

Solutions for TBM tunnelling

Modern mechanised tunnelling is unthinkable without using chemicals. Only the combination of good mechanical engineering and the use of modern chemical additives leads to an overall optimum in TBM tunnelling.

Normet Construction Chemicals are recognised worldwide in the tunnelling industry. Normet strives to understand your needs and requirements of our customers and offers specialised solution and consultancy aiming for highest productivity and safety.

Normet offers in addition to the complete range of specialty chemicals for EPB, Hard Rock and Slurry TBMs also chemical and machinery for the efficient construction of crosspassages, waterstop injection and soil stabilisation, sprayable watertight membranes and sprayed concrete solutions.

Foams & Polymers

- > **TamSoil 100CF / 200CF / 260CF (Foams)**
 - High performance tunnel-foams
- > **TamSoil 280AC (Anti-Clay)**
 - For clayey soils, increasing TBM speed.
- > **TamSoil 600CP (Polymer)**
 - For water bearing soils, increasing cohesion.
- > **TamSoil 800AD / 870AW (Anti-Wear)**
 - Anti-Wear and Anti-Dust foams

Annulus Grout Additives

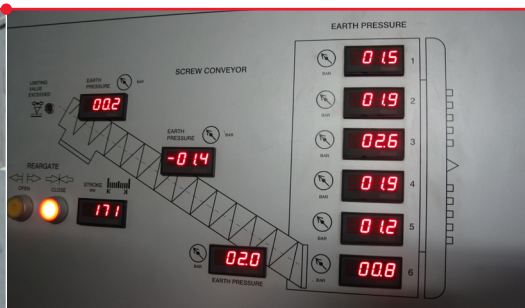
- > **TamCem 8BFG / 9BFG**
 - Stabiliser for grout - keeps the grout "alive" for 24 hours
- > **TamCem 23SSR**
 - Superplasticiser allowing high flowability
- > **TamCem HCA**
 - Highly efficient hydration control

Tail Sealants

- > **TamSeal TG1**
 - Standard driving grade
 - Especially developed for 2k grouts
- > **TamSeal TG2**
 - First fill grade
 - Highest protection of the brush seal

Main Bearing Greases

- > **TamGrease BS1**
 - Excluder grease
 - Based on vegetal and synthetic oils
- > **TamGrease BL11**
 - EP2 lubricating grease
 - Based on synthetic oils



Normet Construction Chemicals



Sprayed Concrete for Tunnel / Cross Passages

- > **TamShot 70AF / TamShot 80AF / TamShot 90AF / TamShot 110AF**
 - Alkali-free set accelerator for sprayed concrete applications
- > **TamCem 23SSR / TamCem 60**
 - Superplasticising concrete admixture
- > **TamCem HCA**
 - Liquid admixture for controlled concrete hydration
- > **Minimec**
 - Concrete spraying manipulator designed for smaller-scale sprayed concrete works
- > **Norstreamer 30V**
 - Trailer concrete pump designed to be used in tunnelling worksites
- > **Spraymec 8100**
 - Sprayed concrete equipment for standard large tunnel profiles

Sprayable Watertight membranes

- > **TamSeal 800**
 - High performance waterproofing membrane

Pre-injection

- > **TamCrete MFC**
 - Microfine Injection Cement
- > **TamCrete UFC**
 - Ultra-fine Portland cement for injection
- > **TamCrete 400CS**
 - Colloidal silica for soil and rock injection

Soil Stabilisation for Cross Passages / Start & Receipt Shafts

- > **Tam GeoTek AC**
 - Acrylic injection gel
- > **Tam GeoTek CS**
 - Colloidal silica for soil and rock injection
- > **Tam GeoTek HS**
 - 2-Component polyurethane grout
- > **Tam GeoTek LV**
 - Stabilisation, underpinning and consolidation polyurethane grout
- > **Tam GeoTek MF**
 - Microfine injection cement
- > **Tam GeoTek SM**
 - Silicate modified flexible polyurethane injection resin
- > **Tam GeoTek SS**
 - Sodium silicate for soil and rock injection
- > **Tam GeoTek VF**
 - Highly reactive, two-component urea-silicate foam for filling cavities

Leak sealing

- > **TamPur 100**
 - Water stopping and soil stabilisation polyurethane resin
- > **TamPur 125**
 - 2-Component Rapid Setting Polyurethane Grout
- > **TamPur 130**
 - Semi-Flexible Polyurethane Grout
- > **TamPur 150**
 - Hydrophilic flexible polyurethane grout
- > **TamAcryl 2000**
 - Acrylic Injection Gel

