

# PVD DEPOSITION

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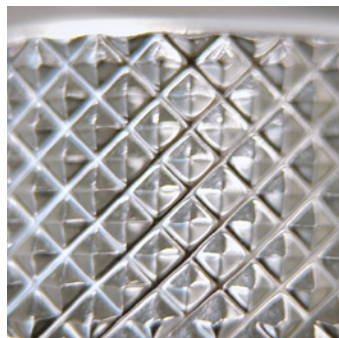
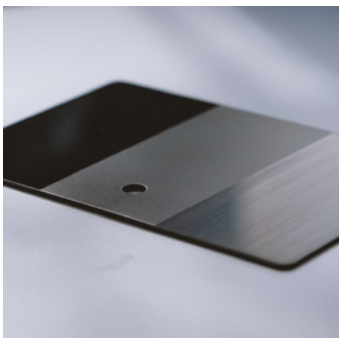
## Increasing efficiency and reducing emissions with Edwards GXS dry screw vacuum pumps

Since 1952, Italian company Kolzer has been supporting markets worldwide with intelligently designed machines for sustainable PVD, Plasma and PECVD treatments. Creating machinery tailored to their customers' needs, Kolzer supplies machines to various sectors from automotive, fashion, lighting and furniture – with a portfolio of over 1,300 machines in 60 countries.

Their machines primarily focus on processes like PVD Sputtering, Metallisation, Plasma, PECVD and PVD 2.0 processes, ensuring effective coating for all types of surfaces like metals, alloys, polymers, plastics, wood and glass. Their highly productive and durable machines help customers achieve faster production cycles with low operating costs. Edwards and Kolzer have a longstanding collaborative relationship going back to the 60s. Our strong partnership is based on a mutual commitment to quality, reliability, and trusted assistance to create market-leading vacuum coating machines.



GXS 750/2600 dry screw vacuum pump



*“Our collaboration with Edwards started in 1960s. It has been a natural choice to maintain our collaboration thanks to the quality and reliability of Edwards products.”*

**Antonio D'Esposito**  
Managing Director - Kolzer

### KEY FACTS

Customer **Kolzer**  
 Region **Italy**  
 Sector **PVD deposition**

- BENEFIT**
- **Reduced energy consumption and emissions**
  - **Better control and data analysis of vacuum pumps through digital management**
  - **High productivity and process stability**

## PVD DEPOSITION

### 1. CHALLENGE

Vacuum power has a direct effect on cycle times, machine productivity and process stability for these physical vapour deposition processes and coating machines.

They are used inside the process chamber and are vital components that influence the quality of the process and product. In order to meet customer requirements and operational goals, Kolzer needed a range of vacuum products that would allow them to achieve:

- Better control of the entire process
- High pumping speed and reduced cycle times
- Low operating costs
- Energy-efficient processes with reduced emissions
- Improve the quality of their final products

### 2. SOLUTION

After exploring all the different aspects of Kolzer's vacuum needs, Edwards suggested our dry screw vacuum pumps: GXS 750-4200 and GXS 450-2600.

With sustainability and clean technology being a hallmark of Kolzer, our industry-leading dry pump technology offered the right level of vacuum power, pressure values and low energy consumption. The faster pumping speed of the pumps reduced cycle times and consequently lowered operating costs. Our GXS and the corresponding vacuum help their machines achieve a very high quality in their final products. The intelligent oil-free design also cut down on frequent cleaning and enabled easier maintenance and assembly.

In terms of control the digital management system ensured better monitoring of the process itself (composed of chamber evacuation to create ideal deposition conditions) and the analysis of all data for new developments.

### 3. OUTCOME

Throughout Kolzer's history of developing reliable, dependable PVD and vacuum coating machines for the global market – offering clean and sustainable solutions is also a fundamental requirement for their own customers down the line.

The reliable power and vacuum performance of GXS enabled them to raise the quality of their final products.

The addition of the Edwards range of vacuum pumps and solutions to their process not only enabled more efficient operations but also allowed Kolzer to stay true to their mission of reduced environmental impact, all thanks to our advanced dry pump technology.



Scan the QR code to learn how we helped Kolzer



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*“The collaboration with Edwards has allowed us to improve our production processes thanks to their vacuum pumps, ensuring energy efficiency, and process stability for our machines”*

**Izabela Lange**

Sales Manager - Kolzer

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