

# Look, no Torque!

**Torque matched rope design successfully tested!**



**When a synthetic mooring lines are combined with wire ropes in one mooring leg, the wire will twist/untwist as a result of the cyclic loading of the mooring leg. This twisting action of the wire rope drastically reduces its lifetime.**

To solve this problem Bexco has designed a rope that matches torque over a wide range of tensions going from 0% to over 50% of its MBL. To prove its performance the rope was submitted to a full scale test Houston witnessed by representatives of Interroom, Noble Denton,

ABS and Moorwest. In this test a mooring leg, consisting of a 89mm 6X52 IWRC steel wire in combination with a 150mm polyester rope, was subjected to cyclic loading around different load levels ranging from 15% up to 55% of rope MBL. This test proved rotation well below 5° per lay length (as prescribed by ABS and ISO) over the complete tension range from 15%-55% of the ropes' MBL. This means that this new rope not only avoids fatigue damage to steel wire at the service load of the mooring leg but also at loads occurring during storm conditions.