

# Make your products shine with **BALITHERM PRIMEFORM**

The innovative and highly efficient treatment  
for brilliant mould surfaces



Plastics

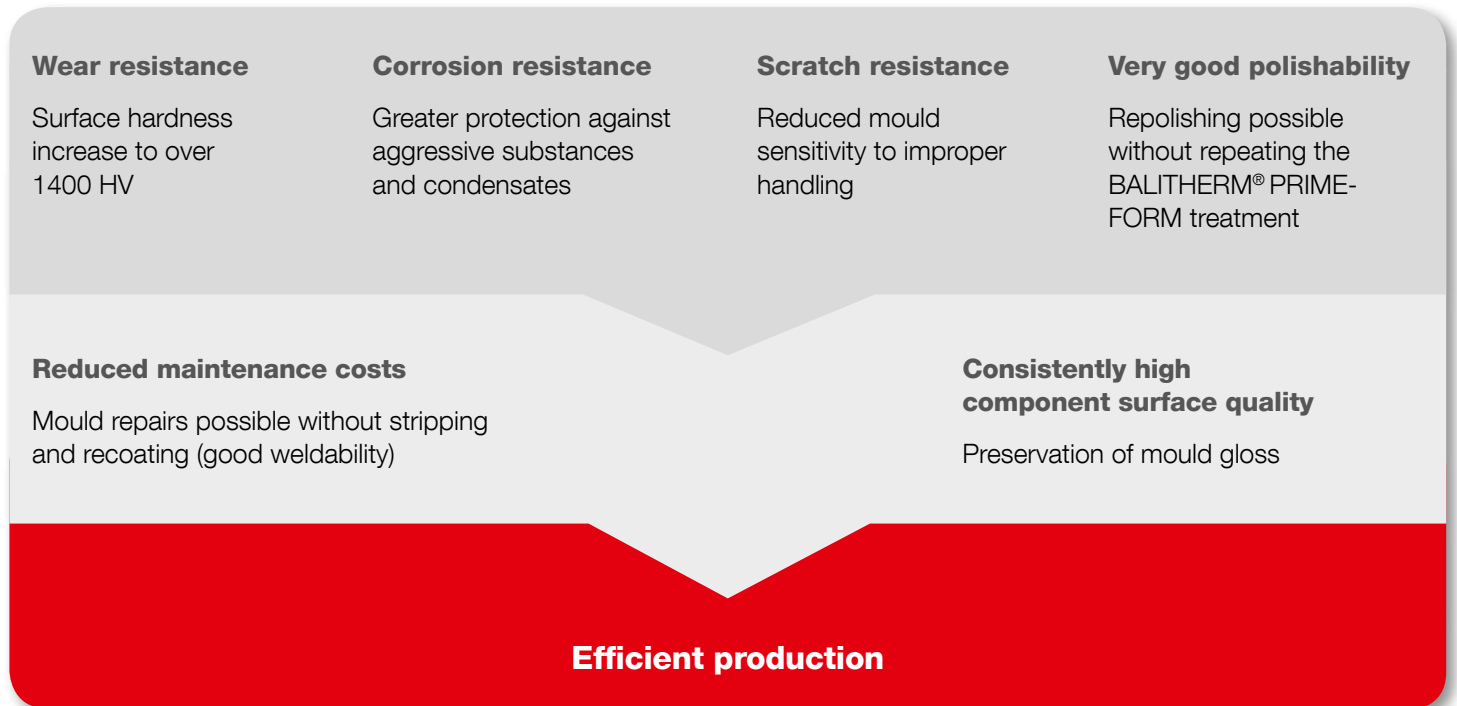


# BALITHERM PRIMEFORM: The innovative repair effect for mould surfaces and higher productivity

As a professional, you are aware of this problem: Mirror-polished surfaces in plastics injection moulding are very sensitive. Heavily stressed surfaces in particular are prone to wear and scratches caused by environmental effects or improper handling. Subsequent repairs or even repolishing is time-consuming and costly.

That's why we developed BALITHERM® PRIMEFORM – a plasma-assisted treatment that perceptibly boosts the surface hardness of your moulds with a diffusion coating. Additionally, it prevents build-up, flaking, and embrittlement at edges.

## Brilliant benefits for you



## Steel moulds for plastics treated with BALITHERM PRIMEFORM have better properties

Steel grade	1.2738/1.2311/1.2312		1.2343/1.2344		1.4112/1.4122		1.8519/1.8550/1.7735	
	P20+Ni/P20/P20+S		H11/H13		440B/-		-/-/A470	
	-/-/-		SKD 6/SKD 61		-/-		-/-/-	
	un-treated	<b>BALITHERM® PRIMEFORM</b>	un-treated	<b>BALITHERM® PRIMEFORM</b>	un-treated	<b>BALITHERM® PRIMEFORM</b>	un-treated	<b>BALITHERM® PRIMEFORM</b>
Polishability	+	++	+	++	+	++	-	++
Etchability	-	+	+	+	+	++	+	+
Weldability	+	+	+	+	+	+	+	+
Surface hardness	--	+	-	++	+	+	--	++

# The optimised solution for every application



## Automobiles

Examples: bumpers, headlights, and seat shells



## Agricultural machinery

Examples: external parts



## Trucks

Examples: external parts



## Furniture

Example: plastic seats



## Household appliances

Examples: high-gloss fittings and fascia panels



## Electrical devices

Example: covers



## Medical technology

Example: Reusable syringes



## Packaging industry

Example: Beverage bottles

## A compelling advantage



### Problem so far

Slight corrosion in hard-to-reach places despite TiN / CrN. Scratches caused while cleaning the mould – difficult or impossible to remove. Disadvantages: Multiple stripping and recoating or new hard chrome-plating, elaborate maintenance required.

### Solution

BALITHERM® PRIMEFORM. For noticeably improved demoulding, optimised process reliability, enhanced component quality.

### Result

Improved production efficiency and reliability. Reduced scrap costs. Productivity gain in the magnitude of 60 %.

# Specifications

<b>Treatable steels</b>	Strong steels with dimensional stability up to temperatures of 450°C, e.g. 1.2311, 1.2738, 1.2316, 1.2343, 1.2344, 1.2379, 1.2083 (secondary heat treatment), 1.4112/1.4122, 1.8519/1.8550/1.7735
<b>Treatment temperature</b>	450°C standard, 380°C on request (steels with > 10% Cr). Please always double check with the BALITHERM® PRIMEFORM product information
<b>Treatable surfaces</b>	Polished surfaces (mirror/brushed) and textured surfaces (shot-peened, etched, eroded)
<b>Post-treatment</b>	Generally possible
<b>Combinations with other coatings</b>	BALINIT® C, BALINIT® ALCRONA PRO, BALINIT® FUTURA NANO, BALINIT® LUMENA, BALINIT® D, BALINIT® A, BALINIT® CROMA, BALINIT® CROMA PLUS, BALINIT® DYLYN, BALINIT® DYLYN PLUS, BALINIT® DYLYN PRO
<b>Tool dimensions</b>	Length max. 9.500 mm Part weights up to 25 t

## Tap into our global network of coating centres to fully exploit the potential of your plastic injection moulds

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### Further coating centres

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Malaysia, Netherlands, Austria,  
Poland, Portugal, Romania,  
Scandinavia, Switzerland, Spain,  
Thailand, Czech Republic, Turkey,  
Ungaria

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of our locations at:

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