3DT APPLICATION NOTES

MultiDyne 2000 Corona Treating System



SOLUTION

MultiDyne 2000 Corona Treating System is the perfect solution for adhesion problems on injection, blow molded or extruded parts. It is designed for a wide variety of applications including the treatment of complex 3-D parts. MultiDyne 2000 effectively treats surfaces uniformly and consistently using a process-controlled system.

In operation, polymer parts are placed manually or received from a production line. During treatment, these parts pass through the corona discharge. The corona field is created by an airstream passing between the electrodes, effectively spreading the corona discharge out of the treating head. Two treating heads are used in conjunction to ensure uniform treatment of the entire exposed surface. A standard, individual treating head can deliver treatment up to 2.5" in width.

MultiDyne 2000 alters the molecular structure of the part and thereby raises the surface energy improving wettability. Corona is one of the most effective methods for surface treatment. It is gentle yet powerful imparting highly improved bonding of paint, ink, adhesive and coating.

PURPOSE

Many thermoformed and injection molded parts have very low surface energy levels and do not bond well to other materials. Corona surface treatment creates a higher surface energy to allow for bonding.

The MultiDyne 2000 Corona Treating System is designed for the treatment of 3-D parts prior to printing, gluing or coating to improve surface energy and a powerful bond.

EQUIPMENT

The MultiDyne 2000 is furnished as a complete set of components including:

- Generator with transformer
- 2 MultiDyne treating heads
- Interface for external control
- Footswitch control
- Easy to use, operator control system
- Intelligent fault monitoring system
- Made in the USA



3DT's Advanced Technology

With 25 years of innovation and experience, 3DT provides solutions to a wide range of adhesion problems. Our systems are designed to treat most substrates, regardless of shape, with superior bonding results.

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MultiDyne 2000 Corona Treating System



MultiDyne 2000 Equipment Specifications:

Model: Part Number: Number of Heads: Voltage at Electrode: Mains Voltage: **Optional Input Voltage:** Voltage Fluctuations: Frequency: Phase: Input Power: Circuit Breaker: **Output Contacts Rating:** Ambient Temperature Range: Relative Humidity (non-condensing): Maximum Altitude: Noise Emissions: **Optimal Treating Distance:** Max. Treating Area w/Treating Head in Stationary Position: Timer Adjustment Range: HV Cable and Air Conduit Length: Length Available: Overall Dimensions. H,W,D: Weight (Net): Shipping Weight:

MULTIDYNE™ 2000 10000-88, -70 2 2 x 12 kV 240 VAC 200 VAC $\pm 10\%$ 50/60Hz. Single 2.8 kVA 16 Amp S.P.S.T., 125VAC, 30VDC, 2A + 5°C to +40°C 20% to 85% RH 6560 feet above sea level (2000m) 78 dB(A) .20" (5mm)

2 each 2.50" x 1.60"(65x40mm) .1 - 25.5 seconds Standard, 78" (1980mm) Special Up to 17' (5m) 20.63"/524, 19.7"/500.5, 8.85"/224.8. 116 lbs. (53 kg) 132 lbs. (60 kg)

