

FOCUS ON APPLICATIONS

PRECISION BULK MANUFACTURING: SCREW CAPS FOR BOTTLES

HIGH EFFICIENCY AND PROCESS RELIABILITY WITH POLISHED MOULDS

Plastic screw caps are bulk items generally produced by continuous compression or injection moulding.



Their geometry has to be so perfect that they effortlessly form a leak proof seal around the top of drinks bottles.

Plastic screw caps are mass-produced items. But they have to meet stringent quality standards.

Screw caps are also used for medicines, child-safe cleaning products, and so on.

To produce them cost-effectively you need to keep rejects to a minimum. And that's where high-quality precision moulds make all the difference, because the better the quality, accuracy and service life of the mould, the more efficient your mass production.

The special moulds used for screw caps are usually turned from steel and then milled or injection moulded. In one mechanical post-processing stage (or two depending on the application), the mould is smoothed and polished so that the plastic caps produced on it will separate without sticking or residues, *and* without affecting the cap geometry. So the smoother the surface, the longer the mould provides top performance.

**STREAM FINISHING + PULSE FINISHING =
superb surface quality ($R_a < 0.1 \mu\text{m}$) in seconds!**

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Pulse finishing, OTEC's stream finishing innovation, has remained the fastest mass finishing process on the market ever since it was launched in 2013. With average process times of 60 seconds, it's (literally!) rapidly putting conventional techniques in the shade.

The process obtains uniform results even on complex workpieces like moulds for screw caps, because it's highly effective at using very small grinding bodies.



*SF MANUAL Series (left) and
SF AUTOMATIC Series (right) –
with optional PULSFINISH.*





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For comprehensive information on the OTEC SF Series
(technology, models, accessories and downloadable brochures)

[click here >>](#)

**To see the SF-3/105 pulse finishing process in action on
YouTube, click here:**

- <https://www.youtube.com/watch?v=tUAJRho3KkM>
- To browse all our videos on OTEC's YouTube channel, go to:

About OTEC

OTEC GmbH Präzisionsfinish provides precision technology for achieving perfect surfaces. OTEC machines are used for deburring, grinding, smoothing and polishing, with the aim of improving surface quality on tools and products. With a network of over 60 distributors worldwide, OTEC is there for international customers from a wide range of sectors. Customers benefit from OTEC's in-depth technical expertise when it comes to developing the perfect interplay of machine and abrasive.

Press contact

OTEC Präzisionsfinish GmbH | Heinrich-Hertz-Straße 24
75334 Straubenhardt-Conweiler Germany
Tel. + 49 (0) 70 82 - 49 11 20 | Fax + 49 (0) 70 82 - 49 11 29
info@otec.de | www.otec.de