



**HAARSLEV™**

Processing Technology

# **VERTICAL HYDROLYZER**

Product brochure



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# VERTICAL HYDROLYZER



If you need to process feathers or hog hair into a high-quality feed meal that contains a minimum of indigestible proteins, the Haarslev Vertical Hydrolyzer is an extremely effective way to do it.

The fibers disintegrate when pressure-cooked at high temperatures under controlled conditions. Full control and the right balance between pressure and retention times – with your input material only very briefly exposed to high temperatures – help you achieve feed outputs of the quality you require. These units are available with processed raw material capacities up to 10 metric tons per hour. After hydrolysis, your raw material can be dewatered effectively using a screw press or decanter centrifuge, and then dried.

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EFFICIENT HYDROLYSIS OF POULTRY FEATHERS OR HOG HAIR, WITH FULL CONTROL OF PROCESS CONDITIONS IN ORDER TO ENSURE BETTER-QUALITY OUTPUT.



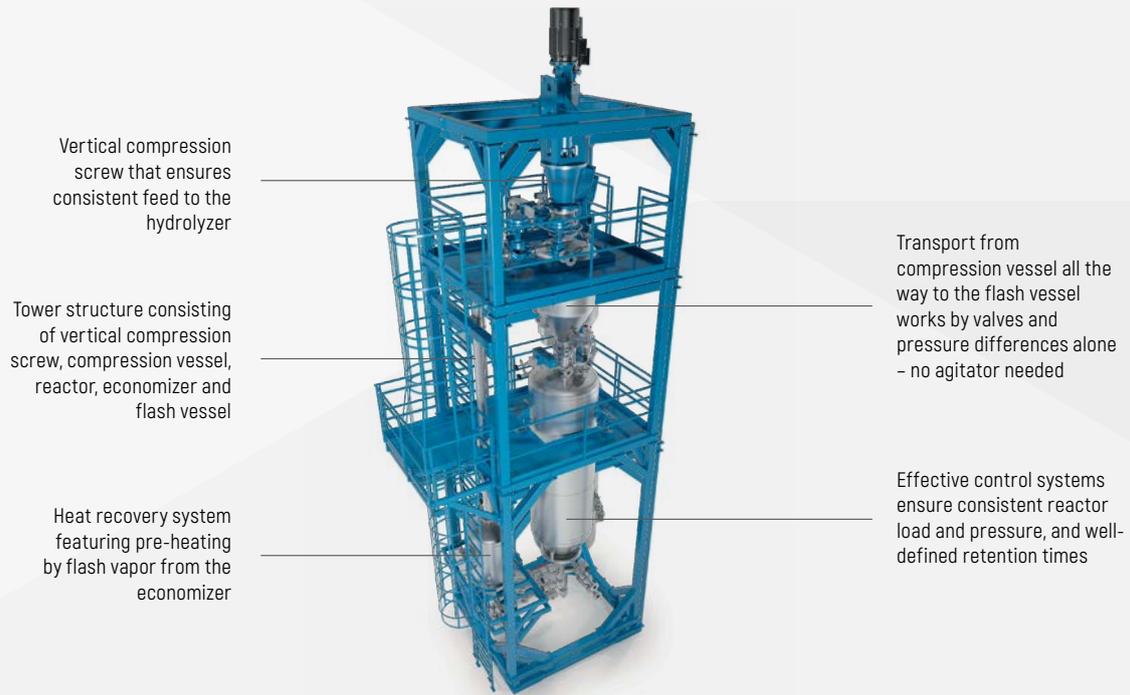
#### APPLICABLE FOR:

- Independent rendering operations
- Poultry rendering plants
- Specialist operations involving feathers or hog hair

#### BENEFITS

- Processing effectiveness unaffected by variations in input specs
- Operates with direct high-pressure steam supply and short retention time
- Direct steam supply does away with heating surfaces, eliminating the risk of input material scorching
- No rotating or moving parts – very reliable and only minimal maintenance required
- Flash vapor released from the hydrolyzed material is re-used for pre-heating
- Effective heat recovery system reduces energy consumption and operating costs
- Advanced instrumentation and control systems ensure high product quality

**FEATHERS OR HOG HAIR OF VIRTUALLY ANY QUALITY/SPECIFICATIONS AND IN ANY CONDITION**



Vertical compression screw that ensures consistent feed to the hydrolyzer

Tower structure consisting of vertical compression screw, compression vessel, reactor, economizer and flash vessel

Heat recovery system featuring pre-heating by flash vapor from the economizer

Transport from compression vessel all the way to the flash vessel works by valves and pressure differences alone - no agitator needed

Effective control systems ensure consistent reactor load and pressure, and well-defined retention times

**HYDROLYSIS UNDER PRESSURE TO MAKE FIBERS IN THE INPUT MATERIAL DISINTEGRATE, READY FOR MECHANICAL DEWATERING USING A SCREW PRESS OR DECANTER CENTRIFUGE**

TYPE	NOMINAL CAPACITY* (kf/h)/(lb/h)		COMPRESSED AIR (Nm <sup>3</sup> /h)/(ft <sup>3</sup> /h)		STEAM SUPPLY		DIMENSIONS**									
					kg/lb OF RAW MATERIAL		Lenght		Height		Width		Weight (kg)/(lb)		Volume (m <sup>3</sup> )/(ft <sup>3</sup> )	
100	10,000	22,046	35	2,119	0.3	0.7	11,350	37' 3"	2,700	8' 11"	3,200	10' 6"	11,000	24,250	86	3,037

\* Capacity at 70% moisture

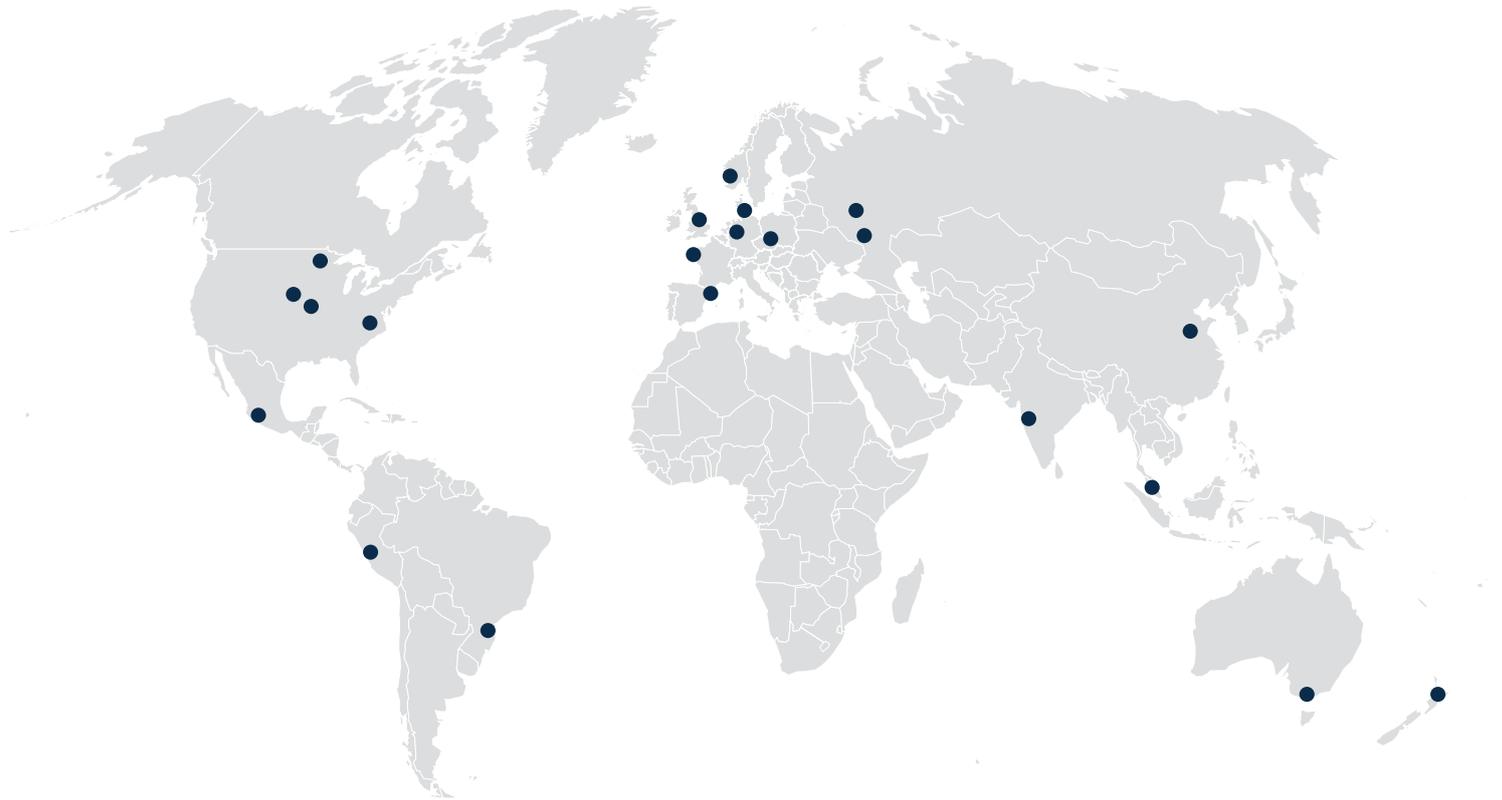
\*\* All statements of dimensions are approximate.

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



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## PROCESS IS POTENTIAL

### HEAD OFFICE

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