# SEALER FOR THERMAL SPRAYED COATINGS



Capillary deep impregnation, durable protection for porous structures





Member of the community for thermal spraying e.V.





Drinking water approval

### RELIABLE PROTECTION FOR YOUR THERMAL SPRAYED LAYERS

# DIAMANT sealers seal open pores liquid- and gas-tight

Thermal sprayed coatings have pores that make them susceptible to corrosion. Consequence: Aggressive gases or liquids can penetrate through these pore structures and oxidise on the substrate. A possible and unattractive effect of this under-corrosion is the flaking or failure of the thermal spray coating.

DIAMANT sealers close the open pores in thermal spray coatings and thus ensure your permanent corrosion protection.

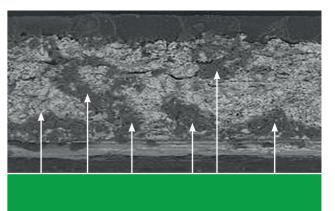




# DIAMANT sealers penetrate deeply into the thermal spray layers. And provide long-lasting protection

Our sealers are specially developed and optimized for use on thermal spray coatings. You therefore receive an individual solution and not an off-the-shelf product. Because our products are developed and manufactured for you without exception at our own company site in Germany.

DIAMANT sealers penetrate deep into the layers and protect them permanently. Due to the capillary deep impregnation, we offer you a system that does not require a vacuum and is therefore easy to apply. Simply brush on, spray or dip. dichtol penetrates independently into the pores and seals them. Deep penetration is important to ensure lasting protection even in the event of wear or downstream machining.



with **dichtol** sealed ZnAl layer



#### THE RIGHT SEALER FOR EACH PROJECT

## Our sealers are as diverse as your coatings

The days of all-purpose glue and grease are history. Today's world demands special solutions and specialities to meet your increasingly demanding requirements. At DIAMANT, you can obtain specially matched sealants for your coatings, as required by DIN EN ISO 14924. We have developed individual and demand-oriented solutions for you, which cover almost all areas of thermal spraying.

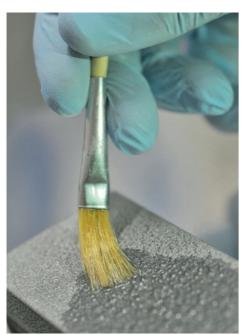
Together with you, we adapt our basic formulations to your coatings. As a result, you will receive a high-performance seal-coating system that offers maximum performance. No matter which process you use or which materials are sprayed, we always have the right sealer for you!

PROCEDURE										
APS	HVOF	LDS	Wire-flame spraying							
Detonation spraying	Cold gas spraying	Laser spraying	Powder flame spraying							

	SE	AL	
to achieve special surface properties *	for hydraulic and pneumatic applications	to improve the corrosion resistance	to influence the friction and sliding properties
* Electrical insulation, non-st	ick properties, wetting or non-	wetting, optical properties.	

#### **GUARANTEED FUNCTION, PROVEN RESULTS**

# We not only supply you with the right sealer, we also provide you with a proof of functionality



The function of a Siegler coating system is influenced by many parameters. Coincidence and gut feeling are definitely not among them. Instead, we rely on facts and exact measured values to select the right sealer for you. On facts and exact measured values. For this purpose, we have developed in-house testing and qualification procedures with real added value. value. With our PERM test, we demonstrate the penetration depth of the of the sealer in your coating layer.

The GAPO test allows a quick statement about the corrosion resistance. Flanked by further in-house measurements, this enables a precise statement to be made about what the sealer performs in conjunction with the respective coating system and where there is potential for improvement.

We are not satisfied until you are. That's why the systems are systems are adjusted until we have found the optimum solution for you.

That is our DIAMANT satisfaction promise.



#### **SELECTION GUIDE / OVERVIEW OF STANDARD SEALERS**

# Did not find what you are looking for? Contact us, we will find the right sealer for your application!

The table shows an extract from our complete product portfolio. All products come out of our own production. Dichtol is available exclusively from the manufacturer. Benefit from over 60 years of experience in the field of metal impregnation. Quality *Made in Germany*.

You can reach our service on +49 2166 - 98 36 - 0 or by email: info@diamant-polymer.de

Product Name Pro				Recommended rea of Application							Solid			Max.	Max.	Surface	Suitable	Flexibility	Chemical resistance*2		
	ProdNo.	HVOF	APS	ARC, LDS	Flame	Typical Application / Description	Characteristics	Colour	Base	Solvent	[% By weight]		Density [g/cm³]	Operating Temp °C (°F)	Application Temp °C (°F)	drying at 20°C (68 °F)	Pore size Small / Medium / Large	* = low ** = middle *** = high	Acids	Bases	Solvent
dichtol WFT Concentrate	0932					Can only be used diluted (1285)	Concentrate	transparent	Acrylate	Yes	43	610	0,93	300 (572)	30 (86)	12 min	-	**	**	**	-
dichtol WFT Makro	1546					Corrosion protection. Simple application,	Increased Solid	transparent	Acrylate	Yes	25	34	0,90	300 (572)	30 (86)	6 min	L	**	**	**	_
dichtol WFT Makro Spray	2088						Spray Bottle	transparent	Acrylate	\$.0.	25	34	\$.0.	300 (572)	30 (86)	6 min	L	**	**	**	-
dichtol WFT	1532					1-component, ready-to-use.  Drinking water approval	Low Solidchr	transparent	Acrylate	Yes	10	12	0,88	300 (572)	30 (86)	6 min	S	**	**	**	-
dichtol WFT Spray	2087					Dimining traces approval	Spray Bottle	transparent	Acrylate	S.O.	10	12	\$.0.	300 (572)	30 (86)	6 min	S	**	**	**	-
dichtol WFT Slow	2507					Warm climate, large surfaces	Slow Ventilation	transparent	Acrylate	Yes	11	14	0,96	300 (572)	50 (122)	12 min	S	**	**	**	-
dichtol HTR Concentrate	1388					Can only be used diluted (1285)	Concentrate	transparent	Silicone	Yes	48	75	1,02	500 (932)	30 (86)	50 min	-	**	**	**	*
dichtol HTR	0977					Corrosion protection for high temperature. 1-component, ready-to-use	Low Solid	transparent	Silicone	Yes	22	14	0,89	500 (932)	30 (86)	45 min	S	**	**	**	*
dichtol HTR Blue	2501					Evaporator tubes	Color for better visibility	blue	Silicone	Yes	22	16	0,95	500 (932)	30 (86)	45 min	S	**	**	**	*
dichtol WF49 Concentrate	1849					High viscosity, thinner 1285	Concentrate	yellowish	PURE	Yes	61	250	1,07	120 (248)	30 (86)	45 min	S	**	**	**	***
dichtol WF49-3	2181						Resistant to solvents	transparent	PURE	Yes	20	60	0,94	120 (248)	30 (86)	43 min	L	**	**	**	***
dichtol WF49-2	2182					Corrosion protection, 1-component, ready-to-use	Resistant to solvents	transparent	PURE	Yes	15	40	0,92	120 (248)	30 (86)	40 min	М	**	**	**	***
dichtol WF49-1	2180						Resistant to solvents	transparent	PURE	Yes	12	20	0,91	120 (248)	30 (86)	38 min	S	**	**	**	***
dichtol AM Hydro	2589					Corrosion protection, 1-component	Water base	transparent	Acrylate	No	27	60	1,01	200 (392)	40 (104)	40 min	L+M	**	**	**	**
dichtol HM	2407					Anilox rollers, large components and surfaces. 2-component	Apply on hot surfaces	Light yellowish	Epoxy resin	Yes	84	75	1,05	200 (392)	120 (248)	20 h	L+S	***	***	***	***
dichtol HTWG Hydro	2506					1-component, ready-to-use	High temperature resistance	transparent	Inorganic	Yes	37	120	1,22	700 (1292)	40 (104)	12 h	М	*	***	***	***
dichtol HTWG-S	2505					1-component, ready-to-use	Fast curing	transparent	Inorganic	Yes	32	110	0,89	700 (1292)	40 (104)	6 h	М	*	***	***	***
dichtol HTR HS	2530						High solid, no solvents	transparent	Silicone	No	98	140	1,14	500 (932)	40 (104)	15 min	L + M	***	***	***	**
dichtol HTR HS AS	2531					1-Component, ready to use Good electr. isolation	Like 2530 with anti-stick characteristic	transparent	Silicone	No	98	140	1,14	500 (932)	40 (104)	15 min	L + M	***	***	***	**
dichtol HTR HS 50S	2532						Like 2530 for small pores	transparent	Silicone	Yes	52	60	1,00	500 (932)	40 (104)	10 min	S	***	***	***	**
dichtol UVDC-1	2536						Fast UV curing	transparent	PU acrylate	Yes	98%	300	1,02	160 (320)	60 (140)	30 sec	L + M	**	**	**	**
dichtol UVDC-2	2537						Fast UV curing	transparent	PU acrylate	Yes	98%	250	1,03	160 (320)	60 (140)	30 sec/2 h	L + M	**	**	**	**



#### **DEVELOPMENT ACCORDING TO CUSTOMER REQUIREMENTS**

## Use our expertise to your advantage

In order to find the right sealer for your application, we make many things possible. The starting point of a successful development embodies a joint initial meeting. To determine your individual needs and to define with you which tests and parameters are relevant for your application. We then create a test plan and set the development goals. The tests are always carried out on real coating samples you have produced with your own materials, parameters and systems. This guarantees that real-world results are achieved so as not to shipwreck later when transferring the product from the lab to the real world. Success with plan, guarantee and proof. Of course, you will also receive complete documentation of the Results. The tests prove the function of our sealers in your shifts. And you will receive a tested product together with the proof of function for your shift.

#### APPLICATION SERVICE/SUBCONTRACTING

# Whether at your site, on the construction site or at our factory

Are you looking for support in using our products? The **DIAMANT** technicians and fitters are professionals with many years of experience and in-depth expertise. Talk to us, we would be happy to arrange an appointment at your location. Or simply send us your parts and we will apply the products in our factory.

#### **CONTRACT MANUFACTURING**

# Continuously growing partnership

We are a manufacturing company with adequate and professional equipment to produce polymer products of the highest quality and quantity. In addition to fillers, coatings and adhesives, other products can also be manufactured with it. Renowned national and international manufacturers and/or recipe owners have had their products manufactured by us for more than 25 years. We manufacture these products according to recipe templates and then calculate the provision of the equipment, the staff and the services. Everything always according to the ISO 9001 quality standard. And we do not act as an extended workbench, but as your permanent and trustworthy partner with the same goals and quality standards.



#### **OWN LABEL**

# Our product under your good name

Would you like to sell **DIAMANT** quality products under your own name? No problem. Talk to our customer service and we will be happy to make you an individual offer. We take care of label printing and packaging. If desired, we can even take over the worldwide distribution of the goods to the destination for you. You receive REACH-compliant labels and safety data sheets in all European and many non-European national languages. Customs clearance and forwarding our experienced clerks will be happy to register for you.

#### **PRODUCT OWNERSHIP**

## Maximum exclusivity - a product just for you

It does not work? Yes, it works. Our ultimate goal is to offer you a functioning and profitable solution with real added value. To do this, it is necessary to understand your requirements and processes in detail. We realize that this often touches on sensitive areas of your business. In order to be a reliable partner for you in such situations, we also offer the option of manufacturing the jointly developed product exclusively for you in addition to individual non-disclosure agreements (GHV, NDA). According to old merchant custom, confirmed with letter and seal. Because your know-how is safe with us. Promised.

#### **130 YEARS OF EXPERIENCE**

# Tradition, innovation, consistency

Already in the 5th generation, we are developing and manufacturing special polymer-based products for you. Our special Know-how lies in extremely highly filled compound systems, which are used in the areas of wear protection, power transmission, Form fit, force fit or used in metal repairs. In addition to these systems, we also serve the other extreme with extremely low-viscosity unfilled polymer systems, such as those used in the areas of impregnation, sealing or infiltration. The modern and environmentally friendly product solutions are used for repairs and maintenance, but also for production or in new buildings. DIAMANT products preserve values and protect your investments. Our products thus contribute to the efficient use of scarce resources. Because one thing is as true today as it was 130 years ago: the resources of our world are finite. Therefore, they should be used efficiently and judiciously.











#### **OUR MISSION**

#### Mission

Protect, mend, connect: DIAMANT products and services help you avoid costs and preserve value by:

- as composite materials protect surfaces and thus extend the service life of pipes, pumps, pipelines, extend containers etc.
- · correct defective castings as repair materials and make them usable,
- · as impregnating materials to protect porous structures and increase their durability, as well as
- · as a "liquid lining plate" non-positive and form-fitting, full-surface and permanently corrosion-resistant
- create connections without mechanical processing.

#### DIAMANT product and application solutions protect the environment and conserve resources by:

- · increase the stability and service life of machines, systems and constructions,
- · reduce waste and thus unnecessary consumption of raw materials,
- · help significantly to identify defective products, machines, systems, constructions and buildings
- · to repair and make usable again,
- · limit material losses as well
- · shorten construction times and thus also reduce energy consumption and wear and tear on the machines used.

The excellent quality of our products and application solutions give our customers the security to keep the quality promises they have made.



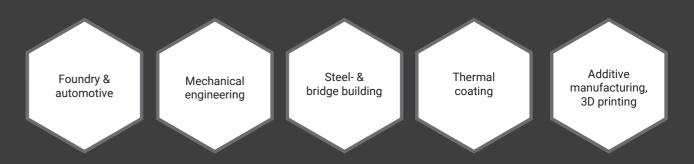








# Application areas of our products



blowhole repair, fillers & putties. Reduce rejects, preserve values.

Metal impregnation, Sliding bearings, sliding coatings, alignment pads, seals and infiltration of porous structures. Avoid costs, refine products.

Gap and tolerance compensation on steel constructions Avoid costs, generate traction.

Wear protection, coating and sealing. Preserve values, protect areas.

Impregnation, infiltration and sealing of porous structures. Avoid costs, refine products.



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