

# Substrate Management

In this article we'll learn,

- How **Substrates** are structured in the Workflow
- How to **add** Substrates to the Workflow

## 1. Substrate Overview

Print Data is always printed on a Substrate. Therefore Substrates are a key factor in print production. Production relevant parameters of the Workflow, such as grain and machine direction as well as the color profile (ICC profile), are linked to the Substrate. Changes in the composition of a Substrate can have a decisive influence on color reproduction and have a direct effect on the quality of a print.

Substrates are organized in the Workflow as follows:

- **Substrate Categories** – Represents the superset of Substrates. Typical categories could be *Paper, Cardboard, Corrugated Board, Textiles, PE white*, and so on.
- **Substrates** – This is the actual material on which the printout is made. Substrates such as *Blueback Paper, Gardamatt, Avery Top Clear*, etc. can be grouped into the aforementioned *Substrate Categories*.
- **Substrate Definitions** – Describes production-specific parameters such as *Length, Width, Thickness, Grain Direction, Printable Sides, Distortion Factor*, etc. A Substrate can exist in various *Substrate Definitions*.

## 2. Create a new Substrate

Before you can start profiling, the Substrate which is to be profiled must be available in the Workflow. You can create a Substrate in three different ways:

1. Creating Substrates by importing the Substrate list of a Printer
2. Adding Substrates manually to the Workflow
3. Create Substrates using the leading ERP system via a specific interface (XML, JDF or Rest API)

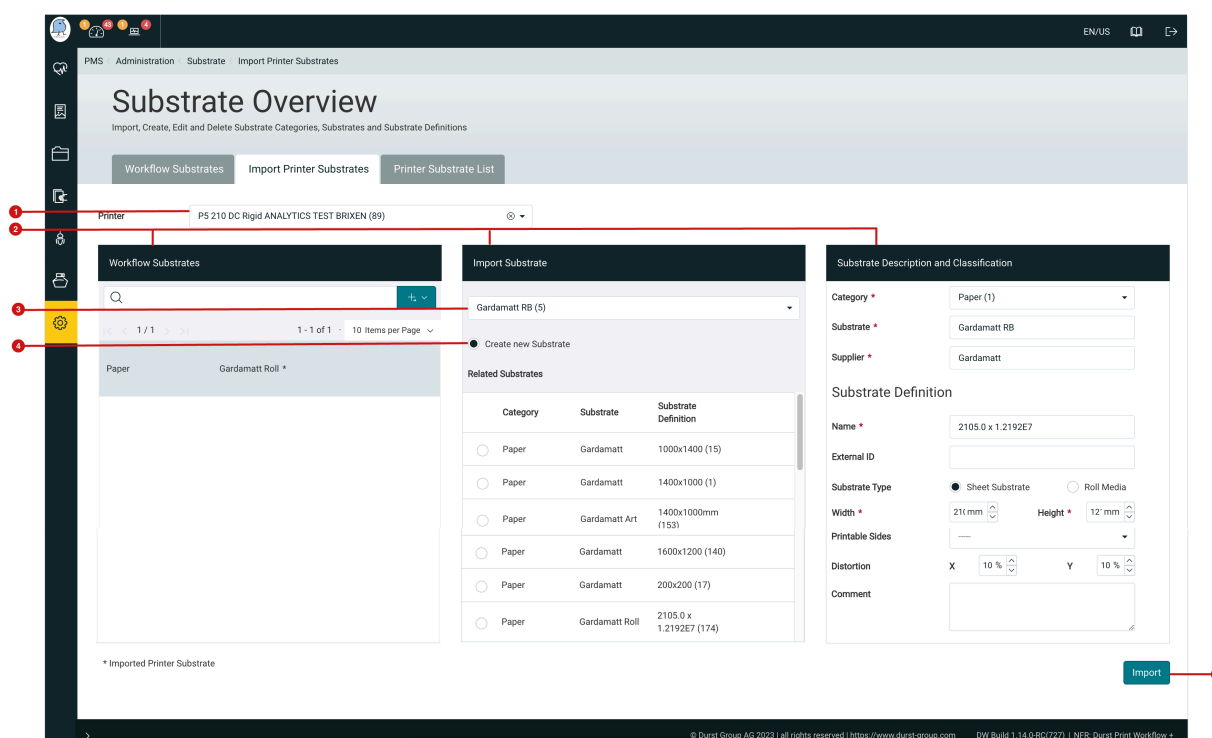
This means that essentially all variants of Substrates are available in the Workflow. Important! Please make sure that only one leading system (a Printer or an ERP system) is responsible for creating Substrates. Doing so will minimize confusion when selecting Substrates in the future.

## 2.1. Importing Substrates

Depending on the selected Printer, Substrates can be retrieved and imported from the Printer's media list. Please note: not all printing systems support access to the Substrate list! To import Substrates, proceed as follows:

1. Navigate to **Administration> Substrate** and select the **Import Printer Substrates** tab. This tab is divided into the sections, **Workflow Substrates**, **Import Substrates** and **Substrate Description and Classification** [2].
2. Select the desired Printer from the first drop-down menu [1]. By selecting the Printer, all pre-made Substrates are displayed in the **Workflow Substrates** area.
3. Select the desired Substrate in the drop-down menu [3] of the *Import Substrate* tab or *Create a new Substrate* [4]. Available Printing system Substrates are visible here. Click on **Import** [5].
4. The selected Substrate will be imported and integrated in the Workflow. You can now switch to the **Workflow Substrates** tab to make additional adjustments in the corresponding *Substrate Category*. Please note that the changes in Workflow Substrates currently are not reflected in the printing system.

**Figure 1:** The *Import Printer Substrates* tab visible under the *Substrate Overview* menu item.

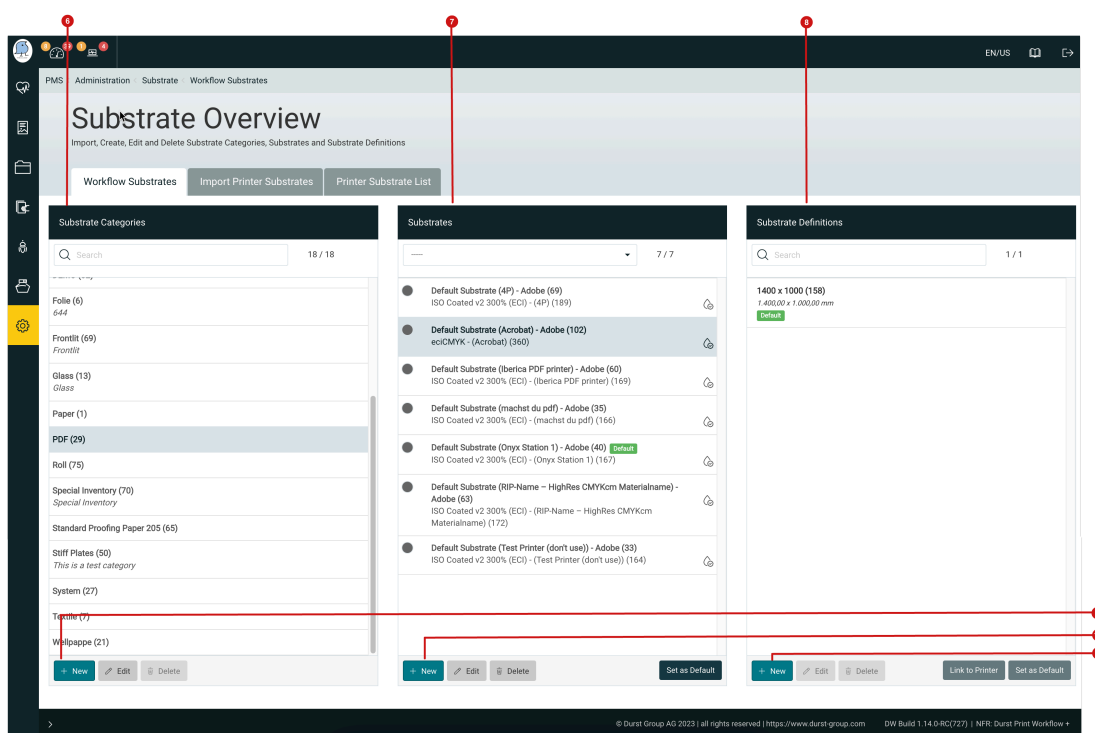


## 2.2. Add a Substrate manually

If importing Substrates is not possible for your printing system, the Substrate can be created manually before profiling. To do this, select the **Workflow Substrates** tab. The user is presented with three panels: *Substrate Categories*, *Substrates* and *Substrate Definitions*.

To view the **Substrates** [7] contained in a **Substrate Category** [6], you must first select a Substrate Category. To see all **Substrate Definitions** [8] of a Substrate, you must select the required Substrate.

**Figure 2:** The *Configure* tab displays three panels which list the *Substrate Categories*, *Substrates* and *Substrate Definitions*.

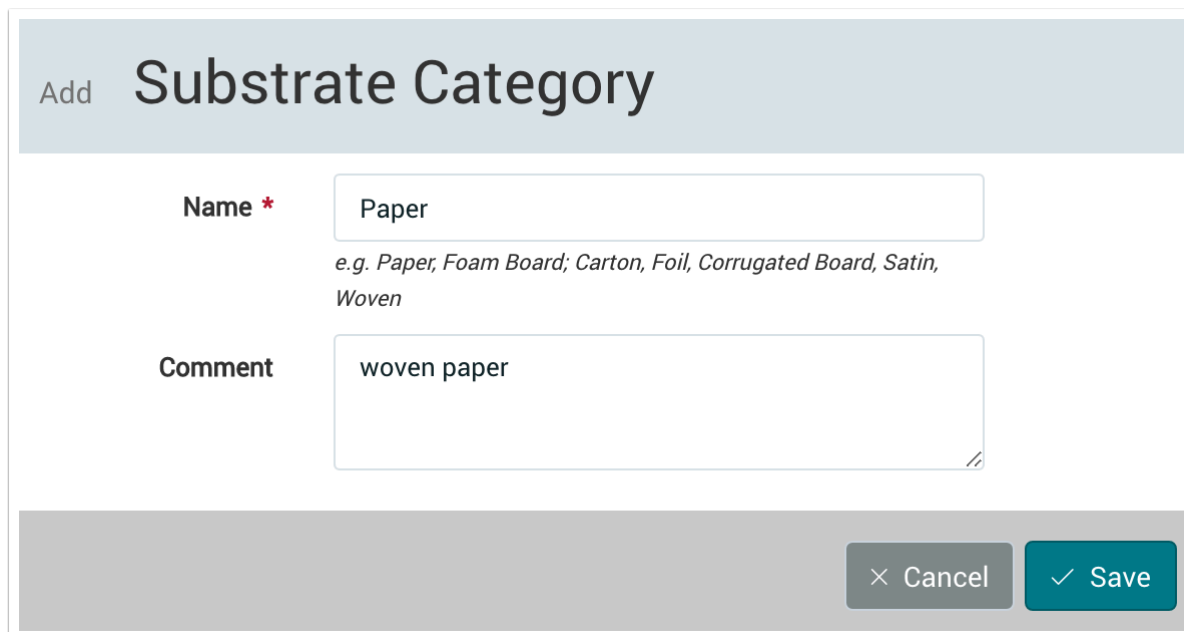


### 2.2.1. Add a Substrate Category

To create a *Substrate Category*, proceed as follows:

1. Click on **+ New** [9] in the footer of the **Substrate Categories** [6] panel. The *Add Substrate Category* dialog opens.
2. In the dialog, enter a *Name* for the category and an optional *Comment*.
3. To create the *Substrate Category*, click on **Save**.

**Figure 3:** The *Add Substrate Category* dialog.

The image shows a dialog box titled "Add Substrate Category". It has a light blue header bar with the text "Add Substrate Category". Below the header, there are two input fields. The first is labeled "Name \*" and contains the text "Paper". Below this field is a hint text: "e.g. Paper, Foam Board; Carton, Foil, Corrugated Board, Satin, Woven". The second input field is labeled "Comment" and contains the text "woven paper". At the bottom right of the dialog, there are two buttons: "Cancel" with a close icon (X) and "Save" with a checkmark icon (✓).

Add Substrate Category

Name \*

*e.g. Paper, Foam Board; Carton, Foil, Corrugated Board, Satin, Woven*

Comment

× Cancel ✓ Save

### 2.2.2. Add a Substrate

To create a *Substrate*, proceed as follows:

1. Select an existing *Substrate Category* or the previously created *Substrate Category* in the **Substrate Category [6]** panel.
2. Click on **+ New [10]** in the footer of the **Substrate [7]** panel. The *Add Substrate* dialog will open.
3. Enter a **Name [12]** and the **Manufacturer [14]** for the Substrate. If you made a mistake when defining the *Category*, you can select the correct one under **Category [13]**.
4. Optionally, you can add the RGB Display Color, which is used to display the Substrate color in the Impose editor, and a *Comment*.
5. To create the *Substrate*, click on **Save**.

**Figure 5:** The *Add Substrate* dialog.

**Add Substrate**

Substrate Category **Paper**

**Name \*** Gardamatt Art 12  
e.g. Kappa, Gardamatt, PE 85 Top White, Media Number from ERP

**Category \*** Papier (9) 13

**External ID** 102000-2

**Manufacturer \*** Europaper 14

**Display Color** 200 200 200

**Comment** Reference Substrate for Profiling

× Cancel ✓ Save

### 2.2.3. Add a Substrate Definition

Substrate Definitions must first be added and then configured for use with different Printers in the second step. To create a Substrate Definition, proceed as follows:

1. Select an existing *Substrate* or the previously created *Substrate* in the **Substrate [8]** panel.
2. Click on **+ New [11]** in the footer of the **Substrate [7]** panel. The *Add Substrate Definition* dialog will open.
3. Enter a **Name [15]** as well as the **Width [16]** and **Height [17]** for the *Substrate Definition* in the inputs. If the Substrate is a Roll Media, activate the checkbox **Roll Media [19]** and then enter the length for the roll and adjust the height.
4. Sometimes production-relevant distortion must be taken into account when rendering the print data. If it is a Substrate that should be distorted in width or height due to water, heat etc., enter the distortion value in the **X** or **Y Distortion [18]** inputs.
5. Additional options include: an **External ID**, the **Weight**, **Thickness** and the **Printable Sides**.
6. To create the *Substrate Definition* click on **Save**.

**Figure 6:** The *Add Substrate Definition* dialog.

**Add Substrate Definition**

Substrate **Gardamatt**

**15** Name \* 1000 x 1400  
*e.g. 330 x 1000, 1700 x 2300 300g, 1000 x 1200 single side*

External ID 201000-2

**16** Width \* 1000 mm

**17** Height \* 1400 mm

☐ Roll Media **19**

Weight 180 g/sqm Thickness 0,3 mm

Printable Sides Frontside

**18** Distortion X 100 % Distortion Y 100 %

Comment

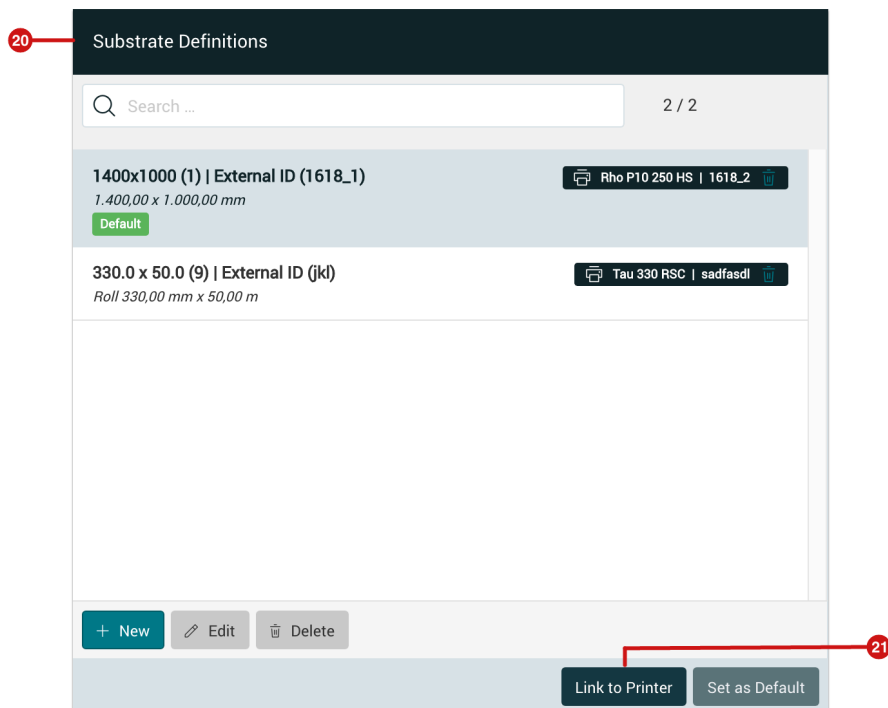
× Cancel ✓ Save

## 2.3. Linking Substrates to multiple Printers

To inform the Workflow which Substrate can be used for which Printer or which *Substrate ID* in the Printer is used for the Substrate, the Substrate Definition must be linked to each appropriate Printer. If Substrates were imported from a Printer, the Substrate ID should already be selected. For manually created Substrates with Substrate Definitions, this must be done manually. Proceed as follows:

1. Select the **Workflow Substrates** tab via **Administration > Substrates**.
2. Select a *Substrate Definition* in the **Substrate Definitions** panel **[20]**.
3. Click on the **Link to Printer [21]** button in the footer of the Substrate Definitions panel. The *Add Link to Printer* dialog will open.

**Figure 7:** The *Substrate Definitions* panel with the *Link to Printer* button visible in the footer.



4. In the *Add Link to Printer* dialog, first select the **Printer** [22].
5. Then select the option **Custom** under **Source** [23], which will enable you to enter an ID in the *Substrate ID* input field [24].
6. To create the link between the *Substrate ID* and the Printer, click on **Save**.
7. Repeat these steps for all Printers that need access to this *Substrate Definition*.

**Figure 8:** The *Add Link to Printer* dialog.

Add

Link to Printer

22

Printer \*

Rho P10 250 HS

23

Source

☐ Import from Printer ☒ Custom

24

Substrate ID \*

999

× Cancel

✓ Save