T-E-Klebetechnik

Anwendungs-, Verfahrens- und Dosiertechnik

How to prepare surfaces correctly

In the rapidly changing practice for industry and technology, bonding is becoming increasingly important.
Today, highly developed materials are used to achieve bonding solutions that were unimaginable just a few years ago.

Proper pretreatment is crucial

Many materials have problematic surfaces for bonding when untreated. The correct pretreatment of these surfaces provides a remedy and enables optimal connections. Surfaces should be dry, dust, grease and solvent free. Depending on the material, the joint surface must be roughened and cleaned before bonding to ensure optimal adhesion.
With the different cleaning processes, the respective safety regulations go hand in hand. These vary depending on the process, as chemical solvents or caustic substances may be used.

Surface treatment process

Mechanical pretreatment

- using sandblasting, brushing, grinding, sanding or milling

The roughness of the surface changes the size of the joint surface. In addition, loosely adhering reaction products, polishing agents, lubricants and stabilizers are removed.

Cleaning and degreasing

With water or solvents - dust, oil, grease, separating and processing agents are removed. The surface is not changed in its structure. Degreasing is done with organic solvents or by pre-drying in the oven. If cleaning is carried out with solvents, the treated surfaces must be flash off briefly.

Invoice address	Cust. Center + Delivery address	Phone	Mail	Banking account	Banking account
T-E-Klebetechnik	T-E-Klebetechnik	HQ +49 (0)511 353982-0	infotek@t-e-klebetechnik.de	Nord-LB	Postgiro
H.-P. Thielen	H.-P. Thielen	Fax +49 (0)511 353982-40		IBAN: DE06 2505	IBAN: DE46 2501
Vahrenwalder Str. 131	Eckenerstr. 9	UST-ID-No.: DE 115640309	Internet:	0000 0101 0403 27	0030 0244 1893 00
D-30165 Hannover	D-30179 Hannover	EORI-No.: DE 5193265	www.t-e-klebetechnik.de	BIC: NOLADE2HXXX	BIC: PBNKDEFF

Chemical pretreatment

- by etching or corroding with acidic or alkaline substances

With this process the polarity of the surface is strongly changed by oxidation or phosphating. With the wet chemical pretreatment, for example with chromosulfuric acid, components of any design can be treated.

Physical surface treatment

is carried out with high-energy electron, laser and UV rays.
This surface treatment also includes thermal processes such as flaming or the electric plasma process. During physical surface treatment, the joining surface changes chemically and physically. This makes the component surface highly energetic and easier to bond.

Coatings

Especially with metals, the surfaces can be coated to increase the surface energy. With adhesion promoters such as primers or activators, reactive surfaces can be created that enable optimal bonding. Adhesion promoters are chemical substances, so it is recommended to observe the application instructions such as flash off time and pot life. The use of adhesion promoters should be considered for bonds where a pure adhesive bond does not meet the requirements.

The instructions given here for the treatment of surfaces are of a general nature. A legally binding assurance of certain properties or the suitability for a possible pre-treatment of your individual materials cannot be derived from this information. The information given here is based on our current experience and knowledge. They do not constitute instructions for action.

Invoice address	Cust. Center + Delivery address	Phone	Mail	Banking account	Banking account
T-E-Klebetechnik	T-E-Klebetechnik	HQ +49 (0)511 353982-0	infotek@t-e-klebetechnik.de	Nord-LB	Postgiro
H.-P. Thielen	H.-P. Thielen	Fax +49 (0)511 353982-40		IBAN: DE06 2505	IBAN: DE46 2501
Vahrenwalder Str. 131	Eckenerstr. 9	UST-ID-No.: DE 115640309	Internet:	0000 0101 0403 27	0030 0244 1893 00
D-30165 Hannover	D-30179 Hannover	EORI-No.: DE 5193265	www.t-e-klebetechnik.de	BIC: NOLADE2HXXX	BIC: PBNKDEFF