Rochester Cable

Company Overview

Engineered cable solutions for harsh environments

Founded in 1794, Rochester Cable is one of the oldest manufacturers in the United States.

Who we are

From our headquarters in Culpeper, Virginia, we design and manufacture rugged cable solutions for customers operating in harsh environments beneath the ocean, downhole, and in mission-critical systems. Our work supports industries where cables must withstand motion, pressure, abrasion, temperature swings, and service life. What makes Rochester Cable different is how we work: we bring engineering, manufacturing, and testing together with a consultative approach, so customers get a cable that's built to perform in the conditions they're actually facing, not just theoretical ones.

What customers can rely on

In-house collaboration from early requirements through build and validation

Design flexibility to meet electrical, mechanical, and environmental needs

Manufacturing discipline focused on consistency and quality

Testing capability aligned with high-performance expectations

Built for high-stakes work

Rochester Cable is built around disciplined execution. We operate with a quality-first mindset and documentation practices that support compliance-driven requirements, so customers can trust that what is approved is what gets built. That consistency matters when cables are part of larger systems, long service lives, and high-stakes environments.

Our Certifications: Recognized for meeting quality, safety, and compliance requirements.

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Backed by Hexatronic. Made for harsh environments.

Rochester Cable is part of the Hexatronic Group, a global leader in fiber-optic and connectivity solutions. Headquartered in Sweden, Hexatronic supports customers worldwide with advanced technology, strong engineering capabilities, and a long-term commitment to manufacturing and innovation.

What Hexatronic brings

- **Global reach and capability** to support customers across regions
- **Investment in technology and manufacturing** that strengthens reliability
- **Shared engineering expertise** across products, markets, and operating entities
- **A commitment to responsible, innovative growth** and continuous improvement

Hexatronic Harsh Environment

At Hexatronic, we operate in the Harsh Environment business area, which specializes in cable and connectivity solutions designed to withstand extreme and demanding conditions. As part of this business area, Rochester Cable contributes specialized experience in rugged cable design and manufacturing for harsh-environment applications.

What Harsh Environment enables

- **Specialization for extreme conditions**—pressure, abrasion, temperature, motion, and endurance
- **Complementary capabilities** across the business area to support complex requirements
- **A broader toolkit for customers** operating in unforgiving environments
- **A focus on performance under real-world conditions** where failure isn't an option

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Solutions for harsh environments

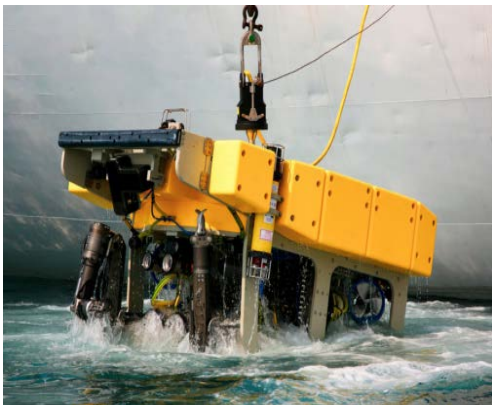
Rochester Cable designs and manufactures cable solutions tailored to harsh-environment applications where performance, reliability, and durability matter most. We support customers across industries with rugged designs built to withstand demanding operational conditions and perform consistently over time.

Markets and Capabilities

Work Class ROVs
Durable cables for tethering, lifting, and deck operations in subsea environments.

Oil and Gas Exploration and Production
High-performance cables engineered for pressure, temperature, and demanding offshore conditions.

Downhole Logging
Advanced wireline solutions designed for harsh downhole environments and rugged performance.



Defense
Precision-engineered cables for mission-critical naval operations and advanced sensor systems.

Ocean Research
Rugged cable solutions for underwater exploration, monitoring, mapping, and marine systems.

Renewable Energy
Cables built to support wind, tidal, and other renewable energy systems in challenging environments.

Custom Cable Designs
Tailored solutions engineered in-house to meet unique electrical, mechanical, and environmental requirements.

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Work Class Remote Operated Vehicles (ROVs)

Work-class ROV systems depend on cable solutions that can handle motion, load, and exposure without becoming the weak point in the operation. Rochester Cable designs and manufactures ROV cables for harsh subsea conditions, with reliability and service life in mind.

Built for harsh environments

Our ROV cables are designed for challenging subsea conditions where motion, load, and exposure are part of daily operations.

Constructions are tailored to:

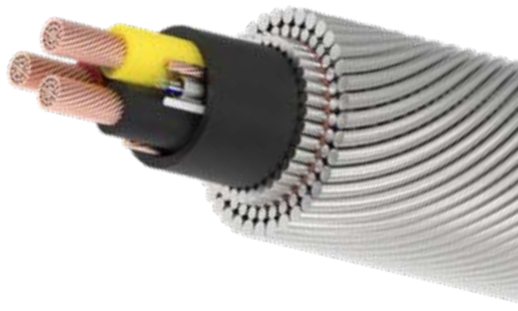
- Withstand dynamic handling and bend cycles
- Manage abrasion points and contact with sheaves, drums, and hardware
- Maintain performance over time in harsh marine environments

Cable types:

- Lift umbilicals
- Tethers
- Deck cables

Use cases

- ROV tethering and subsea operations
- Lift and deck handling, where abrasion and repeated flex are common
- Marine environments where exposure and endurance are constant factors



Our capabilities

- Construction features matched to dynamic motion and handling
- Electro-optical configurations available as required
- Design support for mechanical and environmental requirements
- Testing and validation aligned to performance expectations
- STEEL-LIGHT™ and ELECTRO-LIGHT™ fiber solutions (single-mode / multi-mode configurations)

Designed for real-world handling

ROV environments create constant mechanical demand. We help customers align cable construction to how the cable is actually used—from deployment to recovery—so performance holds up over time.

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Oil and Gas Exploration and Production

Deepwater drilling and subsea production pose unique challenges, including extreme pressures and harsh conditions that demand reliable, high-performance solutions. Rochester Cable delivers rugged cable solutions engineered for critical offshore environments where durability and performance are essential.

Built for harsh environments

Deepwater and subsea environments place heavy demands on cable construction and long-term reliability.

Constructions are tailored to:

- Performance under pressure and harsh offshore exposure
- Construction durability for subsea environments and reliability
- Materials and armor selections aligned to application demands

Cable / component types:

- Subsea umbilical power/control components
- MUX control cable assemblies
- Instrumentation and control cables

Use cases

- Offshore drilling and exploration environments
- Subsea control systems and instrumentation
- Umbilical component integration for subsea applications

Our capabilities

- **MUX cables:** designed with lightweight armor for reliable data transmission and precise pressure control in blowout preventers (BOPs)
- Construction options, including **steel armor, synthetic strength members, or armor-free designs**, integrated into larger umbilical systems
- Design support aligned to mechanical and environmental requirements
- Testing/validation aligned to performance expectations

Designed for real-world integration

Subsea systems depend on components that integrate cleanly into larger assemblies and hold up over time. We help align cable construction to how it will be installed, protected, and operated—so performance remains dependable in the field.

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Downhole Logging

Rochester Cable brings **60 years of experience** supporting downhole logging with cable solutions built for demanding wellsite conditions where reliability, endurance, and performance are essential. Our constructions are designed to hold up through field handling and harsh downhole environments, including pressure, temperature, and abrasion.

Built for harsh environments

Downhole environments place heavy demands on cable construction, durability, and long-term reliability.

Constructions are tailored to:

- Motion endurance under bend and repeated handling
- Mechanical durability in demanding wellsite conditions
- Custom armor packages aligned to application demands
- Materials selected for exposure and long service life

Cable types:

- Single- and multi-conductor wireline
- Fiber wireline
- Alloy wireline
- Custom wireline designs

Use cases

- Downhole logging operations in harsh wellsite environments
- Applications requiring dependable performance under repeated handling and long runs
- Systems where data integrity and durability are critical

Our capabilities

- Construction matched to handling and endurance requirements
- Design support for mechanical and environmental requirements
- Testing and validation aligned to performance expectations
- **Jacketed wireline** (greaseless technology): uses a flexible polymer outer jacket to help **eliminate exposed armor wires**, **reduce environmental impact**, and **enhance durability**

Designed for real-world handling

Downhole logging operations create constant mechanical demand. We help customers align cable construction to how the cable is actually used—from deployment to retrieval, so performance holds up over time.

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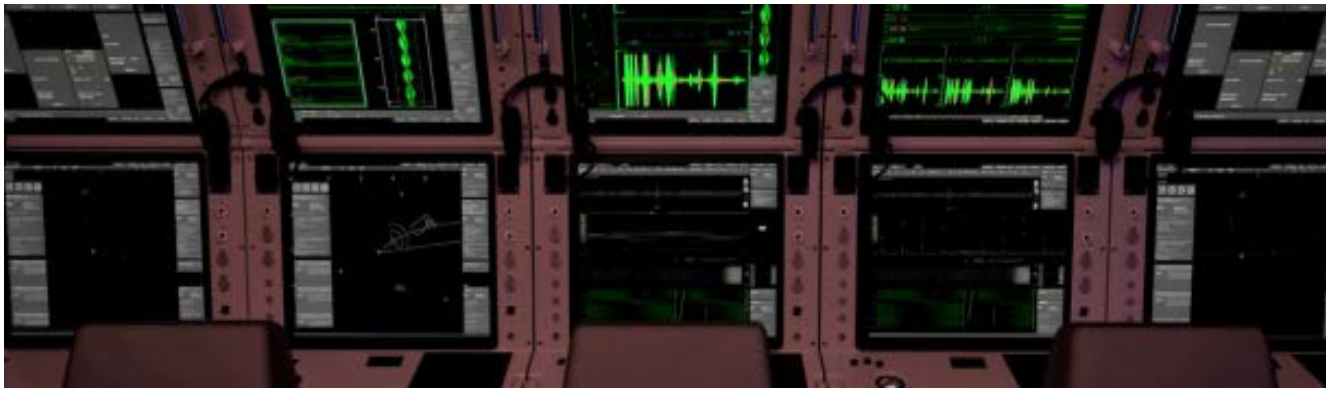
Defense

Defense programs require cable solutions that perform in harsh environments and meet strict specifications. Rochester Cable manufactures engineered cable solutions in the U.S., designed for defense requirements where reliability, traceability, and performance expectations matter.



Built for harsh environments

Defense environments demand consistency, traceability, and performance under tough operating conditions.

Constructions are tailored to:

- Durability in harsh marine environments and service life
- Mechanical performance aligned to handling and installation realities
- Electrical/optical performance matched to system requirements
- Validation expectations defined early in the process

Cable types:

- Shielded signal and communication cables
- Electro-optical cables
- Rugged power/control cables
- Custom cable designs matched to specification requirements

Use cases

- Naval and maritime defense environments
- Undersea systems and mission-critical sensing applications
- Programs requiring high reliability and specification-driven builds

Our capabilities

- U.S.-based manufacturing support and responsive collaboration
- Engineered-to-requirement builds for mission-critical applications
- Designs for mechanical, electrical, and environmental requirements
- Testing and validation aligned to performance expectations
- ITAR registered

Designed for specification-driven requirements

Defense programs depend on getting details right—materials, construction, documentation, and performance expectations. We work with customers to align cable design to real operating conditions and the requirements that matter most.

ITAR registered for defense program compliance.

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Ocean Research

Ocean research depends on cable solutions that hold up through repeated deployment, retrieval, and long exposure in harsh marine environments. Rochester Cable supports ocean research programs with engineered cable solutions designed for service life, reliability, and real-world handling on vessels and in undersea operations.

Built for harsh environments

Ocean research environments demand performance under handling, exposure, and long deployments.

Constructions are tailored to:

- Mechanical durability for repeated deployment and retrieval
- Materials selected for harsh marine exposure and long service life
- Construction features aligned to routing, abrasion points, and bend cycles
- Requirements defined early to match validation and performance expectations

Cable types:

- Tow cables
- Winch/deck handling cables
- Electro-optical cables
- Custom cable designs

Use cases

- Research vessel operations and deck handling
- Undersea deployments where abrasion, routing, and bend cycles are common
- Long-duration marine exposure where endurance and reliability matter

Our capabilities

- Construction features matched to handling and endurance requirements
- Design support for mechanical, electrical, and environmental needs
- Testing and validation aligned to performance expectations
- Options that support instrumentation and sensing requirements when needed

Designed for real-world handling

Ocean research systems operate in complex environments. Cables get routed on deck, run through hardware, and cycled repeatedly over the life of a project. We help align cable construction to those realities so performance holds up over time.

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Renewable Energy

Renewable energy environments require reliable cable solutions that withstand exposure, have a long service life, and meet installation requirements. Rochester Cable produces engineered cable solutions that adhere to harsh-environment design principles to meet the renewable energy needs of applications where reliability and performance are crucial.

Built for harsh environments

Renewable environments place long-term demands on construction durability and performance consistency.

Constructions are tailored to:

- Materials chosen for durability and resistance to long-term exposure
- Mechanical durability aligned to installation and handling realities
- Performance expectations defined early for the right validation approach
- Construction features matched to electrical and environmental requirements

Cable / solution types

- Umbilical components
- Control and instrumentation cables
- Rugged power/control cables
- Custom cable designs

Use cases

- Renewable energy infrastructure operating in demanding environments
- Installations where durability, routing, and service life are key concerns
- Projects requiring specification-driven builds and validation expectations

Our capabilities

- Engineered-to-requirement builds for specification-driven projects
- Design support for electrical, mechanical, and environmental needs
- Testing and validation aligned to performance expectations

Designed for real-world installation

Cable performance depends on how it is installed, routed, protected, and maintained over time. We help align cable construction to real-world conditions, so designs meet the expectations defined in the field.

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Custom Cable Designs

Every harsh environment brings a different set of requirements. Rochester Cable partners with customers to engineer cable solutions that align to real operating conditions—mechanical demands, environmental exposure, electrical performance, and operational continuity. Our in-house approach brings engineering, manufacturing, and validation together so customers can move from requirements to a buildable design with confidence.

How customization works

Consultation
Define operating conditions, constraints, and performance targets.

Design
Engineer construction, materials, and configuration to requirements.

Build
Manufacture with disciplined process control and quality focus.

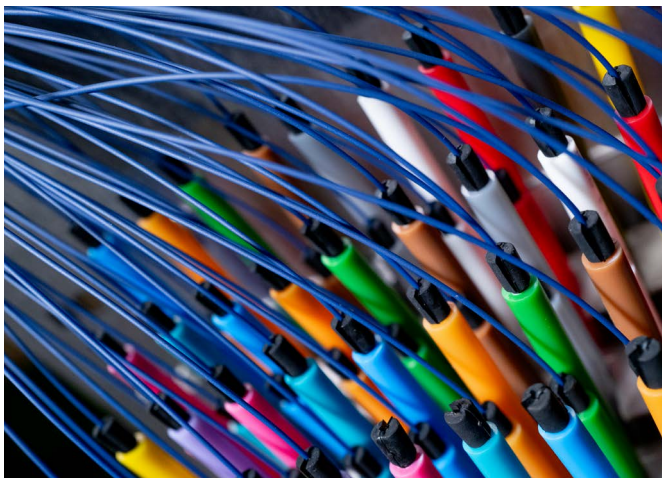
Test & validate
Confirm performance against expectations and requirements.

How we approach custom design

We turn real operating conditions into build decisions, selecting materials and construction features based on motion, pressure, abrasion, temperature exposure, and endurance targets.

Why customers choose a custom build

- **Reduce risk** by aligning construction to real service conditions
- **Improve reliability** where maintenance access is limited
- **Support demanding environments** with engineered durability
- **Avoid overbuilding** by making the right choices early



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Construction Options

Custom design isn't one decision. It's a set of engineered choices that shape durability, reliability, and long-term performance. We help customers evaluate trade-offs and select construction features that align to the application's mechanical, electrical, and environmental requirements.

Electrical requirements

- High-speed data transmission rates
- Signal integrity for reliable communication
- Electromagnetic compatibility (EMC) compliance

Mechanical performance

- Weight optimization
- Length adaptability
- Hydrostatic pressure resistance
- Size precision
- High tensile strength

Environmental endurance

- Materials selected for abrasion, saltwater exposure, pressure, and temperature
- Jacket selection aligned to the operating environment
- Drag and tension endurance
- Durability for long-term performance

Testing and validation

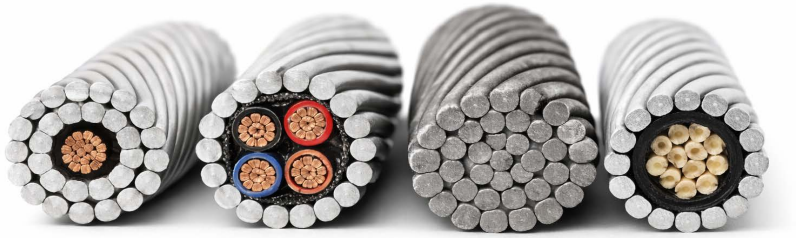
- Individual armor wire break
- Cable break load testing
- Torque, rotation, and elongation
- Cyclic bend-over-sheave

Armor Packages

- Synthetic armor for lightweight flexibility
- Steel-wire armor for maximum strength
- Alloy-wire armor for specialized applications

Cable construction

- **Configurations:** Power, signal, coaxial, fiber optic, composite
- **Fiber packages:** Fiber-In-Steel Tube, STEEL-LIGHT™, ELECTRO-LIGHT™
- **Conductor styles:** Standard wall design, SPEC 44 Technology



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Built for the challenge

Harsh environments don’t leave room for guesswork. Rochester Cable engineers and manufactures cable solutions built for real service conditions, so performance holds up when access is limited, and reliability matters most. Our in-house approach connects design, build, and validation to reduce surprises and improve long-term confidence.

Bring us your requirements, constraints, or even a partial spec, and we’ll help you define the path forward.

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Taming harsh environments

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Rochester Cable designs and manufactures custom cables for harsh environments. With a history dating back to 1794, and as one of the oldest manufacturers in the United States, we deliver reliable solutions for oil and gas, oceanographic research, defense, and industrial applications. As part of Hexatronic Group, we combine legacy expertise with global innovation to support customers worldwide.

Let’s build the right solution

Connect with our team to confirm requirements and recommended constructions for your application.

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Scan to explore our solutions