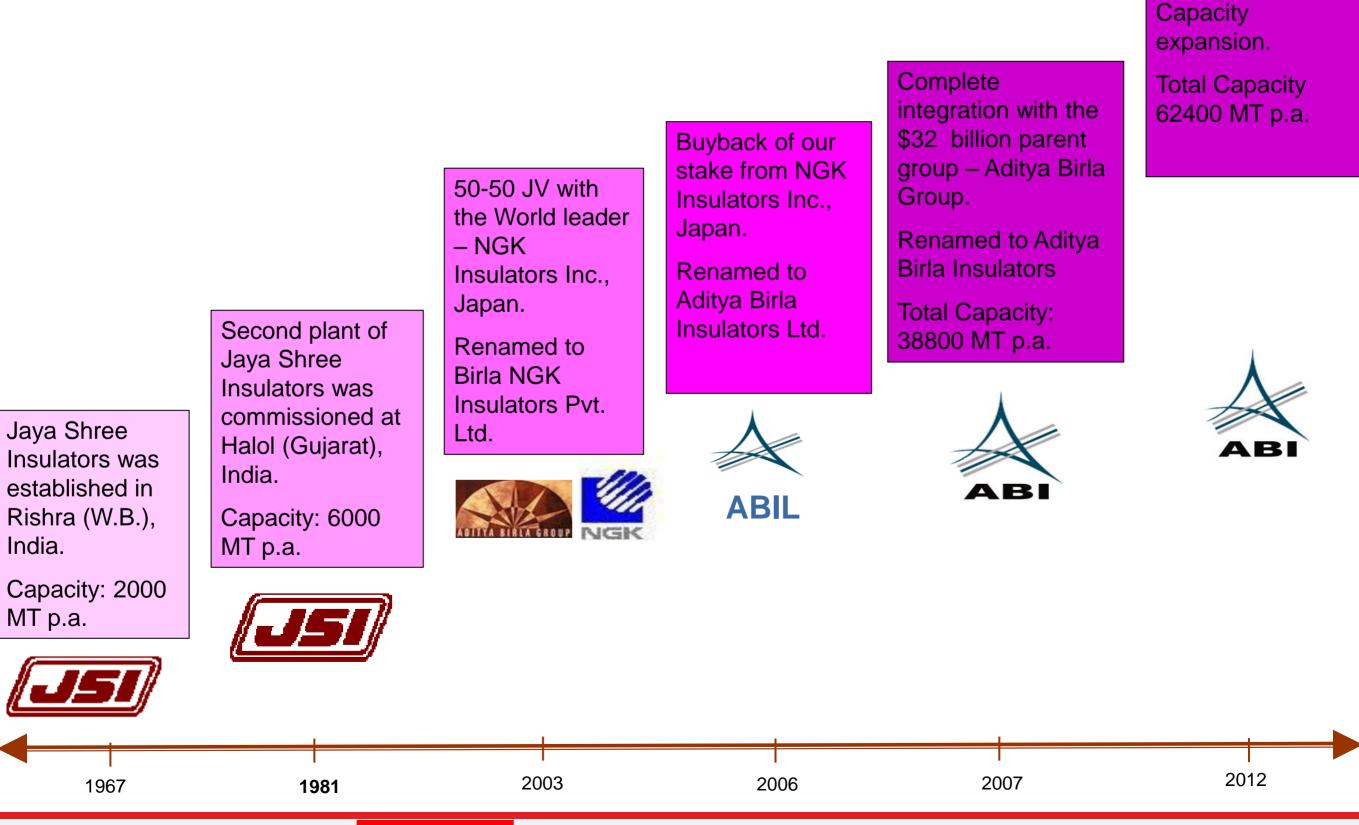
ADITYA BIRLA INSULATORS

Insulators | Evolution





ADITYA BIRLA GROUP

At a glance Business Sectors

Insulators | Manufacturing Locations

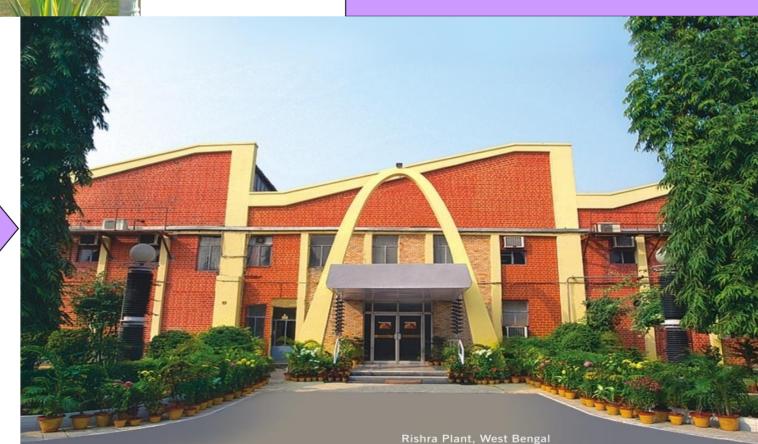




Halol Works, Gujarat, India. The plant has a Capacity of 24150 MT p.a. and is dedicated to the Sub-station, Traction & Line Post Insulators, besides Composite Insulators.

Rishra Works, West Bengal, India

The plant has a capacity of 38250 MT p.a. and is dedicated to Transmission Insulators



ADITYA BIRLA GROUP



Highest installed capacity in India - 62,400 MT p.a.

Widest Product Range of Porcelain Insulators - From 11kV to 1200kV

<u>Substation</u> (Solid Core Station Post and Hollow Core Insulators), Traction (Railways), Line Post

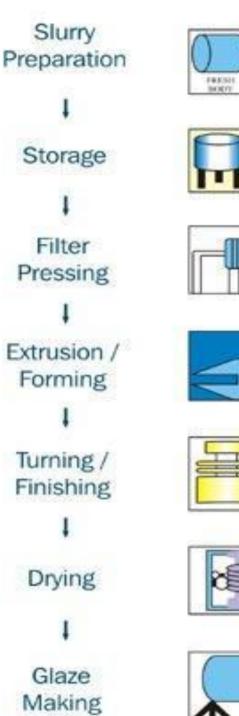
<u>Transmission Insulators</u> (Suspension Disc Insulators, Pin Insulators)

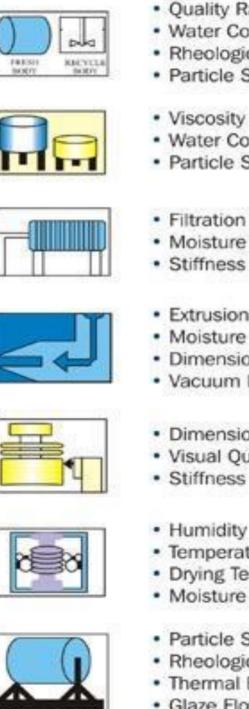
Long Rod Composite / Polymer Insulators from 11kV to 400/500kV

Insulators | Manufacturing Process



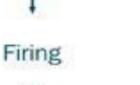
PRODUCTION PROCESS AT ADITYA BIRLA INSULATORS

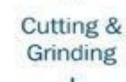




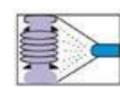
- · Quality Raw Materiels Water Content Rheological Values Particle Size
- Viscosity
- Water Content Particle Size
- Filtration Rate
- Moisture Content
- Extrusion Rate
- Moisture Content
- Dimension Vacuum Level
- Dimension
- Visual Quality
- Humidity
- Temperature
- Drying Temperature
- Moisture Content
- Particle Size
- Rheological Value
- Thermal Expansion
- Glaze Flow

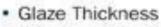
Glazing & Sanding





- Cement Mixing
- Assembly
- Testing Final
- Inspection Packing &
- Despatch





- Viscosity Density
- Dimension
- Sand Size & Quality
- Adherence to Firing Cycle
- Thermal Expansion
- Kiln Pressure & Temperature
- Porosity
- Dimensions
- Visual Inspection
- Ultrasonic, Dye Penetration Test
- · Cement Quality
- Mixing Ratio
- Pot Life
- Metal Hardware Quality
- Zinc Coating
- Curing Cycle Conditions
- Electrical & Mechanical Test
- Thermal Test & Porosity
- Special Test for Customers
- Visual Inspection
- Dimension
- Packing Quality
- Packing Design
- Marking & Documents

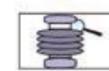
ADITYA BIRLA GROUP

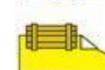
At a glance

Business Sectors











Insulator Type	Ratings	Applicable Standards
Solid Core Station Post Insulators	Up to 1200 kV	IS, IEC & ANSI
Long Rod Insulators	Up to 500 kV	IS, IEC & ANSI
Traction Insulators for Railways Electrification	25 kV	IS, IEC & RDSO
Solid Core Line Post Insulators	Up to 66 kV	IEC and ANSI
Apparatus Porcelain Insulators for SF6 Circuit Breakers, ITs, Condenser Bushings, Lightening Arresters etc	Up to 800 kV	IS, IEC & ANSI



Insulator Type	Profile/Rating	Mechanical Strength	Creepage Distance	Applicable Standards
Suspension Disc Insulators	Super Fog, Anti Fog, Semi-fog, Normal, Open Profile	Up to 420 kN	Up to 690 mm	IS, IEC, BS, ANSI & Australian Specs
Pin Insulators	Up to 69 kV	Up to 10 kN	Up to 1080 mm	IS, IEC, BS, ANSI, AS Specs
Post Insulators	Up to 36 kV Up to 245 kV with Multi-units	Up to 32 kN	Up to 1050 mm, Single unit	IS, IEC & ANSI Specs
HVDC	Up to 500 KV	210 kN	_	IS, IEC & ANSI Specs

ADITYA BIRLA GROUP

At a glance **Business Sectors**

Insulators | Certified Management Systems

ISO 14001:2004



SA 8000:2008

ISO 9001:2008



DET NORSKE VERITAS AS, EMCREN CHAMPERS, 10, C.S.T. ROAD, SANTACRUZ (E), MUMBAI - 400.098, INDIA - 1999, dry,

Place and Date of Issue

Chennai, 28 December 2010 for the Accredited Unit:

DET NORSKE VERITAS AS

MUMBAL INDIA

Bhupalam Ajit

Management Represen

ELECTRICAL, CHEMICAL AND MECHANICAL TESTING LABORATORIES ARE "NABL" ACCREDITATED.

OHSAS 18001:2007

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At a glance **Business Sectors**

Insulators | Process Control Equipments





Particle Size Analyzer



Process Ball Mill



Optical Microscope



Piston Type Extruder



Dilatometer

9

Insulators | Testing facilities for Transmission Products





Vibration Testing Setup





800kV 20kJ Impulse Generator



1000kN Tensile Testing Machine

Insulators | Testing facilities for Substation Products





1200 KV Bending Machine/Joint CT

The various type of Mechanical Tests

Test-

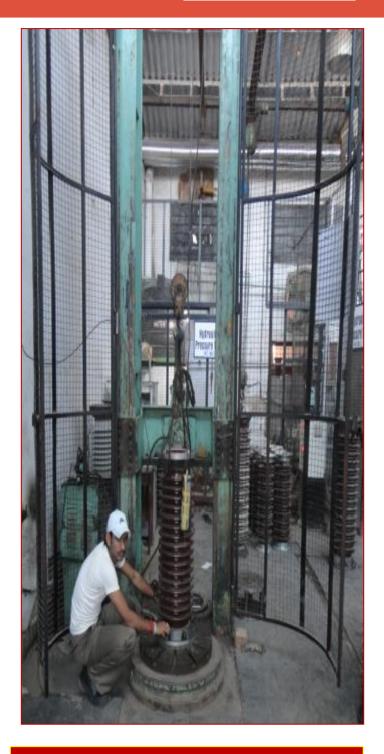
Four

are

- Bending Load direction
 - Tensile test
 - Torsion Test
 - Compression Test
 - Inner Pressure Test
 - Mechanical Performance Test



Ultrasonic Testing Machine



Bending Machine

ADITYA BIRLA GROUP

Insulators | Packing & Dispatch





Aesthetic, all-weather packing after due cleaning of Insulators



Loading by Forklift



Truck Loading through Crain



Safe despatch to the customer

Insulators | ABI's Global Footprint





Our insulators are up and running in over 56 countries

ADITYA BIRLA GROUP

Insulators New Product Development



Approved Vendor for entire range of 765kV Transmission & Substation products. Presently enjoy highest domestic market share in this segment

1200kV Product Range

•Developed 1200kV Product Range for Substation & Transmission and successfully charged by PGCIL.

<u>Super fog Range for</u> <u>Transmission</u>

• Disc Insulators with 612mm creepage successfully developed, tested & supplied.

HVDC Product Range

•Development of Insulators for HVDC applications is under progress



- New Shuttle kiln of 2500 MT per annum capacity commercialized
- Jointed insulators upto 5000mm
- CNC shaping machine for 850mm O.D insulator
- Bar coding of Insulators

Insulators Valued Customers





Insulators | Accolades





Some of the awards that ABI has won are:

- •IMC Ram Krishna Bajaj performance excellence award 2011-12 (equivalent to Deming Quality Award)
- •IMC Ram Krishna Bajaj National Quality Award Certificate of Merit 2009 & 2010
- •IMC Ram Krishna Bajaj National Quality Award Commendation Category 2008
- GOLDEN PEACOCK Environment Management Award 2008-09
- GOLDEN PEACOCK National Quality Award 2007
- •CAPEXIL Export Award for 21 Years in a row
- •Export Excellence awards for His Excellencies The President of India and also from the Prime Minister of India

Insulators | Contact





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