

# Fiber Optic Connector Cleaning Solutions

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### Overview

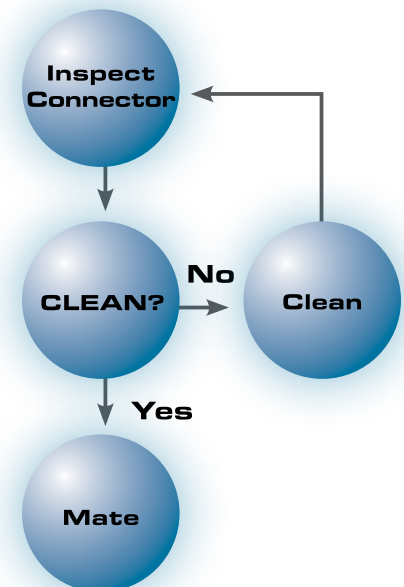
With contamination being one of the root causes of network failure, the cleanliness of the fiber optic connector end face is crucial. Connector end faces containing even small amounts of debris (skin oils, dust, lotions, water residue, etc.) not only suffer from power degradation but also an increased likelihood of permanent damage when mated.

US Conec's fiber optic cleaning product line includes a variety of solutions that make connector end face cleaning a simple and economical practice. Features include a robust micro-woven cloth that captures debris and minimizes electrostatic charge, sturdy housings and cost-effective high-end cleaning solutions.

With cleanliness being of utmost importance for a healthy network, US Conec always recommends good cleaning practices, proper training, and use of reliable cleaning tools.

### Recommended Cleaning Method: Inspect-Clean-Inspect

1. Always inspect both connectors before mating.
2. Mating dirty connectors may:
  - Cross contaminate both connectors
  - Scratch and pit the ferrule end face
3. Inspecting and cleaning before mating will:
  - Prevent permanent damage to connectors
  - Reduce trouble shooting time
  - Reduce material costs
  - Improve signal quality
4. Make keeping fiber optic connectors clean a priority
  - Develop inspection and cleaning procedures
  - Train your team regularly on how to inspect and clean your connectors



## Single Fiber Cleaners



### IBC™ Brand Single Fiber Cleaning Tools

The US Conec IBC™ Brand of single fiber cleaners can be used to effectively clean various single fiber connectors such as FC, LC, SC, LC Duplex and M250 both residing in an adapter or faceplate and unmated. They feature a novel dry cleaning strand to gently sweep and lift away dust and debris from the connector end face that eliminates the need to use solvents for an effective clean. A simple pushing motion to engage the tool, an audible CLICK to alert the operator that the tool is fully engaged, a dust cap attached by a lanyard to prevent losing it, over 525 cleaning engagements per tool and the effectiveness of the cleaner to remove such contaminants as graphite, hand lotions, skin oils and Arizona road dust are just a few of the features of the US Conec's IBC brand of single fiber cleaning tools. All IBC™ brand single fiber cleaners are RoHS compliant.

The IBC™ Brand Cleaners are effective at removing the following contaminants:		
• Arizona Road Dust (ISO 12103-1)	• Skin Oil Residue	• Salt Water Residue
• Alcohol Residue	• Vegetable Residue	• Hand Lotion
• Distilled Water Residue	• Graphite	• T-shirt Lint







IBC™ Brand Cleaning Tools for 1.25mm Based Connectors





Part Number	Model	Cleans Connector Types	Additional Information
<div>9393</div> 	LC	LC, MU	-
<div>12910</div> 	H125	LC, MU	Cleans harsh environment 1.25 mm based connector systems - ARINC 800, ODC series, MXL38999, LuxCis series, MIL PRF 64266 [NGCON], Neutrik opticalCON
<div>13965</div> 	Zi125	LC, MU	Compact size; includes retractable zipcord
<div>14303</div> 	LC²	LC	Cleans 525+ pairs of LC duplex connectors in one clean
<div>14649</div> 	ZiA125	LC , MU	Cleans harsh environment 1.25 mm based connector systems - ARINC 800, ODC series, MXL38999, LuxCis series, MIL PRF 64266 [NGCON], Neutrik opticalCON; includes retractable zipcord, Compact size

Single Fiber Cleaners

IBC™ Brand Cleaning Tools for 2.5mm Based Connectors

Part Number	Model	Cleans Connector Types	Additional Information
<div>9392</div> 	SC	SC, ST, FC, E2000	-
<div>9394</div> 	HC	OptiTap®	Used in FTTx applications
<div>13310</div> 	M250	SC, ST, FC E2000, TFOCA	1.8 mm cleaning region
<div>13964</div> 	Zi25	SC, ST, FC, E2000	Compact size; includes retractable zipcord

IBC™ Brand Cleaning Tools for Specialty Connectors

Part Number	Model	Cleans Connector Types	Additional Information
12926 	M20	SMPTE 304M, SMPTE 358M, MIL PRF 28876	Cleans harsh environment 2.0 mm based connector systems
13309 	M16	M38999	Cleans harsh environment 1.6 mm based connector systems
14829 	GA16	M38999	Cleans harsh environment 1.6 mm based connector systems; Cleans through Glenair M38999 test adapters; compact size; includes wrist lanyard
15523 	G1000	Glenair Mighty Mouse 20 series	Compact size; can be used to clean MIL/AERO 1.0 mm connectors; includes retractable zipcord



## Multifiber Cleaners

### IBC™ Brand Multifiber Cleaning Tools

When the application calls for cleaning multifiber connectors, US Conec offers a variety of cleaners for the job. The IBC™ Brand of multifiber cleaning tools is designed for cleaning the MT based connector systems loaded in a bulkhead adapter, on the card edge, on a backplane and can even be used to clean unmated cable assemblies using the alignment cap. The design of the IBC™ Brand of multifiber cleaning tools allows it to clean both the female [no guide pins] and male [with guide pins] connectors. These cleaners will clean both flat and angled ferrules. The US Conec multifiber cleaners feature a nozzle that is keyed for precise alignment of the cleaning tip to the fiber array. All IBC™ brand multifiber cleaners are RoHS compliant.







#### The IBC™ Brand Cleaners are effective at removing the following contaminants:

• Arizona Road Dust (ISO 12103-1)	• Skin Oil Residue	• Salt Water Residue
• Alcohol Residue	• Vegetable Residue	• Hand Lotion
• Distilled Water Residue	• Graphite	• T-shirt Lint













## IBC™ Brand Cleaning Tools for MT Connectors

Part Number	Model	Cleans Connector Types	Additional Information
7104 	MPO II	MPO	Cleans flat and angled MT ferrules
17669 	MTP-16™	MTP-16™, TIA-604-5 compliant MPO connectors only	Cleans flat and angled MT-16™ ferrules
8037 	HBMT	Molex HBMT™, 1x8 ARRAY, 1x6 ARRAY, 1X3 Circular MT, MPO	Additional special adapters available
9959 	HBMT EN	Molex HBMT™, 1x8 ARRAY, 1x6 ARRAY, 1X3 Circular MT, MPO	Additional special adapters available; extended nozzle length of 224mm
15639 	OptiTip® II	OptiTip®	Requires attached lanyard of adapters
15546 	MT38 II	MT based D38999	Requires special adapters

## Multifiber Cleaners



### IBC™ Brand Multifiber Cleaning Tool Adapters

Part Number	Model	Cleans Connector Types	US Conec Cleaner Used	Additional Information
 7907	ARRAY 1 x 6	Molex ARRAY6 connections	8037	Cleans plug and socket Molex ARRAY6 connections; Clean ferrules 1, 3, and 5 then flip and clean ferrules 2, 4, and 6
 8035	HBMT Card Edge	Molex HBMT card edge connections	8037	Cleans plug and socket Molex HBMT card edge connections
 8097	HBMT Backplane	Molex HBMT backplane connections	8037	Cleans plug and socket Molex HBMT backplane connections
 8485	ARRAY 1 x 8	Molex ARRAY6 connections	8037	Cleans plug and socket Molex ARRAY6 connections; Clean ferrules 1, 3, 5 and 7 then flip and clean ferrules 2, 4, 6 and 8
 8802	Circular 1 x 3 Receptacle	Molex 1 x 3 circular connections	8037	Cleans receptacle on Molex 1 x 3 circular connections
 8803	Circular 1 x 3 Connector	Molex 1 x 3 circular connections	8037	Cleans connector on Molex 1 x 3 circular connections
 13463	MT38999 Quad	MT ferrules in Quad MT D38999 connectors	15546	Will align cleaner part number onto protruding MT ferrules in Quad MT D38999 connectors from Amphenol Aerospace
 13464	MT 38999 Single	MT ferrules in Single MT D38999 connectors	15546	Will align cleaner part number onto protruding MT ferrules in Single MT D38999 connectors from Amphenol Aerospace

Cleaning Tools for PRIZM® MT Based Connectors

The PRIZM® MT cleaning tool is designed specifically for use with US Conec's PRIZM® MT lensed ferrule technology. The simple, one-push style with guide cap cleans bulkhead-mounted MXC receptacles and/or cabled MXC plugs. US Conec also offers a version that can be used to clean the PRIZM® MT in an MTP® format.

PRIZM® MT Cleaning Tools

Part Number	Model	Cleans Connector Types	Additional Information
15990 	MXC®	MXC® plug, MXC® receptacle, MXC® back plane	Adapter available for MXC® back plane connectors
16899 	PRIZM® MTP®	MTP® connector with PRIZM® MT ferrules	Cleans unmated cables and cables loaded in a bulkhead adapter

### OPTIPOP R Refillable Cassette Cleaners

The OPTIPOP R is a fiber optic cleaning cassette that can be refilled to help reduce the cost per clean, making it a great cleaner to use in production facilities, data center installations and other applications where unmated fiber optic connectors are used. This cleaner offers multiple versions for cleaning various types of connector end faces from single fiber like the SC and LC to multifiber such as the MTP® Brand, MPO and MTRJ connectors. The anti-static cloth material used in these cassettes produces a pristine fiber end face and minimizes contaminant attraction. The cleaning fabric is pre-washed and produces less than 70 pcs per CFM of particles that are > 1mm in size, making this an excellent cleaning cassette for use in any production setting including clean rooms. A great feature of this cassette is that all versions utilize the same replacement reel part number. The replacement reels are easy to install and offer 400+ cleanings per reel.



OPTIPOP R Refillable Cassette Cleaners







US Conec Part Number	Model	Cleans Connector Types	Number of Slots	NTT-AT Reference
6338 	Single Slot	SC, ST, FC, E2000, LC, MU, Female MPO, MTRJ	One	ATC-RE-01
6437 	Two Slots	LC, MU	Two	ATC-RE-02
6339 	MPO Male	Male MPO with guide pins	One	ATC-RE-03
6340 	MTRJ	Male MTRJ with guide pins	One	ATC-RE-04
8057 	OptiTap®	OptiTap®	One	ATC-RE-03W
6232 	Refill	<i>(Used for all OPTIPOP R cassettes; 6 pack)</i>	-	ATC-RS-01

Cassette Cleaners





CLETOP Refillable Cassette Cleaners

The CLETOP and CLETOP-S are refillable cassette style fiber optic connector end face cleaners. They offer a low cost per clean, making them a good fit for factory settings. The CLETOP cleaners come in multiple versions and can be used to clean single fiber and multifiber connector end faces, depending on the version chosen. CLETOP cleaners feature an anti-static cloth material that minimizes contaminant attraction while creating a debris-free connector end face. The refills come in either cassettes or reels and the refill type used is dependent upon the version of cleaner being used. Refills offer more than 400 cleanings each and are easy to install.

CLETOP Refillable Cassette Cleaners

	US Conec Part Number	Model	Tape Color	Cleans Connector Types	Tape or Cartridge	NTT-AT Part Number	Additional Information
	14703	CLETOP Type A	Blue	SC, SC2, FC, ST, DIN, D4, E2000	Tape	14100501	Uses refill part number 14709 or 14710
	15052	CLETOP Type A	White			14100511	
	14704	CLETOP Type B	Blue	MU, LC, MT, MPO, MTRJ (Female), BIC	Tape	14100601	Uses refill part number 14709 or 14710
	15053	CLETOP Type B	White			14100611	
	14705	CLETOP Type MTRJ	White	MTRJ (Male and Female)	Tape	14100101	Uses refill part number 14709 or 14710
	14706	CLETOP Type MPO	White	MTP®/MPO (Male and Female)	Tape	14100201	Uses refill part number 14709 or 14710
	14707	CLETOP-S Type A	Blue	SC, SC2, FC, ST, DIN, D4, E2000	Cartridge	14110501	Uses refill part number 14711 or 14712
	14708	CLETOP-S Type B	Blue	MU, LC, MT, MPO, MTRJ (Female), BIC	Cartridge	14110601	Uses refill part number 14711 or 14712
	15051	CLETOP-S Type B	White			14110611	

CLETOP Replacement Tape & Cartridges

US Conec Part Number	Model	Tape or Cartridge	Tape Color	NTT-AT Part Number
14709 	CLETOP Refill	Tape	Blue	14100700
14710 	CLETOP Refill	Tape	White	14100710
14711 	CLETOP-S Refill	Cartridge	Blue	14110700
14712 	CLETOP-S Refill	Cartridge	White	14110710






### NEOCLEAN PZ Refillable Cassette Cleaner

The NEOCLEAN PZ is a cassette style fiber optic cleaner system designed specifically for the PRIZM® LightTurn® connector. This refillable cassette cleaner uses a microfiber fabric to remove harmful contaminants off of the ferrule end face. The anti-static cleaning material used in the cassette produces a pristine optical window and minimizes contaminant attraction. The cleaning material is pre-washed making it excellent for use in any production environment, including clean rooms. The NEOCLEAN PZ cassette cleaning tool will accommodate both bare ribbon and jacketed PRIZM® LightTurn® cable assemblies.



NEOCLEAN PZ Refillable Cassette Cleaner

US Conec Part Number	Model	Cleans Connector Types	NTT-AT Part Number	Additional Information
14554 	NEOCLEAN-PZ Cassette	PRIZM® LightTurn®	ATC-NE-PZ	Cleans bare ferrules, ribbon assemblies and jacketed assemblies
14555	NEOCLEAN-PZ Refill	-	ATC-NE-PZS	5 pack



Placing PRIZM® LightTurn® connector into cleaner





Cleaning PRIZM® LightTurn® connector

Cassette Cleaners



NEOCLEAN S, OPTIPOP P, and CLETOP Stick and Pipe Cleaners

US Conec’s line of stick and pipe cleaners offers a solution for those hard to reach areas where an IBC™ Brand Cleaner nor a cassette style cleaner cannot be used. The sticks and pipes come in multiple sizes and can accommodate small form factor duplex and/or single-fiber connectors, transceiver receptacles and lenses. They are suitable for both field and factory use.





NEOCLEAN S Stick Cleaners

US Conec Part Number	Size	Total Number per Case	Number per Sleeve	NTT-AT Part Number	Additional Information
 7892	1.25 mm	250	10	ATC-ST-01N	Notched for length customization
 7893	2.5 mm	250	10	ATC-ST-02N	Notched for length customization

OPTIPOP P Pipe Cleaners

US Conec Part Number	Size	Total Number per Case	Number per Sleeve	NTT-AT Part Number	Additional Information
 6363	1.25 mm	200	5	ATC-PP-01	Designed to cup ferrule end face and sides
 6364	2.5 mm	200	5	ATC-PP-02	Designed to cup ferrule end face and sides

CLETOP Stick Cleaners

US Conec Part Number	Size	Total Number per Case	NTT-AT Part Number	Additional Information
 14713	2.5 mm	200	14100400	-
 14714	1.25 mm	200	14100401	-
 14715	2.0 mm	200	14100402	-
 14716	2.0 mm 2.5 mm	100	14100403	Double-ended



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