



## HORIZONTAL MIXERS



SKIOLD MAKES THE DIFFERENCE!



### **SKIOLD HORIZONTAL MIXERS H2000 & H2500**

Optimum emptying

High mixing accuracy 1:100000

Suitable for computerized feed mills

Standard models 2000/2500 litres

Solid construction with shaft gear and V-belt drive

Modular mixing arrangement with pre- and discharge bin

High efficiency - also with addition of fat, oil, molasses and corncob maize (CCM)





## Efficient Mixing

### Construction

The entire mixer is made in a solid welded steel construction with fittings places for many options. The cover of the H-mixer is divided into three sections with four Ø150 mm pipe inlets for intake of raw materials and it is equipped with inspection door which allows manual addition of extra components, e.g. minerals. Liquid components are added through a nozzle placed at the end of the mixer. One of the mixer end plates is bolted on the trough securing an easy access directly to the mixing auger, which is mounted in adjustable bearings. As a standard the mixer is equipped with a Q20 end outlet with either hand or motor operated throttle.

### Efficient Mixing

The SKIOLD H-mixer is a batch mixer suitable for mixing almost any kind of meal or granulated raw material with very high accuracy. During the

mixing process, taking 4-12 minutes, it is possible to add fluid raw materials like fat, oil, molasses as well as up to 50% of corncob maize (CCM). The SKIOLD H-mixer is made with an open double auger and the mixing trough is cylindrical shaped just like the auger. This secures not only a homogeneous mixing, but also an optimum emptying of the mixer. The special construction of the open double auger has the effect that the material furthest out in the mixer is pulled in one direction, whereas the smaller central auger pulls the material in the opposite direction. This mixing method is very effective and gives a very homogeneous feed mixture. For further documentation, we refer to the test results from Bio-technological Institute on the back of this leaflet.





# Mixing Plants

In our effort to increase the capacity of traditional computerized batch feed mills, we have developed a mixing arrangement with:

- a pre-bin with pneumatic bottom outlet
- a version of the H-mixer with double bottom outlet
- a discharge bin with extracting auger.

## Pre-Bin

The pre-bin is placed either directly on top of the H-mixer, or is installed with flex connection and four load cells. In computer controlled batch mixing plants, these installation options allow direct weighing-in in the pre-bin. The pre-bin bottom consists of two inclined sides, of which one of them is equipped with a bottom throttle that opens in the full length of the mixer. The throttle is pneumatically controlled by means of two cylinders and it is equipped with indication and self-locking closing device. A pipe system equalises the air pressure occurring between the pre-bin and the mixer when the material suddenly drops.

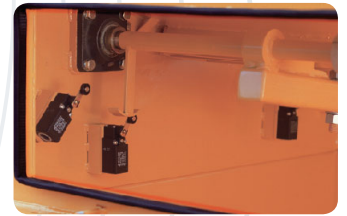
## Mixer Bottom

The mixer bottom consists of two trough shaped throttles, which open in the full length of the mixer. The adjustable throttles are fitted on strong

through-going shafts and they are both equipped with open and close indication. The throttles are opened and closed by a pneumatic cylinder via a closing device also having a self-locking safety function.

## Discharge Bin

The discharge bin for the H-mixer is delivered with bolt flange for direct mounting under the mixer. The bin itself is equipped with an empty indicator and it has a large inspection door. A strong  $\text{\O}250$  mm trough auger, directly driven by a gearmotor, empties the bin. This emptying auger is equipped with high level indicator. The SKI-OLD H-mixer is very flexible due to its modular design, which makes it possible to mix with very high accuracy in capacities varying from 1 t/h up to 12 t/h.





***Conclusion of test of the SKIOLD mixer carried out on 30 April 1998 by the Biotechnical Institute of Kolding, Denmark:***

*The test was carried out by adding tracer and methyviolet to ground wheat in the mixture ratio 1:100,000. Random samples were selected in the mixer after 8, 10 and 12 minutes of mixing and a set of random samples was also selected during emptying after 12 minutes of mixing. The results showed improved homogeneity with rising mixing time and a very satisfying mixing effect on the testing material. After 8 minutes the coefficient of variation was down to 7.5%, and after 12 minutes down to 2.6%, which amply fulfil the normally accepted demand for feed mixes on a coefficient of variation equal to or less than 5% at a mixture ratio of 1:100,000.*

*Test report in its full length is available on request.*