

CORONA TREATER

Product Description



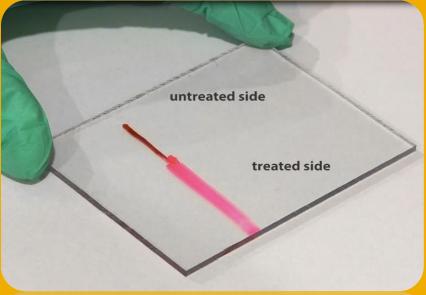


Corona treatment can be polymer, metal, glass, etc. Surface lamination process or printing process is the name of the preprocess to provide material revival by breaking the surface processes of the process (adhesive or ink.)



Corona traters are used in order to eliminate surface stresses during production in plastic and metallized film materials and to increase the adhesion of the material surface. Optionally we can produce corona devices and Plasma with different power and width.





Corona treater and plasma treater have control card that produce 3 up to 40 khz. Which the system that can produce the controllable high voltage (8 up to 20 kV) in the voltage transformer.





1.Generator with control unit

2. Station part where high voltage is generated and material passes





WHY WE SHOULD CHOOSE AIS ENGINEERING



Big things in a short time

The first microprocessorcontrolled IGBT technology in Turkey.



Specific Design

Original designs created with customer needs in mind.



Experience

Spare parts supply to more than 200 companies for 60 machines working non-stop in 35 different companies in 5 years

Generator Types

AiS 1000 and up to 3Kw

- Control with microprocessor
- IGBT technology
- LCD touch screen
- Controllable power
- Product movement tracking
- Product meter tracking work safety door sensor
- Visual and audible error notifications.





Generator Types

- Control with microprocessor
- IGBT technology
- LCD touch screen
- Controllable power
- Product movement tracking
- Product meter tracking work safety door sensor
- Visual and audible error notifications.
- Remote Access(optional)

AIS 5000



AIS 10 K



C

Station Types

Sticker Corona

A quality corona treatment is necessary to ensure the flawless print quality we want at the end of the production line. Therefore, it is important to use corona systems in label printing.

Specifications:

Width: 50mm-500mm Speed: 1- 250 m/min

Electrode: Ceramic Number of Transaction

Side : 1 (2-optional)
Roller : Chrome Plated

Application: Metallized Label, Aluminum Foil, Label Printing, etc.





Station Types

Plastic Film Corona

Corona treatment on blown film or cast film extrusion lines, printing/lamination/coating etc.
Required to achieve an excellent surface tension prior to surface transformation operations



Specifications:

Width : 60,80,100,120mm

Speed: 1- 100 m/min

Electrode : Aluminum

Side : 2 (optional)

Roller : Silicone Cylinder

Station Types

Plastic Film Corona



Specifications:

Width : 1300mm-3000mm

Speed : 1- 200 m/min Electrode : Aluminum

Side : 1-2 (optional)

Roller : Silicone Cylinder

Roller Diameter: 100mm-200mm



Metal Film Corona



Station Types

Sheet Corona

Sheet corona is widely used to increase the surface tension of PP, PVC and metallized polyester laminated sheets, providing better printing and adhesion quality. It is used for the processing of water-based or UV inks on plastic films or unprimed papers.

Specifications:

Width: 50mm-500mm Speed: Drive Controlled

Electrode: Ceramic or Aluminium

Side : 1 (2-optional)

Roller : Special to Application





Sheet Corona



Station Types

Cable Corona

It is used in cable production to improve the adhesion of the PVC coating on the wire and to increase the print quality on the cable.

Specifications:

Cable diameter Range: 05.-2.5, 4-50,70-300, 400-100 mm2

Speed: 30- 150 m/min

Electrode: : Aluminum / Ceramic Process Material: PVC/PE/XLPE



CORONA SILICONE

 Our corona silicon is completely homogeneous in chemical composition, and is suitable for to create stable discharge conditions.
 Due to its dielectric property, it allows long-term use. Our flexible silicone sleeves are very resistant in terms of tensile strength





DIMENSIONS OF CORONA SILICONE

| No | Roller Diameter(mm) | Silicone Inner Diameter(mm) | Silicone Wall Thickness(mm) |
|----|---------------------|-----------------------------|-----------------------------|
| 1 | 50 | 45 | 3±0,1 |
| 2 | 60 | 55 | 3 <u>±</u> 0,1 |
| 3 | 65 | 60 | 3 <u>±</u> 0,1 |
| 4 | 70 | 65 | 3 <u>±</u> 0,1 |
| 5 | 75 | 70 | 3 <u>±</u> 0,1 |
| 6 | 80 | 75 | 3 <u>±</u> 0,1 |
| 7 | 90 | 85 | 3 <u>±</u> 0,1 |
| 8 | 100 | 93 | 3 <u>±</u> 0,1 |
| 9 | 120 | 110 | 3±0,1 |
| 10 | 150 | 135 | 3±0,1 |
| 11 | 200 | 183 | 3 <u>±</u> 0,1 |

TECHNICAL SPECIFICATIONS OF CORONA SILICONE

| Feature Name | Unit | Test Result | The standard used |
|-----------------------------------|---------|------------------|-------------------|
| ElektrocaL Strength | Kv/mm | 18-20 | |
| Hardness | Shore A | 65+-3 | ASTM D2240 |
| Operating temperature | °C | -60°C dan +250°C | |
| Pulling Strength | Мра | 11 | ASTM D412 DIE C |
| Tensile Strength | kN/m | 22 | ASTM D412 DIE B |
| % Elongation | % | 400 | ASTM D412 DIE C |
| Pressure Test (22 hours at 177 °C | % | 30 | ASTM D395 |

CERAMIC ELECTRODE

The ceramic electrode consists of an active substance that reduces the risk of deterioration and burning at high temperatures (over 2000°C). Ceramic electrodes enable surface bombardment of metallized films. When using ceramic electrodes, they must be protected against physical damage and impacts, otherwise it will lead to irreversible consequences for the electrode.

| Maximum Length | Operating | Voltage Resistance | Type | certificaTEE |
|----------------|-------------|--------------------|------------------|---------------|
| | temperature | | | |
| 2000 mm | -40-2000°C | 30 Kv | Statikte Seramik | Ruhs ISO9001: |
| | | | | 2008 |



CORONA TEST MARKER

When Corona Pens or Solutions are used alone, they only test whether the desired corona value is on that surface, but when the Corona Pen or Solution is taken as a set, the surface tension on that surface can be detected. Surface Tension Measurement Sets; AIS Engineering offers you ASTM D2578-67 and DIN 53364 produced pens and solutions, which are the most widely used standards in the world.





CORONA MARKER SETS

| Small Corona Set | 30-32-34-36-38-40-42-44 dyne/cm |
|------------------|---------------------------------|
|------------------|---------------------------------|

| Middle Corona Set | 34-36-38-40-42-44-46-48 dyne/cn | n |
|-------------------|---------------------------------|---|
|-------------------|---------------------------------|---|

CORONA DEVICE HIGH VOLTAGE TRANSFORMER

Ferrite core transformers operating under high frequency and high voltage used in the production of high voltage in Corona devices are repaired and produced, and delivered after passing the necessary tests.







Thanks You Too Much ©



For more information, you can send an e-mail to info@aismuhendislik.com.

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