

Plastic injection technology

TOPOCROM® surfaces for moulds, male and female dies

The use of TOPOCROM® coated moulds and dies in the plastic injection industry has been successfully proved for many years. In comparison with other types of coated or structured surfaces, TOPOCROM® achieves considerably better results in a variety of ways (see right side of page). The temperature in the reactor during the coating process is less than 100°C therefore a wide range of material can be chosen. Send us your requirements and specifications. Our engineers will help you solving your problems.



Advantages on the mould

- Better ejection
- Up to 30% quicker cycle times
- Less or no release agent is required
- Less pressure and effort during ejection
- Better heat distribution over the mould surface
- High resistance to wear and corrosion

Advantages for the plastic part

- Better heat distribution over the mould surface
- The option of smooth or structured surfaces

Cost-effective rework of used injection tools

If there is no mechanical damage to the basic material, the coating can be repeated after removing the layers without any interim machining.



Extrusion Technology

Process technology with a commitment to continuity of production

In the plastic industry extruders are used to produce profiles, tubes, foils etc. from granulate material. During this process granulate is pressed through a female die using heat and pressure (e.g. as viscous molten compound). For this operation a workflow without interrupts is extremely important. TOPOCROM® coated moulds show longer service life, help avoiding disposal and thus causes continuity.

Demands of the plastic industry

- More product changes induced by smaller production batches
- Lower costs for material and energy consumption
- Lower rejection rate during the process of product changes
- Decrease of material changing time
- Optimization of the product changing process

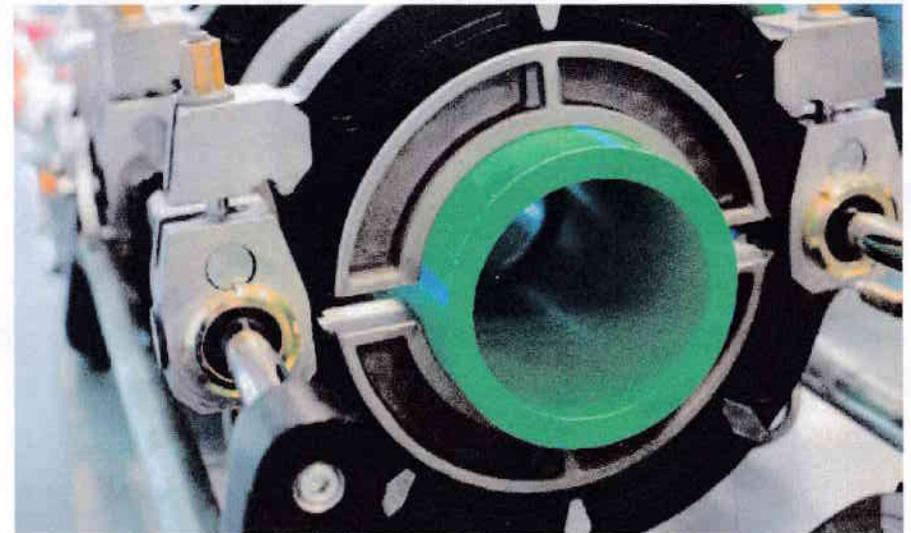


Defined surface characteristics thanks TOPOCROM® coating

During the coating process surface topographies and tribological properties of the structured layer can be exactly defined (roughness, wettability, open or closed structures, Rz-values).

Many advantages result by using TOPOCROM® coated dies:

- Avoidance of disposal
- Significant decrease of abrasion
- Better flowing ability
- Longer service life



Increase industrial productivity by TOPOCROM® surface coating

topocrom carbonprocessing

carbonprocessing

Surface for process stability in guiding filaments

Industries

- Carbon industry
- Textile machinery
- Manufacturing of non-wovens
- Manufacturing of foils
- Chemical fibres

Work pieces

- Eyelets
- Bobbins
- Funnels
- Deflection elements
- Bracing elements
- Guiding elements
- Rolls
- Scoop rolls

topocrom easyject

easyject

Surface for excellent ejection

Industries

- Plastic injection tools
- Extrusion tools

Work pieces

- Cores
- Ejectors
- Moulds
- Two-component tools
- Mandrels
- Extrusion dies
- Screws
- Forming tools
- Smoothing rolls
- Calender rolls

topocrom rollstructuring

rollstructuring

Surface for selective abilities on rolls

Industries

- Printing machines
- Machines for sheet metal forming

Work pieces

- Feed rolls
- Straightening rolls
- Wheels
- Skin pass rolls
- Distributing rollers
- Printing rolls
- Deflection rolls
- Laminating rolls
- Embossing rolls

topocrom highresistance

highresistance

Surface for highest strains and avoiding abrasion

Industries

- Concrete pumps
- Waste disposal
- Steel works
- Hydraulic industry

Work pieces

- Casting moulds
- Transport pipes for concrete and high consistencies
- Hydraulic cylinders
- Pull rods
- Hydraulic pipes
- Forming tools
- Pipes for waste disposal