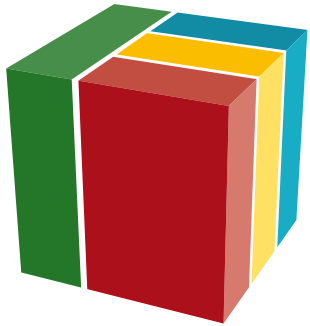


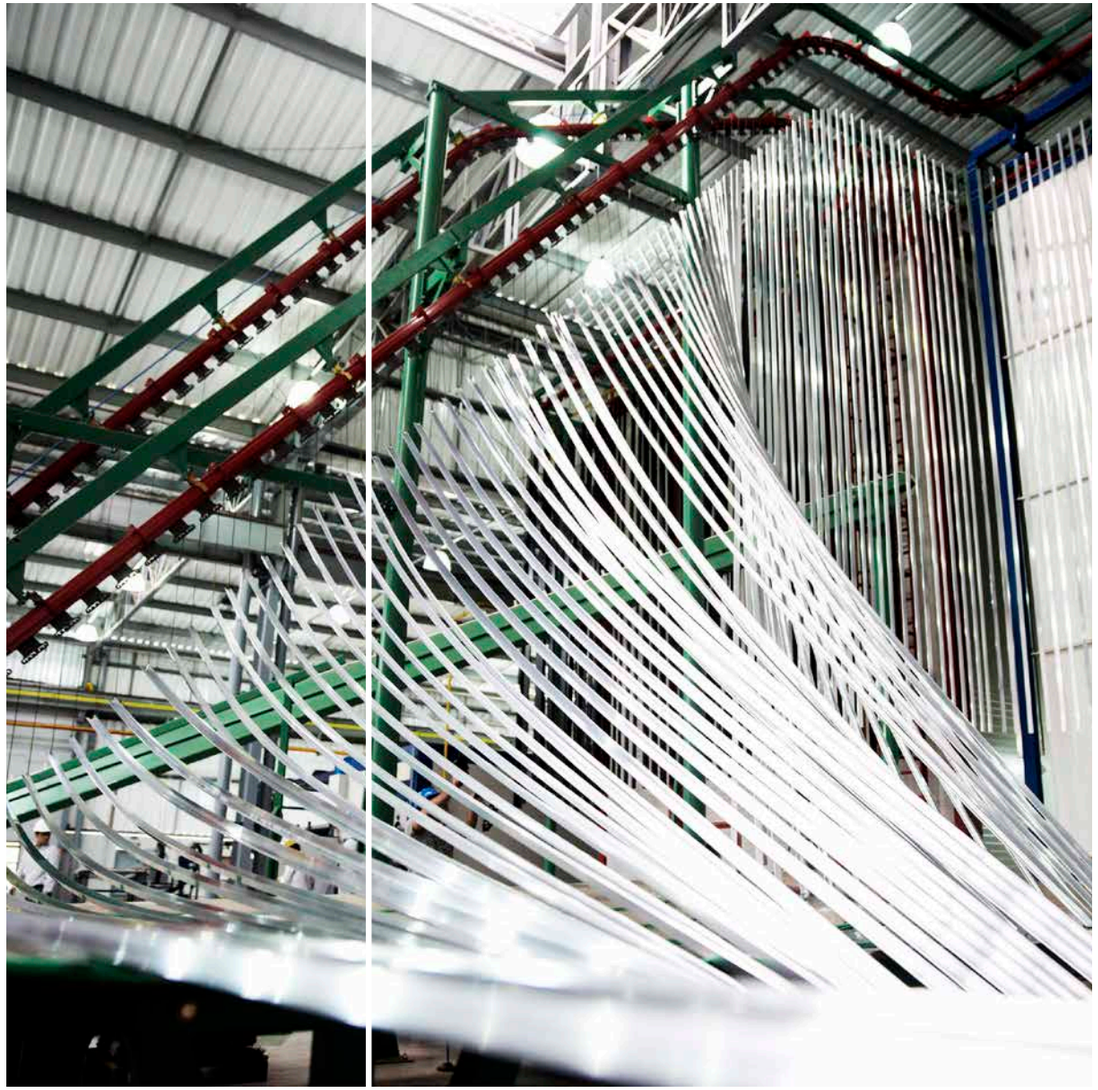
CUBE
TREVISAN

THE FUTURE
TODAY
IS SOLID.

VERTICAL POWDER COATING COMPACT LINE

CUBE

TREVISAN

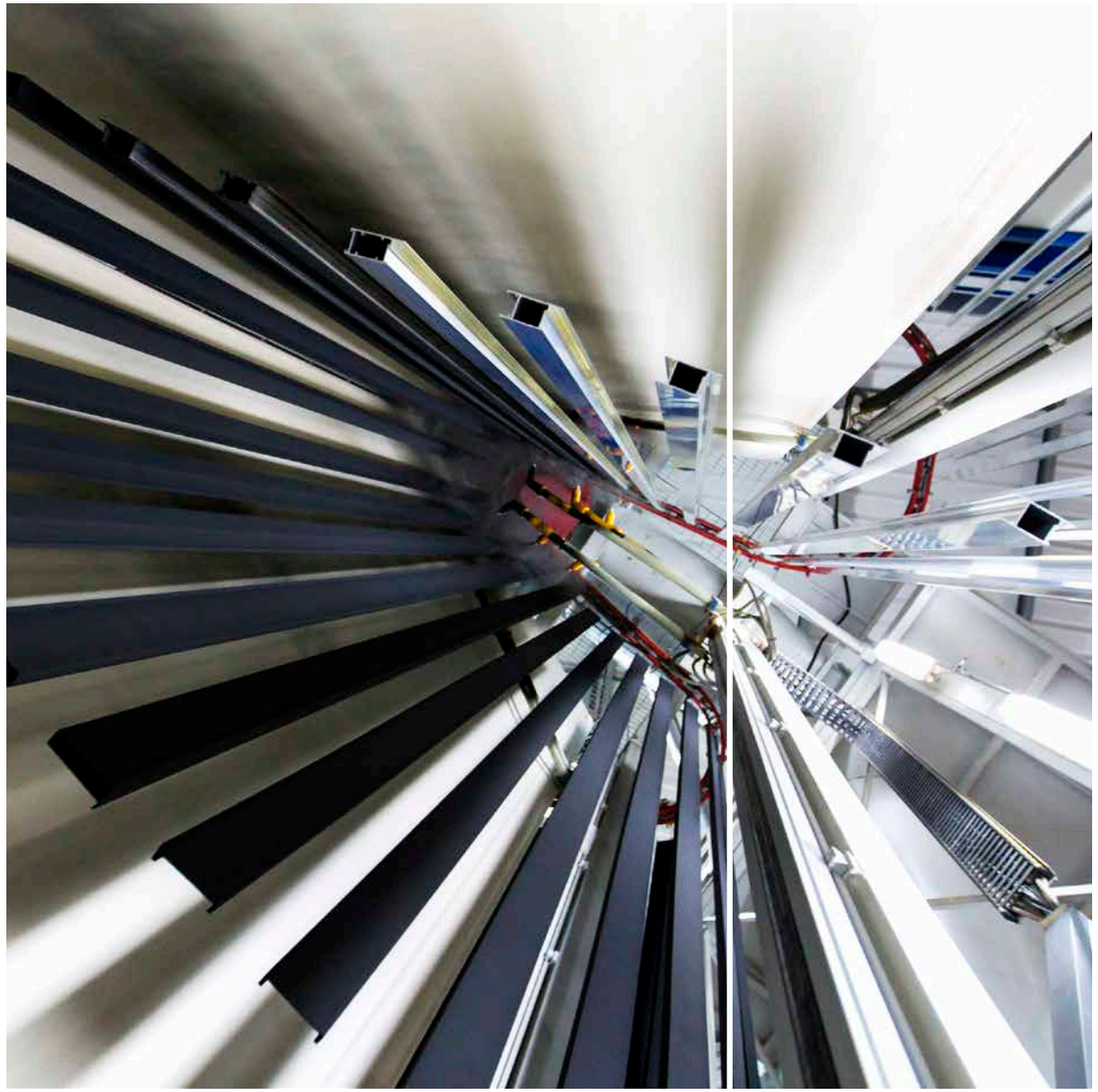


CUBE IS VERTICAL

The **best way to coat aluminium extrusions** is to do it in vertical and, since 1981, we are the specialist for this kind of technology.

Compared to the horizontal systems, the main advantages of vertical coating plants are the following:

- **Small space** required;
- **Completely automated process**;
- **Less workers** needed to manage the entire line;
- **Fast colour change** (**5 minutes**), that allows a reduction of downtime and a higher flexibility;
- **Higher quality of the product** thanks to a higher powder transfer efficiency that involves both a higher coat thickness uniformity and a reduction of percentage of powder wasted;
- **Higher production**: up to 350 profiles/h with the standard CUBE line Vs 150 ÷ 200 profiles/hour with an average horizontal line;
- **Low operating costs**.



POWDER BOOTH DESIGN

The new design of SAT's painting booth comes from **2 years of research & development** by SAT technical department: the result is the most selling booth in the industry and **3 European patents** that covers our technology.

The new booth concept dramatically increased the powder transfer-efficiency, the percentage of the sprayed powder that applies directly on the profiles surface.

In the booth the guns are located on the right and on the left of the profiles and this allows to spray the powder from both sides; the result is a cloud of powder that surrounds the aluminium, with a slower speed of powder and a longer time for powder to stick on the profiles.

QUICK COLOUR CHANGE

5 MINUTES
COLOUR CHANGE

PLAN PRODUCTION
& HIGH FLEXIBILITY

Thanks to the quick colour change system, the booth is cleaned and ready to coat with a new colour in only 5 minutes.

It means to have the possibility to plan the production with high flexibility, fulfilling all the customers' requests (even the most urgent ones!).

LOWER POWDER CONSUMPTION

The new design has brought to a great reduction of powder consumption due to the following reasons:

- A **higher powder transfer efficiency** involves a relevant reduction of the overspray and this implies to save powder every time you work without powder recovery, for example for a very short lot or at the beginning of every new colour. Furthermore, the quality of the coating layer is higher because it consists mainly of fresh powder.
- A **wider paint brush** (the path of the conveyor along which you can spray powder on pieces) allows to perform a higher number of strokes along the profiles. the consequence is that the final layer of powder is the result of the overlapping of a double number of thin layers and this allows to balance the uneven local output of the guns, improving the uniformity of the powder thickness along the profile.
- The **new booth allows to get a more balanced coverage** between easy and difficult sides of the profiles while keeping a higher chain speed and a higher output race.
- As a result, it is possible to **get a good thickness on the difficult sides** without exceeding with extra thickness on the easy surfaces.
- Thanks to relevant simplification of the powder recovery system, the use of less guns and the cleaning in continuous of the booth, the amount of powder wasted during each color change while cleaning the booth and the powder application equipment is very limited.

	PROFILES/H	MT./MIN.
CUBE STANDARD	300	0.7
CUBE PLUS	600	1.4
CUBE XL	1.000	UP TO 3

CUBE IS COMPACT

Cube is **extremely compact**. Unlike the traditional powder coating plants (approx. 1000 m^2 area required), Cube lines require a small area for its main line components: **pre-treatment tunnel**, **powder booth** and **ovens**.

A more compact line does not mean only saving of space in the building but also:
- possibility of **work-synergy** between the plant operators;
- **more safety** because all equipment remains in the central block of the plant;
- **ergonomic working positions** (all "outside" the aerial conveyor);
- **energy saving** design (ovens combined);
- **easy and safe** maintenance and inspection.

To satisfy all kind of productivity needs, Cube is available in **three different versions**.

THE LINE
A SMART SYSTEM

The software supervision system: a clear view on the production

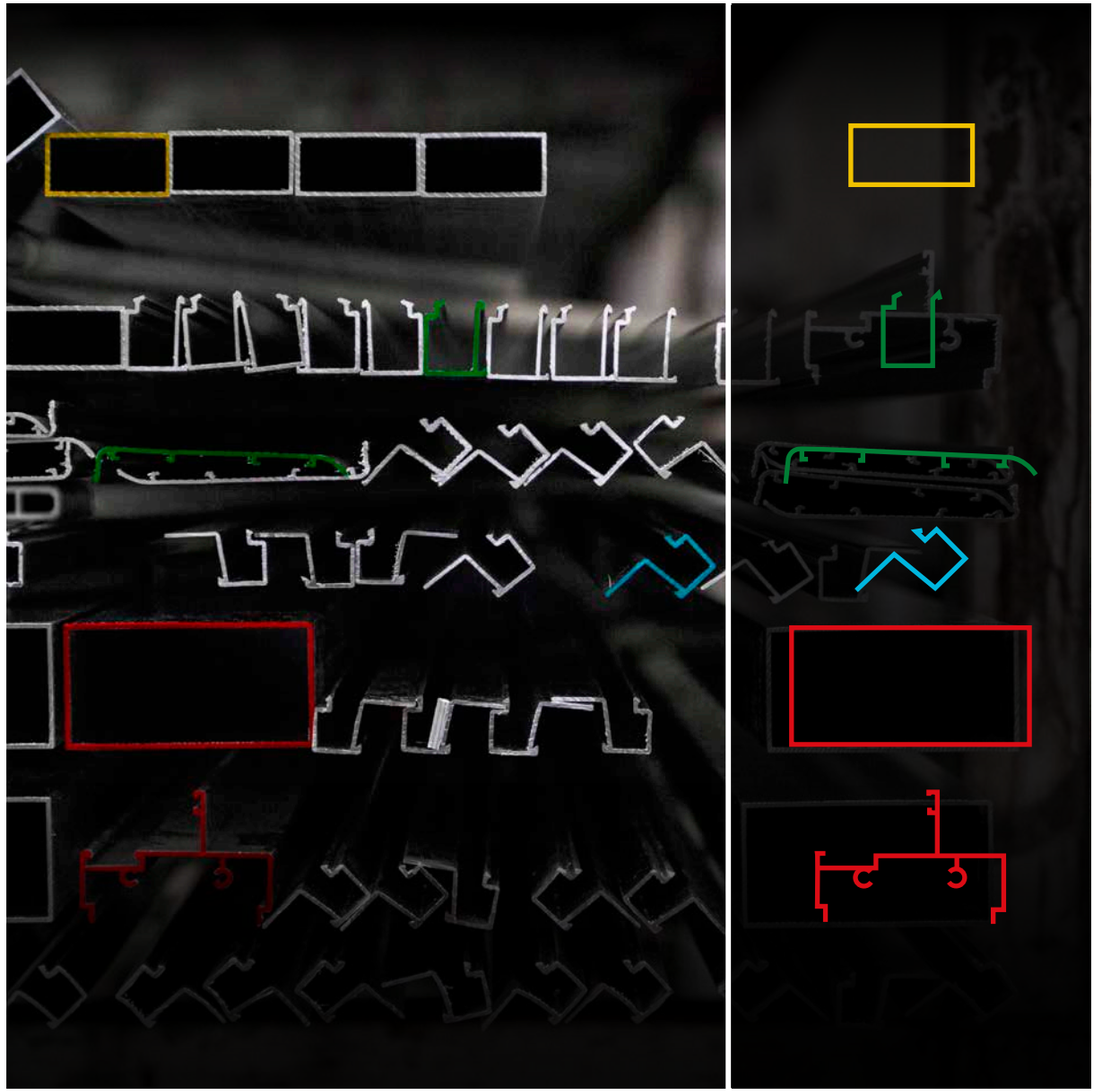
Starting from a wide knowledge of the old technology, Cube has launched a meaningful process that has transformed the plant from simple "carpentry" to an intelligent system.

In fact, while the traditional plants were considered mere collections of mechanical components, Cube reverse this trend with the addition of innovative technological contents that have increased the product value and its role in the aluminium finishing process cycle.

In this context, the process control and **supervision software** play a fundamental role. The management of the entire process is very simple and allows the **repeatability** of outstanding coating results.

In fact, the supervision software allows:

1. to **follow in real time all orders** while running through the plant (also with visualization on the screen);
2. to collect for every order the **set of values of all the production parameters;**
3. to issue for each single order a specific **production certificate**;
4. to **save such parameters in the line database**, with the consequence that all data can be recalled anytime;
5. to run **accurate statistics** to follow the production tendency (a very useful tool for plant managers!).



PROFILE RECOGNITION AND

AUTOMATIC GUNS SETTING

SAT has developed a relevant innovation in the aluminium coating industry: the automatic recognition of profiles section.
By means of a system of cameras and a new designed software, the system recognizes the profile sections, matching the picture took by the camera with the profile drawing in the customer database.

the capability of knowing exactly what profiles are going through the coating process is becoming essential. It means to be able:

- to **exactly calculate the production cost** for any profile section, with the consequence that you can prepare tailor-made offers for any section;
- to **automatically coat profiles with a specific recipe** (number of guns, powder flow, voltage, ampere, etc) for each section: the system recognizes the section and recalls the specific recipe in the database; in this way, you can coat any profile with the best conditions all the time, automatically.

CUBE IS

ALL OVER

THE WORLD.

THE FUTURE

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