



**PROTECTRON<sup>®</sup>**  
ELECTROMECH (P) LTD



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**ELECTROMECH (P) LTD**

*Making The Perfect Connection*

# Introduction

**Protectron Electromech specializes in producing high-quality circuit protection fuses, interconnect solutions, EMI/RFI shielding products, EV connectors, airborne connectors, and EV cable assemblies.**

**The Protectron team has an extensive experience of more than 30 years across a wide variety of industries – Telecom, Automotive, Medical, Lighting, Defense, Domestic Appliances and White Goods. The technology – centric team strives to offer high quality and value driven solutions to customers.**

**Its capacity to meet large and small requirements in short duration has procured it over 350 satisfied customers.**

01

Manufacturer of  
Professional Grade  
Components

02

Design, Development &  
Manufacturing

03

Wide Industry  
Expertise

04

Customized  
Solutions





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ELECTROMECH (P) LTD

# Awards, Certifications & New Introductions

## 1977-2003

**1977 Award from the President of India for Import Substitution of Fuses**

- 1980 LCSO / DGQA (Defense) Approval
- 1994 Formation of Radiall Protectron (JV)
- 2000 Obtained ISO 9001:1994 Certification
- 2002 Obtained UL Certification of Compliance for Fuses
- 2003 Obtained LCSO approval for Connectors
- 2003 Obtained ISO 9001:2000 Certification

## 2007-2014

- 2007 Obtained approval under CACT-Approved Vendor Scheme
- 2009 Certifications for TS 16949:2002, ISO 14001:2004, ISO 9001:2008
- 2009 UL & ARAI Approvals for Midi Blade Fuse. ARAI Approval for Glass Fuses
- 2011 Capacity Expansion for Blade Fuses
- 2012 Introduction of Cable Assemblies
- 2013 UL Approval for Mini Blade fuse
- 2013 ARAI Approval for Mini Blade Fuse
- 2014 MIDI Bolt Down Fuse (32V) launched



### 2015-2022

- 2015 UL approval for complete series of Midi Blade fuse in PC & Nylon (2A to 40A).
- 2015 UL approval for TE Fuse.
- 2017 Certifications revised to ISO9001:2015, ISO14001: 2015 and IATF 16946:2016.
- 2018 Introduction of LP Mini Blade Fuse, Micro2 fuse, EV Charging Connector.
- 2018 UL approval for 300V TE fuse, UL approval for LP Mini Under Process.
- 2019 Design & supply of Special connectors for EVM project to BEL & ECIL.
- 2021 Design & development of Nickel Feeder /Bus bar connectors for EV's.
- 2021 Introduction of Mega Bolt down fuses & Midi bolt down fuses(70V).
- 2022 UL lab approved and UL approval of Midi &Mega Bolt down fuse(70V) initiated.
- 2022 Machines incorporated, and New Protectron Unit established.
- 2023 We obtained UL lab approval and UL approval of Midi &Mega Bolt down fuse(70V).
- 2024 Fully Automated Machines Implemented for Midi Bolt Down Fuse (70V) & for Mega Bolt Down Fuse fully Automated Machines are initiated.





# Quality Systems Approvals

ZERTIFIKAT ◆ CERTIFICATE ◆ CERTIFICADO ◆ CERTIFIKAT ◆ 認證證書 ◆ CERTIFICATE ◆ CERTIFICADO ◆ CERTIFICAT



Management Service

## CERTIFICATE

Certificate Registration No.: 12 100 46619 TMS / Order No.: 4153092930

The Certification Body of TÜV SÜD Management Service GmbH certifies that the organization

**Protectron Electromech (P) LTD.**  
# 44, 29th Cross, 7th Main Road,  
Banashankari Industrial Layout, Banashankari II Stage  
Bengaluru - 560070, Karnataka  
India

for the scope

Design, Manufacture and Supply of Glass Cartridge Fuses, Ceramic Fuses, Connectors, Feeders, USB, IC Sockets, PCB Hardware, RF Shielding, Blade Fuses, Micro Fuses, Bolt Down Fuses, Cable Assemblies, EV Terminals, EV Connectors & EV harness

has established and applies a Quality Management System.  
An audit was performed and has furnished proof that the requirements according to

**DIN EN ISO 9001:2015**

are fulfilled.

The certificate is valid from 2024-07-01 until 2027-06-30.


  
 Fred Wenke  
 Head of Certification Body  
 Munich, 2024-07-01






TÜV SÜD Management Service GmbH • Zertifizierungsstelle • Riederstrasse 57 • 80339 München • Germany  
[www.tuv-sud.com/en/certificate-validity-check](http://www.tuv-sud.com/en/certificate-validity-check)

ZERTIFIKAT ◆ CERTIFICATE ◆ CERTIFICADO ◆ CERTIFIKAT ◆ 認證證書 ◆ CERTIFICATE ◆ CERTIFICADO ◆ CERTIFICAT



South Asia

## CERTIFICATE

The Certification Body of TÜV SÜD South Asia Private Limited certifies that

P

PROTECTRON


**Protectron Electromech (P) LTD.**  
# 44, 29th Cross, 7th Main Road, Banashankari Industrial Layout,  
Banashankari II Stage, Bengaluru - 560 070, Karnataka, India  
including the sites and scope of application see enclosure


has implemented Environmental Management System  
in accordance with **ISO 14001:2015**  
for the scope of




**Design, Manufacture and Supply of Glass Cartridge Fuses, Ceramic Fuses, Connectors, Feeders, PCB Hardware, RF Shielding, Blade Fuses, Micro Fuses, Bolt Down Fuses, Cable Assemblies.**

The certificate is valid from 2024-03-26 until 2027-02-15  
Subject to successful completion of annual periodic audits  
The present status of this certificate can be obtained through TÜV SÜD website by scanning below QR code and by entering the certificate number (without spaces) on web page. Further clarifications regarding the status & scope of this certificate may be obtained by consulting the certification body at [info.in@tuv-sud.com](mailto:info.in@tuv-sud.com)

Certificate Registration No. 9910401159  
Date of Initial certification: 2018-02-16  
Issue Date: 2024-03-26 Rev. 00



  
 Rahul Kete  
 Head of Certification Body  
 of TÜV SÜD South Asia Private Limited,  
 Mumbai  
 Member of TÜV SÜD Group

TÜV SÜD South Asia Pvt. Ltd. • TÜV SÜD House • Saki Naka • Andheri East • Mumbai - 400072 • Maharashtra • India

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Management Service

## CERTIFICATE

Certificate Registration No.: 12 111 46619 TMS / IATF Certificate No.: 0527345  
IATF USI: CSTT34

The Certification Body of TÜV SÜD Management Service GmbH certifies that the organization

**Protectron Electromech (P) LTD.**  
# 44, 29th Cross, 7th Main Road,  
Banashankari Industrial Layout, Banashankari II Stage  
Bengaluru - 560070, Karnataka  
India

for the scope

Design and Manufacture of Blade Fuses, EV Terminals, EV Connectors, EV Harness & Bolt down fuses (with Product Design as per Chapter 8.3)

has established and applies a Quality Management System.  
An audit was performed and has furnished proof that the requirements according to

**IATF 16949**  
**First Edition 2016-10-01**

are fulfilled.

Issue date: 2024-07-01  
Expiry date: 2027-06-30

Part of the certificate is an appendix.

  
 Fred Wenke  
 Head of Certification Body  
 Munich, 2024-07-01



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[www.tuv-sud.com/en/certificate-validity-check](http://www.tuv-sud.com/en/certificate-validity-check)

## Product Approvals

**Fuses:- UL , RoHS , ARAI & LCSO**

**Connectors:- RoHS , LCSO**



## Approved Current Ratings

**ARAI Approved MIDI Blade  
Fuses (CURRENT RATING)**

**3A, 5A, 7.5A, 10A, 15A, 20A, 25A,  
30A, 40A**

**ARAI Approved MINI Blade Fuse  
(CURRENT RATING)**

**5A, 10A, 15A, 30A & 5A-N, 10A-  
N, 15A-N, 30A-N**

**ARAI Approved GLASS Fuses  
(CURRENT RATING)**

**5A & 15A 32V**



# Protectron Products

## • Electric Vehicle Products

- Automotive Fuse
- In Line Fuse Holder
- EV Charging Connector
- Bus Bar
- EV Charging Terminals

## • Circuit Protection Devices

- EV Fuse
- Glass & Ceramic Fuse
- Bolt down Fuse
- Fuse Holders & Clips
- Fuse Taps

## • Electronic Hardware

- RF Shields
- USB 2.0 Connectors
- Board To Wire Connectors
- USB C Type Connector
- FPC

## • Cable Assembly

- D- SUB Assembly
- RJ 11 and RJ 45 Assembly
- IDC Cable Assembly
- Multiport
- Wire to Board



# New Launched Products



# EV Charging Terminals & Connectors



# Quality Control

## Testing Facilities Accessible.



### 2. Reliability Lab Facility:

- Mating Cycle Test
- Flammability Test
- Salt Spray Testor
- Hot, Cold & Chamber
- Humidity Chamber (40° to 180°)
- Thermal Chamber (till 200°)
- Crimped Profile Analyzer



### 1. full-fledged UL approval lab facility. (Standard Test Conducted as per UL 248 / UL 275A)

- Time Current Characteristics up to 3000A.
- DC Interrupt Testing Facility up to 1000A.
- AC Interrupt Facility up to 120A.
- Crimped Strength Test.
- Surge Test 7KVA.
- Transient Facility.



### 3. Other lab Facility:

- Hardness Tester.
- Video measurement System.
- XRF Plating thickness tester.
- Crimp Strength tester for Wire Harness.
- 100% Continuity Tester for wire Harness.
- Insertion/ Extraction tester for Connectors.
- Camera inspection System for Wire Harness, Connector, Fuses.





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# Quality Control Machines



Fuse Testing Power Supply



Fuse Testing Jigs



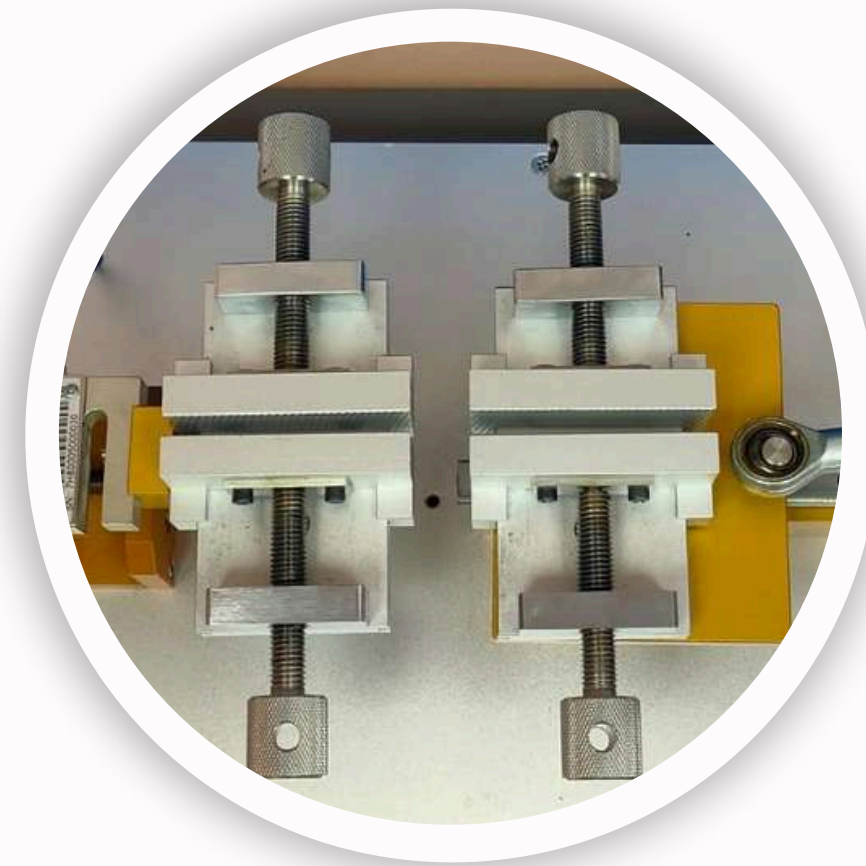
Insertion & Extraction Machine



Crimp Profile Analyser's Microscope.



Pull of Load



Mating Cycle





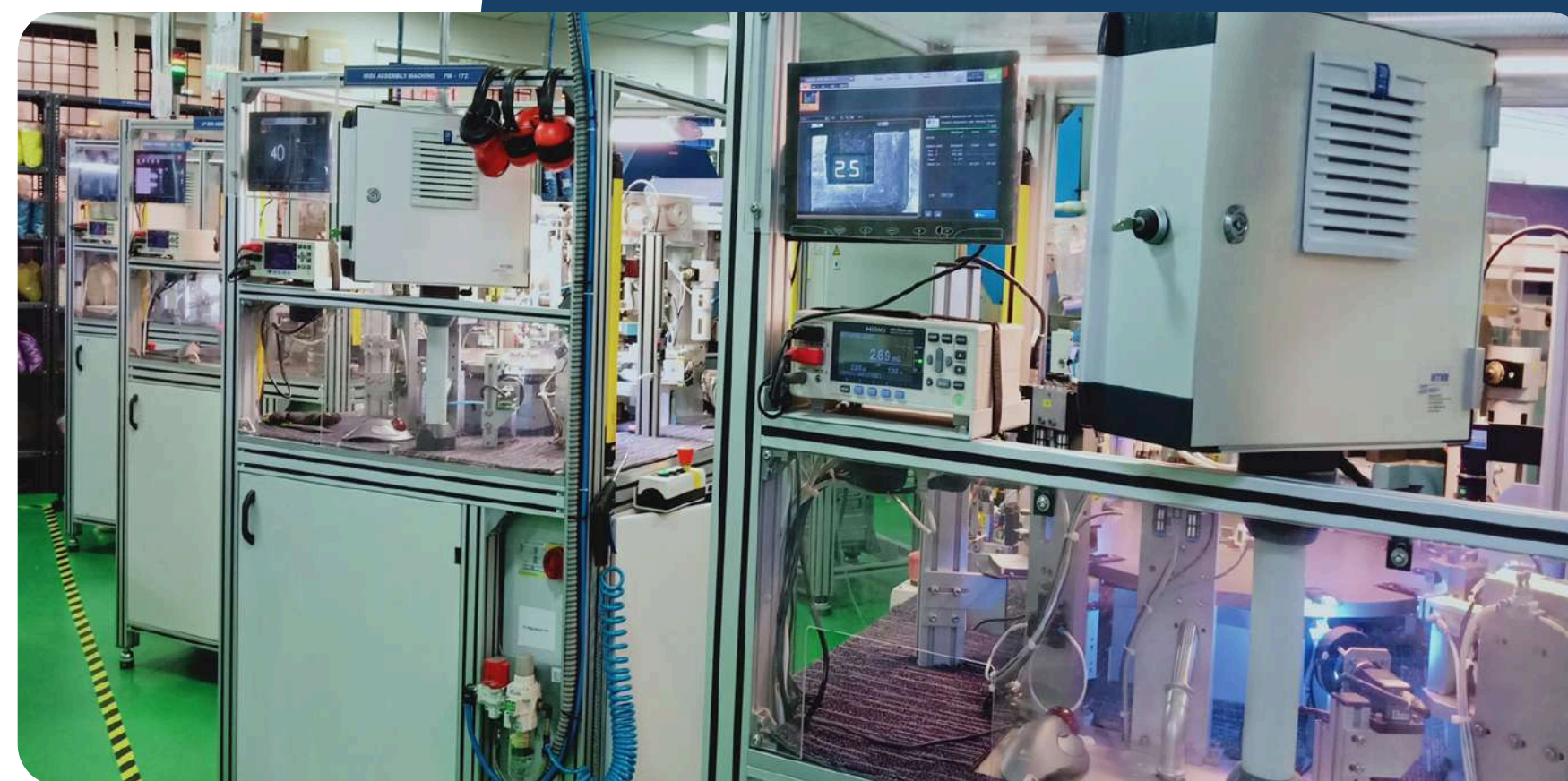
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These machines automate the production of blade fuses, ensuring precision and consistency in the manufacturing process. They handle tasks such as cutting, shaping, and assembling the metal blades and plastic housings.

## TE Fuse Machine



## Blade Fuse Machine

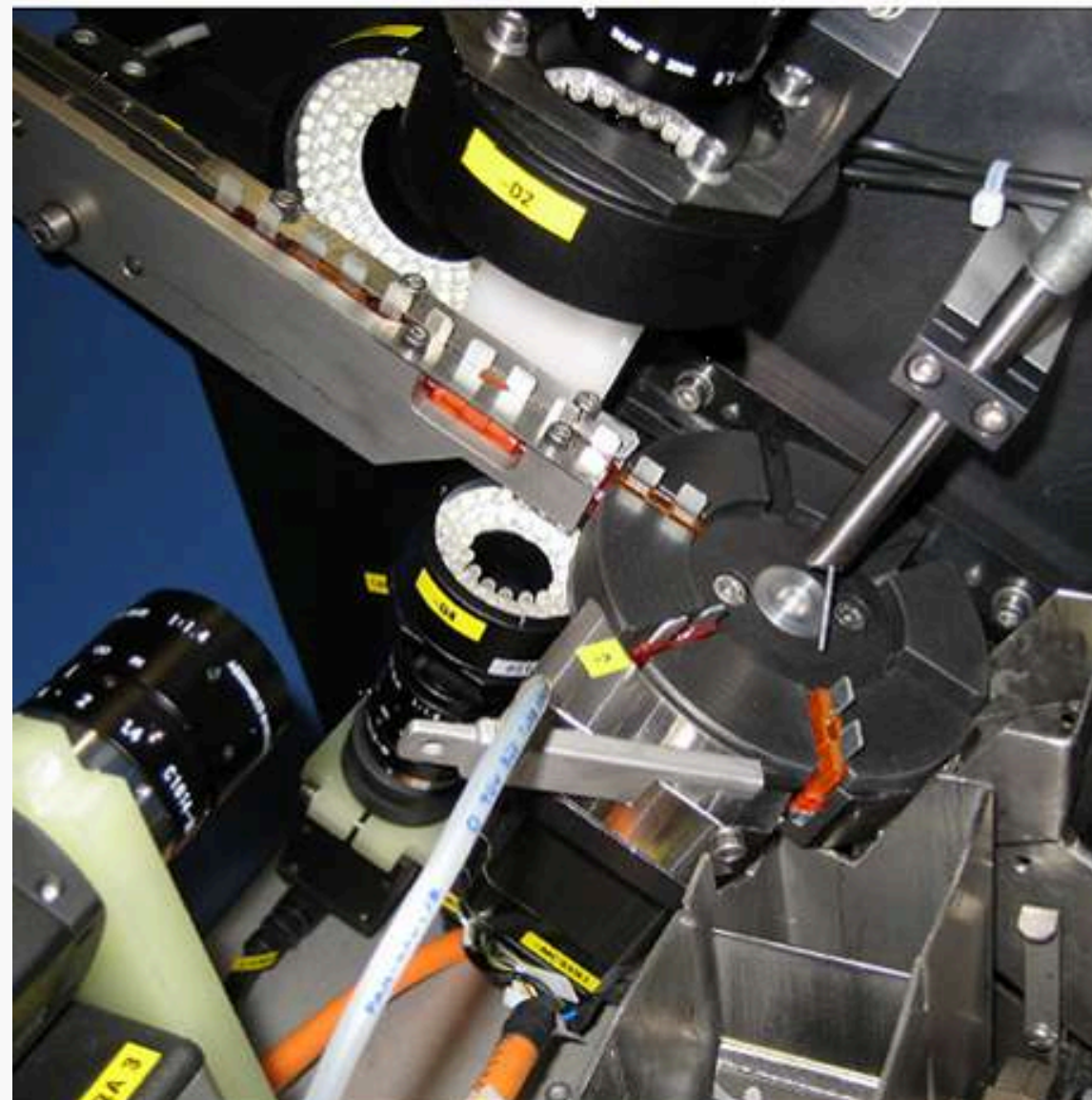
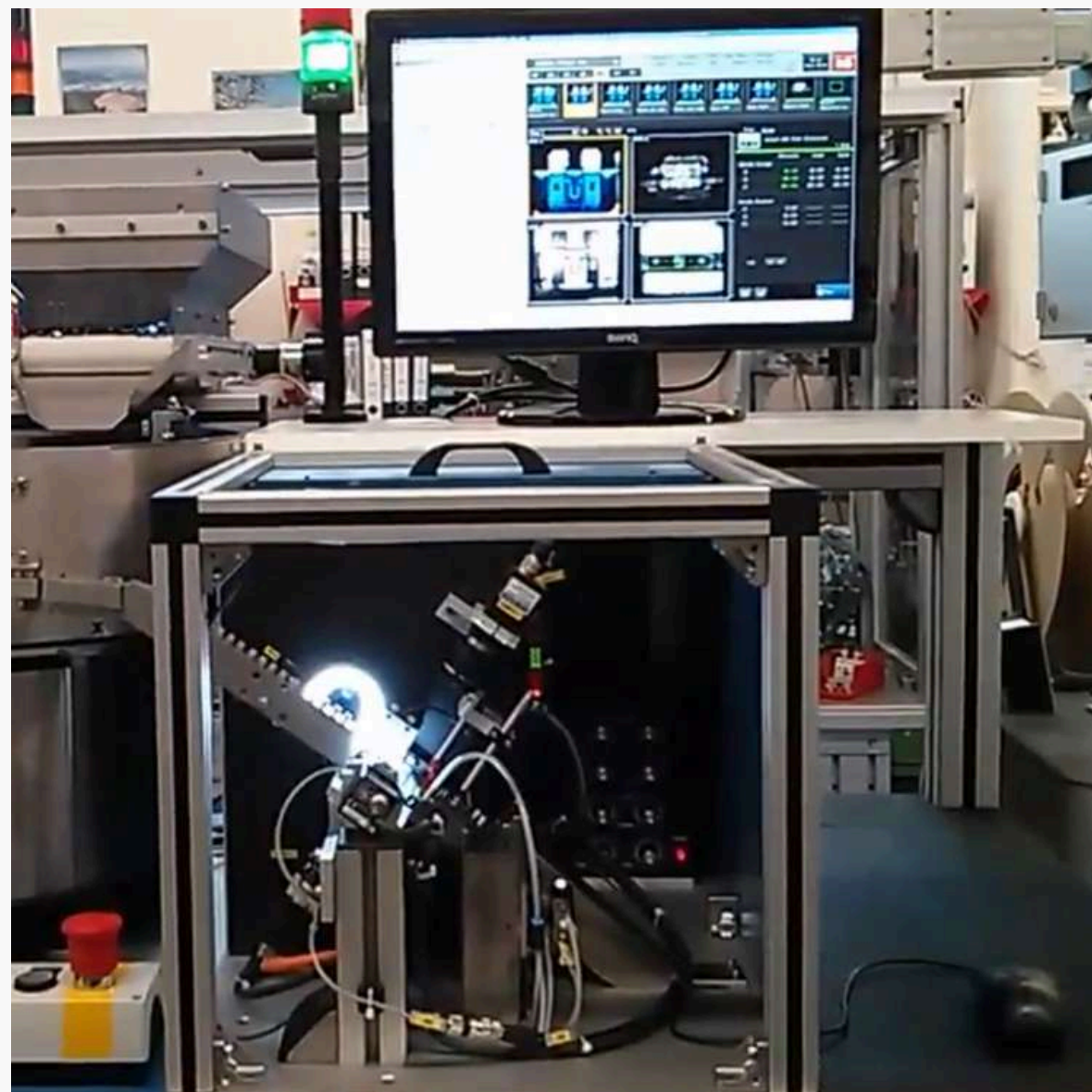


TE focuses on innovation and efficiency in their products. Their machines are designed to streamline production processes, reduce errors, and increase overall productivity. This makes them a preferred choice for manufacturers looking to enhance their production capabilities.





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## Vision Inspection System for Blade Fuse.





# Electronica India 2023 & 2024

## Participation Awards



**India Exposition Mart Limited (IEMML),  
Greater Noida, Delhi NCR**





PROTECTRON<sup>®</sup>  
ELECTROMECH (P) LTD

# Major Customers in India

Automotive OEMs Tier-2





# Our Major Customers in India

## CMS Customers



## Industrial Customers







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ELECTROMECH (P) LTD

# Our export- customers







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# Why Protectron?

- **30 Years in Manufacturing**
- **International Raw Material Supplier**
- **Strong Quality System and Design Team**
- **Approvals and Certifications**
- **Continuous Improvement and Automation**
- **Brand Image and Infrastructure**
- **Localization and Competitive Pricing**
- **Capacity and Customer Satisfaction**

## Benefits of working with us



**Agile Process**



**Prototype Assistance**



**Cost-Effective**



**High volume**

- **Follow us for exclusive updates on all major social media platforms.**





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# Thank You!

## Contact Us

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