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**LASTING DIAMOND TECHNOLOGY FOR UHP  
WATERJET CUTTING, WATERBLASTING AND  
MICROJET APPLICATION.**

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**MICROJET TECHNOLOGY FOR 50 MICRON ORIFICE BORE.**

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**LASTING NATURAL DIAMOND ORIFICE  
AND ULTRA SAPPHIRE ORIFICE.**

We are thrilled to introduce your Lasting Ultra Sapphire Orifice, made of a new special single-crystal material with the highest purity and processed by an innovative Nano-polishing method on the orifice bore, provides the longest lifespan among all the current regular waterjet sapphire orifices products at the market. Ideal and perfect solution or UHP water-only cutting.



**QUALITY THAT BLASTS AWAY INDUSTRY NORMS**

Lasting Diamond Technology manufactures each of our UHP orifice with the highest quality materials and precision machining techniques in the industry. Each nozzle is equipped with heat treated stainless steel mounts, aerospace grade retainers, and 100% quality inspection, to ensures:

- Maximized orifice life
- Consistent jet stream profile and coherency
- Needlejet Quality
- Reduced downtime



## We offer both Sapphire and Diamond options.

### Sapphire

#### PRODUCT FEATURES

- **Utility Grade:** Long life
- High jet stream coherency
- Max jet stream length
- Premier sapphire material quality
- Aerospace grade mounting & retaining materials
- 100% quality inspected

### Natural Diamond

#### PRODUCT FEATURES

- **Performance Grade:** 15 to 20 Times longer life than Sapphire
- 100% tested at 60K psi
- Zero ID edge degradation over use
- Premium jet stream coherency & integrity
- Optimized jet stream length and consistency
- Maximized uptime and productivity

Although Natural Diamond Orifices are most ideal for UHP waterjet cutting applications, sapphire remain a commonly used orifice material. While sapphire, also known as corundum, is still utilized in the industry today for non-critical applications, due to its inherent material characteristics it does not hold up well to impacts from on/off cycles, metal debris from high pressure lines, or abrasive particles that collide with the orifice edges. Any of these impacts can render the jewel useless in an instant. It takes only one impact on the inlet edge of a ruby or sapphire to chip it, causing jet stream quality failure.

**But the natural diamond orifices made by Lasting Diamond (HK) Technology have about 50% less cost than other international competitors, at an affordable price point, allowing you to go the distance with your production without costly downtime to change out unreliable nozzles.**



# Waterjet Orifices List

Lasting Diamond (HK) Technology  
www.waterjetdiamond.com



LASTING PN	Material	Description	OEM PN	Pic
21-XX	Sapphire	FLOW ECL	014201-XX	
21D-XX	Diamond		014155-XX	
22-XX	Sapphire	FLOW Paser3	009519-XX	
22D-XX	Diamond		009519-XX	
23-XX	Sapphire	Standard Mount/ Comadur Type 18	004519-XX	
23D-XX	Diamond		004519-XX	
24-XX	Sapphire	FLOW Paser4	041759-XX	
24D-XX	Diamond		015849-XX	
25-XX	Sapphire	Omax Maxjet5i	303281-XX	
25D-XX	Diamond		305322-XX	
26-XX	Sapphire	Accustream Dialine	12835-XX	
26D-XX	Diamond		12749-XX	
27-XX	Sapphire	KMT Autoline	A22600xx	
27D-XX	Diamond		050770xx	
28-XX	Sapphire	KMT Food- Ggrade Water-only	49888xxx	
28D-XX	Diamond		49888xxx	
29-XX	Sapphire	Accustream A2	11007-XX	
29D-XX	Diamond		11007D-XX	

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LASTING PN	Material	Description	OEM PN	Pic
30-XX	Sapphire	Long Stem	12612D-XXX	
30D-XX	Diamond			
31-XX	Sapphire	Low Mass (FLOW and Accustream version)	003788-XX D-5071-XX	
31D-XX	Diamond			
32-XX	Sapphire	FLOWPaser2	001821-XX	
32D-XX	Diamond			
33-XX	Sapphire	KMT Short Stem, WJS , Comadur Type 27	A22600XX	
33D-XX	Diamond			
35-XX	Sapphire	Jetedge Permalign II	100159-XX 100158-XX	
35D-XX	Diamond			
40-XX	Sapphire	FLOW SIDE FIRE, 94K	043225-XX	
40D-XX	Diamond			
41-XX	Sapphire	GlobalMAX, GLOBALJET	318828-XX 318828-XX	
41D-XX	Diamond			
45-XX	Sapphire	Low Mass, Comadur type 20, DTI- 57		
45D-XX	Diamond			

*Lasting Diamond are in no way affiliated with Flow®, KMT®, Omax®, Jet Edge®, Accustream®, Comadur® and DTI® . Part numbers are for convenience only.*