



## HighNo 5.0W

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In coaxial powder feed nozzles, the powder is injected into the melt pool through a conical annular gap. The conical powder feed produces a precise, stable, and homogeneous powder gas jet. The nozzle geometry is specifically tailored to the required laser focus and powder focus diameters.

- Plug-and-play solution for industry
- On-site conversion in a very short time (replacement in less than 2 minutes)
- Reproducible nozzle tip replacement (nozzle tip module qualification possible)
- High wear resistance thanks to special coatings
- High No. 5.0W
- directly cooled nozzle tip
- Specifically designed for high-performance applications with large laser focus diameters.
- Enlarged powder focus for stable powder applications at high application rates

### Technical specifications:

- up to 20 kW laser power  
(These specifications depend on the radiation source and application used).
- Weight is max. 1 kg
- Particle size 20 - 50  $\mu\text{m}$ ,  
50 - 100  $\mu\text{m}$  (recommended)
- Powder gas jet focus:  
2.5 mm at 3 g/min
- Possible track widths range from 3 to 7 mm.
- The maximum powder mass flow rate is 200 g/min.
- direct water cooling 1-3 l/min at 18 - 20 °C
- Maximum powder efficiency up to 90% with track widths of 3 mm and a grain fraction of 20-50  $\mu\text{m}$ .