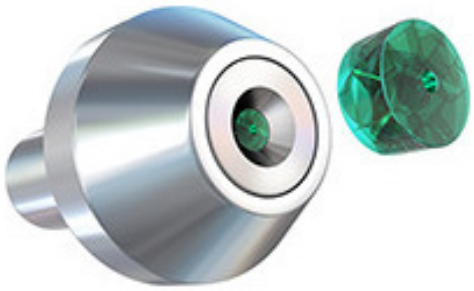
BLASTONE
SUPERIOR PERFORMANCE

tetraCORE™
WATER JET BLAST NOZZLES



Introducing tetraCORE™, the material of the future for waterjet cutting and cleaning applications. A breakthrough in material science, tetraCORE™ is the first new grade of orifice material introduced into the waterjet industry in over 30 years. An elaborate technology engineered at the atomic level, tetraCORE™ is the achievement of a strategic structuring of the atomic lattice and has been designed to employ an extremely tough and durable tetrahedral bond that will resist erosion, chipping and fracturing, while reducing operating costs.

NEW MATERIAL GRADE

Precision engineered to offer predictable performance, tetraCORE™ waterjet orifices make waterjets a viable option for almost any cutting application. Manufactured under tightly controlled conditions, tetraCORE™ approaches the hardness and wear resistance of diamond, while offering prices comparable to ruby and sapphire.

Extensive testing of tetraCORE™'s durability consistently delivered 400 or more cut hours, a full ten times longer than ruby & sapphire orifices could deliver.

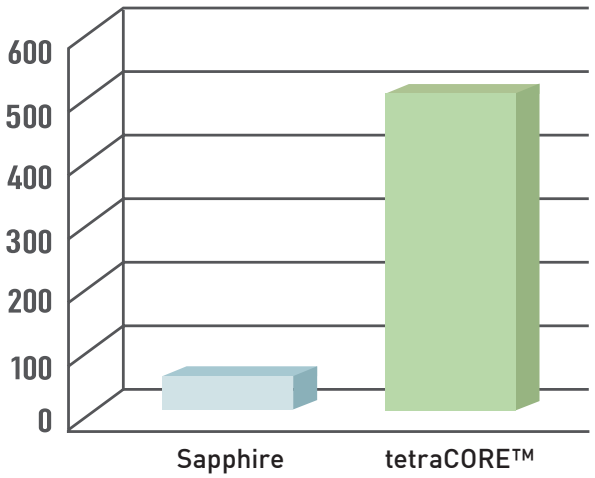
BENEFITS

- 10X Longer life
- Up to 60,000 psi operating pressure
- Zero ID edge degradation over use
- Premium jet stream coherency & integrity
- Optimised jet stream length and consistency
- Maximised uptime and productivity
- 100% factory testing of all nozzles prior to shipping
- Minimised material waste
- Increased equipment ROI
- Operational excellence
- Binderless structure eliminates chemical reaction to water and subsequent premature edge erosion
- Reduced operating costs
- Excellent reliability in harsh AWJ environments
- Less supervision required

LIFETIME COMPARISON

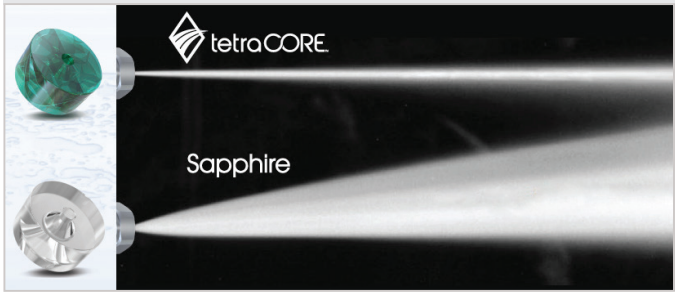
This graph shows the lifetime comparison depicted by elapsed time in hours of a sapphire nozzle and tetraCORE™ nozzle.

tetraCORE™ has 10 x the life of sapphire.



Water jet stream comparison on a ship cleaning application to remove two-part epoxy and silicon coating.

- **tetraCORE™ nozzle after 3 weeks**
- **Sapphire nozzle after 3 days**



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PART NUMBERS

M10

Thread Pitch: M10 x 1.5
Description: 5mm hex key slot
Sealing Angle (included): 58°
Similar to Form: 21, 3261, 688, Type 965

RUBUJTC4008	TetraCORE Nozzle, M10 x 1.5, Size .008" (0.20mm)
RUBUJTC4009	TetraCORE Nozzle, M10 x 1.5, Size .009" (0.23mm)
RUBUJTC4010	TetraCORE Nozzle, M10 x 1.5, Size .010" (0.25mm)
RUBUJTC4011	TetraCORE Nozzle, M10 x 1.5, Size .011" (0.28mm)
RUBUJTC4012	UltraJet TetraCORE Nozzle, M10 x 1.5, Size .012" (0.30mm)
RUBUJTC4013	TetraCORE Nozzle, M10 x 1.5, Size .013" (0.33mm)
RUBUJTC4014	TetraCORE Nozzle, M10 x 1.5, Size .014" (0.36mm)
RUBUJTC4015	TetraCORE Nozzle, M10 x 1.5, Size .015" (0.38mm)
RUBUJTC4016	TetraCORE Nozzle, M10 x 1.5, Size .016" (0.41mm)
RUBUJTC4017	TetraCORE Nozzle, M10 x 1.5, Size .017" (0.43mm)
RUBUJTC4018	TetraCORE Nozzle, M10 x 1.5, Size .018" (0.46mm)
RUBUJTC4019	TetraCORE Nozzle, M10 x 1.5, Size .019" (0.48mm)
RUBUJTC4020	TetraCORE Nozzle, M10 x 1.5, Size .020" (0.51mm)

7/16" - 20

Thread Pitch: 7/16" - 20
Description: 7/16" hex head
Sealing Angle (included): 112°
Similar to Form: 3076, 3604, Type 975

RUBUJTC3008	TetraCORE Nozzle 7/16"-20, 0.008" (0.2mm)
RUBUJTC3009	TetraCORE Nozzle 7/16"-20, 0.009" (0.23mm)
RUBUJTC3010	TetraCORE Nozzle 7/16"-20, 0.010" (0.25mm)
RUBUJTC3011	TetraCORE Nozzle 7/16"-20, 0.011" (0.28mm)
RUBUJTC3012	TetraCORE Nozzle 7/16"-20, 0.012" (0.3mm)
RUBUJTC3013	TetraCORE Nozzle 7/16"-20, 0.013" (0.33mm)
RUBUJTC3014	TetraCORE Nozzle 7/16"-20, 0.014" (0.36mm)
RUBUJTC3015	TetraCORE Nozzle 7/16"-20, 0.015" (0.38mm)
RUBUJTC3016	TetraCORE Nozzle 7/16"-20, 0.016" (0.41mm)
RUBUJTC3017	TetraCORE Nozzle 7/16"-20, 0.017" (0.43mm)
RUBUJTC3018	TetraCORE Nozzle 7/16"-20, 0.018" (0.46mm)
RUBUJTC3019	TetraCORE Nozzle 7/16"-20, 0.019" (0.48mm)
RUBUJTC3020	TetraCORE Nozzle 7/16"-20, 0.020" (0.51mm)
RUBUJTC3021	TetraCORE Nozzle 7/16"-20, 0.021" (0.53mm)
RUBUJTC3022	TetraCORE Nozzle 7/16"-20, 0.022" (0.56mm)

3/8"-24

Thread Pitch: 3/8" - 24
Description: 3/8" hex head
Sealing Angle (included): 112°
Similar to Form: 3024, 3546, Type 972

RUBUJTC2008	TetraCORE Nozzle 3/8"-24, 0.008" (0.2mm)
RUBUJTC2009	TetraCORE Nozzle 3/8"-24, 0.009" (0.23mm)
RUBUJTC2010	TetraCORE Nozzle 3/8"-24, 0.010" (0.25mm)
RUBUJTC2011	TetraCORE Nozzle 3/8"-24, 0.011" (0.28mm)
RUBUJTC2012	TetraCORE Nozzle 3/8"-24, 0.012" (0.3mm)
RUBUJTC2013	TetraCORE Nozzle 3/8"-24, 0.013" (0.33mm)
RUBUJTC2014	TetraCORE Nozzle 3/8"-24, 0.014" (0.36mm)
RUBUJTC2015	TetraCORE Nozzle 3/8"-24, 0.015" (0.38mm)
RUBUJTC2016	TetraCORE Nozzle 3/8"-24, 0.016" (0.41mm)
RUBUJTC2017	TetraCORE Nozzle 3/8"-24, 0.017" (0.43mm)
RUBUJTC2018	TetraCORE Nozzle 3/8"-24, 0.018" (0.46mm)
RUBUJTC2019	TetraCORE Nozzle 3/8"-24, 0.019" (0.48mm)
RUBUJTC2020	TetraCORE Nozzle 3/8"-24, 0.020" (0.51mm)
RUBUJTC2021	TetraCORE Nozzle 3/8"-24, 0.021" (0.53mm)
RUBUJTC2022	TetraCORE Nozzle 3/8"-24, 0.022" (0.56mm)
RUBUJTC2023	TetraCORE Nozzle 3/8"-24, 0.023" (0.58mm)
RUBUJTC2024	TetraCORE Nozzle 3/8"-24, 0.024" (0.61mm)
RUBUJTC2025	TetraCORE Nozzle 3/8"-24, 0.025" (0.64mm)

Mushroom

Description: Mushroom style
Sealing Angle (included): 60°
Similar to Form: 2720, Type 257

RUBUJTC6030	TetraCORE Nozzle, Mushroom Style, Size .030" (0.76mm)
RUBUJTC6031	TetraCORE Nozzle, Mushroom Style, Size .031" (0.79mm)
RUBUJTC6032	TetraCORE Nozzle, Mushroom Style, Size .032" (0.81mm)
RUBUJTC6033	TetraCORE Nozzle, Mushroom Style, Size .033" (0.84mm)
RUBUJTC6034	TetraCORE Nozzle, Mushroom Style, Size .034" (0.86mm)
RUBUJTC6035	TetraCORE Nozzle, Mushroom Style, Size .035" (0.89mm)
RUBUJTC6037	TetraCORE Nozzle, Mushroom Style, Size .037" (0.94mm)
RUBUJTC6042	TetraCORE Nozzle, Mushroom Style, Size .042" (1.07mm)
RUBUJTC6045	TetraCORE Nozzle, Mushroom Style, Size .045" (1.14mm)