Vinpower
HEAVY DUTY WIRES & CABLES

"**Connecting you with confidence**"

Introduction:

VIN Power, an Indian entity founded in 2005, Blessed with Mrs. Aachi Devi Goyal, Mr. G. R. Goyal & Mr. Hemant Goyal, is a well-known name in wire and cable solutions having an extensive range of world-class products and services.

Our highly experienced Director, Mr. Rajesh Kumar Goyal his wide knowledge and extensive networking throughout the industry, his teams at various departments are motivated to achieve results with best offering to the clients.

Vinpower Cables are superior quality cables, Manufactured by VIN POWER PRODUCT, At Their Brand new, Modern and well equipped plant with 2 Units at Sarna Doongar ind. Area, Jaipur.

Why VinPower?

VINPOWER Cables are made through well co-ordinate effort of highly qualified experienced and competent team of engineers, Executives and technocrats.

The brand equity of VIN POWER ELECTRO PRODUCT is a solid guarantee for every meter of cable presented to the market. VIN POWER Cables undergo a closely observed, regulated and continually tested manufacturing process. Raw Martials are tested in accordance with every stringent and exacting requirement of purchase specifications, both as specified by the bureau of Indian standard, NABL and our high qualified in-house standards. Strict quality control is enforced at every stage in the process of manufacturing. The finished product is also thoroughly tested as required by the relevant standard specifications. All these factors contribute to zero defect products, and as sure long life and trouble free service under rugged and varying conditions of usage.

VINPOWER cables are also attested by the bureau of Indian standard and NABL Certification, and various other approvals and certification for usage in industry, refineries, homes, offices, defenses and just about anywhere. The Company has an organized team of qualified staff to meet any challenge in the field of sales and production. The Company followed a strict quality control policy to achieve the quality final product.

Our Vision:

Our vision at "VIN Power Electro Product" would be to inspire people to innovate constantly and provide increased quality to each of our customers, which sets out on an ambitious undertaking of achieving a sale of highest level in the coming decade.

Quality Road Map:

At VINPOWER Electro product, we promise to produce quality material appreciable by customer and supply within stipulated time frame with a continued effect towards reducing cost an increasing satisfaction by continuously improving our management system with the help of our latest testing equipment.

The above process as follows:

- Reducing customer complaints.
- Supplying customer desired quality material within stipulated time frame.
- Reduce wastage during the production.
- Reducing the manufacturing cost with the help of experienced team.
- Increase the productivity by utilizing a smart combination of man and machinery.

COMPANY PROFILE

VIN POWER HAS OWN NABL TESTING LABORATORY WHICH TC NO. IS 11491

PRODUCT RANGE-:

DESCRIPTION OF CABLES/ BIS LICENCE-:

1) BIS LICENCE NO.CM/L- 8780803 FOR CERTIFICATION MARK IS:1554 (PT.I) 1988 - 1100 VOLTS GRADE PVC POWER & CONTROL CABLES

1.1 KV Grade PVC Insulated & Sheathed &Armoured/Unarmoured Aluminium Cables to IS:1554 (Pt.I)1988	Single Core up to 1000 sq.mm Multicore up to 400 sq.mm including HR PVC & FRLS Cables (Complete Range)
1.1 KV Grade PVC Insulated & Sheathed Armoured/Unarmoured Copper Cables to IS:1554 (Pt.I)1988	Upto 48 Cores Including HR PVC & FRLS Cables (Complete Range)

2) BIS LICENCE NO.CM/L- 3143845 FOR CERTIFICATION MARK IS:7098 (PT.I) 1988 - 1100 VOLTS GRADE XLPE CABLES

1.1 KV Grade XLPE Insulated & PVC Over & all Sheathed Armoured/Unarmoured Aluminium/Copper Cables to IS:7098 (Pt.I)1988	Single Core up to 630 sq.mm Multicore up to 400 sq.mm including HR PVC & FRLS Cables (Complete Range)
1.1 KV Grade XLPE Insulated & PVC Over & all Sheathed Armoured/Unarmoured Aluminium/Copper Cables to	Up to 37 Cores x 2.5 sq mm Including HR PVC & FRLS Cables (Complete Range) IS: 7098 (Pt.I) 1988

3) BIS LICENCE NO.CM/L-8780904 FOR CERTIFICATION MARK IS:694 - PVC ALUMINIUM/COPPER WIRES & CABLES

Non weather proof/weather proof PVC Insulated Sheathed/Unsheathed Aluminium /Copper Wires & Cables, PVC Flexible Copper Wires for voltage grade upto and including 1100 Volts to IS:694-2010 and including FR/FRLS Flexible Wires & Cables

1-	HOUSE WIRE	0.50 SQMM TO 150 SQMM
2-	FLEXIBLE CABLE	2CX 1.5 SQMM TO 24CX 2.5 SQMM
3-	FIXED CABLE	2CX 2.5 SQMM TO 4C X 50 SQMM
4-	SUBMERSIBLE CABLES	3CX1.5 SQMM TO 3CX 50 SQMM

4) BIS LICENCE NO.CM/L-8400134210 FOR CERTIFICATION MARK IS: 14255 AERIAL BUCH CABLES ALUMINIUM WITH ALLOY MASSENGER CABLES

Non weather proof/weather proof XLPE Insulated Aluminium Conductor cables, with street light for voltage grade upto and including 1100 Volts to SIZE UP TO 1CX16+16 SQMM TO 3CX 120+16+95 SQMM ABC CABLES,

Key Products:

1) 3CX25+25 SQMM
2) 3CX25+16+25 SQMM
3) 3CX35+16+25 SQMM
4) 3CX50+35 SQMM
5) 3CX50+16+35 SQMM
6) 3CX70+16+50 SQMM
7) 3CX95+16+70 SQMM
8) 3CX95+16+50 SQMM
9) 3CX120+16+95 SQMM

5) BIS LICENCE NO.CM/L-8400127912 FOR CERTIFICATION MARK IS:398 PART -2 ACSR CONDUCTOR UP TO 520 SQMM

Non weather proof/weather over head Distribution ACSR Aluminium conductor, **Key Products**:

1) Squirrel Conductor
2) Weasel Conductor
3) Rabbit Conductor
4) Raccoon Conductor
5) Dog Conductor
6) Panther Conductor
7) Zebra Conductor
8) Moose Conductor

6) BIS LICENCE NO.CM/L-8400245413 FOR CERTIFICATION MARK IS:398 PART - 4 AAAC CONDUCTOR UP TO 200 SQMM

Non weather proof/weather over head Transmission Purposes AAAC Aluminium conductor, **Key Products**:

1) Squirrel Conductor
2) Weasel Conductor
3) Rabbit Conductor
4) Raccoon Conductor
5) Dog Conductor
6) Panther Conductor
7) Zebra Conductor
8) Moose Conductor

List of Plant and Machinery

A) PVC – XLPE SECTION

Sr. No.	Extruders	Capacity	Nos.
1.	120 mm	600 Kg/hrs. (PVC)	1
2.	80/50 mm	220 Kg/Hrs. (PVC)	1
3.	80/50 mm	220 Kg/Hrs. (PVC)	1
4.	75/45 mm	160 Kg/Hrs. (PVC)	1
5.	75/45 mm	160 Kg/Hrs. (PVC)	1
6.	65/45 mm	120 KG/Hrs. (PVC)	1
7	120/80/65 mm Sioplus for MVCC/HT 11KV/33KV	400 Kg/Hrs.(XLPE)	1

B) PVC COMPUNDING SECTION

1) High Speed Mixers 100 Kgs Capacity each 4
2) High Speed Mixers 60 Kgs Capacity each 4
3) Inkjet Printing Machines 5

C) WIRE DRAWING SECTION

1)	Horizontal heavy 11 Dies Wire Drawing M/C	1
2)	(10 Dies) Wire Drawing Machine	2
3)	9 Wire-Drawing Machines	1
4)	16 Fine Wire- Drawing Machines	1

D) ANNEALING & TINNING

1)	Copper Annealing Plant	1
2)	Aluminium Annealing Plant	1

E) STRANDING SECTION

1)	4+1 Stranding machine core laying	1
2)	7 Strands High Speed Stranding Machine (Skip)	1
3)	7 Strands Tubular	3
4)	61 Strands Machine	1

F) LAYING UP MACHINE

1)	4+1 Core Laying up machine	2

G) Armourming Machines

1)	48 Spools Armouring M/C	1
2)	24 Spools Armouring M/C	3
3)	Aluminium strip making machine for screening	1
4)	Copper tapping machine	1

H) OTHER EQUIPMENTS

1)	Coils Rewinding Units	10
2)	Butt Welding Machines	5
3)	Cable Rewinding Stand	2
4)	Generator 15 Kva- Mahindra Make	1
5)	Weighing Balance	5

I) Workshop

1)	Drilling Machines	2
2)	Shaper Machines	2

J) SPECIAL EQUIPMENT FOR XLPE CABLES

1)	Steam Boiler (Water Bath for Curing)	1

LIST OF LABORATORY & TESTING EQUIPMENTS

Sr. No.	Name of Equipment	Quantity
1.	Steel Scale	1
2.	Digital weighing balance	1
3.	Water bath (Single position)	1
4.	Weighting balance	1
5.	AC high voltage tester	1
6.	D.C H.V. tester	1
7.	Kelvin bridge	1
8.	Pointed micrometer	1
9.	Digital vernier caliper	1
10.	Million mega Ohm meter	1
11.	Glass Thermometer	1
12.	CBC tester	1
13.	HOT air oven (Single position)	1
14.	Standard Resistance box	1
15.	Ageing oven (Single Position)	1
16.	Thermal stability (Single Position)	1
17.	HOT set oven (Single Position)	1
18.	Hydrometer	1
19.	External Micrometer	1
20.	Earth Resistance Testing	1
21.	Hour meter of hot air oven	2
22.	Spark tester	1
23.	Digital tensile testing machine	1
24.	Digital tensile testing machine	1
25.	Halogen test apparatus instrument- as per IS:10180 (PT.59) 1988, IEC 754/1	1
26.	Critical oxygen index test apparatus instrument-as per ASTM-D2863	1
27.	Smoke density tester application	1
28.	A set of Weights	1
29.	K-type thermocouple	1
30.	ageing oven 4 sell	1

31.	Digital micro Ohm – Meter	1
32.	Digital Profile Projector	1
33.	Digital External Micrometer	1
34.	Humidity chamber (Single Position)	1
35.	Apparatus for (Gravemetric) water absorption test, vacuum oven (Single Position)	1
36.	Digital stop watch	1
37.	Conditioning Chamber (Single Position)	1
38.	Measuring tape	1
39.	Water Bath	1
40.	Digital weighting balance	1
41.	Digital thermo hygrometer	1
42.	Sleep gauge	1

EQUIPMENT FOR SPECIAL TESTS INCLUDING FRLS & XLPE TESTS

1) Flammability Test Apparatus-as per IEEE 383, IEC 332-1 — 1
2) Swedish Chimney- as per SS 424 – 14 – 75 — 1
3) Thermal Stability test Apparatus – as per IS:5831 — 1
4) Apparatus for Accelerated Water Absorption test — 1

SOME IMPORTANT TYPE TESTS UNDER IS:1554 (PT.1)

1) Loss of Mass Test for PVC Insulation and sheath as per IS:5831 – 1984.
2) Heat Shock Test for PVC Insulation and Sheath as per IS:5831 – 1984.
3) Thermal Stability Test for PVC Insulation and Sheath as per IS:1554 (Pt-1)
4) Flammability Test as per IS:1554 (Pt-1)
5) Tensile Strength & Elongation Test. (Before Ageing & After Ageing)
6) Hot Deformation Test.
7) Shrinkage Test.

OPTIONAL TESTS UNDER IS:1554 (PT. I)

1) Cold Bend Test
2) Cold Impact Test
3) Armour Resistance Test
4) (For other than mining Cables)

ADDITIONAL TESTS WHEREVER REQUIRED

1) Di-electric Strength Retention Test as per NEMA WC-5
2) Test for Rodent and Termite Repulsion Properties of Sheath

SPECIAL TEST FOR PVC FRLS & XLPE CABLES

1) Oxygen Index Test at 27°C as per IS : 1554 (Pt-1) 1988
2) Temp Index Test at 250° C as per IS : 1554 (Pt-1) 1988
3) Test for Halogen acid Gas evolution (Percentage by Weight).
4) Flame Retardance Test on Single Cable as per IS: 1554 (Pt-1) 1988.
5) Flame Retardance Test on Bunched Cable as per IS: 1554 (Pt-1) 1988.
6) Smoke Density Test as per IS: 1554 (Pt-1) 1988.
7) Accelerated Water Absorption Test for Insulation (Gravimeter) as per IS:7098 (Pt-1) 1988
8) Hot Set Test for XLPE Cables.

QUALITY CONTROL & TESTING

The tests on both PVC & XLPE Insulated cables are divided in three groups :

1) Tests at raw material stage.
2) Production shop preventive tests, i.e. process inspection.
3) Finished cable tests (**Final Inspection**).

1. TESTS AT RAW MATERIAL STAGE

Cables are manufactured from quality raw materials which are tested in our laboratory, strictly according to our Works Specifications. The raw materials and tests generally conducted are as follows:

(i) Aluminium / Copper:

Conductivity, tensile strength, Elongation/ Annealing.

(ii) PVC Compound & XLPE Compound:

Density, tensile strength elongation at break, volume resistivity, ageing, hot deformation and shrinkage, Hot Set Test

(iii) Steel Strip / Wire:

Tensile strength elongation at break torsion, resistivity, zinc coating and winding test.

2. PRODUCTION SHOP PREVENTIVE TESTS, I.E. PROCESS INSPECTION

The process control tests are carried out at every stage of manufacture for checking the adequate cable manufacturing process and taking necessary steps to eliminate any deficiencies.

The control tests are to ascertain that cables manufactured at our Works are of desired quality and comply with the standards and technical specifications.

The quality of **"Vin Power"** Cables is maintained at high level due to the latest processing technology with which these cables are manufactured. The followings are the salient features of the process inspection carried out by us for PVC Cables.

(i). **Wire Drawing:**

(a). Wire diameter and surface finish.
(b). Wrapping and tensile strength test on aluminium wires.
(c). Annealing test on copper wires.
(d). Conductor Resistance.

(ii). **Conductor Stranding:**

(a) Dimensions.
(b) Surface and shape of conductor.
(c) Lay and direction of lay for stranding
(d) Shaping conductor.
(e) D C Resistance.
(f) No. of wires in each conductor

(iii) Insulation:

(a) Dimensions of cores
(b) Thickness
(c) Surface
(d) Spark Test, High Voltage Test and IR Test
(e) Curing Test for XLPE Cables

(iv) Laying up:

(a) Sequence of cores.
(b) Direction of laying length and lay.
(c) Circularity of cable.
(d) Dia over laid up cores
(e) Application of fillers in the interstices

(v) Inner Sheath:

(a) Surface
(b) Concentricity
(c) Thickness
(d) Dia over Inner Sheath

(vi) **Armouring :**
(a) Lay and direction of lay of armouring wires / strips.
(b) No. of strips / wires.
(c) Uniformity of application and dia over armouring
(d) Dimensions of strip / wire

(vii) Outer Sheath :
(a) Thickness
(b) Concentricity and dia over sheath
(c) Surface
(d) Embossing with requisite information on outer sheath.

3. FINISHED CABLE TESTS

The finished cable tests can be divided into two categories:

(a) Routine tests to which each and every length of cable is subjected.
(b) Type tests to which samples of bath of cable are subjected. The samples for these tests are selected as per the scheme laid down in I.S.I. License.

(A) ROUTINE TESTS:

(i) Voltage Tests:

Each core of the cable is tested at room temperature at 3 KV a.c.(RMS) for a duration of 5 minutes

(ii) Conductor Resistance Test:

The D.C. Resistance of each conductor is measured at room temperature and the results are corrected to 20° C as specified in I.S. 8 130 – 1984.

4. Our Valuable client: