



Smart solutions.
Strong relationships.



RIP Condenser Bushings



CG POWER AND INDUSTRIAL SOLUTIONS LIMITED



Attributes

Low Dielectric Losses (tan delta < 0. 40%).

Partial Discharge free at Highest System Voltage, Um.

Excellent Mechanical Strength.

Highest Operational Safety.

No Explosion Risk, Fire Resistant Due to Oil-free Design.

Maintenance Free.

RIP Condenser Bushings

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Aerial view of Switchgear Complex

CG - A distinguished legacy of pioneering innovation and unmatched excellence in electrical solutions.

CG is an engineering conglomerate headquartered in Mumbai, India. The company is a leader in the Electrical Engineering Industry and has two business lines—Industrial Systems and Power Systems. It manufactures Traction Motors, Propulsion Systems, Signaling Relays etc., for the Indian Railways, and wide range of Induction Motors, Drives, Transformers, Switchgears, and other allied products for the Industrial and power sectors.

Recently, the company also made a foray into the business of consumer appliances such as Fans, Pumps, and Water Heaters.

The company has 16 world-class manufacturing plants in India and Sweden, and a PAN India network of 5 regional and 14 branch offices, with more than 3,100 permanent employees.

The company continues to excel and maintain its

leadership position across its businesses, backed by its outstanding expertise, customer-centric approach, and enhanced focus on innovation and sustainability.

Since November 2020, the company has become a part of the renowned Murugappa Group.

At CG, our recent innovations showcase the exceptional synergy achieved through diverse

talent, cutting-edge manufacturing expertise, and an unwavering commitment to excellence. By integrating a rich tapestry of perspectives and leveraging advanced manufacturing techniques, we have not only broadened our product portfolio but also set new industry benchmarks.

Introduction

The reliability of a power transformer depends to a great extent on the sound operation of bushings. Oil Impregnated Paper (OIP) bushing technology has proven its adequacy for decades on Power Transformer. However, with this new technology, Resin Impregnated Paper (RIP) bushings, enhance their reliability manifold by the sheer nature of its dielectric characteristics and complete elimination of dielectric liquid within the product.

CG takes pride in introducing this new technology RIP bushing, developed completely indigenously. State of the art manufacturing facility including automated winding machine, curing ovens and fully automated resin processing plant are established at our Switchgear complex in Nasik, India. These bushings are type tested as per latest IEC 60137.



Sustainability

RIP Bushings is our holistic approach to protecting environment, fostering ecological harmony and stimulating a circular economy.

Condenser bushings are used as a lead out for the Power and Distribution Transformers. 'Transformer Bushings' provide a reliable and safe connection of High Voltage power to the transformer with proven design.

Resin Impregnated Paper (RIP) bushings, enhance their reliability manifold by the sheer nature of its dielectric characteristics and complete elimination of dielectric liquid within the product which makes the product fire resistant & explosion free. CG takes pride in introducing this new technology RIP bushing developed indigenously. Currently, CG is the only company in India which has end to end manufacturing facility for RIP bushings.

Features

» Fine-Graded Condenser Cores

- CG's Resin impregnated paper (RIP) condenser bushings are made using high-quality electrical grade crepe paper, high quality epoxy resin and aluminium foils, ensuring uniform condenser grading. Our bushing core winding machine features closed-loop controls that maintain consistent winding parameters such as tension and pressure etc.

» Compliance with International Standards

- All bushings undergo thorough type testing in accordance with the latest IEC 60137 standards, guaranteeing quality and reliability.

» Seismic Qualification

- Designed to meet seismic requirements as specified in IEC 61463, our bushings ensure stability and performance in challenging conditions.

» Outdoor Application (Oil-to-Air)

- Available with composite insulators, our bushings are engineered with appropriate creepage distances to withstand heavy pollution levels in outdoor environments.

» Altitude and Temperature Specifications

- Upon request, bushings can be customized for high-altitude applications and are suitable for extreme temperature ranges, from -40°C to +50°C.

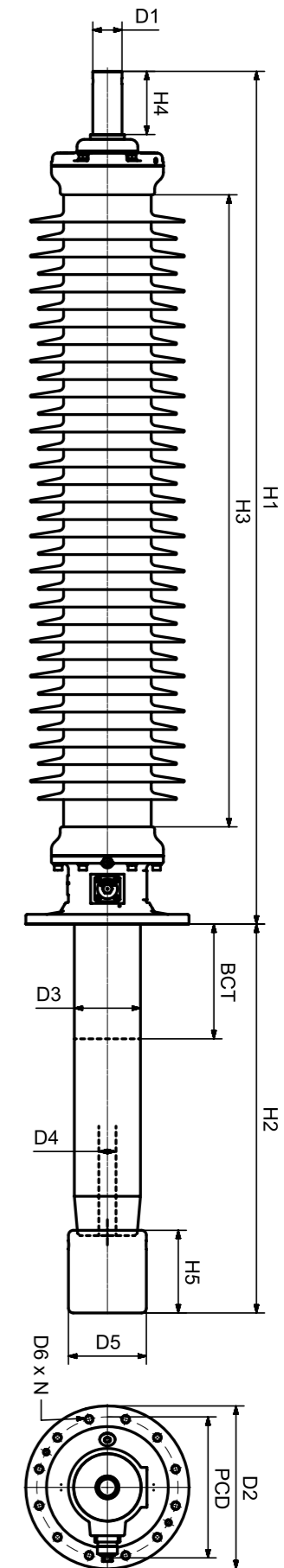
» Customized Solutions

- CG provides fully customized solutions tailored to meet specific customer needs.

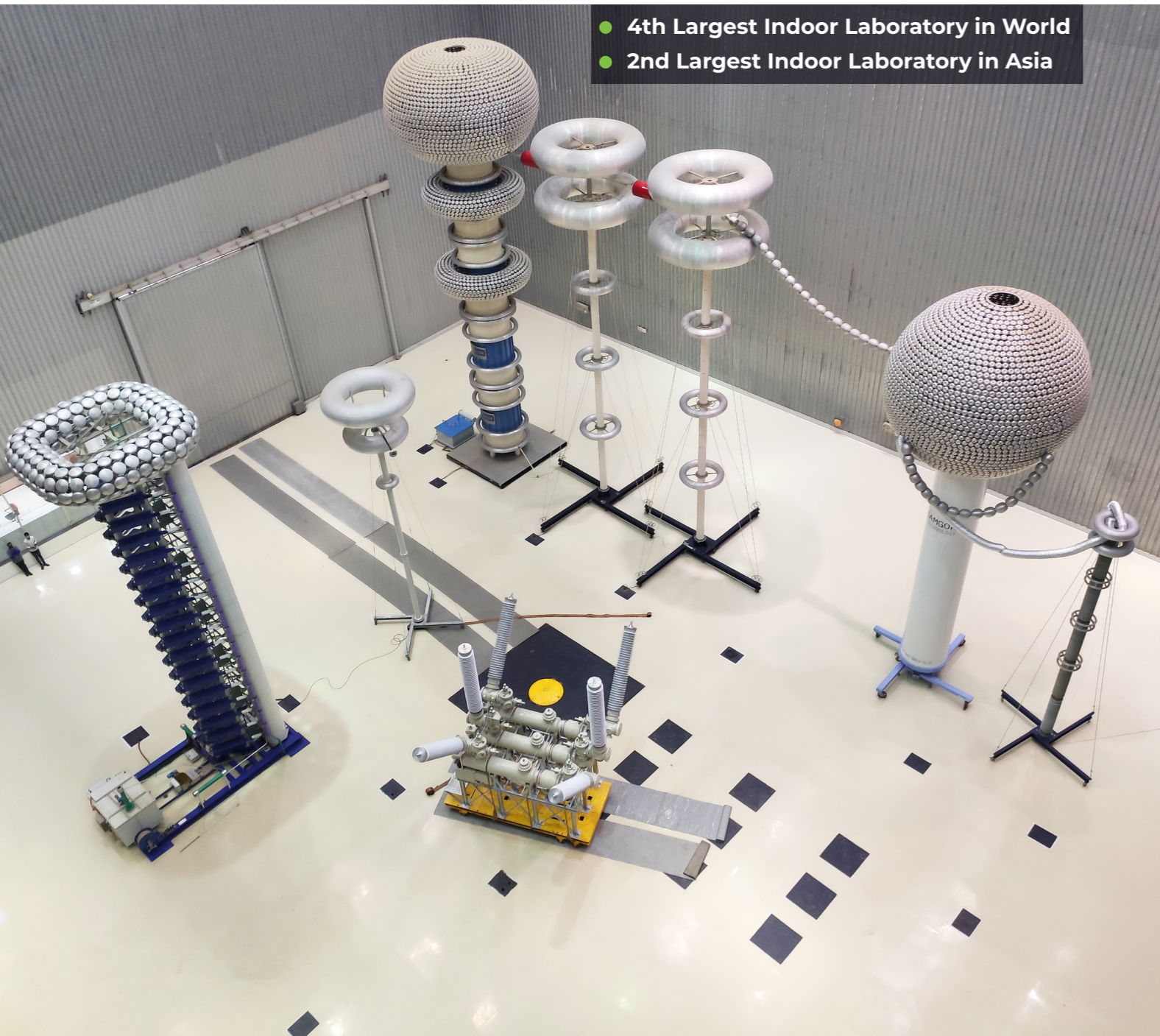


Technical Specifications

Type Reference	kV Class	Insulation Level	Rated Current	Termination Types	Available BCT	D1	D2	D3	D4	D5	D6xN	PCD	H1	H2			H3	H4	H5	Creepage (mm/kV)	
						30	60	115	38	110	15x6	185	905	100	300	600	450	650	950		460
RCB-250-800	52	105 kV /250 kVp	800	Draw Lead	100/300/600	60	225	115	38	110	15x6	185	905	450	650	950	460	125	32	31	
RCB-250-1250			1250	Draw Rod		60	225	115	38	110	15x6	185	905	935	450	650	950	460	125	32	31
RCB-250-2000			2000	Stem		60	335	136	-	-	-	15x12	290	935	475	675	975	975	500	125	-
RCB-250-3150	72.5	155 kV /325 kVp	3150	Stem	100/300/600	60	335	136	-	-	15x12	290	935	475	675	975	500	125	-	31	
RCB-325-800			800	Draw Lead		30	225	115	38	110	15x6	185	1110	1110	495	695	995	660	125	50	31
RCB-325-1250			1250	Draw Rod		60	225	115	38	110	15x6	185	1110	1110	1110	495	695	995	660	125	50
RCB-325-2000	145	305 kV /650 kVp	2000	Stem	100/300/600	60	335	136	-	136	15x12	290	1110	495	695	995	660	125	-	31	
RCB-325-3150			3150	Stem		60	335	136	-	136	15x12	290	1110	1110	495	695	995	660	125	-	31
RCB-650-800			800	Draw Lead		30	335	136	38	160	15x12	290	1780	290	1780	600	800	1100	1300	125	170
RCB-650-1250	1250	Draw Rod	60	335	136	38	160	15x12	290	1754	290	1754	600	800	1100	1300	125	170	31		



State of the Art EHV Research Centre



CG's Switchgears Offices

➤ NORTHERN REGION OFFICES

- 1) Bhatinda, Punjab
- 2) Jaipur, Rajasthan
- 3) Lucknow, Uttar Pradesh
- 4) Noida, Uttar Pradesh
- 5) Zirakpur, Punjab

➤ EASTERN REGION OFFICES

- 1) Bhubaneswar, Odisha
- 2) Guwahati, Assam
- 3) Kolkata, West Bengal

➤ WESTERN REGION OFFICES

- 1) Ahmedabad, Gujarat
- 2) Baroda, Gujarat
- 3) Bhopal, Madhya Pradesh
- 4) Mumbai, Maharashtra
- 5) Pune, Maharashtra

➤ SOUTHERN REGION OFFICES

- 1) Bangalore, Karnataka
- 2) Chennai, Tamil Nadu
- 3) Secundrabad, Telangana

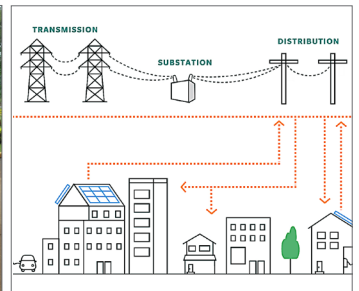
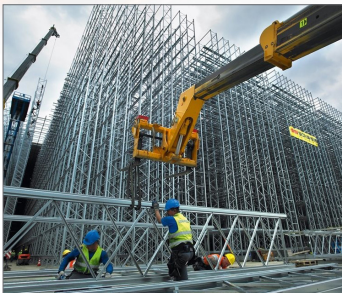


International Presence in 104 Countries





Smart solutions.
Strong relationships.



CG POWER AND INDUSTRIAL SOLUTIONS LIMITED

Registered Corporate Office:

CG Power and Industrial Solutions Limited
CG House, 6th Floor, Dr. Annie Besant Road,
Worli, Mumbai 400 030, Maharashtra, India.
Website: www.cgglobal.com

Manufacturing Plant:

Switchgear Division
A-3, MIDC, Ambad,
Nashik - 422 010, India.
Website: www.cgglobal.com

Vacuum Interrupter, Instrument
Transformer & Power Quality
Solutions Division
D2 & D1/2, MIDC, Waluj,
Aurangabad - 431 136.
Website: www.cgglobal.com

Medium Voltage Switchgears - mv.switchgear@cgglobal.com
High Voltage Switchgears - ehv.swgr@cgglobal.com

