



Eltech Engineers Pvt Ltd

WE TREAT ANYTHING....

Since 1992



An ISO 9001 - 2015 Company



VORTEX PLASMA TREATMENT

Who are we ?

ELTECH ENGINEERS PVT LTD , established in 1992 is an ISO 9001:2015 certified Indian Company engaged in the manufacturing activity of Corona treater, Plasma Treatment Systems, Static Charge Eliminator,Static Chargers,Static Meters, Ionizing Air gun,Blowers etc. Our clients always look upto us for their different requirements because of our high quality standards, superior performance, zero defect products, timely deliveries and very reasonable price.

About Vortex Plasma Treatment -

Eltech's New Vortex Plasma treatment system is built around the concept of a high voltage Plasma discharge in atmospheric air while the plasma head is rotating. The versatility of this unit allows for use in fully integrated on robots, as a standalone unit, or any production line for covering more treatment area as the treatment head diameter is larger & rotating.

The purpose of surface treatment of polymer based materials is to increase surface wettability through plasma discharge. The low surface energy of polymer based substrates often leads to poor adhesion of inks, glues and coatings. To obtain optimum adhesion, it is necessary to increase the surface energy of the substrate to just above that of the material to be applied. Surface treatment with plasma results in improved surface adhesion properties.

Eltech offers a cost effective method for optimising the adhesion properties of printing inks, coatings, glue, paint onto a polymer surface including commonly used materials like polypropylene and polyethylene. This universal system developed by Eltech operates with special rotating DC motor for spinning Plasma Nozzles pointing inwards for uniform treatment and to minimize heat impact & Cover larger area. The system is able to rotate up to 3000 rpm / min. These self contained units can be installed within existing production lines or used as an off line process.

The system includes a high frequency generator, high voltage transformers, rotary plasma heads and customised stand alone or bench top treating station. To ensure proper Plasma Discharge from the Discharge Nozzle the compressed air must be within a certain level of pressure and volume. Eltech's Vortex Plasma conforms with CE regulations and is CE marked.



Printing

Surface treating parts prior to printing enhances ink adhesion. It makes printing easier, and for others it makes printing possible.

Painting

Injection molded or thermoformed parts are often treated prior to painting. Surface treatment allows the paint to adhere and also increases the life and durability of the paint on the object's surface.

Coating

Products are coated to protect their surfaces from harsh environments or as decoration. Doors, frames, and extrusions/profiles are often coated. The medical industry uses surface treating to improve adhesion of antimicrobial/antibiotic coatings.

Bonding

Bonding is primarily used to increase the strength of an adhesive. The medical and automotive industries rely on surface treating to remove contaminants such as dust, grease, oils, or mold to improve bonding. Typical cleaning solvents such as methyl ethyl ketone (MEK), trichloroethylene, toluene, or acetone may be used for this purpose, but cleaning agents that leave a film residue upon evaporation will retard bonding.

Labeling

Surface treating caps, bottles and lids ensure that labels will not peel off before complete destruction of the label occurs. Air, flame and chemical plasma treatment of materials like HDPE can effectively improve adhesion of labels.

Eltech's Vortex Plasma Treatment system readily solve surface adhesion problems for a wide variety of products and applications:

- Caps and closures
- Cups and containers
- Painting and decorating
- Consumer products
- Extruded pipe, tubing, profiles
- Medical and health care products
- Electrical/electronic components
- Direct printing
- Hot stamping
- Laminating
- Inkjet printing on cartons
- Pad printing
- Adhesive coating
- Wire and cable



Features

- Advanced IGBT Technology
- Compact simple construction
- Ultra High Frequency
- Soft Start
- Maximum operator safety
- Forced cooled convertor for longer life



Technical Specifications :

Treating head	: Max 50 mm
Mains supply	: 230 VAC
Mains frequency	: 50Hz
Speed	: As per material and product
Output frequency	: 30 KHz
App. output power	: 1.5 KW
Plasma output	: Constant at same speed No influence of supply voltage
Dynes level	: 38-54 Dynes/cm
Dimension	: 450 mm x 550 mm x 850 mm
Weight	: 60 kg



Certificates



Certificate of Compliance

This is to Certify that the following designated products :

Corona Treater, Lab Corona Treater, Sheet Corona Treater, Plasma Ion Treatment, Plasma ARC Treatment, Plasma Vortex Treatment, Induction Cap Sealer, Static Eliminator, Ionizing Air Gun, Ionizing Air Nozzle, Ionizing Air Blower, Static Charger, Static Charge Meter and Silicone Items.

This certificate is issued under the following conditions:
1- It applies only to the above referenced set of products mentioned above. The manufacturer is obligated to assure that all products of the respective model conform to the type covered by this certificate.
2- The Certificate validity is conditioned by the positive result of the surveillance audits.
3- The Certificate remains valid until the manufacturing conditions, the quality systems or relevant legislation are changed but until the 30/06/2020.
4- After Fulfilling the E.U. legislation requirements, the manufacturer shall affix to each product of the above referenced models, CE Marking according to the following example

Manufactured By

ELTECH ENGINEERS PRIVATE LIMITED

A - 108, Diamond Industrial Estate, Ketiapada Road, Near Toll Naka,
Off. Western Express Highway, Dahisar-(East), Mumbai - 400068,
Maharashtra, India

Conforms with the Applicable requirements of
Medical Device Directive MDD (93/42/EEC)

CERTIFICATE NO. : 192MZC0053C

ISSUED DATE : 02/07/2019	1ST SURVEILLANCE : 01/06/2020
EXPIRY DATE : 01/07/2022	2ND SURVEILLANCE : 01/06/2021

[Signature]
Managing Director




For BMC Conformity Assessment Services Pvt. Ltd.
C-108, 1st Floor, Sector-10, Gurgaon-122001, Haryana, India
This Certificate is Intellectual Property of BMC and shall be maintained in strict confidence and should not be disclosed without the prior written consent of BMC. BMC shall not be held liable for any consequences arising from the use of this certificate. BMC is not responsible for the use of this certificate for any other purpose. BMC is not responsible for the use of this certificate for any other purpose. BMC is not responsible for the use of this certificate for any other purpose.

QUALITY CERTIFICATION



UKAC
ACCREDITED
SIGNATORY



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This certificate of compliance is based on the technical file of above mention products

Manufactured By :

M/S. ELTECH ENGINEERS PVT.LTD.

A-108, Diamond Industrial Estate, Ketiapada Road, Near Toll Naka
Off. W. E. Highway, Dahisar (East), Mumbai - 400068, Maharashtra, India

Application of Council Directive on the Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment 2011/65/EU

CERTIFICATE NO. : 192MZG02176R

ISSUED DATE : 04/07/2019
EXPIRY DATE : 03/07/2022

1ST SURVEILLANCE : 03/07/2020
2ND SURVEILLANCE : 03/07/2021



Authorized Signatory
INTERNATIONAL QUALITY CERTIFICATION SERVICES UK LTD
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Eltech Engineers Pvt Ltd

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