



Continuous Hydroliser

Continuous Hydroliser Model ACH

The Haarslev Hydroliser model ACH is used for treatment of feathers and hog hair, giving a meal of very high digestibility. After hydrolysis the raw material is dewatered in a screw press or decanter and then dried. Haarslev Industries is a supplier of complete process plants.

The ACH is available in three sizes with capacities up to 10.0 tonnes of raw material processed per hour.

Design

The design principle of the ACH is shown in the figure. The hydroliser consists of a vertical compression screw, a compression vessel, a reactor, an economiser and a flash vessel.

Features of the ACH include:

- All main equipment is made of stainless steel.
- All pressure vessels can be delivered with certification according to local standards.
- Transport from the compression vessel all the way to the flash vessel is by

pressure differences and no rotating parts are involved.

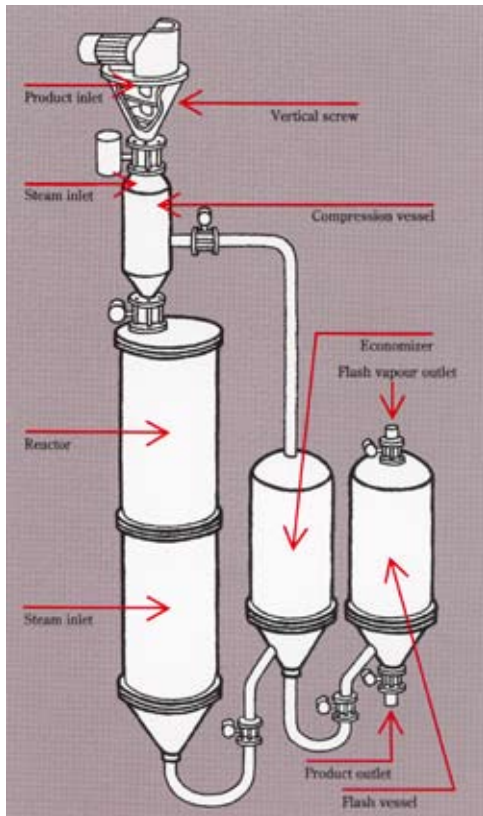
- Flash vapour released from hydrolysed material is reused for pre-heating.
- The hydroliser operates with direct steam supply at elevated pressure and well defined short retention time.
- The hydroliser is fully automatic, PLC controlled, and is delivered with control board.
- The flash vessel can usually be located for direct feeding of dewatering press, decanter or dryer.

Operation

The overall PLC controlled system ensures constant load of the reactor, well-defined retention time and short-time exposure to process temperature, all giving a high and homogeneous product quality and reducing attendance to a minimum.

Due to easily adjustable process variables, the ACH is not influenced by variations in the raw material composition.

The design also incorporates a comprehensive heat recovery system. Pre-heating is performed by means of flash vapour from the economiser, thus reducing live steam supply and energy costs. Due to a design principle which excludes rotating parts the power consumption is extremely low.



Maintenance

With the Haarslev Hydroliser maintenance costs are reduced to a minimum. As rotating parts are not used the traditional main reason for maintenance is removed. The hydroliser is not sensitive to minor foreign bodies. The hydroliser is heated by direct steam supply, thus not requiring heating surfaces and consequently the risk of material scorching is eliminated. This provides improved product quality and reduced labour requirements.

| ACH types | Nominal capacity t/h | Compressed air Nm ³ /h | Steam supply kg/kg of raw material | Height | Shipping data | |
|-----------|----------------------|-----------------------------------|------------------------------------|--------|---------------|-----------------------|
| | | | | | Weight T | Volume m ³ |
| 50 | 5.0 | 60 | 0.3 | 10.7 | 13 | 86 |
| 100 | 10.0 | 60 | 0.3 | 10.7 | 16.5 | 86 |

We reserve our right to alter the specifications at any time without prior notice.



Haarslev Industries A/S • Bogensevej 85
 DK-5471 Sønderso • Denmark
 Telephone: +45 63 83 11 00
 E-mail: info@haarslev.com
www.haarslev.com

