



Maximize The Value Of Your Crop

Efficient Grain Cleaning
Solutions



PNEUMATIC SYSTEMS DESIGNED FOR THE GRAIN INDUSTRY

Kongskilde Industries is a world-leading manufacturer of pneumatic systems and a specialist in custom grain handling solutions

ABOUT KONGSKILDE

Since 1949 Kongskilde Industries has been at the forefront of materials handling using high-pressure blowers.

With a strong focus on technology and customization, we provide a complete line of pneumatic conveying, cleaning and separating equipment.

OUR SYSTEMS

Kongskilde systems are flexible and easy to adapt to the needs of our customers. Our wide range of products and know-how within grain handling processes provide a multitude of solutions for both conventional and organic farmers and others involved with grain handling.

- Pneumatic conveying systems
- Grain cleaners
- Aspirator cleaners
- Dust collection
- Grain vacs / Suction blowers
- Weighers



Warehouse and Office with Training Center in Normal, IL

We continue to serve the needs of our customers across Central and North America from our location in Normal, Illinois in the heart of the grain belt. Contact us to learn more or schedule a demo.

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FRL 15 Aspirator Fan

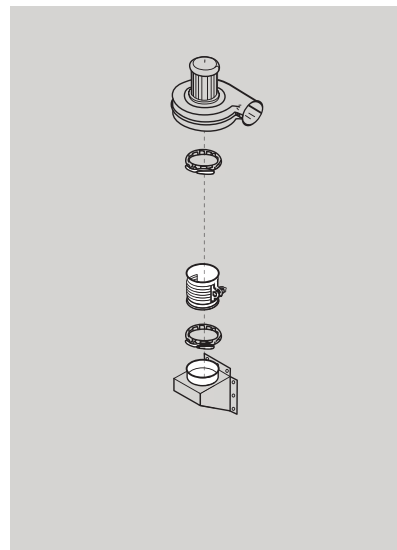


Improves Grain Quality and Reduces Cost

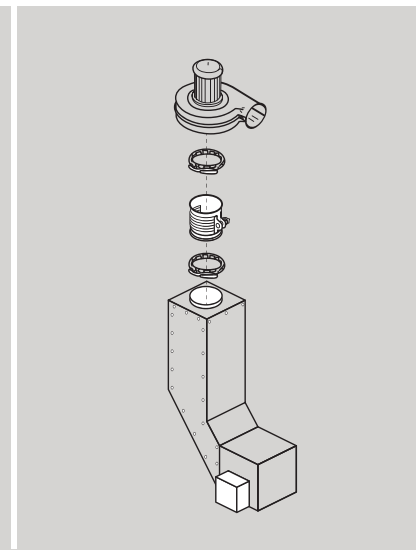
The FRL 15 Aspirator Fan is an effective, economical way to give your grain an air wash and remove any light, unwanted foreign materials like dust and bees' wings (red dog). Plus, its adaptability makes it a great addition to your operation. Add it to the discharge on grain dryers or place it at the head or boot of grain elevator legs or augers... and let it clean away!

4 Reasons to Clean Your Grain

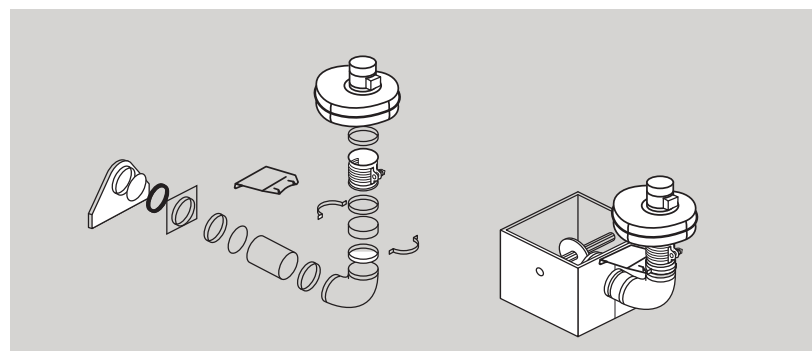
- **Improves Grain Quality**
Let's face it. Prices at the elevator matter. By removing these unwanted materials, you improve your FM counts and reduce dockage at the elevator.
- **Improves Aeration**
Another great benefit is that with the fines removed, air circulation is also improved in storage facilities without overtaxing aeration fans. Goodbye hot spots and spoilage!
- **Eliminates Plugging**
Bees' wings are known for plugging up systems. By removing them from your grain, you can add downspouts to legs without worrying about clogging and downtime.
- **Prolongs Equipment Life**
The cleaner you keep your equipment, the longer it lasts. Removing bees' wings and other contaminants to a bin keeps your processing area clean and working at top performance.



Universal Mount



M-C Mount



Super B Conveyor Mount

Dual Cleaner **KDC PLUS**

The KDC is a cleaner with a dual cleaning function that utilizes both screen and aspirator technology. The screens sort the grain by means of size, and the aspirator unit removes light impurities and dust by means of air for exceptional cleaning capability.

The KDC Plus features hinged doors for complete access to screens for easy screen replacement and visual inspection from either side. The inner screen serves as scalping, removing all large particles, and the total outer screen area is available for smaller fines removal.

The KDC Plus 4000 has a capability of up to 1,400 bu/h (40 t/h). The KDC Plus 8000 can handle twice as much with a capability of up to 2,800 bu/h (80 t/h).



KDC 8000 **PLUS**



Bottom of inlet made of heavy stainless steel for weather resistance.



Easy access for collection of grain samples after cleaning.



Windows on the side panel and aspirator unit can easily be cleaned or replaced.

Features & Benefits

- Effective size separation of grain kernels through two layers of screens.
- Quick-release system for easy and fast replacement of screens.
- Large selection of screens for all common crops.
- Cleaning by aspiration after size screening for maximum removal of dust.
- Limited stress and wear of cleaner with rotative parts only, so no vibration is transmitted.
- All components exposed to the ambient are made in galvanized steel suited for outdoor installations.
- Wear spots are made in stainless steel.
- Dampers on the torque arm for gear drive reduce stress load on screen drum.
- A vacuum inside the drum compartment limits the amount of dust.
- Easy adjustment of screen drum angle by use of crank handle (standard on KDC 8000 PLUS).
- Easy access for collection of grain samples after cleaning.
- Easy inspection during operation through multiple windows.

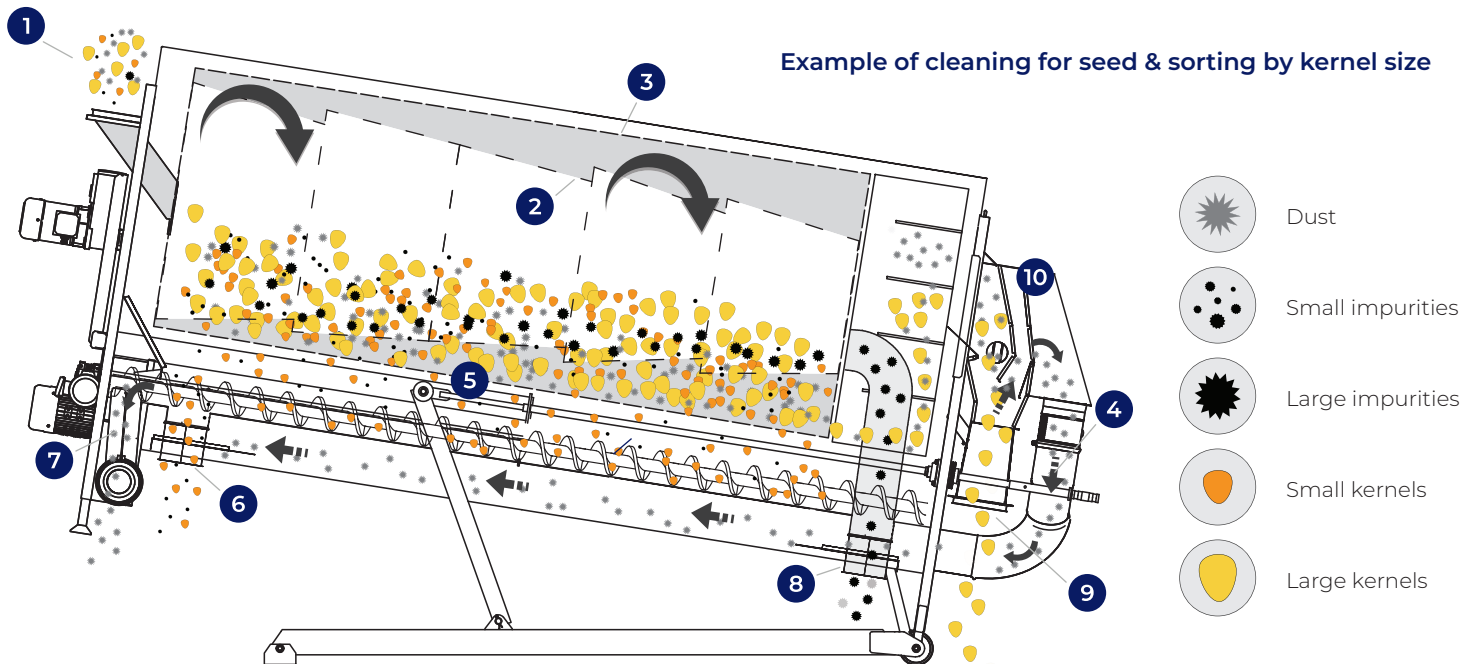
How a KDC Works



KDC 4000 **PLUS**

Parameters Affecting Capacity

- Grain type and condition, moisture, impurities.
- Higher inclination of the adjustable legs makes the grain pass faster over the screens. This provides a higher capacity, but reduces the cleaner's effectiveness.
- Selection of screens. Inner screens with "small" holes provide a better cleaning at a lower capacity.
- How the cleaner is installed.

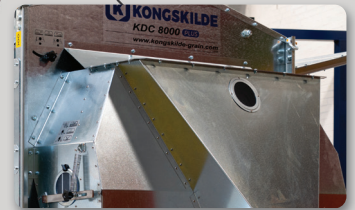


- | | |
|--|--|
| 1 Grain inlet | 6 Closable outer screen outlet for screenings / small kernels |
| 2 Inner screen, exchangeable | 7 Blower for aspirator |
| 3 Outer screen, exchangeable | 8 Closable outlet from inner screen |
| 4 Air bleed for air flow control in aspirator | 9 Clean grain outlet |
| 5 Auger for conveying of screenings | 10 Aspirator chamber for dust separation |



Aspiration Cleaning

The aspirator unit is placed at the end of the cleaning system. This separates light impurities and dust from the grain.



KDC 8000 PLUS



Easy to open side panels save time and increase efficiency when changing screens.



Screenings are conveyed through pipes up to 15 m (50 ft) away.



The cleaning brushes are mounted on a spring loaded arm for efficient even load on the outer screens.



A quick-release system makes it easy and fast to change screens and make ready for the next crop.

Accessories

- Wide assortment of standard screens for all common crops.
- Cleaning brushes clean the outer screens.
- Rain cover for motors and gear boxes.
- OK 200 pipe system and cyclone, connected to the outlet of the aspirator blower for conveying of trash and fines.
- Wheel set for short distance transport of KDC 4000/8000 PLUS between different locations.

Screens

Kongsild Industries offers a large assortment of screens for size separation of grain kernels. See Datasheet "Screen Selection for KDC" for more details.

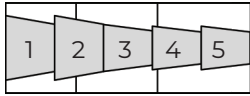
Technical specifications	KDC 4000 PLUS	KDC 8000 PLUS
Max. capacity pre-cleaning. t/h*	40	80
App. capacity seed cleaning. t/h*	3 - 17	6 - 34
App. capacity malting barley. t/h*	3 - 17	6 - 34
Screen drum drive motor size kW (HP)	1.5 (3.0)	2.2 (3.0)
Screen drum RPM	21.9	23
Blower for aspirator motor size kW (HP)	4.0 (5)	4 (5)
Blower for aspirator motor. RPM	3.450	3.450
Auger drive motor size. kW (HP)	0.75 (1.5)	1.1 (1.5)
Auger RPM	3.450	1.750
Inlet for crop	OK 200 (8")	FK 250 (10")
Outlet for cleaned crop	OK 200 (8")	FK 250 (10")
Conveying pipes for impurities	OK 200 (8")	OK 200 (8")
Pipe outlet from auger	OK 160 (6")	OK 200 (8")
Screen area. Inner drum. m ²	4.1	7.5
Screen area. Outer drum. m ²	6.5	10
Weight. machine without screens. lbs (kg)	1,962 (890)	3,141 (1,425)

*Grain 700 kg/m³. Capacity affected by grain type and condition, moisture, impurities, angling of KDC, selection of screens

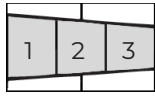
Screen Selection for KDC Plus

Inner Screen

KDC Plus 8000



KDC Plus 4000



Max. capacity



Max. cleaning eff. -
reduced capacity

Regarding capacity and selection of inner screens

The inner screen separates the large fines from the crop. Inner screen with small holes compared to the kernel size gives the most efficient cleaning, but reduces the capacity. Inner screen with large holes compared to the kernel size gives capacity, but reduces the cleaning efficiency. If too much crop is fed into the KDC, good kernels will be discharged together with the fines.

Screen Perforation in Sections (mm) KDC Plus 8000 1-2-3-4-5 KDC Plus 4000 1-2-3	Corn	Wheat	Barley	Oats	Rye	Soybeans	Sunflower seeds	Peas	Canola
●17 ●17 ●15 ●15 ●15 ●17 ●17 ●5									
●15 ●15 ●13 ●13 ●13 ●15 ●15 ●11									
●13 ●13 ●11 ●11 ●11 ●13 ●13 ●11									
●11 ●11 ●9 ●9 ●9 ●11 ●11 ●9									
●9 ●9 ●7.4 ●7.4 ●7.4 ●9 ●9 ●7.4									
●8 ●8 ●7.4 ●7.4 ●7.4 ●8 ●7.4 ●7.4									
●7.4 ●7.4 ●5.2 ●5.2 ●5.2 ●7.4 ●7.4 ●5.2									
●7 ●7 ●5.2 ●5.2 ●5.2 ●7 ●5.2 ●5.2									
●6.5 ●6.5 ●5.2 ●5.2 ●5.2 ●6.5 ●5.2 ●5.2									
■5.2 ■5.2 ●4.3 ●4.3 ●4.3 ■5.2 ■5.2 ●4.3 ●4.3									
●4.3 ●4.3 ●3.5 ●3.5 ●3.5 ●4.3 ●4.3 ●3.5									
●3.5 ●3.5 ■2.75 ■2.75 ■2.75 ●3.5 ●3.5 ■2.75									
—5 x 20 (all sections)									
—10 x 30 (all sections)									

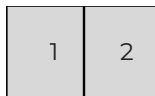
●Round Holes ■Square Holes ▬Oblong Holes

Outer Screen

KDC Plus 8000



KDC Plus 4000



Kernel Size

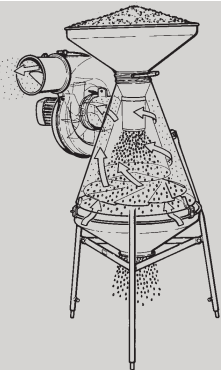
- Small
- Middle
- Large

Regarding capacity and selection of outer screens

On the outer screen small fines and kernels are separated from the crop. For pre-cleaning there is no limitation in capacity in relation to screen choice. For size separation of kernels on the outer screen approx. 10-20% of the capacity rated for pre-cleaning can be obtained.

Screen Perforation (mm)	Corn	Wheat	Barley	Oats	Rye	Soybeans	Sunflower seeds	Peas	Canola
—1.0 x 16.5									●
—1.2 x 1.5									●
—1.8 x 16.5		●		●	●		●		
—2.0 x 16.5		●	●				●		
—2.25 x 16.5		●	●				●		
—2.4 x 16.5		●	●				●		
—2.5 x 16.5			●						
—2.65 x 16.5			●						
—4.0 x 16.5						●		●	
—4.3 x 16.5						●		●	
—4.5 x 16.5						●		●	
—5.0 x 20.0	●							●	
■2.75		●	●		●				
■5.2	●								
■6.0	●								
●2.0		●	●	●	●				
●3.5						●		●	
●4.5	●					●		●	
●7.0	●								
●7.4	●								
●9.5	●								
No perforation									

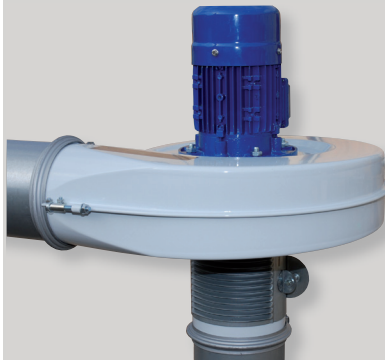
Kongskilde Aspirators **KF**



KF 12 mode of operation.



KF 12.



FRL 15 blower can be used to vacuum off dust, fines, and chaff at grain dryer discharge or at leg, auger, and conveyor inlets.



Cyclone for discharge of dust.

HOW AN ASPIRATOR WORKS

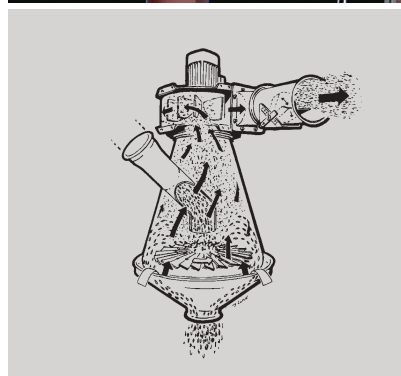
The grain passes through an upwards moving air stream in the aspirator. The air stream picks up dust and light impurities, and gravity allows the grain to fall down into the bottom outlet of the aspirator.

The dust and light impurities follow the air stream through the blower and further on into a pipeline to the desired discharge point.

Aspirators are suited for removal of dust and light impurities from grain. The construction of the pre-cleaner provides many options for integration in a grain plant.

We recommend that the grain cleaner is installed in such a way that it can clean the grain both before going into and coming out of storage.





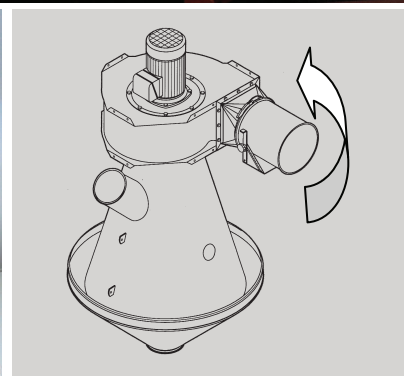
KF 40 mode of operation.



KF 40 fitted with support legs.



Air regulator for adjustment of the suction power of the aspirator blower.



Blower outlet can be turned in any direction.

BENEFITS

- Modular system with great flexibility for built-in systems.
- Cost effective way to clean grain before going into storage or coming out.

Technical specifications	KF 12	KF 20	KF 60
Max. capacity (barley) t/h	12	20	60
Motor size blower motor kW (HP)	0.75 (1.5)	1.5 (3.0)	7.5 (10)
Motor RPM	3.450		
Motor type	C Flange motor		
Weight (incl. motor) lbs (kg)	165 (75)	232 (105)	573 (260)
Conveying pipes for fines	OK 160	OK 200	2 x FK 300
Max. recommended conveying length for fines ft (m)	80 (25)	50 (15)	50 (15)

MTD Blowers

MTD Blowers are direct drive centrifugal units designed for material handling.

MTD blowers are equipped with a self cleaning rotor, with 6 backwards curved blades and an aerodynamic intake. The rotor is statically and dynamically balanced to ensure maximum airflow and efficiency.

With the MTD blowers a volume of up to 7,000 CFM and a max pressure of 18" pt. inches WG can be reached.

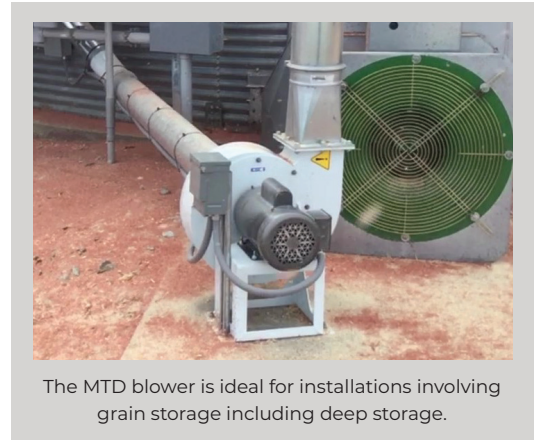
BENEFITS

- MTD blower houses are constructed in 3mm steel plate.
- Suited for both indoor and outdoor installation.
- Low power consumption.



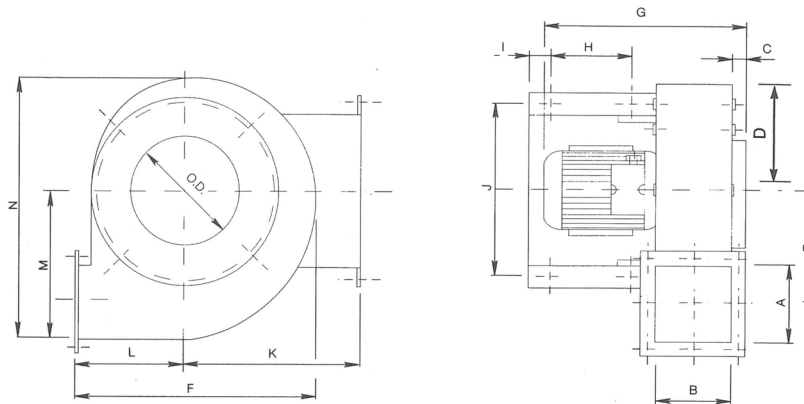
TECHNICAL DATA

Type	Motor MP	Rpm	Weight lbs (kg)	Noise level 3' (1m) dBA	Standard inlet
MTD 20	2	3450	90 (41)	74	OK160 (6")
MTD 22	3	3450	119 (54)	73	OK200 (8")
MTD 25	5	3450	168 (76)	76	OK200 (8")
MTD 30	10	3450	236 (107)	80	FK 250 (10")
MTD 35	15	3450	421 (191)	80	FK 250 (10")
MTD 40	30	3450	624 (283)	84	FK 250 (10")



The MTD blower is ideal for installations involving grain storage including deep storage.

DIMENSIONS



Type	A mm	B mm	C mm	D mm	D1 mm	øD2 mm	n mm	E mm	F mm	G mm	H mm	I mm	J mm	K mm	L mm	M mm	N mm
MTD 20	140	85x2	33	200	235	9	12	207	448	406	141	40	329	325	198	284	500
MTD 22	166	98x2	29	225	260	9	12	220	500	475	192	40	326	340	224	310	552
MTD 25	186	108x2	30	250	285	9	12	248	582	530	210	50	356	384	273	348	618
MTD 30	206	118x2	36	300	335	9	12	267	631	644	230	50	356	415	293	377	676
MTD 35	225	128x2	45	350	389	11	12	320	670	740	360	50	390	515	293	438	770
MTD 40	250	94x3	55	400	439	11	12	330	740	810	400	50	488	500	326	462	824

K-Series Bag Filter

THE SUPERBAG

The Superbag is a polyester filter bag created using a patented weaving technique in tubular format. This design gives the filter bag a surface which can cope with varying dust loads and with virtually any type of dust.

BENEFITS

- Special shape ensures high efficiency and effectiveness for long periods of time.

- Durable patented construction made from strong polyester fiber and seamless body.
- Efficient filter media provides low pressure drop and low energy consumption.
- Interwoven carbon fiber wire provides anti-static properties inside and out.
- Easy assembly.

Waste Disposal Options



Bags



Barrels



Dump Bin



KA Batch Weighers

SIMPLE AND ROBUST

Kongskilde twin-compartment batch weighers operate on a continuous batch weighing principle, in which the material flows constantly through the weigher at a given capacity.

- Robust and simple construction ensures reliable operation.
- Suited to many different applications, such as cereals and other granular materials.



Weigher Type	KA 10	KA 25
Contents per comp. std. lbs (kg)	22 (10)	55 (25)
Contents per comp. min/max lbs (kg)	13-26.5 (6-12)	44-66 (20-30)
Capacity t/h (dry barley)	8	15
Volume per compartment, litres	26	68
Net weight, lbs (kg)	66 (30)	115 (52)
Accuracy deviation (subject to correct adjustment and operation)	+/-1%	+/-1%

**All weighers are balanced at the factory to weigh out the batch indicated. If desired, the weight may be varied within the limits stated above.*



Providing high-quality solutions for grain cleaning since 1949

Efficient grain cleaning and handling systems

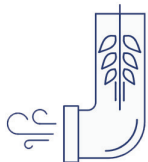
We are pioneers within the field of conveying blowers for many different kinds of material handling needs. Our systems include conveying, cleaning and separation of grain and raw materials - it's quick, efficient, environment friendly, and gentle on the grain.

At Kongskilde, our dedicated and experienced staff ensure that all products and solutions are

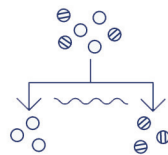
customer focused in regards to development, testing, production and installation. Our reliable and scalable solutions are designed in close cooperation with our customers, who always have the last say.

Dialogue is the first step towards the best Kongskilde solution; you tell us your company needs - now and in the future.

Start the conversation today and discover what the power of air can do for your business.



CONVEYING PNEUMATICALLY



CLEANING AND SEPARATION



WEIGHING

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