



# The First CUBE Plus Installation in the USA: the Successful Choice of International Extrusion Inc.

Alessia Venturi **ipcm**<sup>®</sup>

To reduce lead time, improve quality and lighten the tasks of the workforce, Michigan-based aluminium manufacturer INTEX installed CUBE Plus, the latest generation of the CUBE powder coating line developed by SAT – the first installed in the USA.



The CUBE Plus technology installed at INTEX is the first one by SAT in the USA.



Unlike in Europe, Middle and Far East, in the United States 60% of the aluminium profiles market still accounts for liquid paints. For powder coatings to become the preferred choice for aluminium finish in the building industry architects and specifiers would need to change their viewpoint.

"I started to work at INTEX 29 years ago and for 29 years people in the field told me: 'in 10 years liquid paints and the application will completely disappear'. Now approaching 30 years, people in the US keep saying the same thing", says Nicholas Noecker, INTEX President. "Nonetheless, I am sure that this future is finally beginning to arrive, and that application solution like the one provided by SAT will speed up the process even further".

International Extrusion Inc (INTEX) in Garden City, Michigan has installed the first CUBE Plus powder coating line in the US market by the Italian company SAT. Referred to as "Black Widow", this powder coating line is not only nice to look at but also a smart model of efficiency and production consistency.

"INTEX is committed to employ visionary technology that keeps us on the leading edge and Black Widow is a perfect example of our unmatched passion to delivering quality to our customers" Nicholas Noecker states.

"25 years ago, there was a fire in our factory due to liquid paints. The only possible solution was to switch to powders or to deal with a lot of problems of handling the chemicals used in the factory. This transition proved to be very good for us as one of the first market to adapt to powder coatings was the residential fence market, which accounted - and still accounts - for a big part in our production. We became immediately committed to powder coating. I haven't even thought about going back to liquid. INTEX continues to invest in the best people, in the best technology and in the best equipment available to exceed our customers' expectations. To me, SAT CUBE Plus powder coating line is one of the best powder coating application technologies currently available in the world".



Profiles' hanging at the loading station of the CUBE Plus system.



## About INTEX

"Since its foundation in 1937, International Extrusions has led the way in high-quality aluminium manufacturing offering a wide range of deliverables in variable extrusion sizes for industrial or commercial applications.

In addition, the company also provides fabricated custom extrusions utilizing the latest CAD-assisted technology and powder coating for any kind of aluminium product", Noecker recounts. "Purchased by my father in 1949 from the original founder, it soon became involved with the building trade: they did commercial windows, residential windows, doors entrances.

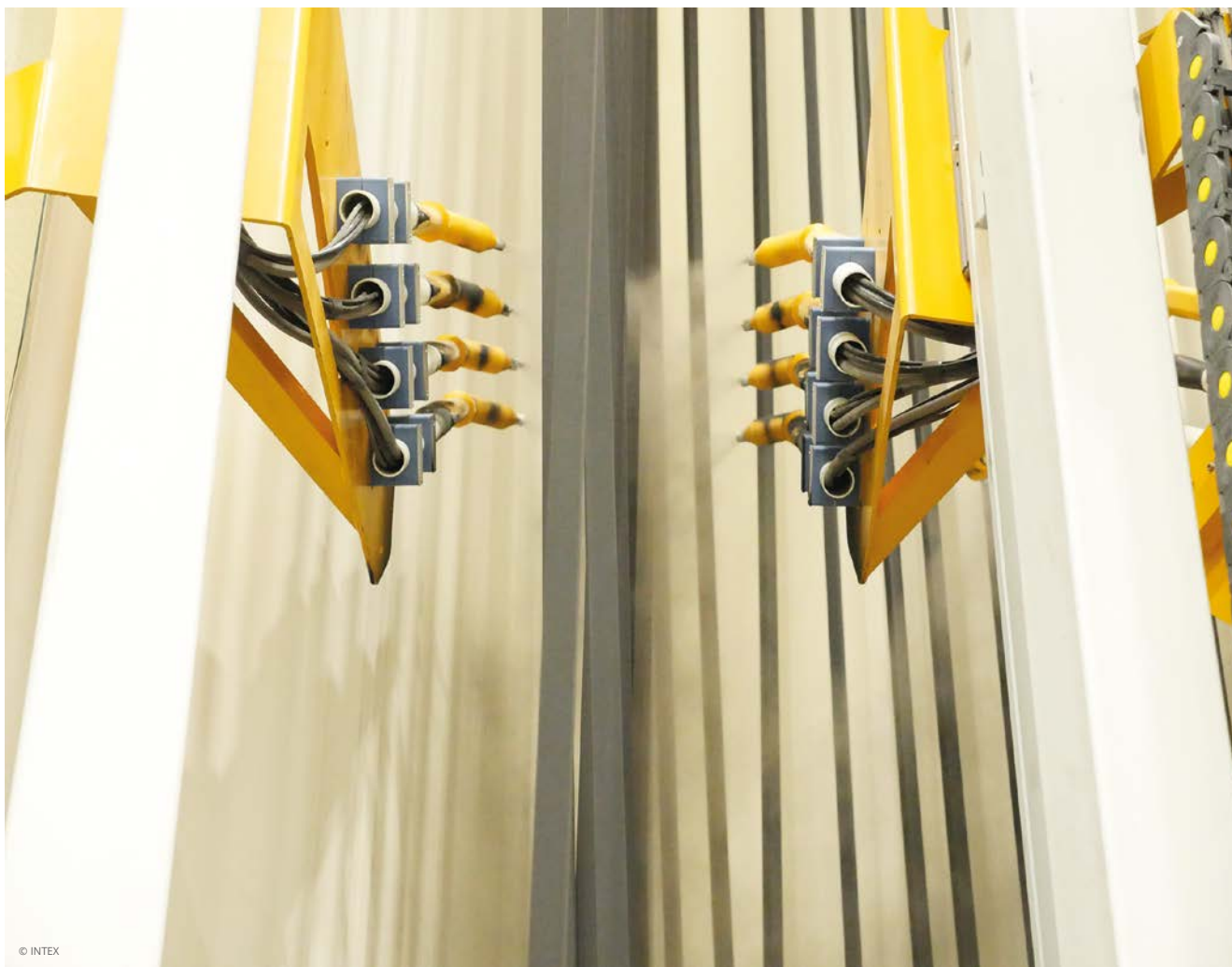
The fast evolution of the company prompted my father to buy a small extrusion press and to start painting residential products in the 70s. Over time, the company grew quickly until the early 90s.

I chose to shut down all the windows and doors operations and focus on extrusion and painting. INTEX was a very small company at the time, about 5 million dollars in revenue. We battled through the Nineties and we really started growing again during the Great Recession in 2008.

Transition to powder coating happened in the Nineties.

Our team of technicians have over 80 years of experience fabricating quality aluminium extrusion applications for a wide variety of clients worldwide", states Nicholas Noecker.

"Our in-house facilities include a full fabrication plant, CAD-assisted precision equipment, and a quality assurance team that's second to none. In addition, we house a state-of-the-art powder coating facility that can give your aluminium the look and protection it needs to remain durable for a lifetime".



Application of powders with Gema GA03-P automatic spray guns.





**Powder coated profiles before curing.**

### **The Midwest's premier powder coating specialists**

"We started looking at different options for a new powder coating line in 2020 and we chose SAT", says Noecker. "We started a conversation with them in the first 2 months of Covid and we signed the contract to purchase the line a few months after. It was a big leap of faith from our side: considering the pandemic and the international travel situation we could not be sure that SAT would be able to supply the line in a reasonable time. In summer 2021, we started to put the new line into place and we immediately had problems due to Covid. SAT sent over one of their installation teams and the US Immigration sent them back saying they were not "necessary workers". Despite all the difficulties, SAT did a really good job in finding a way to get over Covid problems and the powder coating line started up the 3rd of January of this year.

# Strumenti tascabili per grandi lavori



**Gli strumenti Fischer della serie MP0R sono studiati appositamente per il mondo della protezione dalla corrosione.**

- Misura accurata di rivestimenti secchi, anche senza calibrazione
- Robusti fuori, tecnologici dentro
- Versatili e facili da usare
- Doppio display illuminato a rotazione automatica per una veloce ed ottimale lettura dei risultati
- Leggeri e di dimensioni tascabili
- Modalità di misurazione preinstallate per la misura dello spessore di rivestimento secondo le norme IMO PSPC e SSPC-PA2

[www.helmut-fischer.com](http://www.helmut-fischer.com)





**The unloading station.**

It was a two-year process but I am relatively confident that, without Covid, SAT could have ended the installation in only 3 months.

We chose the CUBE Plus because all the other lines we considered buying in the meantime had space requirements that were too large for our buildings. SAT proposal convinced us because it was very flexible: it was incredible how they could adapt and reconfigure their machine to the available space”.

“We currently offer powder coats up to 24.5 ft in length as well as standard and customized colours, indoor and outdoor finishes with an environmentally-friendly application process. Our quality powder coating provides a stunning finish to aluminium extrusions, and it can protect them from discolouring, UV damage, scuffs, and scratches. We use state-of-the-art equipment to ensure our coatings consistently cover every inch of your product. We also guarantee long term sustainability of the powder-coated product by offering anodizing in lineals p to 24 ft. Our range of powder coatings includes clear finishes, satin finishes, a wide variety of colours and bright dip finishes”.

### **CUBE Plus – the latest generation of the CUBE installation**

SAT introduced CUBE, the first vertical powder coating compact line in the world, in 2013. Requiring a small space, and having low operating costs and a competitive price, CUBE soon turned out to be a game changer in the aluminium powder coating market. Since 2013, CUBE has continued to evolve with updated process control and supervision software to provide advanced automation capabilities. SAT designed CUBE to be an intelligent system with the addition of modern technological components that streamline the aluminium finishing process in order to achieve the increasing repeatability requirements of the coating industry.

Compared to the original line of the cube, the CUBE Plus can run at a higher speed similar to other vertical standard lines. At the end of the belts of the loading, there is a table featuring plastic curves which guide the profile up to the vertical position. The pre-treatment tunnel has PP tanks for chemicals and PVC walls. The drying and curing oven





The control panel of the CUBE Plus powder coatings line.

### CUBE Plus benefits for INTEX

"The real value of this SAT CUBE technology is that it allowed us to go from having a full-time painter on every shift to only one painter that works during the day and helps controlling the line but with no need for a skilled technician on the line. In addition, we have total control on the coating thickness applied. Our target is 2.2 (gr/f<sup>2</sup>) and with the old installation we were somewhere between 3.2 and 2.1. Now, with the CUBE Plus, we are between 2.1 to 2.4, reducing by an average 30% the powder we were using with an improved coverage of the coated surface", Noecker concludes.

"After running the plant for about 5 months, I am extremely happy

of my choice. We have reduced our lead time, we can do a lot of small batches with a lot of colour changes, and quality has improved dramatically. In addition, our powder consumption has lowered. One of the most important things to me is that my workforce is happy and fine with its job. In the US, workforce is a tough issue and companies are competing for labour. I needed an installation that could help my workforce in handling the profiles and that could lighten their tasks. With how we have organized things now, everything is more ergonomic and the machines do all the tough work of lifting and lowering the profiles. What we have achieved is being more productive and making people's tasks less hard".



Scan or click the QR code to see "Black Widow" working





# The new **Vertical Powder Booth**



[c-expert.com](http://c-expert.com)