



VELOSIT is an innovative start-up organization. You will find decades of experience in R&D, production and consulting of high performance construction materials in our team.

We have made it our mission to supply solutions to accelerate the construction process. With VELOSIT products you will finish your project faster without compromising on quality.

VELOSIT offers alternative solutions to the construction based on the highest technical standards. The production „made in Germany“ stands for consistent premium quality.

## Questions? Please call us!

We can create individually tailored solutions for your problems.  
Our technical department can be reached at:

+ 49 (0) 5233 - 95 17 300



Hightech-coatings

# Polyurea systems





# Polyurea - an innovative material

Polyurea is formed by chemical reaction (polyaddition) of a di-isocyanate (NCO-R-NCO) and a polyamine (NH<sub>2</sub>-R-NH<sub>2</sub>).

Other than polyurethanes no toxic catalysts or crosslinkers are required to give a reaction within seconds. The resulting polymers show outstanding mechanical properties and may be used in versatile applications.

**VELOSIT** polyurea systems allow significant reduction of application times on both horizontal and vertical surfaces. **VELOSIT** polyurea protects concrete substrates against mechanical abrasion and chemical influences. Long lasting corrosion protection

can be achieved on steel.

**VELOSIT** polyurea is applied with heated dual component high pressure spray machines like the WIWA Duomix PU 460. The mixing of both material components happens in the spray gun at a pressure of 140-200 bar (2000-3000 psi) and a temperature between 70 and 80°C (160-180°F). For repairs and smaller applications hand applied materials are available.

**Unsere Anwendungstechnik kann für Ihre Anforderungen spezielle Systemaufbauten prüfen und anpassen.**

## Typical application fields for VELOSIT polyurea systems



### Hydraulic structures

Protective coating for sewage treatment plants, canals, potable water and sewage tanks, swimming pools, reservoirs and sewage pipes.



### Construction

Industrial floors and walls, production and warehouse areas with high abrasion, corrosion protection on metal structures, roof restoration, concrete floors, park decks, shutterings, joint grouting, tunnels and bridges.



### Food industry

Refrigerated warehouses, slaughterhouses.



### Energy

Refineries, pipelines, oil rigs (floor and walls), cooling towers, biogas facilities (interior and exterior silo coating), hydroelectric plants (dams and collection basins).



## Systems

### VELOSIT PU 400

- Universal polyurea coating
- Reacts within seconds
- High flexibility paired with extreme tensile strength
- High weathering resistance
- Permanent surface protection

### VELOSIT PU 403

- Chemical resistant coating
- Reacts within seconds
- High flexibility paired with extreme tensile strength
- High crack bridging
- Permanent surface protection
- Strong corrosion protection
- Resistant against elevated temperatures
- Ideal for use in chemically stressed areas (i.e. secondary containment, canal and pipeline construction, biogas facilities, truck beds)

### VELOSIT JF 421

- Hybrid polyurea joint filler
- Very good adhesion to edges
- 35 % joint movement
- back to service in 30 min.
- potential application fields in industrial, bridge and park deck construction
- Especially suitable for airport aprons and taxiways

### VELOSIT PU 411

- 1 component polyurethane primer for many substrates with limited moisture content

### VELOSIT PR 303

- Special primer for substrates with elevated moisture content

