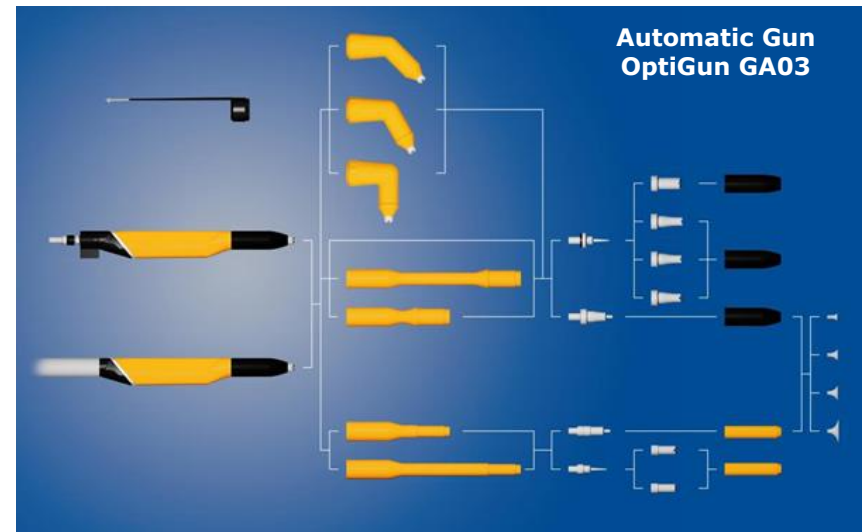
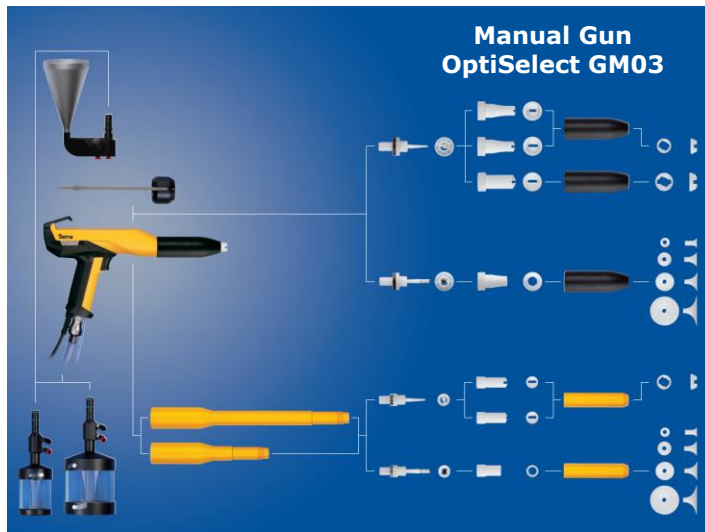


# Gun nozzles for every application

Different extensions, flat spray, round spray and angle nozzles are designed to offer the best results even with difficult applications.



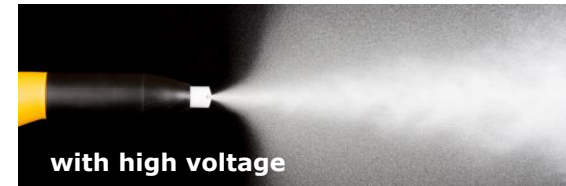
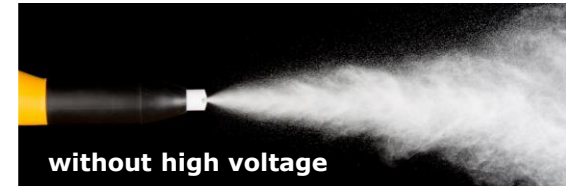
Highest powder  
transfer efficiency

Perfect powder  
distribution

Consistent  
application quality

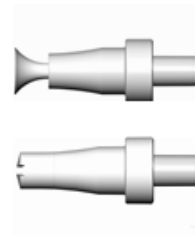
# Gun nozzle design

- Powder coating requires a perfect combination of nozzle design and high voltage supply to achieve an homogeneous powder cloud.
- The high voltage field plays a very important role ensuring a perfect powder atomization and charging.
- Different object geometries to be coated require different nozzle geometries to ensure that the powder cloud is ideal and at the right speed.



# Gun nozzles and extensions

- The nozzles and extensions are interchangeable for the manual and automatic guns, thanks to the compatible and smart gun shaft design.
- All nozzles and extensions are compliant to the ATEX directives.
- The use of high quality non-stick materials prevents powder accumulations and allows a high quality color change.



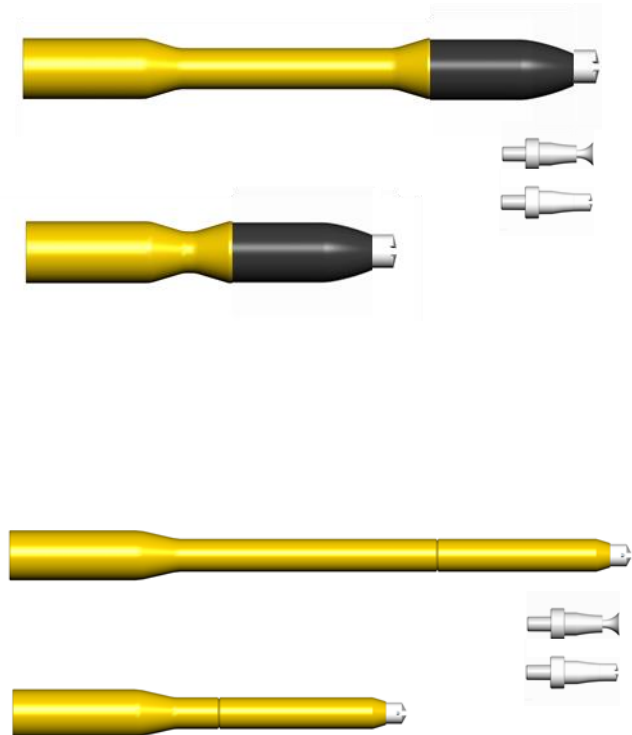
**OptiSelect GM03**



**OptiGun GA03**

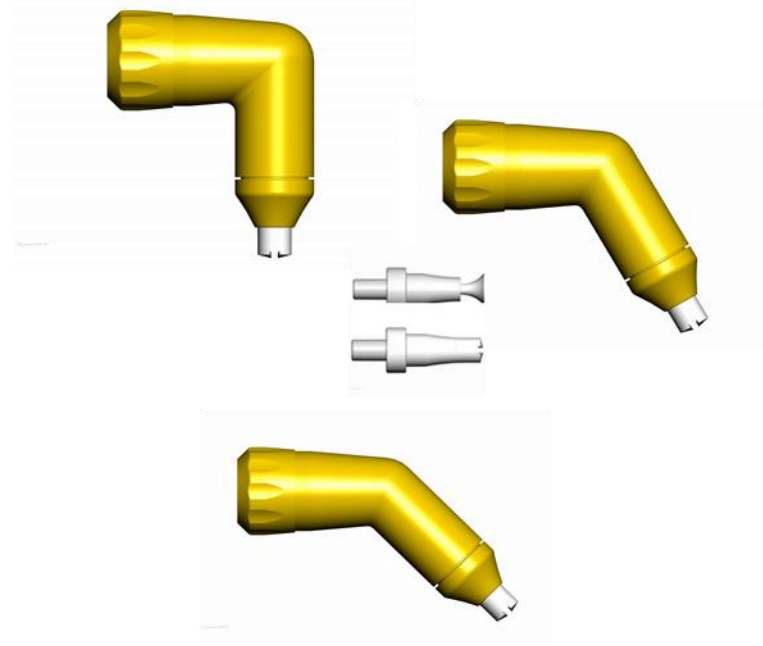
# Extensions for round and flat jet nozzles

- Manual and automatic guns can be provided with robust and solid nozzle extensions of 150 and 300 mm length. These nozzles are interchangeable with the standard nozzles and offer a perfect flexibility of use.
- Special smaller and lighter-weight extensions are also available.
  - In manual applications they offer easy and stress-free operation over a long working time.
  - In automatic application, they are ideal for inside coating of narrow areas like in boilers.



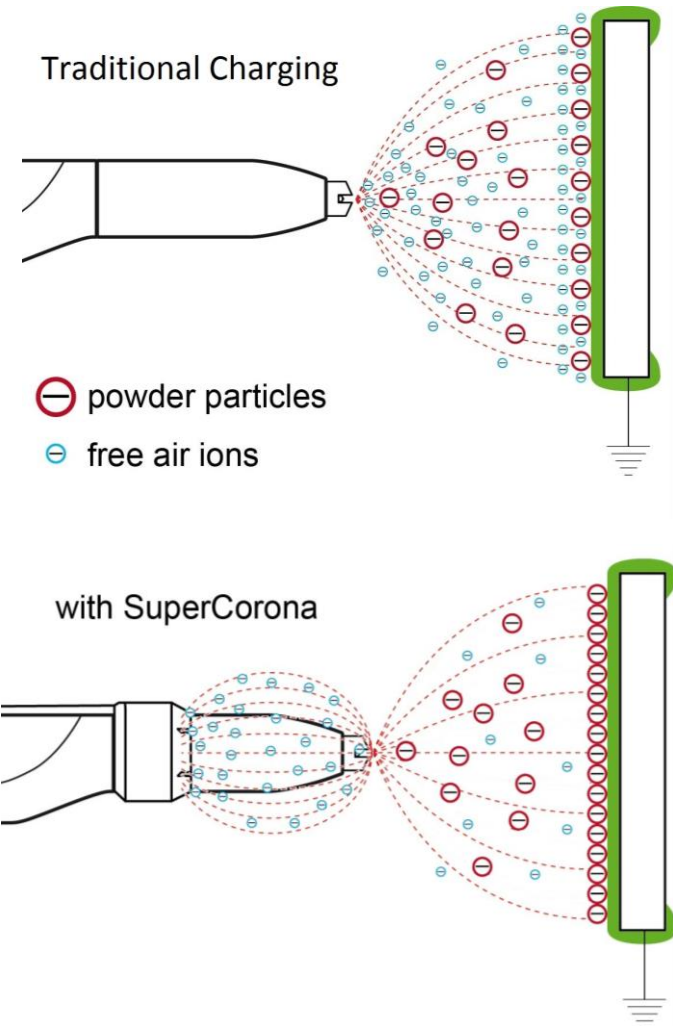
# Angle nozzles for special applications

- A wide range of 45°, 60° and 90° angle nozzles are available for challenging applications.
- The typical area of use are complex geometries like profiles, chassis, beam frames and cabinet coating.
- The angle nozzles are also ideal for variety of applications where fixed guns are needed.



# SuperCorona add-on to improve quality

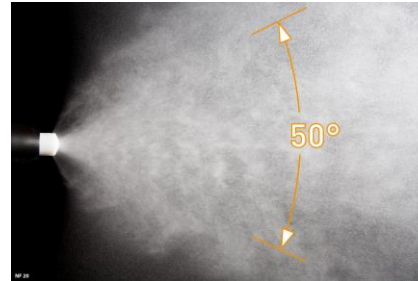
- In a corona gun the high voltage electrode generates a big quantity of air ions
- Only a few air ions really charge the powder particles, the other ions remain free and are attracted by the surface to coat (which is grounded).
- The high accumulation of free ions on the surface to coat can produce an uneven powder layer and the so called "**orange peel effect**" or "**back-ionization**" problems.
- **SuperCorona** discharges the excessive free ions to ground and avoids overcharging of the powder and of the surface to coat.



# Flat jet nozzles: NF20, NF21, NF22

## Flat jet nozzle type **NF20**

Angle = **50°**  
Velocity = **moderate - low**  
Distance to object maximal = **250 mm**



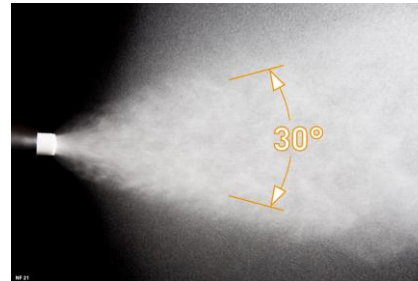
## Application

Standard manual nozzle

- flat parts
- profiles

## Flat jet nozzle type **NF21**

Angle = **30°**  
Velocity = **high**  
Distance to object maximal = **400 mm**



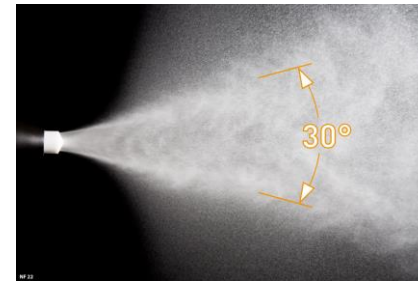
## Application

Automatic & manual nozzle

- complex parts (deep recess)
- target spraying

## Flat jet nozzle type **NF22**

Angle = **30°**  
Velocity = **high**  
Distance to object maximal = **450 mm**



## Application

Automatic & manual nozzle

- complex parts (deep recess)
- target spraying
- robot applications

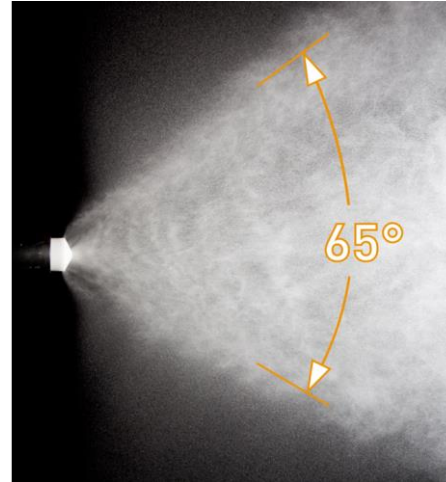
# Flat jet nozzles: NF24, NF25

## Flat jet nozzle type **NF24**

Angle = **65°**

Velocity = **low**

Distance to object maximal = **200 mm**



## Application

Automatic & manual nozzle

- large object
- flat parts
- complex parts when nozzle close to the object

## Flat jet nozzle type **NF25 (mini)**

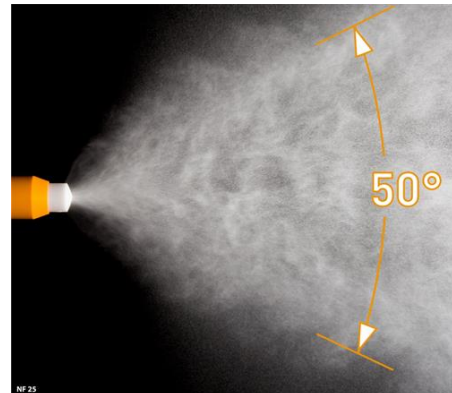
Angle = **50°**

Velocity = **moderate - low**

Distance to object maximal = **250 mm**

### Remark:

In combination with **extension Ø 25mm**, reduced diameter to penetrate into cavities / Powder cloud like NF20



## Application

Automatic & manual nozzle

- flat parts
- profiles



# Flat jet nozzles: NF26, NF27

## Flat jet nozzle type **NF26** (mini)

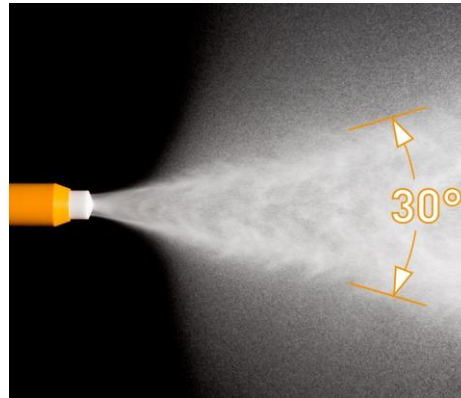
Angle = **30°**

Velocity = **high**

Distance to object maximal = **450 mm**

### Remark:

In combination with **extension Ø 25mm**, reduced diameter to penetrate into cavities



## Application

- Automatic & manual nozzle
- complex parts (deep recess)
  - target spraying
  - robot applications

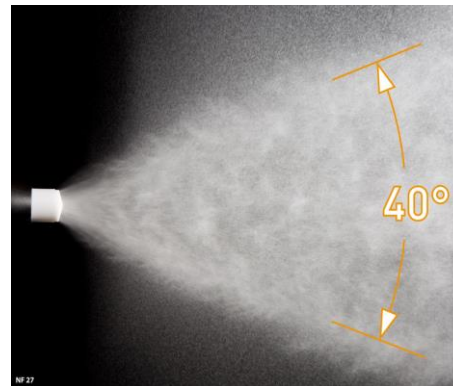
## Flat jet nozzle type **NF27**

Angle = **40°**

Velocity = **high - moderate**

Distance to object maximal = **350 mm**

**Remark:** Alternative for large flat objects or complex parts, when nozzle close to the object = NF24



## Application

Standard automatic nozzle

- Profiles
- complex parts,
- flat parts

The NF27 requires a minimal clearance between object and nozzle.

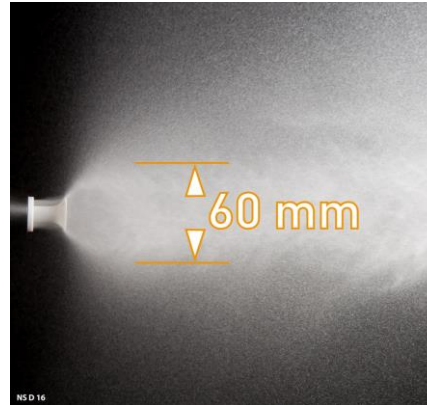
# Round jet nozzle NS09 deflector 16/24

## Round spray nozzle type NS09 Deflector **Ø16 mm**

$\varnothing_{\text{maximal}}$  Powder cloud = **60 mm**

Velocity = **low**

Distance to object maximal = **120 mm**



## Application

Automatic & manual nozzle

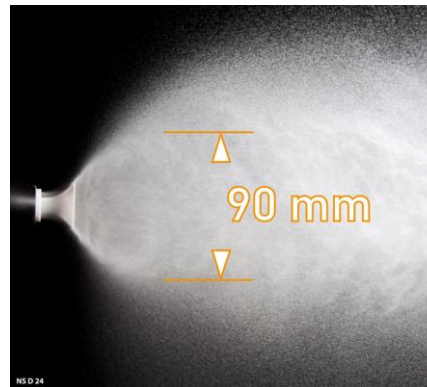
- flat parts
- low speed coating
- powder cloud 60mm

## Round spray nozzle type NS09 Deflector **Ø24 mm**

$\varnothing_{\text{maximal}}$  Powder cloud = **90 mm**

Velocity = **low**

Distance to object maximal = **160 mm**



## Application

Automatic & manual nozzle

- flat parts
- low speed coating
- powder cloud 90mm

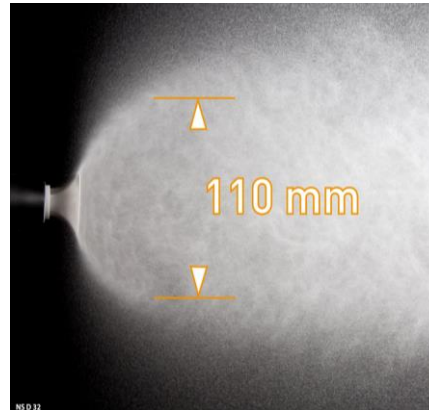
# Round jet nozzle NS09 deflector 32/50

## Round spray nozzle type NS09 Deflector **Ø32 mm**

Ø<sub>maximal</sub> Powder cloud = **110 mm**

Velocity = **low**

Distance to object maximal = **160 mm**



## Application

Automatic & manual nozzle

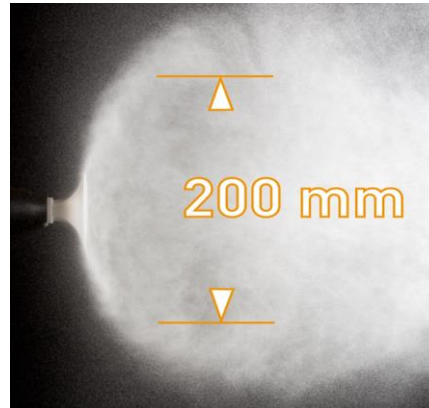
- flat parts
- low speed coating
- powder cloud 110 mm

## Round spray nozzle type NS09 Deflector **Ø50 mm**

Ø<sub>maximal</sub> Powder cloud = **200 mm**

Velocity = **low**

Distance to object maximal = **180 mm**



## Application

Automatic & manual nozzle

- flat parts
- low speed coating
- powder cloud 200 mm