



# Mercedes Textiles Limited

"Flowing with Technology"

## MTSS-800™

**Municipal Attack Fire Hose**  
Premium all Synthetic Double Jacket  
400 PSIG / 2750 kPa Service Pressure

5838 Cypihot  
Saint Laurent, Quebec  
Canada, H4S 1Y5  
Tel : 514-335-4337  
Fax : 514-335-9633

**FOR THE COST CONSCIOUS FIRE SERVICE**



### Applications

- ▶ Pre-Connected Cross-Lay & Attack Hose
- ▶ De-Contamination & Wash Down Hose

### Features and Benefits

- ▶ Our Patented Mertex® lining process produces an amazingly thin but smooth inner waterway, yielding an extremely low friction loss for maximum flow.
- ▶ Available with Permatek™ HP treatment in a variety of colors, for even greater visibility & abrasion resistance. This treatment also greatly reduces moisture absorption through the jacket.
- ▶ Resistant to most chemicals, petrol products, ozone & U.V. exposure, hydrolysis, and rot & mildew.
- ▶ Will remain flexible to -40° F (-40° C).

### Patented Mertex® Lining Process

- ▶ Welds the lining directly to the textile while the hose is being woven.
- ▶ This allows the use of high strength Filament Polyester yarn to be used, due to the Mertex® process superior liner adhesion.
- ▶ Locks fibers together for greater strength while still allowing for a high flexibility.
- ▶ Creates a virtually inseparable bond without the use of adhesives. Huge advantage over competitors.
- ▶ Yields an extremely low friction (pressure) loss because the Mertex® process fills the corrugations of the weave, which creates an amazingly thin and smooth waterway.
- ▶ Mertex® lined hose produces lower elongation under pressure. This means less pull back when water is suddenly shut-off, resulting in a safe hose to work with.
- ▶ Permits manufacturing to special lengths. Consult factory for details.

### Permatek™ Treatment

- ▶ Available in the following Colors : Yellow(Y), Blue(B), Green(G), Red(R), Orange(O), Black(K), Tan(T), and Clear C.
- ▶ Locks fibers together for greater strength, reduces water pickup and absorption.
- ▶ Provides protection against abrasion.
- ▶ Provides resistance to Petroleum products and Ozone.
- ▶ Provides for shorter drying times.



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## Bid Specifications

### How to Specify MTSS-800™

#### Scope:

- ▶ Hose manufactured to this specification shall be of superior quality and workmanship. This heavy-duty double jacket fire hose shall be designed to withstand the rough usage of front line fire fighting.

#### Construction and Features:

- ▶ The hose shall be of double jacket construction.
- ▶ The outer jacket shall be made with virgin spun polyester warp yarn and a filament polyester weft yarn. Hose made using nylon or other materials shall not be considered as meeting this specification.
- ▶ Both inner and outer jackets shall be made with spun polyester yarns.
- ▶ The hose outer jacket shall have a minimum filler yarns of 10.0 per inch (394 per Meter)
- ▶ The hose shall be available in any of eight colors listed with our Permatek treatment, upon request.
- ▶ The hose shall be resistant to most chemicals and petrol products, rot & mildew, hydrolysis, and resist deterioration due to exposure to UV-rays and ozone.
- ▶ The hose must be of sufficient body and weight to meet the demands of heavy-duty fire fighting.

#### Performance:

- ▶ The hose, in all sizes, shall have minimum service, test, and burst pressures as specified in the Technical Chart. Hoses which do not meet these minimum pressures, shall not be considered as meeting this specification.
- ▶ The hose shall have a maximum flow with minimum friction loss.
- ▶ The hose jacket shall be highly abrasion resistant.
- ▶ There shall, be no defects, dirt, knots, lumps or other irregularities affecting the performance of the hose.
- ▶ The hose must resist kinking and remain flexible to -40°F (-40°C).

#### Lining:

- ▶ The hose lining shall have excellent resistance to most chemicals, petrol products, ozone and U.V.
- ▶ The hose lining shall be capable of being approved for potable water, when so ordered.
- ▶ The thermoplastic lining material used for this specification shall have a flawless record in the fire hose industry.
- ▶ The hose jacket shall be lined by the patented Mertex® method. The lining material in its molten state shall fill the corrugations of the weave fusing to every warp and filler thread and provide a very smooth and low friction waterway. No adhesive or backing material shall be used to bond the lining and it shall yield maximum flow with minimum friction loss. A hose manufactured by inverting an exterior coated hose shall not be considered as meeting this specification. Hose manufactured with the use of adhesives or backing for bonding the liner, or hose made with rubber liners shall not be considered as meeting this specification.

#### Treatment:

- ▶ When requested, the exterior jacket shall be Permatek® treated for greater abrasion resistance, improved visibility & reduced moisture pick-up.

#### Standards:

- ▶ Fire hose manufactured to this specification shall meet & exceed all performance requirements of NFPA 1961, Underwriter's Laboratories & Factory Mutual.

#### Technical Chart

Hose Spec	Trade Size		Bowl Size		Weight 50' (15.2M) Un-coupled		Coil Diameter 50' (15.2M)		Service Pressure		Proof Pressure		Burst PSI	Pressure kPa
	In.	mm	In.	mm	Lbs	Kg	In.	Cm.	PSI	kPa	PSI	kPa		
429	1.50	38	1 13/16	46	11.0	5.0	15.5	39.4	400	2,750	800	5,500	1,200	8,275
430	1.75	44	2	51	13.0	5.9	15.5	39.4	400	2,750	800	5,500	1,200	8,275
432	2.50	64	2 7/8	73	20.0	9.1	16.5	41.9	400	2,750	800	5,500	1,200	8,275
433	3.00	76	3 5/16	84	26.0	11.8	18.0	45.7	400	2,750	800	5,500	1,200	8,275