

# CRGO CORE PROCESSOR

**1 Lakh Sq. Meters**

of operational space, equipped with advanced infrastructure for high-precision manufacturing.



**35+Years**

of operational space, equipped with advanced infrastructure for high-precision manufacturing.

# ABOUT US

MEIL, established in 1990, is an **ISO 9001:2015, ISO 14001:2015, and ISO 45001:2018** certified company and a pioneer in processing CRGO products.

Approved by Power Grid Corporation of India Limited for **400 kV class projects**, MEIL is also equipped to process CRGO core lamination up to the **1200 kV class**.

MEIL is a well-established brand in **CRGO lamination, core assembly, core-coil assembly, windings, amorphous cores, wound cores, and transformer CRGO cores (for both distribution and power transformers)**, serving the global industry for several decades.

# HISTORY

A transformative journey in the power transmission industry began 35 years ago with just 10 employees. Over time, MEIPL has grown into a vast family of over **1,000 members**.



Our journey began with transformer lamination manufacturing. Today, we proudly stand as India's foremost CRGO core supplier, offering a comprehensive range of products, including **CRGO lamination, CRGO slit coils, core assembly, core-coil assembly, amorphous cores, wound cores, I.C.B., toroidal cores**, and more.

This evolution reflects our unwavering commitment to excellence and innovation, enabling us to serve the diverse needs of the electrical industry and solidify our position as a trusted partner for high-quality CRGO core solutions.



# INFRASTRUCTURE

Spread across

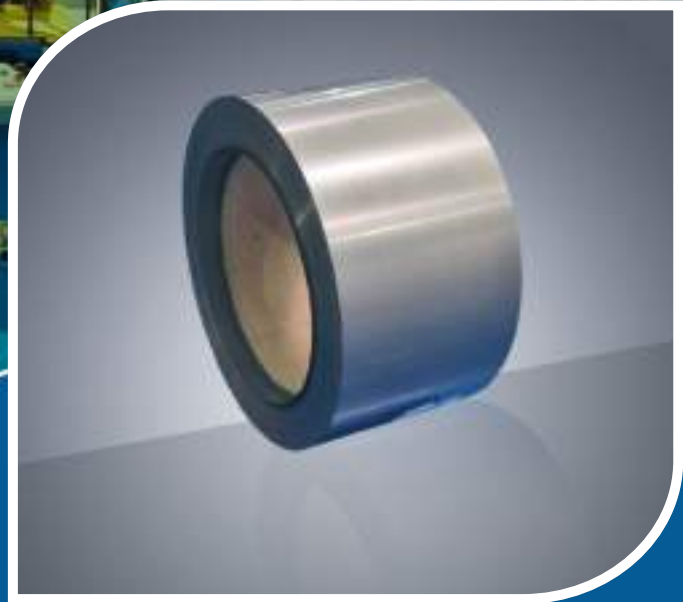
## 1 Lakh Sq. Meters

our seven state-of-the-art production facilities  
boast a capacity of

## 40,000 Metric Tons

providing a livelihood to over 1,000 people.





## CRGO SLIT COIL

### EXCEPTIONALLY UNIQUE

Specializing in slitting Cold Rolled Grain-Oriented (CRGO) mother coils to precise widths ranging from 40 mm to 1,250 mm, tailored for both small- and large-scale transformer applications.

### PRECISION AND QUALITY

Ensuring each lamination meets exacting standards for efficiency and performance, with high dimensional accuracy and consistency.

### COIL PROTECTION

Utilizing coil wrapping machines with LDPE, HDPE, and stretch film to safeguard coils during handling and transportation.

### COMMITMENT TO EXCELLENCE

Delivering cuts with burr less than 8 microns ( $\mu\text{m}$ ), setting the foundation for reliable and high-performance transformer components.



# CRGO CUT LAMINATION

## **CUTTING PRECISION**

Utilizing state-of-the-art Cut-to-Length (CTL) machines with V-notch, 2-hole punch, and 2-tip cut units, we deliver precision-cut CRGO laminations for distribution and power transformers.

## **VERSATILE CORE DESIGNS**

Our advanced cutting process accommodates diverse core designs and configurations, ensuring superior accuracy and consistency in lamination dimensions.

## **OPTIMAL PERFORMANCE**

Leveraging cutting-edge technology and expertise, we produce high-quality laminations that enhance transformer efficiency and performance across various voltage levels.

## **DETAILED MEASUREMENTS**

For power transformer cores above 25 MVA, we provide on-pallet measurements for burr level, stack height, number of pieces, and packets, ensuring zero material wastage or shortages.



## CORE ASSEMBLY

### PRECISE TESTING

Undergoes stringent testing to evaluate no-load losses, ensuring precision and efficiency for optimal transformer performance.

### SECURE PACKING

Each core assembly is carefully packed to safeguard it during transportation and handling, maintaining uncompromised quality.

### COIL INSERTION PREPARATION

Assemblies are prepped for seamless insertion of Low Voltage (LV) and High Voltage (HV) coils, marking a critical stage in transformer manufacturing.

### QUALITY ASSURANCE

With a focus on precision and careful handling, we ensure high reliability and superior performance in every core assembly.



# CRGO CORE COIL ASSEMBLY

## ■ TAILORED CRGO CORE ASSEMBLIES

Specializing in core assemblies for distribution and power transformers with capacities up to 10 MVA, designed for optimal performance and efficiency.

## ■ EXPERT DESIGN & FABRICATION

Offering comprehensive production capabilities, including design, fabrication, assembly, and testing, ensuring strict adherence to industry standards.

## ■ HIGH-VOLTAGE RELIABILITY

Engineered to withstand high-voltage environments, minimizing energy losses while optimizing efficiency in power transmission and distribution.

## ■ QUALITY & DURABILITY

Providing complete magnetic core assembly solutions, ensuring long-lasting reliability, durability, and superior performance.





# AMORPHOUS CORE

## MINIMIZED EDDY CURRENT LOSSES

With an ultra-thin 0.03 mm thickness, the amorphous core significantly reduces eddy current losses, lowering no-load losses to just one-fifth of those in silicon steel cores.

## UNIQUE MATERIAL PROPERTIES

Amorphous core materials exhibit minimal magnetic hysteresis and reduced electrical conductivity, ensuring exceptional energy efficiency.

## ENHANCED ENERGY PERFORMANCE

The ultra-thin profile minimizes electromagnetic induction, reducing energy losses during operation and optimizing power consumption.

## ENERGY CONSERVATION

Improved efficiency enhances energy conservation efforts, leading to operational cost savings across various electrical applications.



## WOUND CORE

### **PREMIUM CRGO WOUND CORES**

Manufactured from carefully selected Cold Rolled Grain-Oriented (CRGO) electrical steel, designed for superior electromagnetic properties and precise dimensional accuracy.

### **SUPERIOR MAGNETIC CHARACTERISTICS**

CRGO steel minimizes energy losses and enhances efficiency, making it an ideal choice for transformers and other electrical applications.

### **STRESS-RELIEF ANNEALING**

The cores undergo a specialized annealing process to restore magnetic properties, relieve internal stresses, and improve magnetic permeability.

### **ENHANCED RELIABILITY & EFFICIENCY**

With consistent magnetic behavior, these cores ensure long-lasting performance and optimal efficiency, essential for high-quality electrical equipment.



# IMMERSED CIRCUIT BREAKER (ICB)

## 25 YEARS OF MANUFACTURING EXCELLENCE

Specializing in Immersed Circuit Breakers (ICBs) engineered for exceptional performance, reliability, and maximum lifespan.

## OIL-IMMERSED DESIGN

Designed to reduce damage and minimize maintenance costs, ensuring long-term reliability for distribution transformers.

## CUSTOMIZED SOLUTIONS

Offering a wide range of circuit breakers tailored to diverse industrial needs, featuring efficient voltage capabilities for various applications.

## DURABLE & RELIABLE ENGINEERING

Built with a robust metal frame and air-insulated design, ensuring superior durability and operational efficiency.

# WORLD-CLASS QUALITY TESTING LAB SETUP

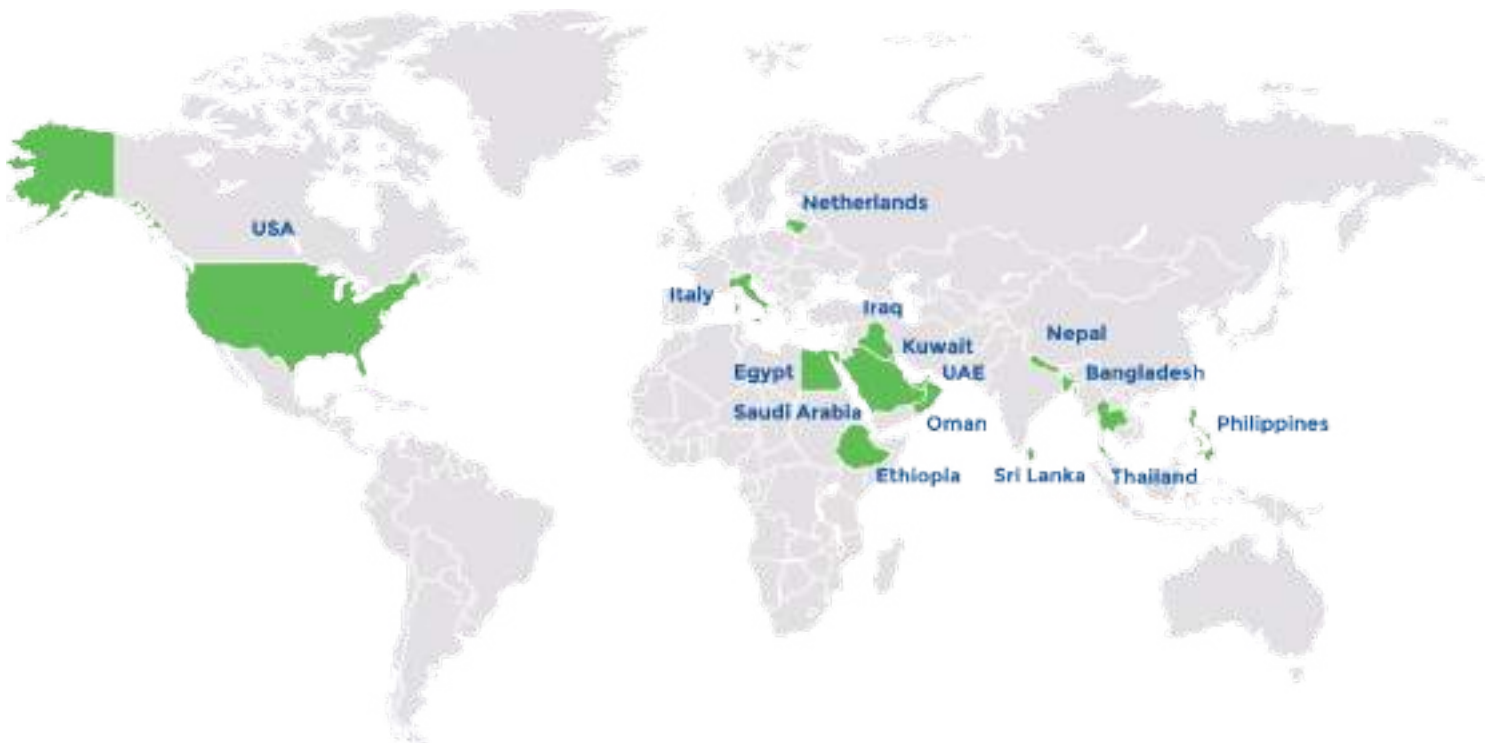


## BROCKHAUS MESSTECHNIK LAB Germany

The **MEIL Brockhaus Lab** is equipped to conduct comprehensive electrical testing of CRGO products in accordance with **ISO 3024:2015 standards**.

# OUR GLOBAL FOOTPRINT

Expanding our presence across international markets with a commitment to quality, innovation, and reliability.



## QUALITY APPROVALS

Certified and approved by leading global standards and regulatory bodies, ensuring excellence in every product.



# GET IN TOUCH

 **Corporate Address**

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C-61, (A&B), Road No. 1-C, V.K.I.  
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302013, India

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