How does Ink Analytics work?

How does it work from PRINERGY?

Once the **PRINERGY Portal: Ink Analytics** Service is enabled, the ink usage flow becomes fully integrated into the **PRINERGY** flow - ink coverage values and other production parameters are automatically calculated and collected from **PRINERGY**.

When the loose pages (artworks) or imposition (layouts) are created in **PRINERGY**, the separation output information is sent (along with other job details) and saved within your database. This information is used to calculate the ink usage estimate, based on predefined **Print Conditions.**

The estimated ink usage values (weight and cost) for the near future production period (based on Press Due Dates) are displayed in the Ink Usage dashboard in the **PRINERGY** Portal: Ink Analytics.

What is a Print Condition?

A **Print Condition** is a unique set of resources and factors (such as press, substrate, ink type, number of impressions and make-ready waste), together with assigned **Mileage Factors** (Ink Usage factors), that contribute to ink consumption for each color in a job.

Once a **Print Condition** is assigned to a new job, and the number of impressions and make-ready is entered, Ink Analytics will automatically calculate total ink requirements for the job, based on the ink coverage (%) of each page (artwork) or imposition (layout).

Defining an Estimate:

PRINERGY calculates the ink coverage based on the sheet area in an output process. These values are sent to the cloud database along with the Production data (**Print Condition** name, number of printed sheets and make-ready waste). When a loose page / separation is approved, the ink usage and cost estimation is displayed in the Ink Usage dashboard in the **PRINERGY Portal Ink Analytics** platform.

Determining Mileage Factors:

Ink suppliers or your in-house ink department should be able to provide you with the ink coverage factors they use to estimate ink requirements.

Ink manufacturers often supply suggested Mileage Factors for their inks.

Start with numbers supplied by ink vendors and use these to produce Ink Usage Estimates using **PRINERGY Portal**: **Ink Analytics**. After a job has been printed, enter these numbers in **Actual Ink Usage**, and view reports to compare your estimated Ink requirements to actual ink used for jobs. As you track these comparisons over time, adjust your current Mileage Factors to create estimates that are more closely aligned with actual production values.

$$T = \frac{A \times N \times .01 \times P}{M}$$

T = Total Pounds of Ink Required
A = Area of Sheet (Square Inches)
N = Number of Sheets to Print (Including waste)
P = Percent Coverage (%)
M = Mileage Factor

Example: Sheetfed Mileage Factors - "M"		
Ink	**Enamel / Coated**	**Offset / Uncoated**
	Sq. Inches / LB	**Sq. Inches / LB**
Black	425,000	375,000
Colors	350,000	300,000
Opaque White	250,000	200,000
Varnish	350,000	300,000
Golds	170,000	120,000
Silver	250,000	220,000
Fluorescent	250,000	150,000
UV Coating	110,000	
Aqueous Coating	125,000	

For more information:

- Print Conditions
- Ink Estimator
- Actual Ink Usage
- Ink Usage (Loose Page)
- Ink Usage (Imposition)