



# NARROW WEB CLEANER



## WCN4

### 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 three linked processes.



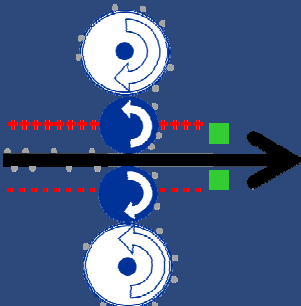
Specially formulated polymer rollers gently lift loose, dry contamination away from any flat surface.



The polymer rollers are in contact with an adhesive roll, onto which they transfer the lifted contamination. When saturated, the outer layer is simply peeled away.



Anti-static systems then prevent re-attraction of airborne particles to the cleaned substrate.



## Features

- ◇ Single or double-sided contact cleaner
- ◇ Retrofit or OEM install to any narrow web line
- ◇ 1.5" diameter Polymer Cleaning Rollers are perfectly concentric, reducing vibration and wear
- ◇ 3" core Adhesive Rolls trap contamination safely for analysis and disposal
- ◇ Sturdy backplate ensures no flex or torsion through long-term operation, avoiding web problems
- ◇ Pneumatic control of Adhesive Roll (rather than being gravity fed) allows perfect pressure to be set.
- ◇ The WCN4 can use narrower Adhesive Rolls if required, saving consumable costs

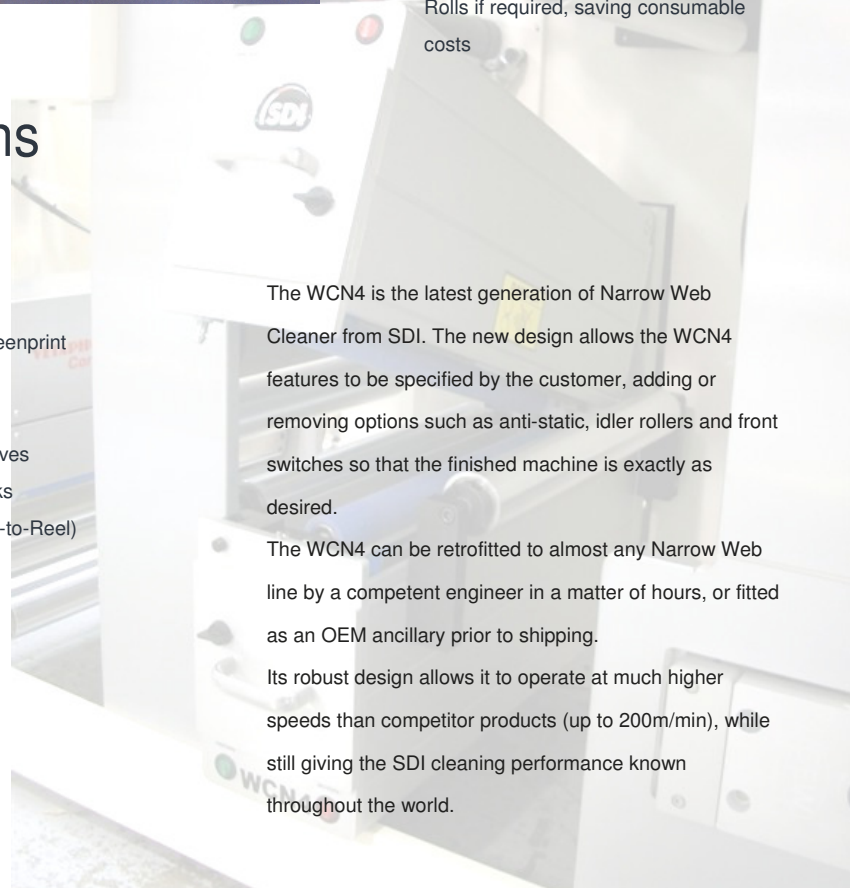
## Applications

- ◇ Narrow Web Printing
  - ◇ Flexo
  - ◇ Offset
  - ◇ Gravure
  - ◇ Rotary Screenprint
  - ◇ Letterpress
- ◇ Packaging
  - ◇ Shrink sleeves
  - ◇ Blister packs
- ◇ PCB Production (Reel-to-Reel)
  - ◇ Photomech
  - ◇ Exposure
  - ◇ AOI

The WCN4 is the latest generation of Narrow Web Cleaner from SDI. The new design allows the WCN4 features to be specified by the customer, adding or removing options such as anti-static, idler rollers and front switches so that the finished machine is exactly as desired.

The WCN4 can be retrofitted to almost any Narrow Web line by a competent engineer in a matter of hours, or fitted as an OEM ancillary prior to shipping.

Its robust design allows it to operate at much higher speeds than competitor products (up to 200m/min), while still giving the SDI cleaning performance known throughout the world.





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**POLYMER ROLLERS**

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

- ◇ **Light Blue**—silicone-based polymer suitable for most applications, cleaning particles down to 1µ in size.
- ◇ **Green**—silicone-based polymer suitable for delicate substrates, cleaning particles down to 1µ in size.
- ◇ **Yellow**—silicone-free polymer suitable for most applications, cleaning particles smaller than 1µ in size.
- ◇ **Orange**—silicone-free polymer suitable for delicate substrates, cleaning particles smaller than 1µ in size.

**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.

## Machine Options

- ◇ **Single or Double-Sided Model**
  - ◇ If only single-sided cleaning is required, the bottom cleaning module can be replaced with an idler roller (**WCNS4**).
- ◇ **Double Polymer Rollers**
  - ◇ For extra peace of mind, four polymer rollers (two on the single-sided version) can be specified (or easily installed later).
- ◇ **Anti-Static**
  - ◇ 2 x 7kV Anti-Static bars at exit (one bar on single-sided version)
- ◇ **NEMA Control Box**
  - ◇ The Control Box is recommended for retrofit installations, as it contains all necessary transformers and regulators.
- ◇ **Installation / Orientation**
  - ◇ The WCN4 can be specified to operate in either direction, and at any angle. The power/pneumatic conduit can exit from the back, top or bottom of the machine.
- ◇ **Extended Shafts for Slave Drive**
  - ◇ The WCN4 can be specified with extended polymer roller shafts to allow it to be slave driven by its host machine—recommended for very delicate substrates.
- ◇ **Idle Rollers**
  - ◇ It is important that the web is supported as it enters and exits the web cleaner. Path rollers can be fitted to the WCN4 or WCNS4 chassis to facilitate this

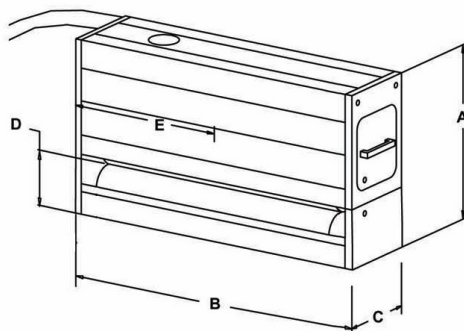
## Specifications

- ◇ **Cleaning Widths**
  - ◇ 10"
  - ◇ 12"
  - ◇ 14"
  - ◇ 16"
  - ◇ 18"
  - ◇ 20"
  - ◇ 22"
  - ◇ 24"
  - ◇ 26"
- ◇ **Maximum Web Speed**
  - ◇ 650 feet per minute
- ◇ **Services Required**
  - ◇ 110V or 220V AC
  - ◇ 5 bar clean dry air

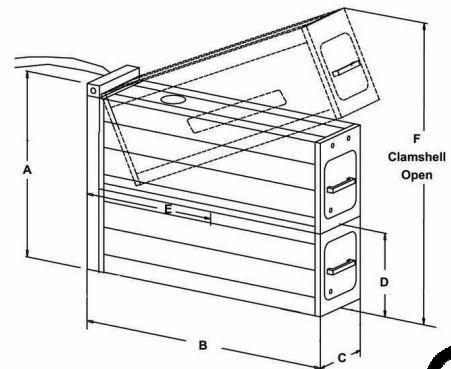
## Dimensions

The WCN4 and WCNS4 are available in a range of cleaning widths (CW).

	WCNS4	WCN4
A	12.63"	18.23"
B	CW + 5.38"	CW + 5.38"
C	6.21"	6.21"
D	3.0"	9.16"
E	CW/2 + 3.0"	CW/2 - 3.0"
F	CW+14.6"	CW + 20.0"



Single-Sided Version (WCNS4)



Double-Sided Version (WCN4)

