# Machinery and Electrical Equipment Safety (Omnibus Technical Regulations) Order, 2024



**Bureau of Indian Standards** 

## Structure of Presentation

#### Introduction

- About BIS
- OTR order

#### Compliance

- Prior Registration
- Technical file preparation

#### Certification

- Application submission, Specification selection
- Certification Process
- Interaction **Q&A**s

## BIS - National Standards Body of India



#### Registered society

**Indian Standards** Institution 1947

#### **Product** certification

**Indian Standards** Institution (Certification Marks) Act, 1952

#### **Statutory body**

BIS Act 1986 BIS (Certification) Regulations 1988

#### **National Standards Body**

BIS Act 2016 BIS (Conformity Assessment) Regulations 2018

LAW

## The BIS Act, 2016

- National Standards Body Harmonious development of the activities of:
  - Standardisation
  - Conformity assessment for goods, articles, processes, systems and services
- o Provisions to undertake certification activities for quality assurance
- Section 16 Authorises the Central government to issue Technical Regulations/QCOs
  - Protection of human, animal or plant health
  - Safety of the environment
  - Prevention of unfair trade practices
  - National security
- Section 17 Prohibition to manufacture, import, distribute, sell, hire, lease, store or exhibit for sale

#### Details about the OTR Order

- Notified by the Ministry of Heavy Industries
  - 28th August 2024
  - Available on the Ministry website and BIS website
- Commencement and application at Present
  - Due to come into force after 1 year from notification
  - Apply to machines and electrical equipment and their assemblies, sub-assemblies and components listed in the **1st Schedule**
  - Doesn't apply for Exports and
    - Construction equipment covered in CMVR Rules issued by M/o Road Transport & Highways
    - Goods covered under QCO orders issued under the BIS Act

#### Schedules in the OTR Order

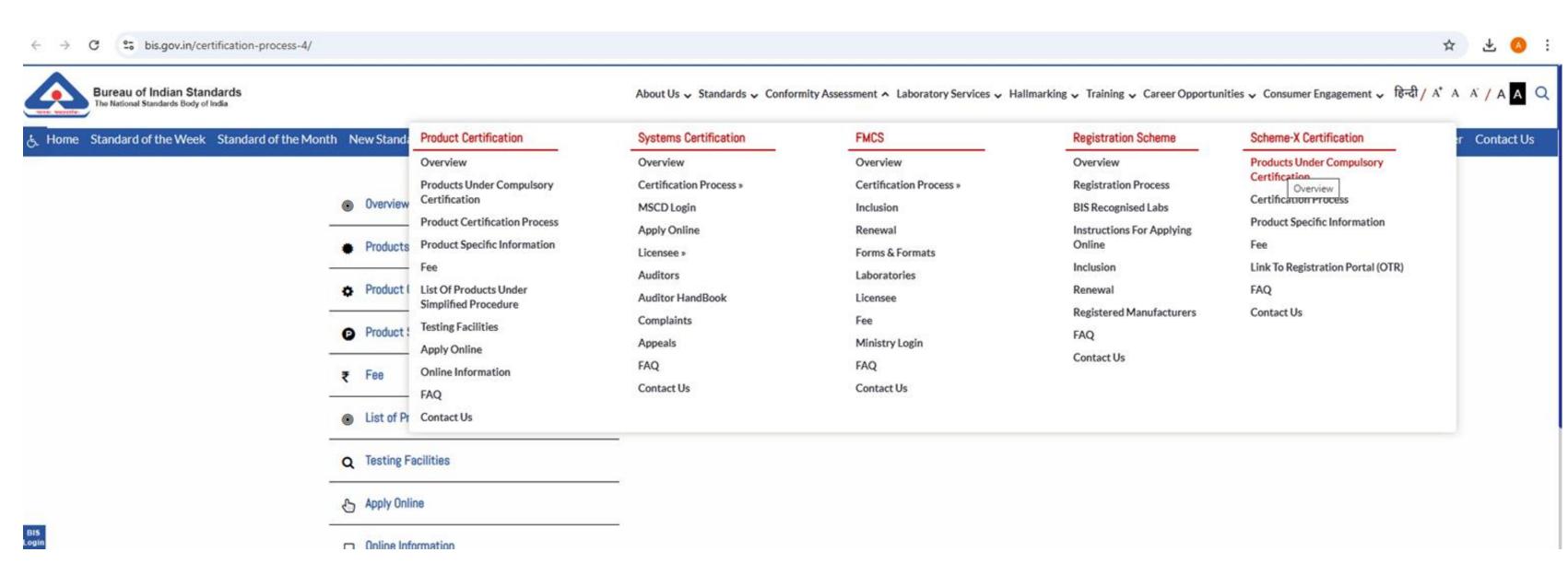
- Three schedules
  - 1st List of Machinery and Electrical Equipment covered under OTR
  - 2nd Type B Standards (Generic Safety Standards dealing with one safety aspect or more than one type of safeguard that can be used across a wide range of machinery)
  - 3rd Type C Standards (Machine Safety Standards dealing with detailed safety requirements for a particular machine or group of machines)
- Type A Standard Listed in the OTR
  - IS 16819:2018/ISO 12100:2010 (Safety of Machinery General Principles for Design Risk Assessment and Risk Reduction
- If a Type C standard deviates from technical provisions dealt with by Type A or Type B standard, Type C standard takes precedence

# **Prior Registration**

- Prior Registration General information of manufacturer such as
  - Name, Address (Factory & Office), City, Location
  - Contact details (email, office number, phone number)
  - Contact details of person in India optional
  - Details of Management and contact person
- Register with information specific to the Machinery and Electrical Equipment
  - As listed in 1st schedule of OTR
  - Name/type and Variety

### **BIS** website

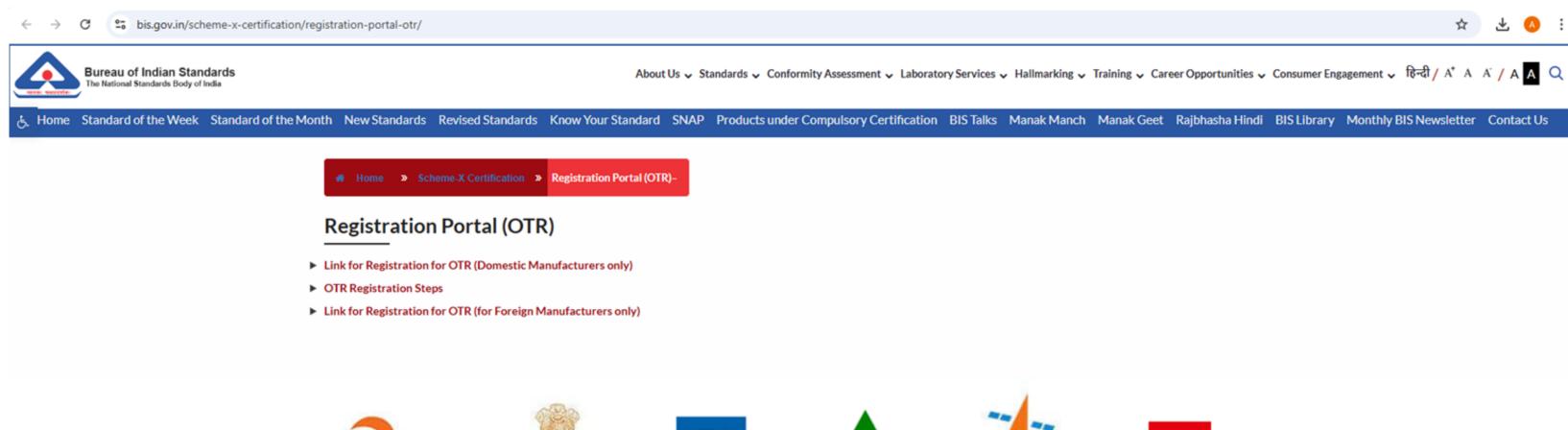
• <a href="https://www.bis.gov.in/">https://www.bis.gov.in/">> Conformity Assessment >> Scheme-X Certification</a>



#### **BIS** website

• <a href="https://www.bis.gov.in/">https://www.bis.gov.in/">> Conformity Assessment >> Scheme-X Certification</a>

>> Link to Registration Portal (OTR)

















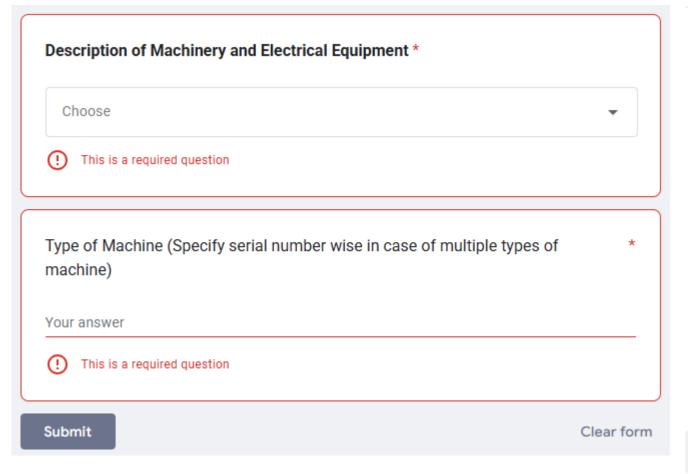
# Registration - Form

Bureau of Indian Standards	
Switch account  Not shared	
* Indicates required question	
Firm Name *	
Your answer	
Firm Address *	
Your answer	
City *	
Your answer	
Country *	

Name of CEO/Proprietor *  Your answer	
Contact Number *	
Your answer	
Email Id *	
Your answer	
Name of Contact Person *	
Your answer	
Contact Number *	
Your answer	
For all lid *	
Email Id *	
Your answer	

Latitude of the Factory *
Your answer
Longitude of the factory *
Your answer
Name of Contact Person (Indian representative, if available)
Your answer
Contact Number (Indian representative, if available)
Your answer
Email Id (Indian representative, if available)
Your answer

## Select from menu and Submit



- 1. All types of Pumps for handling liquids, liquid elevators and (or)their assemblies /sub-assemblies /components
- 2. All types of compressors and(or)their assemblies /sub-assemblies /components.
- 3. All types of machinery for treatment of material by a process involving a change of temperature and(or)their assemblies /sub-assemblies /components
- 4. All types of centrifuges, filtering or purifying machinery for liquid and gas and(or)their assemblies /sub-assemblies /components
- 5. All types of machinery for filling, closing, sealing, labelling bottles, packing or wrapping and(or)their assemblies/sub-assemblies /components
- 6. All types of cranes and (or) their assemblies /subassemblies/components
- 7. All types of machinery for construction, earthmoving, Mining and (or)their assemblies sub-assemblies/components
- 8. All types of weaving machines (looms) and (or)their assemblies/ sub-assemblies / components
- 9. All types of machinery for making embroidery and(or)their assemblies /sub-assemblies /components.
- 10. All types of metal cutting machines tools covered under the heading 8456 to 8461 and(or)their assemblies /sub-assemblies/components.
- 11. All types of machine tools for working stone, ceramics, concrete, asbestos cement or like mineral glass and (or)their assemblies /sub- assemblies /components.
- 12. All types of machinery for working rubber and plastics and(or) their assemblies /sub-assemblies /components
- 13. All types of Machines including the machines for public works & building and the machinery & mechanical appliances having individual functions, not specified Or included
- 14. All types of gears and gearing, toothed wheels, chain sprocket, transmission elements ball or roller screws, gear boxes and speed changers, including torque converters An
- 15. All types of Rotary electrical machines such as Generator, etc. and (or) their assemblies /sub-assemblies /components.
- 16. All types of Diesel Generator and (or)their assemblies /sub-assemblies /components.
- 17. All types of Transformers and (or)their assemblies/sub-assemblies/components.

## Category 10 and 11 - 1st Schedule

10. All types of metal cutting machines tools covered under the heading 8456 to 8461 and (or) their assemblies/ sub-assemblies/ components

8456, 8457, 8458, 8459, 8460, 8461 and 846693

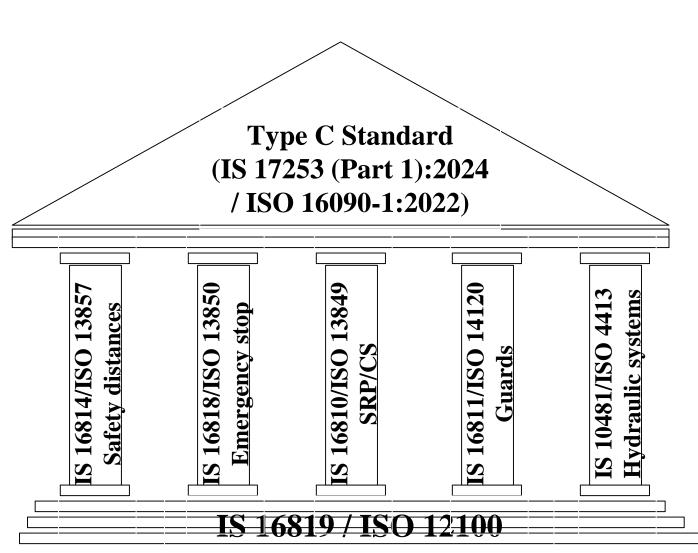
**Technical** 

All types of machine tools for working stone, ceramics, concrete, asbestos cement or like mineral glass and (or) their assemblies/sub-assemblies/components.

8464 and 84669100

## Selection of Specifications - Use Standards

- Type-A standards (basic safety standards) giving <u>basic</u> concepts, principles for design and general aspects that can be <u>applied to machinery</u>;
- Type-B standards (generic safety standards) dealing with <u>one</u> safety aspect or one type of safeguard that can be used across a wide range of machinery:
  - Type-B1 standards on particular safety aspects (e.g. safety distances, surface temperature, noise);
  - Type-B2 standards on safeguards (e.g. two-hand controls, interlocking devices, pressure-sensitive devices, guards);
- Type-C standards (machine safety standards) dealing with detailed safety requirements for a particular machine or group of machines.



## Type C Standards - Machine Tools Safety

- Machine Tools Safety Machining Centres Milling Machines Transfer Machines: Safety Requirements
  - IS 17253 (Part 1):2024 / ISO 16090-1:2022
- Machine tools Safety Sawing machines for cold metal
  - IS 17254:2019 / ISO 16093:2017
- Machine tools Safety Turning machines
  - IS 17258:2019 / ISO 23125:2015
- Machine tools Safety Electrical discharge machines
  - IS 17259:2020 / ISO 28881:2013
- Safety of thermal cutting machines
  - IS 18165:2023 / ISO 17916:2016
- PGD 35 technical committee Machine Tools, Machine Tool Elements, and Holding Devices

## Application submission with Technical File

- Form-I annexed to Scheme-X
- Technical file for product
  - Grouping based on technical criteria
- Contents below

**✓**□ Compliance Report

Specified Requirements

**—** □ Design Drawings

**4** Quality Assurance

(in-house and/or sub-contracted)

Product Photos

**♥**□ Manufacturing Process

☐ Usage Instructions

Manufacturer Details

Raw Materials

+ Other Requirements

## Certification under Scheme - X

- Submission of certification application by the manufacturer
  - Licence to use BIS Standard Mark or Certificate of Conformity (CoC)
- Desk evaluation of technical file submitted with application
- Inspection and evaluation through on-site visit
- Authorised representative in India Mandatory
- Conformance to specified requirements Establishment of evidence
- After establishing evidence Decision to grant licence or CoC
- Licence for continuous production
  - o Initial 3 to 6 years, Renewal 3 to 6 years
- CoC for one-time production with no renewal
- Scheme-X notification and procedural Guidelines available on BIS website

### Fee structure under Scheme - X

- Application fee for licence /CoC ₹ 2,000
- Certification fee for licence to use BIS Standard Mark ₹ 25,000 / year
- Certification fee for CoC ₹ 10,000
- Fee for review of technical file ₹ 20,000 / technical file
- Inspection fees ₹ 20,000 / manday
- Cost for site visit Start of journey to end of journey
- Sample procurement and testing fees On actuals
- Fees notifications available on **BIS** website
- Indemnity Bond and Performance Bank Guarantee US\$ 10,000
- Agreement with mention of authorised Indian representative

# **OTR Registration Progress**

- 16 Registrations
  - Category-1: 1 registration
  - Category-2: 1 registration
  - Category-5: 1 registration
  - Category-10: 4 registrations
  - Category-14: 4 registrations
  - Category-18: 2 registrations
  - o 3 more registrations with multiple categories selection

# Thank You!



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