



Systems engineered with wire rope, synthetic fibre rope and chain are often complex.

Rope material, the design and construction can have a profound effect on the system performance and lifetime. Technical textiles need a rigorous engineering approach to meet the demands of tough industrial applications.

Electromechanical Cables for offshore and defense applications must be as small as possible and yet exceptionally robust.

TTI has the knowledge and the strength in personnel to provide a total systems approach, from concept to realization. The company's staff includes leading industry experts and distinguished academics. TTI has an extensive engineering database

The company is dedicated to deliver on time and within budget.

Original Research & Development

- Innovation
- New Software

Testing

- Test Programme Design
- Interpretation of Results

Component Design

- Selection of Fibre
- Rope or Fabric Construction
- Associated Hardware

Component Manufacture

- Method
- Quality Control
- Quality Assurance

System Design

- System Response (e.g. energy

absorption, load excursion etc)

- Lifetime Prediction
- Relevant Regulations & Guidelines

System Installation

- Method & Manuals
- Supervision

System Monitoring

- Retirement Criteria

Project Management

- Specifications for Purchasing
- Supplier Review
- Procurement
- Documentation
- Overall Management & Budget Control

TTI will interface seamlessly with the customer by, for example, adopting the customer's documentation and procedures.



TTI ACHIEVEMENTS

Software

Fibre Rope Modeller - Rope Design and Analysis

OPTIMOOR – Vessel Mooring Analysis

NET – Riser Protection Net

OPTI-LIFE - Hawser Life Prediction

JIP's / R & D

Fibre Tethers 2000

Durability of Polyester Ropes

Engineers Design Guide for Deepwater

Fibre Moorings

The Testing and Optimisation of full

scale fibre FPS Mooring lines

NDT for Fibre Ropes

Projects

- Mooring analysis of 1300m water depth polyester moored FPSO
- Novel design of yacht marina mooring, marina breakwater and RNLI lifeboat mooring using nylon rope
- Design of taut moored semi-submersible in Scottish Loch
- HMPE spread moored 96,000dwt OBOE in Norwegian fjord
- High tensile and fatigue efficient splice design/specification from 10 to 1500tonne
- Study of wave action on LNG carriers at exposed terminal and redesign mooring
- Mooring analysis for new build jetty for gas carriers up to 200,00cm
- Design upgrade/specification to jetty to take larger product carriers with light weight HMPE mooring system

For further information and a demonstration, contact:

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Consultancy, Design
and Engineering Services
in Ropes, Textiles and
Marine Systems

