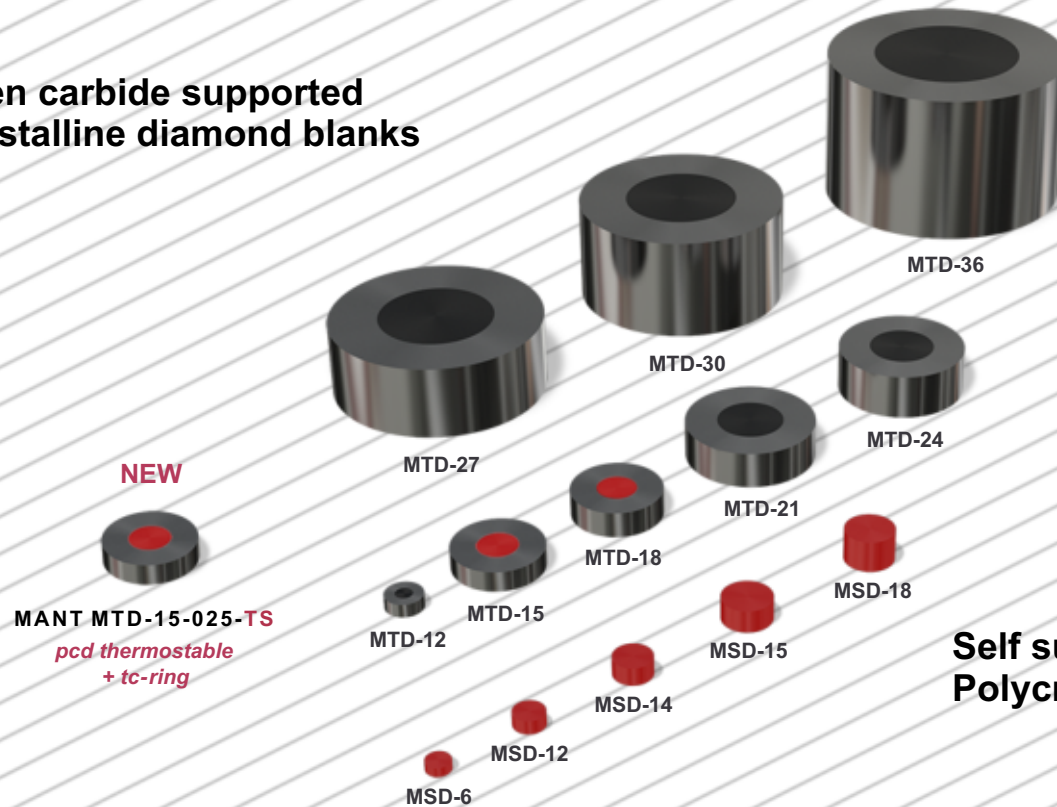


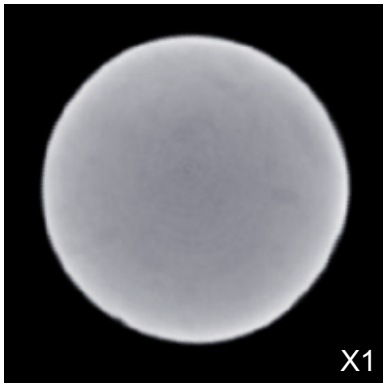


# Perfection and Competence in Diamond

## Tungsten carbide supported Polycrystalline diamond blanks



## Self supported Polycrystalline diamond blanks



left image- RCT, the non-destructive computer-tomographic X-ray leads to a 3-dimensional description of impurities. Inner defects in the range of 0,01 mm are visible and can be found in the course of the following treatment by laser and ultrasonic.

"The samples MANT X1 was free of defects. It showed the best material properties of all probes investigated."  
Dipl.-Ing. Sebastian Pollmans of WZL (Werkzeugmaschinenlabor) of RWTH Aachen University.

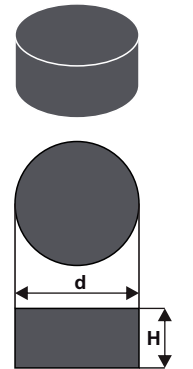
"The product MANT is well proved since more than 10 years. The wire drawing dies made from MANT are established as perfect in the industrial drawing process."  
Uschi Messerschmied, Quality Manager REDIES GERMANY.



# Perfection and Competence in Diamond

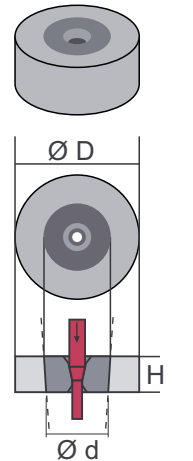
## Polycrystalline diamond blanks

Self supported						
Type	PC Diamond d x H in mm	Max. recomm. Die size in mm	Grain size available			
			1µm	5µm	25µm	40µm
MSD-6	2,5 x 1,0	0,5	x	x	x	
MSD-12	3,2 x 1,5	1,0	x	x	x	
MSD-14	4,0 x 2,0	1,2	x	x	x	
MSD-15	5,2 x 2,5	1,5	x	x	x	x
MSD-18	5,2 x 3,5	2,0	x	x	x	



Also thermostable available.

Tungsten carbide supported						
Type	PC Diamond d x H in mm	Total blank D in mm	Max. recomm. Die size in mm	Grain size available		
				1µm	5µm	25µm
MTD-12	1,8 x 1,5	4,0	0,8			x <sup>1)</sup>
MTD-15	4,2 x 2,3	9,7	1,8	x <sup>1)</sup>	x	x
MTD-18	4,2 x 2,9	9,7	2,3	x <sup>1)</sup>	x	x
MTD-21	7,1 x 4,1	14,0	3,5		x	x
MTD-24	7,1 x 5,1	14,0	4,5		x	x
MTD-27	13,0 x 8,5	24,1	6,0			x <sup>1)</sup>
MTD-30	13,0 x 12,0	24,1	7,5			x <sup>1)</sup>
MTD-31	15,2 x 12,0	26,0	9,0			x <sup>1)</sup>
MTD-33	15,2 x 15,1	26,6	11,2			x <sup>1)</sup>
MTD-36	18,2 x 18,5	30,0	12,7			x <sup>1)</sup>



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Normal PC blanks can be mounted by sintering, brazing or shrink process with temperatures up to 650°C. Thermostable PC blanks can be mounted by sintering process with temperatures up to 1050°C. Max. recommended die size for copper, aluminium and other soft nonferrous wire. Hard wire(steel) should not exceed 65% of this diameter. Order Code = Type + Grain size (example: MTD-24-025, grain size 25 micron). Bigger pcd blanks on request.

<sup>1)</sup> TC-ring cylindrical