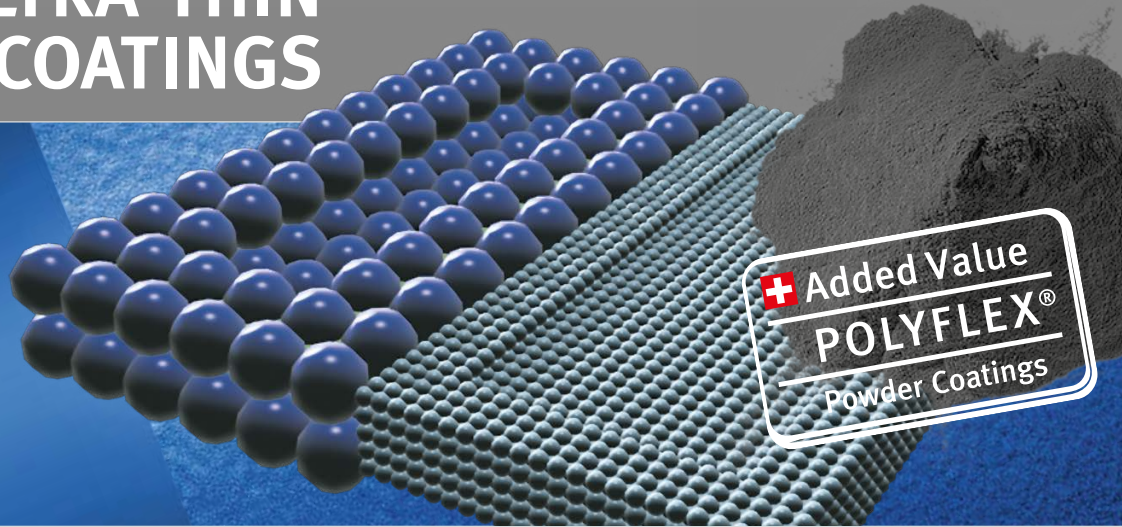


# POLYFLEX® UDS ULTRA-THIN POWDER COATINGS



**Maximum performance with  
minimum material consumption.**

POLYFLEX® UDS powder coatings provide a perfect finish with an ultra-thin coating layer that dramatically reduces powder consumption.



KARL BUBENHOFER AG

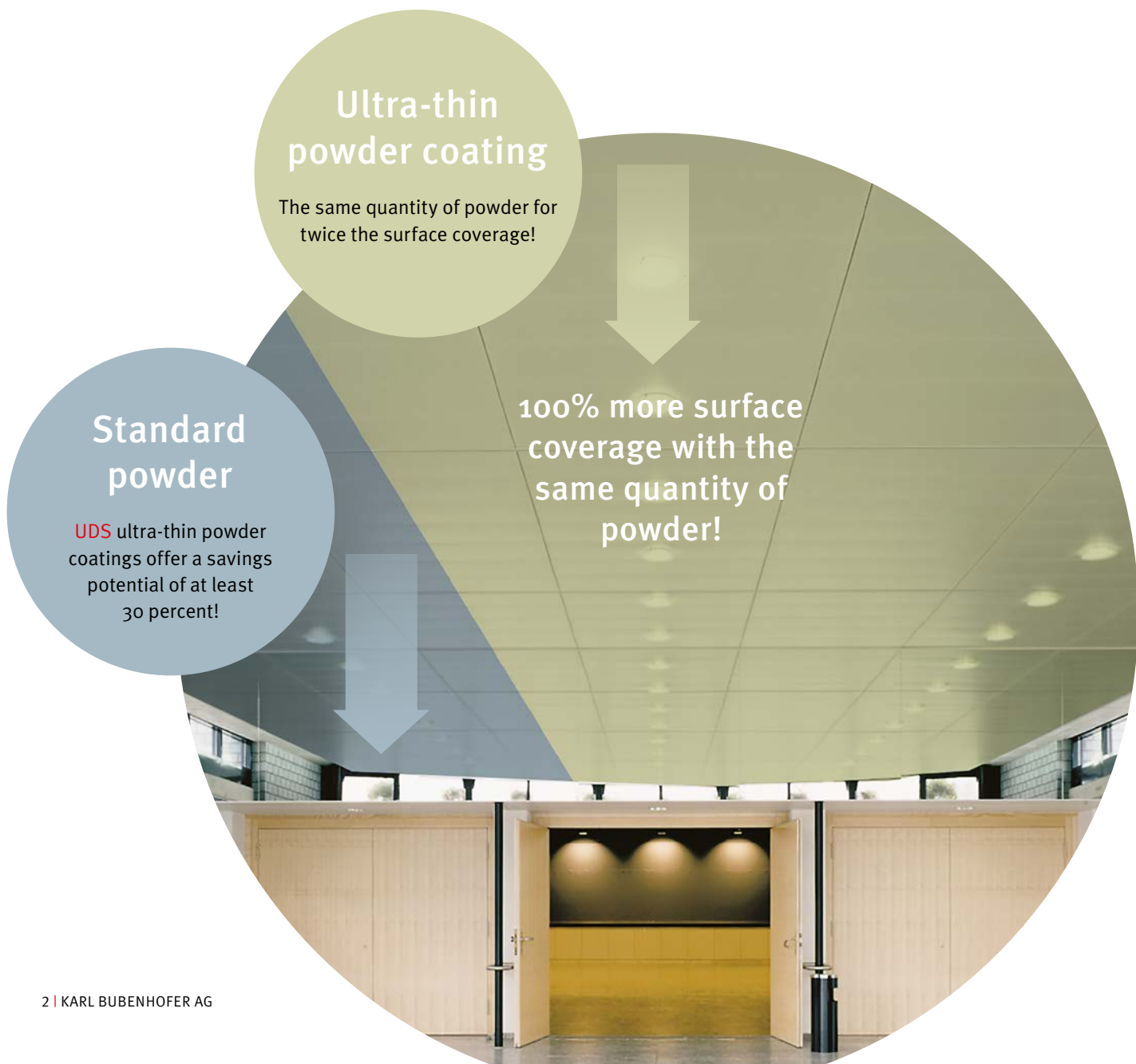
## UDS ultra-thin powder coatings – less is more!

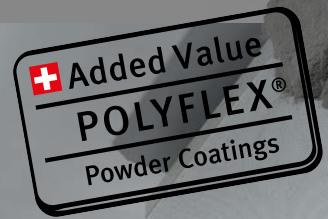
The demands on surface technology are continuously increasing and require individual solutions. Growing pressure from competitors calls for a strong willingness to innovate and to optimise production processes.

We have the solution to these challenges! New technology now makes it possible to apply ultra-thin coatings that produce a closed film with excellent free-flowing properties. And all this can be achieved without investment or retraining.

Optimised recipes and special production technologies now enable us to supply UDS ultra-thin powder coatings that provide a perfectly free-flowing coating film with optimum coverage with film thicknesses from 25 µm (depending on the colour).

These innovative ultra-thin powders are available in a wide range of colours and in all degrees of gloss. Even metallic effects are possible.



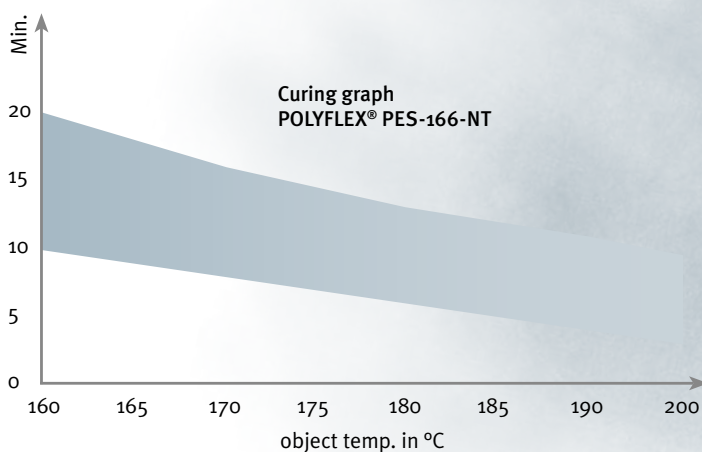


## Low-temperature (NT) and UDS ultra-thin powder coatings – save energy and time.

Low-temperature (NT) powder coatings are the perfect complement to UDS ultra-thin powder coatings. Low-temperature (NT) powder coatings from Karl Bubenhofer AG give you benefits on all levels. You not only have a top-quality coating solution but can also increase your productivity or reduce energy costs. A genuine win-win situation!

Low-temperature (NT) powder coatings let you reduce your curing temperatures and therefore optimise your production process. Or you can increase your throughput, for example by speeding up your conveyors.

**A benefit in every respect!**



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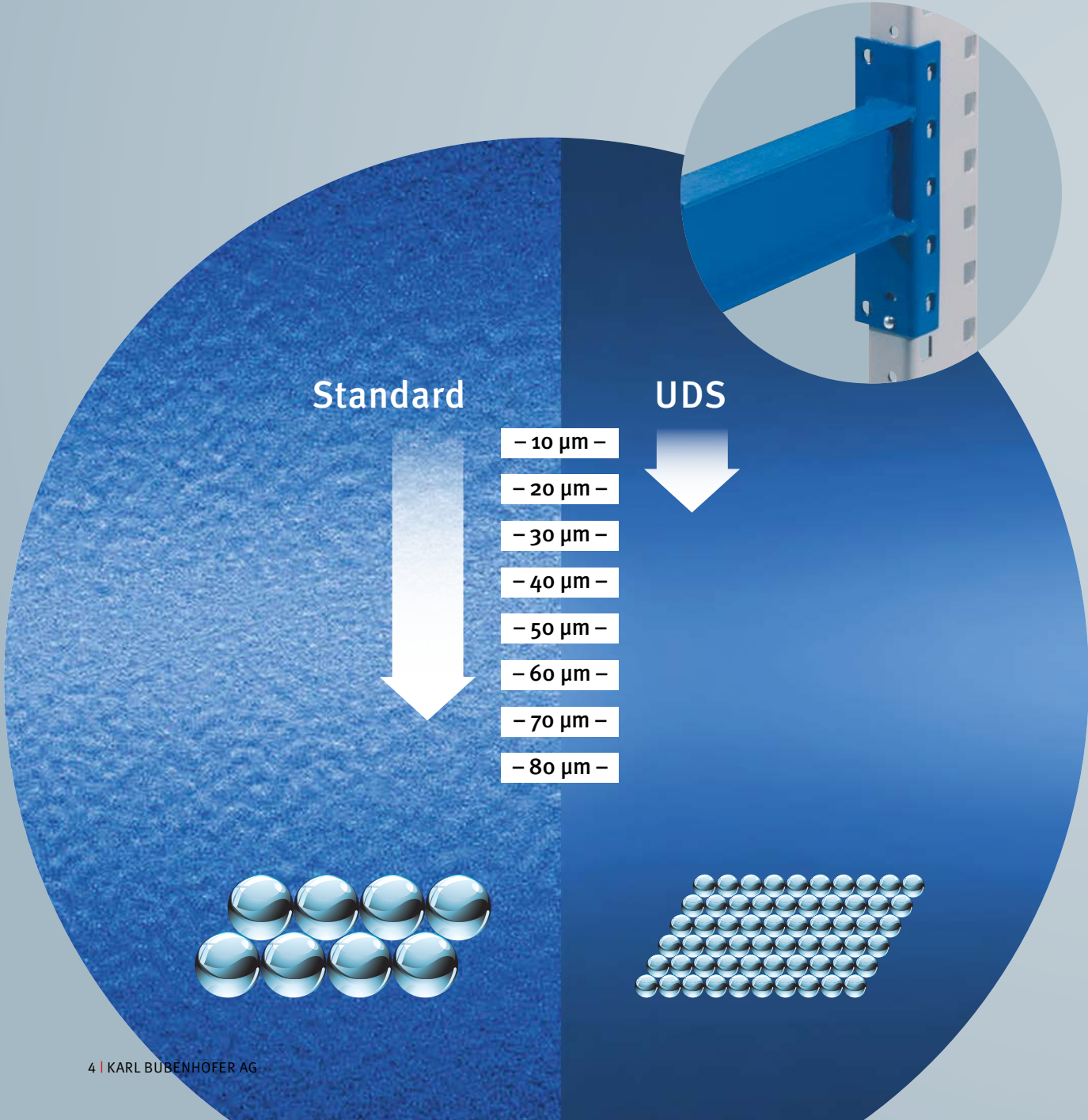
# Higher efficiency and lower costs.

POLYFLEX® UDS ultra-thin powders achieve powder coating films with excellent flow and coverage properties with average film thicknesses of between 25 µm and 30 µm (depending on the colour and degree of gloss).

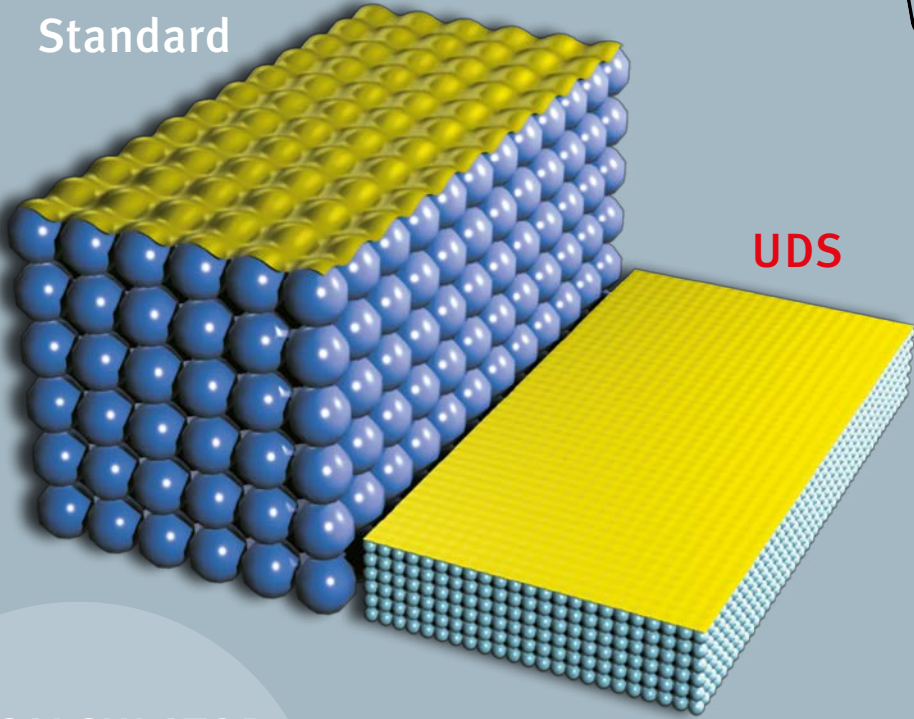
To understand the secret of UDS technology, imagine the grains of powder to be tiny spheres. In normal powder, the spheres will be the size of footballs, whereas UDS ultra-thin spheres would be comparable to marbles. If these differently sized spheres are applied in layers with the same number of layers in each case, the result will be very different film thicknesses that are clearly recognisable.

This model of small spheres also helps to understand the other benefits of UDS ultra-thin powder coatings:

- A layer of marbles is much more even than a layer of footballs.
- The surface finish of UDS ultra-thin powder coatings is therefore much smoother.
- Their flow characteristic, which is unique for powder coatings, is reminiscent of the perfect surface finish achieved with liquid coatings, thus opening up a new dimension in aesthetic powder coating.



Standard

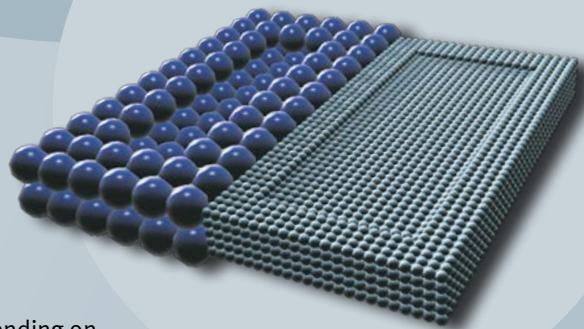


## UDS CALCULATOR

Use the KABE **UDS** calculator to find out how much you can save.



## REDUCED EDGE BUILD-UP



## Your benefits!

### Cost savings

A film thickness of 25 µm and above (depending on the colour) results in cost savings in the double-figure percentage range.

### Excellent flow characteristics

Flow characteristics comparable with those of liquid coatings – in all degrees of gloss and in all colours.

### No edge build-up

Irregularities in application have much less influence on the film thickness. Reduced edge build-up ensures that tight-fitting components can be assembled with high accuracy.

### No investment

**UDS** ultra-thin powder coatings can be applied using conventional plant and equipment.

### No changes in application

Retraining requires time, effort and cost. This is not necessary, as **UDS** is applied like a conventional powder coating.



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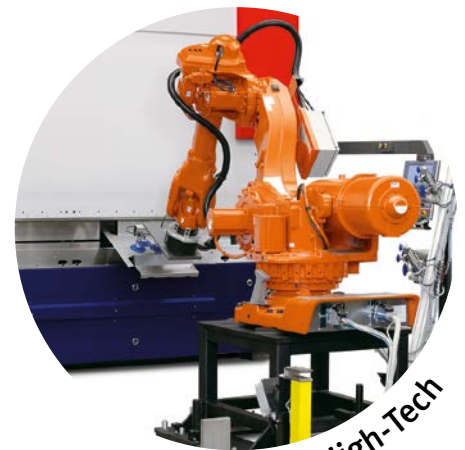


Design



## UDS ultra-thin powder coatings for almost all applications.

UDS ultra-thin powder coatings can be handled and applied just like a conventional powder. The existing equipment can be used without modification – from the transfer pumps to the spray guns and cyclone systems. Everything remains the same, except for the fact that you achieve a perfect surface finish while saving powder at the same time.



High-Tech

Our list of UDS references provides information about reputable companies that are already enjoying the benefits of UDS. Please contact us for further details.

Well-known plant and equipment manufacturers recommend POLYFLEX® UDS ultra-thin powder from Karl Bubenhofer AG.



Architecture



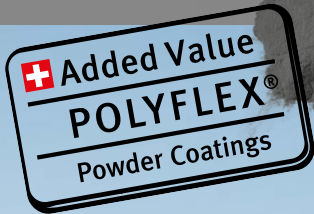
Outdoor



Watch the video!



Sheet metal/metal processing



## A coating system for the future!

**UDS** ultra-thin coatings are almost twice as efficient as comparable standard products on average. These savings in time and energy improve your company's cost-effectiveness.

Low-temperature (NT) powder coatings NT generate the lowest CO<sub>2</sub> emissions (foot print) of all industrial coatings! (study by DSM/CE Delft).

For many years, Karl Bubenhofer AG has been one of Switzerland's leading companies renowned for their environmentally friendly production processes. Based on a keen awareness of our responsibility, we aim to achieve the maximum level of environmental compatibility for all our products in development, production and recycling.

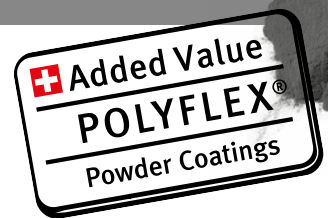


Please contact us. We will be happy to discuss the perfect solution to your problem. Countless other applications are also possible.



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# POLYFLEX® UDS ultra-thin powder – the most important products at a glance.



Art. No.	Product Name	Properties	Application	Degree of Gloss
12800	POLYFLEX® PES-50-UDS	smooth, ultra-thin film, resistant to yellowing	Interior	Silk matt 30
12880	POLYFLEX® PES-50-UDS	smooth, ultra-thin film, no slip	Interior	Silk matt 35
12993	POLYFLEX® PES-51-DS	smooth, thin film, resistant to yellowing	Interior	Silk matt 20
13108	POLYFLEX® PES-50-DS Metallic	smooth, thin film, metallic, resistant to yellowing	Interior	Silk matt 22
13124	POLYFLEX® PES-50-DS	smooth, thin film, resistant to yellowing	Interior	Silk matt 22
13240	POLYFLEX® PES-50-UDS-S	smooth, thin film, no slip	Interior	Silk matt 20
13387	POLYFLEX® PES-55-NT-UDS-S	smooth, fast-reacting, thin film	Interior	Silk gloss
13427	POLYFLEX® PES-55-UDS-S Metallic	smooth, metallic, thin film, conductive	Interior	Silk gloss 60
13445	POLYFLEX® PES-55-UDS-S Metallic	smooth, metallic, thin film, fast-reacting	Interior	Silk gloss 60
13485	POLYFLEX® PES-55-NT-DS	smooth, fast-reacting, thin film	Interior	Silk gloss 55
13511	POLYFLEX® PES-55-NT-UDS	smooth, ultra-thin film, resistant to yellowing	Interior	Silk matt 35
13570	POLYFLEX® PES-70-UDS-S	smooth, thin film	Interior	Silk gloss 75
13669	POLYFLEX® PES-50-DS Metallic	smooth, metallic, thin film, resistant to yellowing	Interior	Silk matt 30
12845	POLYFLEX® PES-135-UDS	smooth, ultra-thin film	Exterior	Silk gloss 75
13198	POLYFLEX® PES-136-DS	smooth, thin film, industry	Exterior	Silk matt 20
13546	POLYFLEX® PES-166-NT-UDS-S	smooth, thin film, fast-reacting	Exterior	Silk matt 45

Other versions on request!

## Your advantages and benefits!

### Product

- From 25 to 30 µm depending on the colour
- Very smooth flow characteristics
- No edge build-up

### Surfaces/visual

- Quality marks and logos remain visible
- Available in many colours
- No picture frame effect
- Increased covering power

### Application

- Shorter coating times
- Fast penetration into corners
- Wide processing window
- High accuracy of fit
- No time-consuming masking work
- No thread masking required

### Equipment requirements

- Lower compressed air consumption
- Lower voltage
- Shorter spray gun distance
- Lower costs due to wear (diffusers, hoses)
- Shorter cleaning times as less powder coating is in circulation



**UDS ultra-thin powder coating  
improves your eco-balance and  
boosts your productivity!**

