

Truck Sampler Rakoraf

for correct sampling directly from truck with remote control.



The Rakoraf Sampler is the fastest and easiest method to take an accurate sample from an open trailer.

- Fast and easy sampling.
- Representative sampling.
- Remote control for parallel operation of sampler and weighbridge
- Sample spear: 2.1 to 3m length
- Turning space: 4.8m to 8.8m, 0-350°.
- Sample mass 0.5kg/m of sample spear.
- Option: Vario-divider (up to 8 sub samples).

The sample can be taken if the trailer is before or on the weighbridge. The telescopic arm with the core tube can be extended or retracted, be turned horizontally 0-350°, and can also be raised or lowered vertically. When the core tube is forced downward into the load, the grain, due to the down pressure, is pushed upwards into the inner chamber of the core tube and carried to the receiving chamber located in the weighbridge office via steel and PVC tubing.

The air circulation system with the patented CON-VAC system secures a correct sample eliminating the „vacuum cleaner effect“. This has been certified by independent SjF test report no. 758.

Each time the probe is inserted into the load a sample is taken. From a 1 metre load a 500 gram sample is taken. Sample size is independent of the time the probe is inserted in the load. The sample is taken right to the bottom of the material layer, because smaller impurities settle at the bottom. When the core sampler stops, the samples is automatically emptied out from the receiving chamber.



sampling

Inline Sampler DVB

Automatic sampler for cereals, feedstuffs, seeds and similar bulk flow solids.



- 100% representative sample, thereby maximising control.
- Optimum productivity - the possibility of error in sample taking is eliminated as sampling is automatic
- Rapid payback period, with the benefit of continued improved contributions thereafter.
- Reliable, maintenance free construction.
- In addition to cereals will sample feedstuff, seeds, rice, soybeans, milled products - in fact most bulk flow solid.
- Remote control facility.

Sampling is effected by means of a diverter with an open slot in the leading edge. The diverter is moved automatically through the stream (e.g. grain), see principal sketch.

Thus a correct sample is taken from across the spout area, not just at the side or in the centre of the flow. Test interval is stepless adjustable from 1 test per 5 sec. or 1 test per hour.

A remote control facility also exists whereby it is possible to switch on the sampler from a central control room; alternatively to let it operate on elevator control.

Size of the single sample will depend on the spout flow rate and the size of the slot in the diverter. The standard slot is 8 mm. Other openings can be supplied on request. The slot can easily be changed on site.



sampling

Sample Spear

For sampling in grain, rapeseed etc.

The sample spear opens from the bottom and then gradually. This ensures a true sample of grain. The spear is open at the handle so that the sample can be easily emptied into a container.

Material: Aluminium
 All spears: 8 openings
 Diameter: Ø 38 mm
 available in:
 Length: Weight:
 1,50 m 1,6 kg
 2,00 m 2,1 kg
 2,50 m 2,6 kg
 3,00 m 3,1 kg

For pellets etc.
 Diameter: Ø 50 mm
 Length: 1,30 m
 Weight: 1,9 kg



Bag Filler

makes filling of laboratory samples into bags fast and easy

The height of the bag filler is variable corresponding to the bag size. Easy to clean aluminium hopper, which can be sterilised if required.

Dimensions:
 Total height: 500mm
 Hopper diameter 310mm
 Bag height: up to 310mm
 Base: length 200mm x width 275mm
 4 non-skid rubber feet
 surface electro galvanised
 Total weight: 3,4 kg



sampling

Sample Divider Vario

Accurately dividing samples of grain, seed and other products to the desired sample size in one operation.

In laboratories variable dividers can be used for very precise dividing of different materials. A lot of labour time is saved compared with the "riffle type" and "boerner" dividers. In addition to this the required sample size can be obtained both more easily and accurately.



model 4-8

The sample is poured through a hopper and slides down a rotating tube which passes a number of variable outlets leading to the sample trays. Sample material between the variable outlets is surplus. Example (model 2): 4 kg of sample divided into 2 samples of 1 kg each. (sample and duplicate). The handle is moved to position 4 on the scale. Start the divider. Pour the sample into the hopper and wait approx. 20 sec. Sample and duplicate sample are now ready.

- Model 1 G/1-4 for grains, 1 sample, 4 outlets of which 1, 2 or 3 can be covered to obtain larger divid. ratios
- Model 1 F/1-4 for flours, as 1 G/1-4 but with 70° slope
- Model 2H for grains, 2 samples (sample + duplicate)
- Model 2L 2 samples, vibration feeder
- Model 4-8 for grains, with options for 4 to 8 samples
- Model 8 for grains, 8 samples (optional: variabel)
- Model 32 32 samples for ring test analysis or collaborative studies

Options:
 - Automatic control panel for combination with
 - RAKORAF truck sampler (mostly model 2H)
 - Vibration feeder for samples < 1 kg
 - Program for PC for exact sample weight in dividing seed
 - Transport system for transport of surplus sample

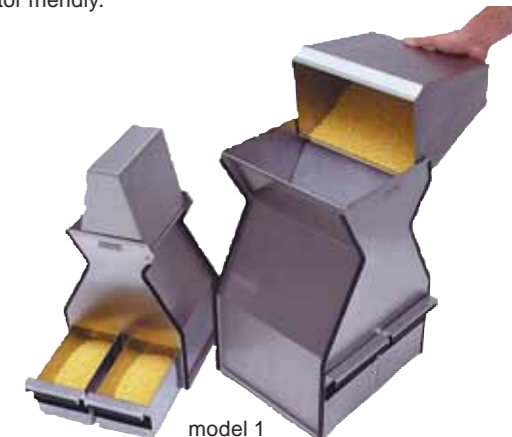


sample dividing

Sample Divider Riffle type

gives a homogeneous and representative division of grain samples.

- Manufactured from stainless steel, no static electricity.
- The construction prevents the escape of dust.
- The hinged container prevents failure in operation.
- The divider is manufactured without any loose parts.
- Operator friendly.



model 1

Pour the sample into the hinged container and tip. If the sample is still too large, repeat with the contents from one of the drawers.

- 4 sizes 3, 5, 10 and 18 litre
- 3 different numbers of splits 10, 18 and 34
- different slit dimensions: from 9,8 to 29,0mm

Types of hinged containers:

- model 1 has a closed hinged container
- model 2 has an hinged container for use with a tray which opens just before the container is on top. The closed construction is optimized for flours or powders
- model 3 has an additional leaf for alternative use with or without tray.



sample dividing

Sample Mill

coarse reduction,
granulator for lab use

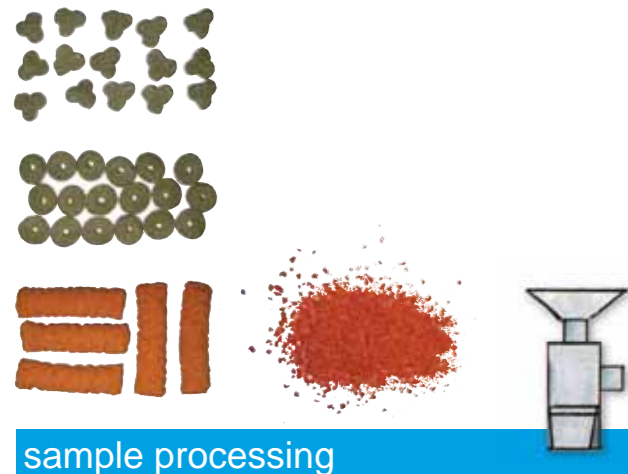
Coarse reduction of feed pellets/cakes to enable the division of a representative sample for analysis. Then this working sample can be fine ground for say NIR analysis. Some NIR/NIT units can analyse the working sample without further preparation, thus saving time.

In connection with the automatic sampling of feedstuff at raw material reception or production the crusher can be built onto the automatic sample divider Vario model 1F.

- low noise design
- high capacity 100-200 kg/h
- low maintenance
- very competitive price
- also pellets of very high fat contents can be reduced



The cover and the lid of the crusher are mounted with snaplocks. If cleaning is necessary it takes only 10 sec. to open the crusher. Reassembling of the crusher is also 10 sec. The crusher has a 5 litre collection tray for the sample.



sample processing

Sample Cleaner MLN

Sample Cleaner model MLN for testing of grain samples for impurities

- accurate assessment of the total consignment.
- Price can be negotiated on the basis of a cleaned representative sample.
- for a wide range of products (e.g. oil seeds, cereals, grain, beans etc.
- Sieve changes can be made in seconds.
- Access to all vital parts of the machine is simple.
- Silent and vibration free operation.

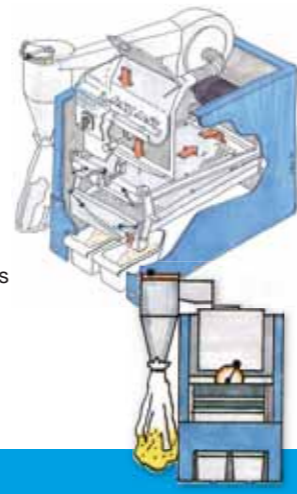


The MLN is made for laboratory or intake facility or wherever a cleaned sample of grain from a large consignment is required. The cleaned sample also enables a more accurate moisture measurement to be obtained.

Options:
A variety of sieves for almost all kinds of seeds and grains.

PC-Program for electronic balances

Extension hopper, run through trays and sack holder for continuous cleaning.



sample processing

Sample Cleaner SLN3 & SLN4

for cleaning and grading by size as means of selecting grain for seed, malting, feed etc.

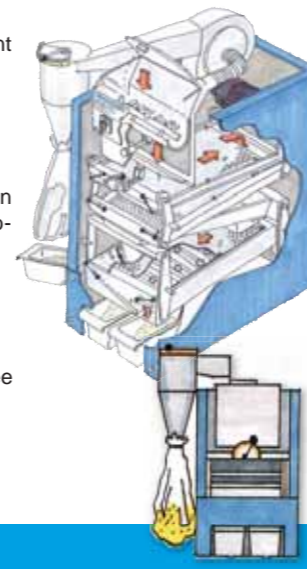
- Selection based on sample makes it possible to accept quality grain or alternatively reject that which does not meet the specified standards at intake.
- for a wide range of products (e.g. oil seeds, cereals, grain, beans etc.
- Fully automatic cleaning - maintenance free.
- The screens are self cleaning being equipped with ball cleaning system.
- Sieve changes can be made in seconds.
- Silent and vibration free operation (below 82 dB).



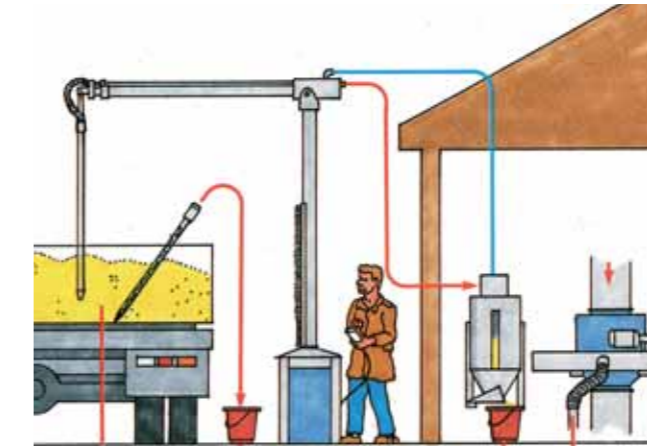
The identification of quality and type of impurities in a consignment and the actual grain size is important when selecting suitable grain for seed, malting barley, intervention etc.

A similar standard of cleaning as that on cereals can be achieved on peas, beans and more difficult products such as sunflower seeds or small seeds like flower or grass seeds etc.

A large feed hopper can be supplied to enable the cleaner to be used for the separation of pedigree seed from experimental yields.



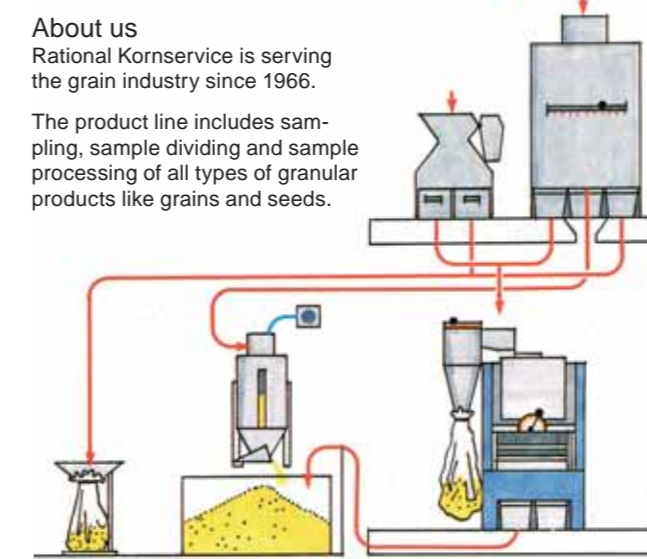
sample processing



About us

Rational Kornservice is serving the grain industry since 1966.

The product line includes sampling, sample dividing and sample processing of all types of granular products like grains and seeds.



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We make samples representative.

Sampling, dividing and processing as basis for the assessment of grain and seed quality.

