



DUST REMOVAL SYSTEM

DRS Range



Features

- ◇ Cleans loose, dry contamination from any flat surface.
- ◇ Dust, hair, lint, clothing fibres etc, are all controlled.
- ◇ Cleaning is completely dry, without chemicals or abrasion.
- ◇ Rollers are made in our own production facility ensuring complete quality control.
- ◇ Widest variety of polymer types to ensure the correct formulation for every task.
- ◇ Selection of widths and handles to give total flexibility for customers' dust-related issues.
- ◇ Quality bearings used to ensure no plastic-on-plastic abrasion and dust creation.
- ◇ High coat weight adhesive pad ensures maximum retention of removed particles.
- ◇ Silicone-based and silicone-free versions.

Applications

- ◇ Printed Circuit Boards
- ◇ Surface Mount Technology
- ◇ Screenprinting
- ◇ Glass Manufacture
- ◇ LCD
- ◇ Photo Mounting
- ◇ Light Boxes
- ◇ Flat Screen
- ◇ Medical Packaging
- ◇ Many other industries where particulate contamination is a problem

The **Dust Removal System** is the ultimate tool for cleaning particulate contaminants from flat surfaces. Unwanted particles as small as one micron are readily removed from the substrate.

How does it work?

- ◇ Gently pass the **DRS** hand roller over the flat surface to be cleaned. The roller's polymer surface lifts particulate matter from the substrate. No pressure is required.
- ◇ Now, pass the **DRS** hand roller over the **DRS1** adhesive pad. The pad's surface energy is higher than the roller's, so the particulate is transferred, leaving the roller clean, and ensuring no cross-contamination.
- ◇ Each sheet of the pad can absorb many passes of the hand roller before it is discarded.

ABOUT SDI

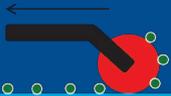
SDI is the largest independent manufacturer of contact cleaning systems in the world.

Founded in 1979, we offer highly engineered products dedicated to yield improvement in dust-critical production areas.

THE SDI PRINCIPLE

The SDI cleaning principle consists of two linked processes.

Specially formulated polymer rollers gently lift loose, dry contamination away from any flat surface.



The polymer rollers are then passed in contact with a sheet on an adhesive pad, onto which they transfer the lifted contamination. When saturated, the top sheet is simply peeled away, exposing a fresh layer.



DRS-1



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Options

There are many combinations of options available to ensure that the correct roller can be supplied for the customer's requirements. Standard products are shown in **bold**.

Roller Width

With complete control over our processes, SDI can offer standard and custom widths of hand rollers (up to 457mm) wide.

- ◇ **DRS-6 — 152mm cleaning width**
- ◇ **DRS-12 — 305mm cleaning width**
- ◇ DRS-18 — 457mm cleaning width
- ◇ Custom widths available

Handle Material

SDI offers both strong metal handles and lightweight plastic handles.

- ◇ **"P" handle - plastic / dual leg**
- ◇ "F" handle - metal /dual leg
- ◇ "S" handle - metal / single leg (edge cleaning)
- ◇ "N" handle - metal / dual narrow legs (edge cleaning)

Grip Angle

Rollers can be supplied straight, or with a 30° angle to the handle.

- ◇ "A" angle - straight
- ◇ **"B" angle - 30° angle**

Polymer Formulation

As the sidebar to the left shows, SDI make a variety of formulations of the polymer roller that touches the substrate.

- ◇ **"H" type - Dark Blue (High Tack)**
- ◇ **"M" type - Red (Medium Tack)**
- ◇ "L" type - Black (Low Tack)
- ◇ **"GP" type - Light Blue (Thin Film)**
- ◇ "Y" - type - Yellow (Medium Tack, Silicone-Free)

Further Options

- ◇ "X" - Telescopic extendable handle for DRS6 and DRS12 with any of the metal handles (F, S or N-type). Extends from 457-863mm
- ◇ "J" - Fixed extended handle for DRS6, DRS12 and DRS18 with any of the metal handles (F, S or N-type). Adds 914mm to handle length
- ◇ "G" - As "J" but adds 457mm to handle length
- ◇ "E" - As "J" but adds 305mm to handle length
- ◇ "S" - This roller has a static brush built in, connected to a metal ring in the handle which kills the static when the operator holds it. Straight handles only.

Ordering Examples

Required: 152mm hand roller, with plastic, dual leg handle with 30° angle for cleaning thick metal substrate.

Order: DRS-6PBH

Required: 305mm hand roller, with metal, dual leg, straight handle, for cleaning glass before lamination.

Order: DRS-12FAY

Required: 457mm hand roller, with metal, dual leg straight handle, in Medium Tack polymer with 914mm fixed length extended handle.

Order: DRS-18FAMJ

DRS Products

DRS-1 Adhesive Pads (silicone-lined)

The hand roller is only part of the process in cleaning the substrate of unwanted particulate. The **DRS-1 Adhesive Pads** trap and store the collected contamination, ensuring no re-transfer back to the **DRS** roller and on to the substrates.

The extremely high coat-weight of adhesive ensures that the maximum amount of contamination is stored before the top sheet of the pad is full.

DRS1 Adhesive Pads are slightly larger than the 305mm width of the **DRS-12**, and are thus suitable for both **DRS-6** and **DRS-12**. Use two pads side-by-side with the **DRS-18**.

DRS-1 Adhesive Pads are sold in packs of 5 pads.

DRS-1-PLAS Adhesive Pads (silicone-free)

These special Adhesive Pads are used with the "Y"-type polymer formulation of hand roller, ensuring that the complete system is silicone-free

DRS-4 Pad Holder

The strong pad holder provides a workstation for the **DRS-6** or **DRS-12** roller (with 30° grip angle) and **DRS-1 Adhesive Pads**,

Replacement roller cartridges and handles

Can be ordered from your nearest SDI office or distribution partner

POLYMER ROLLERS

SDI offer a range of polymer formulations to balance the best cleaning performance against the ease of processing a particular substrate.

- ◇ **Dark Blue (High Tack)** - silicone-based polymer suitable for rigid substrates and high levels of contamination, cleaning particles down to 1µ in size.
- ◇ **Red (Medium Tack)** - silicone-based polymer suitable for semi-rigid substrates, cleaning particles down to 1µ in size.
- ◇ **Black (Low Tack)** - silicone-based polymer suitable for flexible substrate, cleaning particles down to 1µ in size.
- ◇ **Light Blue (Thin Film)** - silicone-based polymer suitable for the most delicate substrates, cleaning particles down to 1µ in size.
- ◇ **Yellow** - silicone-free polymer suitable for most substrates, cleaning particles smaller than 1µ in size. Uses **DRS1-PLAS** Adhesive Pads.

IMPORTANT

Material thickness is only a guide to how well a substrate can be processed.

It is *rigidity* rather than thickness that determines a substrate's ability to be cleaned by our systems.

If in doubt, please send samples to our laboratory for testing at the SDI AMERICAS address.