



Advanced Engineered Solutions for Trenchless and Tunnel Construction

Capital United Canada is proud to introduce two specialty products designed to meet the demanding needs of underground construction, micro tunneling, and trenchless technology: **Special Mixture SP-1** and **Polymer SP**. These proprietary formulations are the result of collaborative development efforts with leading industry partners and tailored for complex geotechnical conditions.

Special Mixture SP-1

Premium Bentonite-Based Support Material for Underground Excavation

Special Mixture SP-1 is a high-performance blend of purified bentonite and mineral additives engineered for trenchless and tunnel construction. It is specifically formulated for stabilizing boreholes, annular voids, and tunnel shields under challenging geological conditions—such as collapsing soils, high permeability zones, or saturated ground.

Key Applications:

- Tunnel Boring Machine (TBM) operations
- Pipe jacking and microtunneling
- Horizontal Directional Drilling (HDD)
- Soil stabilization, ground improvement, and annular grouting

Product Highlights:

- Excellent sealing capacity and filtration control
- Enhanced borehole wall stability
- Reduced friction during pipe jacking and TBM operations
- High water absorption and swelling index
- Compliant with API standards for gel strength and fluid loss

[Download Technical Data Sheet (PDF)] – *(Add link once uploaded)*

Polymer SP

High-Performance Polymer Additive for Bentonite Enhancement

Polymer SP is a specially formulated polymer-based additive designed to boost the performance of bentonite slurries used in trenchless construction. It improves viscosity, suspension stability, and overall borehole cleanliness, making it ideal for demanding HDD and TBM operations.

Key Applications:

- Enhancing bentonite slurry properties
- Improving cuttings transport and filtration control
- Increasing suspension stability in long bore paths
- Reducing fluid loss in coarse or unstable soils

Product Highlights:

- Superior rheological behavior
- Compatible with various soil types
- Easy to mix and apply in field conditions
- Reduces environmental impact through efficient fluid recycling

[I will download Technical Data Sheet (PDF)] – *(Add link once uploaded)*

For technical specifications, custom formulation inquiries, or large-scale procurement, please [contact us](#) directly.