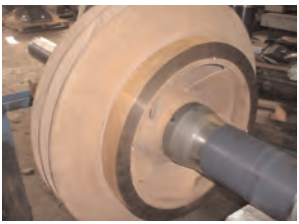
DICHTOL

The Capillary Sealer to Impregnate THERMAL SPRAY COATINGS



Eliminate Premature Failures

DIAMANT COATING SYSTEMS

Repair Coating Technology: Dichtol, Plasticmetal, Ultrametal, Special Products

DICHTOL – ***The proven metal impregnation system creates a better than "vacuum impregnated" pressure tight fit in the finest pores!***

- Perform on-the-spot repairs, in-house.
- Apply by dipping, brushing or spraying the metal or ceramic coatings.
- Penetrate microscopic, porous holes and hairline cracks.
- Sealer offers the benefits of resistance against aggressive chemicals.
- Large and small coated parts are ready for grinding or machining within hours depending on thickness.
- Plasma, arc spray and even HVOF coatings can resist premature failure by sealing with DICHTOL
- Continuous temperature-resistant up to 932°F and pressure-resistant to 8700 psi.
- Liquid available in pints, quarts, 1 and 5 gallon containers.

DICHTOL WFT 1532

To impregnate micropores and hairline cracks from **nearly 0 to 1/10 mm** without vacuum or pressure for any kind of alloy. Areas to be impregnated must be clean and dry (surface cleaned mechanically and chemically, then heat treated to remove all remaining materials inside the pores so Dichtol can penetrate area).

Apply by dipping into Dichtol (eg in a container with a tight cover) for 30 minutes or
- -by brushing 3 to 4 times within a short time period with a soft brush or
- -by spraying 3 to 4 times crosswise within a short time period.

Cures at ambient temperature for approx. 1 hour per mm wall thickness (ie. 8 hours cure time for 8 mm wall thickness).

Used worldwide since 1964, approved by well-known foundries, machine and machine tool makers; car, ship and metal industries. Pressure proof up to approximately **600 bar**, temperature resistant approximately **- 170° c to + 250° C continuous.**

DICHTOL WFT 1546 MACRO

To impregnate porosities from nearly **1/10 to 5/10 mm**. Preparation and application like above; no Macro spray.

DICHTOL HTR 0977

Similar to above Dichtols, but temperature resistant to **500° C continuously**, also in spray form. Approx. 1 hour after application, Dichtol HTR will have to be heat cured at approx. 250° C for approx. 3 hours for full cure.

DICHTOL Thinners

Dichtol may change viscosity after a longer period of use, losing penetrating and impregnating properties. Ideal viscosity can be controlled by Dichtol Viscometer; viscosity loss can be compensated by adding the relevant thinners. Available for Dichtol, Macro, HTR. Thinners contain a small portion of Dichtol polymers ensuring perfect regeneration properties.

RESISTANT: ethyl alcohol 96%, ethyl alcohol 50%, ethyl ether, ethyl silicate, 2 ethyl hexanol, ethylene glycol, ammonia conc., ammonia conc 5%, gasoline, butanol, butyl glycol, n butyl ether, carbitol, chlorine lime sol., diesel oil, diethylene glycol, dipropylene glycol, natural gas, acetic acid conc., acetic acid conc. 10%, frigene, glycol, hexanol, heptadecanol, isopropylene techn., isopropylene ether, isopropylene alcohol, potash lye 10%, potash lye 40%, sodium chloride sol. 10%, lubricating oil, sea water, methanol, methyl amyl alcohol, methyl carbitole, lactic acid conc., lactic acid 10%, soda lye 20%, soda lye 40%, paraffin oil, phenol sol. 10%, phosphoric acid conc., phosphoric acid 10%, propylene glycol, nitric acid conc., nitric acid 10%, hydrochloride acid conc., hydrochloride acid 10%, oxygen, sulphuric acid conc., sulphuric acid 30%, suplhuric acid 10%, soap suds, soda lye, tetradecanole, tetra ethylene glycol, triethylene glycol, undecanole.

NOT RESISTANT: acetone, ester, cetone, methylene chloride

LIMITEDLY RESISTANT: formic acid conc., formic acid 40%, benzene, carbon tetrachloride, toluene, xylene

APPLICATION DATA		WFT 1532	WFT 1546 Macro	HTR 0977
dipping		X	X	X
brushing		X	X	X
filing		X	X	X
spraying chamber		X	–	X
spray can		X	–	–
Dipping Time / *approx. time in minutes*				
5mm	5 mm wall thickness	4	6	10
5-10mm	5-10 mm	8	10	15
10-15 mm	10-15 mm	13	15	20
> 15 mm	> 15 mm	30	40	30
Surface Dry Time / *approx. time in minutes*		1	3	–
Surface Film Thickness / *approx.*		3	10	4
Cure Time *at room temp., load after approx.*		*light(full)*	*light(full)*	*1 hour after*
5mm	5 mm wall thickness	4(24)	6(24)	dipping:
5-10mm	5-10 mm	8(24)	10(24)	anneal at
10-15 mm	10-15 mm	13(48)	15(48)	250° C
> 15 mm	> 15 mm	24(48)	24(48)	for 3 hours
Other treatments cured DICHTOL films:				
nitrocellulose		–	–	–
baked paints		X	X	X
flat paints/primers		X	X	X
DD/EP a.s.o. paints		X	X	X
other paints/coating systems		*pse. test*	*pse. test*	*pse. test*

TECHNICAL DATA	WFT 1532	WFT 1546	HTR 0977
Porosity size *approx./mm*	-1/10	1/10 - 5/10	-1/10
Continuous temp. load *approx./°C*	-170/+250	-170/+250	-170/+500
Max short term temp. load *approx./°C*	-170/+450	-170/+350	-170/+650
Compressive strength *approx. bar/psi*	~600/8700	~600/8700	~600/8700
Viscosity *at 20°C approx., 4mm nozzle*	*14-16 seconds*	*20-22 seconds*	*12-14 seconds*
Dichtol *pint,quart, 1& 5 gallon*	X	X	X
Thinner *pint, quart*	X	–	X

DIAMANT COATING SYSTEMS

501 Shotwell Drive • Franklin, OH 45005
(937) 746-7632 • Fax (937) 746-7658

Product Information: www.strongholdone.com