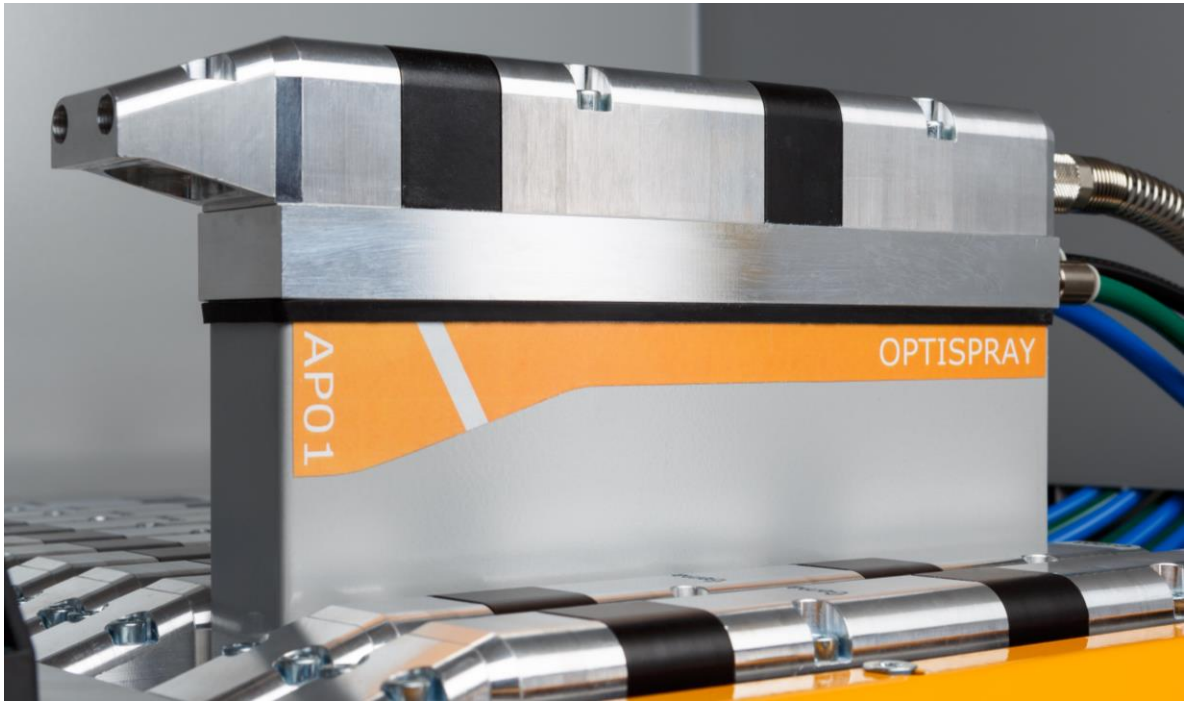
Great coating quality and powder savings

The smooth powder delivery improves the application, which remains constant for a long time thanks to the wear-free technology.



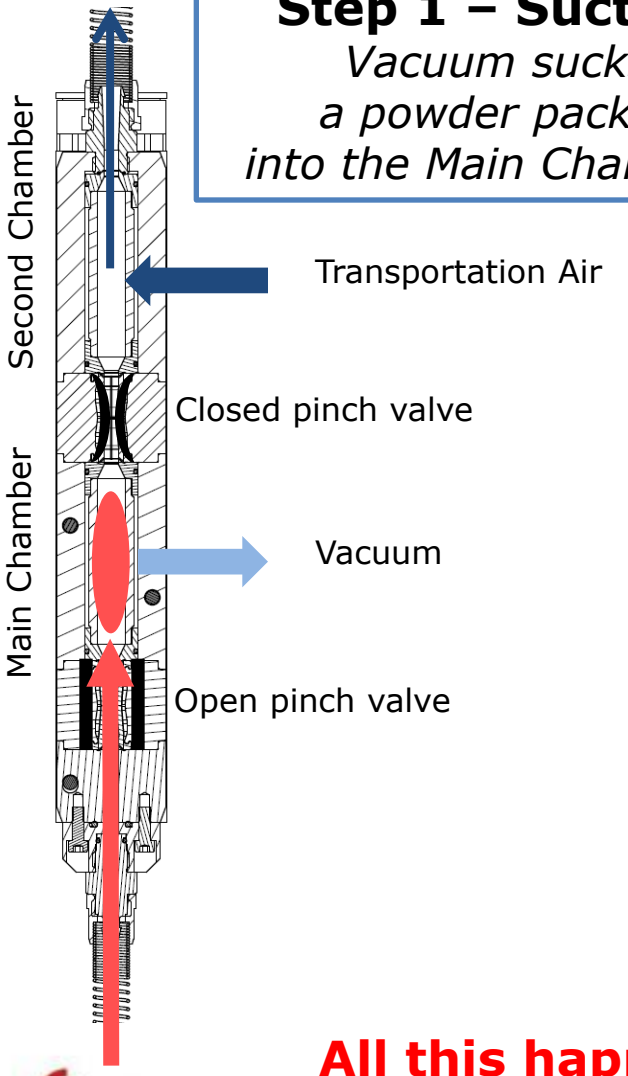
No wearing parts

Reduced powder consumption

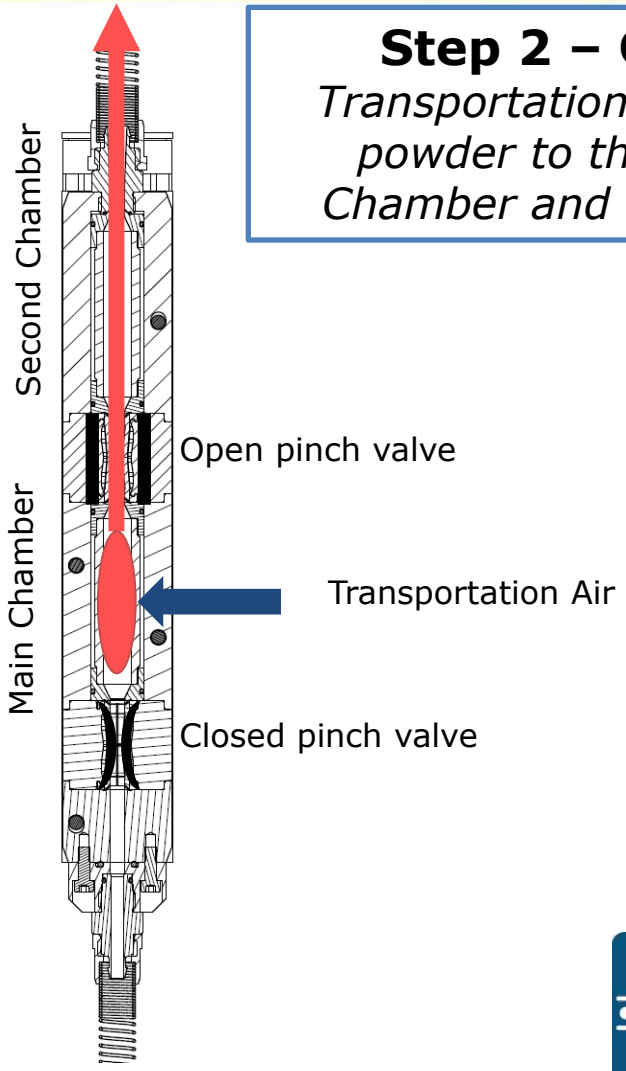
Improved application quality

Smart Inline Technology: how does it work?

Step 1 – Suction
Vacuum sucks a powder packet into the Main Chamber.



Step 2 – Output
Transportation Air pushes powder to the Second Chamber and to the gun.



All this happens within 0.33 seconds!

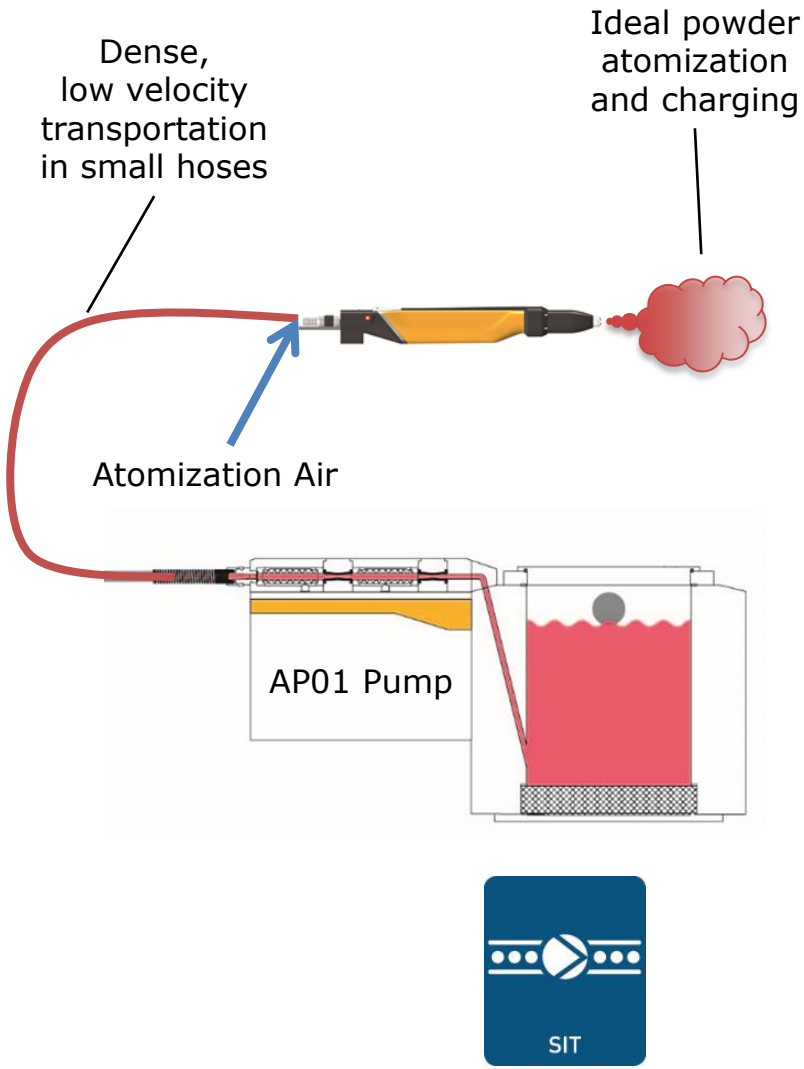
Smart Inline Technology: how does it work?

- With **Smart Inline Technology** powder output remains constant for a very long period of time.
- There are no wearing parts whose deterioration can decrease the powder output.
- Periodic maintenance is recommended for just a few components.
- Self-detection system identifies failures of key components.

SIT

Smart Inline Technology: how does it work?

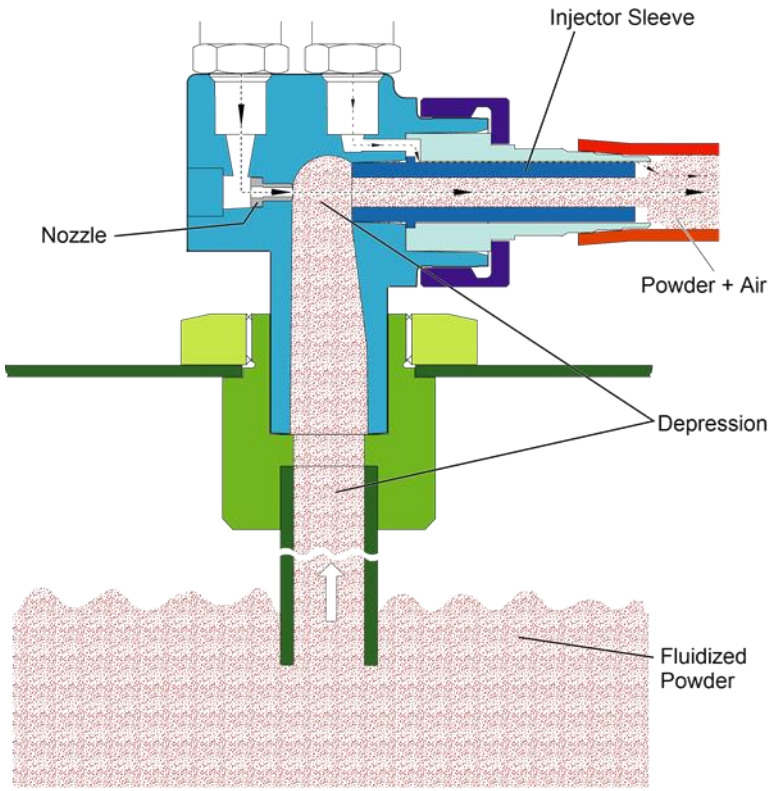
- Powder is conveyed from the AP01 pump to the gun using only **little compressed air**.
- Powder hoses are **smaller** in diameter and easier to manage.
- Powder velocity in the hoses is lower, **reducing wearing problems**.
- **Longer powder hoses** can be used without the need for more transport air.
- **Optimal amount of air** for powder atomization is added just at the back of the gun.



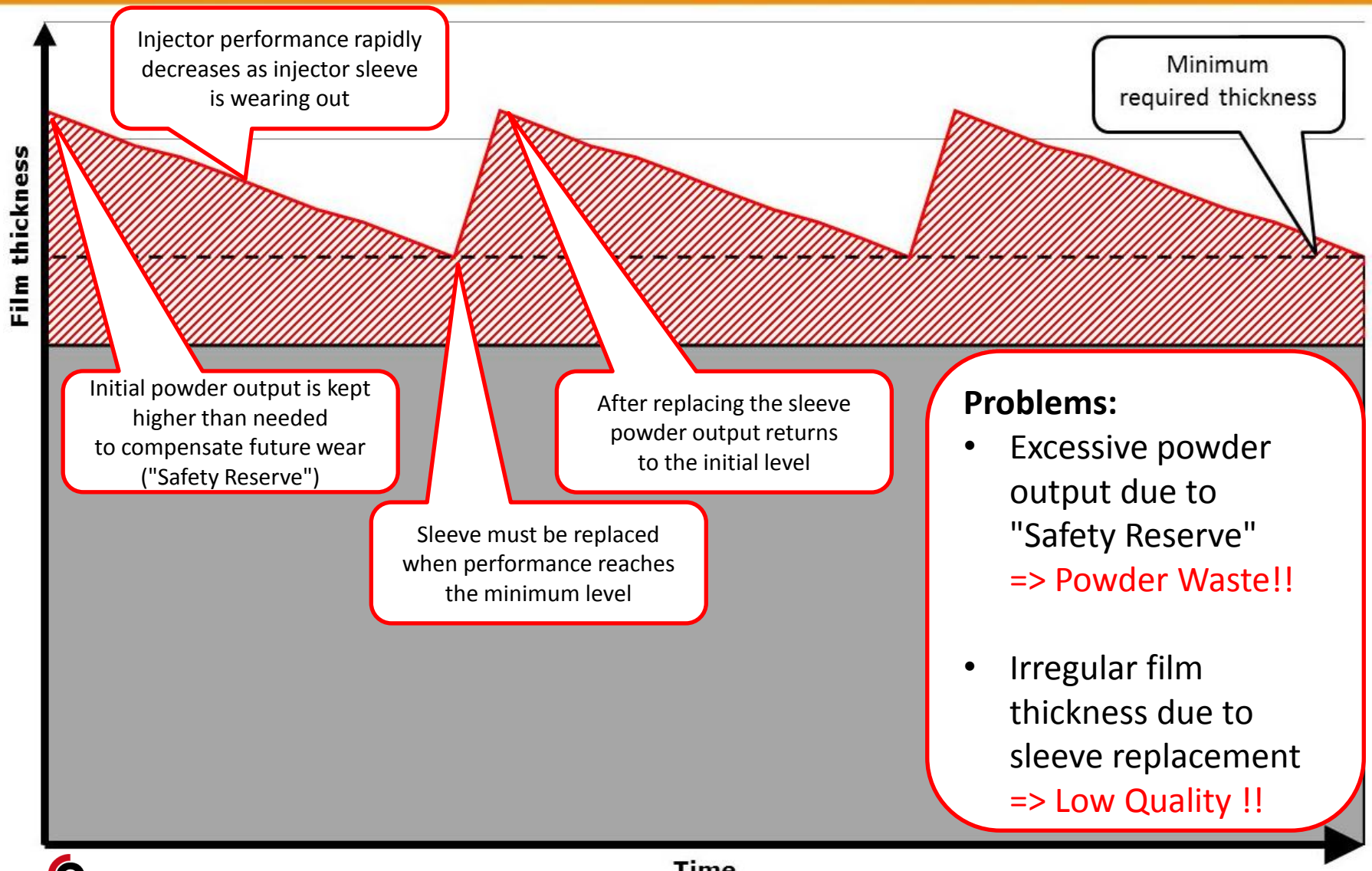
Traditional Venturi Technology

- Nozzle blows air into the injector sleeve
- This creates depression in the injector chamber that sucks powder from the fluidized hopper
- Powder + air is conveyed to the gun

- Powder progressively wears out the injector sleeve: **as injector sleeve wears out, performance decreases!**
- Large powder output requires more air through the injector nozzle: **possible application problems, lower transfer efficiency!**



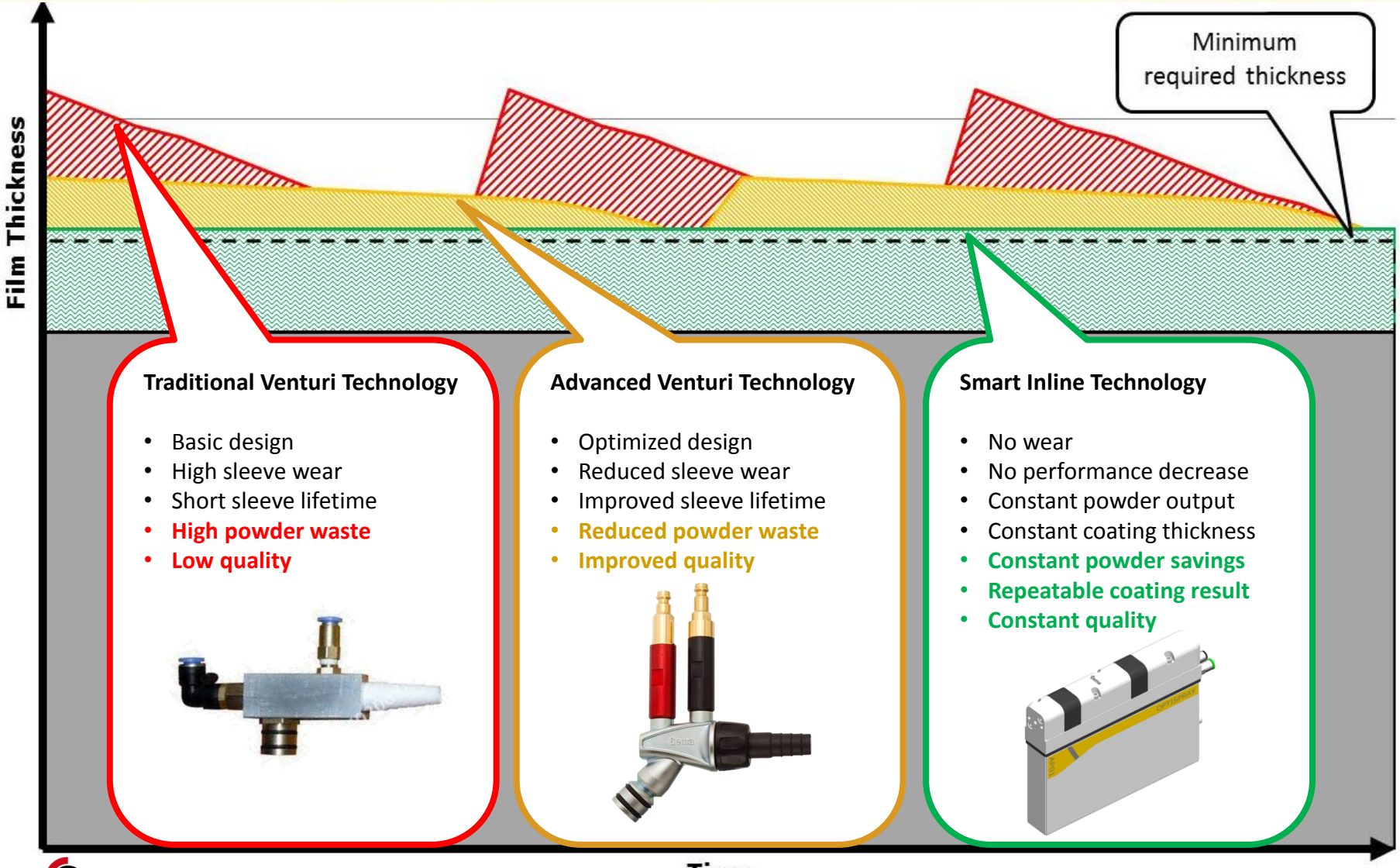
Traditional Venturi Technology



Problems:

- Excessive powder output due to "Safety Reserve"
  => Powder Waste!!
- Irregular film thickness due to sleeve replacement
  => Low Quality !!

Constant quality and powder savings



Constant quality and powder savings

- The AP01 pumps thanks to their wear-free **Smart Inline Technology** can deliver constant powder output for a long period of time

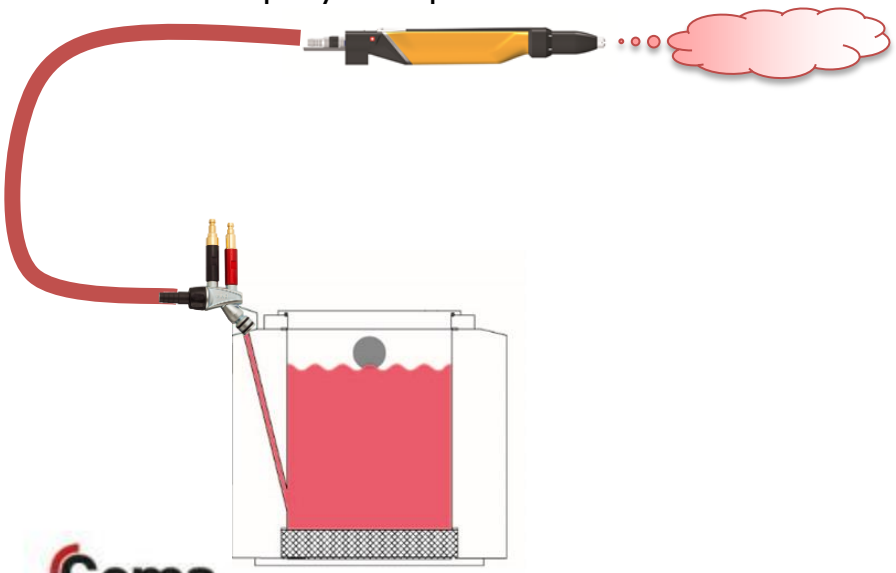
  - **No performance decrease due to parts wearing**
  - **Constant powder output over long time**

  - **Constant coating thickness**
  - **Constant powder savings**

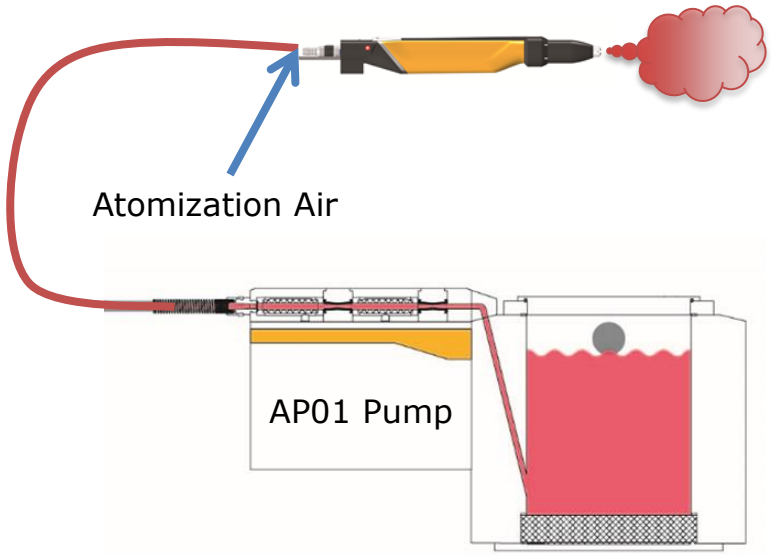
  - **Repeatable coating result**
  - **Constant quality**

Improved quality and powder savings

- **Venturi Injectors** need larger hoses and higher amount of air to transport powder.
- Excessive air amount necessary with long hoses and high powder output can determine too high powder velocity at the gun nozzle.
- Less efficient powder charging
- Possible application problems
- Reduced transfer efficiency
- More overspray and powder losses



- With **AP01 pumps** the powder is conveyed to the gun with just little air.
- Optimal atomization air is added at the back of the gun. This allows softer and denser powder cloud even with long hoses and high powder output.
- **Ideal powder charging in all conditions**
- **Optimal application performance**
- **Highest transfer efficiency**
- **More powder on parts, less waste**



Improved quality and powder savings

- The AP01 pumps thanks to their **Smart Inline Technology** can transport high amount of powder to long distances with just minimum amount of air.
  - **Easier optimization of powder application**
  - **Softer and more efficient powder cloud**
  - **Improved powder charging and transfer efficiency**
  - **More powder on the parts, less waste in the recovery system**
  - **Optimal application in all conditions**
  - **Improved coating performance**