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MOLDADUR[®]-P

Scratch protection for sensitive surfaces

THE PROTECTIVE LAYER FOR POLISHED APP AND STRUCTURED SURFACES IN PLASTIC

MOLDADUR®-P is a special plasma process of voestalpine eifeler Coating GmbH, which creates a protective layer on highly sensitive surfaces. The surface is thereby lastingly protected against wear or damage. This process can directly be combined with a PVD coating.

MOULD CONSTRUCTION.

It is used for polished, textured and grained surfaces on plastic molds.

MOLDADUR®-P creates a scratch-resistant surface without altering the surface quality and while preserving the visual appearance.

MOLDADUR®-P compared to conventional processes, is able to very uniformly copy the surface contours – even within depressions – while also creating a constant surface hardness on the entire tool. This is achieved primarily through the perfectly adapted process management in small systems (max. component size of Ø850 x 800 mm).

APPLICATIONS

- » Plastic injection molding
- » Parts with risk of warping
- » Grained shapes
- » Polished and textured surfaces

COATING ADVANTAGES

- » Protection against scratches and wear
- » Uniform increases of surface hardness
- » Repairable/Weldable
- » Polishable
- » Coatable (PVD)
- » Improved corrosion resistance¹
- » No changes in dimensions

1) The special MOLDADUR®-P STAINLESS treatment is recommended for corrosion-resistant steels. This has been specially developed for stainless steels and protects the surfaces from wear and damage while maintaining the corrosion resistance as far as possible



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EXAMPLE RESULTS OF TREATMENT WITH MOLDADUR®-P

Manufacturer	Material	Surface hardness after MOLDADUR®-P [HV0.1] ²	Initial hardness [HV0.1] ²	Process
General	1.2343 ESU	1200	550	MOLADADUR®-P
	1.2316	1350	300	MOLADADUR®-P
	1.2738	900	350	MOLADADUR®-P
	1.2083	1400	600	MOLADADUR [®] -P
	1.2379	1300	700	MOLADADUR®-P
BÖHLER	W400	1100	500	MOLADADUR®-P
	W300	1200	500	MOLADADUR®-P
	M303	1350	300	MOLADADUR®-P stainless
	M333	1350	500	MOLADADUR®-P stainless
	M368	1400	550	MOLADADUR®-P stainless
	M268	900	350	MOLADADUR®-P
	M261	950	350	MOLADADUR [®] -P
EschmannStahl	ES Primus SL	1200	550	MOLADADUR [®] -P
	ES Atlas 42	950	450	MOLADADUR®-P
Uddeholm	Caldie	1150	650	MOLADADUR®-P
	Stavax ESR	1400	550	MOLADADUR®-P stainless
	Elmax	1500	650	MOLADADUR®-P stainless
	QRO90	1100	500	MOLADADUR®-P
	Nimax	1000	400	MOLADADUR®-P
	Unimax	1200	650	MOLADADUR®-P
	Corrax	1350	550	MOLADADUR®-P stainless
	Vanadis 4 Extra	1200	700	MOLADADUR [®] -P

2) General measurement tolerance ±50 HV, in addition to the alloy composition of the steel the results achieved also depend on the individual process management.

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