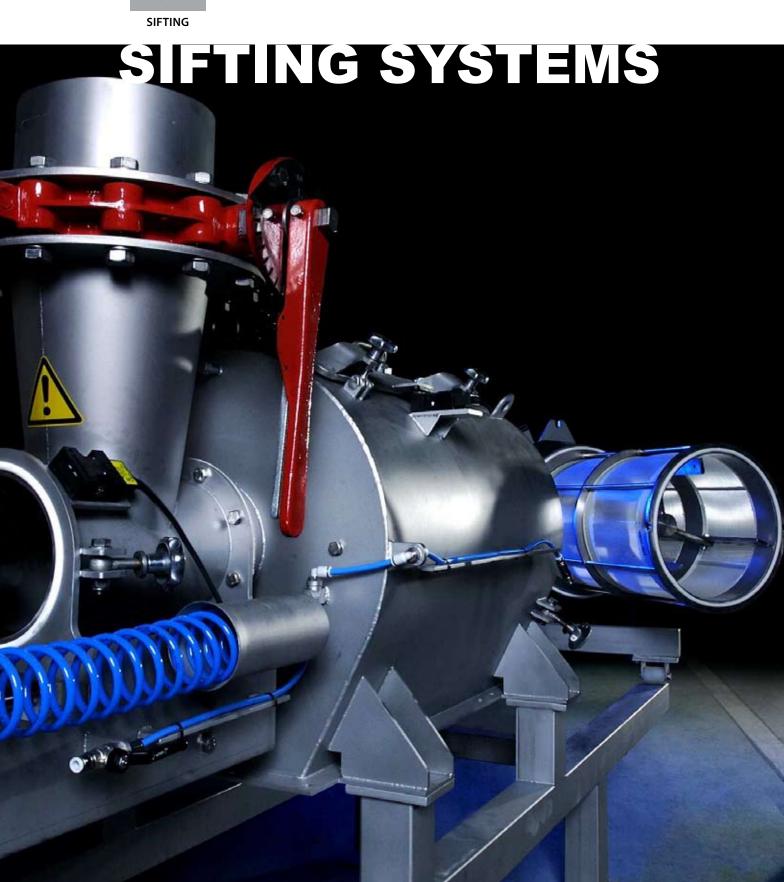
# YOUR PROCESS... ...OUR CARE









# Sieving

## **Maximum control for optimal results**

Companies in the food, feed, pharma and chemical industries are being confronted with increasingly stringent requirements with regard to food safety, quality, tracking & tracing, and hazards associated with dust and explosions. Dinnissen Process Technology is continually searching for the best solutions when it comes to quickly and reliably managing various granulated as well as powdered materials.



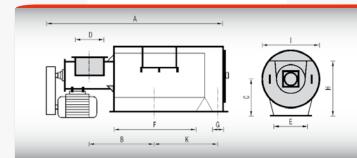
#### Efficient fractionation ensures the highest purity

Our sieving technique is based on the use of our centrifugal sieves. The material to be fractionated is brought into the sieving chamber, where the material is agitated by spinning fins. Those fractions which consist of small enough particles pass through the centrifugal sieve, whereas contaminants and larger particles are quickly transported onwards. By varying the rotation speed as well as the diameter of the openings and the path length of the sieve, we can realize any desired sieving result.

#### XS<sup>4</sup> Sifting, high capacity powder monitoring to integrate in transport systems

Regardless of whether powders arrive from silos, bulk transporters or an unloading station, speed of operation and high capacity are almost always essential. Dinnissen's XS4 Sifting is a new method for high capacity powder control that can be integrated with practically any new or existing (pneumatic) transport system. The basis of XS4 Sifting is a centrifugal sieve. A specially fitted feeding system is used to introduce material to the sieving chamber. With the right combination of rotor speed, sieve size and length, practically any sieve result can be accomplished. Capacities, ranging from 15 kg. up to as much as 70 tons per hour, can be achieved and even powders (particle size between 1 and 400  $\mu m$ ) can be processed at extreme speed.





TYPE	Screen area (m²)	A	В	C	D	E	F	G	Н	l	K
CZ-MINI	0,24	1350	338	250	180	170	305	100	370	350	247
CZ-1	0,57	1580	460	320	250	320	470	110	500	570	390
CZ-2	0,68	1710	525	320	250	320	600	110	500	570	455
CZ-3	0,79	1860	600	320	250	320	750	110	500	570	530
CZ-4	1,05	2060	700	320	250	320	950	110	500	570	630
CZ-5	1,38	2270	774	400	350	440	968	150	610	700	659
CZ-6	2,20	2750	1015	400	350	440	1450	150	610	700	900

### Screen protector minimizes loss due to equipment damage and downtime

Metal particles, stones and excessive loading of the sieve elements can damage your expensive equipment. That is why our method ensures that the material to be sieved is distributed over the sieve basket as uniformly as possible. This reduces repairs, maintenance and expensive production downtime to an absolute minimum. The use of a preliminary sieve or screen protector prevents sharp and/or heavy objects from coming into contact with the most delicate elements of the sieving equipment. In addition, the special design ensures that our sieve sleeves are very robust.

Testing facilities

#### International guidelines and strict hygiene standards

We are thoroughly familiar with all the relevant international guidelines and standards – including ISO, ATEX, HACCP, GMP, FDA and EHEDG – so that we can quickly and effectively ensure compliance with all the requirements pertaining to your production process. This is true even for the very strictest hygiene standards, such as those which apply to our customers in the baby food sector. That is also why we supply a wide range of sieving installations in any desired material and finish level – including steel and high-quality stainless steel, with or without an inside layer of wear-resistant or PTFE liner, wear-resistant metal, and electrolytic polishing.

#### Compact design facilitates integration in new or existing systems

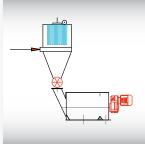
Our sieving installations are available with sieving cylinders in a wide range of sizes – from compact models to extra long sieving baskets (up to 1500 mm) for even more security. We develop customized sieving installations for special situations, which can be delivered quickly and with the added option of choosing which location you wish to use for injecting the product to be processed. Various options are also available for injecting the product including: screw feed, vibration feed, gate feed, or gravity feed. In short, our wide product range and flexible options make it easy to quickly and efficiently integrate our sieving installations into your existing pneumatic transport system and/or production process.





#### Sieve guidance system ensures ease-of-use and quick inspection

Time is money, and that certainly applies to frequently recurring work activities such as inspection, cleaning and maintenance. That is why all of our sieving systems can be fitted with a guidance system which makes it possible to remove the basket sieve either manually or fully automatically.



#### Modular XS4 sifter

The Dinnissen modular Sifter can be provided directly underneath a conveying / dosing element. Therefore an extra integrated dosing screw is not always required.

#### Typical applications:

- directly under a cyclone separator / receiver / hopper with rotary valve
- dosing by a feeder / vibrating tube conveyor / screw feeder



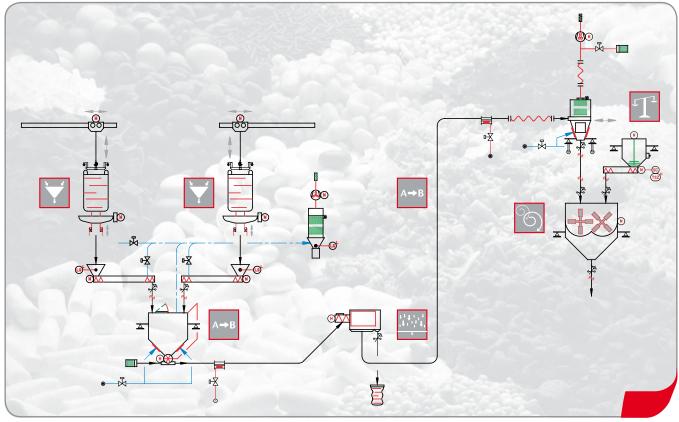
#### We can manage the entire process

Thanks to over 60 years of experience in process technology, our expertise is not limited to sieving technology alone. We also have a great deal of in-house expertise when it comes to the intake and transport of even the most difficult powders as well as accurately weighing, dosing, grinding, mixing and packaging a wide range of materials. We design and develop our own technology and have extensive in-house manufacturing and service facilities.

# Video CD

Please ask for our free video CD-ROM with a demonstration of the centrifugal sifter operating features





Total process with: feeding, pneumatic conveying, inline sifting, mixing etc.

#### **Benefits**

- · Efficient fractionation and removal of impurities;
- High capacity for even the finest particles;
- Screen protector for protecting delicate and expensive sieving mesh;
- Easy to clean and inspect due to sieve guidance system;
- Easy integration into new and existing systems;
- · Low noise and vibration level;
- Compliance with all relevant international standards of hygiene and safety;
- · Complete process solutions;
- In-house test facilities.

#### Options available

- 15 kg to 70 tons per hour;
- Down to 60 micrometers mesh size;
- Screen protector;
- · Sieve guidance system;
- Large inspection hatches;
- · Reserve sieve baskets;
- Ultra-hygienic model;
- Available in any desired material and finish level;
- Product can be fed in using various methods: screw feed, vibration feed, gate feed, gravity feed etc.

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