



**SETREM**  
*Extrusion cooking*



**READY TO FEED**



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Extrusion cooking

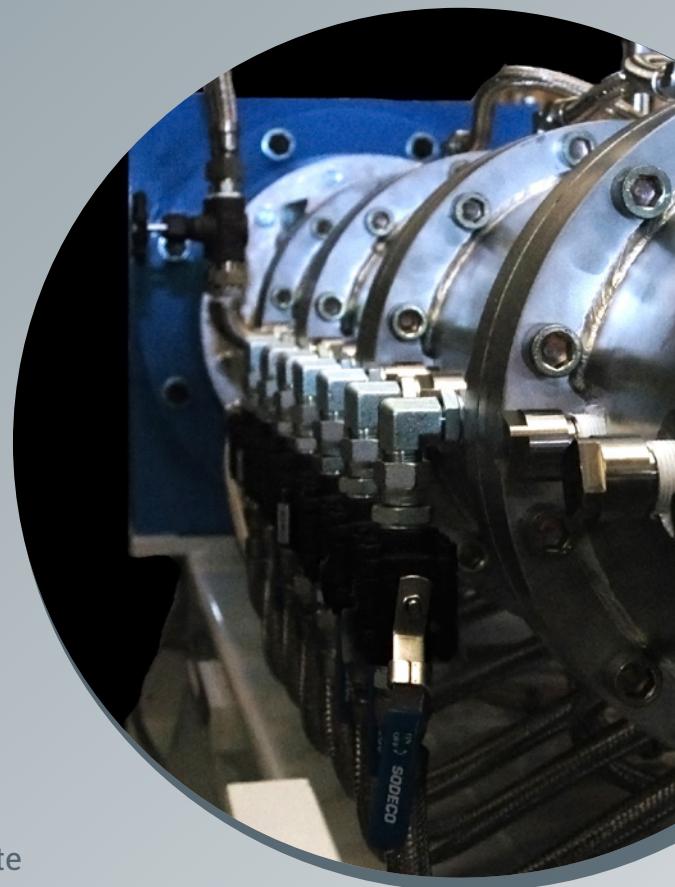
## COMPLETE EXTRUSION SOLUTIONS FOR FOOD AND FEED PRODUCTS

Setrem has been designing and marketing complete extrusion lines throughout the world since 1986. Its single-screw extruders meet all requirements for food and animal feed products.

### TAILOR-MADE SOLUTIONS

Thanks to the flexibility of its extruders, Setrem has been able to follow and anticipate developments in the market by offering tailor-made systems to its customers. Setrem's single-screw extruders are equally suited to dry and semi-wet processes for the manufacture of the most complex products.

Setrem can offer complete lines with capacities ranging from 40kg/hour up to around 10 tonnes/hour.





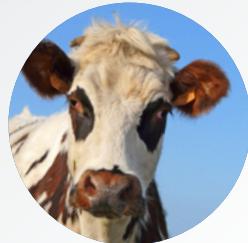
## WHY ARE SETREM SYSTEMS SO HIGHLY APPRECIATED BY MANUFACTURERS?

- They are flexible and robust in use,
- Their operating costs are low,
- They produce high-quality extruded products.



## EXTRUDERS CAPABLE OF PRODUCING ALL TYPES OF FEED PRODUCTS

- **For dogs and cats:** processed, premium, semi-wet and co-extruded products, treats,
- **For aquatic species:** floating, sinking and semi-sinking feed products,
- **For livestock:** high-production dairy cows, other cattle, sheep, pigs, poultry (laying hens, broilers), horses, etc.



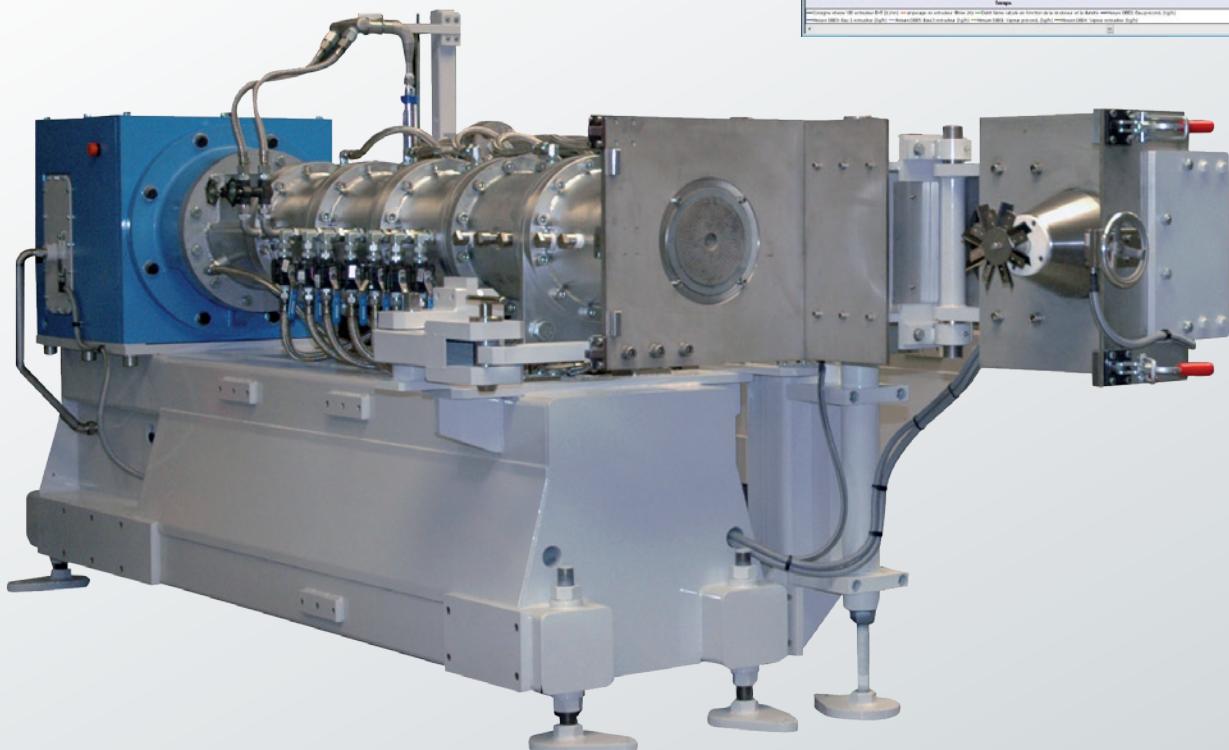
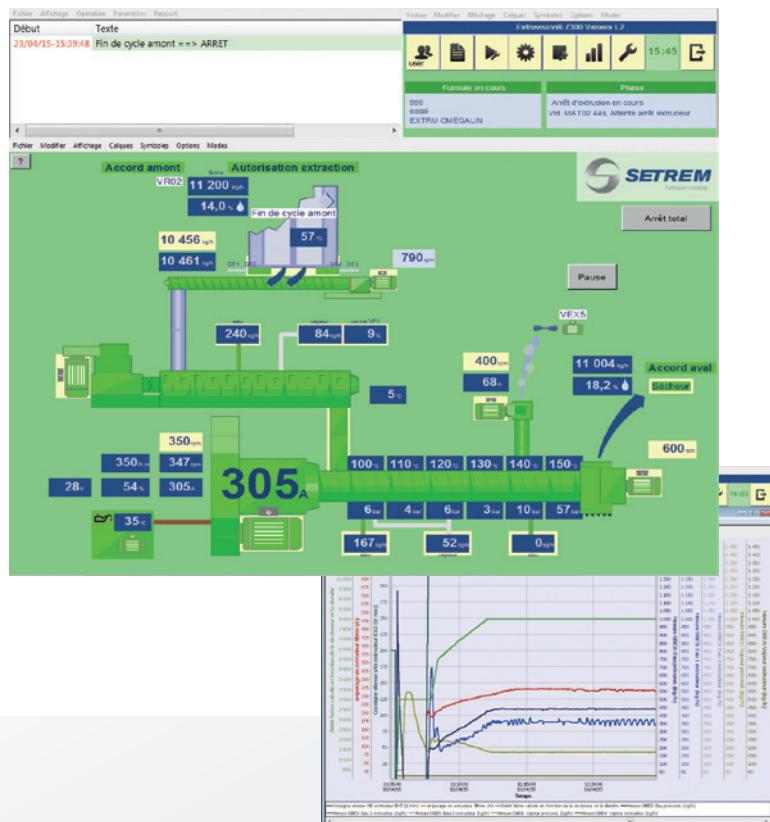
### *Single-screw extruders can also be used for:*

- Treatment of base materials: soybean, rapeseed, wheat and other cereals.
- Preparation for the mechanical extraction of oil from oilseeds.



## INNOVATIVE: FULL CONTROL SOFTWARE

This software allows the start-up and stop of the extruder, but also the full control of the parameters production.



READY TO FEED

# COMPLETE SOLUTIONS

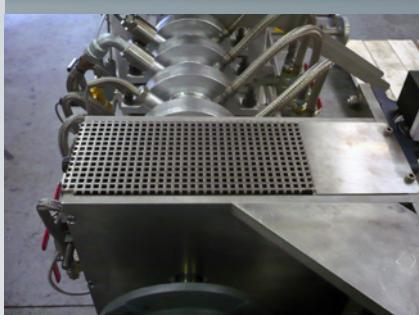
## Dryers

Setrem offers a wide range of dryers that meet the extrusion requirements: the type of product to be extruded and the quantity of water for evaporation. Three technologies are proposed to match manufactured products and obtain the best possible energy efficiency:

- Counterflow drying,
- Horizontal drying,
- Fluid-bed drying.



## MECHANICAL COMPONENTS



### Feeder

The purpose of the feeder is to ensure that the product is put through at a steady rate. It may be of single-screw or twin-screw type according to the application.

### Hopper

This not only holds a sufficient stock of the formula but also helps ensure perfect product take-off.

### Preconditioner

A preconditioner upstream from the extruder offers a number of advantages:

- higher rates of throughput,
- steady operation,
- less mechanical wear of extruder parts,
- uniform product wetting,
- three-minute residence time,
- a more palatable product,
- increased starch gelatinisation,
- improved product aspect and quality.

Preconditioner models may be of single-rotor or dual-rotor type to meet the requirements of the whole range of industrial configurations and guarantee a fast return on investment.

### Cutting head

The cutting head comprises a set of interchangeable blades for optimum quality of product cut. It is articulated and integrated into the machine. Its ease of opening ensures that the extruder die is highly accessible, facilitating maintenance work. Setrem extruder dies allow a large number of product shapes to be manufactured.

### Modular components

The extruder sleeve comprises various models of screws, steamlocks and barrels fabricated in high-resistance steel. Barrels are double-jacketed to enable heating or cooling and can be grooved in a range of ways.

# THE SETREM EXTRUDER RANGE

Model	Number of barrels	Power (kW)	Production (kg per hour)				Petfood ou aliments poissons 1,5 mm < 0 < 5mm
			Soybean		Cereal mix		
S50	3 5	22 37	400 500	200 300	300 450	150 300	
X100	4 5	75	1,000 1,200	700 1000	900 1100	650 1000	
X125	5 6	90	1,200 1,500	1,000 1,200	1,000 1,800	750 1400	
Y160	5 6	110	2,000 2,500	1,500 1,800	2,500 3,800	1,500 3,200	
Y200	6 7	160	3,000 4,000	2,000 4,000	3,800 5,000	2,500 3,800	
Z300	7 9	200 250	5,500 10,000	3,000 6,000	5,000 8,500	4,000 6,500	

The above production figures are indicative only. Actual figures will depend on formula, base material and particle size.



## SETREM ALSO MEANS CUSTOMER SERVICE

The technical team can provide assistance in commissioning your extruder along with their product formulation skills.

Setrem has a stock of spare parts for rapid delivery.

## A PILOT LINE AT THE SERVICE OF MANUFACTURERS

The pilot line is a Setrem research and development tool. The unit is available for use by manufacturing companies in the agrifood sector for the following:

- Conducting trials for research & development projects,
- Conducting tests to validate new processes or extrusion projects based on your formulas.

## LABORATORY EXTRUDERS

Setrem has developed a range of limited-capacity, single-screw extruders specifically for use in laboratories and research facilities.

- Capacity: approximately 40-50 kg/hour.
- Reproducible results on an industrial scale.

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