

EFI Metrix Tech Note:
UV Inks and Coatings – Ink-handling Changes

Version 2020.2.0.647

UV Inks and Coatings

What it Is

2020.2.0.647 introduces support for Coatings and UV inks. In addition to the existing Process Color, Spot Color, and Varnish, Metrix now has Coating as a new ink type. We have also added a flag for all ink types called “UV”.

In Metrix 2020.2.0.618, the 2020.2 hot fix release prior to this one, and earlier versions, if an ink was defined as a Varnish and no coater was defined for the Press, the Varnish would be treated as a regular ink, requiring a plate and using one of the ink units defined for the press (if any). If a Coater was defined for the press and the ink was defined as a Varnish, then Metrix would assume the Varnish was being applied by the Coater.

In Metrix 2020.2.0.647 and later, a Varnish that is applied by a Coater must be defined as **Ink Type: Coating**. A Varnish that is applied by a plate and uses an ink unit on the press can continue to be defined as Ink Type: Varnish, and Metrix will never assume it can be applied by a Coater.

UV Inks

Any ink may be flagged as a UV ink. UV inks can be used only with a press that has the new **UV Support** property set to **True**. Inks that are not marked as UV may be used on any press. There is a new Status message indicating if the press supports the inks defined for the Product.

Coatings

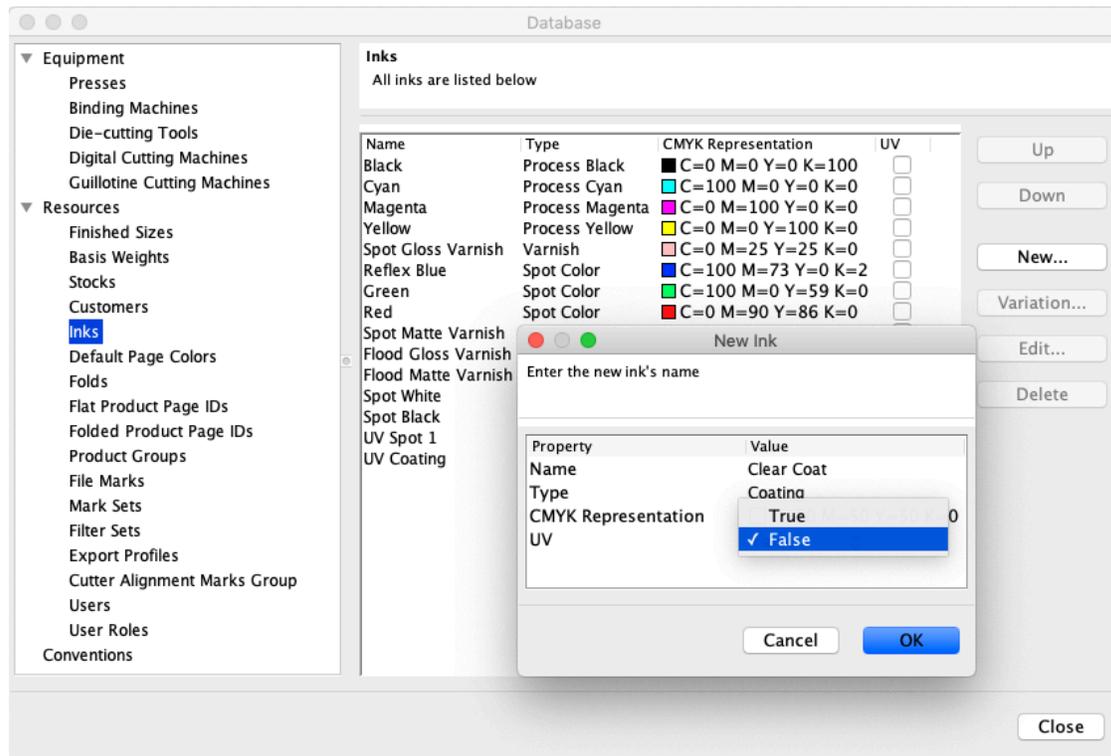
An ink that is defined as a Coating can be applied only by a Coater that is attached to the press. Metrix allows a press to have 0, 1, or 2 Coaters defined. If a product uses a Coating, it can only be used with a Press that has a Coater.

Coatings are treated as a variation of a Finishing Group. This means a Layout that contains a Product with a Coating will only contain products that use the same Coating (or combination of coatings). When a Product contains one or more Coatings, the Finishing Group name is automatically updated to include the name of the Coating (for example, “FinishingGroup1” will be changed to “FinishingGroup1::CoatingName”). If no Finishing Group has been specified, it will just show the name of the Coating (for example, “::CoatingName”).

How it Works

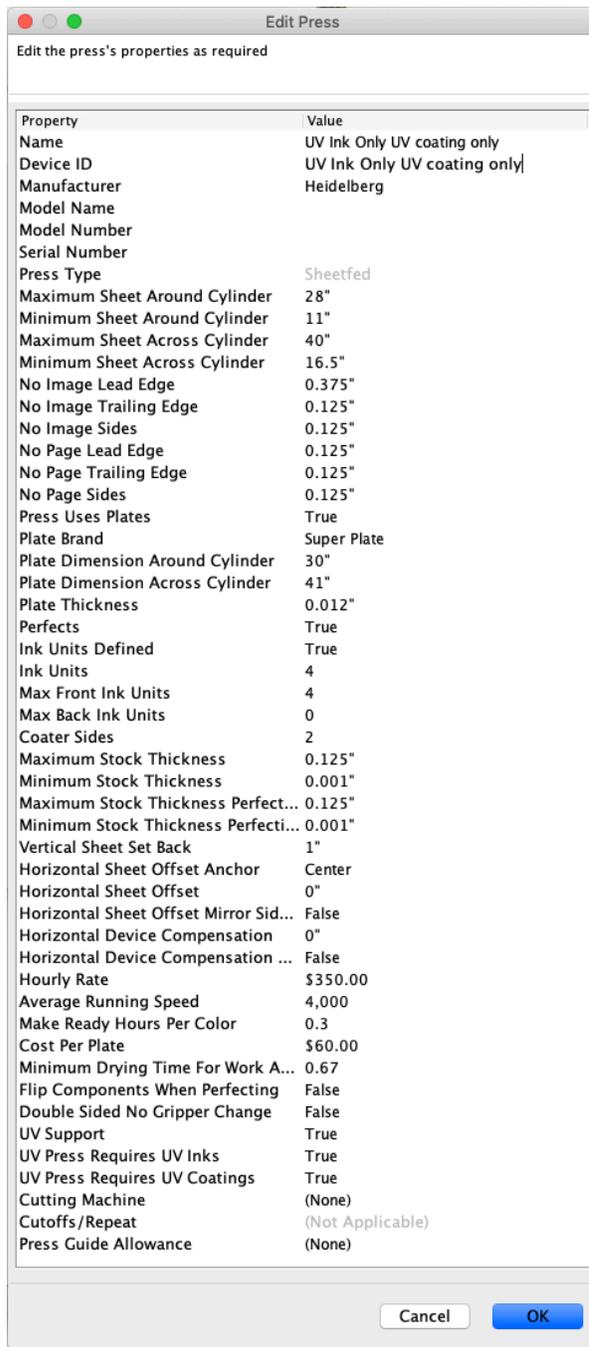
Defining an Ink

1. In the Database dialog, on the Inks screen, when you create New or Variation, or Edit an ink, there is a new **Type** called **Coating**.
 2. There is also a new **UV** field that may be set to **True** or **False**. Any Ink Type can be a UV ink.
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Defining a Press

- There are three new fields when you edit a Press: **UV Support**, **UV Press Requires UV Inks**, and **UV Press Requires UV Coatings**.
 - To use UV Inks on a press, the **UV Support** property must be set to **True**.
 - To limit a UV press so it can only use UV inks, the **UV Press Requires UV Inks** property must be set to **True**.
 - To limit a UV press so it can only use UV Coatings, the **UV Press Requires UV Coatings** property must be set to **True**.
- To plan projects that contain Coatings, you must define a Coater for the press.



UV Inks, Coatings, and Projects

If any Product in a Project uses Coatings or UV inks, those must be defined in the Planned Colors. If UV inks are used, a message appears in the Auto Plan dialog that says, “Products that use UV inks will require a press that supports UV inks.” If Coatings are used, a message appears in the Auto Plan dialog that says, “Products that use Coatings will require a press that has a Coater.” If you plan the project using a press that does not have the required support, there will be Status errors for the Project. In Metrix 21.1 and newer, if you select a press that does not have the required UV Ink or Coating

support, no algorithms will be available in the Auto Plan dialog and the project cannot be planned.

Projects with Mixed Inks

If some products in a project contain only UV inks and some products do not contain any UV inks, and you want to restrict the products with no UV inks to non-UV presses, do the following:

- Specify two presses in Auto Plan: one that has UV support and one that does not.
- If you want the non-UV products to prefer the non-UV press, configure the non-UV press to be less expensive to use than the UV press.
- Or, set the **UV Press Requires UV Inks** and **UV Press Requires UV Coatings** properties to **True** on the UV press. However, if any products contain both UV and non-UV inks, they will not be planned and the project will fail in automation because some products were not planned.

Limitations

If a project does not contain UV inks and you plan it on a press that is restricted to only UV inks, no workable layouts will be found. No other errors or notifications will appear.

MXML Tags for UV and Coater Support

There is one new optional attribute in the “Ink” element: “UV”. This may be “true” or “false” (default is “false”). In addition, the “Type” attribute may now be “Coating”.

There is one new optional attribute for the “Press” element, “UVSupport” which may be “true” or “false” (default is “false”).

MXML Tags

Parent: Root/Resource Pool/Ink

Attribute / Sub Element	Use	Description
<i>UV</i>	Optional	Indicates if the Ink requires a UV press, values are “true” or “false”, defaults to false.

Example: Parent: Root/Resource Pool/Press

Attribute / Sub Element	Use	Description
<i>UVSupport</i>	Optional	Controls if the Press supports UV Inks. values are “true” or “false”, defaults to false
<i>DisableNonUVInk</i>	Optional	For a press with UVSupport, this controls if the press also allows Non-UV Inks (other than coatings). values are “true” or “false”, defaults to false
<i>DisableNonUVCoating</i>	Optional	For a press with UVSupport, this controls if the press also allows Non-UV Coatings.



values are "true" or "false", defaults to false

```
<MetrixXML xmlns="http://www.lithotechnics.com"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
DocumentVersion="e9ca6c58c61fc77ca99f5bfaa807db96" SchemaVersion="2.0" Units="Inches"
xsi:schemaLocation="http://www.lithotechnics.com ../MetrixMXMLInches.xsd">
  <ResourcePool>
    <Press DeviceID="Speedmaster 102 UV" DisableNonUVCoating="false"
    DisableNonUVInk="true" UVSupport="true"
    ... />
    <Ink ID="Ref_20" Name="UV Coating" Type="Coating" UV="true">
      <CMYKColorRef rRef="Ref_14"/>
    </Ink>
  </ResourcePool>
```

METRIX-15327

