

Food Processing Plants in Egypt ÷ Tomato, Juice, Aseptic Filling and Canning

Target application: food processing plants Egypt

Reference configuration: 3,000 kg/h finished product from aseptic bulk paste (500÷5,000 kg/h configurable)

Egypt is one of the largest tomato producers in the world and a net importer of finished conserves ÷ the two facts that make local processing investable. MCF Technology engineers turnkey plants for the Egyptian market with the constraints of the country built into the design from the start: 380 V / 50 Hz supply with generator backup, cooling sized on 40÷45 ÷C summer ambient, Nile or well water treated before it enters a recipe, GOEIC clearance at Alexandria or Port Said, NFSA product registration, and Arabic operating documentation. This hub collects the lines we are asked for most in Egypt, each with its own technical page rather than a duplicated template.

SCOPE OF SUPPLY

- Tomato processing lines for the July÷October Delta and Upper Egypt campaign
- Tomato paste rework lines running 250÷300 days a year on aseptic bulk
- Fruit juice and nectar lines for local citrus, mango and guava
- Aseptic filling for bulk export in bag-in-drum and IBC
- Industrial pasteurization and sterilization for glass, cans and PET
- Canning and seaming lines for tinplate formats sold in Egyptian retail
- Utilities, water treatment, steam, cooling and CIP designed for local conditions
- Installation, commissioning, operator training and after-sales from the MCF crew on site

TYPICAL OUTPUTS

Tomato paste, passata and ketchup in cans, jars and sachets ÷ Aseptic bulk paste for export in 220 L drums and 1000 L IBCs ÷ Citrus, mango and guava juices and nectars ÷ Canned vegetables, pulses and fish ÷ Bank-ready feasibility and financing dossier for each project

DIMENSIONS AND BUILDING ENVELOPE

Process and filling footprint	700÷900 m÷ at 3,000 kg/h (250÷350 m÷ at 500 kg/h, 1,100÷1,300 m÷ at 5,000 kg/h)
Clear height	6÷7 m under beam over mixing and thermal section, 4.5 m over filling
Drum unloading station	60÷110 m÷, two alternating stations above 3,000 kg/h
Mixing bay	2 ÷ 6,000 L tanks, 120÷180 m÷ including gravimetric dosing platform
Thermal section	90÷140 m÷ for pasteurizer, hold cell, buffer tank and CIP interface
Filling and packing	260÷380 m÷ including seamer, pasteurization tunnel, coding and case packing
Bulk and finished storage	500÷900 m÷ for inbound drums / IBCs and finished pallets

LAYOUT ÷ FUNCTIONAL ZONES IN FLOW ORDER

1 ÷ Bulk intake	Drum, IBC and bag-in-box reception, sampling and traceability scanning
2 ÷ Unloading	Heated drum emptying stations, filtering, transfer pumps
3 ÷ Mixing & recipe	Mixing tanks with agitator, gravimetric dosing of water, salt, sugar and spices
4 ÷ Standardisation	Continuous mass-flow loop with inline refractometer, ÷ 0.2 ÷Brix at steady state
5 ÷ Thermal treatment	Tubular or scraped-surface pasteurizer 92÷98 ÷C with validated holding section

6 يٲٲٲ Filling & closing	Cans, glass jars, sachets or doypacks with seaming / capping and vacuum control
7 يٲٲٲ Pasteurization tunnel	Tunnel or retort, cooling section and dryer before labelling
8 يٲٲٲ End of line	Coding, labelling, case packing, palletizing and finished-goods staging
9 يٲٲٲ Utilities & CIP	Steam skid, chilled water, compressed air, water treatment, CIP skid

UTILITIES AND CONSUMPTION

Installed power	350يٲٲٲ450 kW at 3,000 kg/h (90يٲٲٲ140 kW at 500 kg/h, 550يٲٲٲ700 kW at 5,000 kg/h)
Steam	1.5يٲٲٲ2.5 t/h saturated at 6يٲٲٲ8 bar at 3,000 kg/h
Process and cooling water	8يٲٲٲ12 مٲٲٲ/h at 3,000 kg/h, treated and softened before dilution
Compressed air	300يٲٲٲ500 Nmٲٲٲ/h at 7 bar
Effluent	3يٲٲٲ7 مٲٲٲ/h to treatment, mainly CIP and tunnel blowdown
Manning	6يٲٲٲ9 operators per shift including QC and end-of-line
Operating calendar	250يٲٲٲ300 days/year, 16يٲٲٲ20 productive hours/day يٲٲٲ not a seasonal campaign

INSTALLATION, SITE CONDITIONS AND SCOPE BOUNDARIES

- Scope of supply: process equipment, automation, mechanical and electrical erection, commissioning, FAT/SAT, HACCP validation and operator training.
- Excluded from the ranges: land, civil works, building steelwork, external utility generation and import duties.
- Installation, commissioning and after-sales service are delivered worldwide by MCF crews, with remote diagnostics on the SCADA.
- Egypt: 380 V / 50 Hz with generator interface, 40يٲٲٲ45 يٲٲٲC design ambient, treated Nile or well water, GOEIC and NFSA documentation.

TECHNICAL FAQ

Which lines does MCF install in Egypt?

Tomato processing and tomato paste rework lines, fruit juice and nectar lines, aseptic filling for bulk export, industrial pasteurization and sterilization, and canning lines. Each has a dedicated page with process, capacity and investment data.

When is the Egyptian tomato campaign?

Broadly July to October, with regional variation between the Nile Delta and Upper Egypt. A campaign plant is sized on that window; a rework line is sized on year-round demand and runs on stored or imported bulk concentrate.

What is specific about designing a plant for Egypt?

Cooling capacity at 40يٲٲٲ45 يٲٲٲC ambient, water treatment before dilution, electrical design for grid dips with generator interface, packaging formats that sell locally (cans and sachets), and the documentation chain for GOEIC clearance and NFSA registration.

Can MCF support financing of an Egyptian project?

MCF prepares the technical and financial dossier يٲٲٲ mass balance, CAPEX schedule, operating cost, EBITDA, DSCR and payback يٲٲٲ in the format commercial banks, development funds and export credit agencies expect. Financing itself is granted by the lender, not by MCF.

Where does the equipment land and how is it installed?

Typically Alexandria or Port Said, then inland road transport to site. MCF supervises unloading, carries out mechanical and electrical installation, commissioning and capacity verification, and trains the operating and maintenance teams on site.

NEXT STEPS

- Full technical page: <https://mcftechnology.group/en/food-processing-plants-egypt>
- Configure the line and request the feasibility study: <https://mcftechnology.group/en/configurator>
- Run the ROI simulator: <https://mcftechnology.group/en/roi-simulator>
- Build the bankable financial plan (310 years): <https://mcftechnology.group/en/financial-plan>
- Request a quotation: <https://mcftechnology.group/en/contact>

DISCLAIMER

All figures in this datasheet are indicative engineering ranges used by MCF Technology for budget screening and layout discussion of the reference configuration. They are not a quotation, not a performance guarantee and not the audited result of a specific plant. Final specification, dimensions, utilities and CAPEX are fixed in the feasibility study on your product, packaging formats, utilities cost and site conditions.