

TECHNOLOGY AND EQUIPMENT FOR MAKING WET FEED MIXTURES

TEKMASH Institute has developed an innovative technology and equipment for making paste-like and vegetable milk-like wet feed mixtures. These mixtures are made right on stock farms using soya, peas, lupine, wheat, maize, etc. which are grown on the farm. Dozens of cheap recipes have been made up to ensure full-value well-balanced feeding of young and adult cattle and swine.

“TEKMASH®” technology provides fine grinding, mixing and thermal processing of mixtures by means of hydrodynamics (science dealing with liquid movement) with no heating elements used. It permits making 5-6 l vegetable milk using not more than 0.25 kWh electric energy.

While dry feeds assimilation does not exceed 55-60%, “TEKMASH®” feed mixtures are 65-85% assimilated. The equipment is repaid within 1 year time, which contributes to the farm profitability.

In 2005 TEKMAH equipment was included in the Ukrainian State Program. Since then it has been implemented on more than 200 farms in Ukraine, Russia, Byelorussia and proved to be quite promising.

Concentrated paste-like leguminous supplements (mainly based on soya) preserve all vitamins and minerals, as distinct from cake or soya meal which are much less useful.

The unit consists of a pump with an electric motor, a bunker for loading the components (leguminous, water, supplements) and a special device to perform grinding and heating the mixture to a necessary temperature when antinutrients and pathogenic flora are destroyed.

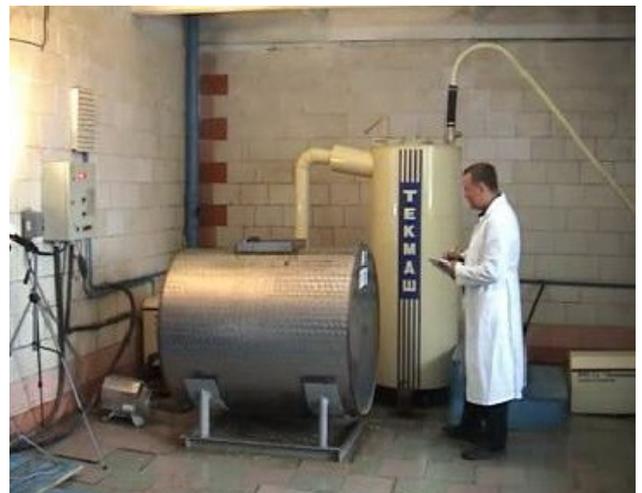
TEK-SM unit specifications

Parameter	TEK-1SM	TEK-2SM	TEK-3SM	TEK-4SM
Capacity (milk, paste), kg/h	70/210	100/300	150/450	320/960
Processing temperature, °C	105...110			
Processing time, min	60			
Motor power, kW	11	15	22	45
Overall dimensions, mm	1840 x 570 x 1650	2070 x 660 x 1650	2140 x 900 x 1700	2450 x 960 x 2200
Weight, kg	480	500	620	960
Servicing staff, person	1	1	1 – 2	2

The equipment is protected by Eurasian patents (9 countries) and international invention applications

Feed processing according to TEKMAH® technology promotes:

- indigestible fiber change over to sugar;
- more than 30% increase in amino acid assimilation;
- 2-3 – fold higher vitamin availability (no additional inputs);
- pathogenic flora destruction as well as mycotoxins, urease, antitrypsins, etc. content reduction to a safe level.



TEKMASH® technology enables:

- to save up to 200-300 grivnas raising 6-month old calves when using vegetable milk (mainly soya milk) instead of whey or whole milk substitutes;
- to increase fattening bull-calves daily gains from 800 to 1000 g due to supplying their ration with 3-4 l 10% vegetable milk;
- to increase 2-4-month old pigs daily gains by 10-15% due to supplying their ration with 1-2 l vegetable milk;
- to increase cow milk yields by 1-3 l due to supplying its ration with 3-4 l vegetable milk;
- to increase farm profitability two or more times due to higher weight gains and reduced feed cost;
- to cut energy consumption for making wet feeds 3-5 times as compared to conventional technologies;
- to introduce necessary mineral, biologically active and pharmaceutical substances while making feeds.

Installation and startup period is not more than 1 workday.

TEK-SM equipment is repaid within 2-4 months.

TEKMASH authority:

- equipment required capacity calculation;
- equipment installation and adjustment;
- servicing staff training;
- 12-month warranty;
- assistance in selecting an appropriate ration taking into account the farm peculiarities.

For TEK-SM unit acquisition apply to:

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