

Dosing & Weighing Technology



ALFRA KCD CLEAN PROFESSIONAL WORKHORSE

A DOSING SYSTEM FOR SMALL COMPONENTS



WEIGH DOSES QUICKLY AND ACCURATELY

- High throughput for small components like dry powders, granulates and pellets
- Dose any quantity from 0.5 kg to 100 kg quickly and accurately
- Closed design for clean workplace
- Extremely robust with low maintenance and running costs, >20-year operational life

Workhorse for small component doses

Our ALFRA KCD dosing & weighing system with stationary weighing hopper is closed for low-dust operation. The system combines ingredients from up to 24 silos automatically.

Combining high throughput with excellent accuracy, the system features our unique dosing slide, which ensures that dosing and weighing is no longer the factory bottleneck. This workhorse machine is low cost yet has high performance. It handles from 0.5 kg up to 100 kg in a single machine.

Self-learning software optimizes the flow profile for highest speed and precision (so saving on expensive raw materials). When the batch is complete, the correct weight is discharged onto a transport belt or into an under hopper or mixer positioned below the machine.

Materials are traceable through all the process stages. Cleaning, inspection and maintenance are all simple, and running costs are low.

Smart software ensures maximum throughput

The embedded ALFRA dose&weigh software uses historical data to start the coarse dosing and then adjusts the fine product flow profile dynamically, achieving up to 20% more throughput – even for materials with varying flow characteristics. The improved accuracy saves raw materials, while batch times are shorter and more predictable. Now, materials dosing is no longer a process bottleneck!

PIONEERING DOSING SLIDE IMPROVES ON SCREW DRIVES

KSE's pioneering dosing slide makes fundamental improvements over traditional dosing systems using screw drives. It has few moving parts for easy maintenance and long life (>20 years). It delivers raw materials with greater speed and accuracy, and has an enormous dynamic flow range (1:1000 !!!).

The unique KSE dosing slide maintains the all-important First-In-First-Out material flow, eliminating dead zones in the silo. With its very large discharge area it is highly effective at avoiding bridging and rat holing. Vertical delivery means no product damage or compaction.



A PROFESSIONAL WORKHORSE FOR
SMALL COMPONENTS RANGING FROM
0.5 kg to 100 kg





Dosing & Weighing Technology

Specifications

Dosing range	0.5 kg to 100 kg
Number of silos	8 to 24
Weighing capacity	30, 50 or 100 kg
Dosing accuracy	+/- 5, 10 or 20g

Applications

Feed and food	Compound feed, mineral premixes, pet food, aqua feed, milk substitutes, food ingredients
Industrial	Building materials, rubber, industrial components, plastics, chemicals
Special products	Seeds, washing powder, gypsum, plaster, raw materials for grinding discs, etc.

See also:

Datasheet	ALFRA Dosing Slides
Datasheet	ALFRA dose&weigh

KSE: what we do

KSE Process Technology is a family business that has grown steadily over the last 40 years to become a worldwide concern. We supply everything your factory needs to dose, weigh and transport your materials. Besides dosing and weighing systems themselves, we provide automation solutions and services for producers of powders, pellets and granulates for the animal feed and related industries.

The portfolio of KSE dosing and weighing solutions covers everything from micro up to macro components, with dose rates from 1 gram to above 6,000 kg. Next to this, KSE's future-proof PROMAS ST process control system completely automates animal feed and food industry factories. Remote support with on-line diagnostics and a 24-hour helpdesk are available to customers around the world.

Although many of our products are standard, all our systems can be optimized to your requirements with different options and modifications.

KSE Process Technology B.V.
Rondweg 27
5531 AJ BLADEL
The Netherlands

Tel. +31 (0)497 38 38 18
info@kse.nl

www.ALFRA.nl



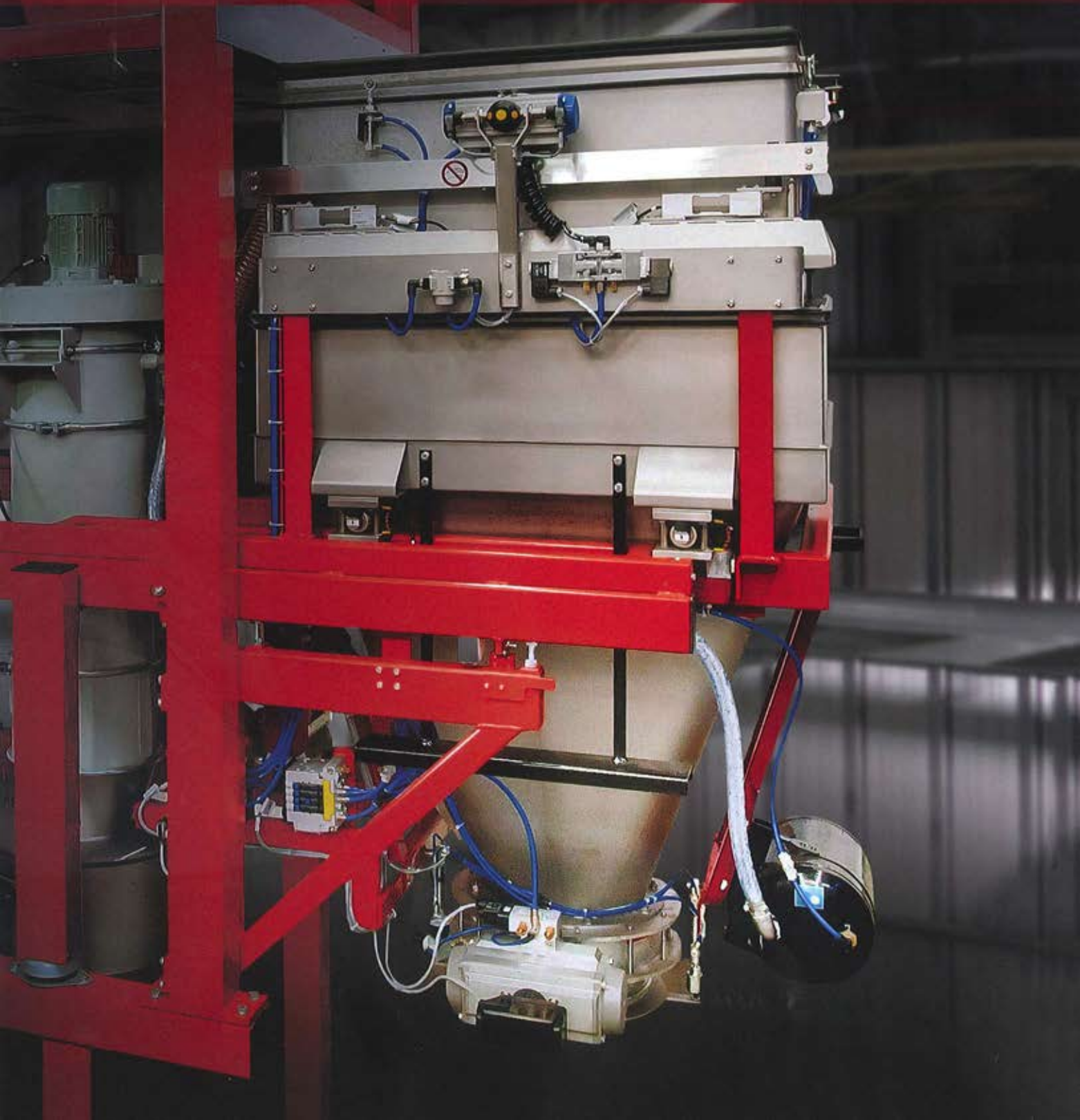
Scan the QR code to see
more about the ALFRA KCD

Dosing & Weighing Technology



ALFRA FCD ELIMINATE BOTTLENECKS

A DOSING SYSTEM FOR MICRO AND SMALL COMPONENTS



WEIGH A HUGE RANGE OF DOSES IN A SINGLE MACHINE

- High throughput for micro and small components like dry powders, granulates and pellets
- Virtually eliminates cross contamination and residues
- Dose any quantity from 20 grams to 100 kg quickly and accurately
- Low maintenance and running costs, >20-year operational life
- For animal feeds, foodstuffs, industrial, agricultural and special products

Quickly and accurately

Combining high throughput with outstanding accuracy, the ALFRA FCD combines ingredients from up to 40 silos automatically. This highly productive machine features our unique dosing slide, which ensures that dosing and weighing is no longer the factory bottleneck. Uniquely, it eliminates labour-intensive and error-prone hand dosing – and the alternative of a separate machine for small amounts – by handling from 20 grams right up to 100 kg in a single machine.

Design features like an in-built dust extractor help ensure a clean workplace with minimum or even zero cross contamination. Cleaning, inspection and maintenance are all simple, and running costs are low.

Pioneering dosing slide improves on screw drives

KSE's pioneering dosing slide makes fundamental improvements over traditional dosing systems using screw drives. It has few moving parts for easy

maintenance and long life (>20 years instead of 5 years for screws). It delivers raw materials with greater speed and accuracy, and has an enormous dynamic flow range (1:1000 !!!).

The unique KSE dosing slide maintains the all-important First-In-First-Out material flow, eliminating dead zones in the silo. With its very large discharge area it is highly effective at avoiding bridging and rat holing. Vertical delivery means no product damage or compaction.

Smart software ensures maximum throughput

The embedded ALFRA dose&weigh software uses historical data to start the coarse dosing and then adjusts the fine product flow profile dynamically, achieving up to 20% more throughput – even for materials with varying flow characteristics. The improved accuracy saves raw materials, while batch times are shorter and more predictable. Now, materials dosing is no longer a process bottleneck!

UNIQUE CONCEPT MAKES FULL USE OF ENORMOUS SLIDE RANGE

With two weighing scales in one hopper (Weigher-in-Weigher) we make full use of our pioneering dosing slide concept. Dosing large quantities directly into the large weigher – with smaller quantities first going into the small weigher – means high throughput combined with excellent accuracy. Now, the appropriate weigher is selected automatically, reducing the number of silos you need.

EXTREMELY ACCURATE IN QUANTITIES RANGING FROM
20 g to 100 kg





Dosing & Weighing Technology

Specifications

Dosing range	20 g to 100 kg
Number of silos	4 to 48
Weighing capacity	5 kg and 100 kg (WiW)
Dosing accuracy	+/- 2 g and +/- 20 g
Available types	FCDx, FCDxy and FCDc

Applications

Feed and food	Compound feed, minerals, premixes, pet food, aqua feed, milk substitutes, food ingredients
Industrial	Building materials, rubber, industrial components, plastics, chemicals
Special products	Seeds, washing powder, gypsum, plaster, raw materials for grinding discs, etc.

See also:

Datasheet	ALFRA Dosing Slides
Datasheet	ALFRA dose&weigh

KSE: what we do

KSE Process Technology is a family business that has grown steadily over the last 40 years to become a worldwide concern. We supply everything your factory needs to dose, weigh and transport your materials. Besides dosing and weighing systems themselves, we provide automation solutions and services for producers of powders, pellets and granulates for the animal feed and related industries.

The portfolio of KSE dosing and weighing solutions covers everything from micro up to macro components, with dose rates from 1 gram to above 6,000 kg. Next to this, KSE's future-proof PROMAS ST process control system completely automates animal feed and food industry factories. Remote support with on-line diagnostics and a 24-hour helpdesk are available to customers around the world.

Although many of our products are standard, all our systems can be optimized to your requirements with different options and modifications.

KSE Process Technology B.V.
Rondweg 27
5531 AJ BLADEL
The Netherlands

Tel. +31 (0)497 38 38 18
info@kse.nl

www.ALFRA.nl



Scan the QR code to
see the FCD in action

