



## Russell Finex 22™ sieve enables manufacturer to expand its product range

Using a Russell Finex industrial sieving machine to grade its lime putty allowed Intracoat to develop a range of high value, complementary products.



Intracoat BV supplies lime, sand and gravel products to wholesalers and DIY stores in the Netherlands. The family-run business specializes in lime-based aggregates, employing modern manufacturing methods to produce traditional lime mortars, plasters and paints for use in building renovation and conservation projects.

Lime-based products are hugely important to the building trade. Lime has been used to bind mortar for centuries. Although cement has largely replaced lime in modern construction, it is not compatible with older building materials, such as stone and terracotta. Lime mortar remains soft and permeable, making it ideal for renovation work.



Limestone is baked by Intracoat in rotary kilns to produce quick lime (calcium oxide). It is then slaked with water and agitated to promote an exothermic chemical reaction which transforms it into lime putty (calcium hydroxide). The lime putty is matured in airtight containers before being mixed with aggregates, such as sand and gravel.

Keen to expand its range of ready-to-use heritage products, Intracoat experimented with the production of limewash paint. Limewash paint is prepared by adding colorants to lime putty and is preferred for heritage projects because it soaks into brickwork and plaster, giving it a beautifully textured and natural finish.

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***“Lime paint is a high value, complementary product. To manufacture it, we needed to refine our lime putty. The Finex 22 proved the perfect solution.”***

Martijn van Ommeren, General Manager

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If Intracoat’s ready-to-use limewash paints were to be commercially successful, the finished products would need to have a uniformly fine texture and consistent colors. Color matching didn’t prove an issue, but it was quickly apparent that Intracoat’s regular lime putty was too coarse to be converted into limewash paint.

To resolve the issue, Intracoat would need to grade its lime putty, separating out different consistencies for different products. Fine putty would be used as a base for the new limewash paints and coarse putty as a base for lime mortar. Intracoat turned to grading and sieving specialists, Russell Finex, for advice.



Russell Finex was pleased to help, installing a double decked **Finex 22™ sieve** on Intracoat's production line. The Finex 22™ is a powerful industrial sieving machine. Its **unique vibratory action** maximizes throughput and separation efficiency, making it ideal for grading powders and viscous, thixotropic slurries, like Intracoat's lime putty.

The Finex 22™ sieve can be configured with a large number of options including the **Vibrasonic® Deblinding System**. The deblinder applies an ultrasonic frequency to the mesh which breaks the surface tension and prevents materials from adhering to the wire. The Vibrasonic® Deblinding System **improves throughput** and eliminates the need for cleaning.



The **double decked solution** enables Intracoat to separate lime putty into three grades in a single pass. The **upper deck** has a 50-micron mesh and the **lower deck** a 15-micron mesh. Rough putty (>50 microns) is used for lime mortar, coarse putty (15 to 50 microns) for lime plaster, and fine putty (<15 microns) for lime paint.

### Advantages of the Finex 22™ sieve:

- **Improve productivity** – Outperforms conventional spring mounted separators.
- **Support more applications** – Accurately grade powders, liquids and viscous slurries.
- **Reduce downtime** – Robust technology requires minimal maintenance.

**Established in 1934, Russell Finex designs and builds separation machines for an international market and supplies to over 140 countries. With its head office in the U.K. and subsidiaries in Belgium, the U.S.A., India and China, the company has a truly global presence, enabling a comprehensive approach to customer service and after-sales support.**

***"The double deck solution is brilliant. It allows us to produce three grades of putty in a single pass. We use the finest putty as a base for our limewash paints."***

Martijn van Ommeren, General Manager

Intracoat **grades the lime putty** while it is still warm from slaking. Warm putty flows more easily than cold putty, speeding the **sieving process**. Indeed, with the double decked Finex 22™ installed on its production line, Intracoat is able to **accurately grade** as much as 45 litres of warm lime putty an hour.

The fine lime putty (<15 microns) is the **perfect consistency** for limewash paint. In a secondary manufacturing process, Intracoat mixes water-based pigments with the refined putty to create a range of **colored limewash paints**. As a result of this sieving stage, Intracoat's limewash paints look fabulous and are proving to be **popular with customers**.

