

HyproJET X6

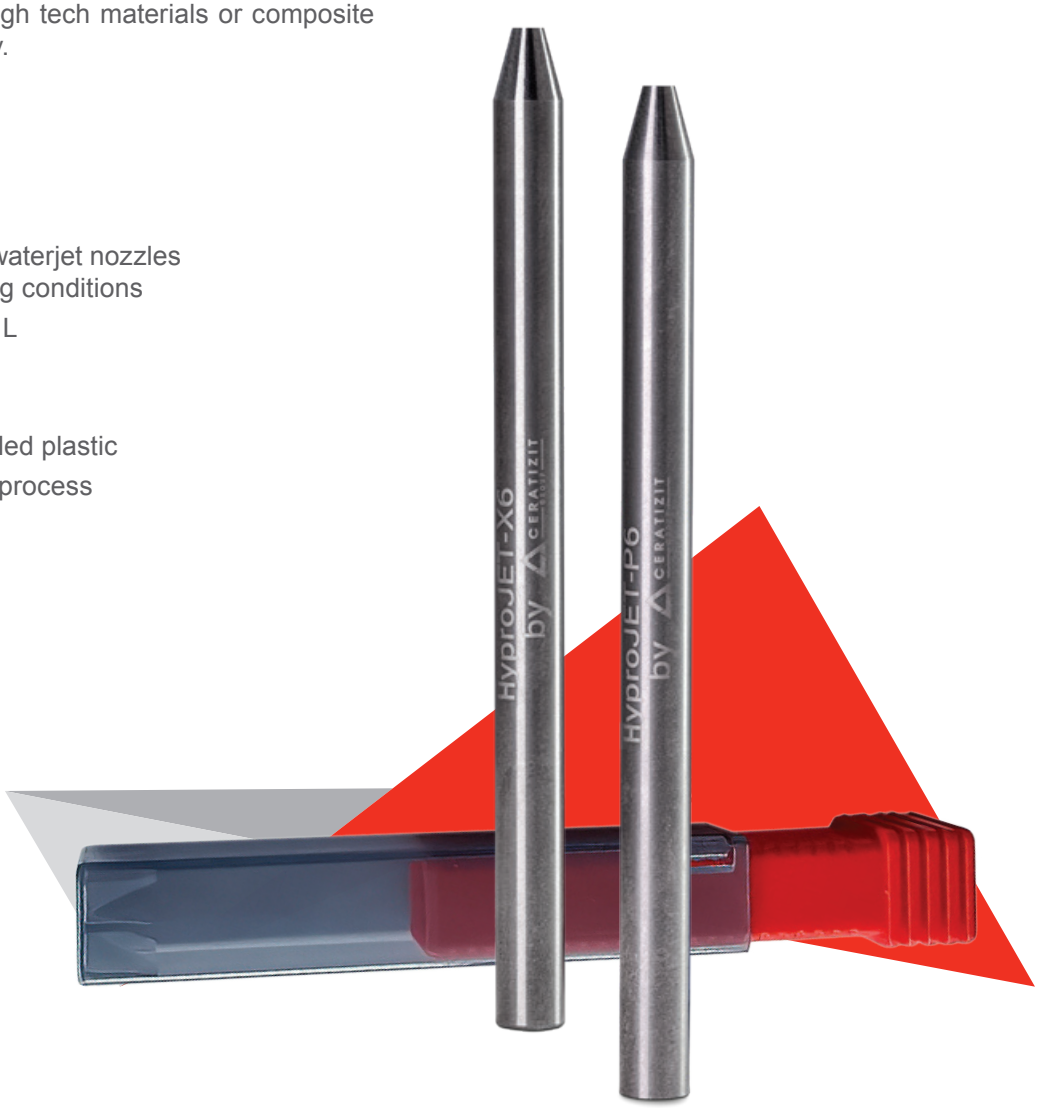
Solutions for waterjet cutting

CERATIZIT GROUP

Facts & Figures about HyproJET X6 vs P6

The **X6** is based on an improved and patented design which makes is possible to increase cutting performance, leading and lifetime. This nozzle is suited to cutting through high tech materials or composite parts with precise and smooth quality.

- ▲ Longer lifetime: +20%
- ▲ Quieter: -3 dB
- ▲ Better finishing:
  R_z - 40% compared to equivalent waterjet nozzles on the market with the same cutting conditions
- ▲ Premium metallurgy: grade CTN01L
- ▲ 2800 HV_{10}
- ▲ K_1c (toughness): 7.2 MPa*$m^{½}$
- ▲ Packaging made from 100% recycled plastic
- ▲ Constant wear for a stable cutting process



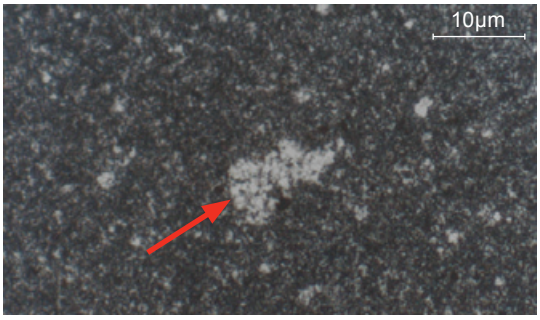
Advantages of HyproJET X6

HyproJET X6 nozzles cutting efficiency allows you to achieve longer lifetimes and better cutting quality than other premium grades on the market. The patented design of X6 nozzles helps improve abrasive and water flow inside the nozzle.

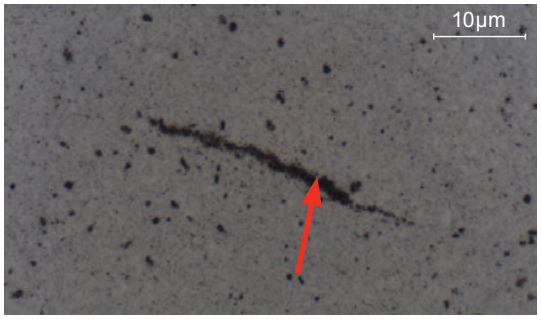
CTN01L, a success story thanks to its mechanical properties and its clean metallurgy

Premium nozzle from competitor

2600 HV_{10}
K_1c (toughness): 6.0 $MPa*m^{½}$



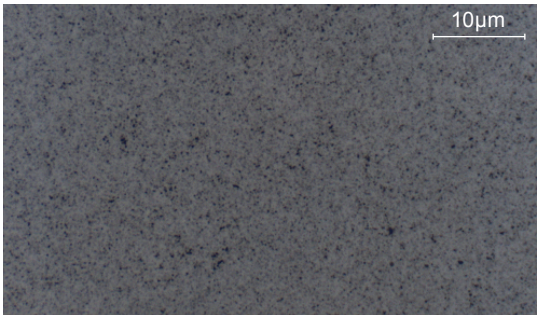
Aggregate



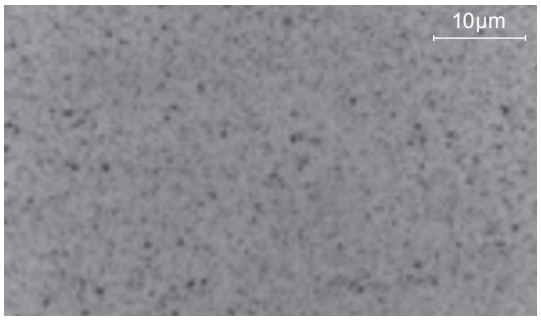
Non-homogeneous structure

New CERATIZIT X6

2800 HV_{10}
K_1c (toughness) 7.2 $MPa*m^{½}$



X6 microstructure



X6 microstructure

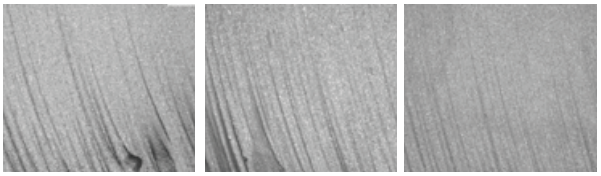
The CTN01L material used for X6 is more homogeneous and defect free than other main grades on the market.

Cutting performance

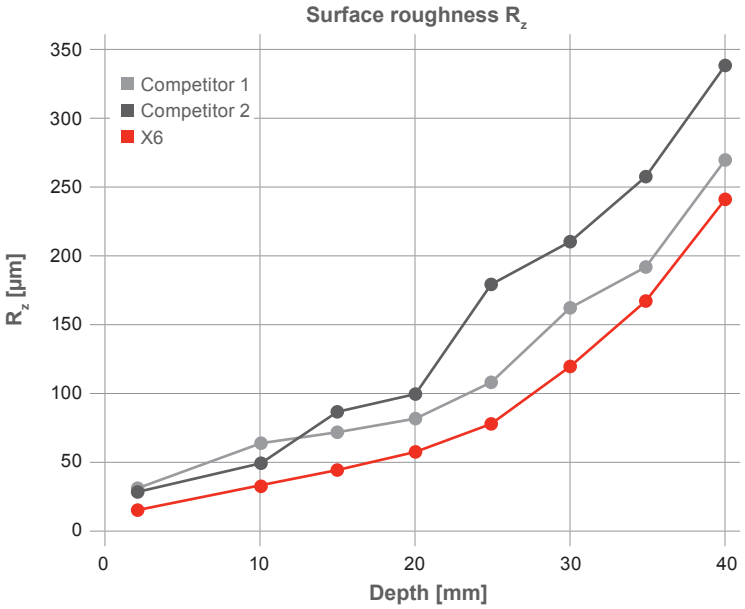
Test conditions

- ▲ Water pressure 4000 bar
- ▲ Ø 0.25 mm diamond orifice
- ▲ 20 kg/h – mesh: 160 – 200 microns grain size
- ▲ V_p = 90 mm/min (Aluminium 5083 – 40 mm)
- ▲ Mixing tube: 7.14 – 0.76 – 101.6

▲ Up to 25% better cutting quality after 40h usage.



Competitor 1 Competitor 2 X6



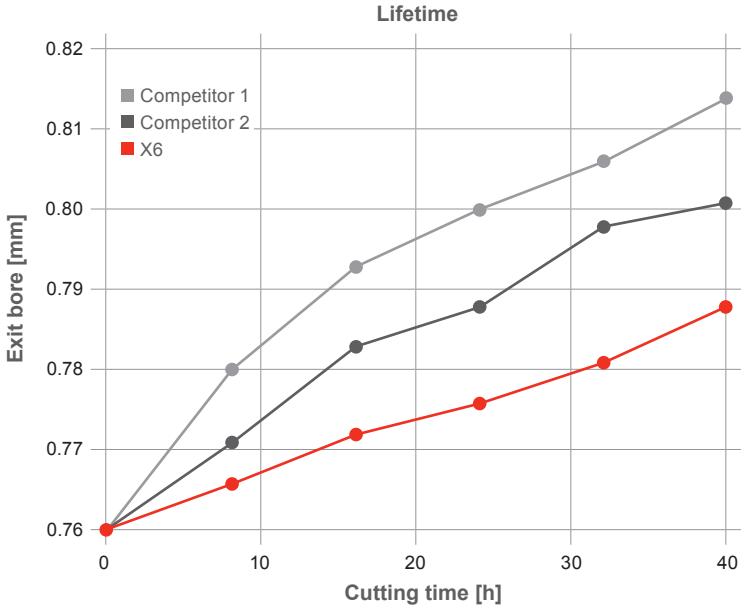
Lifetime

Test conditions

- ▲ 3000 bar pressure
- ▲ 0.76 mm bore diameter
- ▲ 20 kg/h – mesh: 160 – 200 microns grain size
- ▲ Mixing tube: 7.14 – 0.76 – 101.6

▲ Control of the wear with linear and stable exit bore wear

▲ Up to 5% reduced exit bore wear compared to premium waterjet nozzle from competition



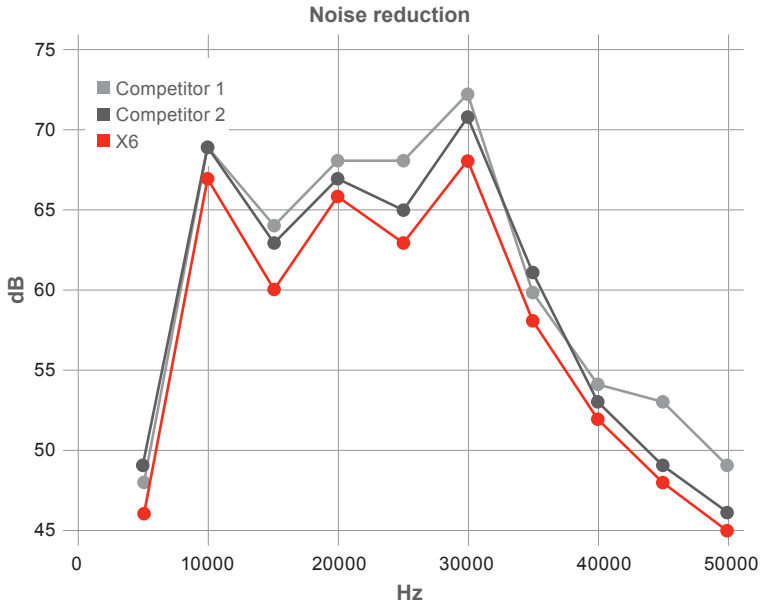
Noise reduction

Test conditions

- ▲ 3500 bar
- ▲ 300 g/min – mesh: 160 – 200 microns grain size
- ▲ Mixing tube: 7.14 – 0.76 – 101.6

▲ The new waterjet nozzle generation is significantly quieter than comparable nozzles on the market, due to its ingenious design.

▲ Quieter cutting process will reduce health issues / noise hazard in the workshop.



HyproJET X6

Product portfolio

Type, description	Material	D mm	d mm	L mm
X6 0635-076-0762-32-15 CTN01L	14833761	6.35	0.76	76.2
X6 0635-102-0762-32-15 CTN01L	14833764	6.35	1.02	76.2
X6 0714-076-0762-32-15 CTN01L	14833766	7.14	0.76	76.2
X6 0714-076-1016-32-15R CTN01L	14833767	7.14	0.76	101.6
X6 0714-102-0762-32-15 CTN01L	14833768	7.14	1.02	76.2
X6 0714-102-1016-32-15 CTN01L	14833770	7.14	1.02	101.6
X6 0797-076-1016-32-15 CTN01L	14833771	7.97	0.76	101.6
X6 0714-102-1016-25-15-S CTN01L	14833772	7.14	1.02	101.6
X6 0900-076-0762-40-15M CTN01L	14833774	9	0.76	76.2
X6 0714-102-1016-32-15R CTN01L	14833775	7.14	1.02	101.6
X6 0797-102-1016-32-15 CTN01L	14833776	7.97	1.02	101.6
X6 0714-076-1016-32-15 CTN01L	14833779	7.14	0.76	101.6
X6 0714-089-1016-32-15 CTN01L	14833780	7.14	0.89	101.6
X6 0900-102-0762-40-15M CTN01L	14833781	9	1.02	76.2
X6 0635-102-1016-32-15 CTN01L	14833782	6.35	1.02	101.6

The longer cutting lifetime allows to reduce maintenance costs and increase productivity. Its ingenious design also helps to improve the abrasive's flow inside the nozzle, reducing issues linked to turbulences phenomena and to reduce total abrasive consumption. Its ingenious design also helps to improve the abrasive's flow inside the nozzle, reducing issues linked to turbulences phenomena and lowering total abrasive consumption.

Technical specifications

- ▲ Grade CTN01L
- ▲ Higher abrasive flow consistency
- ▲ Better cutting quality and increased lifetime compared to our P6 model

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