

MP-1™

REFERENCE PERFORMANCE RESULTS

MP-1 is similar in handling/use to 100% polyester tails, with important benefits. MP-1's construction leads to decreased water retention, resulting in lower in-use weight for deck hands. Overall, strength and cost-per-moor beat 100% polyester in lab and field testing:

MP-1 FIELD TRIALS

BACKGROUND

- Common issue with pulled yarns and snags with 100% polyester line
- Used ropes take on a "wet dog" appearance
- Average historical 100% polyester line residual strength at 18 months retirement is 58% of minimum break strength

TRIAL ROPES

- Four 100% polyester tails per vessel
- Four MP-1 tails per vessel

TESTING PLAN STARTED SEPT./OCT. 2015

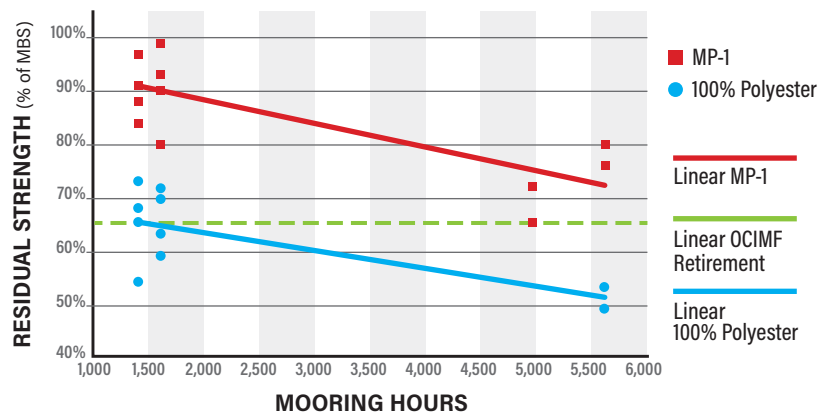
- Remove two 100% polyester tails and two MP-1 tails at 6 months AND 18+ months use
- Inspect and test for residual strength

LAB EVALUATION

- Dock-side abrasion testing showed, after 42 miles of wear (simulated), MP-1 had 89% residual strength, vs 73% held by 100% polyester line

FIELD TRIALS

- 6-month on-vessel testing showed MP-1 with 90–91% of residual strength, while 100% polyester had 65% residual strength
- 18+ month on-vessel testing showed MP-1 with 68–78% of residual strength, while 100% polyester had only 51–54%



MP-1 exceeds OCIMF recommended residual strength at retirement. 100% polyester lines fall below OCIMF recommended residual strength at only 8 months.

COST PER MOOR	MP-1	100% POLYESTER
DIAMETER STRENGTH (pounds)	3 INCH DIAMETER 208,000 LB MBS	2-3/8 INCH DIAMETER 208,000 LB MBS
TAIL SPECS (meters)	22 meter over all length 1m eye & 2m eye (CCEEE)	22 meter over all length 1m eye & 2m eye (CCEEE)
LIST PRICE	\$1,604	\$1,533
MOORING HOURS (To OCIMF Retirement)	65% MBS 8,900 HOURS	65% MBS 4,000 HOURS
COST PER MOOR	\$0.18/HOUR	\$0.38/HOUR