

Using the Coating Wheel[®]

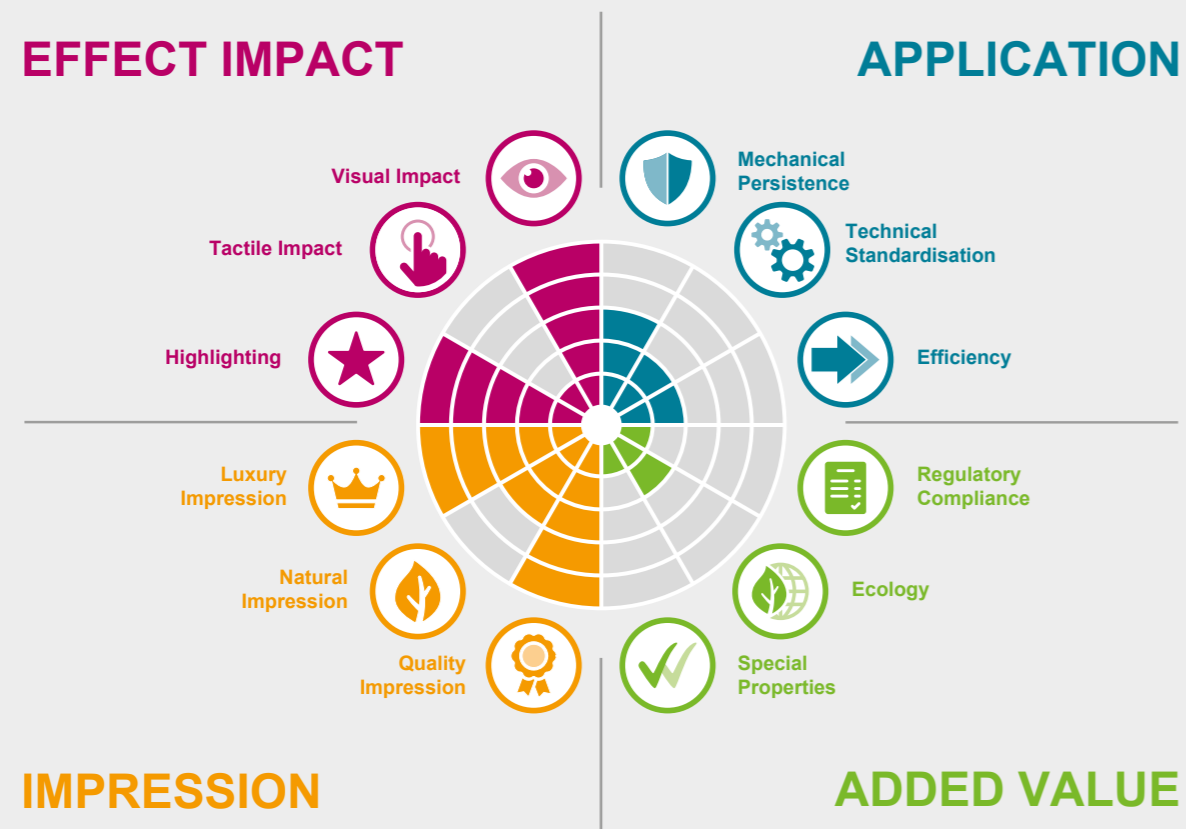
Easy coating selection for your categories



Packaging Wheel® Strategic Evaluation Tool

The Packaging Wheel® is a logic evaluation tool helping in strategic thinking, communication and decision-making processes.

It is also a way of working, with the tool itself supporting the exchange of opinions and know-how when used in packaging development. Interdisciplinary teams can work and evaluate examples together with a standardised benchmarking process.



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We are encouraging everybody to use the Packaging Wheel® in general and its variation described here – the Coating Wheel® – for their benefit and for the advancement of packaging solutions in the market.

Attributes and features of evaluated items are translated into a set of benefits that are rated with values from 0 to 5.

Complex information is reduced to simple visual profiles that allow to make decisions in large (interdisciplinary) teams.

Evaluation profiles of items (here: of coatings) can quickly be compared to requirement profiles (here: of categories) to easily find matching pairs.

Wheel Setup

SPECIFIC WHEEL SETUP

The Coating Wheel® is a variation of the Packaging Wheel® that has a specific setup of benefits defined for the evaluation and comparison of ACTEGA's packaging coatings.

Coatings here refer to overprint varnishes. They protect the printed product and enable a fast further processing. They add the right visual or tactile finishing and may extend the packaging by valuable functions, e.g. barrier properties.

On the right of this page, you find these 12 benefits. The petrol blue and green ones are rather objectively rated while the ratings of the red and orange ones are more emotional and subjective.

In addition to the coating evaluation profiles, we have defined requirement profiles for the most important categories in which the coatings are used. Both types can be matched to find the right coating(s) for an end use.




PARTNER COMPANIES AND SPONSORS

This project has been realised under the lead of **ACTEGA** and **pacproject** with the support of the following partner companies and sponsors:

KBA: printing of coating samples

Stora Enso: supply of printing substrates



-  **Mechanical Persistence**
Scuff and scratch resistance during production and logistics
-  **Technical Standardisation**
How easy it is to apply the coating and if special equipment is required
-  **Efficiency**
How efficient the application of the coating and the further processing is
-  **Regulatory Compliance**
If the coating is appropriate for indirect or direct food contact
-  **Ecology**
The ecological impact of the coating concerning production and disposal
-  **Special Properties**
Additional beneficial properties that are not included in the other benefits
-  **Visual Impact**
The strength and impact of the coating's visual effect
-  **Tactile Impact**
The strength and impact of the coating's tactile effect
-  **Highlighting**
How well the coating can be used to highlight specific artwork elements
-  **Luxury Impression**
How well the coating can support an impression of Luxury
-  **Natural Impression**
How well the coating can support an impression of Naturalness
-  **Quality Impression**
How well the coating can support an impression of superior product quality

Benefits and Evaluation Criteria

- Visual Impact**
 - Gloss effect •
 - Matt effect •
 - Changing depending on angle •
 - Metallic sheen •
 - 3 dimensional •
- Tactile Impact**
 - Softness •
 - Roughness •
 - Smoothness •
 - Realism •
- Highlighting**
 - Contrast to substrate surface •
 - Effect not depending on angle •
 - Metallic sheen •
- Luxury Impression**
 - Look •
 - Feel •
 - Effect quality •
- Natural Impression**
 - Look •
 - Feel •
 - Realism •
- Quality Impression**
 - Extraordinarity •
 - No / few competitors •
 - Expensive •
 - Effect quality •



For these benefits, the level of rating is directly connected to the listed characteristics for each

The more of the listed attributes are rated positively, the higher the rating for these benefits

- Mechanical Persistence**
 - 5 — Highest persistence in UV*
 - 4 —
 - 3 — Lowest in UV* / highest in WB*
 - 2 —
 - 1 — Lowest persistence in WB*
- Technical Standardisation**
 - 5 — Applicable by any professional printer
 - 4 — Standard product
 - 3 — Technical guidance required
 - 2 — Guidance & special configuration required
 - 1 — Intensive guidance & special equipment required
- Efficiency**
 - 5 — Good runability & quick setup
 - 4 — Quick reactivity / drying speed
 - 3 — High slip angle (WB*) / surface smoothness (UV*)
 - 2 — Good further processing (embossing, hot foil, ...)
 - 1 — Quick processing speed possible
- Regulatory Compliance**
 - 5 — Direct Food Contact - FoodSafe®
 - 4 —
 - 3 — Indirect Food Contact
 - 2 —
 - 1 — No food contact material
- Ecology**
 - 5 — TerraGreen® certified
 - 4 — Compostable, climate neutral, etc.
 - 3 — Standard water-based coatings
 - 2 — Standard UV* & metallic coatings
 - 1 — Difficult to recycle
- Special Properties**
 - 5 — Anti-slip
 - 4 — Ink-Jet overprintable
 - 3 — ToySafe®
 - 2 — Microwaveable
 - 1 — Ovenable
 - Overprintable

*WB = Water based coatings; UV = Ultraviolet light cured coatings

Profile Comparison

End Use Requirement Profiles

In the first pocket of this folder, you will find our booklet 'Coatings by End Use' with valuable information about the use of coatings in different categories. There is a page for each end use, including an Coating Wheel® profile reflecting the general requirements there.

E.g. Confectionary - Premium:



Coating Evaluation Profiles

In the other pocket, there are descriptive cards for selected ACTEGA coatings, each one including a Coating Wheel® evaluation profile for the coating.

E.g. TerraEffekt® Pearlescent G 29/438:



Blank Profiles

You should also find transparent pages with blank Brand & Product Target Profiles in your set. These can be used to create your own individual profiles for your projects.

After having chosen your end use, you can easily match and compare its requirement profile with the evaluation profiles of different coatings by overlaying both using the transparent films in the End Use Booklet.

Those benefits for which the wheels and thus coating and end use perfectly match will instantly become obvious, as here e.g.:



Especially for the Regulatory Compliance benefit, it is essential that the coating matches or exceeds the end use requirements.



It is also easy to see for which benefits the coating exceeds the end use requirements, as there, the outer wheel segments still appear clearly coloured:



Attention is required with those benefits getting dark grey outer wheel segments:



Here, the coating does not reach the general end use requirements. You need to consider if you are ready to make a compromise or not.

Benchmarking Process

While for some Coating Wheel® benefits, the rating is clearly defined by the corresponding evaluation criteria, others require a benchmarking session, best done with an interdisciplinary team.

In such a session, the participants evaluate the various items against the evaluation criteria together, using their professional expertise and discussing their opinions. At the end of the benchmarking session, all participants should be convinced that the ratings are right.



Luxury Impression

How well the coating can support an impression of Luxury

The more of the listed attributes are rated positively, the higher the rating for this benefit:

- Look
- Feel
- Effect quality



The Coating Wheel® benchmarking sessions have been conducted with a range of experts with various professional backgrounds:

- Coating Technology
- Printing Technology
- Packaging Design
- Brand Strategy
- Packaging Development
- ...

Our Coating Wheel® evaluations reflect the collective distilled know-how of these experts.

If you have any questions or comments about the Coating Wheel® in general or any specific ratings, please do not hesitate to contact us:

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