



# tailor-made in europe

manufacturing solutions  
from glass to cable

ROSENDAHL NEXTROM. here for you

[rosendahlnextrom.com](https://rosendahlnextrom.com)





shaping the future  
of technology -  
today

# quality that leads to success

At Rosendahl Nextrom, each piece of machinery is 100% tailor-made in Europe according to your specific needs.

We have been specializing in fiber optic technology for almost half a century, putting great emphasis on research and the continuous development of our technologies.

## key expertises include

- Fabrication of high-purity optical glass preforms
- Drawing & proof-testing of optical fibers
- Application of UV-curable acrylates on fibers
- Producing high-quality fiber optic cables



# telecom preforms

Achieve perfection in optical preform production. Nextrom provides all necessary steps to manufacture high quality optical preforms.

Nextrom offers two complementing process steps in manufacturing first-rate optical telecom preforms to draw the highest of quality optical fibers.

- Nextrom's innovative VAD process empowers you to create robust and flawless preforms and core structures.
- Nextrom's Vapor Deposition OVD - cladding is more than just a protective layer; it is the envelope that ensures the effective confinement and transmission of light within the core.



” With our tailor-made equipment  
you can maximize your production  
output from start to finish.



#### solutions for VAD production

**OFC 04C** Core Deposition System

**OFC 08C** Core Sintering System

**OFC 09C** Core Degassing System

**OFC 15** Glass Working Lathe

**OFC 17** Core Stretching System

#### solutions for OVD production

**OFC 05** Clad Deposition System

**OFC 08** Clad Sintering System

**OFC 09** Clad Degassing System

**OFC 15** Glass Working Lathe

**OFC 19** Tip Forming System



*watch the video of  
Nextrom's optical  
fiber preform  
factory*

# telecom fiber draw

OFC 20 Fiber Draw Tower for Telecom Fiber is paving the way for a seamless and high-speed future for high-quality optical fiber production with unmatched precision, speed and quality.

- State-of-the-art user interface, with real-time data and comprehensive control features optimizes performance and minimizes downtime.
- Helium recovery system for optical fiber draw process – recover 90 % of the Helium used in the draw process
- Nextrom induction furnace – reduce the energy consumption of the process by 50 %





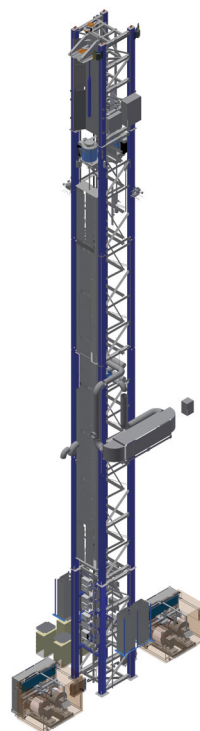
A variety of components are available to fulfill different customer requirements

### flexible construction

- Furnace solutions for large and small preforms
- Dynamic Iris for preforms with large outer diameter variations
- Fiber cooling solutions
- Helium Recovery Unit
- Wet-on-wet coating systems
- Refilling cabinet for coating system
- Acrylate delivery system
- Several different diameter measurement gauges
- Non-contact tension measurement systems
- A variety of start-up and master capstans
- Single and dual take-ups
- Advanced process control and data logging system



*watch the video of  
Nextrom's telecom  
draw*





# specialty fiber & preform

Nextrom offers a comprehensive range of customizable and cutting-edge manufacturing solutions for a wide range of specialty preforms and optical fibers.

The tower draws preforms of various types using either MCVD (modified chemical vapor deposition technology) or PCVD (plasma chemical vapor deposition technology).

## OFC 12 MCVD System

Widely used method for the fabrication of high-quality optical fiber preforms. MCVD results in long lifetime, low cost of ownership, quick set-up, and easily customized solutions. High purity stainless steel lines ensure no leakage or moisture intrusion and enables the highest possible complexity and quality of optical fiber preform production.

## OFC 11 PCVD System

Allows deposition of very thin layers of glass inside the deposition tube. These fine layers enable the production of many different accurate index profile types for the fiber industry. The PCVD process also allows for higher doping concentrations and significantly higher conversion efficiency compared to other deposition processes.





## OFC 20 SF Specialty Fiber Draw Tower

Specialty optical fibers are optimized for applications other than signal transmission, such as lasers, sensors, filters, ring resonators, etc. For such varied applications, there are hundreds of different specialty optical fiber types with many variations in glass composition, core and cladding structures, geometric properties, coatings, and specially tailored optical performance characteristics.



“ Nextrom puts the special into specialty fiber production.

The Nextrom OFC 20 SF fiber draw tower for specialty fiber production is available with different furnaces and precise preform feeding solutions for soft glass, silica, and plastic optical fibers . OFC 20SF Specialty Draw Tower also enables solutions for cane and capillary tube pulling as well as solutions for micro structured (or HCF – hollow core) fiber drawing

### range of fiber types

Single-mode

Hollow core/Antiresonant

Multi-mode

Laser fiber

Amplifier fiber

Holey fiber

Bragg fiber

Chalcogenide fiber



*watch the video of  
Nextrom's specialty  
fiber production*

# post draw & UV coating

In the fiber optic industry, post draw and UV coating equipment are essential for optical fibers. Post draw equipment tests the fiber strength and conditions the fiber to ensure long term reliability in deployment. These processes are critical for producing high-quality fibers for telecommunications and data transmission.

## Deuterium treatment

Nextrom's OFC 02 NDS deuterium treatment system treats Low Water Peak Fibers (ITU-G.652C) with deuterium gas. The properties of the optical fiber remain intact during the fiber's lifetime. The deuterium treatment ensures that OH-related attenuation does not rise during the lifetime of the optical fiber.

## Proof-testing

To meet the requirements of Telecom optical fiber properties, Nextrom offers three different solutions for the proof-testing process of your optical fibers.

- OFC 30 Proof Testing Line with Automatic Reel Change
- OFC 35 Proof testing and rewinding line
- OFC 55 Coloring & Proof Testing Line with Automatic Reel Change





## Coloring of Optical Fiber

As the fiber count is ever increasing in fiber optic cables, it's important to differentiate your optical fibers by using Nextrom's high-speed and reliable solutions for coloring.

Nextrom offers advanced high-speed coloring line OFC 52i along with, OFC 55 Coloring & Proof Testing Line with Automatic Reel Change that combines both coloring and proof-testing processes for faster and for more cost-efficient results.

With our Nextrom equipment, you can color all types of fibers. Also solutions for ring marking and upcoating can be added.

## Ribboning

Rosendahl Nextrom's OFC 21 High Speed Ribbon Line offers advanced cutting edge technology for the Ribbon process.

High quality ribbons with accurate dimensions and excellent optical properties are manufactured with this advanced, modular system.



*watch the video  
of Nextrom's Post  
Draw & UV Coating  
Solutions*



# fiber optic cable

Nextrom offers the most comprehensive range of production solutions for all types of fiber optic cables imaginable.

We provide Fiber Optic Cable lines that are specifically designed to complement each process step from start, all the way to the desired finished product.

This allows our customers to produce the high-quality fiber optic cables associated to our brand.

Fiber Optic Cable lines for loose or tight buffering optical fibers as well as tube extrusion for fiber bundles and ribbons to SZ-Stranding of the buffered fibers to be finalized by Jacketing/Sheathing process to create the outermost protection for the optical cables, for all previously mentioned fiber types.



customized production lines  
for indoor cables

## **OFC 42**

Tight Buffering Line

## **OFC 43**

Premises Cable Extrusion Line



*watch the video of  
Nextrom's Fiber  
Optic Cable  
Production*



We can provide you  
with the necessary tools  
to produce the desired  
cable range.



customized production lines  
for **outdoor** cables

**OFC 40**  
Secondary Coating Line

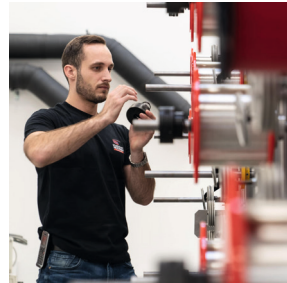
**OFC 60**  
Jacketing Line

**OFC 70**  
SZ-Stranding Line

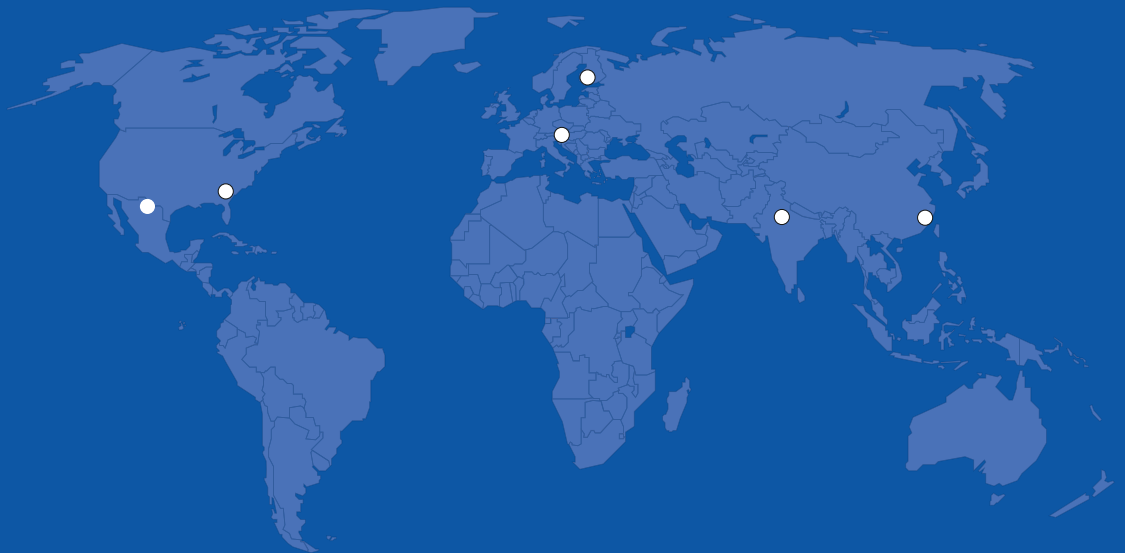
# we are a lifetime partner

Reliable support is key when working with complex machines. That's why we make it our mission to accompany and support you throughout the whole product lifetime. Our global network of sales and service centers and local partners provide first-class support anywhere in the world.

- Quick support
- Remote and online
- Trainings
- Line audit & inspection
- Upgrades



## our sales and service units worldwide



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