

# Case Study

## Chengdu Tianfu International Airport



Chengdu Tianfu International Airport, located in Chengdu, China, is a state-of-the-art facility designed to accommodate the growing demand for air travel in the region. With sustainability at the forefront, the airport project required a cutting-edge solution for its interior lighting and design. Beckers Group, as a global leader in coil coating technology, was brought on board to provide an innovative and environmentally friendly coating solution for the landmark structure.

### Project overview

Occupying a formidable 250,000 square meters, the Chengdu Tianfu International Airport project not only presented an awe-inspiring infrastructural challenge but also a demanding requirement for an effective coating solution. The coating prerequisite extended beyond mere surface coverage. It necessitated a high-performing, environmentally-conscious solution capable of enduring the airport's high-traffic nature and enhancing its overall aesthetic appeal.

### Product overview

The Beckers DJ-213/225 diffuse reflective coating is an exceptional coating solution expertly developed to

augment the reflection of light while reducing glare.

This innovative coating system promises a light reflectance value (LRV) of  $\geq 95\%$  courtesy of its advanced technology, ensuring significant energy savings and an enhanced visual environment. One of the standout features of the coating is its adaptability across a diverse range of environments.

Composed of a primer layer (DJ-213) and a topcoat layer (DJ-225), this superior product creates a thoroughly constructed layer of 120 microns thickness. To add further value, a soft-touch, matte finish was developed to heighten the aesthetics and tactile experience of the built environment.

### Project challenges

- Applying the coating over a large surface area within a short timeframe.
- Ensuring a high level of cleanliness and quality during the application process, due to the material's sensitivity to contamination.
- Collaborating with roll-coating manufacturers and end clients to optimize application methods, balancing performance and cost efficiency.
- Meeting sustainability requirements without compromising the building's aesthetic appeal.

## Solutions offered

In response to these challenges, Beckers DJ-213/225 diffuse reflective coating emerged as a holistic and innovative solution for this large-scale project. Several core advantages are conferred:

1. **Swift and Superior Application:** With our understanding of the importance of turnaround times, on-site trials and process modifications were performed which allowed us to accelerate the application process without sacrificing quality or integrity. The result was a premium-grade finish achieved within a tightly controlled timeline.
2. **Exceptional Aesthetic Quality:** The coating features a micro-textured matte finish that adds a touch of sophistication to the building. The soft-touch, matte coating guarantees an elegant aesthetic and enhanced tactile experience for users.
3. **Sustainability Initiatives:** Beckers coating brought an energy-efficient solution that significantly reduces interior lighting consumption. The high diffuse reflectance value of the coating ensures a visually comfortable environment while contributing to sustainability goals.



*Building ceiling – interior*

2. **Superior Lighting Quality:** The combination of high reflectance capability ensures the airport is bathed in a more bright, visually pleasant environment.

3. **Aesthetic Sophistication:** The Beckers DJ-213/225 goes beyond a standard coating. With its micro-textured matte finish, it imparts a visually appealing aesthetic and tactile sophistication to the airport's interior design, delivering a visual treat to travelers passing through.

## Product features

The successful deployment of Beckers coating in the Chengdu Tianfu International Airport serves to illustrate the robust benefits of Beckers' avant-garde coating solution, both practically and aesthetically. Some of these tangible benefits include:

1. **Enhanced Energy Efficiency:** The coating's high diffuse reflectance value promotes the optimal occupancy of light. This, in turn, leads to a marked reduction in energy consumption for internal lighting and contributes to the overall green footprint of the airport.

## Conclusion

The triumphant rollout of the Beckers DJ-213/225 diffuse reflective coating at the Chengdu Tianfu International Airport is a glowing testament to Beckers' commitment to delivering both innovation and sustainability. This cutting-edge coating solution isn't just attuned to the challenges of energy efficiency, lighting quality enhancement, and visual comfort. It sets a benchmark in our commitment to blend aesthetics with sustainability.