### ANSH **a** INDUSTRIES CRGO/CRNGO

**Coils & Strips** 



Ansh Industries, Gr Floor-Gala13, Wadhani Industrial Estate, Lal Bahadur Shastri Marg, opposite Shanti Niketan, Ghatkopar West, Mumbai, Maharashtra 400086

### 13+ Years Experience

We have excellent knowledge of all the components and reliability issues one can face in this industry, hence we can provide every solution to your problems

### **Evaluation Testing Segment**

Each component we order is tested meticulously before delivery, and even if you face any issues with the product, our comprehensive warranty will cover your needs.

# Production quality

The production quality of our vendors surpasses many european standards within your budget.

### **CRGO** coils



CRGO coils are a type of electrical steel used to make power transformers. CRGO stands for Cold Rolled Grain Oriented.

CRGO coils are usually supplied in coil form and must be cut into laminations. These laminations are then used to form the transformer core.

CRGO steel has:

•High mechanical elasticity

- •High electrical resistivity
- •High magnetic properties in the rolling direction

## Single Phase Rectangular Transformer Lamination Cutting Machine



Transformer core cutting machines cut silicon steel coils into lamination strips for transformers

When buying a single phase rectangular transformer lamination cutting machine, you can consider things like: •Standard specifications

- Technical parameters
- •Dynamic short circuit tested design

A transformer core cutting machine is a machine that cuts CRGO/silicon steel laminations. It can cut V-notches, 90&45, any degree mitered, single or multi-holing, punching, and step lab design. It can also customize different shapes according to drawings for the transformer, reactor, and more

#### Silicon Steel Transformer Core Cutting machine



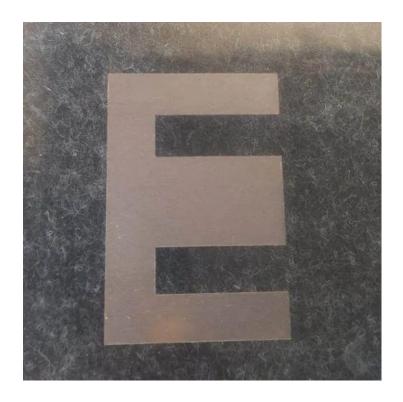
A silicon steel transformer core cutting machine uses servo motors to feed, punch, and cut electrical silicon steel coils into rectangular laminations. These laminations are used for transformers, welders, and reactors.

## Features of a silicon steel transformer core cutting machine include:

•AC servo system with PLC professional module to ensure high precision feeding

Quick response time with precise positioning and low noise
Fully automatic finishing, counting, cutting, swinging angle, etc.

#### Three Phase CRGO Transformer Lamination, E Shape



•Thickness: 0.23 mm •Core type: Shell type •Shape: E & I •Frequency: 50 Hz

Laminations in a transformer are **used to minimize eddy current and hysteresis losses**. CRGO stands for cold rolled grain oriented steel, which has grains (crystals) aligned in the direction of rolling. CRGO transformers have reduced eddy current losses and increased corrosion resistance over previous-grade steels.

### **E-Core Transformer**

The core of the single-phase E-core transformer considered here consists of a pair of E-cores, which form a closed magnetic flux path. The primary and secondary coils in the transformer are placed around the central leg of the core as shown in Figure 1

A nonlinear B-H curve that includes saturation effects is used to simulate the magnetic behavior of the soft-iron core. Hysteresis effects in the core are neglected. The model assumes that the primary and secondary windings are made of thin wire and have multiple turns. Using the assumptions that the wire diameter is less than the skin depth and that there are many turns, these windings are modeled with Multi-Turn Coil Domain features. Furthermore, the model does not account for eddy currents in the individual turns of the coil. The primary winding is connected to a primary resistor, Rp and the AC voltage source, Vac while the secondary winding is connected to the secondary load resistor

