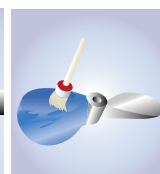
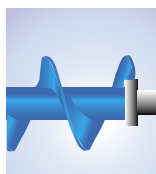
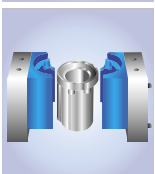




# Plastic Metal

2-component epoxy adhesives

- durable
- fast
- economical



## Plastic Metal

WEICON Plastic Metal is ideal for providing fast, cost effective and durable repairs and coatings to many different types of material. WEICON Plastic Metal is also suitable for tool and mould making.

The range consists of 18 different types to cover the various application requirements needed for industry. The system is complemented by a range of optional accessory products.



Flare bleeder in a petrochemical factory

## Composition

WEICON Plastic Metals are two-component epoxy resin systems. All types are supplied in a retail package which contains the resin and hardener components in the correct mixing ratios.

Depending on type, the resin component is filled with either steel or aluminium powder or in some cases, a mineral filler (except Casting Resin MS 1000). The different hardeners determine the viscosity and curing behaviour of each product type.



Mixing facility for catalytic converter in a chemical plant

## Characteristics

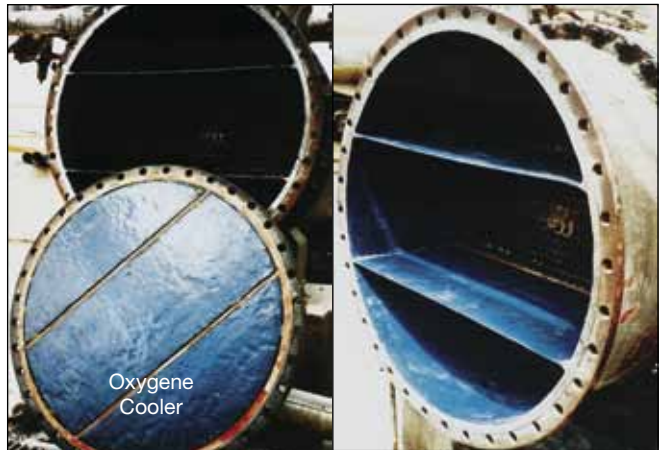
After mixing the two components, WEICON Plastic Metal hardens at room temperature to a firm, metal-like material which immediately adheres to almost every kind of surface.

Time of hardening depends on the type. Unlike polyester resin, the material does not shrink while curing. The cured material may be machined, e.g.

- drilled
- milled
- ground
- filed

WEICON offers a wide range of putty, liquid or brushable types with extremely high temperature and abrasion resistance.

All types show an excellent resistance to aggressive media.



Oxygene Cooler

Detailed product information as well as technical data and instructions for use will be given on the next pages

## Applications

Most different materials may be reliably and durably bonded to themselves and among each other, e.g.

- iron, steel, hard metal, bronze
- aluminium, brass and copper
- glass and ceramics, concrete and wood
- as well as many rigid plastics (except PTFE, polyethylene and polypropylene)

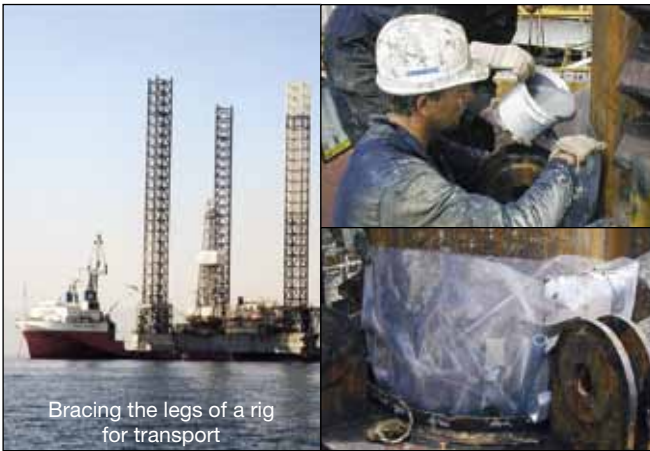
For workshops and maintenance departments in all industries, WEICON Plastic Metal is the ideal product for

- repairs on aluminium and light alloy
- reconditioning and repairing castings, pipes and tanks
- filling blowholes and microporosities
- working over shafts, sliding bearings, pumps and housings
- welding without preheating (wherever welding is problematic or impossible)

In industrial design and manufacturing, WEICON Plastic Metal is used for making moulds and models, in particular

- as an aid for making moulds for rubber and injection moulded parts
- making dies
- templates and models for pre-production testing
- lining of cutting tool guides
- making fixing devices.

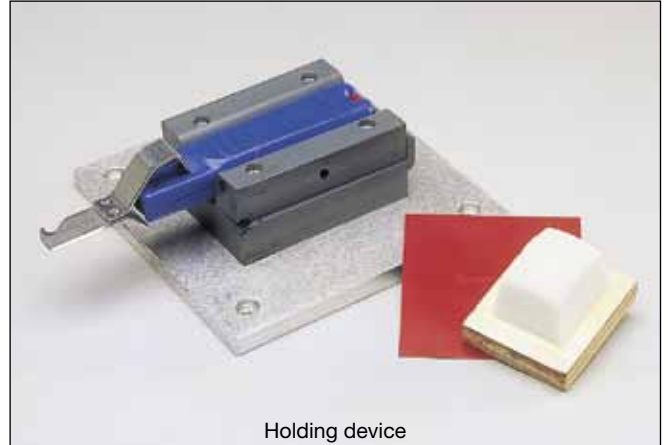
WEICON Plastic Metal is ideal for maintenance works and will give durable repairs without the need for expensive replacement parts.



Bracing the legs of a rig for transport

## WEICON B

viscous - steel-filled -  
temperature resistant from -35°C up to +120°C



Holding device

Due to its liquid consistency, WEICON Plastic Metal B is particularly suitable for:

- detailed reproductions in mould and model making
- making tools and templates, gauges and fixtures
- filling blowholes and microporosities on castings
- as well as for general repair works where a castable compound is advantageous

## WEICON A

putty - steel-filled -  
temperature resistant from -35°C up to +120°C



Repair of a turbine wing

WEICON A is the general purpose product from the WEICON Plastic Metal range. Nearly all repair jobs can be dealt with WEICON A:

- elimination of corrosion damages and pitting on tanks
- repairs on pipes and castings
- repairs of cracks on housings and machine parts
- making of moulds, models, tools and fixtures

## WEICON BR

putty - bronze-filled -  
temperature resistant from -35°C up to +120°C



Repair of a ship propeller

WEICON BR is particularly suitable for:

- filling blowholes and rebuilding bronze equipment parts (e.g. ship propellers)
- repairs of bronze castings
- patch-up and rebuilding where brazing is undesirable or impossible

Also bonds strongly to all other metals, such as brass, copper, ferrow metals.

## WEIDLING C

liquid - aluminium-filled -  
high-temperature resistant from -35°C up to +220°C



Filter for the food-industry

High-temperature resistant casting resin system especially for industrial use. This type is non-corroding, anti-magnetic and cures practically without shrinkage. The product provides high temperature resistance after precuring at room temperature and post-curing (after-bake) at +120°C.

Especially suitable for:

- pouring out moulds (e.g. vacuum and foam moulds)
- making fixing devices and tools (e.g. injection dies) which are exposed to high temperatures

## WEICON F

putty - aluminium-filled -  
temperature resistant from -35°C up to +120°C



Reconditioning of an aluminium housing

Designed for use on aluminium or alloy, magnesium and other light metals.

- for all kinds of cost saving repairs, also on steel parts
- for filling blowholes on light alloy casts
- for the reconditioning of parts (e.g. injection moulded parts, holding devices)
- non-corroding, anti-magnetic

## WEICON F2

viscous - aluminium-filled -  
temperature resistant from -35°C up to +120°C



Filling of holes in an aluminium housing

WEICON F2 is highly recommended for making castings and in particular for:

- making moulds, forms and templates
- reconditioning porous or damaged castings
- making prototypes and holding devices
- pouring out swages to test their exactness
- low specific weight

## WEICON HB 300

putty - steel-filled - high-temperature resistant  
from -35°C up to +200°C, briefly up to +280°C



Breaking pad of a tambour brake

A high quality putty with the advantages of a high-temperature resistance and a 1:1 mixing ratio.

May also be used on vertical surfaces. Easy and practical to use e.g.:

- for repairing and bonding castings and metal parts
- for filling blowholes
- for repairing damages on containers, car bodies and machine parts
- for sealing pumps and pipes

## WEICON Ceramic BL

liquid - mineral-filled - extremely wear resistant - high temperature resistant from -35°C up to +180°C



Repair of a feed impeller

Blue, brushable surface protection with extremely high wear and abrasion resistance. Forms a smooth surface of low friction which shows a high chemical resistance and which is used:

- for lining highly stressed pump cases
- as a wear protection for slide bearing, slides, funnels and pipes
- for repairing castings, valves and blower vanes

Large blowholes and/or damaged spots should be first filled with WEICON WR or WEICON WR2 as appropriate.

WEICON Ceramic BL forms an extremely hard surface with excellent edge strength and high mechanical strength.

A slow hardener for WEICON Ceramic BL is available. (for more information, see technical data on page 8-9)



Coating of a centrex cone

## WEICON Ceramic W

putty - mineral-filled - extremely wear resistant - high temperature resistant from -35°C up to +200°C, briefly up to +260°C



Bonding of aluminium oxyd-stones

White surface protection coating with extremely high resistance against abrasion and chemical substances. Thanks to its putty consistency, it can also be used on vertical surfaces and even overhead.

Recommended especially

- for bonding and lining of aluminium oxide stones in mill production
- for lining of highly stressed pump cases
- as a wear protection for slide bearings, slides and pipes

and everywhere where the use of dark products is not wanted for optical reasons.



Coating of pipes and pipe bends

## WEICON SF

putty - steel-filled - super-fast curing -  
temperature resistant from - 35°C up to +90°C



Emergency repair of a water pipe

The universal type for quick repairs due to its fast-curing properties (pot life 5 minutes, may be machined after 45 minutes) and its simple application.

- for quick repairs and bondings on leaky pipes, housings and gears
- for making anchorages
- for making fixing devices

## WEICON ST

putty - stainless steel filled - non-corrosive  
temperature resistant from -35°C up to +120°C



Repair of blowholes at a sluice valve

Special high grade, non corrosive putty for various repair and maintenance works on machine parts and stainless steel equipment, e.g.:

- tanks, pipes, vessels, trays, funnels in chemical plants
- marine and off-shore sector
- sewage installations
- paper industry

## WEICON TI

putty - titanium-filled - wear resistant - temperature  
resistant from - 35°C up to +200°C, briefly up to +260°C



Repair of worn-out threads in elements of a mobile stand

This titanium-filled type is especially suitable for repairs which require high compressive strength and extreme chemical resistance.

Suitable for:

- repairs of pumps, valves, wearing plates, ball bearing seats, shafts, centrifugal pumps and propellers
- linings of pump cases, slide bearings, etc.

## WEICON UW

putty - steel-filled - cures even under water  
temperature resistant from -35°C up to +120°C



Repairs on flood-gates

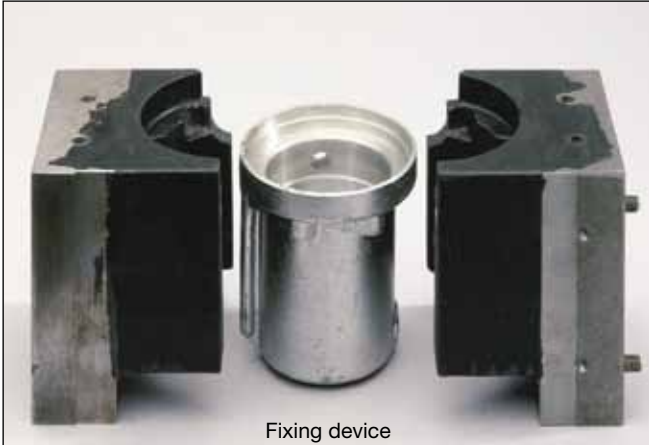
Special type with very high bonding strength on damp and wet surfaces and even under water.

Particularly suitable for repair and maintenance work, e.g.:

- pipes, pumps, valves, tanks, vessels und trays
- marine and off-shore sector
- sewage installations
- wherever dampness and wetness lead to bonding problems

## WEICON WR

liquid - steel-filled - wear resistant -  
temperature resistant from -35°C up to +120°C



This pourable wear-resistant type is used in mould making and wherever metal parts are subject to high wear caused by friction, e.g.:

- for repairing and build-up of shafts
- for pouring out bearings, cutting and punching tools
- for making casting and profile milling models as well as drawing moulds
- for pouring under machines and foundations
- and as a wear-resistant under-coating before final coating with WEICON Ceramic BL

WEICON Plastic Metal WR cures to a hard and wear-resistant surface with good sliding properties.

## WEICON Casting Resin

### MS 1000

liquid - unfilled - transparent -  
temperature resistant from - 35°C up to +120°C

Unfilled epoxy resin of low viscosity. Casting and laminating resin system which is suitable for many different applications., e.g. for encapsulating electronic parts.

WEICON Casting Resin MS 1000 may be filled with a variety of different fillers (pulverized, fibrous and textural) to produce highly filled backings.

Additional technical data:

Electrical resistance:  $5 \times 10^{15} \Omega/\text{cm}$

Dielectric strength: 19 KV/mm (IEC 60.243)

Creep resistance: CTI >600 (IEC 112)

Water absorption: 0,5 % (ISO 62) after 10 days at +23°C

## WEICON WR2

putty - mineral-filled - wear resistant -  
temperature resistant from -35°C up to +120°C

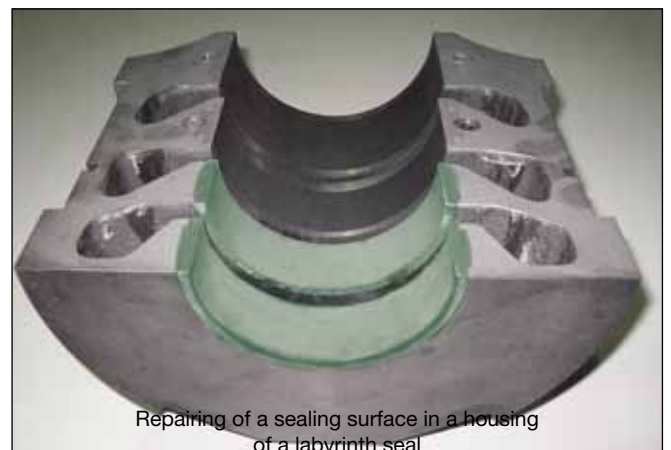


Differs from type WR in its putty and non-dripping consistency and the mineral fillers. Due to these properties, this wear-resistant type is mainly used where castable compounds cannot be processed:

- for repairs on conveyors, guides and sliding ways
- where rolling or sliding movements cause wear
- to prevent wear on metal surfaces which are exposed to extreme abrasion and erosion
- and as a wear-resistant under-coating before final coating with WEICON Ceramic BL

## WEICON Epoxy Resin Putty

putty - kneadable - mineral-filled -  
temperature resistant from - 35°C up to +200°C



The easy-to-use and versatile putty compound for sealing, fastening, bonding, filling and moulding.

Used for fast repairs and maintenance works such as:

- fixing screws, anchors and plugs
- repairing leaky tanks and pipes
- reconditioning castings
- repairing shafts, bearings, pumps and housings.
- reconditioning defective threads

# Technical Data

Product type	WEICON Plastic Metal in non-cured condition										
	Composition	Specific Properties	Complete Packaging Sizes	Mixing ratio (Weight %)		Pot life at +20°C (min.)	Density of the mixture g/cm <sup>3</sup>	Viscosity of the mixture mPa·s	Max. layer thickness per application mm	Cure times in h	
				Resin	Hardener					(200 g preparation)	mechanical loads
<b>WEICON A</b>	Epoxy resin steel-filled	putty	0,5 kg 2,0 kg	100	10	60	2,90	1.000.000	10	16	24
<b>WEICON B</b>	Epoxy resin steel-filled	viscous	0,5 kg 2,0 kg	100	7	60	2,75	200.000	10	16	24
<b>WEICON BR</b>	Epoxy resin bronze-filled	putty	0,5 kg 2,0 kg	100	33	60	1,68	500.000	10	16	24
<b>WEIDLING C</b>	Epoxy resin aluminium-filled	liquid, high-temp. resistant	0,5 kg 2,0 kg	100	8	60	1,62	25.000	60	24	48*1
<b>WEICON F</b>	Epoxy resin aluminium-filled	putty	0,5 kg 2,0 kg	100	20	60	1,60	880.000	10	16	24
<b>WEICON F2</b>	Epoxy resin aluminium-filled	viscous	0,5 kg 2,0 kg	100	14	60	1,45	200.000	10	16	24
<b>WEICON HB 300</b>	Epoxy resin steel-filled	putty, high-temp. resistant	1,0 kg	100	100	30	2,34	1.700.000	20	12	24
<b>WEICON Ceramic BL</b>	Epoxy resin mineral-filled	liquid, extremely wear resistant	0,5 kg 2,0 kg	100	10	20	1,90	40.000	10	12	24
				100*2	15	40	1,80	6.000	10	16	24
<b>WEICON Ceramic W</b>	Epoxy resin mineral-filled	putty, extremely wear resistant	0,5 kg 2,0 kg	100	33	120	1,59	600.000	10	24	48*1
<b>WEICON SF</b>	Epoxy resin steel-filled	putty, fast-curing	0,5 kg 2,0 kg	100	13	5	2,60	800.000	10	3	6
<b>WEICON ST</b>	Epoxy resin metallic-filled	putty, non corrosive	0,5 kg 2,0 kg	100	50	60	1,64	550.000	10	16	24
<b>WEICON TI</b>	Epoxy resin titanium-filled	putty, wear resistant	0,5 kg 2,0 kg	100	33	120	1,61	550.000	10	24	48*1
<b>WEICON UW</b>	Epoxy resin steel-filled	putty, cures even under water	0,5 kg 2,0 kg	100	50	60	1,63	500.000	10	16	24
<b>WEICON WR</b>	Epoxy resin steel-filled	liquid, wear resistant	0,5 kg 2,0 kg	100	15	45	2,30	20.000	10	16	24
<b>WEICON WR2</b>	Epoxy resin mineral-filled	putty, wear resistant	0,5 kg 2,0 kg	100	25	45	1,67	560.000	10	16	24
<b>WEICON Epoxy Resin Putty</b>	Epoxy resin mineral-filled	putty, high-temp. resistant	0,1 kg 0,4 kg 0,8 kg	100	100	30	2,00	Paste	20	2	3
<b>WEICON Casting Resin MS 1000</b>	Epoxy resin unfilled	liquid	1,0 kg	100	20	20	1,10	1.300	10	24	36

\*1 Plastic Metal TI can be machined after 16 hours at room temperature (+20°C), After 48 hours at room temperature, temper-hardening in four steps (3 h +50°C, 2 h +90°C, 2 h +130°C, 1 h +170°C). After temper – hardening a permanent temperature resistance of +200°C is reached.

\*2 WEICON Ceramic BL is supplied with a standard hardener.

Product type	WEICON Plastic Metal in cured condition								
	Mean strength at +25°C acc. to DIN 53281-83 / ASTM D 1002						Thermo forming resistance °C / °F	Colour after curing	Temperature resistance °C / °F
	Com- pressive MPa (psi)	Tensile MPa (psi)	Flexural MPa (psi)	E-Modul MPa (KSI)	Shore hardn. D (ASTM D 1706)	Shrinkage %			
<b>WEICON A</b>	80 (11.600)	21 (3.050)	34 (4.950)	3.500 - 5.000 (500 - 725)	90	0,015	+65 (149)	dark-grey	-35 to +120 (-31 to +248)
<b>WEICON B</b>	110 (15.950)	21 (3.050)	52 (7.500)	3.500 - 5.000 (500 - 725)	90	0,030	+65 (149)	dark-grey	-35 to +120 (-31 to +248)
<b>WEICON BR</b>	82 (11.900)	18 (2.600)	22 (3.200)	2.500 - 3.000 (360 - 435)	80	0,020	+50 (122)	bronze	-35 to +120 (-31 to +248)
<b>WEIDLING C</b>	140 (20.300)	25 (3.600)	77 (11.150)	5.800 - 6.000 (840 - 870)	90	0,010	+130 (266)	grey	-35 to +220 (-31 to +428)
<b>WEICON F</b>	61 (8.850)	20 (2.900)	37 (5.350)	1.500 - 2.000 (215 - 290)	84	0,020	+60 (140)	aluminium	-35 to +120 (-31 to +248)
<b>WEICON F2</b>	43 (6.250)	14 (2.050)	26 (3.750)	1.500 - 2.000 (215 - 290)	79	0,025	+55 (131)	aluminium	-35 to +120 (-31 to +248)
<b>WEICON HB 300</b>	100 (14.500)	27 (3.900)	42 (6.100)	9.500 - 10.000 (1.380 - 1.450)	85	0,015	+120 (248)	dark-grey	-35 to +200 briefly +280 (-31 to +392 briefly +536)
<b>WEICON Ceramic BL</b>	115 (16.700)	25 (3.600)	98 (14.200)	9.000 - 9.500 (1.300 - 1.380)	88	0,020	+80 (176)	blue	-35 to +180 (-31 to +356)
	85 (12.300)	22 (3.200)	95 (13.800)	7.000 - 8.000 (1.010 - 1.160)	83				
<b>WEICON Ceramic W</b>	140 (20.300)	30 (4.400)	90 (13.100)	4.500 - 5.000 (650 - 725)	85	0,020	+150 (302)	white	-35 to +200 briefly +260*1 (-31 to +392 briefly +500)
<b>WEICON SF</b>	70 (10.150)	14 (2.050)	21 (3.050)	2.000 - 2.500 (290 - 360)	85	0,030	+50 (122)	dark-grey	-35 to +90 (-31 to +194)
<b>WEICON ST</b>	80 (11.600)	27 (3.900)	38 (5.500)	2.000 - 2.500 (290 - 360)	80	0,020	+50 (122)	grey	-35 to +120 (-31 to +248)
<b>WEICON TI</b>	105 (15.200)	35 (5.100)	100 (14.500)	4.500 - 5.000 (650 - 725)	80	0,020	+150 (302)	grey	-35 to +200 briefly +260*1 (-31 to +392 briefly +500)
<b>WEICON UW</b>	82 (11.900)	28 (4.050)	38 (5.500)	2.000 - 2.500 (290 - 360)	85	0,020	+50 (122)	dark-grey	-35 to +120 (-31 to +248)
<b>WEICON WR</b>	110 (15.950)	33 (4.800)	80 (11.600)	5.000 - 5.500 (725 - 800)	90	0,020	+65 (149)	black	-35 to +120 (-31 to +248)
<b>WEICON WR2</b>	71 (10.300)	29 (4.200)	39 (5.650)	2.500 - 3.000 (360 - 435)	82	0,025	+65 (149)	dark-grey	-35 to +120 (-31 to +248)
<b>WEICON Epoxy Resin Putty</b>	80 (11.600)	30 (4.350)	56 (8.100)	4.000 - 6.000 (580 - 870)	87	0,005	+95 (203)	green	-35 to +200 (-31 to +392)
<b>WEICON Casting Resin MS 1000</b>	60 (8.700)	25 (3.600)	285 (41.300)	17.000 - 18.000 (2.460 - 2.610)	65	0,200	+50 (122)	transparent, slight inherent colour	-35 to +120 (-31 to +248)

Conversion factors:

(°C x 1.8) + 32 = °F • kV/mm x 25.4 = V/mil • mm / 25.4 = inches • µm / 25.4 = mil • N x 0.225 = lb • N/mm x 5.71 = lb/in • N/mm x 5.71 = pli • N/mm² x 145 = psi • MPa x 145 = psi • MPa x 0.145 = KSI • mPa·s = cP • N·m x 8.851 = lb·ft • N·m x 0.738 = lb·ft • N·mm x 0.142 = oz·in • kg x 2.2046 = lb

## Instructions for use



When using WEICON Plastic Metal, pay attention to the physical, toxicological and ecological data and instructions contained in our Material Safety Data Sheets ([www.weicon.de](http://www.weicon.de))

The successful processing of WEICON Plastic Metal depends on the careful preparation of the surfaces. Dust, dirt, oil, grease, rust and humidity or moisture have a negative influence on the adhesion of epoxy resins.

Before starting to work with WEICON Plastic Metal, we strongly recommend to observe the following points:

### Pretreatment of the surface

The surfaces must be clean, dry and degreased (metallic clean). Almost every surface soiling like e.g. old paint residues, oil, grease, dust and dirt can be removed with WEICON Cleaner Spray S or WEICON Sealant and Adhesive Remover.

If the surfaces are badly soiled resp. smooth the adhesion can be optimized by sand-blasting with sand in a suitable grain size or by mechanical roughening with coarse abrasive material.

Cast parts, which have been exposed to sea water for a long time, should be treated with special care as they might contain inorganic salts. It is possible that these salts reach the surface and absorb moisture, thus starting rust formation (rust bubbles under the protective coating). We therefore recommend to heat or flame the parts after sand-blasting.

If adhesion with the ground is not desired, a separating agent must be applied. For smooth surfaces e.g. WEICON Mould Release Agent (silicone-free) or WEICON Silicone Spray.

We recommend to start the application of WEICON Plastic Metal straight after the surface pre-treatment to avoid oxidation and instantaneous rust formation.



### Mixing

Before adding the hardener, it is absolutely necessary to stir up the fillers in the resin component thoroughly and bubble-free (exceptions: Epoxy Resin Putty, HB 300 and Casting Resin MS 1000).

After this, mix resin and hardener for at least 4 minutes with the processing spatula or mechanical mixers at a low speed (max. 500 r/min.) to get a uniform mass.

Do not mix more material than you are able to use within the pot life. Strictly observe the specified mixing ratio (tolerance max. +/- 2%).

### Pot life and processing time

The indicated pot life times refer to mixtures of 200 g and +20°C material temperature. Larger quantities will cure faster due to the typical heat reaction of epoxy resins. WEICON Plastic Metals should be processed at room temperature (approx. 20°C).

Pot life and cure time will be reduced at higher temperatures. The rule of thumb is: Every increase of 10°C above room temperature leads to a reduction of pot life and cure time by 50%. At temperatures below +16°C, the pot life and cure time will slow down; below approx. +5°C no reaction between resin and hardener will take place any more.



### Cure and treatment

Depending on the type, WEICON Plastic Metal can be machined or demoulded after 2 until max. 24 hours at room temperature. Final cure of all types is reached after 48 hours (at room temperature).\*

In low temperature environments, the cure time can be speeded up by the influence of heat, max. +40°C (heat lamp, electric blanket, hot air fan). To avoid thermal overheating and a possible deformation, the surface must not be warmed up with open flame (e.g. gas burner, oil lamp).

### Storage

Store WEICON Plastic Metal at room temperature (+20°C) in a dry place. Unopened containers can be stored for at least 24 months after delivery at temperatures from +18°C to +28°C (Epoxy Resin Putty max. 36 months). Opened containers must be used within 6 months.



\* To achieve a permanently high temperature resistance, we recommend to temper-harden after 48 hours as detailed below:

Type Weidling C

- 2 h at +40°C,
- 2 h at +60°C,
- 2 h at +80°C,
- 2 h at +100°C,
- finally 14 h at +120°C

Types WEICON Ceramic W and WEICON TI

- 3 h at +50°C,
- 2 h at +90°C,
- 2 h at +130°C,
- finally 1 h at +170°C

## Supplementary Range



Repair of a water-cooled turbocharger housing

## WEICON Hand Protective Foam with Liposomes

WEICON Hand Protective Foam forms a greaseless, invisible and water-resistant protective film that does not let various kinds of soiling penetrate the skin and pores.

This "invisible glove" protects against hazardous substances and irritants from aggressive chemical substances. Through the addition of liposomes, the care effect is considerably improved.

WEICON Hand Protective Foam is pleasant to use and protects against solvents, acids, lye, oils, tar, lacquer and paints, adhesives, bitumen, sealants and silicones.

## WEICON Cleaner Spray S

WEICON Cleaner Spray S degreases and cleans all metals, glass, ceramics, and many plastics.

### Applications

- cleaning and degreasing before priming and painting
- before the use of other WEICON products, where a greasy substrate would impair the effect, e.g. during adhesion
- cleaning of machine parts

WEICON Cleaner Spray S evaporates quickly and works without residue. No residual layer remains as is the case when thinners are used. Even gummy lubricants are removed.

Thermoplasts like PVC, plexiglass, polystyrene and simple paintjobs can be partially dissolved.

## WEICON Sealant and Adhesive Remover

WEICON Sealant and Adhesive Remover dissolves and quickly eliminates sealant and hardened adhesive residues, as well as lacquers and paints, even on vertical surfaces.

### Applications

- dissolves all types of sealant residues from cylinder heads, oil pans, water pumps, exhaust manifolds, valve covers and gear flanges
- reliably removes carbon residues, paints and lacquers
- eliminates oils, resins, greases and tar
- removes all kinds of adhesive, even hardened cyanoacrylate and anaerobically hardened adhesives

WEICON Sealant and Adhesive Remover can be used on metal, wood, glass, ceramics, polyethylene and polypropylene.

It should not be used with sensitive plastics like PVC, synthetics or linoleum.

## WEICON Silicone Spray

WEICON Silicone Spray is an ideal lubricant and separating agent for rational production and servicing. At the same time, it assumes the function of a preservative and care product for plastic, rubber and metal.

### Applications

- prevents the development of adhesive residue in presses and guides
- prevents the adhesion of goods on conveyor belts, channels and slideways
- cares for rubber, plastic and metal parts

WEICON Silicone Spray provides a durable separating film and good surface properties.

## WEICON Mould Release Agent

WEICON Mould Release Agent is a silicone-free lubricant and release agent. The high-quality material combination with a high lubricating effect consisting of pure, natural products prevents adhesion to plastics, moulds, metals and tools.

Temperature resistant from -20°C to +130°C

### Applications

In plastics processing including

- injection moulding
- compression and vacuum moulding

## Chemical resistance of WEICON Plastic Metals after curing\*

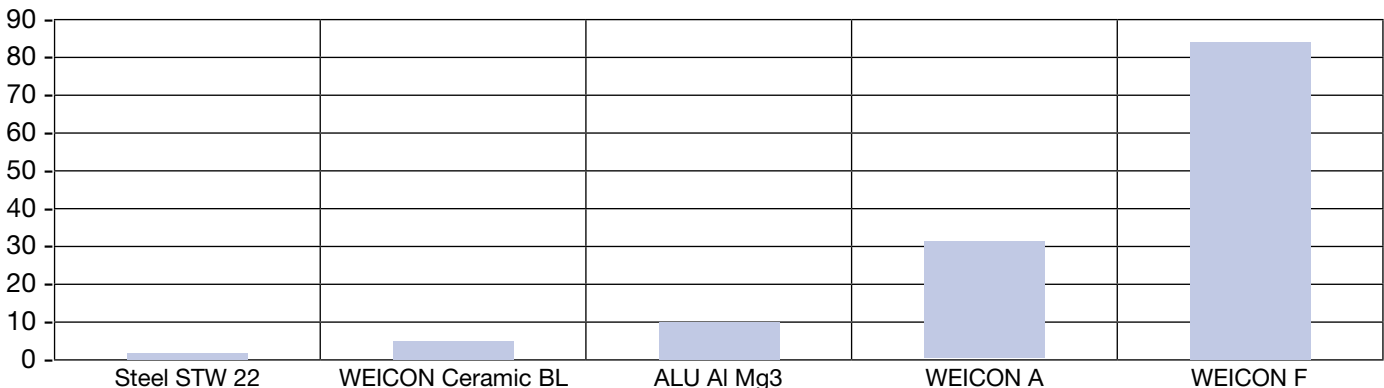
Acetic acid dilute < 5%	+	Hydrocarbons, aliphatic (crude oil derivatives)	+
Acetone	0	Hydrocarbons, aromatic (benzene, toluene, xylene)	-
Alkalis (basic materials)	+	Hydrochloric acid < 10%	+
Amyl acetate	+	Hydrochloric acid 10 - 20%	+
Amyl alcohols	+	Hydrofluoric acid dilute	0
Anhydrous ammonia 25%	+	Hydrogen peroxide < 30% (hydrogen superoxide)	+
Barium hydroxide	+	Impregnating oils	+
Butyl acetate	+	Magnesium hydroxide	+
Butyl alcohol	+	Maleic acid (cis-butenedioic acid)	+
Calcium hydroxide (slaked lime)	+	Methanol (methyl alcohol) < 85%	0
Carbolic acid (phenol)	-	Milk of lime	+
Carbon disulphide	+	Naphthalene	-
Carbon tetrachloride (tetrachloromethane)	+	Naphthene	-
Caustic potash solution	+	Nitric acid < 5%	0
Chlorinated water	+	Oils, minerals	+
Chloroacetic acid	-	Oils, vegetable and animal	+
Chloroform (trichloromethane)	0	Oxalic acid < 25% (ethanedioic acid)	+
Chlorosulphonic acid	-	Paraffin	+
Chromic acid	+	Perchloroethylene	0
Chroming baths	+	Petrol (92 - 100 octane)	+
Creosote oil	-	Phosphoric acid < 5%	+
Cresylic acid	-	Phthalic acid, phthalic acid anhydride	+
Crude oil	+	Potassium carbonate (potash solution)	+
Crude oil and crude oil products	+	Potassium hydroxide (caustic potash) 0-20%	+
Diesel fuel oil	+	Soda lye	+
Ethanol < 85% (ethyl alcohol)	0	Sodium bicarbonate (sodium hydrogen carbonate)	+
Ethyl alcohol	0	Sodium carbonate (soda)	+
Ethyl benzole	-	Sodium chloride (cooking salt)	+
Ethyl ether	+	Sodium hydroxide < 20% (caustic soda)	0
Exhaust gases	+	Sulphur dioxide	+
Formic acid >10%	-	Sulphuric acid < 5%	0
Glycerine (trihydroxypropane)	+	Tannic acid dilute < 7%	+
Glycol	0	Tetralin (tetrahydronaphthalene)	0
Grease, oils and waxes	+	Toluene	-
Heating oil, diesel	+	Trichloroethylene	0
Humic acid	+	Turpentine substitute (white spirit)	+
Hydrobromic acid < 10%	+	Xylene	-

+ = resistant    0 = resistant for a limited time    - = not resistant

\* Storage of all WEICON Plastic Metals was at +20°C chemical temperature

## Abrasion measurement according to Taber:

With the standard procedure according to Taber, the abrasion resistance of different materials can be measured. Abrasion is caused by two friction rollers that are pressed to the rotating test sample with a pre-defined force. The test samples are plates made of the corresponding material. (Details are available upon request).

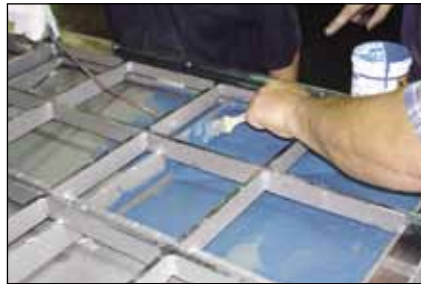


	Density (g/cm³)	Abrasion volume (mm³)
Steel STW 22	7,9	1,3
WEICON Ceramic BL	1,9	5
ALU Al Mg3	2,7	10
WEICON A	2,9	31
WEICON F	1,6	83

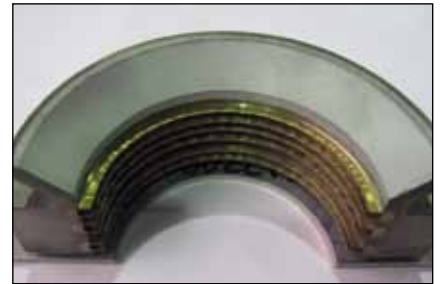
# Application samples



WEIDLING C - Repair of a crankshaft



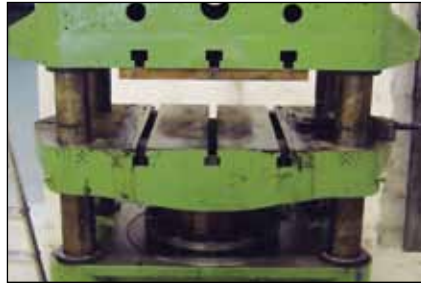
WEICON Ceramic BL - Coating of a mixed sieve system



Epoxy Resin Putty - Emergency start-up surface in a pump seal



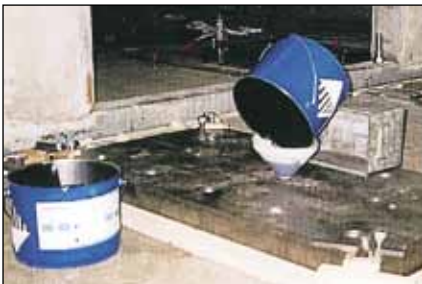
WEICON WR - Coating of a waste gas pipe



WEIDLING C - Manufacturing of a distance ring



WEICON Ceramic BL - Coating of a pump case lid



WEICON WR - Underpouring of a steel plates



WEICON WR - Coating of a CO<sub>2</sub> cleaning installation



WEICON HB 300 - Repair of a vertical screen in a paper factory



WEIDLING C - Repair of a turbo charger housing



WEICON Keramik BL - Coating of a pump case



WEICON WR - Fixing of a rifle barrel to the rifle butt



WEIDLING C - Manufacturing of cast aluminium patterns



Epoxy Resin Putty - Repair of a gearbox



WEICON WR - Underfilling of a live ring in a deck crane installation



WEICON Ceramic BL - Coating of pipe bends



WEICON WR - Coating of a rotatory pump



WEICON BR - Repair of a ship propeller

# Plastic Metal

## 2-component epoxy adhesives

- durable
- fast
- economical

*Distributed by:*



Repair of a feed impeller



Coating of pipes and pipe bends



Reconditioning of an aluminium housing



Breaking pad of a tambour brake

The specifications and recommendations given in this brochure must not be seen as guaranteed product characteristics. They are based on our laboratory tests and on practical experiences. Since individual application conditions are beyond our knowledge, control and responsibility, this information is provided only as a guide. We guarantee the high quality of our products, however, own adequate laboratory and practical tests to find out if the product in question meets the required properties are recommended. A claim cannot be derived from them. The user bears the only responsibility for non-appropriate or other than specified applications.

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