

hard material matters



Water jet nozzles
Precise - tried and tested - long-lasting



Water cutting technology

Technology:

Cutting with a high power water jet has an ever increasing number of application fields. The cutting principle is based on a water jet focused by means of a nozzle system and the production of extremely high pressure (up to 4,000 bar). The focused water jet reaches a speed of up to 900 m/sec. Depending upon the material which has to be worked, the cutting operation is carried out with pure water or by adding abrasive materials.

Advantages:

The components are cut at room temperature, i.e. no thermal stress occurs. Only one 'tool', the water jet, is applied for all materials. The forces are low so that tension in the components is completely avoided. Virtually all materials up to a thickness of 150 mm can be worked without problems utilising this technology: metallic materials, stone and ceramic, plastic, composite materials, sealing materials and even food. Cleanliness is one of the aspects that has to be pointed out in particular as unlike thermal procedures this technology does not produce any exhaust or other problematic emissions.

Industry sectors:

Water jet technology is mainly applied in the following sectors: mechanical engineering in general, automotive and aerospace industry, packaging industry, medical systems and electrical industry.



The cutting head:

The cutting head is particularly significant for both the result of the cutting operation and process security. One of the key components is the focussing tube which is decisive for the focussing capacity of the abrasive jet. CERATIZIT has in-depth know-how regarding the development and production of focussing tubes. (Picture: cutting head with focussing tube)

CERATIZIT UltraMant focussing tubes

The "UltraMant" brand is synonymous with carbide alloys of utmost wear resistance. The requested cutting quality remains consistent over a long period of application.

Close hole tolerances, perfect grinding and concentricity are additional advantages of the CERATIZIT focussing tube.

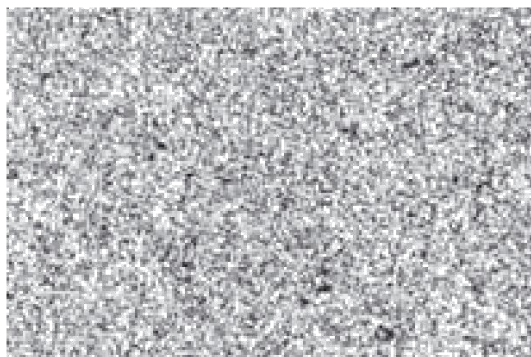
CERATIZIT focussing tubes are suitable for all modern cutting head systems and support automatic centring when clamping the tube. A well-structured warehouse guarantees quick delivery. Extensive technical advice is a part of the service we offer to our customers.



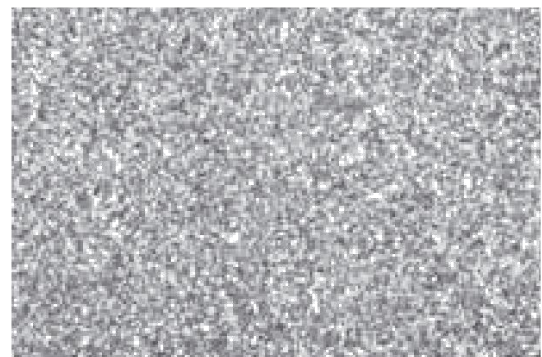
Grade description

Composition and properties:

Grades		Binder	Density	Hardness	Transverse rupture strength
Current designation	old				
		(%)	g/cm ³	HV10	MPa
NANO GRADE					
UltraMant 2000	UMG01	0.4	15.55	2675	2400
NANO GRADE					
UltraMant 3000		0.25	15.60	2825	2000

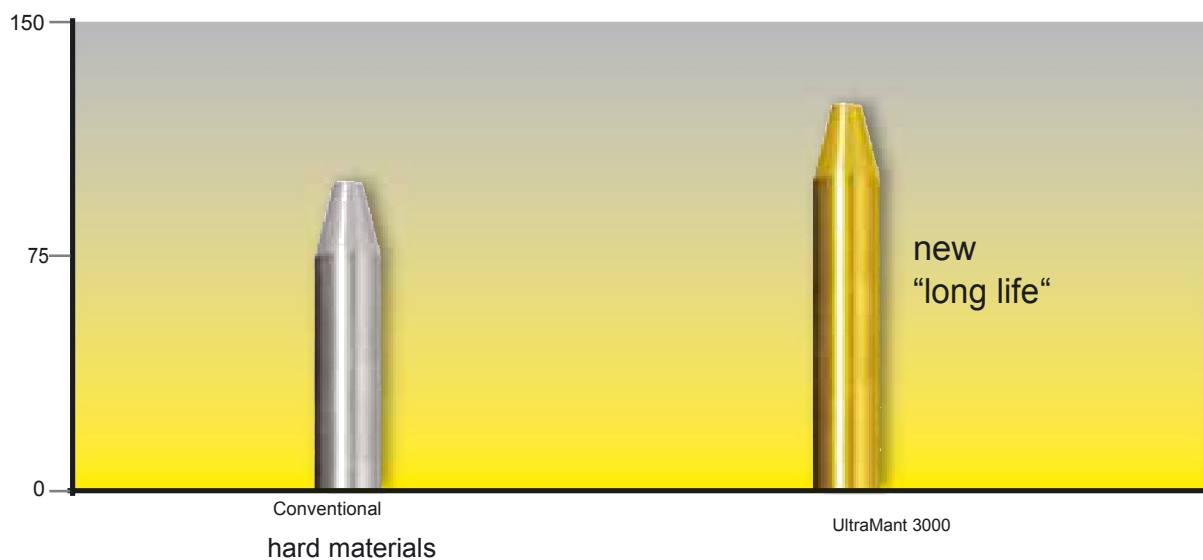


UltraMant 2000

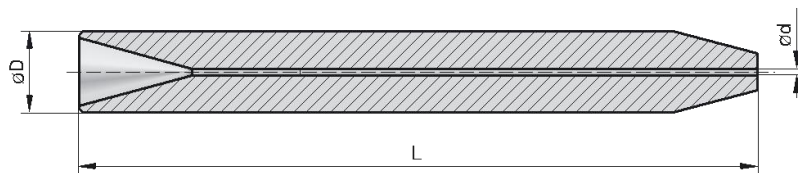


UltraMant 3000
(coated)

Performance diagram:



Focussing nozzles



Type designation	ØD		Ød		L	
	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]
47467	6,00	0.236	0,76	0.030	76,2	3
45786	6,00	0.236	0,80	1/32	70,0	2 3/4
45486	6,00	0.236	1,02	0.040	70,0	2 3/4
47467	6,00	0.236	1,02	0.040	76,2	3
41141	6,35	1/4	0,50	0.020	76,2	3
41141	6,35	1/4	0,60	0.023	76,2	3
44588	6,35	1/4	0,76	0.030	50,8	2
41141	6,35	1/4	0,76	0.030	76,2	3
44588	6,35	1/4	1,02	0.040	50,8	2
41141	6,35	1/4	1,02	0.040	76,2	3
41141	6,35	1/4	1,14	0.045	76,2	3
41141	6,35	1/4	1,20	3/64	76,2	3
41141	6,35	1/4	1,27	0.050	76,2	3
48096	6,69	0.263	0,76	0.030	76,2	3
48096	6,69	0.263	1,02	0.040	76,2	3
48112	6,70	0.264	0,70	0.028	70,0	2 3/4
48543	6,70	0.264	1,00	0.039	70,0	2 3/4
43025	7,14	9/32	0,50	0.020	76,2	3
43025	7,14	9/32	0,76	0.030	76,2	3
48167	7,14	9/32	0,76	0.030	101,6	4
43025	7,14	9/32	1,02	0.040	76,2	3
48167	7,14	9/32	1,02	0.040	101,6	4
43025	7,14	9/32	1,27	0.050	76,2	3
45554	7,62	0.300	1,02	0.040	76,2	3
45554	7,62	0.300	1,27	0.050	76,2	3
45133	7,97	0.313	1,07	0.042	101,6	4
45133	7,97	0.313	0,50	0.020	101,6	4
45133	7,97	0.313	0,76	0.030	101,6	4
42014	9,43	0.371	0,50	0.020	76,2	3
42014	9,43	0.371	0,76	0.030	76,2	3
42014	9,43	0.371	1,02	0.040	76,2	3

Other dimensions upon request



经销商代理证明
深圳斯彼得工业材料有限公司

春保 森拉天时公司

特此证明

深圳斯彼得工业材料有限公司

为

欧洲卢森堡森拉天时有限公司

合法砂管经销代理商.

深圳斯彼得工业材料有限公司 所售卖印有 “SPEED JET” 和 “SPIMC” 商标的砂管

均由本公司核实来源并获得 欧洲森拉天时公司质量保证.

此代理证明书有效期为2022年12月份



Issued by:

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Sales Manager

CBCERATIZIT

