

Tomato Paste Line for Cans and Glass Jars İÇİ½ 400 g, 830 g, 2İÇİ½5 kg and 314/720 ml

Target application: tomato paste processing line for cans

Reference configuration: Packing section downstream of bulk paste, 1,000İÇİ½3,000 kg/h finished product

Retail packaging decides the economics of a tomato paste plant more than the process itself: a 400 g can and a 720 ml glass jar need different fillers, different closing technology, different thermal profiles and different secondary packaging. This page explains how MCF configures one line to run cans and glass jars in the same building, what changes format by format, and how long a changeover realistically takes.

SCOPE OF SUPPLY

- Volumetric or mass-flow filler for hot paste, with format-specific nozzles and no-container / no-fill control
- Can seamer with steam flow closing for 400 g, 830 g and 2İÇİ½5 kg tins, plus vacuum check
- Twist-off capper for 314 and 720 ml glass jars with headspace steaming
- Pasteurization tunnel or continuous cooker-cooler sized on the largest format, with recorded thermal profile
- Dryer, labeller, date coder, case packer or shrink wrapper and palletizer
- Format changeover kits with mechanical presets and SCADA recipes to keep downtime predictable

TYPICAL OUTPUTS

400 g cans İÇİ½ 150İÇİ½200 cans/min İÇİ½ 830 g cans İÇİ½ 100İÇİ½150 cans/min İÇİ½ 2İÇİ½5 kg catering tins İÇİ½ 40İÇİ½80 tins/min İÇİ½ 314 / 720 ml İÇİ½ 80İÇİ½150 jars/min

DIMENSIONS AND BUILDING ENVELOPE

Packing hall footprint	350İÇİ½650 mİÇİ½ depending on format mix and number of lanes
Clear height	5İÇİ½6 m under beam, 4.5 m minimum over the filler and tunnel
Filling island	90İÇİ½160 mİÇİ½ including buffer tank, filler, closing and vacuum control
Thermal treatment	80İÇİ½130 mİÇİ½ for pasteurization tunnel or retort area with cooling zone
End of line	120İÇİ½220 mİÇİ½ for coding, labelling, case packing, shrink wrapping and palletizing
Packaging material store	200İÇİ½450 mİÇİ½ for empty cans, jars, laminate reels, caps and cartons

LAYOUT İÇİ½ FUNCTIONAL ZONES IN FLOW ORDER

1 İÇİ½ Product buffer	Pasteurized product buffer tank with level and temperature control
2 İÇİ½ Container feed	Depalletiser, rinser or air cleaner, format changeover parts
3 İÇİ½ Filling	Volumetric or mass-flow filling heads sized on the format range
4 İÇİ½ Closing	Seamer with steam-vacuum control, capper or sealing jaws with seal integrity check
5 İÇİ½ Thermal treatment	Pasteurization tunnel or retort with validated F-value recipe
6 İÇİ½ Inspection	Checkweigher, metal detection, seal and fill-level inspection with rejection
7 İÇİ½ End of line	Coding, labelling, case packing, palletizing and pallet wrapping

UTILITIES AND CONSUMPTION

Installed power	180İÇİ½320 kW for the packing section
Steam	0.8İÇİ½1.8 t/h at 6İÇİ½8 bar for filling temperature and tunnel
Water	5İÇİ½10 mİÇİ½/h process and tunnel cooling water, with recirculation
Compressed air	250İÇİ½450 NmİÇİ½/h at 7 bar, oil-free on product contact points
Format changeover	20İÇİ½45 minutes between formats, 45İÇİ½90 minutes with recipe change and CIP
Manning	4İÇİ½7 operators per shift on the packing section

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.

TECHNICAL FAQ

Can one line fill both cans and glass jars?

Yes, with a shared filler and process section and two closing branches İÇİ½ seamer for tins, twist-off capper for glass. Below roughly 1,000 kg/h a single filling head with changeover parts is usually more economical than two branches.

How long is a format changeover?

Indicatively 30İÇİ½60 minutes between two can sizes and 60İÇİ½120 minutes between cans and glass, including recipe change and rinse. Presets and quick-release parts are what keep those figures stable in production.

What thermal treatment do 400 g cans need?

Acidified tomato paste in small tins is normally filled hot at 88İÇİ½92 İÇİ½C, closed, then held and cooled in a tunnel; the validated profile is issued with the plant documentation and recorded batch by batch.

Why does glass need a different profile?

Glass tolerates thermal shock poorly, so the tunnel uses gradual heating and cooling stages with tighter ?T limits, which lowers the throughput per minute compared with tins.

Is the line suitable for sachets and doypacks?

Yes, as an additional module downstream of the same process section İÇİ½ typically 70 g to 1 kg sachets on a dedicated filler, sharing standardisation, pasteurization and CIP.

NEXT STEPS

- Full technical page: <https://mcftechnology.group/en/tomato-paste-line-for-cans-and-glass-jars>
- 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 (3İÇİ½10 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.