

Capillary-active metal impregnation



Product description

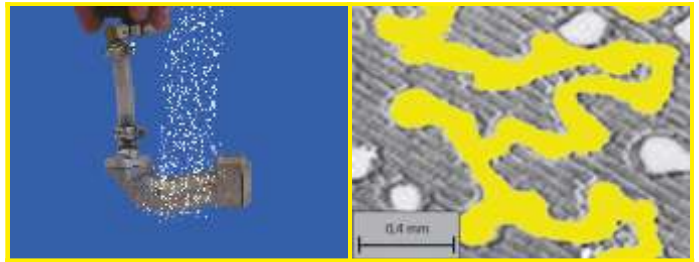
dichtol is a highly flexible and ready for use 1-component-system which can be use-orientated formulated. The easy and versatile application of **dichtol** (dipping, brushing, injecting, spraying) allows a reliable impregnation – even on complex structures. Regardless of whether small or large pores – **dichtol** impregnates form-locking and restores the pressure tightness of castings. The polymeric material has been formulated for the needs of the foundry industry and is therefore specifically resistant to physical, thermal and chemical stress. In contrast to welding the material is extremely gentle to castings and enhances the surface and varnish properties of castings. By using **dichtol** you minimize costs and thereby increase the profitability of your production.

Product benefits

- ◆ Versatile application of the capillary impregnation system
 - Dipping
 - Brushing
 - Injecting
 - Spraying
- ◆ Punctual serial impregnation
- ◆ Single impregnation (of large parts)
- ◆ Low investment costs
- ◆ Enhanced surface and varnish properties
- ◆ Most efficient consumption of polymeric material
- ◆ Temporary corrosion protection (transport protection)
- ◆ Location-independent, usable everywhere
- ◆ Transparent, invisible
- ◆ No maintenance and lead times
- ◆ Food and drinking water approved

dichtol has been tested by the „Hygiene Institut des Ruhrgebiet“, one of the leading german institutions regarding the application of the polymer in contact with food and drinking water. Since 1886 we are producing exclusively in Germany to guarantee a constantly high quality of our products around the globe.

**MADE
IN
GERMANY**



By using the capillary-active impregnation a high-resistance polymer, in combination with volatile components is applied on the porous surface. Based on the excellent capillary action - **dichtol** penetrates deeply into the casting and impregnates it right away. After curing the polymer is highly resistant to thermal, physical and chemical stress - even with alternating temperatures.

Assortment

WFT

Pore sizes from 0 up to 0,1 mm, temperature resistance up to 300°C, extended curing time, improved capillary action
#1532 FL (fluid)
#2087 spray

WFT Macro

Pore sizes from 0,1 up to 0,5 mm, temperature resistance up to 300°C, extended curing time, improved capillary action
#1546 FL (fluid)
#2088 spray

HTR

Pore sizes from 0 up to 0,1 mm, temperature resistance up to 500°C, has to be tempered 1 hour after application at 250°C for 3 hours
#0977 FL (fluid)

Hydro

Pore size up to 0,5 mm, wall thickness <5 mm, water-based
#1524 FL (fluid)

Surface-cleaner

removes the surface film of **dichtol** after the application (except **Hydro** and **HTR**).
#1009 FL (fluid)

All **dichtol** versions are silicone-free (except Hydro). After the application is the surface resistant to corrosion.

Thinner

dichtol - to adjust the viscosity:
#1285 für WFT und WFT Makro
#1307 für HTR

Shelf life

min. 12 months in the closed can, store cool and dry.

Package size

1 liter
 5 liter
 10 liter
 200 liter



Capillary-active metal impregnation

		WFT		WFT Macro		HTR	Hydro
		FL #1532	spray #2087	FL #1546	spray #2088	FL #0977	FL #1524
Application	dipping	X	-	X	-	X	X
	brushing	X	-	X	-	X	X
	injecting	X	-	X	-	X	X
	spray can	-	X	-	X	X	-
	pump sprayer - spray chamber	X	-	-	-	-	X
Dipping time / Penetration time		minutes		minutes		minutes	minutes
up to 5 mm wall thickness		4		6		10	10
5 - 10 mm		8		10		15	15
10 - 15 mm		13		15		20	20
> 15 mm		30		40		40	40
Surface drying [minutes]		3		5		-	60
Surface layer thickness [µm]		3		8		4	20
Cure at +20 °C [hours.]	Belastbarkeit	light (completely)		light (completely)		Has to be tempered 1 hour after the application at 250°C for 3 hours.	light (completely)
	bis 5 mm wall thickness	6 (24)		8 (24)			8 (24)
	5 - 10 mm	10 (24)		12 (24)			14 (24)
	10 - 15 mm	17 (48)		19 (48)			20 (48)
	> 15 mm	24 (48)		28 (48)			28 (48)
Technical data							
Pore size [mm]		0 - 0,1		0,1 - 0,5		0 - 0,1	0 - 0,5
Permanent temp. resistance [°C]		-40 / +300		-40 / +300		-40 / +500	-40 / +200
Temporary temp. resistance [°C]		-40 / +450		-40 / +450		-40 / +550	-40 / +300
Compression strength [bar]		bis 350		up to 300		up to 350	up to 150
Viscosity (DIN 4 cup, +23°C) DIN 53211 (4 mm nozzle) [sec.]		13		17		12	10



Preparation

Remove loose debris, grease and dirt from the pores with **DIAMANT cleaner**. The impregnation area has to be free of oil and water. In the case of oil soaked parts, wash the parts thoroughly with 100% acetone. If you have to impregnate wet parts, put them into an oven to vaporize the water. It is important to remove water, oil or other liquids from the parts before the impregnation material can be applied. Heated parts must be cooled down to max. 30°C.

Versatile in the application:

Spraying: Spray **dichtol** 4 times crosswise in one minute intervals on the porous surface to guarantee the best possible penetration.

Brushing: Brush **dichtol** 4 times crosswise in one minute intervals on the porous surface to guarantee the best possible penetration.

Injecting: Deep holes, threads, channels, tubes and chambers can easily be filled with **dichtol** by injecting the polymer right away.

Dipping: Fill **dichtol** in a lockable basin. After the impregnation with the polymer - after the application please refill **dichtol** in the original packaging and keep it closed and dry.

Curing: **dichtol** cures chemically at room temperature within a few hours (approx 1 hour per mm wall thickness). The dipped parts have a dried surface after approx. 5 minutes and can then be stored or delivered.

THERMASPRAY

Tel: +27 (11) 316 6520
Fax: +27 (11) 316 7527

www.thermaspray.co.za

PO Box 1152, Olifantsfontein, 1665
3 Axle Drive, Corner Axle & Hammer Road, Clayville,
Olifantsfontein