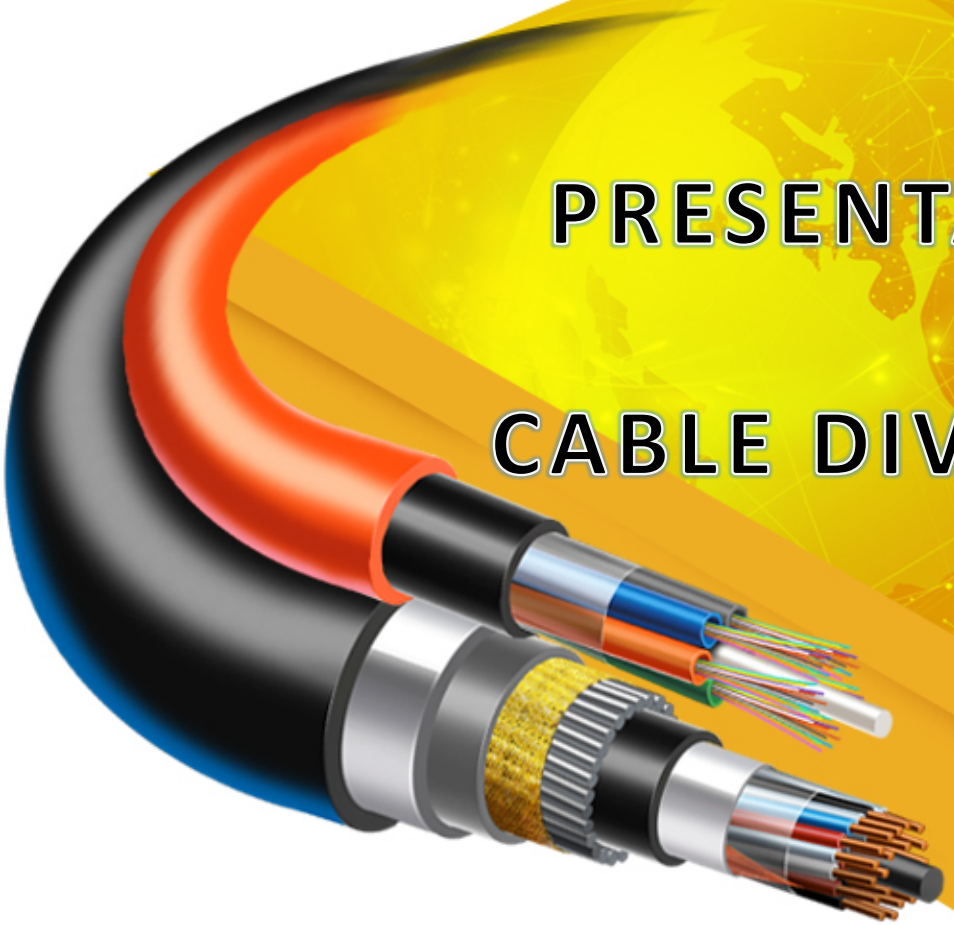
M.P. Birla GROUP

PRESENTATION

CABLE DIVISION



Vindhya Telelinks Limited

BIRLA ERICSSON OPTICAL LIMITED

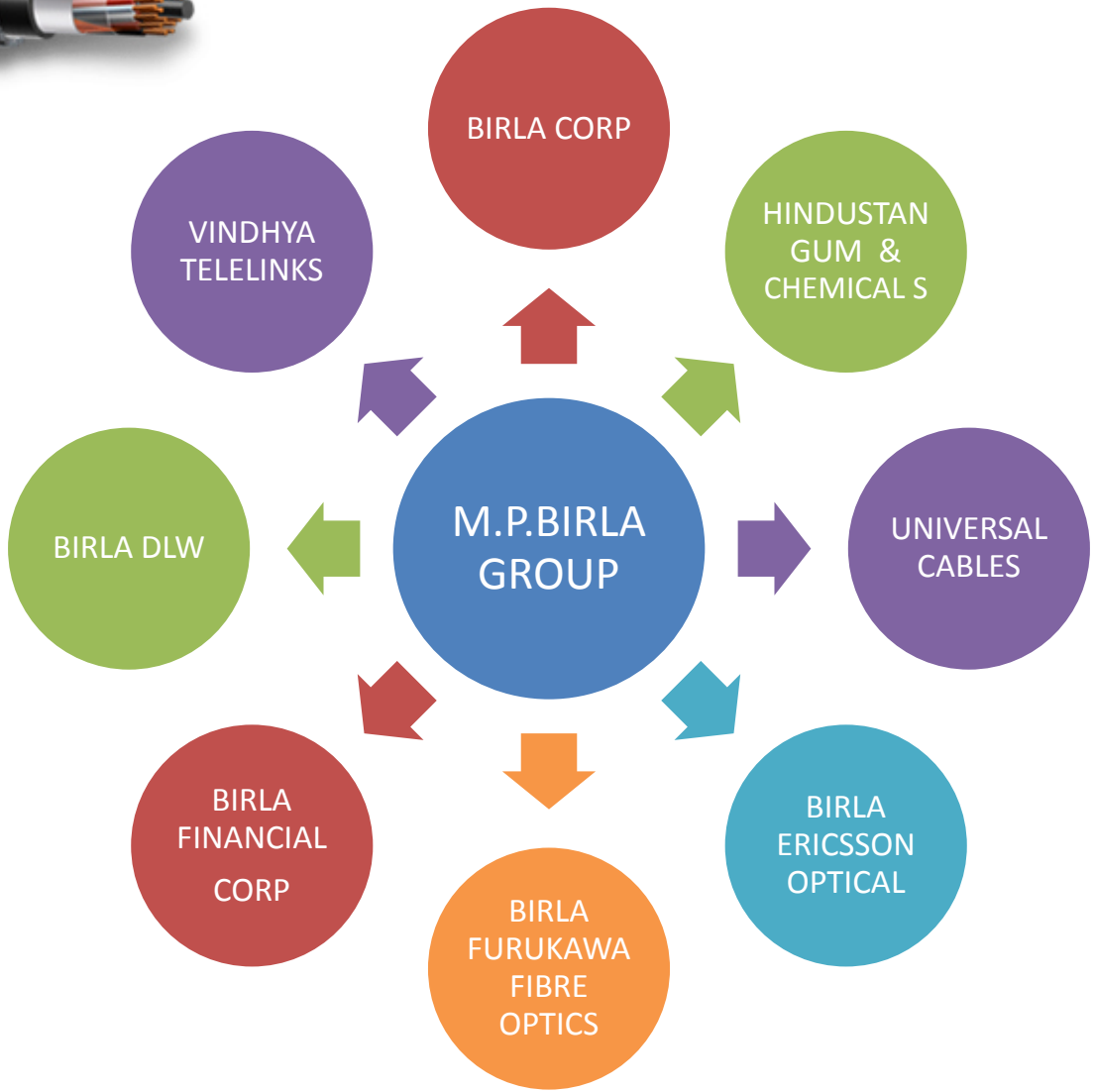
BirlaFurukawa Fibre Optics Limited

Group Overview

Facts :

- Founded in : 1919
- Founder : Late Shri. Madhav Prasad Birla Ji
- Group Turnover : USD 2.00 Billion
- Area of Operations : Cement , Guar Gum & Chemicals , Cables , Optical Fibre , EPC, Finance, Auto Trims,Jute & LED Lighting
- Philonthrophic Activities : Has made important social contributions through CSR initiatives by way of annual donations to institutions, relief funds, hospitals and not-for-profit organisations

Group Overview



Group Philanthropic Activities - Education

- South Point School, Kolkata
- M. P. Birla Higher Secondary School, Kolkata
- Priyamvada Birla Higher Secondary School, Satna
- Sharda Kanya Vidyapeeth, Barrackpore
- M. P. Birla Shiksha Bhavan, Allahabad
- M. P. Birla Industrial Training Institute

Group Philanthropic Activities – Health Care

- Bombay Hospital & Research Centre, Mumbai (900 beds)
- Bombay Hospital & Research Centre, Indore (830 beds)
- Belle Vue Clinic, Kolkata (130 beds)
- Priyamvada Birla Aravind Eye Hospital
- M. P. Birla Eye Clinic, Kolkata
- Birla Vikas Hospital, Satna & Sidhi

TELECOM DIVISION

A. COMPANIES & CAPABILITIES

B. INFRASTRUCTURE

- I. Infrastructure
- II. Installed Capacities
- III. Plant and Machinery
- IV. Test Equipments

C. CORE COMPETENCIES

D. TECHNICAL COMPETENCIES

- I. Optical Fibre Cables
- II. Copper Telecom Cables

F **BACKWARD INTEGRATION**

G . **PRODUCT RANGE**

- I. Optical Fibre Cables
- II. Copper Telecom Cables
- III Specialty Cables (Copper & Optical Fibre)

H. **GLOBAL PRESENCE**

I **MAJOR GLOBAL CUSTOMERS**

J **ACHIEVEMENTS, AWARDS & RECOGNITIONS**

K **SUPPLIERS**

L **LOGISTICS**

M **CAMPUS TOUR**

N **PLANT TOUR**

O **M.P. BIRLA FIBRE TRAINING ACADEMY**

P. **ADVANTAGE BIRLA**

Vindhya Telelinks Limited

BIRLA ERICSSON OPTICAL LIMITED

TELECOM CABLE DIVISON

Companies

VINDHYA TELELINKS LIMITED

- **Leading manufacturer & supplier of Jelly Filled Copper Telecommunication Cables and Optical Fiber Telecommunication Cables since 1983**

BIRLA ERICSSON OPTICAL LIMITED

- **Birla Ericsson Optical Ltd is recognized globally for pioneering the design and production of fibre optic cables in technical and financial collaboration with Ericsson Cables AB, Sweden**

BIRLA FURUKAWA FIBRE OPTICS LIMITED

- **Birla Furukawa is a joint venture company with Furukawa Electric Co. Ltd., Japan and possesses state-of-the-art technology to produce high performance optical fibres**

Capabilities

Optical Fibre Cable	• 1 F TO 1024 F
Copper Telecom Cable	• 1 Pair to 2400 Pair & Quad cables
Optical Fibre	• SM, MM, NZDS, Bend Insensitive Fibre

INFRASTRUCTURE

- Total Land Area : 587,500 Sq. Mtrs
- Total Covered Area : 52,500 Sq. Mtrs
- Total Employees : 780
- Qualified & Experienced Engineers, Skilled Workforce
- State-of-the-art Inspection & Test Facility
- 100% Backup Power Generation
- UPS For Critical Machines
- SAP ERP implemented

PLANT & MACHINERY

Description	Make
Ribbon Line	Medek & Schroner, Austria
Fibre Coloring Line	Medek & Schroner, Austria
	Delachaux , France
Secondary Coating Line	Rosendahl, Austria
	Royle Systems, USA
	Swiss Cab, Switzerland
	Rosendahl, Austria with ribbon strander
S-Z Stranding Line	Fibroco, Spain
	Swiss Cab, Switzerland
	Rosendahl, Austria

Description	Make
Wire Armoring	Hefei Smarter
Sheathing/ Jacketing Line & Armouring Line	Weber & Scher, USA
	Kuhne, Germany
	Tecnocable, Spain
	Rosendahl, Austria
	Swiss Cab, Switzerland
Cable Marking System	Widenbach, Germany
	Medek & Schroner, Austria - Hot Foil indent marking system

INSTALLED CAPACITIES

Optical Fibre Ribbon	3,00,000 Km
Ribbon Type Optical Fibre Cable (Up to 576 Fiber Count)	25704 Cable Km & 6,000 Cable Km
Optical Fibre Cable (Armoured/Unarmoured)	112,800 Cable Km
Indoor Optical Fibre Cable (Simplex , Duplex , Fan-Out, Drop Cable)	72,000 Km
Jelly Filled Copper Telecom Cable	11.0 Million Conductor Km
Switch Board Cable	2,92,000 Conductor Km
PCM Cables	3,15,000 Conductor Km
Railway Signaling Cable	17,000 Cable Km
Automotive Wires	30,000 Cable Km
L.T. Aerial Bunched Cable	12,000 Km
L.T. Power & Control Cable	12,000 Km
FRP Rod	20,000 Km
Tinned Copper Wire	1,000 MT

TEST EQUIPMENTS

OPTICAL FIBRE TESTING & TRANSMISSION LAB

SL. NO.	DESCRIPTION	MAKE / MODEL NO.	QTY	SUPPLIER DETAILS
1	CHROMATIC DISPERSION SYSTEM	EG & G CD 300	ONE	UK
2	FIBRE OPTICAL ANALYSER	PHOTON KINETIC FOA 2200	ONE	USA
3	FIBRE GEOMETRY ANALYSER	PHOTON KINETIC FGA 2400	ONE	USA
4	POLARISED MODE DISPERSION SYSTEM	EG & G PMD – 440	ONE	UK
5	RIBBON GEOMETRY ANALYSER	OPTICAL GAGING, SMART SCOPE FLASH	ONE	SINGAPORE
6	OPTICAL TIME DOMAIN REFLECTOMETER (OTDR)	ANRITSU MW 9070 A ANRITSU MW 9070 A ANRITSU MW 9070 B ANRITSU MW 9060 A ANRITSU MW 9076 C ANRITSU MW 9076 B1 ANRITSU MW 9076 C ANRITSU MT 9083 A	ONE ONE ONE ONE ONE ONE ONE ONE	JAPAN
7	OPTICAL RETURN LOSS TEST Eq.	NYOES ORL – 3	ONE	USA
8	CLIMATIC TEST CHAMBER	HERAEUS VEMZ/04/ 280/S C.M. Eq. & Inst. () Pvt. Ltd,	ONE ONE	GERMANY INDIA

TEST EQUIPMENTS

MATERIAL LAB

SL. NO.	DESCRIPTION	MAKE / MODEL NO.	QTY	SUPPLIER DETAILS
1.	TENSILE TESTING MACHINE (0-5000N)	MODEL 4301	ONE	INSTRON
2.	MELT FLOW INDEX APPARATUS	MODEL 7353/050	ONE	
3.	SINGLE PAN BALANCE	MODEL 501	ONE	COBOS
4.	TEST SETUP FOR ENVIRONMENTAL STRESS CRACKING	ESCA 748 S.NO. 748/006	ONE	
5.	AIR CIRCULATION OVEN (50 °C TO 300 ° C)	TYPE T 6060	ONE	HERAEUS
6.	DENSITY MEASURING TEST SET UP			
A) B) C)	SINGLE PAN ELECTRIC BALANCE (0.055 TO 200 GRAMS) RELATIVE DENSITY BOTTLES 25 ML, 50 ML HYDRO METER	TYPE AE - 240	ONE FIVE EACH TWO EACH	METTLER SCIENCE CORP SCIENCE CORP SCIENCE CORP
7.	PENETROMETER DEVICE	S.NO. 91112	ONE	HERZOO
8.	DROP POINT TESTING DEVICE	S.NO. 23075	ONE	SELECTA
9.	MICROSCOPE (X5,X10,X20)	TYPE LABOPHOT 2A SMZ-25	ONE	NIKON
10.	FLASH POINT TESTING DEVICE	S.NO. 91972	ONE	HERZOO
11.	ABRASION TESTER	MAB-001	ONE	FIBROCO

TEST EQUIPMENTS

MATERIAL LAB

SL. NO.	DESCRIPTION	MAKE / MODEL NO.	QTY	SUPPLIER DETAILS
12.	TENSILE TESTING MACHINE (0-50000 N)	MODEL TST 1.5G	ONE	BLUE STAR PL 73 (KMI)
13.	ULTRA LOW TEMPERATURE CABINET (0° C TO 55° C)	MODEL 11C - 40 H S.NO. 940401	ONE	
14.	YARN TESTER TEST SET		ONE	GUJRAL
15.	STOP WATCH (0 SEC – 30 MIN.)		ONE TWO	AGAT RACER
16.	DIGITAL WEIGHING BALANCE (0 – 5 Kg)	OC-51/894C018	ONE	
17.	THERMO GRAVIMETRIC ANALYSER	TGA – 2050	ONE	U.S.A
18.	DIELECTRIC CONTENT METER FOR JELLY	DCM – 1MHZ	ONE	DEVLALI
19.	V.A. RESISTIVITY SETUP FOR JELLY	LS – 3E	ONE	DEVLALI
20.	UV TEST SETUP	QUV/PASIC	ONE	U.S.A
21.	DIFFERENTIAL SCANNING CALORIMETER	DSC – 10	ONE	SICO,

Core Competency

- Rich experience of more than three decades.
- Widest Product Range under one Roof.
- Among top players in global arena with state-of-the-art and best in class technology.
- Possesses Qualifications for all strategic global tenders.
- Constantly developing low cost innovative products to beat the competition . The theme is, “We need to be the one beating the Drum, not marching to the Drum beat”
- Preferred Vendor status by globally renowned Telecom Equipment Vendors, System Houses (NSN, Ericsson, ZTE, Alcatel-Lucent, Huawei, Ciena), Turnkey Contractors, Contractors besides several renowned global telecom operators.
- Already covered a spread to more than 40 countries giving wider geographical distribution.

Technical Competency- Optical Fibre Cables

Loose Tube	• PBTP, PP, PC, PA 12
Armouring	• Steel Tape/ Steel Wire Armouring • Glass Yarn/ FRP Armouring
Jacketing	• HDPE/ HFFR/LSZH/NYLON/ • TPU/PVC/FRLS
Fibre Bundle	• CFU • Ring Marking
Total No. of Fibre Counts	• 288 F in Loose Tube • 1024 F Ribbon

Technical Competency – Copper Telecom Cables

Insulation	• HDPE (Solid/ Foam)
Element	• PAIR / QUAD / CORE
Screening	• Mylar Tape / Aluminum Foil
Filling	• Filled / Unfilled
Inner Sheath	• PVC / LDPE /HDPE / HFFR
Armouring	• Steel Tape / Wire Armouring /Strip Armouring
Jacketing	• HDPE / PVC /LDPE / HFFR

FARM TO FORK

OUR MAIN STRENGTHS

OPTICAL FIBRES

E-GLASS ROVING

FRP RODS

OPTICAL FIBRE CABLES

Backward Integration

ACHIEVEMENTS , AWARDS & RECOGNITIONS

ISO 9001	• Quality Management System
ISO 14001	• Environmental Management System
ISO/TS 16949:2009	• Manufacture of Insulated Wires & Cables
CACT	• Components Approvals
TSEC	• Product Approvals
RDSO	• Product Approvals
EIL	• Product Approvals
DGQA	• Product Approvals
UL / Intertek	• Product Approvals
EEPC Award	• Export Excellence-Star Performer 07-08 , 08-09 ,10-11
DGFT Status	• Star Export House
Safety Award	• National Safety Award

PRODUCT RANGE

FOCUS PRODUCTS

- Optical Fibre Cables
- Copper Telecom Cables
- Fibre-to-the-Home Cables
- Specialty Cables
- Optical Fibres
- Structured Cables
- Data Communication Cables

PRODUCT RANGE

Optical Fibre Cable

UNARMOURED DUCT CABLE

(Uni-tube, Multi-tube, Double Sheath& Double layer)

Armoured Cables

(Uni-tube, Multi-tube, Double Sheath, Steel Wire Armouring & FRP Armouring)

RIBBON CABLES

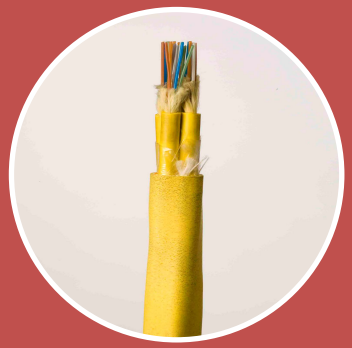
Upto 576 Fibres

AERIAL CABLE

(Multi-tube ADSS & Fig-8)

PRODUCT RANGE

Optical Fibre Cable



Indoor Cables

(Simplex, Duplex, Zip, Break-out, Premise Distribution & Tight Buffered)

Drop Cables

(With Wire, Without Wire)

Micro Cables

(Uni-tube, Multi-Tube)

High Fibre Loose Tube

PRODUCT RANGE

Copper Telecom Cable

- Armoured Cables
- Unarmoured Cables
- Aerial Cables (Fig-8)
- PCM Cables
- Switchboard Cables

PRODUCT RANGE

Specialty Cable

- Stainless Steel Wire Armoured Tactical Cables
- Fibre to Antena
- Cat 5e, 6a
- Data Cables
- Automotive Wires
- Electroplated Tinned Copper
- Hybrid Cables (Optical Fibre & Quad)
- Signalling Cables
- Aerial Bunched Cables

EPC

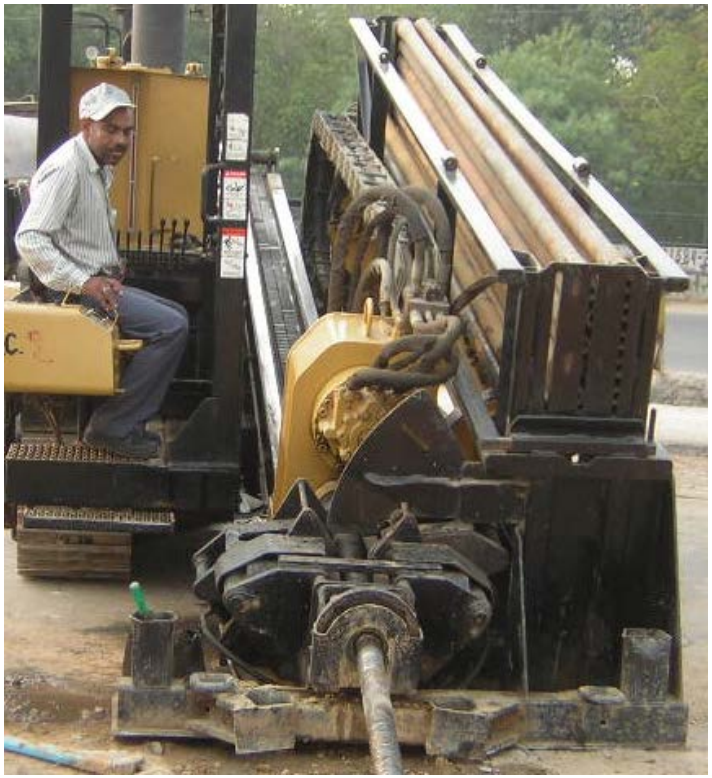
We offer complete turnkey services for Engineering, design, supply, construction, installation, testing & commissioning for:

Telecom Sector-

- Turnkey projects of Optical fiber cabling.
- Complete Infrastructure for Telecom Towers.
- Intracity HDD – Broadband network.

Power Sector-

- EHV Cabling Projects.
- Rural Electrification projects.
- Transmission Lines.
- Transmission and Distribution substations Lighting Projects.

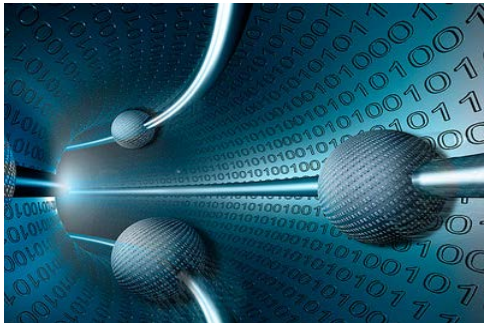


EPC

Erics

OFC NETWORK CONSTRUCTION ACTIVITIES

Applications



GLOBAL PRESENCE

CUSTOMER GLOBAL - MAJOR

Telecom Operators

- MOC KUWAIT
- PTC YEMEN
- STC, Saudi Arabia
- ITC, Saudi Arabia
- Wataniya Telecom, Kuwait
- CYPRUS TELECOM ,CYPRUS
- NEPAL TELECOM ,NEPAL
- SRILANKA TELECOM, SRILANKA
- VODAFONE
- SAFARI COM ,KENYA
- TUNISIE TELECOM ,TUNISIA
- OMAN TEL ,OMAN
- PTT SERBIA
- BOTSWANA TELECOM
- TANZANIA TELECOMMUNICATION CO. TANZANIA
- Telia Sonera, Nepal
- Telenor
- Ncell ,NEPAL
- TELSTRA ,AUSTRALIA
- WIND, Greece
- Vodafone, Greece

System Vendors & Equipment Integrators

- ERICSSON
- NSN
- ALCATEL-LUCENT
- HUAWEI
- ZTE

Data Communication & Wire Harness Suppliers

- VOLEX
- FCI
- DELPHI
- LEONI
- BELDEN
- R&M
- TE CONNECTIVTITY
- 3M
- HUBER & SHUNER
- RADIALL
- ADC KRONE
- NEST
- UT STARCOM

OUR SUPPLIERS

PROMINENT OVERSEAS VENDORS FOR PRINCIPAL RAW MATERIALS		
U. V. Resins	DSM Hexion	The Netherlands USA
Optical Fibres	Birla Furukawa Fujikura Furukawa, OFS Corning Sumitomo	India Japan Japan/USA USA Japan
Fibre Ink	DSM	USA
Ribbon Matrix	DSM	USA/Holland
Thixotropic Jelly	Unigel/Itcogel	U.K/ India
PBTP Chips	Degussa AG BASF	Germany Malaysia
Polyester Yarns (LS Type)	Nikol Weber Roblon	Germany Denmark

OUR SUPPLIERS

PROMINENT OVERSEAS VENDORS FOR PRINCIPAL RAW MATERIALS		
Aramid Yarn	Tejin Twaron Dupont	Holland Hong Kong/ USA
Nylon	EMS Chemie Degussa AG	Switzerland Germany
Steel Tape	DOW Chemicals Dami	USA Korea
E Glass Roving	Vindhya Telelinks Owens Corning	India USA
HFFR Compounds	Polyone Alpha Gary	Belgium UK
Polyethylene	Dow Chemicals Borouge Hanwha SCG Chemical	USA UAE Korea Thailand

LOGISTICS

- Pre-inspected products with all technical test reports
- Export worthy packaging
- Available in different lengths on drums (customized designs)
- Pallettisation as per customer requirements
- Pre-fumigated containers on request
- Optimum utilization of container storage space

CAMPUS TOUR

Main Entrance

Corporate Office

Copper Cable Plant

OFC Plant

Conserving Nature

Recreation Center

Residential Complex-Staff

PLANT TOUR

Transmission Lab

Colouring Line

Secondary Coating Line

Copper Cable Plant

Rod Break Down Machine

Drum Twister

Sheathing / Jacketing Line

ADVANTAGES BIRLA

End-to-end Delivery capability

In-depth understanding of industry know-how

Client-centric, transparent and user-friendly approach

Delivery excellence through hands-on experience and time tested methodologies

Rich in-house pool of trained, experienced technology and Business professionals

Total Delivery Accountability

Comprehensive infrastructure, facilities and processes

Innovation & Creativity blended in Products, Services/Practices & Solutions delivery

M.P. BIRLA FIBRE TRAINING ACADEMY

We have a special programme within our facility which imparts complete training on Fibre optics. It covers some key aspects like:

- Brief about Fibre
- Type of Fibres
- Effective Cable Designing
- Type of Cables
- Precautions while handling

It would also cover aspects like :

- Splicing, Trenching, Blowing, & low cost of installation
- Make use of existing infrastructure and rights of way
- Fast and Easy installation
- Readily available for maintenance
- Future alteration and expansions

CLIENTELE

Omantel

रेलटेल RAILTEL

INDIAN RAILWAYS

BOMBARDIER

INTRAKAT

cyta

Safaricom

Sri Lanka Telecom

NEPAL TELECOM

Tunisie Telecom

Dialog

دیوا dewa

FiberHome

ADC KRONE

UTSTARCOM

Nokia Siemens Networks

CLIENTELE

VSNL

GAIL

Idea
IDEA Cellular Ltd.

airtel

AIRCEL

Volex

MTNL

Vodafone

Reliance
Industries Limited

एनटीपीसी
NTPC

TATA
indicom

TATA
COMMUNICATIONS

BSNL
Connecting India

Reliance
Communications
Anil Dhirubhai Ambani Group

R&M

MTS

पावरग्रिड
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

THANK YOU