

SedimentCareProgram

Softurb LS

Hydropower plays an important role in meeting global energy demands. During operation, the hydraulic system is exposed to various environmental influences. One of these can be abrasive sediments. In order to ensure optimal operations, even when sediment loads occur, innovative, high-performance products are required.

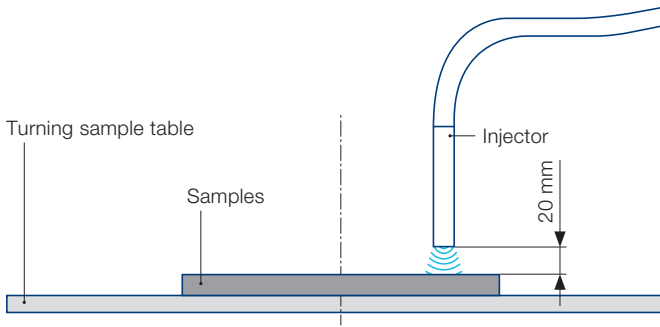
Enter Softurb LS, our latest advancement in hydro abrasion mitigation technology. It offers unparalleled abrasion protection for hydraulic equipment, safeguarding against damage induced by sediments during power generation. Featuring a soft coating that enhances surface resistance, Softurb LS delivers exceptional performance without the need for heavy machinery, enabling local repairs on-site and minimizing downtime. It's improved adhesion properties mitigate peeling effects, ensuring long-lasting protection even under high flow velocities.

With Softurb LS, hydropower station operators can maximize efficiency, reduce maintenance costs, and uphold environmental sustainability standards, all while ensuring the uninterrupted flow of energy and the preservation of river ecosystems.

Benefits

- **Extended lifespan:** Provides extended lifespan due to superior abrasion protection and reparability.
 - **Reduced maintenance costs:** Minimizes maintenance costs with on-site reparability.
 - **Enhanced performance:** Ensures consistent performance even in demanding conditions, minimizing downtime and maximizing efficiency.
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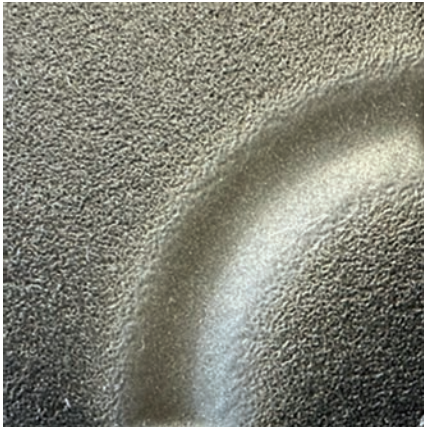
Test setup



- Distance of injector: 20 mm
- Sediment: garnet (grain size 0.1–0.3 mm; Mohs 7)
- Amount of sediment: 50 kg
- Test duration: 30 min
- Impingement angle: 90°
- Radius: 30 mm
- Water pressure: 100 bar

Steel 1.4313

Erosion depth: 700 µm



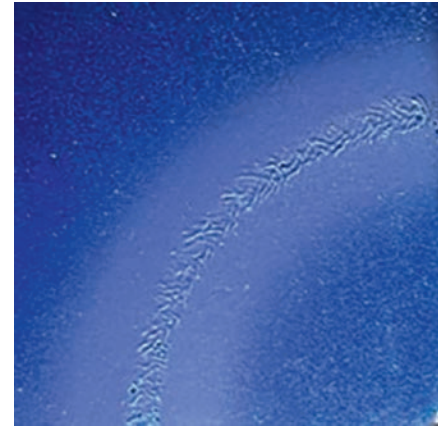
Market competition (1 mm)

Erosion depth: 190 µm



Softurb® LS (1 mm)

Erosion depth: 41 µm



Key features

1. Excellent abrasion protection: Provides superior protection against wear and tear, ensuring durability and longevity.
2. Versatile application: Can be applied without the need for heavy machinery, allowing for easy and flexible installation.
3. On-site repairs: Local repairs and maintenance are possible, minimizing downtime and reducing the need for disassembly.
4. Improved adhesion: Ensures strong adhesion to surfaces, preventing peeling effects and ensuring long-lasting performance.
5. Repairable and fast: Easily repairable with simple and fast procedures, saving time and resources.
6. Suitable for low head and medium head machines: enhancing reliability in hydro abrasive environments.



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<https://voith.com/corp-en/services/hyservice/sedimentmanagement.html>

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