

# HSS circular saw blades

HSS CIRCULAR SAW BLADES ARE MADE OF THE FOLLOWING MATERIALS:

"HSS-DMO5" (DIN 1.3343) – SUPER HIGH SPEED STEEL WITH HIGH CONTENT OF TUNGSTEN AND MOLYBDENUM.

"HSS-CO5" (DIN 1.3243) – SUPER HIGH SPEED STEEL CONTAINING 5% OF COBALT IN ADDITION TO THE HIGH CONTENT OF TUNGSTEN AND MOLYBDENUM WHICH IS RECOMMENDED IN APPLICATIONS WITH HIGH OPERATING TEMPERATURES.

WE CAN HELP YOU CHOOSE THE MOST APPROPRIATE BLADE DESIGN, TOOTH GEOMETRY AND COATING FOR YOUR PARTICULAR SAWING REQUIREMENTS.

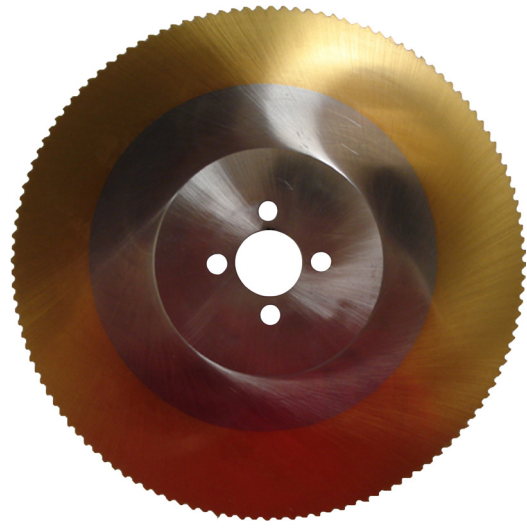
## THE COATINGS

---



### STEAM TREATED

A STEAM TREATED SAW BLADE HAS A FERRIC OXIDE SURFACE COATING FOR A LONGER BLADE LIFE THAN THE BRIGHT SAW BLADE. IT IS MAINLY USED FOR CUTTING STEEL ON MANUAL AND SEMI-AUTOMATIC SAWING MACHINES.



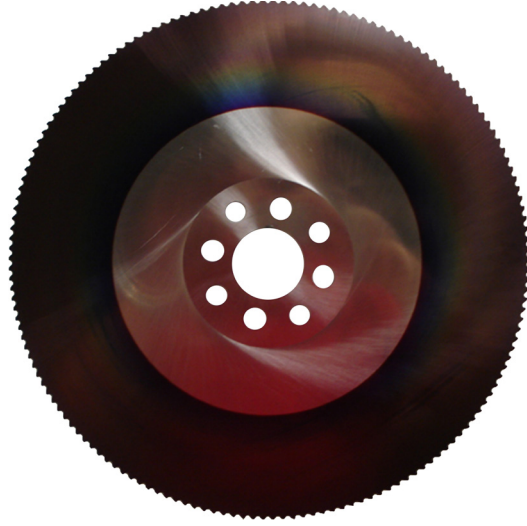
### TIN COATING

COATING WITH A TITANIUM BASE 3 MICRONS THICK. THE HARDNESS OF THE COATED LAYER REACHES 2480 VICKERS. IT IS A COATING SUITABLE FOR CUTTING LOW ALLOY STEEL AND SHOULD ALWAYS BE USED WITH PLENTY OF LUBRICATION. IT IS NOT SUITABLE FOR CUTTING COPPER, BRASS OR BRONZE.



### TICN COATING

COATING 2,5 MICRONS THICK. IT IS MADE BY MEANS OF A PLASMA OF TITANIUM AND CARBON THAT INCREASES THE HARDNESS TO 3000 VICKERS. THE FRICTION COEFFICIENT (0,22) IS VERY LOW DUE TO THE HIGH CARBON CONTENT. THIS MAKES IT VERY SUITABLE FOR CUTTING HIGHLY ABRASIVE MATERIALS SUCH AS STAINLESS STEEL AND MEDIUM ALLOYED STEELS WITH A HARDNESS OF UP TO 800 N/mm<sup>2</sup>. THE LOW FRICTION COEFFICIENT CONSIDERABLY REDUCES CHIPPING AT THE CUTTING EDGE AND THE DISC SIDEWALL.



### TIALN COATING

MULTILAYER COATING 3 MICRONS THICK. THE PLASMA IS OBTAINED FROM THE FUSION OF A TITANIUM/ALUMINIUM CATHODE. AN EXCELLENT COATING THAT GUARANTEE HIGH THERMAL RESISTANCE. IT HAS AN OXIDATION TEMPERATURE OF 800°C RESULTING IN A SURFACE HARDNESS OF 3400 VICKERS. THE FRICTION COEFFICIENT IS 0,45 AND ALLOWS CIRCULAR SAWS TO BE USED WITH EXCELLENT RESULTS EVEN IN CONDITIONS OF LIMITED OR MINIMAL LUBRICATION AND MISTING. IT IS PARTICULARLY SUITED TO HIGH ALLOY STEELS OF UP TO 1100 N/mm<sup>2</sup>, CUTTING CAST IRON, STAINLESS STEEL AND ALL MATERIALS THAT DEVELOP CONSIDERABLE HEAT.

# HSS circular saw blades

## COMMONLY USED DIMENSIONS

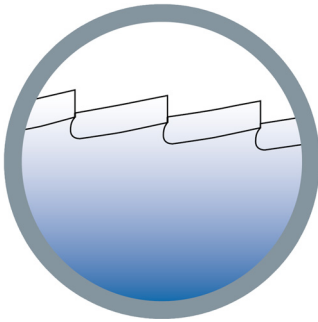
sizes [mm]	central bore [mm]	hub [mm]	pitch (T) and tooth form - corresponding tooth number													
			T3 Bw	T4 Bw	T4,5 Bw	T5 Bw	T5,5 Bw	T6 C	T7 C	T8 C	T9 C	T10 C	T12 C	T14 C	T16 C	T18 C
175x1,2	32	75	180	140		110		90		70						
175x1,5	32	75	180	140		110		90		70						
175x2,0	32	75	180	140		110		90		70						
200x1,0	32	100	200	160		130		100		80		64				
200x1,2	32	100	200	160		130		100		80		64				
200x1,5/1,6	32	90	200	160		130		100		80		64				
200x1,8	32	90	200	160		130		100		80		64				
200x2,0	25,4/32	90	200	160		130		100		80		64				
200x2,5	32	90	200	160		130		100		80		64				
210x2,0	32	90	210	160		130		110		80						
225x1,2	32	100	220	180		140		120		90	80					
225x1,5/1,6	32	90	220	180		140		120		90	80					
225x1,8	32/40	90	220	180		140		120		90	80					
225x1,9/2,0	32/40	90	220	180		140		120		90	80					
225x2,5	32	90	220	180		140		120		90	80					
250x1,0	32	100	250	200		160		128	110	100		80	64			
250x1,2	32	100	250	200		160		128	110	100		80	64			
250x1,5/1,6	32	100	250	200		160		128	110	100		80	64			
250x2,0	25,4/32/40	100	250	200	180	160	140	128	110	100		80	64			
250x2,5	25,4/32/40	100	250	200		160		128	110	100		80	64			
250x3,0	32	100	250	200		160		128	110	100		80	64			
275x1,6	32	100	280	220		180		140	120	110		90				
275x2,0	32/40	100	280	220	200	180	160	140	120	110		90				
275x2,5	25,4/32/40	100	280	220	200	180	160	140	120	110		90				
275x3,0	32/40	100	280	220		180		140	120	110		90				
300x1,6	32/40	100	300	220		180		160	140	120		94	80			
300x2,0	32/40	100	300	220		180		160	140	120		94	80			
300x2,5	32/38/40	100	300	220		180		160	140	120		94	80			
300x3,0	32/40	100	300	220		180		160	140	120		94	80			
315x1,6	32/40	100	300	240		200		160	140	120		100	80	70		
315x2,0	32/40	100	300	240		200		160	140	120		100	80	70		
315x2,5	32/40	100	300	240		200		160	140	120		100	80	70		
315x3,0	32/40	100	300	240		200		160	140	120		100	80	70		
315x3,5	32/40	100	300	240		200		160	140	120		100	80	70		
325x2,0	32/40	120	320	250		200		170		128		100	80			
325x2,5	32/40	120	320	250		200		170		128		100	80			
325x3,0	40	120	320	250		200		170		128		100	80			
350x1,8	32/40/50	120	350	280		220		180	160	140	120	110	90	80		
350x2,0	32/40/50	120	350	280		220		180	160	140	120	110	90	80		
350x2,5	32/40/50	120	350	280		220		180	160	140	120	110	90	80		
350x3,0	32/40/50	120	350	280		220		180	160	140	120	110	90	80		
350x3,5	32/40/50	120	350	280		220		180	160	140	120	110	90	80		
370x2,5	40/50	120		280		220		190	160	140	120	110	90	80	70	
370x3,0	32/40/50	120		280		220		190	160	140	120	110	90	80	70	
370x3,5	40	120		280		220		190	160	140	120	110	90	80	70	
400x2,5	40/50	120		310		250		200		160		120	110	90		70
400x3,0	40/50	120		310		250		200		160		120	110	90		70
400x3,5	40/50	120		310		250		200		160		120	110	90		70
400x4,0	50	120		310		250		200		160		120	110	90		70
425x2,5	40/50	120		320		260		220		160		130	110		80	70
425x3,0	40/50	120		320		260		220		160		130	110		80	70
425x3,5	50	120		320		260		220		160		130	110		80	70
425x4,0	50	120		320		260		220		160		130	110		80	70
450x2,5	40/50	140		350		280		230		180		140	120		90	80
450x3,0	40/50	130		350		280		230		180		140	120		90	80
450x3,5	40/50	130		350		280		230		180		140	120		90	80
450x4,0	40/50	130		350		280		230		180		140	120		90	80
500x3,0	40/50	130				310		260		200		160	130	110	100	90
500x3,5	40/50	130				310		260		200		160	130	110	100	90
500x4,0	40/50	130				310		260		200		160	130	110	100	90
500x5,0	40/50	130				310		260		200		160	130	110	100	90
525x3,5	50	140		410		330		270		210		164	140	110	104	90
525x4,0	50	140		410		330		270		210		164	140	110	104	90
550x4,0	50	140		440		340		280		220		170	140	120	110	90
550x5,0	50	140		440		340		280		220		170	140	120	110	90
570x4,0	50	150		450		360		300		220		180	150	120	110	100
570x5,0	50	150		450		360		300		220		180	150	120	110	100
600x4,0	50	150		460		380		320		240		190	160	130	120	100
600x5,0	50	150		460		380		320		240		190	160	130	120	100

# HSS circular saw blades

## STANDARD PINHOLES

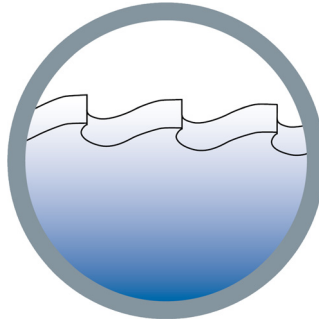
CENTRAL BORE	PINHOLES
ø 32	2-8-45 + 2-9-50 + 2-11-63
ø 32	SLOTS
ø 40	2-8-55 + 4-12-64
ø 50	4-15-80 + 4-14-85

## TOOTH FORM



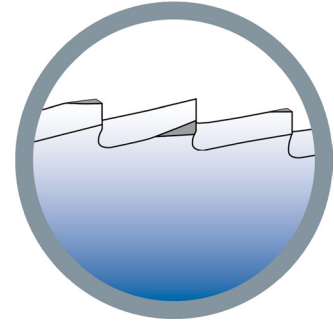
### A SHAPE

NORMALLY USED ON FINE TOOTHING (<T3) FOR APPLICATIONS SUCH AS BRASS ALLOY CUTTING, JEWELLERY AND SCREW SLOTTING.



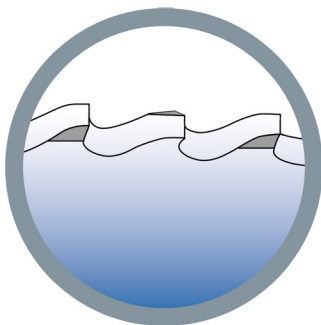
### B SHAPE

NORMALLY USED FOR THIN-WALLED PIPES AND THE CUTTING OF STRUCTURAL SHAPES, ESPECIALLY WHERE CHIP REMOVAL IS NOT AN ISSUE.



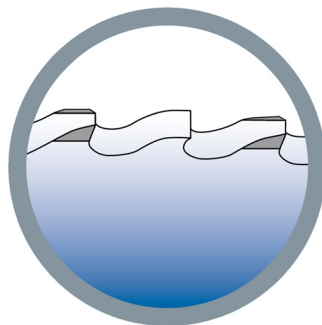
### AW SHAPE

UNLIKE TYPE A, IS ALTERNATELY BEVELLED, THUS OPTIMIZING CHIP SHREDDING. IT IS PARTICULARLY SUITABLE FOR PRECISION CUTTING.



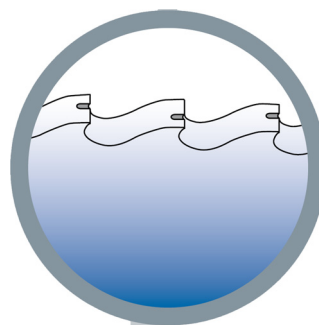
### BW SHAPE

MOSTLY USED FOR CUTTING PIPES AND SECTIONS. THE TOOTH IS ALTERNATELY BEVELLED AT 45°, BREAKS THE CHIP IN TWO AND GUARANTEES GOOD CHIP EVACUATION.



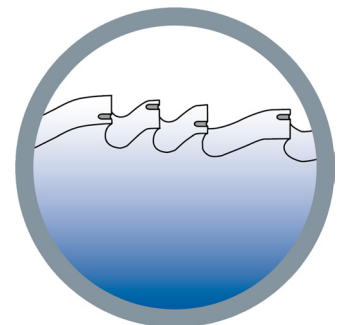
### C SHAPE

USED FOR SOLID SECTIONS OR VERY THICK PIPES. THE CHIP IS SHREDDED INTO THREE PARTS DUE TO THE PRESENCE OF BOTH A FINISHING TOOTH WITHOUT CHAMFER AND A PRE-CUTTING TOOTH (LONGER THAN 0.25 MM) WITH TWO CHAMFERS ON EACH SIDE.



### BR SHAPE

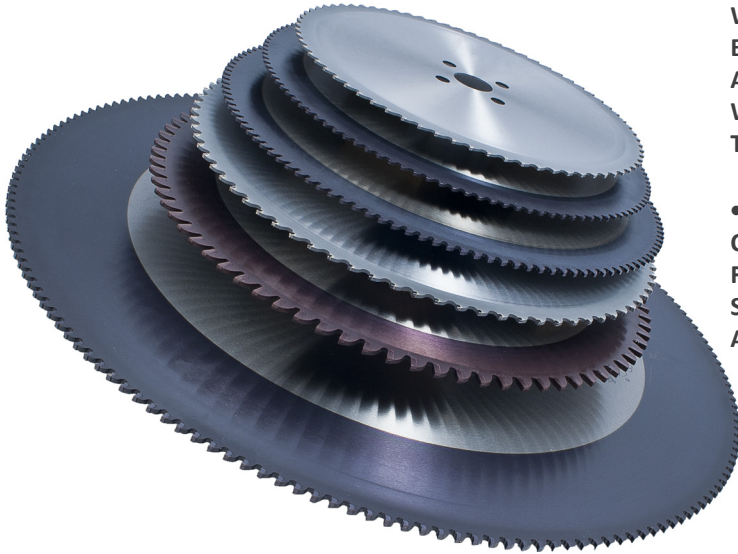
HAS BEEN SUCCESSFULLY INTRODUCED FOR CUTTING PIPES. IT HAS DOUBLE THE NUMBER OF CUTTING EDGES AND GUARANTEES A HIGHER NUMBER OF CUTS AND A BETTER FINISH TO THE SECTION. IT ALSO IMPROVES TOOL DURABILITY BY ABOUT 20% BECAUSE IT REDUCES THE REMOVED SECTION PER EACH SINGLE SHARPENING.



### VP SHAPE

VARIABLE PITCH, IS USED TO CUT VERY IRREGULAR SECTIONS WHICH CAUSE SEVERE VIBRATION AND NOISE. IT GUARANTEES SOFTER CONTACT AND OFFERS A GOOD COMPROMISE BETWEEN CUT DURATION AND REDUCED VIBRATION.

# TCT saw blades



WE SUPPLY TUNGSTEN CARBIDE AND CERMET TIPPED BLADES MADE BY ESTABLISHED PRODUCERS CERTIFIED ACCORDING TO UNI EN ISO 9001:2008 AND EQUIPPED WITH STATE OF THE ART MACHINERY FOR EACH STEP OF THE PRODUCTION PROCESS.

•QUALITY CONTROL OF THE RAW MATERIAL, LASER CUTTING, HEAT TREATMENTS, CNC TENSIONING AND FLATTENING, PRECISION GRINDING, TIPS BRAZING, CNC SHARPENING, 3-D QUALITY CONTROL AND PVD COATING, AND EXPERIENCED SPECIALISTS FOR THE HAMMERING.

THERE ARE SEVERAL DIFFERENT GRADES AND GEOMETRIES OF TIPS, DIFFERENT CVD AND PVD COATINGS TO SUIT THE BEST FOR EACH PARTICULAR REQUEST. SOME OF THE MOST COMMON APPLICATIONS OF THE TCT SAW BLADES ARE:

- CUTTING OF METAL TUBES AND LOW THICKNESS PROFILES
- ORBITAL CUTTING OF METAL TUBES
- CUTTING OF HIGH WALL THICKNESS METAL PROFILES
- CUTTING OF SOLID STEEL

THE TCT SAW BLADES DIAMETERS COULD VARY FROM 100 mm UP TO 2200 mm, WITH A DIVERSITY OF CUTTING THICKNESSES, BLADE BODY THICKNESSES, CENTRAL AND HANDLING HOLES CONFIGURATIONS, AND NUMBER OF TEETH.

# Friction saw blades

WE SUPPLY FRICTION SAW BLADES MADE IN CHROMIUM-WANADIUM 1.2235 OR WOLFRAM-MOLYBDENUM 1.2604, DEPENDING ON THE TEMPERATURE AND THE TYPE OF THE MATERIAL TO BE CUT. DEPENDING ON THE CLIENT'S REQUEST THE BLADES COULD BE FULLY OR PARTIALLY HARDENED , AND THE FLANKS COULD BE GRINDED OR NOT.

WE CAN HELP YOU CHOOSE THE RIGHT BALANCE BETWEEN THE SAW HARDNESS AND THE COMBINATION OF HARDNESS AND TEMPERATURE OF THE MATERIAL TO BE CUT, THE RIGHT TOOTH FORM FOR YOUR MATERIAL TYPE AND CUTTING CONDITIONS.

# After-sale service and maintenance

DIMOTEK LTD. IS ABLE TO PROVIDE TECHNICAL SUPPORT, FROM THE CHOICE OF THE RIGHT TOOL AND PRODUCT FOR YOUR APPLICATION, THE OPTIMIZATION OF THE MACHINE PARAMETERS AND WORKING CONDITIONS FOR SOLVING THE PROBLEMS OF TOOL LIFE, QUALITY OF PRODUCTION OR PRODUCTIVITY, TO THE MAINTENANCE OF THE SUPPLIED PRODUCTS AND THEIR REPAIR (RE-SHARPENING OF HSS SAW BLADES, RECONSTRUCTION OF THE TIPS OF THE TCT SAW BLADES ETC.)

WE ARE WORKING CLOSE TO THE CLIENT AND SIDE BY SIDE WITH THE MANUFACTURER IN ORDER TO PROVIDE BOTH THE BEST OF THE CUSTOMER SERVICE AND THE QUALIFIED TECHNICAL SUPPORT.