

de heus[®]

IN RUSSIA

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PRODUCTION OF PREMIUM CLASS PREMIXES

In 2009 the Russian and Netherlands holding company, founded by De Heus (Netherlands) and Koudijs MKorma (Russia), purchased «NeoKorm» factory (currently Private Joint Stock Company De Heus) located in Lakinsk, Vladimir area, where Koudijs MKorma has started own production of premium class premixes.

In 2015 the production was modernized. Today it is ensured by 2 independent production lines with a total volume of 120.000 tons of premixes per year.

Our plant is a modern enterprise that takes into account all the requirements for the stages of the technological process that ensure the production of high-quality premixes for developing perfectly balanced compound feeds.

The factory is designed and based on specially developed technologies and unique technical solutions. The factory includes 5 functional facilities: (1) the intake and storage of bulk materials, (2) the preparation line for inert filler – wheat grits, (3) dosing and mixing line, (4) the bagging line in bags or big-bags, and (5) the packaging and finishing line. Use of cutting-edge technology and high-tech equipment allows us to manufacture premixes according to the most complex set of standard and customized recipes.

The automated process control system (APCS) functions according to the «one operator – one production line» principle and provides automated control of the whole production cycle. Such system allows carrying out a wide spectrum of tasks: minimizing human influence in the manufacturing process, optimizing dosing and mixing algorithms; generating reports and carrying out diagnostics of the hardware and software status.

The high quality of the product is ensured, among other things, by a comprehensive testing of the raw materials (input by bar codes, handover to production, loading into bins and dosing), with automatic bundling and transfer of finished products with a bar code to the warehouse.

The products sold by Koudijs MKorma complies with the global quality standards, ISO 9001-2009 and ISO 22 000, including HACCP, which guarantees high quality and safety of the products for consumers; it also conforms to De Heus Koudijs B.V. quality control standards.



PRODUCTION OF PRESTARTERS

In 2013 a new high-tech factory was put into operation to produce a unique product – prestarter for piglets. At the time of launch the production capacity of the factory was 30 000 tons per year, after modernization it was increased to 60 000 tons per year.

In 2018 the prestarter production complex line or factory was equipped with a second Pellet line and automatic packaging line, which increased the production capacity of the plant to 60.000 tons of finished product per year, and the range of products was also expanded. Currently, the factory produces prestarter for pigs, cattle and agricultural poultry.

The long-term experience of leading European companies and feed mills of the Russian Federation was used during the design and construction of the factory. Production lines are fully automated to ensure the safety and nutritional value of finished products, and the technology provides with autonomous preparation of raw materials, its heat treatment with the use of modern high-tech equipment.

Guarantee of nutritional value, balanced finished product and high quality of supplied components are the determining capacity for the production of prestarter mixed feeds by Koudijs Mkorma.





UNIQUE PRODUCT-PRESTARTER

Koudjis MKorma prestarters are the unique, high-tech products created taking into account corporate and international quality standards.

We use high-quality raw materials for the production of Koudjis MKorma prestarters, working with the best and proven suppliers. The innovative product is subjected to a thorough comprehensive control. Purchasing our prestarters you get a fresh product within a few days after its development and increase the economic efficiency and technical indicators of your enterprise. The Koudjis MKorma company offers its partners a wide range of high-quality products for all types of agricultural animals: premixes, prestarters, BVMC for pig breeding, dairy and meat livestock, egg and meat poultry farming.





RUSSIAN-DUTCH TECHNOLOGIES, EXPERTISE AND EXPERIENCE



A unique combination of advanced technologies of our Dutch colleagues from De Heus and the expertise of Russian specialists from Koudjis MKorma made it possible to create a highly efficient joint venture whose products meet international quality standards.



HIGH TECHNOLOGY



The production complex of private joint-stock company De Heus is a modern enterprise equipped with the latest technology. The enterprise is maximally automated and optimized to produce a high-quality competitive product that meets international quality standards.



PREMIUM PRODUCTS



The high quality standards of our premium premix are based on strict control of all incoming materials by our modern chemical and technological laboratory, the close monitoring of all stages of the process and a multilevel system of quality control of the finished product.



INNOVATIVE SOLUTIONS



The most modern developments and innovations are boldly introduced into the existing Russian production, designed to improve the production process, increase the level of enterprise productivity and bring the quality of finished products as close as possible to the requirements and standards of the consumer.

A line for receiving limestone flour by pneumatic transport has been introduced in the production, which ensures separation limestone and bran intake flows, contributing to the improvement of the finished product quality.



TECHNICAL CAPABILITIES

1. BAND DRYER
2. LYSINE GRINDING LINE
3. TWO-SHAFT PADDLE MIXER
4. AUTOMATIC PACKAGING LINE
5. CRUMBLER
6. PELLET LINE





TECHNICAL CAPABILITIES:

BAND DRYER AMANDUS KAHL K 9097-0779



SPECIFICATIONS

Drying chamber dimensions:

5.069 * 2.412 * 2.563 mm

The temperature of hot air supplied to the dryer:

80-110°C

Bulkier material thickness at the band:

50-150 mm

Finished bulkier material humidity after drying:

8,8-9,6%

Production output: **2 tons/h**

USE

This device is used for drying or cooling the installation system for the manufacturing of bulk granular materials.

OPERATION

Hot or cold air passes through the material according to the cross-flow principle. With this air distribution system the material is distributed all over the width of the conveyor belt.

TECHNICAL CAPABILITIES:

LYSINE GRINDING LINE



SPECIFICATIONS

Hammer mill type: **MM-70**

Feeding bin above hammer mill:

V=1.1 m³

Buffer bin under the hammer mill:

V=1.7 m³

Capacity: **4 t/h**

USE

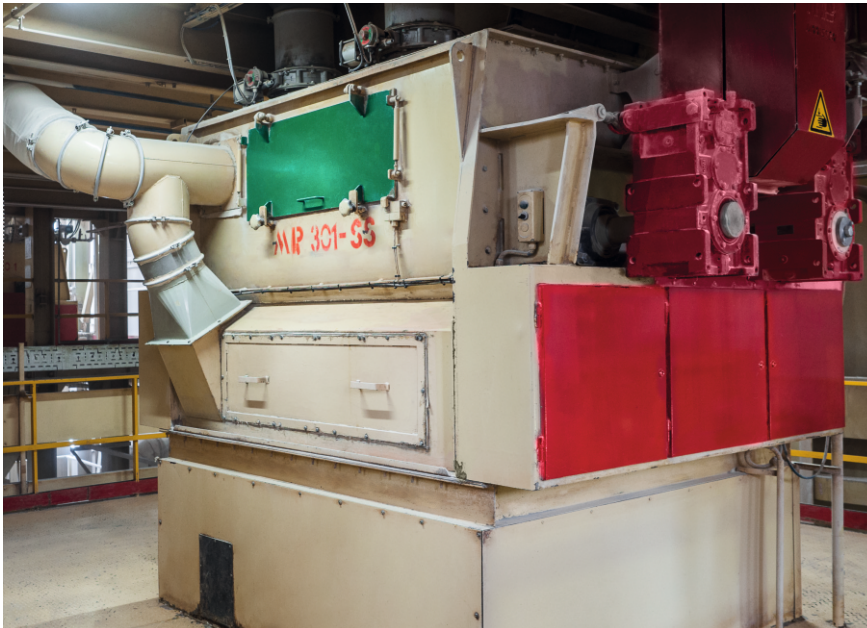
The lysine grinding line is designed for grinding lysine sulfate and transportation to a storage hopper, as well as for automatic control of pneumatic valves, screw containers and for monitoring of emergencies.

OPERATION

The line operates completely in automatic mode. The crusher is started through the soft-start device, at the same time the screw conveyor is started with an automatic rotation speed. The product is fed from under the storage bins by augers to the crusher, thereby controlling the sensors of the upper and lower levels. From the hoppers the product enters the pneumatic gun through the clamping valves, a pressure of 7 bar is applied to the clamping valves by a pneumatic valve. After checking this pressure the system recognizes that the valves are closed and begins purging into the bins (the feed time is regulated from the operator's workstation). After purging the system stops working and opens the clamping valves waiting for the next cycle.

TECHNICAL CAPABILITIES:

TWO TWO-SHAFT PADDLE MIXER FROM DINNISEN PEGASUS MIXER PG 1750



SPECIFICATIONS

Mixer dimensions:
2.710 * 2.450 * 1.600 mm

Mixing time into homogeneous mass
depending on the product concentration:
60 to 120 seconds

Mixing speed: **36 rpm**

Nominal mixer volume: **2.200 l**

USE

The rotary speed mixers are batch mixers designed specifically to manufacture premixes and concentrates; they operate according to a «supply and release» principle.

OPERATION

The upper part of the mixing drum is equipped with a shaft extension. Components to be mixed are fed into the mixing drum through the lid, after which the components are mixed homogeneously with two shafts with installed paddles, parallel to each other, for 90 seconds at a speed of 36 rpm. The bottom valve with pneumatic actuator is used for unloading. It provides a fast unloading of the mixer. The bottom valve has a 360-degree seal; it is actuated by two pneumatic cylinders.

TECHNICAL CAPABILITIES:

AUTOMATIC PACKAGING LINE FROM VOTECH



USE

The set of technological equipment is intended for filling and packing bags with combined feed products.

OPERATION

Before loading the prestarter, a label containing information about the product, the date and time of production is applied to each bag. Two weight dispensers provide high packaging accuracy with a deviation from the nominal weight of no more than 1%. Conveyor type metal detectors exclude the possibility of ingress of foreign metal inclusions into the product. Automatic palletizer completely exclude manual labor from the packaging cycle. Also, the VOTECH packaging line is equipped with a high-speed sewing machine that ensures reliable closure of the bag with a turn of the upper edge which ensures the tightness of the packaging and the exclusion of bag dusting during the transportation.

SPECIFICATIONS

Line capacity:
about 10 t/h = 500-700 bags/h

Palletizer: **VPG**

Air pressure in the pneumatic system: **6 Bar**

Maximum pallet weight: **1.500 kg**

Product weight in the package: **10-50 kg**

Parameters of bags for work:
length 500-900 mm, width 300-450 mm

TECHNICAL CAPABILITIES:

CRUMBLER



SPECIFICATIONS

Capacity: **10 t/h**

Type: **CR 3**

Accuracy of reading on the rollers: **0.1 mm**

Transmission type: **wedge-shaped, chain**

OPERATION

The crumbling technology is based on two large, independently rotating rollers. This ensures an optimal result and a minimum of fine fraction with maximum crumbling. The built-in rotary feeder ensures a uniform supply of granules to the crumbling rollers. Wide axially and radially grooved crumbling rollers rotate slowly at a uniform speed in opposite directions, thereby cutting the granules into crumbs. Using precise measurements, the large 300 mm cutting rollers guarantee an optimal result. The remote control of the roller adjustment increases efficiency and simplifies the adjustment of the rollers during production.

USE

A large industrial crumbler is used for cutting feed pellets into smaller sizes. Thus, the feed can be in form of crumbs suitable for small animals, while having the same composition as the original granules.

TECHNICAL CAPABILITIES:

PELLET LINE



SPECIFICATIONS

Capacity: **4-5 t/h**

USE

It is intended for granulating feed mixtures in order to obtain granular compound feed for agricultural animals.

OPERATION

Loose feed from a special hopper is selected by a dosing screw for feeding to the air conditioner. The product is saturated with sharp steam in a paste conditioner. This allows you to warm it up to the desired temperature, moisten, disinfect and soften it. Then the mixture passes under pressure through the holes of the granulator matrix and being pressed into pellets.

PLANNED LOGISTICS



Our production is successfully operated through a carefully planned logistic system. Product delivery with weights from 1 kg to 60 tons can be arranged by any kind of transport to any location within the country. Our partners can be sure that their goods will be delivered promptly and in pristine and undamaged conditions.

The complete process of loading, transporting and unloading is carried out in a coordinated and careful manner, with maximum precision and tidiness.

Cargo delivery may be carried out by the following means:

- automotive transportation;
- railway transport (wagon, container).

Pickup from the warehouse located at the manufacturer.



UNIQUE LABORATORY

OUR CERTIFICATES:

1. CERTIFICATE OF CONFORMITY

GOST ISO 9001-2015 (ISO 9001:2015)
GOST R ISO 22000-2007 (ISO 22000:2005)
Registration number ROSS RU. AB75.I00026

2. CERTIFICATE OF ACCREDITATION

GOST ISO/IEC17025-2019 (ISO/IEC 17025-2017)
№ AAC. 00213

3. BIPEA CERTIFICATE OF PARTICIPATION

Proficiency testing programs
№ 14-15 / 12888





UNIQUE LABORATORY:

TWO LIQUID CHROMATOGRAPHS PERKIN ELMER



For more accurate, fast and high-quality analysis of vitamins and amino acids the latest generation of Perkin Elmer liquid chromatography system is used at the factory's laboratory. It allows carrying out analysis of fat-soluble vitamins A, D and E simultaneously. The device automatically switches the wavelength for each of the three vitamins, calculating the actual vitamin content of the calibration curve based on the Sigma vitamin-standard.

UNIQUE LABORATORY:

AMINO ACID ANALYSER PINNACLE PCX



The device is designed to determine the amino acid content of feeds, premixes and raw materials. It allows identifying 19 amino acids in one sample. The Pinnacle analyser is built on the basis of HPLC YL 9100 liquid chromatograph and Pinnacle PCX postcolumn (precolumn) derivation system. Depending on the task, the amino acid analyzer supports the classical method of amino acids analysis on the basis of post-column derivation by reaction with ninhydrin. It also supports the highly sensitive methods of pre-column derivation with OPA (ortho-phthalic aldehyde) and FMOC (9 fluorenylmethylchloroformiat) with the initial sample preparation, namely hydrolysis – complete acid hydrolysis of the protein followed by separation and identification of the amino acid hydrolyzate.

UNIQUE LABORATORY:

MICROSTRIP ENZYME LINKED IMMUNOSORBENT ASSAY (ELISA) STAT FAX 303+



This device is used to determine the content of mycotoxins in plant-based raw material. The microprocessor establishes all the methods of calculation existing in ELISA, plotting and recording of the calibration curves as well as reporting on the measurements results. It also has a built-in graphical thermoprinter. The device is designed for parallel quantitative analysis of both large amounts of materials and individual samples. The time of analysis is 30 minutes; the results are consistent with HPLC data.

UNIQUE LABORATORY:

RAKORAF SAMPLER



The RAKORAF sampler is designed for taking samples of cereals, legumes, corn, rapeseed and similar products from the bodies of trucks or agricultural machines, RAKOFAR provides taking a specific average sample. A representative average sample requires a minimum number of samples, the sample weight is from 4 to 8 kg. The transport system is an extension to the probe and is used to auto pneumatic transport of samples at various distance up to 50 meters. Automatic cleaner sample SLN 3 is also an extension to the probe and is designed to determine the mass fraction of weeds and sorting of all types of grain crops in grain receiving, through the research sample you can determine the mass fraction of impurities and grain impurities, as well as the proportion of quality grain. This fact makes it possible to accept high-quality grain and refuse batches of grain that do not meet the requirements terms of the agreement.

UNIQUE LABORATORY:

CRUDE FAT ANALYSER SOXTEC, FOSS



This device determines fat content in raw materials and in finished feed. It extracts the crude fat from the material with a solvent, subsequently removing the solvent, drying up and finally weighing the extracted fat. The regenerating system saves 65-90% of solvent. The Soxtec device allows usage of different types of solvents: ethers, alcohols and mixtures.

UNIQUE LABORATORY:

CRUDE PROTEIN AND NITROGEN ANALYSER KJELTEC



The device includes a digester: an electrically heated platform with a capacity of 8 tubes equipped with a water aspirator. The digester is fitted with a scrubber filter in order to neutralize acid fumes with alkali. Use of catalysts' salts speeds up the reaction reducing its duration down to 45 minutes on average. Methodical flexibility is possible with this device. It allows the analysis of the solid and liquid samples. Compared to conventional methods, overall analysis is 3 times faster, energy consumption is reduced by 95% and agents' consumption by 50%.

UNIQUE LABORATORY:

THERMOSTATIC BATH FOR SAMPLE PREPARATION TERMEX



The Termex thermostatic bath is a modern laboratory instrument that evenly heats the samples placed in its chamber. The presence of a digital display and manual indicator allows technicians to accurately set the temperature of the water chamber and create samples with the utmost accuracy and the least amount of error.

UNIQUE LABORATORY:

CRUDE FIBRE ANALYSER FIBERTEC 1020, FOSS



The Fibertec uses externally heated up agents to determine the content of the fiber as per Weende, Van Soest and other known methods. A single, or a sequence of extractions, including boiling, rinsing and filtering, are carried out in a reproducible and controlled environment. This system allows processing 6 samples simultaneously. Filtration issues are resolved by a continuous-flow system with rarefaction of air supply.

UNIQUE LABORATORY:

CENTRIFUGE FOR SAMPLE PREPARATION 2-6 E, SIGMA



The Centrifuge Sigma 2-6 E is a desk-mounted laboratory centrifuge with swinging bucket rotor. It is designed for centrifugal separation in small and medium volume, both cooling and heating functions, at the speed of up to 4,000 rpm. It is used to separate sample in volumes of 100 ml.

UNIQUE LABORATORY:

INFRARED ANALYZER FOSS DS 2500F



FOSS DS2500 F is used for the current input control of raw materials, for production control, in order to increase efficiency and quality, for monitoring finished products according to various control parameters. The analyzer uses high-precision optical NIR technology, which provides the best-in-class efficiency in the entire spectrum from 400 to 2500 nm. The device is equipped with internal standards for monitoring the light intensity, spectral range and wavelength. Its stability can be controlled to make sure that data transfer occurs constantly and without errors even over time. When checking the content of moisture, fat and protein or more complex parameters such as starch or fiber, the analyzer will give accurate results less than after 1 minute.





PROFESSIONAL TEAM

Employees of Koudjis MKorma and manufactory plant are highly qualified and have a specialized education.

The specialists of the factory closely cooperate, exchange their experience and discuss topical issues with representatives of VNITIP, The Dutch Laboratories Master Lab, De Heus etc. The specialists of the Dutch company De Heus, a partner of Koudjis MKorma, are regularly invited to the factory for consultations and exchange of the richest experience.

The laboratory staff has a higher chemical and medical education, the necessary qualifications and serious work experience. Specialized events help to maintain a high level of professionalism of specialists: exhibitions, seminars, conferences and professional development courses.









GROW UP WITH THE LEADER



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to the customer



Long-term
partnership



Online
consulting



Taking care of health
and the environment



High-tech
production



High quality
standards

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