

Bosch injection nozzles

Manufactured to meet high demanding requirements

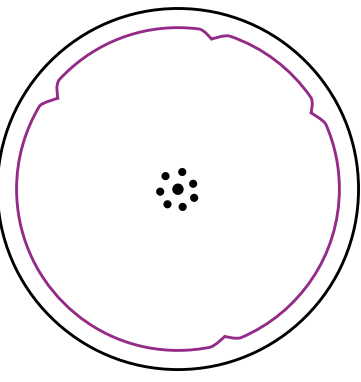
Diesel systems are expected to become increasingly efficient and powerful. This can be achieved with higher system pressure, for this it is important that high quality injection nozzles are used.



Nozzles from Bosch are manufactured to a high degree of precision and in compliance with very tight tolerances and help to avoid negative consequences:



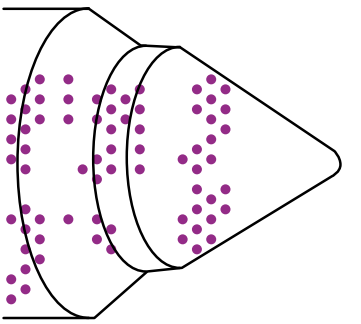
Nozzle seat
The surface of the nozzle seat is carefully smoothed on injection nozzles from Bosch.



If the surface of the nozzle seat is **not smooth**, there is the risk of loud noises after the engine has been operating for an extended period of time or the engine will tend to shake.



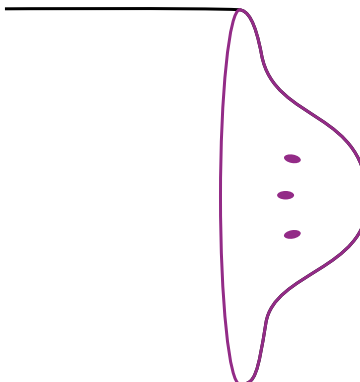
Coating
On coated Bosch nozzles, the surface coating of the nozzle needle is uniformly smooth.



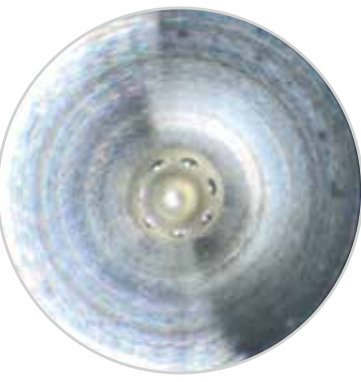
Risk: If the nozzle needle of the injection nozzle is **not coated uniformly**, it can leak and cause blue smoke, and also generate noise.



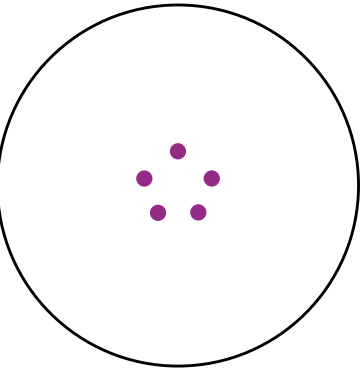
Round end/spray hole length
The round end and spray hole length on Bosch injection nozzles are designed specifically for the particular application.



If the **shape** and length of the round end and spray hole are **not properly designed**, there is the risk of blue smoke being generated, accompanied by a rough engine or engine clattering.



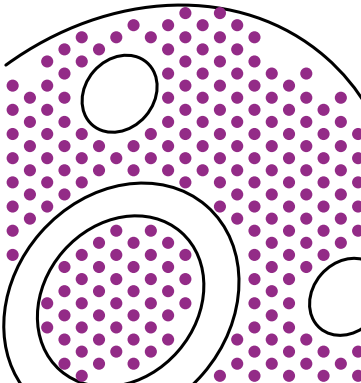
Spray holes
Spray holes on Bosch fuel injection nozzles are provided in the number and arrangement required technically.



If the injection nozzle has **too few** spray holes or they are **positioned incorrectly**, fuel consumption may be higher and more smoke may be generated – with the risk of power loss or thermal overloads.



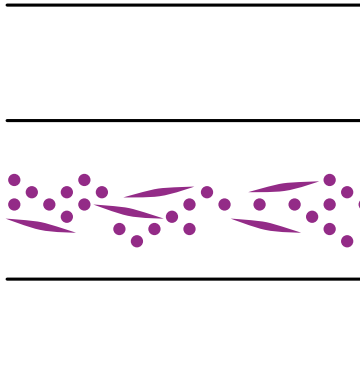
Nozzle sealing surface
The nozzle sealing surface of Bosch injection nozzles is flat.



If the nozzle sealing surface is **uneven**, there is the risk of leaks with subsequent dilution of the lubricating oil and the danger of engine damage.



Guide
The guide on a Bosch injection nozzle is free of damage and scratches.



If the guide has **scratches** or other **damage**, increased wear may result – with the risk of the engine stopping and the vehicle unable to drive any further.



Safety features of Bosch fuel injection nozzles:

- sealing ring technology
- inscription as proof of originality
- Bosch Secure Code Label with 18-digit code and hologram on the packaging

Attributes of lesser quality nozzles may be:

- higher fuel consumption
- loss of power
- reduced service life
- breakdowns and engine damage

Original Bosch packaging

