



# 🗲 The Story ...



BALAJI ENGINEERS ISOLATORS PVT. LTD. is a leading manufacturer of Isolator disconnectors in India, dedicated to serving the industrial power sector since 2004. The Government of India has honored Balaji Engineers with the "Best Product Innovation Award."

Company is Certified with ISO 9001:2015 Certification, located in industrial hub MIDC Shiroli, Kolhapur, Maharashtra, India. Our fully-equipped state-of-the-art machinery and comprehensive testing facilities enable us to specialize in manufacturing high-quality isolator disconnectors that meet international standards IEC 62271. Our products are approved by ERDA, CPRI NABL

The "BALAJI ISOLATORS" brand is well-known for its technical precision and easy electro-mechanical operation of equipment in actual field situations. Electrical contractors and consultants prefer our isolators for a various electrical infrastructure projects, such as power distribution utilities, windmill projects, solar projects, HT consumers, MSEDCL / MSETCL and all state electrical utility tenders, infrastructure projects, industrial substations, distribution substations, EV charging substations, distribution lines, and railway electrical network sectors.

"Balaji Isolators" products are widely utilized throughout India and exported globally. We are committed to offering top-quality products that meet our customers' expectations and contributing in the expansion of the industrial sector domestically and internationally.

#### Management of Company ...



Mr. Suhas Bhandari Director

Mr. Suhas Bhandari, is a Director and Founder of the company. Who is a young and dynamic entrepreneur with a rich 20 - years experience in the electrical field. After completing his Engineering, he started from scratch and planted the small seed of Balaji Engineers, which has now reached the impressive 220 kV voltage level with a strong presence in pan India. With expertise in both research and development and business development is achieving growth in a company with vision of expand product basket and being strong presence in global market. Balaji Engineers group is performing remarkably under proficient guidance of Mr R D Bhandari (Rtd Executive Engineer, MSEDCL Kolhapur). With help of solid technocrats management ,company has engraved its name for quality products and services in power sector in pan India.

#### 🗲 Our Team ...

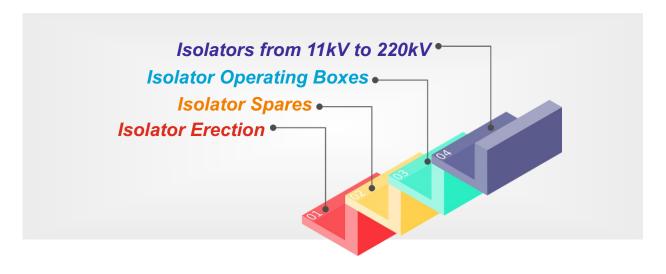
In the competitive world of engineering, experience and expertise play a pivotal role in driving success. At our company, we are proud to say that our team is comprised of highly experienced engineers who have accumulated an impressive 30 years of core experience in the isolator industry, along with a group of young, talented engineers who have a firm grasp on new edge technology and concepts. Together, they form a cohesive unit that serves as the backbone of our company.





# Product Range of Isolators ...

Particulars	Product description
Rated voltage	11 kV,22 kV,33 kV,66 kV,110 kV,132 kV,220 kV
Highest system voltage	12 kV,24 kV,36 kV,72.5 kV,123 kV,145 kV,245 kV
Current Rating	400A,630A,800A,1250A,1600A,2000A,2500A,3000A
Type of Isolator	<ol> <li>Banging Type</li> <li>Turn &amp; Twist Type</li> <li>Horizontal Double Break (HDB)</li> <li>Vertical Single Break (VSB)</li> <li>Horizontal Single Break (HSB)</li> <li>HDB with Underhung</li> <li>Horizontal Center Break (HCB)</li> </ol>
STC Value	1) 11 kV - 12.5 kA for 3 seconds 2) 22 kV - 25 kA for 3 seconds 3) 33 kV - 25 kA for 3 seconds 4) 66 kV - 40 kA for 3 seconds 5) 132 kV - 40 kA for 3 seconds 6) 220 kV - 40 kA for 3 seconds
Operating Mechanism	Motorized Operating, Manual Reduction Gear Operating, Manual Operating with standard handle
Support Structure	Pipe type structure & Lattice type structure / channel type structure
Insulator Type	Porcelain solid core, Polymer type
Earth blade	With earth blade isolator, without earth blade isolator Single, double earth





## 🗲 Why Balaji Isolators ...

- **Awarded** by the Government of India for innovative isolator products.
- **Twenty** years of experience in substation and isolator operations.
- **Experts** in isolation solutions up to 220 kV voltage level.
- Durable mechanism construction of Isolator for long period of span.
- Long-term consistency in contact pressure and contact resistance is maintained due to proper design. Adjustable horn bars, slots are supplied to ensure moving blade engagement and disengagement with fixed copper contact.
- In each Contact of phase, a specific taper shape is included to ensure that the moving blade inserts properly and self aligns with the fixed copper contact.
- In Turn and Twist Isolator, our engineering design is so precise and perfect that the isolator operates smoothly and accurately every time, whether it is being operated manually or automatically.
- Our isolator is designed with copper moving contacts and an operation mechanism for hassle-free operation over a long lifespan.
- Hot dip process is given to all Mild steel parts, quality of process is strictly checked before and during manufacturing of Isolator.
- High purity copper is used in all isolator manufacturing process.

## 🗲 Isolator Operating Mechanism ...

Our operating mechanism is very easy to install as well as easy to operate with a single technician. Both the mains isolator and the earth switch are supplied with a separate working mechanism that allows them to operate independently. Isolators have a manual or motorized operating mechanism installed in this structure. The operating box is connected at a convenient height which will be easy to operate.

- **Manual operating mechanism**: The manual operating mechanism has a specially designed operating handle. The operating box has an adjustment clamp for the mains operating pipe.
- Motorized operating mechanism: We have an in-house manufacturing facility for operation boxes. Our motorized mechanism is provided with a high-quality motorized box that features IP55/IP67 protection. The box panels are equipped with branded auxiliary switches and are designed for a long lifespan. We offer boxes in MS, SS, and Aluminium to meet client requirements. Additionally, interlocking is provided for safety.

#### 🗲 Isolator foundation Structure ...

Balaji Isolators specialize in manufacturing isolator structures using MS hot-dip galvanized channels, angles, and pipes type. Our technical proven and reliable designs cater to voltage levels ranging from 11kV to 220kV Isolators.

#### Testing facility ...

- HV tester 100 kV (for high voltage testing)
- Temperature rise test setup
- Hardness tester
- Contact resistance meter CRM-100
- Plating micro checker
- Surface checker
- Megger tester (For Insulation Test)
- Mechanical endurance setup

#### Type Testing of Isolators as per IS / IEC 62271-102

Our products are type tested from Central Power Research Institute, India (CPRI) and Electrical Research and Development Association (ERDA).





- Lightning Impulse Voltage withstand Test
- Dry Power Frequency Voltage Withstand Test
- Wet Power Frequency Voltage Withstand Test
- Temperature Rise Test
- Short Time Withstand Current and Peak Withstand Current Test on Mains and Earth
- Mechanical Endurance Test

# 🗲 Infrastructure ...

Balaji Engineers Isolators Pvt Ltd is a renowned manufacturer of switching and disconnecting isolation devices. With a perfect blend of state-of-the-art machinery, cutting-edge equipment, and highly skilled manpower, we deliver exceptional products to our clients. Our pneumatic system enhances precision in manufacturing and assembly, while our power press machines with in-house tool kits enhance the confidence in product modifications. The use of high-quality raw materials ensures the durability of our products even when subjected to heavy mechanical operations. We strictly adhere to rigorous quality control measures from material selection to disconnector assembly. Our well-equipped facilities include a machine shop, power press shop, tool kit room, welding shop, pneumatic assembly shop, testing center, and dispatch area. At Balaji Engineers Isolators Pvt Ltd, we are committed to providing reliable isolation solutions that meet the highest standards of excellence in the industry.

- Machine Shop
- Power Press Shop
- ► Tool Kit Room
- Welding Shop
- Pneumatic Assembly Shop
- Testing Setup







Infrastructure ..









Balaji Engineers Isolators Pvt Ltd is a in-house research and development department. Specializing in the development and continuous improvement of isolator products. Our goal is to achieve compact size and precise alignment of contacts with hassle-free operation. With a dedicated R&D team, we focus on the development of isolators ranging from 11kV to 220 kV levels. Our team is focusing developments in product in manufacturing unit as well as on field operations. By continuously pushing the boundaries of innovation, we strive to better understand the needs and preferences of our customers in order to provide them with superior isolator solutions. Our Team is continuously on mission of R & D to achieve design for

- Minimized contact resistance
- Easy and quick erection
- Low friction design for smooth opration
- Ice breaking capacity
- Strong rotary pedestals
- Minimal maintenance





#### 🗲 Approvals ...

Balaji Engineers isolator is approved across various states of Pan India, including electricity boards, electricity utilities, private utilities, private industrial houses, and the Indian Railway network up to a voltage level of 220kV.



#### 🗲 Services ...

Balaji Engineers Isolators Pvt Ltd is a leading manufacturer of isolators and a provider of erection services in India. With our expertise, we supply and install isolators throughout the country, catering to industrial installations as well as distribution and transmission substations. Our fully-fledged technical team is dedicated to substation execution and charging. Additionally, Balaji Engineers has an expert team capable of executing maintenance of isolators up to 220 kV.



#### 🗸 Isolator Spare Parts ...

We also specialize in manufacturing spare parts for isolators ranging from 11kV to 220 kV. Our state-of-the-art manufacturing unit ensures that we can meet the demands of any make of isolators at various voltage levels. Moreover, we provide retro fitting solutions for existing isolators, helping our clients enhance the performance and efficiency of their equipment. With a focus on quality and customer satisfaction, "Balaji Isolators" is your trusted partner for all your isolation needs. In Isolators we are able to supply any spare parts of any make Isolator.



Spare Parts ...



















































TATA HITACHI

















Contact us ...



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