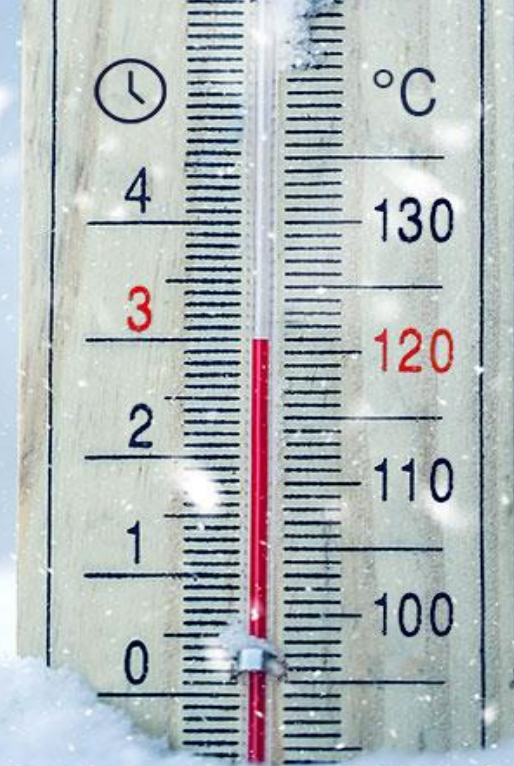




**Low Curing Temperature and  
FAST Powder Coating**



**Low Curing Temperature and Energy  
Efficient Powder Coating  
“3 min @ 120°C “**

# PULVERIT

## OUR COMPANIES



# PULVERIT

## OUR FIGURES

**42 MM**

**TURN OVER**

**190**

**EMPLOYEES**

**46**

**YEARS PC  
PRODUCTION**

# THE PROBLEM

## The powder coating limits are:

- the curing temperature (between 150 and 180 °C) the curing time (from 15 to 20 minutes)
- The curing conditions restrict the application of powder coating to metal substrates
- Heavy metal part, pre-assembled materials, different substrate than metal could not be painted with existing PC

# THE SOLUTION



- **Pulvercoat** is able to combine fast curing, low curing temperature, chemical resistance, UV resistance and anti-scratching properties.
- **Pulvercoat** is the only innovative powder coating of the last 20 years
- **Pulvercoat** is patent in Europe

# THE SOLUTION



**3 min. @ 120°C**

- energy saving
- shorter production cycle

Pulvercoat allows to achieve:

- UV resistance comparable with Qualicoat class 2
- Chemical resistance comparable with polyurethane
- Scratch resistance and hardness not comparable with existing system

**vs**

**standard  
powder coating**

**20 min. @ 150/180°C**

# FAST CURING COMPETITORS

	HYBRID	PE	PULVERCOAT
TEMPERATURE	140°C	150°C	120°C
TIME	20 min	30 min	3 min
SCRATCH RES.	standard		+ 20%
ANTIGRAFFITI	NO		YES



# VALUE PROPOSITION

## TARGET MARKET



Coating of heavy metal parts  
as: earth moving machinery,  
agricultural, metal bottle



Coating of pre-assembled  
material material not able to  
resiste at 150°C, parts with  
electrical circuits inside, as:  
pumps and compressors;



Coating lines with the need to  
speed up the process



# VALUE PROPOSITION

## USER BENEFITS:

- Low temperature
- Fast curing
- High performances
- Zero V.O.C. emissions
- Production costs saving
- High ROI
- The key for liquid powder conversion

# WHERE WE ARE

**INDUSTRIAL  
SCALE UP**

## AVAILABLE COATING

**Textured and fine textured: 3 min. @ 120°C**

**Smooth glossy or semi (50-80 gloss):  
8 min. @ 140°C  
or 12-13 min. @ 130°C**

# Industrial trials

Production **Garage doors**

Material: **panel sandwich** Aluminium + expanded Polyurethane

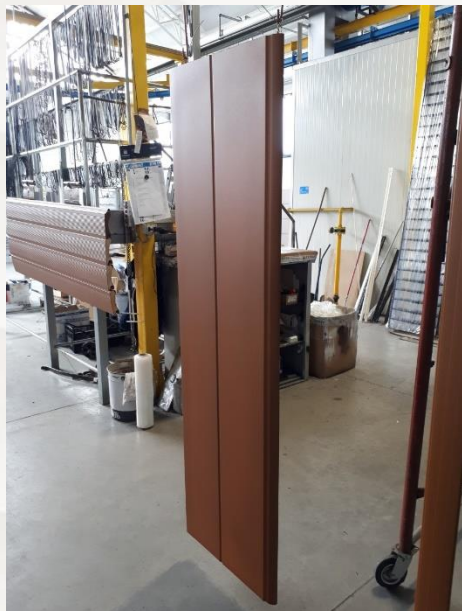
Actual system: **pre-painted coil**

Needs: low temp, non need to speed up the process

Pulvercoat aspect: fine textured

Curing condition required: 20 min. @ 115°C

**Results: Very good aspect, perfect curing , no deformation of PU**



# Industrial trials

Production: **Gas Valve**, it contains plastic gaskets

Material: steel

Needs: substitute liquid paint

Actual system: **liquid paint**

Pulvercoat aspect: smooth

Curing condition required: 25 min. @ 130°C

**Result: Very good aspect, perfect curing, no deformation of gasket.**





# Industrial trials

Production: Job Coater

Product: **heavy structure**

Material: iron

Substrate Preparation: sandblasted and phospho-degreased

Weight: **350 kg**

Actual system: **powder coating**

Needs: cycle time reduction

Pulvercoat aspect: smooth

Curing condition required: 40 min. @ 130°C

**Result: Very good aspect, perfect curing,  
cycle time reduced by 60%**



# Industrial trials

Production: Agricultural parts

Product: iron plate with a thickness of 1 cm

Weight: **10 kg**

Need: speed up the painting cycle

Current system: **powder coating, static oven, starting cold it takes about 2h**

Pulvercoat finish: smooth

Pulvercoat curing conditions: powder coating, static oven, **starting cold it takes about 30 min.**

**Result: very good appearance and curing, polymerization cycle reduced by 75%**



# Industrial Trial

Production: **technical gas cylinders**

Need: speed up the process, improve the coating reticulation

Actual system: powder coating, **infra-gas hoven.**

Pulvercoat aspect : smooth

**Result: very good appearance and curing,  
polymerization cycle reduced by 50%**





# UPSHOT



European  
Commission

Horizon 2020  
European Union funding  
for Research & Innovation

The Pulvercoat project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 825511

As proof of the quality, the originality and the uniqueness of Pulvercoat, the European Community has awarded us an important funding in the Horizon 2020 project to continue developing this new technology.

*Pulvercoat, can't ask for better!*