

PILOT PROJECTS: INNOVATIVE, SUSTAINABLE, REPLICABLE.

PROCESSING TOMATO INTEGRATED VALUE CHAIN

Nursery propagation, open-field cultivation, industrial processing, seed recovery and by-product valorization.

PROJECT FEATURES

Cultivated area: 10 ha

Plant density: 30,000 seedlings/ha

900 sqm gross nursery area

with a production capacity of **330,000 seedlings**
(including 10% allowance for losses)

Processing line capacity: up to 300 kg/h

Technical requirements:

- 1,000 sqm industrial facility
- potable water supply (minimum 1.5 bar, up to 3 m³/h)
- saturated steam for pasteurization (250 kg/h)
- compressed air (minimum 7 bar – 250 NI/min)
- Electrical power supply from 25 to 30 kW

Seasonal processing volume: 160 tonnes

TECHNICAL AND OPERATIONAL ADVANTAGES

NURSERY

Organized into dedicated seeding, germination and growing areas, fully mechanized to ensure healthy, vigorous and uniform seedlings.

CULTIVATION

Soil preparation, application of biodegradable mulch film, localized drip irrigation, mechanical transplanting, and a tailored nutrition plan integrating mineral fertilizers and bio stimulant-based products.

Standard yields in Africa: 18–20 t/ha.

Target: increase yield per hectare by at least 20% from the first growing season onward.



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INDUSTRIAL PROCESSING

The “**Mini Industry**” line is a compact solution designed to **process up to 300 kg/h** of tomatoes into tomato passata or double concentrate, with packaging in bottles, cans or pouches. Approximately 22–24 operators are required.



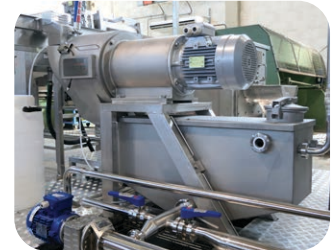
WASHING >



SORTING AND CRUSHING >



ENZYME INACTIVATION >



REFINING >



CONCENTRATION >



PASTEURIZATION >



HOT FILLING >



SECOND PASTEURIZATION

SEED RECOVERY

The seeds undergo treatment and stabilization processes to ensure seed health and proper storage for subsequent sowing reuse. One hectare of tomatoes yields approximately 80–100 kg of seed, with a market value ranging from EUR 30 to EUR 50 per kg.



Seed disinfection
machine

BY-PRODUCT VALORIZATION

With a production volume of 160 tonnes of tomatoes, between 1 and 2.5 tonnes of industrial by-products are generated, known as pomace, consisting of skins, seeds and fibrous pulp. Since tomato pomace is rich in biomolecules with biostimulant activity, additional locally sourced volumes could support the development of a biostimulant production unit.



Seed
centrifuge
Ø 500 mm

INDICATIVE TOTAL PROJECT VALUE EUR 960,000

Areté
The Agri-food
Intelligence
Company

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