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DDU Enterprises, Inc.

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# DRS10/12 Conveyor Systems

## Fully Engineered Conveyor Equipped UV Curing Systems

Fusion UV's popular DRS conveyor system will accept one or two rows of Fusion UV Systems modular electrodeless lamps, with either standard or variable power supply units.

The conveyor will accept two 6-inch lamp systems (F300 or LH6) side-by-side for a nominal 12-inch wide system, or two 10-inch lamps (F450, F600, VPS or LH10) in a two-row arrangement (as shown below).

The DRS10/12 is designed to accommodate a variety of part geometries up to 4 inches high.



## Conveyor Equipped Systems for Laboratory R&D or Production Line Use

The DRS10/12 offers the performance of electrodeless lamp technology in both laboratory and production line environments. The F300, F450, F455, LH6, LH10\*, VPS and F600 lamp systems are available with inter-changeable special fill bulbs offering the user the flexibility to select the most appropriate UV spectrum for the chemistry being used. For chemical formulators, coating manufacturers, and end users, these systems allow evaluation of curing processes for larger production lines...or they can be placed into production as is. The DRS will satisfy your needs for increased productivity, lower energy costs and product quality improvement.

## A wide range of standard and optional features to meet your specific UV curing needs:

### Standard Features

- Compact, efficient design.
- Modular electrodeless lamp systems (lamp system selected separately).
- Anti-static, kevlar, mesh conveyor belt.
- 10-150 fpm (3.0-45.7 m/min.) continuous range. Adjustable speed control with digital display.
- Display speed in m/min. or fpm.
- Vacuum "hold down" facilitates handling of lightweight parts and sheets.
- Emergency stop switch.
- System interlocks for safe operation.
- Parts up to 4 inches high.
- Lamp focus adjustability.
- Designed for ease of product loading and unloading.
- Choice of 110/120 or 200/220 VAC, 50/60 Hz, single-phase.
- Slip-clutch drive for safety.
- Integral exhaust blower.

### Optional Features

Tailor the conveyor to your exact process needs:

- Five optional speed ranges from 1 to 500 fpm.
- Continuous range focal adjustment.
- Standard color shown. Other colors available.

# SPECIFICATIONS: DRS10/12 Conveyor Systems

## Lamp Configurations: (lamps purchased separately)

- **F450, F455, F600, LH10\*, VPS/I250, VPS/I600:**  
One lamp wide, one or two rows.

- **F300:** Two lamps wide, one row.

- **LH6:** Two lamps wide, one or two rows.  
(Conveyor base can accommodate two power supplies.)

**Width, Nominal:** 10 in. (254 mm) or 12 in. (305 mm), depending on lamp system.

**Conveyor Belt Width:** 14 in. (355 mm).

**Length (overall):** 66 in. (1676 mm).

**Width (overall):** 32 in. (813 mm).

**Conveyor Belt Height:** 32 in. (810 mm) ±2.0 in.

**Maximum Part Height:** 4.0 in.

**Infeed Length, Clear:** 15 in. (380 mm).

**Outfeed Length, Clear:** 11 in. (280 mm).

**Belt Material:** Kevlar®, Carbon/Graphite impregnated PTFE Coating.

**Belt Speed Range:** Variable speed in five (5) ranges; 1-15 fpm, 5-75 fpm, 10-150 fpm, 15-225 fpm or 35-500 fpm.

**Speed Control:** Variable with digital display.

**Clutch Slip Limit:** 30 lbs. (13.5 kg) belt pull.

**Vacuum Hold Down:** At infeed, cure zone, and outfeed.

**Slider Bed:** Perforated aluminum sheet.

**Drive System:** P.M.D.C. Motor, 1/8 HP.

**Lamp Focus:** Focal point adjustable from 0.0 in. thru 4.0 in. from belt in 0.5 in. increments (i.e. 2.1 in. thru 6.1 in. from belt to face of lamp).

**Exhaust Blower:** 1600 cfm (45.3 m<sup>3</sup>/min.) @ 2 in. SP (outlet). Blower included and installed in base cabinet.

**Exhaust Duct Connection Size:** 5.88 in. x 11.75 in. (149 mm x 298 mm).

\*LH10 lamp system requires a master DeviceNet™ controller to interface with DRS10/12 conveyor.

## Standard Power Requirements

**Conveyor:** 200/220 VAC, 50/60 Hz, 1 phase, 15 A (including internal exhaust blower).

**Lamp System:** See appropriate lamp data sheet.



System control panel.

## Tough and Safe

The conveyor frame and lamp housing of the DRS10/12 conveyor system are constructed of welded steel for strength and durability.

As with all Fusion UV Systems equipment, personal safety and substrate protection are prime considerations.

The DRS10/12, when used with standard Fusion UV Lamp Systems, protects against:

- Lamp and blower failure.
- Microwave leakage.
- Excessive power supply temperature.
- Power imbalance.
- Power error.
- Power interruption.
- Zero speed.

In addition, there is an external interlock provision for user connection to other equipment.

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Contact your local Fusion UV office for an engineered solution for your specific requirements.



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ISO 9001 Certified QMS



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• Canada Patent No. 1024246

Other U.S. and Foreign Patents Pending. We reserve the right to incorporate changes and improvements without notice.

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