

MARK LANGLOIS

CAREER SUMMARY

Art Director, Founder and Owner

Langlois Design and Photography | June 1997 - Present

- Design, photography & Video Services for large corporate clients and small business.
- Wide range of design varied from print to digital assets. And the logistics behind it.
- Proficient in a variety of high end software applications in the creation of Design, Photography, 3D and video production including all of Adobe Creative Suite.

Senior Designer and Motion Graphics Content Producer

Hitachi Cable America, Hitachi Corporation | February 2008 - October 2022

- Responsible for all graphic design and content to be used in all aspect of print, digital and motion graphics projects.
- Worked with the engineering department to produce accurate 3D Models of various existing and proposed tech product.
- Production of finished video animations utilizing 3D Modeling, digital Photography and Videography.
- Collaborated with various levels and departments of Hitachi corporate both continental and overseas in efficient management of all large scale projects.

Creative Director of Content

CA&D | February 1995 - May 1997

- Responsible for all graphic design and content to be used in animation projects for video.
- Creation and animation of 3D models for rendering.
- After effects to create finished animation for finished video productions.

PERSONAL SUMMARY

A hardworking, collaborative, and results-driven founder and owner of Langlois Design and Photography. I am a Designer with years of experience handling all aspects of design and creative vision and the logistics involved.

When I am not working you can find me enjoying the outdoors backpacking, fly fishing, mountain biking and canoeing. Or working on our small rescue animal farm.

SPECIALIZATIONS

Graphic Design
Illustration
Photography
Motion Graphics
3D Design
Videography
Print
Branding

CONTACT INFORMATION

Phone: 603-867-4071
Email: langloisdesign@gmail.com
Address: Goshen, NH 03752
Website: <http://langloisdesign.net>



ACADEMIC HISTORY

NH Institute of Art

Degree in Photography & Design

- Sept 2004 to May 2008 - Graduated

MILITARY SERVICE

United States Air Force (USAF) Veteran

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PREMISE & FIBER OPTIC CABLE CATALOG

Hitachi Cable America Inc.



Whatever the Network Need, We've Got You Covered.

Hitchack Cable America (HCA) manufactures fiber optic cables, coaxial cables, shielded and unshielded twisted pair cables and hybrid cables to support wireless applications, such as DAS and Fiber to the Antenna (FTTA). Infrastructure for wireless technologies is currently experiencing exponential growth due to the dramatic increase in the use of wireless devices. As the Internet of Things (IoT) evolves and more and more devices become wirelessly networked, the demand and dependence on that wireless network grows. Additionally, many of the components of a wireless network also derive their power from their low-voltage link to the network. As a result, Power over Ethernet is growing in step with the spread of wireless networks. Hitchack Cable America currently offers a wide selection of cables and accessories to support your wireless network. If you are considering developing or expanding wireless capabilities, HCA has the cable for your specific needs.

 Hitachi Cable America Inc.

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CTADEL™
COMPUTER CORPORATION

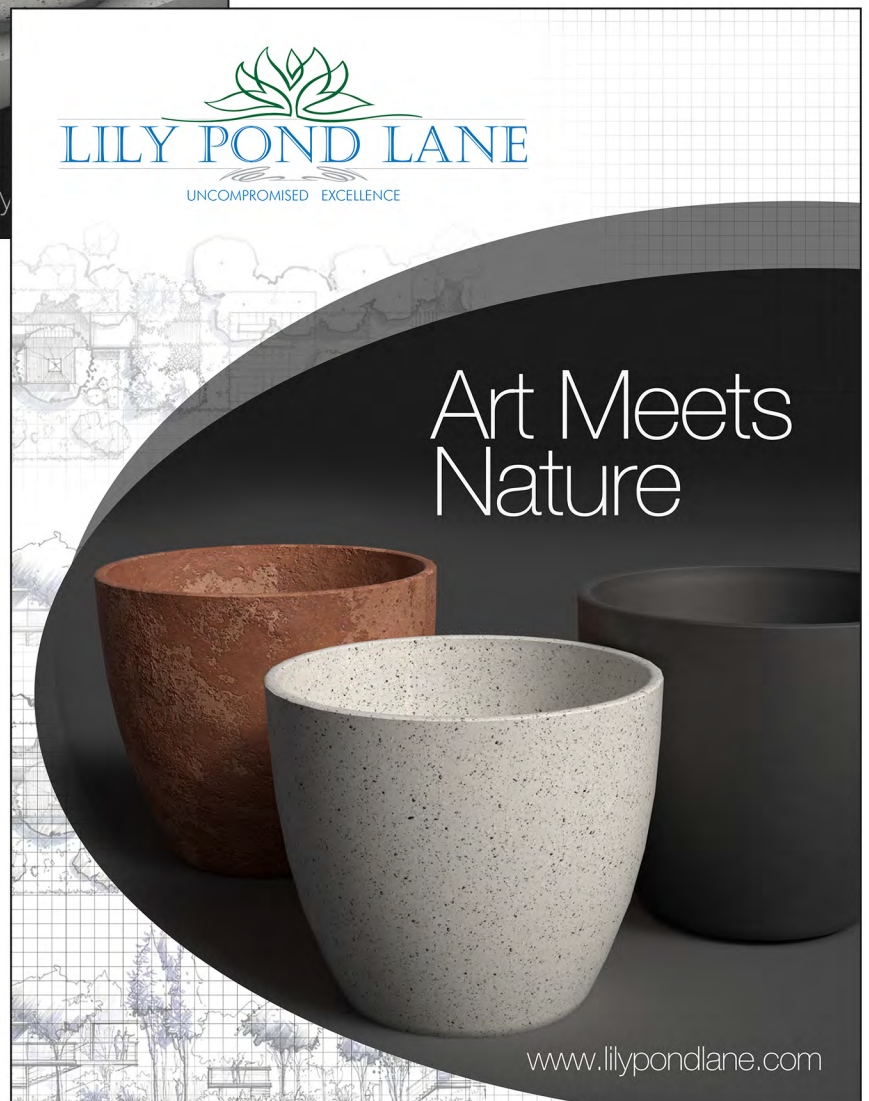
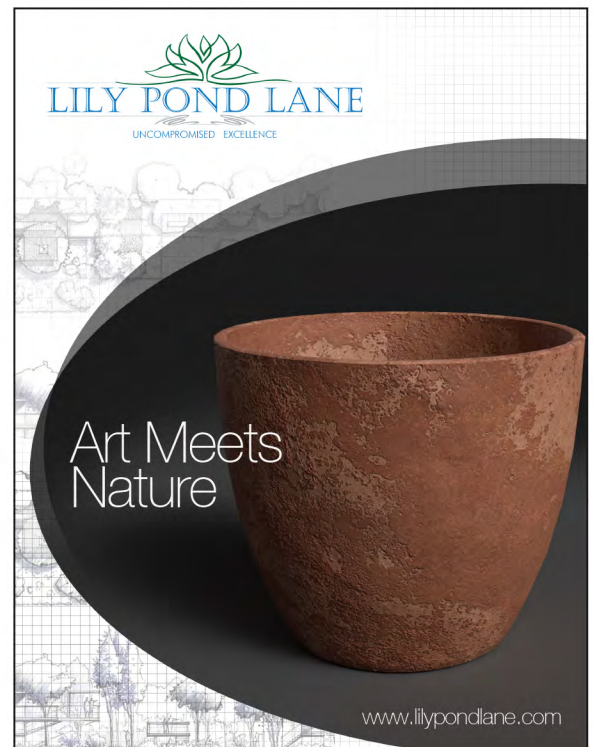
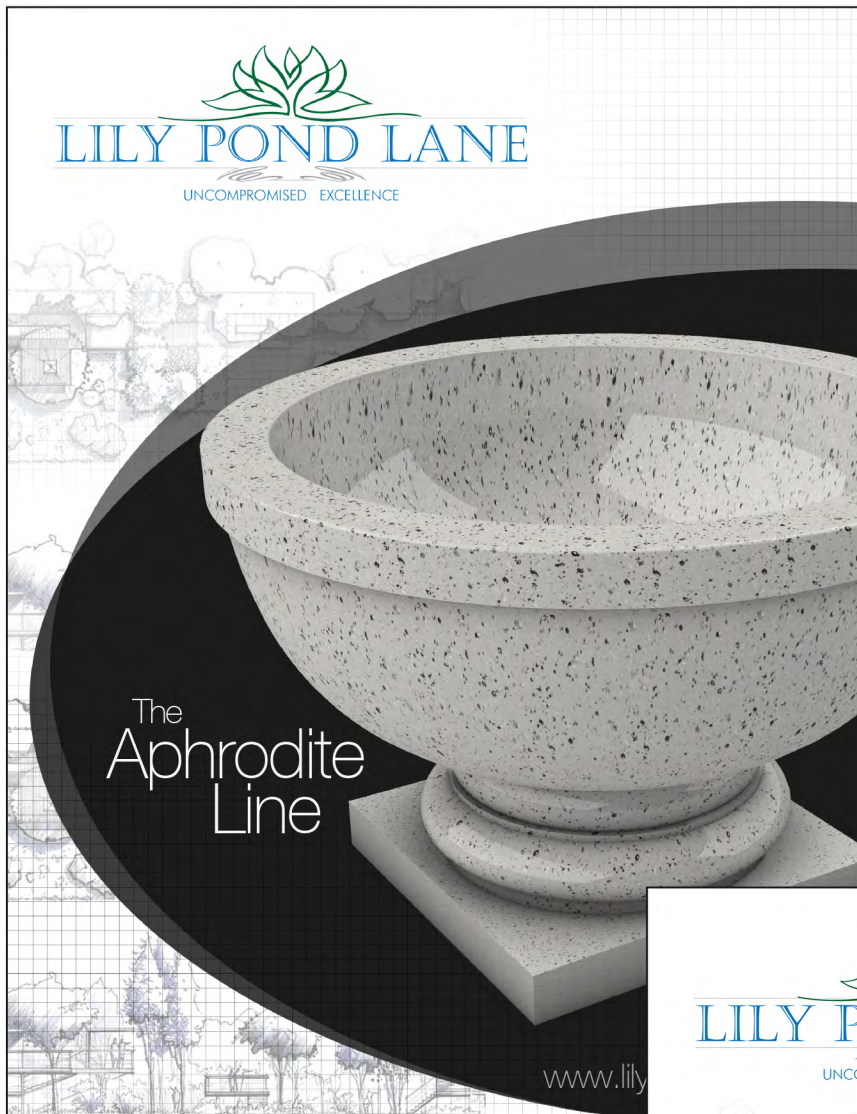
Material-handling
Cross-docking
Order Processing



CTADEL™
COMPUTER CORPORATION

HAZLOC INDUSTRIAL COMPUTERS

**Branding Project utilizing
3D Modeling and Rendering.**



3 Fold DOD Targeted brochure



"We build cable for mission critical programs to ensure mission success."



About Hitachi Cable

Since 1986, Hitachi Cable America (HCA) has been designing and building advanced communication cables for the telecommunications industry. Located in Manchester, New Hampshire, our 300,000 square foot facility produces over 4,000 different cables. Products manufactured include high performance copper and fiber optic communication cables, as well as flat and round electronics cables. HCA products are used worldwide across a wide spectrum of industries, including medical, financial, manufacturing and educational. HCA, however, is most proud of the products that have been chosen and are currently being used by the U.S. government. From our high-speed shielded Category 6A network cables to our armored fiber optic cables, HCA products are deployed not just in federal agencies across the U.S., but at its military installations both domestic and abroad. At HCA, we realize the important role our products play daily in keeping our country and those who defend her safe. And, with HCA's Open System Architecture approach to solution performance and solutions warranties, you're provided options that many of our competitors simply can't offer.

Visit our New Hampshire facility and you will see for yourself that no cable manufacturer is as dedicated to quality and performance as Hitachi Cable America is.



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Hitachi Cable America Inc.

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Hitachi Cable America Inc. **HITACHI**
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FEDERAL PRODUCTS & Applications



Access Control Security (CCTV)
PoE, PoE++
Wireless Access Points

Where are HCA products used?

SCIF Environments
Data Centers
Barracks
Cyber Security
Cloud Computing
Plenum Environments
Harsh Environments
SIPERNET
NIPERNET

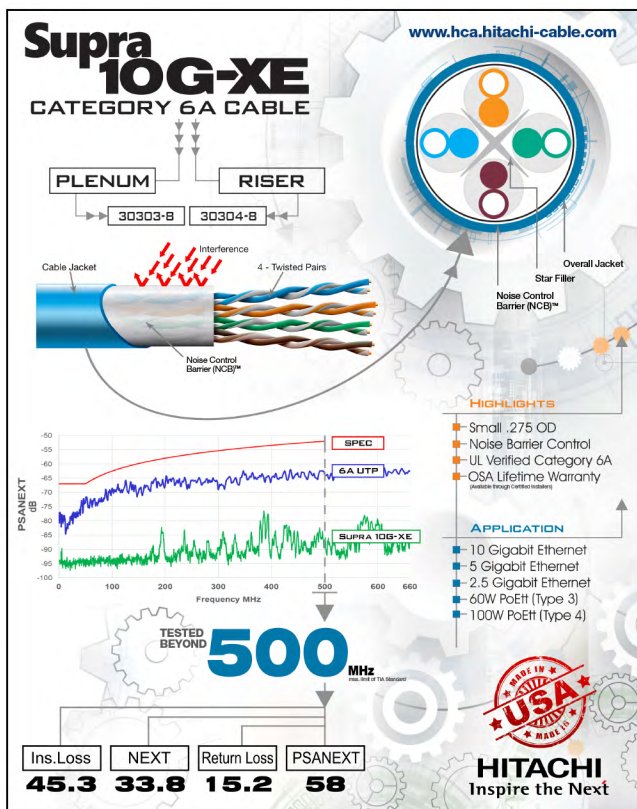
HCA Cables are TEMPEST approved.






Fiber Optic Cables (From 1 to 432 Strands)
Indoor Armored
Indoor Tight Buffered
Indoor Loose Tube for MTP/MPO Connectors
Indoor/Outdoor Rated
Indoor/Outdoor Armored Tight Buffered Plenum Rated
Outside Plant High Strand Count Gel Filled
Outside Plant Armored
Custom Fiber Cables

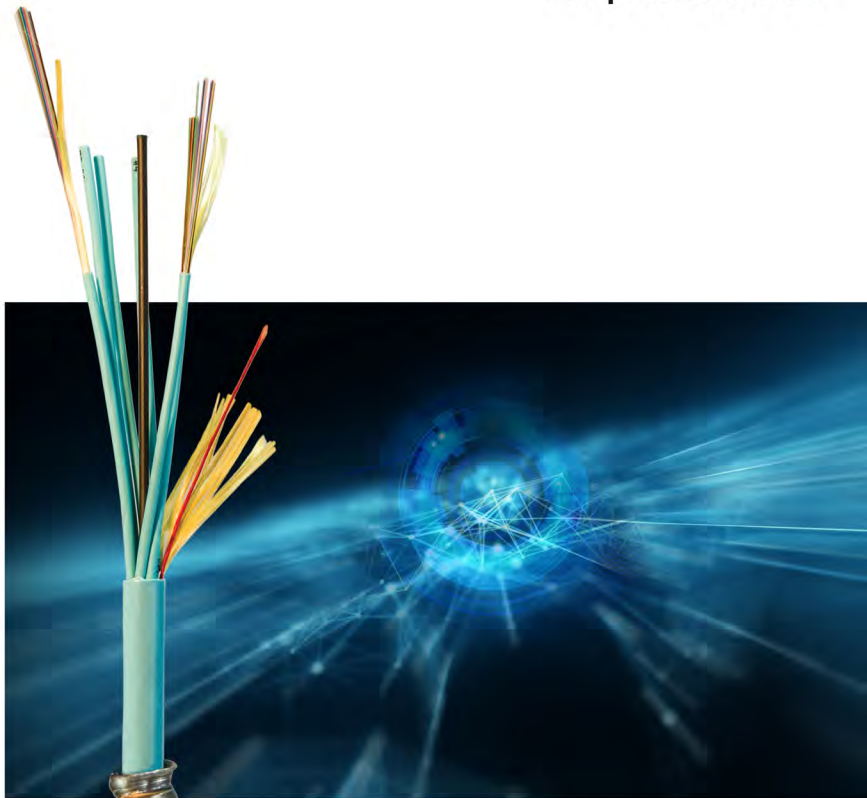




Examples of InfoGraphics

Hitachi Cable America Inc.

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Tight Buffered Interconnect & NanoCore™ Micro Distribution Fiber Optic Cables



Hitachi Cable America Inc.

Located in Manchester, New Hampshire, Hitachi Cable America (HCA) 300,000 square-foot facility produces over 4,500 unique cable constructions. HCA has been manufacturing cables at this facility since 1986 and operates 24/7 to supply demand. In addition to producing network related cables, HCA builds cables for the medical industry, the cellular phone industry, industrial applications, supercomputing and more.

Products from Hitachi Cable America Include:

- Category 5e, 6 & 6A Cables
- Category 7, 7A & 8 Cables
- Fiber Optic Cables (indoor, outdoor & armored)
- NanoCore™ Micro Distribution Fiber Optic Cables
- Industrial Ethernet Cables
- Coaxial & Mini-coaxial Cables
- Distributed Antenna System Cables
- Round & Ribbon Electronic Cables
- MudGuard-EX™ Drilling Mud Resistant Cables



HCA is proud to use Corning Optical Glass in all standard fiber optic cable constructions.



For more information about Open System Architecture, please contact us.

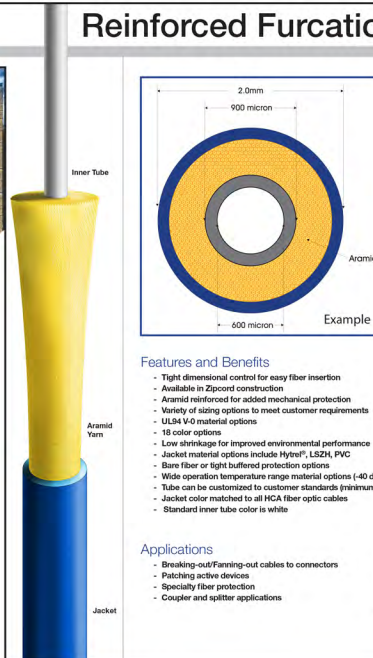
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Hitachi Cable America Inc.

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07/2020

Reinforced Furcation



Features and Benefits

- Tight dimensional control for easy fiber insertion
- Available in Zipcord construction
- Aramid reinforced for added mechanical protection
- Variety of sizing options to meet customer requirements
- UL94 V-0 material options
- 16 color options
- Low shrinkage for improved environmental performance
- Jacket material options include Hytrel®, LSZH, PVC
- Bare fiber or tight buffered protection options
- Wide operation temperature range material options (-40 deg)
- Tube can be customized to customer standards (minimum 6 mil)
- Jacket color matched to all HCA fiber optic cables
- Standard inner tube color is white

Applications

- Breaking-out/Fanning-out cables to connectors
- Plugging active devices
- Specialty fiber protection
- Coupler and splitter applications

NanoCore®

Nanocore® Fiber Optic Solutions

From security cameras and lighting systems to SANs and WANs, the demand on the physical network infrastructure has never been greater. And, there is no end in sight. Bandwidth demands from an ever increasing list of Internet of Things (IoT) devices, as well as continued growth in online shopping, gaming, movies and television and the migration to a paperless world across all industries have created a never ending threat for bandwidth. In addition to the users, the data centers that support these systems must keep up with the bandwidth demand. To support all of these users and more, Hitachi Cable America (HCA) offers our NanoCore® family of micro distribution fiber optic cables.

Available with high bandwidth Multimode and Singlemode fiber optic glass, the NanoCore family is designed to provide the highest levels of throughput in the smallest cable possible. With an industry leading 144-fiber, 9.8mm outside diameter cable, the NanoCore line is ideal anywhere where space is limited, but network demands are high. For this reason, Hitachi now offers a 288-fiber NanoCore cable.

Whether they are installed in the top of rack in a data center or in the horizontal cable space in a call center, NanoCore cables are able to deliver the bandwidth where it is needed. They offer an extremely small outside diameter because they utilize loose tube 250 micron optical fibers. Due to advances in optical fiber manufacturing and the use of bend-insensitive optical fibers, the fibers can now be more easily integrated into a wide range of cable constructions. When NanoCore cables are mated to high-density MPO connectors, you can establish data rates of 100 gigabit per second and even higher. With a cable about as big around as a #2 pencil, that's impressive.

This catalog includes the complete range of NanoCore constructions to meet your specific needs, including tight buffered interconnect cables. All NanoCore cables are made with pride at the Hitachi Cable America facility in Manchester, NH.



Hitachi Cable America Inc.

www.hca.hitachi-cable.com

INDOOR

NanoCore®
2 Through 24 fibers

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Product
Highlights

- REACH & RoHS 2 compliant
- Made in USA
- All multimode, and singlemode cables (except OM3) utilize bend-insensitive optical fibers
- 250 micron loose tube design allows for higher fiber strand counts in a smaller overall diameter cable
- LSHF (with OFNR) rating enables use in riser-rated environments. See note under part number table
- Halogen free design offers improved safety performance
- Ideal for MPO (MTP™) style connectors
- Each fiber is color coded for easy identification
- Flexible and easy to handle
- Lightweight, flexible Aramid yarns enhance strength
- When necessary, color-coded binders separate fiber strands into bundles of 12

Options

- Enhanced bend insensitive OS2 optical fiber is available (ITU-T G.657.B3 & G.657.A2)
- Standard jacket colors are: Yellow, Orange, OM3 & OM4
- Water-Block Viber for OM3 & OM4

- 16 Fiber colors are available
- Colored threads are used to bundle fibers

Applications

- Applications include 10, 40 & 100 gigabit Ethernet, Fibre Channel, Video, Security, Automation
- OM3 supports applications utilizing Short Wave Division Multiplexing (SWDM)

Standards

- TIA/EIA-568-C.3
- ISO/IEC 11801, 2nd edition
- Tecorria GR-409-CORE
- OS2 glass is compliant to ITU-T G.652.A1

NanoCore® Interconnect (Single Jacket) Micro Distribution (LSHF/Riser)

Low Smoke No Halogens (UL) OFNR c(UL) OFNR FT4

PART NUMBERS BY FIBER COUNT										
FIBERS	Cable OD	RISE/	50 UM	50 UM	50 UM	50 UM	50 UM	50 UM	50 UM	8.3 UM
BUNDLE	mm	BURPLE	OM3	OM4	OM4	OM4	OM4	OM4	OM4	OS2
2	2.0	-	62424-2	62425-2	62426-2	62427-2	62428-2	62429-2	62430-2	62431-2
2	3.0	-	62318-2	61811-2	61812-2	61941-2	62438-2	62748-2	61772-2	62429-2
4	2.0	-	62424-4	62425-4	62426-4	62427-4	62428-4	62747-4	62429-4	61772-4
4	3.0	-	62318-4	61811-4	61812-4	61941-4	62438-4	62747-4	62429-4	61772-4
6	2.0	-	62424-6	62425-6	62426-6	62427-6	62428-6	62747-6	62429-6	61772-6
6	3.0	-	62318-6	61811-6	61812-6	61941-6	62438-6	62747-6	62429-6	61772-6
12	2.0	-	62424-12	62425-12	62426-12	62427-12	62428-12	62747-12	62429-12	61772-12
12	3.0	-	62318-12	61811-12	61812-12	61941-12	62438-12	62747-12	62429-12	61772-12
16	3.0	-	62318-16	61811-16	61812-16	61941-16	62438-16	62747-16	62429-16	61772-16
16	3.0	8 X 2	62701-16	62702-16	62703-16	62704-16	62705-16	62706-16	62707-16	62708-16
24	3.0	12 X 2	62424-24	62425-24	62426-24	62427-24	62428-24	62747-24	62429-24	61772-24

LSHF (Low Smoke Halogen Free) is a new flame rating developed by Underwriters Laboratories (UL). It identifies the cable as being low smoke while also containing zero halogens.

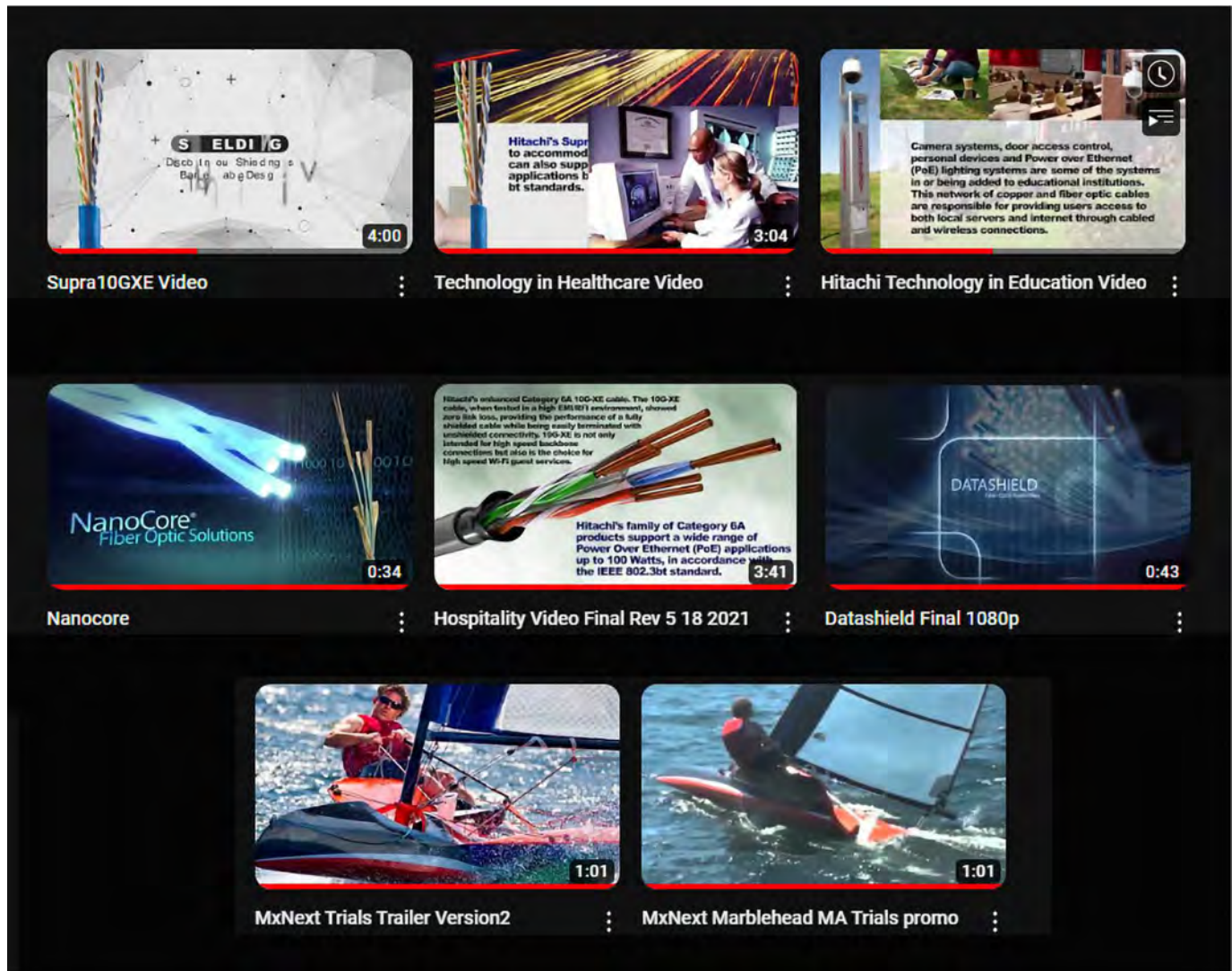
SPECIFICATIONS BY FIBER COUNT															
FIBERS		FIBERS/BUNDLE		CABLE OD		INSTALL		OPERATION		COMPRESSION		IMPACT		CABLE WEIGHT	
		in.	mm	lbs	N	lbs	N	lbs	N	in-m	ft-m	lbs/ft	Kg/Km		
2	-	0.078	2.0	50	222	15	67	35	0.74	2.5	3.7	2.5	3.7		
2	-	0.118	3.0	100	445	30	134	100	2.94	4.8	7.2	2.94	4.8		
4	-	0.078	2.0	50	222	15	67	35	0.74	2.6	3.8	2.6	3.8		
4	-	0.118	3.0	100	445	30	134	100	2.94	4.9	7.4	2.94	4.9		
6	-	0.078	2.0	50	222	15	67	35	0.74	2.7	4.0	2.7	4.0		
6	-	0.118	3.0	100	445	30	134	100	2.94	5.0	7.5	2.94	5.0		
12	-	0.078	2.0	50	222	15	67	35	0.74	3.0	4.4	3.0	4.4		
12	-	0.118	3.0	100	445	30	134	100	2.94	5.3	7.9	2.94	5.3		
16	-	0.118	3.0	150	668	45	200	100	2.94	5.2	7.7	2.94	5.2		
16*	8 X 2	0.118	3.0	150	668	45	200	100	2.94	5.2	7.7	2.94	5.2		
24*	12 X 2	0.118	3.0	150	668	45	200	100	0.74	5.9	8.8	0.74	5.9		

Note: Port number rows in upper table directly correspond to cable characteristics rows in the same location of the lower table. These cable designs utilize color-coded binders to separate subunits.

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Examples of Video Shorts



Videos utilize photography and imagery that I've shot or created myself. 3D Elements such as special effects and wires were self created as well. Some elements of special effect were created using third party templates and improved or altered by myself.