

The effective technology and complex services

Farmet[®]

COMPLEX SOYBEAN PROCESSING



**GET YOUR OWN FEED BY EFFICIENT
SOYBEAN PROCESSING**

OIL & FEED TECH



**HEXANE FREE
TECHNOLOGIES**[®]

WHAT CAN WE OFFER?

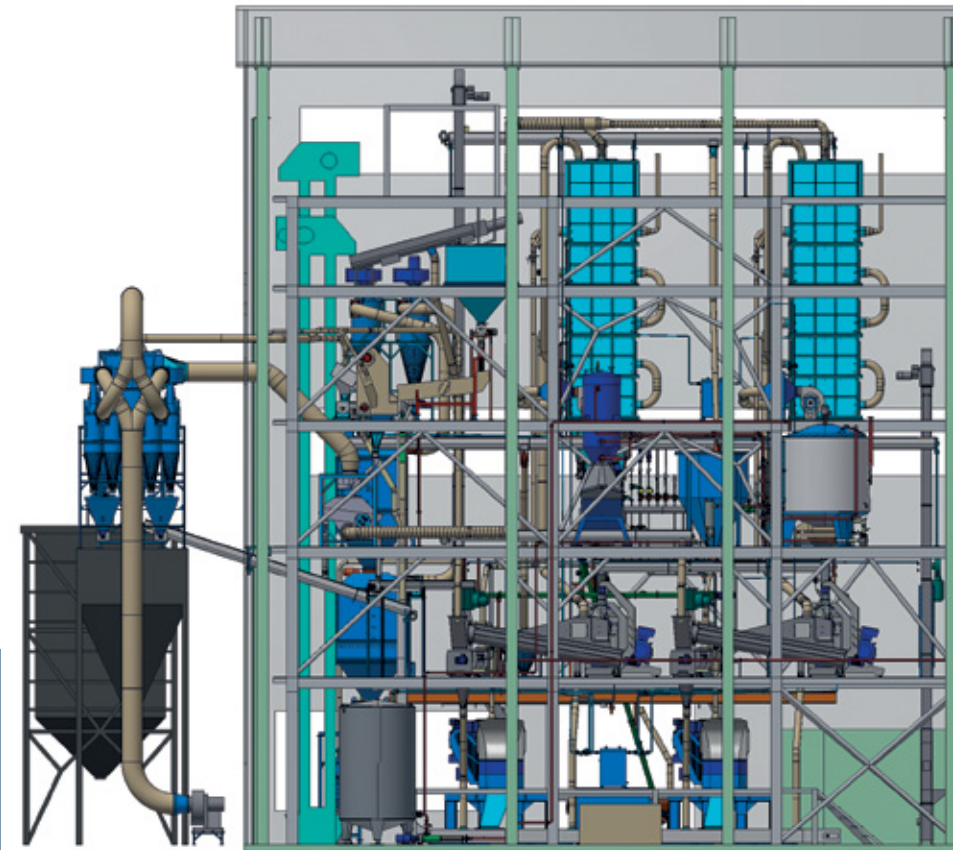
Process soybeans mechanically, by environmentally friendly method with Farmet! (Extrusion, extrusion pressing including dehulling and heat recovery system)

= **HEXANE FREE TECHNOLOGIE FARMET**

- The most economical as well as the most efficient technology
- The received feed has optimal ratio of fat and protein suitable for all categories of farm animals
- You can produce the feed with the lowest costs
- The technology has the lowest operational costs



FARMET HEXANE-FREE TECHNOLOGY IS THE MOST AFFORDABLE AS WELL AS THE MOST EFFICIENT TECHNOLOGY ON THE MARKET



SOYBEAN PROCESSING PLANT IN RUSSIA
- 100 000 MT PER YEAR

- **TECHNOLOGY EP1**
(SINGLE-LEVEL EXTRUSION PRESSING)
- **PRODUCTS:**
 - SOY OIL
 - SOY CAKE
 - FULL-FAT SOYA
- **RECU - UNIQUE PATENTED SYSTEM OF WASTE-VAPOUR RECOVERY**



SOYA – A PLANT OF FUTURE

- IRREPLACEABLE PROTEIN SOURCE
- HIGH PROTEIN CONTENT WITH BALANCED RATIO OF AMINO ACIDS
- WORLD-WIDE INCREASE IN SOWN AREAS AND PRODUCTION
- GROWING DEMAND FOR SOY PRODUCTS

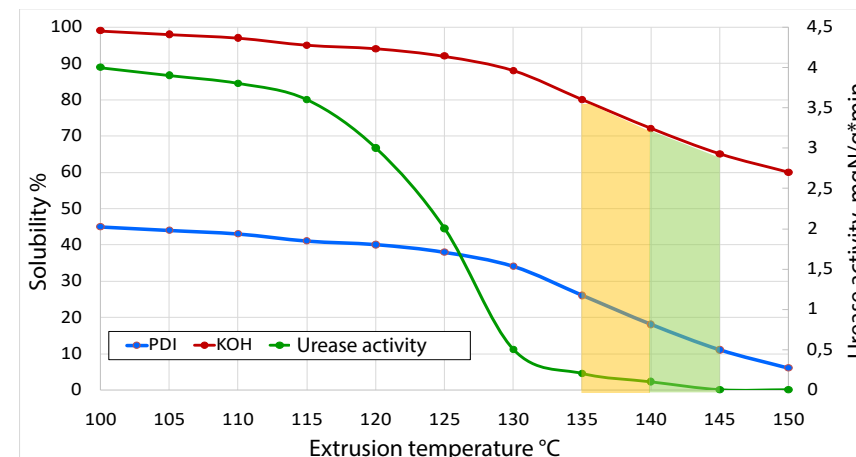
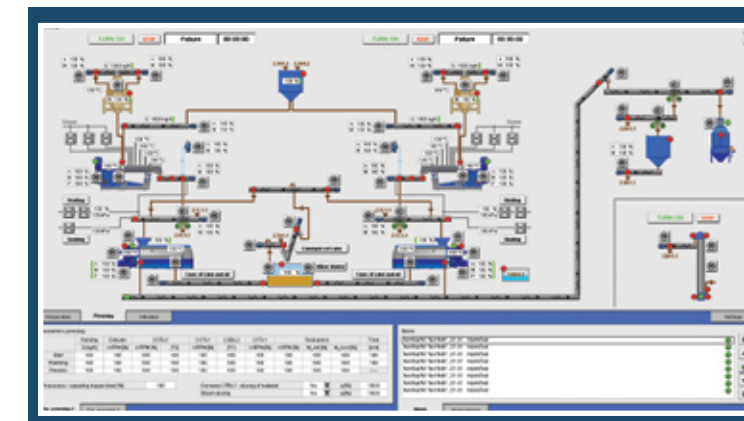
Organic Farming



WITH OUR TECHNOLOGIES YOU RECEIVE VEGETABLE OIL AND FEED OF HIGH QUALITY, WITH NO CHEMICAL ADDITIVES (AND WITHOUT CARCINOGENIC HEXANE).

BYPASS PROTEIN

DUE TO HIGH AUTOMATION LEVEL OF FARMET TECHNOLOGIES

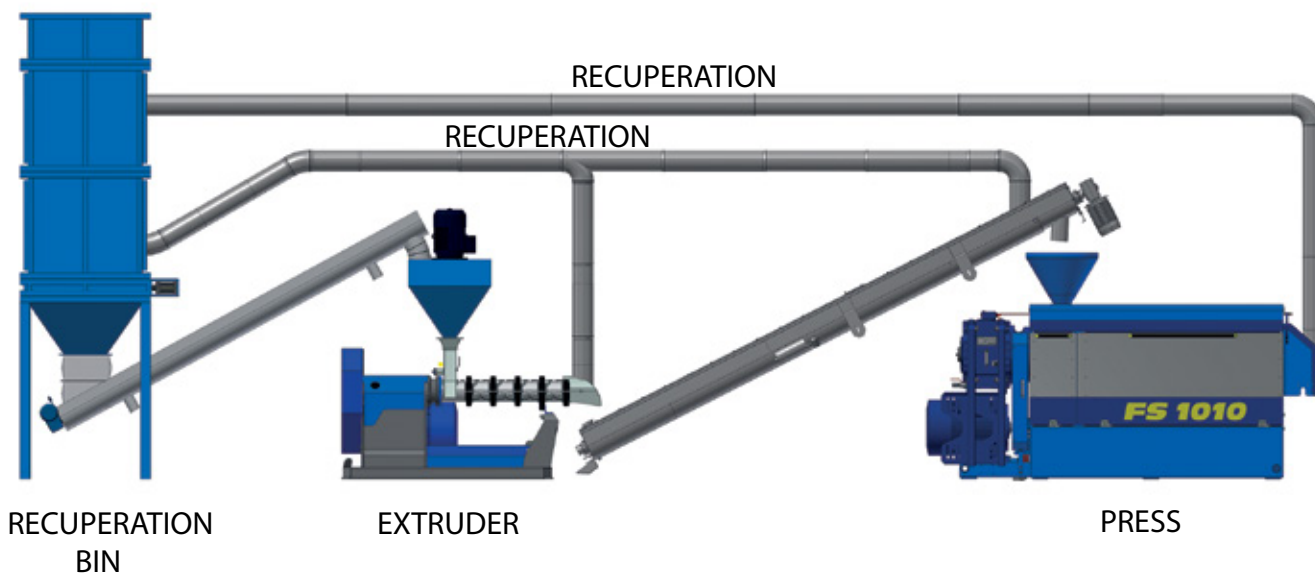


DEPENDENCE OF PROTEIN SOLUBILITY (PDI, HOH) AND UREASE ACTIVITY ON EXTRUSION TEMPERATURE.

- Optimal values for monogastric animals
- Optimal values for polygastric animals

FEED YOUR CATTLE WITH FRESH AND HIGH-QUALITY FEED.

PATENTED HIGH-EFFICIENT SYSTEM OF ENERGY RECOVERY FOR SAVING YOUR COSTS (RECU)



Technology utilizes waste heat for soybean preheating:

- Saves substantial part of electric energy
- Considerably increases production capacity
- Lowers operational costs
- Decreases resulting production costs
- Improves you competitiveness
- Shortens ROI (Return On Investment)



SAFE FOOD = SAFE FEED WITH FARMET

	Raw soybeans	Extruded soy	Extruded and pressed soy cake	Extracted soy meal
Moisture	12 %	7 %	5 %	12 %
Fat	21 %	21 %	5 – 7 %	2 %
Urease activity	2 – 10 mg N/g/min	up to 0,4 mg N/g/min		
Trypsin inhibitor	75 – 115 mg/g	2 – 5 mg/g	2 – 5 mg/g	2 – 5 mg/g
Protein	40	40	44 – 47*	40 – 48

* Can be increased using the OPTION of dehulling

SOYA – TRANSFORMATION OF PROTEIN FRACTIONS FOR RUMINANTS ACCORDING TO THE CORNELL SYSTEM

Fraction	Before extrusion	After extrusion	
A2	87 %	21,5 %	Protein fraction and other nitrogenous substances fully degrading in rumen.
B1	10 %	76,8 %	Protein fraction slowly degrading in rumen, partially transiting to small intestine.
B2	2 %	0,4 %	Protein fraction non-degrading in rumen, fully transiting to small intestine.
C	1 %	1,3 %	Indigestible.