

How can Maritime Application Rope Savers be helpful?

Fluoron's Maritime Application Rope Savers (MARS) bridge the gap between brand new, high-tech synthetic lines and worn deck equipment. Synthetic lines are safer, lighter, faster, and can have the same tensile strength as wire rope. Though a worthwhile investment, synthetic lines can be quickly damaged by weathered and worn deck equipment. MARS solves this problem! MARS is essentially a cover that installs directly over your worn and weathered deck equipment. Made of UHMW – the world's toughest plastic – MARS provides a smooth, durable, corrosion-resistant surface. With Fluoron's MARS on your deck equipment, the advantages of synthetic rope really shine!

What is UHMW anyway?

SRS is constructed of Ultra High Molecular Weight Polyethylene (UHMW) – literally the toughest plastic known! With a molecular weight of 3-6 million (compared to pipe grade high-density polyethylene with a molecular weight of 600,000) it demonstrates extreme wear resistance, even better than steel (see Sand-Slurry Test Results at left). Fluoron, Inc. has a patent on heat shrinkable UHMW-PE roll covers and is now utilizing their expertise to develop solutions for marine corrosion and wear issues.

Advantages of Fluoron's Maritime Application Rope Savers:

- Restores rusted rollers to a wear-resistant surface
- Prevents corrosion, therefore eliminating line chafing
- Eliminates maintenance; stays clean
- One-time installation takes just minutes

Physical Properties	Units	ASTM Test	Result
Density	gm/cm ³	D792	.930
Tensile strength at yield 73°F	psi	D638	3100
Elongation 73°F	%	D638	350
* Relative volumetric abrasion loss	*	*	100
Coefficient of friction 73°F on Steel	-	-	Static .15-.20 Dynamic .10-.20
IZOD impact strength 73°F	KJ/m ²	D4020-96	125
Hardness 73°F	-	D785	Shore D 62-66
Melting point	°F	D789	275° - 280°
Coefficient of linear thermal expansion	1/K	D696	2.0 x 10 ⁻⁴
Coefficient of service temperature in air (max)	°F	-	180
Volume resistivity	Ohm/cm	D257	>10 ¹⁵
Weatherability	Pigmented	-	Excellent
Color	-	-	Black
Abrasion Resistance	UHMW PE is the toughest of all plastics. The abrasion resistance of this polymer is equally impressive. In tests where specimens are rotated at 1,750 rpm (revolutions per minute) for 8 hours in 50% sand slurry, UHMW PE exhibits 10 times the abrasion resistance of carbon steel. This is more than double that of 6/6 polyamide and polyurethane and 80 times that of hard neoprene rubber. It is 3 times more abrasion resistant than the toughest elastomer, polyurethane.		

