

ABSTRACT**Die for extruding a material rich in proteins and water, and system for continuously preparing an extruded food product, comprising such a die**

The present die (200) comprises a tubular casing (210) centered on an axis (X-X) and a coaxial core (220) mounted rotatably about the axis. An upstream part (220.1) of the core extends into the casing so that a material flow channel (230) is defined therebetween, which is annular in cross-section and centered on the axis. A downstream part (220.2) of the core extends outside the casing and is coupled to a motor-drive for driving in rotation (250). A male divergent part (260) is fixedly secured to the casing and coaxially received in the casing so that a passage (270) is delimited therebetween, connecting a central inlet (211) of the casing and an upstream end (230A) of the channel. The passage is shaped so that the material advances through the passage forming a flow (6) that diverges from the axis toward the downstream and is distributed around the axis. The male divergent part abuts axially against the upstream part of the core, supporting same and guiding same in rotation.

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