

NOVATECH CABLES & WIRES MANUFACTURING LTD.

OEM Technical Capability & Product Master Document

Purpose:

This document serves as a centralized OEM technical knowledge base for automated RFP analysis, technical compliance mapping, and bid document generation.

Document Type: Confidential – OEM Technical Repository

Applicable For: Government, PSU, Metro Rail, Power & Infrastructure Tenders

SECTION 1 – COMPANY OVERVIEW

1.1 About Novatech

Novatech Cables & Wires Manufacturing Ltd. is a professionally managed Original Equipment Manufacturer (OEM) specializing in copper control cables, communication cables, data cables, and specialty insulated wires. The company caters to critical infrastructure sectors including metro rail, railways, power utilities, industrial automation, and smart infrastructure projects. Novatech operates with an integrated manufacturing, testing, and quality assurance ecosystem to ensure consistent compliance with Indian and International standards.

1.2 Certifications & Compliance

ISO 9001:2015 – Quality Management System

ISO 14001:2015 – Environmental Management System

ISO 45001:2018 – Occupational Health & Safety

1.3 Industries Served

Metro Rail & Urban Transportation

Power Generation & Distribution

Industrial Automation

Defence & Aerospace

Data & Communication Infrastructure

SECTION 2 – PRODUCT MASTER CATALOG

(All products follow a standardized structure to enable automated RFP matching)

Product 1: 25 Core Armoured Control Cable

Product Name: 25 Core Armoured Control Cable

SKU: NTC-CTRL-25A

Technical Specifications

Parameter	Detail
Conductor Size	48/0.2 mm Annealed Tinned Copper (ATC)
Insulation Material	Extruded HDPE
Shield Type	Overall Aluminium Mylar Tape (100% coverage)
Sheathing	HR PVC Type ST-2, Anti-Rodent & Anti-Termite, Black
Armour Details	Galvanized Steel Flat Flexible Strip

Electrical Parameters

Parameter	Value
Rated Voltage	1100 V

Parameter	Value
Conductor Resistance	As per IS 8130
Insulation Resistance	$\geq 5000 \text{ M}\Omega/\text{km}$

Tolerance Level:

Standards Compliance

- IS 8130
- IS 3975
- IEC 60228

Operating Temperature

−15°C to +70°C

Warranty

12 months from installation or 18 months from dispatch, whichever is earlier.

Parameter	Tolerance
Conductor	$\pm 2\%$
Insulation Thickness	$\pm 10\%$

Standards Compliance

- IS 8130
- IS 3975
- IEC 60228

Operating Temperature

–15°C to +70°C

Warranty

12 months from installation or 18 months from dispatch, whichever is earlier.

Product 2: 12 Pair Armoured Copper Cable

SKU: NTC-COMM-12A

Technical Specifications

Parameter	Detail
Conductor Size	7/0.27 mm ATC
Pair Formation	Twisted Pairs
Shield Type	Overall Poly Aluminium Foil
Sheathing	FRLS / HR PVC, Black (Minimum 2.0 m)

Parameter	Detail
Armour	Round Wire / Flat Strip

Compliance & Conditions

Parameter	Detail
Standards	IEC 60228, IS 8130
Operating Temperature	−10°C to +70°C
Warranty	Standard OEM Warranty

Product 3: 12 Pair Unarmoured Copper Cable

SKU: NTC-COMM-12U

Technical Specifications

Parameter	Detail
Conductor Size	7/0.27 mm ATC
Shield Type	Poly Aluminium Foil

Parameter	Detail
Sheathing	FRLS PVC
Armour	Not Applicable

Application:

Indoor signalling and communication systems

Product 4: 4 Pair Unarmoured Copper Cable

SKU: NTC-COMM-4U

Technical Specifications

Parameter	Detail
Conductor Size	7/0.32 mm ATC
Twist Rate	15–20 twists per meter
Shield Type	Overall Shielded
Sheathing	FRLS / HR PVC

Application

Instrumentation and control communication

Product 5: 18 Pair Armoured Copper Cable

SKU: NTC-COMM-18A

Standards

- IS 8130
- IEC 60228

Technical Specifications

Parameter	Detail
Conductor Size	7/0.27 mm ATC
Armour	GI Flat Strip (4.0 × 0.80 mm, 95% coverage)
Sheathing	HR PVC, Black

Product 6: Armoured CAT6 STP Cable

SKU: NTC-NET-CAT6A

Application

CCTV, Ethernet, railway communication network

Technical Specifications

Parameter	Detail
Conductor	23 AWG Solid Bare Copper
Shield	Aluminium Foil + Tinned Copper Braiding
Armour	Corrugated ECCS Tape
Frequency	Minimum 100 MHz

Product 7: PTFE Insulated Equipment Wire

SKU: NTC-PTFE-ET

Technical Specifications

Parameter	Detail
Available Sizes	16 AWG / 20 AWG / 24 AWG

Parameter	Detail
Conductor	Silver/Nickel Plated Copper
Insulation	PTFE
Voltage Rating	250 V AC
Operating Temperature	−60°C to +200°C

Application

Rail electronics, high-temperature equipment

Additional Standard Products

- Instrumentation Cables (IS/OS)
- Fire Survival Cables
- Solar DC Cables
- LT Power Cables up to 1.1 kV

SECTION 3 – SKU MASTER TABLE

SKU	Cable Type	Key Specifications	Material	Unit Weight
NTC-CTR L-25A	Control Cable	25C Armoured	Copper	1.8 kg/m

SECTION 4 – QUALITY ASSURANCE & TESTING

Quality Assurance Process

- Incoming raw material inspection
- In-process quality monitoring
- Final routine and acceptance testing

Testing Facilities

- Conductor Resistance Test
- Insulation & Sheath Thickness Test
- High Voltage Test
- Flame Retardancy Test

Standards Followed

- IS 8130
- IS 3975
- IEC 60228
- IEC 60332

SECTION 5 – MANUFACTURING & DELIVERY CAPABILITY

Manufacturing Capacity:

able Type	capacity
ontrol & Communication Cables	200 km/month
ata Cables	0 km/month
TFE Wires	0,000 meters/month

Operational Metrics

parameter	etail
andard Production Lead Time	8 weeks
orage	covered, moisture-controlled warehouses
ogistics	n-India transport & handling capability

SECTION 6 – EXPERIENCE & PAST PERFORMANCE (INDICATIVE)

Supply Metrics

oduct Type	quantity Supplied
ontrol Cables	0+ km
ommunication Cables	0+ km

Client Segments:

- Metro Rail Corporations
- Government PSUs
- Industrial OEMs

SECTION 7 – WARRANTY & AFTER-SALES SUPPORT

All products manufactured by Novatech Cables & Wires Manufacturing Ltd. are warranted against manufacturing defects.

Warranty Period:

12 months from installation OR

18 months from dispatch, whichever is earlier

Replacement Policy: Defective material replaced at no cost

Technical Support: support@novatehcables.com

SECTION 8 – OEM AUTHORIZATION (TEMPLATE)

OEM AUTHORIZATION CERTIFICATE

This is to certify that Novatech Cables & Wires Manufacturing Ltd. is the Original Equipment Manufacturer of the products listed in this document.

This authorization is applicable for tender:

Tender No: _____

Authorized Signatory

Name & Designation

Company Seal

Date