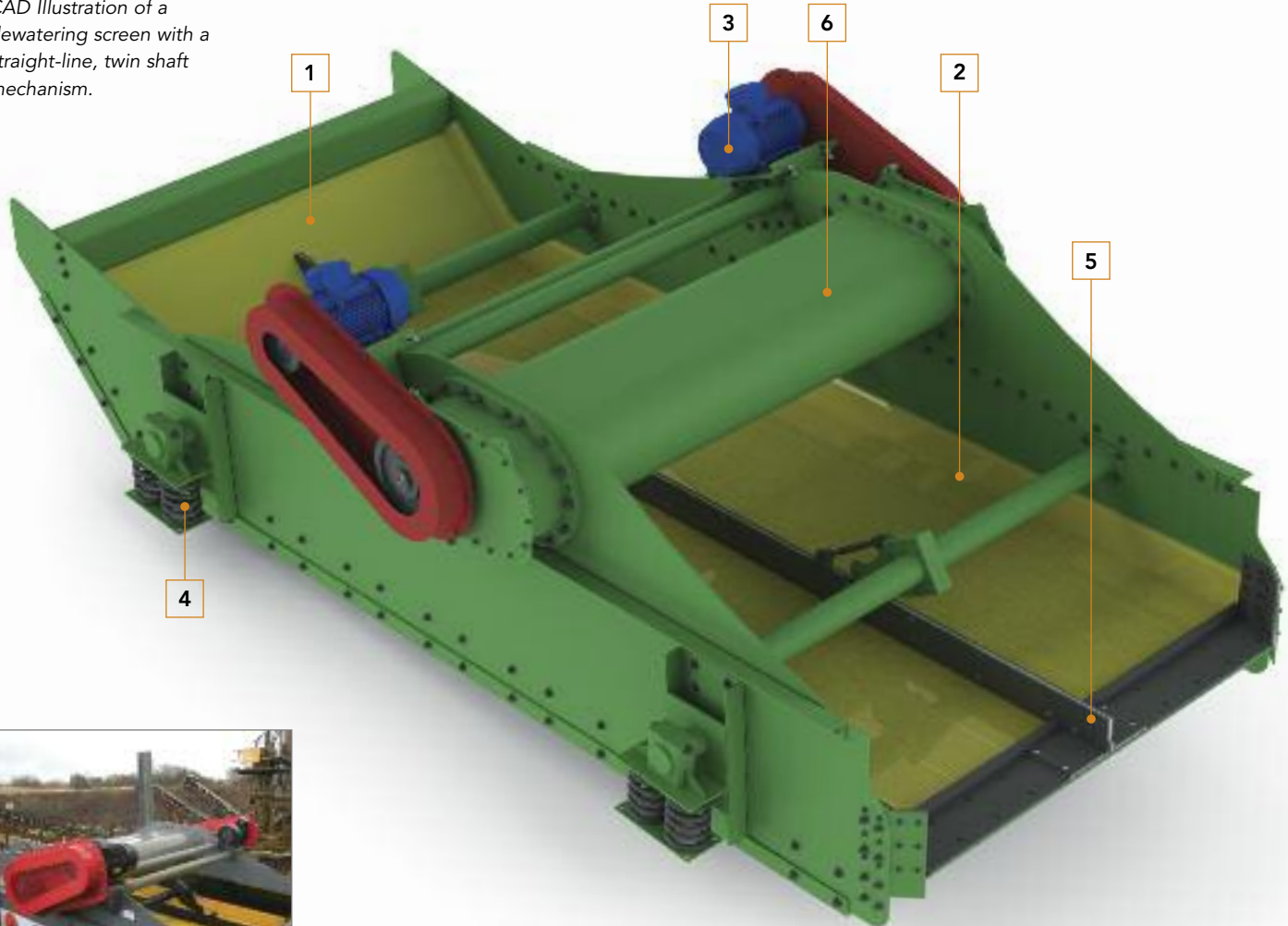
CMB de-watering screen installed at Lafarge, Hertfordshire. This screen was designed to work within a MEP sand plant.



Slurry enters the dewatering screen (left) and exits as a "cake" (right), capable of being conveyed.



CAD Illustration of a dewatering screen with a straight-line, twin shaft mechanism.



Detail of the CMB 280 vibrating mechanism.



GALLERY

Here we have a selection of CMB screens during installation and in use. All the screens features are operating reliably, producing aggregate cost-effectively and all have improved plant efficiency.



2.4m x 7m triple deck screen installed and working at Tarmac Borrás, Wrexham.

1.8m x 4.267m double deck screen working at Tarmac, Cadeby. This is the first of two screens installed by CMB.



Left. 2.4m x 6m triple deck screen about to be installed in Tarmac Croxden, Stoke on Trent. This unit replaced an Alice Rippl-Flo unit.

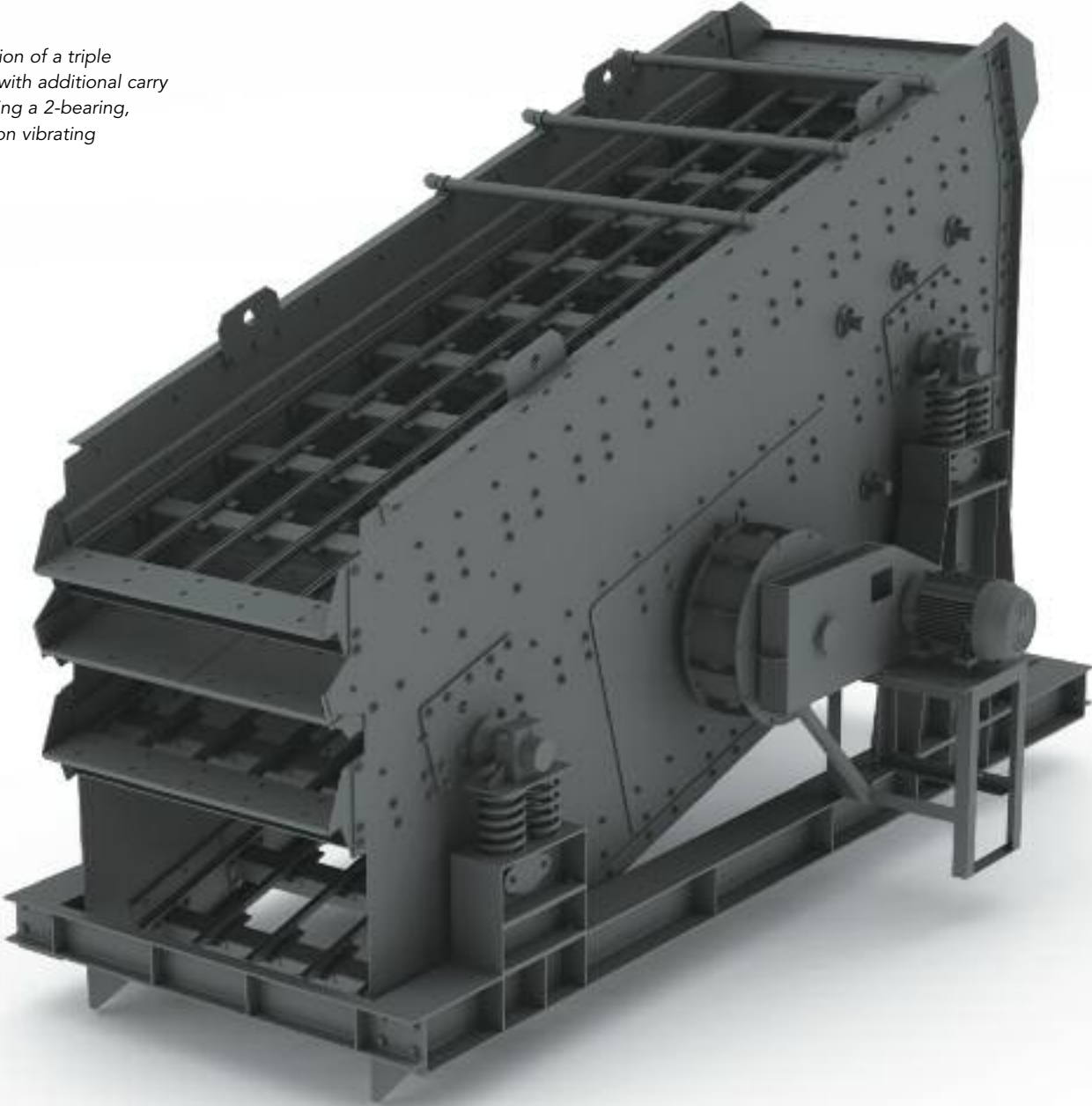
Below. 1.8m x 5m double deck screen working at Ellesmere. This screen replaced a Parker 'Rapide' unit.



Left. CMB de-watering screen installed at Hanson, Staffordshire. This screen was designed to work within a MEP sand reclamation plant.



CAD Illustration of a triple deck screen with additional carry deck. Featuring a 2-bearing, circular motion vibrating mechanism.





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