

EXTRUSION TECHNOLOGY

FOOD AREA

[CENTRO TECNOLÓGICO] **CARTIF**

FOOD AREA

Extrusion Team



Maria Ysabel Piñero
marpin@cartif.es



Pedro Javier Acebes
pedace@cartif.es



Gabriela Ribeiro
gabrib@cartif.es



EXTRUSION TECHNOLOGY CAN HELP YOU TO....

.....

- Develop new products of different size, form, texture and flavour.
- Improve the nutritional, functional and sensorial properties of ingredients and products.
- Valuing agrifood by-products for their incorporation into the food chain.

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APPLICATION OF INTEREST TO THE AGRI-FOOD SECTOR




DEVELOPMENT OF NEW PRODUCTS

MEAT ANALOGUES

Obtained by extrusion at low or high humidity, from alternative protein sources such as:

- Vegetable proteins
- Fungal biomass (micoproteins)
- Insects flour
- Other raw material with high content of proteins

TRANSFORMACIÓN DE MATERIAS PRIMAS

-  Modification of nutritional properties.
-  Valorisation of by-products.
-  Improvement of techno-functional properties.



APPETIZERS OR SNACKS

With a more interesting nutritional profile, increasing the content of proteins, fibres and micronutrients, through innovative ingredients.

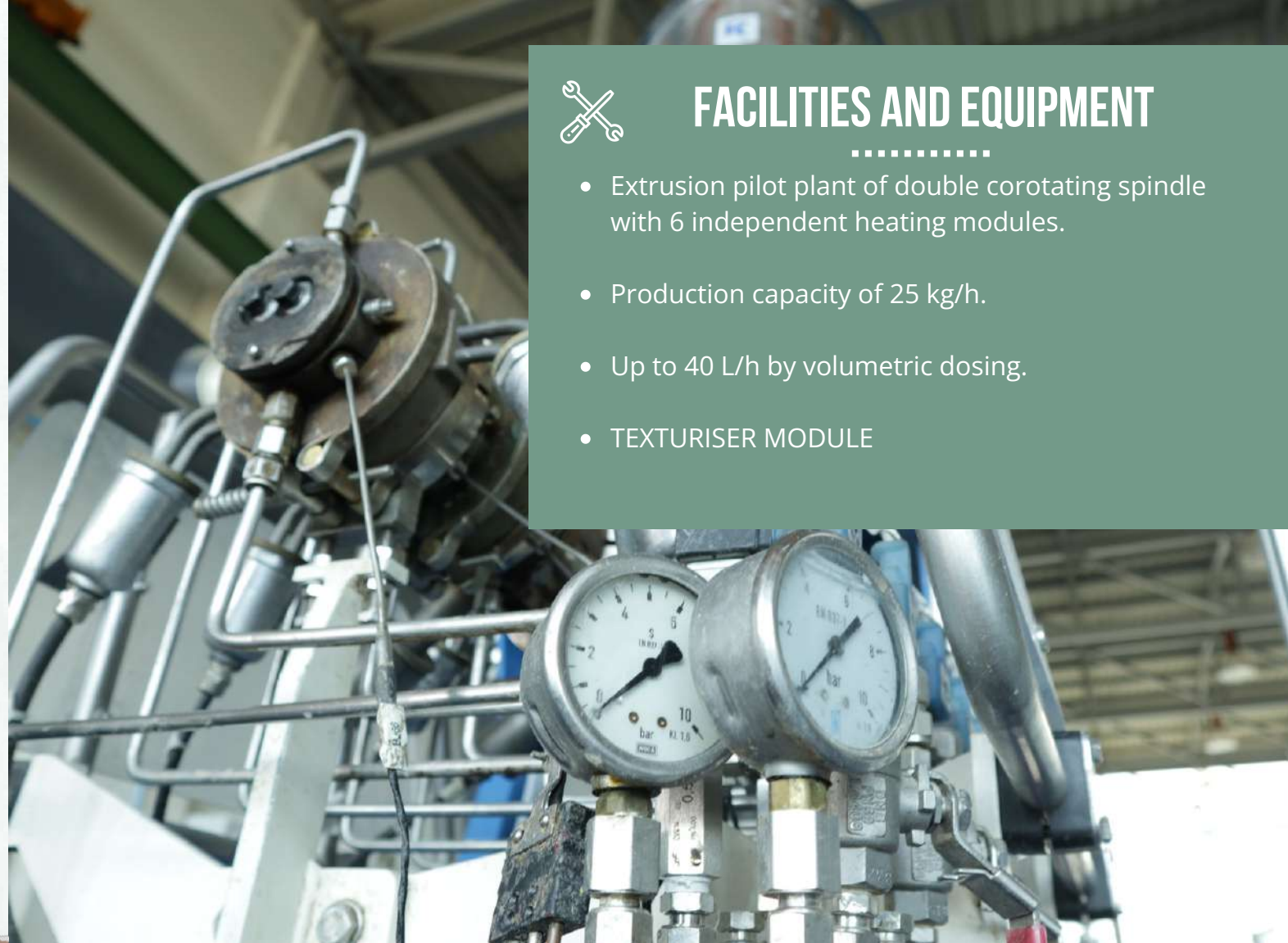
ANIMAL FOOD

Compound feed or for specific nutrition (aquaculture, pets or others).



FACILITIES AND EQUIPMENT

- Extrusion pilot plant of double corotating spindle with 6 independent heating modules.
- Production capacity of 25 kg/h.
- Up to 40 L/h by volumetric dosing.
- TEXTURISER MODULE



Stainless steel mixer



Hot air convection dryer



Mills of different types and capacities

COMPLEMENTARY EQUIPMENT

SPECIFIC LABORATORY TESTS

PHYSICO-CHEMICAL TESTS

- Bulk density.
- Expansion rate.
- Humidity, aw, pH.

TECHNO-FUNCTIONAL TESTS

- Cramming properties.
- Water and oil holding capacity.
- Emulsifying and foaming properties.

ORGANOLEPTIC TESTS

- Texture profile, aroma, colour and sensory analysis.



LABORATORY EQUIPMENT



Colourimeter



RVA



Texturometer