

# WOOD&MECHANICS CATALOGUE

***saidtools***  
INNOVATIVE DIAMOND SOLUTIONS

# I nostri punti di forza

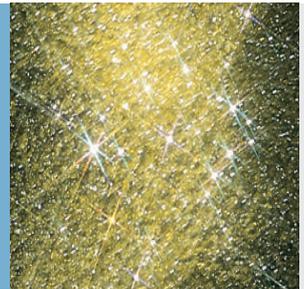
## Our strengths



### IL DIAMANTE | THE DIAMOND

In SAIDTOOLS tutto parte dal diamante, componente "superabrasivo" purissimo capace di offrire prestazioni eccezionali sui più diversi materiali. La sua qualità è controllata e selezionata all'interno dell'azienda per garantire la massima affidabilità.

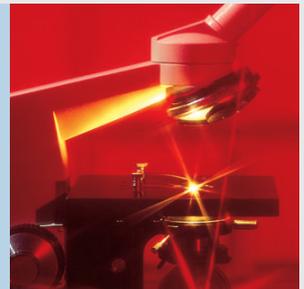
*In SAIDTOOLS everything starts with the diamonds, extremely pure "superabrasive" element able to offer exceptional performance on the most varied materials. The quality is controlled and selected within the company so as to guarantee the maximum reliability.*



### SELEZIONE E COMPOSIZIONE | SELECTION AND COMPOSITION

Il segreto di SAIDTOOLS è basato sulla scelta e nel dosaggio delle polveri metalliche e delle resine impegnate nella produzione della vasta gamma di leganti.

*SAIDTOOLS secret is mainly found in the choice and in the dosage of the metallic powders and of the resins used in the production of a wide range of bonds agents.*



### PRODOTTO E APPLICAZIONI | PRODUCT AND APPLICATIONS

La proposta SAIDTOOLS risponde alle diverse esigenze di taglio, affilatura, levigatura e lucidatura, offrendo soluzioni a tutto tondo sia per la grande industria che per il laboratorio artigiano.

*SAIDTOOLS proposal responds to the various needs of cutting, sharpening, smoothing and polishing, offering overall solutions both for the large industries and for the small craftsman.*

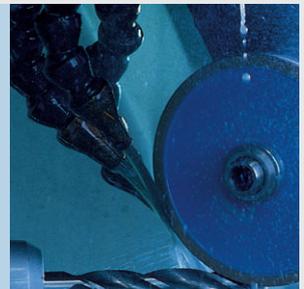


### RICERCA E SERVIZIO | RESEARCH AND SERVICE

La ricerca SAIDTOOLS, alla base dello sviluppo aziendale, viene applicata alle varie richieste provenienti dal mercato.

I nuovi ritrovati, dopo attente verifiche, vengono immediatamente proposti con il supporto di adeguati servizi di consulenza.

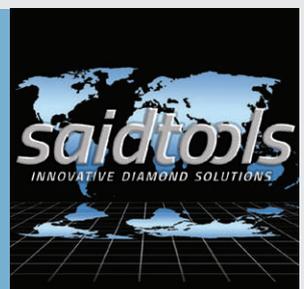
*SAIDTOOLS research, which is the basis of the company development, is applied to all the requests which come from the market. The discoveries, after careful controls, are immediately proposed with all the adequate support of consultancy services.*



### ORGANIZZAZIONE | ORGANIZATION

Il marchio SAIDTOOLS identifica la qualità di una struttura produttiva perfettamente collaudata. Dinamica, flessibile, completa in tutte le sue parti, agisce con tempestività in tutto il mondo.

*SAIDTOOLS mark identifies the quality of a production structure which is perfectly tested. Dynamic, flexible, complete in all its parts it acts with speed in any part of the world.*



## I SUPERABRASIVI

Rispetto alle mole tradizionali, le mole in superabrasivo consentono di ottenere dei processi di rettifica con tempi più ridotti e con costi complessivi inferiori. L'utilizzo delle migliori materie prime, la ricerca di nuovi materiali e l'applicazione di tecnologie all'avanguardia consentono a SAIDTOOLS di portare sul mercato un prodotto progettato, realizzato e confezionato in ITALIA.

### **SUPER-ABRASIVE WHEELS**

*The super-abrasive wheels, if compared to the traditional ones, permit shorter and less expensive grinding operations. The use of the best rough materials, the search for new materials and the application of cutting-edge technologies permit to SAIDTOOLS to propose to the market a product designed, manufactured and packed in ITALY.*

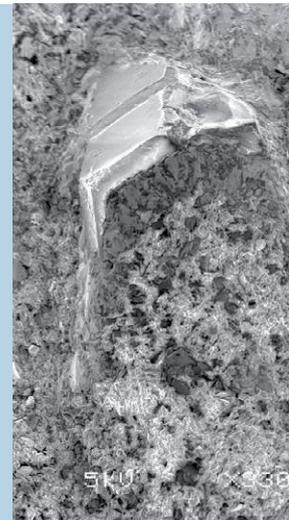


## IL DIAMANTE

Il diamante è il più duro materiale conosciuto. Questa caratteristica ci consente di lavorare con facilità materiali quali la ceramica, cermet, quarzo, vetro e materiali refrattari. Il diamante utilizzato presso la SAIDTOOLS è di tipo artificiale, ottenuto da un processo di sintesi a pressione e temperature elevatissime. Per garantire una migliore adesione alla matrice possono essere utilizzati diamanti ricoperti da un sottile strato di metallo, solitamente Nickel o Rame. L'unico limite del diamante è la sua reattività con i materiali ferrosi, per i quali si deve ricorrere al CBN.

### **DIAMOND**

*Diamond is the hardest material that we know. This permits to work easily materials like ceramic, cermet, quartz, glass and refractory materials. The diamond used at Saidtools is an industrial diamond, obtained from a process of synthesis under very high pressure and temperatures. In order to grant a better adherence to the matrix, sometimes it is used the kind of diamond coated with a thin metal layer, usually nickel or copper. The only limit of the diamond is its reactivity with ferrous materials, so in those cases it is necessary the use of CBN.*



## IL CBN

Il CBN, anche se meno duro del diamante, è caratterizzato da una resistenza chimica superiore. Viene prodotto per sintesi, ed è principalmente utilizzato per la lavorazione di acciai trattati termicamente, ghisa, acciai per molle, HSS e Stellite. Come nel caso del diamante, anche i cristalli di CBN vengono spesso ricoperti di un sottile strato metallico per aumentarne la capacità di ancoraggio e di smaltimento del calore.

### **CBN**

*CBN, even if it is less hard of the diamond, is marked out by a superior chemical durability. It is produced by synthesis, and it is used mainly to grind heat-treated steel, cast iron, steel for springs, HSS and stellite. As for diamond, also CBN crystals are coated by a thin metallic layer in order to increase their capacity of anchorage and heat removing.*



# Specifiche Wheels specifications



## I LEGANTI

Il tipo di legante deve essere scelto in base al tipo di lavorazione e alla quantità di materiale da asportare.

## THE BONDS

The choice of bond type has to be made considering removal rate and type of work.

TIPO DI LEGANTE <i>BOND TYPE</i>	AGGLOMERANTE <i>CEMENT</i>	CAPACITÀ DI ASPORTAZIONE <i>FREEDOM OF CUT</i>	RESISTENZA TERMICA <i>HEAT RESISTANCE</i>	DURATA <i>LIFE</i>	DESIGNAZIONE SAIDTOOLS <i>DESIGNATION</i>
<b>RESINOIDE</b> <i>RESIN BONDED</i>	Resina termoidurente <i>Thermo setting resin</i>	Alta <i>High</i>	Bassa <i>Low</i>	Media <i>Medium</i>	R1-R999
<b>METALLICO IBRIDO</b> <i>HYBRID METAL</i>	Metallo <i>Metal</i>	Alta <i>High</i>	Media <i>Medium</i>	Alta <i>High</i>	MX1-MX999
<b>METALLICO</b> <i>METAL BOND</i>	Metallo <i>Metal</i>	Bassa <i>Low</i>	Alta <i>High</i>	Altissima <i>Excellent</i>	M1-M999
<b>GALVANICO</b> <i>GALVANIC</i>	Metallo <i>Metal</i>	Alta <i>High</i>	Alta <i>High</i>	Media <i>Medium</i>	E1-E999
<b>VETRIFICATO</b> <i>VETRIFIED</i>	Vetro <i>Glass</i>	Altissima <i>Excellent</i>	Altissima <i>Excellent</i>	Media <i>Medium</i>	V1-V999

## PARAMETRI DI RETTIFICA:

Il parametro più importante per la rettifica è la velocità di taglio ( $V_t$ ) che si calcola con la seguente equazione:

The most important grinding parameter is the peripheral speed ( $V_t$ ), that could be calculated as follow:  $V_t = \pi \times D \times n / 60000$

$\pi = 3.14159265359$  -  $D$  = diametro della mola, espresso in mm/wheel diameter (mm)

$N$  = Numero di giri al minuto/RPM

Un altro parametro molto importante riguarda il rendimento della rettifica ( $G$ ), che ci consente di misurare la durata della mola:

Another important parameter is the G-Factor that is connected to the

life of the wheel :  $G = V_w / V_s$

$V_w$  = Volume di mola consumata (cm<sup>3</sup>)/Wheels Wear (cm<sup>3</sup>) -  $V_s$  = Volume di materiale asportato (cm<sup>3</sup>)/Total amount of material removed (cm<sup>3</sup>)

Il coefficiente  $Q'w$  ci consente di capire la quantità di materiale che stiamo asportando nell'unità di tempo.

The Specific material removal rate  $Q'w$  is the the volume of material removed from a work piece in a defined time:  $Q'w = F * Ae / 60$

$F$  = Avanzamento (mm/min)/ Feedrate (mm/min) -  $Ae$  = Profondità di passata (mm)/ Grinding depth (mm)

## LA GRANA

La scelta della granulometria influisce pesantemente sulla finitura e sulla quantità di materiale asportabile. Lo standard europeo FEPA definisce la grana in base al diametro medio dei cristalli misurati. La grana viene espressa in  $\mu m$  (micron).

## GRIT SIZE

The choice of the granulometry affects on the finishing and the quantity of the material that can be removed quite heavily. FEPA European standards define the grit according to the medium diameter of the crystals that have been measured. The grit is expressed in  $\mu m$  (micron).

IMPIEGO <i>APPLICATION</i>	GRANE FEPA <i>FEPA GRIT</i>
<b>SGROSSATURA</b> <b>ROUGHING</b>	252
	213
	181
	151
	126
<b>SEMIFINITURA</b> <b>SEMI - FINISHING</b>	107
	91
	76
<b>FINITURA</b> <b>FINISHING</b>	64
	54
	46
<b>LAPPATURA</b> <b>LAPPING</b>	30
	20
	15
	9

Seguendo lo standard FEPA, SAIDTOOLS propone le geometrie più diffuse e ottimizzate per migliorarne l'ergonomia.  
*Following the standard FEPA, SAIDTOOLS offers the most widely used shapes to improve ergonomics.*



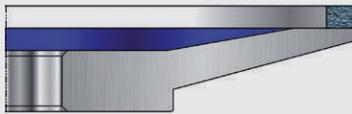
4BT9



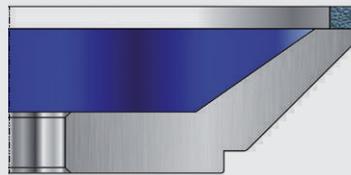
4ET9



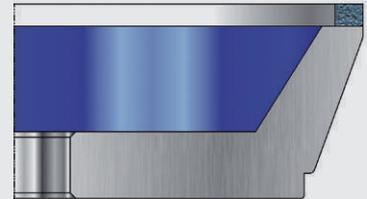
4A2



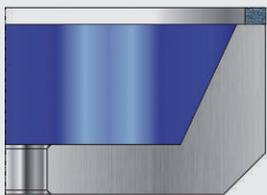
12A2 20°



12A2 45°



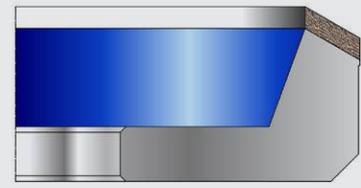
11A2



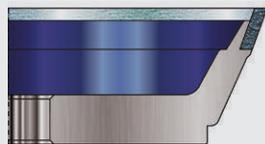
6A2



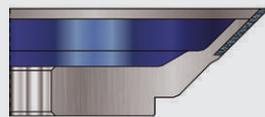
6A9



6V5



11V9



12V9 45°



12V2



6AA9

# Le geometrie Wheel shapes



Seguendo lo standard FEPA, SAIDTOOLS propone le geometrie più diffuse e ottimizzate per migliorarne l'ergonomia.  
*Following the standard FEPA, SAIDTOOLS offers the most widely used shapes to improve ergonomics.*



1A1W



1A1R



14A1



1A1



3A1



1A1F



14E1



14V1



1V1



14F1



14AA1



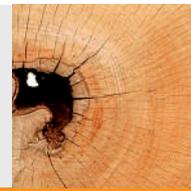
14D1



14VR



14S1



## LEGNO | WOOD WORKING

### WOOD

#### LAME CIRCOLARI / SAW BLADE

##### AFFILATURA PETTO / FACE SHARPENING

12V2 .....	Pg. 8
1A1W .....	Pg. 8

##### AFFILATURA DORSO / BACK SHARPENING

6AA9 .....	Pg. 8
14AA1 .....	Pg. 9
14A1 .....	Pg. 9

#### LAME A NASTRO / BAND SAW

##### AFFILATURA DENTE / TOOTH SHARPENING

14VR .....	Pg. 9
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#### FRESE SALDOBRSATE / BRAZED TOOLS

##### PROFILATURA CNC / CNC PROFILING

14F1.....	Pg. 10
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#### FRESE SALDOBRSATE / BRAZED TOOLS

##### AFFILATURA PETTO / FACE SHARPENING

12A2 20°.....	Pg. 10
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### FAST ONE

#### COLTELLINI / KNIVES

##### PROFILATURA CNC / CNC PROFILING

14F1, 14EF1.....	Pg. 11
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### WOOD

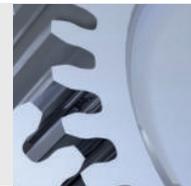
#### COLTELLI PIALLA / KNIVES

##### AFFILATURA PETTO / FACE SHARPENING

6A2.....	Pg. 11
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#### UTENSILI IN PCD / PCD TOOLS

6A2E, 1A1E, 14F1.....	Pg. 12
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## MECCANICA | METAL WORKING

### SPARK

#### FRESE-PUNTE / MILLS - DRILLS

##### TAGLIO / CUT

1A1R .....	Pg. 14
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##### AFFILATURA MANUALE / MANUAL SHARPENING

11V9 - 12V9 45°.....	Pg. 14
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##### RETTIFICA / GRINDING

14A1 - 1A1 - 6A2 .....	Pg. 15
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### FLUSS

#### UTENSILI-STAMPI / TOOLS - MOLDS

##### RETTIFICA / GRINDING

14A1 - 1A1 .....	Pg. 16
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### CNC

#### FRESE-PUNTE / MILLS - DRILLS

##### AFFILATURA - COSTRUZIONE CNC / CNC SHARPENING - CONSTRUCTION

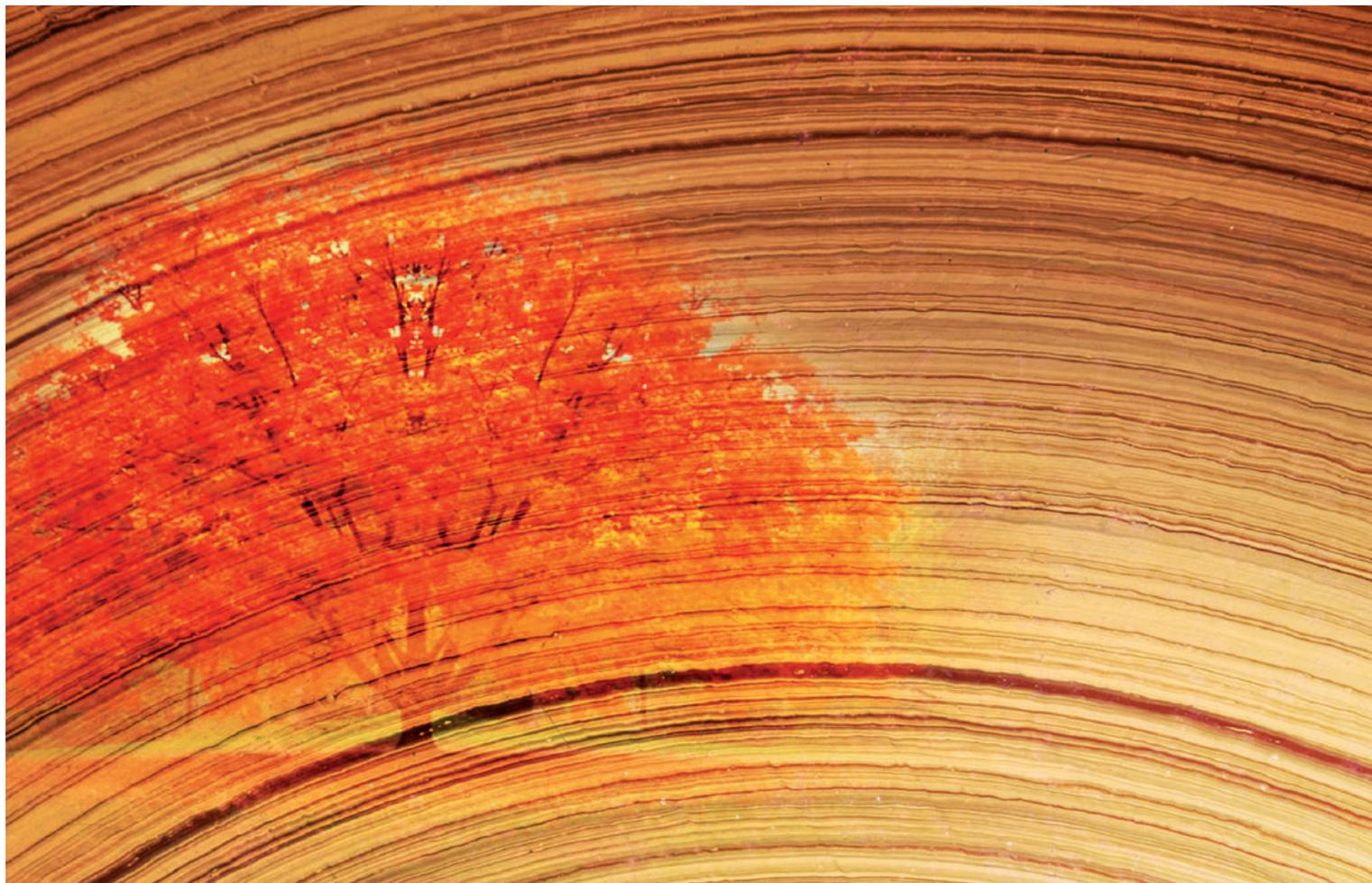
11V9 - 12V9 45° .....	Pg. 18
14A1 - 1A1 .....	Pg. 18/19
14V1 - 1V1 .....	Pg. 20
14F1 .....	Pg. 21
11A2 .....	Pg. 22

### SHARP

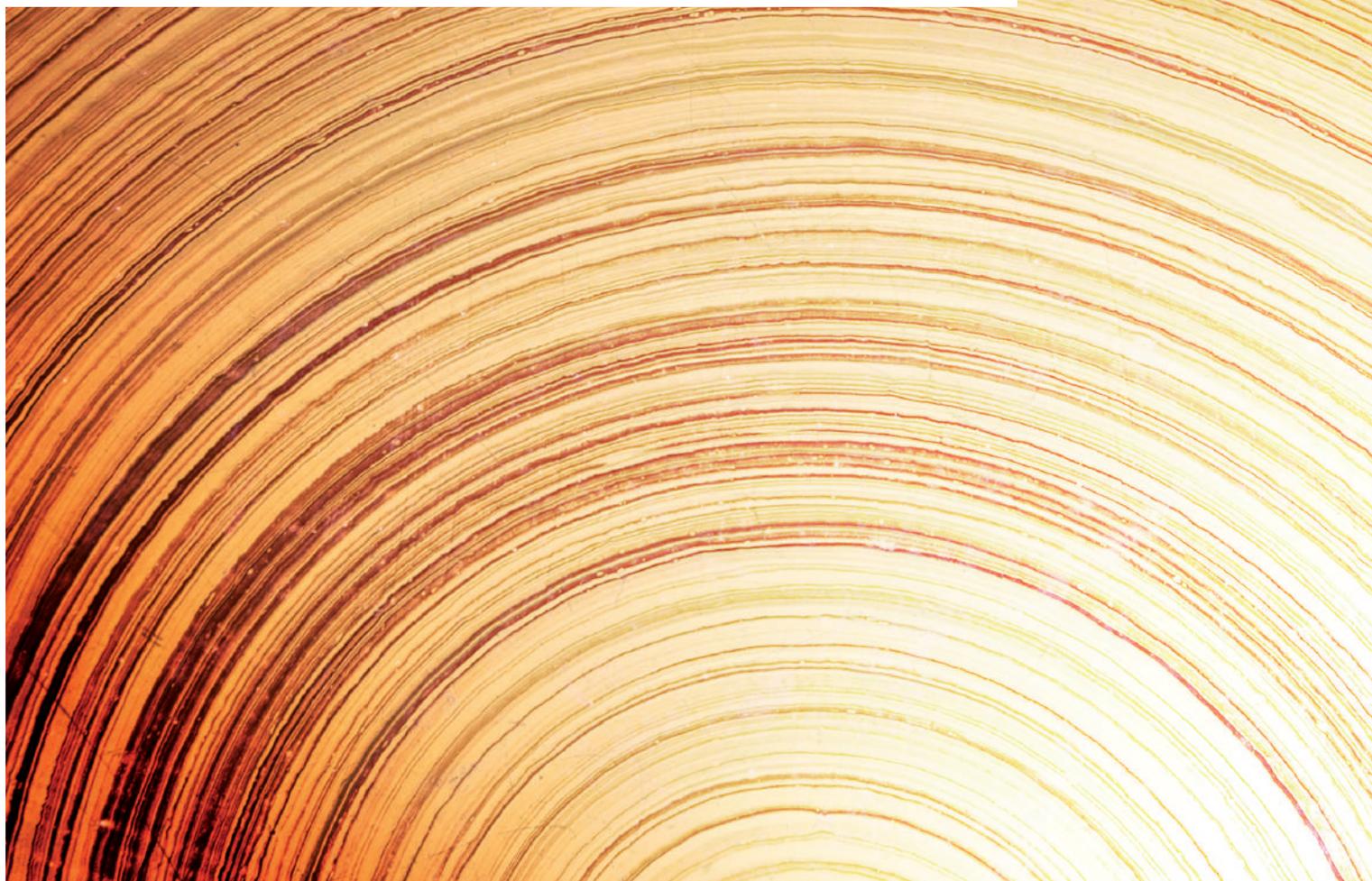
#### LAME CIRCOLARI / CIRCULAR SAW

##### AFFILATURA - COSTRUZIONE CNC / CNC SHARPENING - CONSTRUCTION

1A1R.....	Pg. 23
14F1.....	Pg. 23



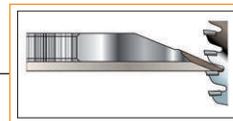
**LEGNO** | Costruzione e affilatura utensili per il legno  
**WOOD WORKING** | *Construction and sharpening tools for wood*



**LAME CIRCOLARI / SAW BLADE**

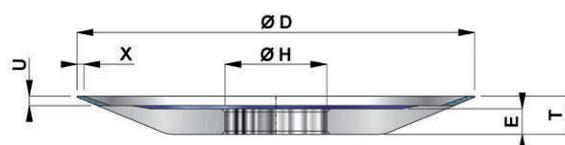
WOOD

AFFILATURA PETTO / FACE SHARPENING



Forma Shape	Ø D	U	X	Ø H	T	E
12V2	75	3	3	25	11	8
12V2	100	3	3	25 CH	11	8
12V2	125	3	3	25 CH	12	9
12V2	125	3	3	32	12	9
12V2	150	3	3	32	12	10
12V2	160	3	3	32	12	9
12V2	175	3	3	32 CH	12	10
12V2	175	3	3	50,8+3F	12	9
12V2	200	3	3	32+1	12	10

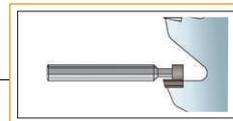
12V2



**LAME CIRCOLARI / SAW BLADE**

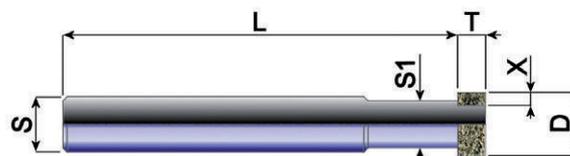
WOOD

AFFILATURA PETTO / FACE SHARPENING



Forma Shape	Ø D	U	X	S	L
1A1W	6	4	1,5	6	40
1A1W	6	6	1,5	6	40
1A1W	7	4	2	6	40
1A1W	7	6	2	6	40

1A1W



**LAME CIRCOLARI / SAW BLADE**

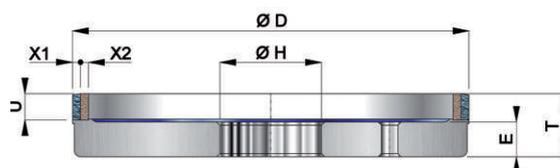
WOOD

AFFILATURA DORSO / BACK SHARPENING



Forma Shape	Ø D	X1+X2	U	Ø H	T	E
6AA9	75	2,5+2,5	6	25	17	9
6AA9	100	2,5+2,5	8	25 CH	20	7
6AA9	125	2,5+2,5	8	32+1F	20	11

6AA9

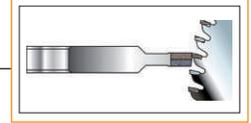


**LAME CIRCOLARI / SAW BLADE**

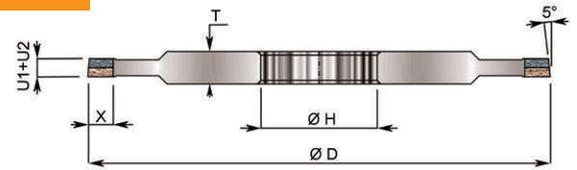
Forma Shape	Ø D	U1+U2	X	Ø H	T
14AA1	127	2,5+2,5	7	32	9
14AA1	150	2,5+2,5	8	32	10
14AA1	175	2,5+2,5	7	32	10
14AA1	200	2,5+2,5	8	32	10

WOOD

AFFILATURA PETTO / FACE SHARPENING



14AA1

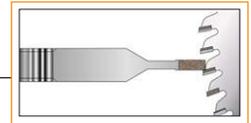


**LAME CIRCOLARI / SAW BLADE**

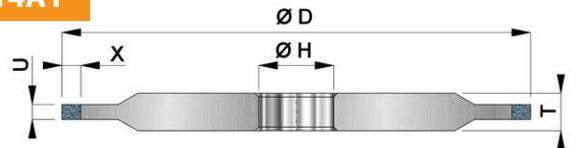
Forma Shape	Ø D	U	X	Ø H
14A1	150	3	6	20
14A1	150	4	6	20

WOOD

SCARICO DORSO / REFIL GRINDING



14A1



**LAME A NASTRO / BAND SAW**

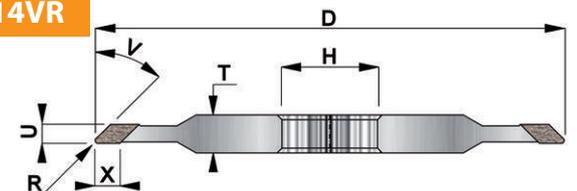
Forma Shape	Ø D	U	X	V	R	H	T
14VR	150	4	7	40°	1	20	10
14VR	150	4	7	40°	1	32	10
14VR	200	4	7	40°	1	20	10

WOOD

AFFILATURA DENTE / TOOTH SHARPENING



14VR



**FRESE SALDOBRASATE / BRAZED TOOLS**

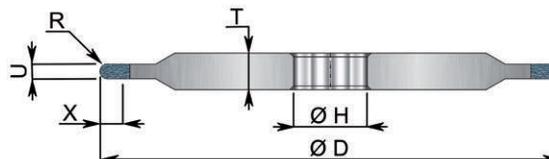
WOOD

PROFILATURA CNC / CNC PROFILING



Forma Shape	Ø D	U	X	R	T
14F1	175	1,5	7	0,75	8
14F1	175	2	7	1	8
14F1	175	3	7	1,5	8
14F1	175	4	7	2	8
14F1	200	1,5	7	0,75	12
14F1	200	2	7	1	12
14F1	200	3	7	1,5	12
14F1	200	4	7	2	12

14F1



PROFILATURA MANUALE / MANUAL PROFILING

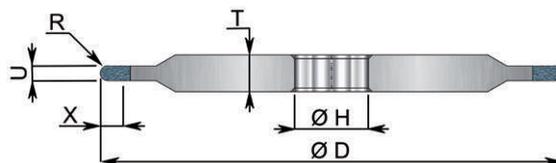
WOOD



**FRESE SALDOBRASATE / BRAZED TOOLS**

Forma Shape	Ø D	U	X	R	T
14F1	200	1,5	7	0,75	12
14F1	200	2	7	1	12
14F1	200	4	7	2	12
14F1	225	1,5	7	0,75	5
14F1	225	2	7	1	5
14F1	225	4	7	2	5
14F1	250	1,5	7	0,75	8
14F1	250	2	7	1	8
14F1	250	4	6	2	8

14F1



AFFILATURA PETTO / FACE SHARPENING

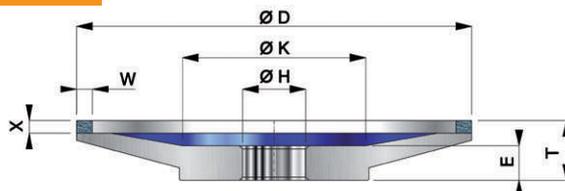
WOOD



**FRESE SALDOBRASATE / BRAZED TOOLS**

Forma Shape	Ø D	W	X	Ø H	T	E
12A2 20°	150	6	4	20	20	9
12A2 20°	175	6	4	20	20	9
12A2 20°	200	6	4	20	22	10

12A2 20°



**COLTELLI A PIALLA / KNIVES**

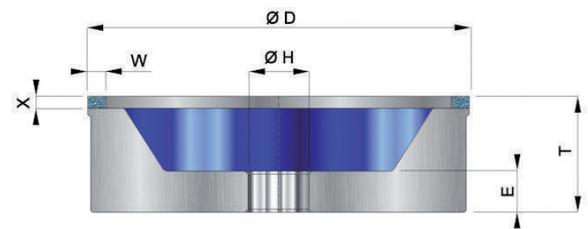
WOOD

AFFILATURA / SHARPENING



Forma Shape	Ø D	W	X	T	E
6A2	125	5	4	40	15
6A2	150	6	4	49	18
6A2	150	6	5	50	18
6A2	175	6	4	55	15
6A2	175	6	4	55	15
6A2	175	6	5	56	15
6A2	200	6	4	50	15
6A2	200	6	4	50	15
6A2	200	6	4	50	15
6A2	250	6	4	50	15
6A2	250	6	4	50	15

6A2



**COLTELLINI A GETTARE / HM KNIVES**

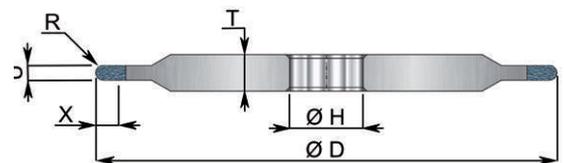
FAST ONE

PROFILATURA CNC / CNC PROFILING



Forma Shape	Sagoma Profile	Ø D	U	X	R	Ø H	T	E
14F1		200	3	7	1,5	20-50	12	12
14F1		200	2	7	1	20-50	12	12
14EF1		200	2	7	V=20° R=0,4	20-50	12	12
14F1		300	3	7	1,5	20-50	37	23
14F1		300	2	7	1	20-50	37	23
14EF1		300	2	7	V=20° R=0,4	20-50	37	23

14F1 - 14EF1



**UTENSILI IN PCD / PCD TOOLS**

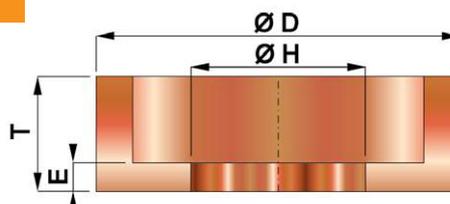
WOOD

LAVORAZIONE FRONTALE / FACE



Forma Shape	Ø D	T	Ø H	E
6A2E	125	40	60	10
6A2E	125	40	20	10

**6A2E**



**UTENSILI IN PCD / PCD TOOLS**

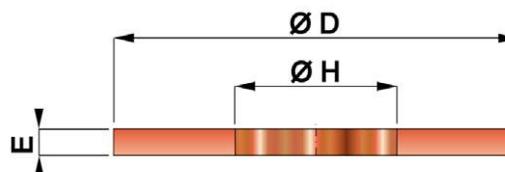
WOOD

LAVORAZIONE PERIFERICA / PERIPHERAL



Forma Shape	Ø D	T	Ø H
1A1E	50	5	10 - 15
1A1E	50	10	10 - 15
1A1E	50	15	10 - 15
1A1E	80	5	10 - 15
1A1E	80	10	10 - 15
1A1E	150	5	20 - 60
1A1E	150	10	20 - 60
1A1E	175	5	20 - 60
1A1E	175	10	20 - 60

**1A1E**



**UTENSILI IN PCD / PCD TOOLS**

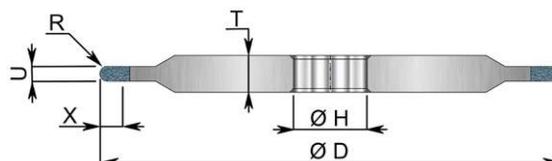
WOOD

SCARICO SECONDA SPOGLIA / BACK GRINDING



Forma Shape	Ø D	U	X	R	Ø H
14F1	125	2	6	1	60
14F1	125	3	6	1,5	60
14F1	125	5	6	2,5	60

**14F1**





**MECCANICA** | Costruzione e affilatura utensili per il metallo  
**METAL WORKING** | *Construction and sharpening tools for metal*



**FRESE-PUNTE / MILLS-DRILLS**

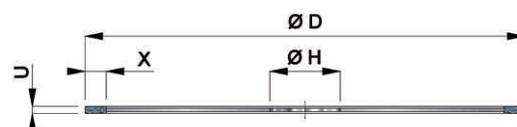
SPARK

TAGLIO / CUT OFF



Forma Shape	Ø D	U	X	T
1A1R	100	1	6	0,8
1A1R	125	1,2	6	0,8
1A1R	150	1,2	6	0,8
1A1R	175	1,3	6	1
1A1R	200	1,3	6	1
1A1R	250	1,5	5	1,3

**1A1R**



**FRESE-PUNTE / MILLS-DRILLS**

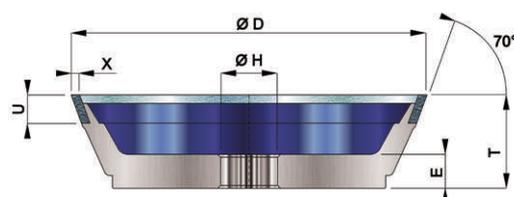
SPARK

AFFILATURA MANUALE / MANUAL SHARPENING



Forma Shape	Ø D	X	U	Ø H	T	E
11V9	75	2	10	20	30	10
11V9	75	3	10	20	30	10
11V9	100	2	10	20	32	12
11V9	100	3	10	20	32	12
11V9	125	2	10	20	32	12
11V9	125	3	10	20	32	12

**11V9**



AFFILATURA MANUALE / MANUAL SHARPENING

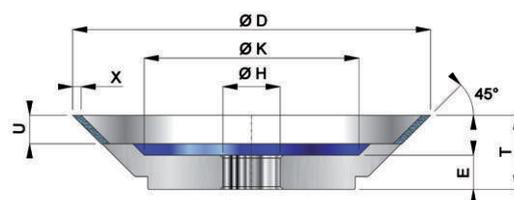


**FRESE-PUNTE / MILLS-DRILLS**

SPARK

Forma Shape	Ø D	X	U	Ø H	T	E
12V9 45°	75	2	10	20	20	10
12V9 45°	75	3	10	20	20	10
12V9 45°	100	2	10	20	25	12
12V9 45°	100	3	10	20	25	12
12V9 45°	125	2	10	20	25	12
12V9 45°	125	3	10	20	25	12
12V9 45°	150	2	10	20	25	12
12V9 45°	150	3	10	20	25	12

**12V9 45°**



RETTIFICA / GRINDING

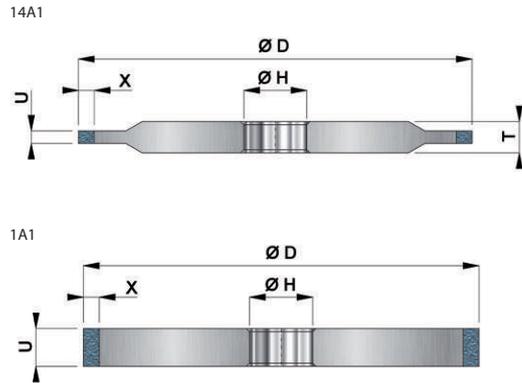
**UTENSILI / TOOLS**

SPARK



Forma Shape	Ø D	U	X	Ø H	T
14A1	75	2/4/6	6	20	6/8/10
14A1	75	8/10	6	20	10
1A1	75	12/15/20	6	20	12/15/20
14A1	100	2/4/6	6	20	12
14A1	100	8/10	6	20	12
1A1	100	12/15/20	6	20	12/15/20
14A1	125	2/4/6	6	20	12
14A1	125	8/10	6	20	12
1A1	125	12/15/20	6	20	12/15/20
14A1	150	2/4/6	6	20	12
14A1	150	8/10	6	20	12
1A1	150	12/15/20	6	20	12/15/20

**14A1 - 1A1**



RETTIFICA / GRINDING

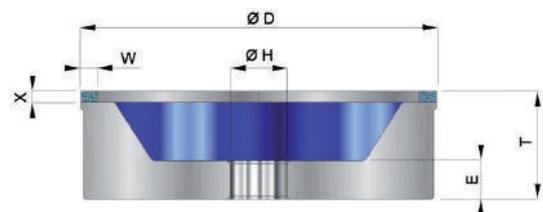
**UTENSILI / TOOLS**

SPARK



Forma Shape	Ø D	W	X	Ø H	T
6A2	75	5/10	4	20	30
6A2	100	5/10	4	20	30
6A2	125	5/10	4	20	30
6A2	150	6/10/15/20	6	20	50

**6A2**



RETTIFICA / GRINDING

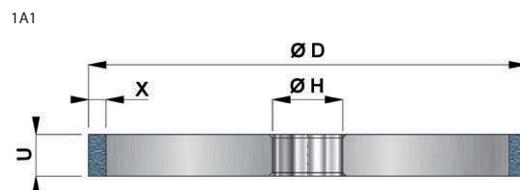
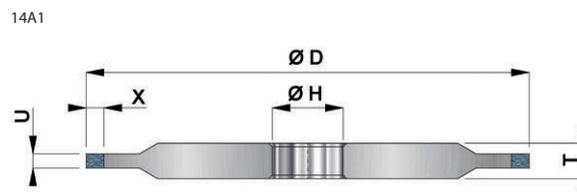
**UTENSILI - STAMPI / TOOLS - MOLDS**

FLUSS



**14A1 - 1A1**

Forma Shape	Ø D	U	X	Ø H	T	E
14A1	175	6	6	20	12	
1A1	175	12	6	20	12	
1A1	175	20	6	20	20	
14A1	200	6	6	32	12	
1A1	200	12	6	32	12	
1A1	200	20	6	32	20	
1A1	200	30	6	32	30	
14A1	250	6	6	76	12	
1A1	250	12	6	76	12	
1A1	250	20	6	76	20	
1A1	250	30	6	76	30	
14A1	300	12	6	127	20	
1A1	300	20	6	127	20	
1A1	300	30	6	127	30	
14A1	350	12	6	127	20	
1A1	350	20	6	127	20	
1A1	350	30	6	127	30	
14A1	400	12	7	127	20	
1A1	400	20	7	127	20	
1A1	400	30	7	127	30	
14A1	500	12	7	127	20	
1A1	500	20	7	127	20	
1A1	500	30	7	127	30	



A close-up photograph of a CNC machine's robotic arm. The arm is black with orange joints and is holding a silver metal drill bit. The background is a blurred blue industrial setting. A green gradient bar is at the bottom left, containing the text 'CNC'.

**CNC**

**FRESE - PUNTE / MILLS - DRILLS**

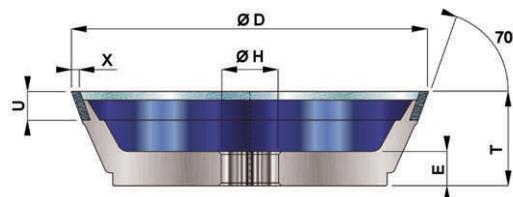
AFFILATURA - COSTRUZIONE CNC / CNC SHARPENING - CONSTRUCTION

CNC



Forma Shape	Ø D	X	U	Ø H	T	E
11V9	75	2	10	20	30	10
11V9	75	3	10	20	30	10
11V9	100	2	10	20	32	12
11V9	100	3	10	20	32	12
11V9	125	2	10	20	32	12
11V9	125	3	10	20	32	12

**11V9**



**FRESE - PUNTE / MILLS - DRILLS**

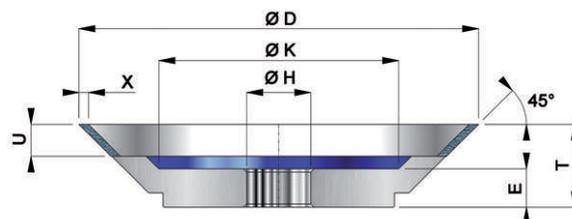
AFFILATURA - COSTRUZIONE CNC / CNC SHARPENING - CONSTRUCTION

CNC



Forma Shape	Ø D	X	U	Ø H	T	E
12V9 45°	75	2	10	20	20	10
12V9 45°	75	3	10	20	20	10
12V9 45°	100	2	10	20	25	12
12V9 45°	100	3	10	20	25	12
12V9 45°	125	2	10	20	25	12
12V9 45°	125	3	10	20	25	12

**12V9 45°**



**FRESE - PUNTE / MILLS - DRILLS**

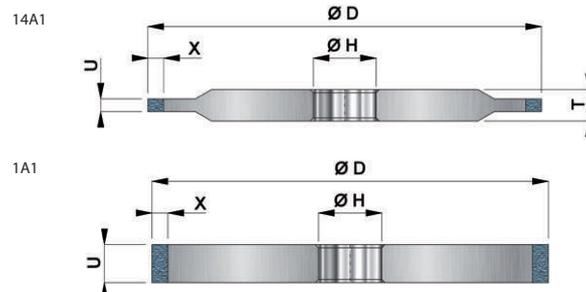
AFFILATURA - COSTRUZIONE CNC / CNC SHARPENING - CONSTRUCTION

CNC



Forma Shape	Ø D	U	X	Ø H	T
14A1	75	6	6/10	20	12
14A1	75	8	6/10	20	12
14A1	75	10	6/10	20	12
1A1	75	12	6/10	20	12
1A1	75	14	6/10	20	14
1A1	75	16	6/10	20	16
1A1	75	20	6/10	20	20

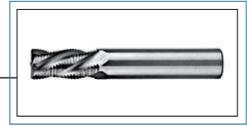
**14A1 / 1A1**



AFFILATURA - COSTRUZIONE CNC / CNC SHARPENING - CONSTRUCTION

**FRESE - PUNTE / MILLS - DRILLS**

CNC



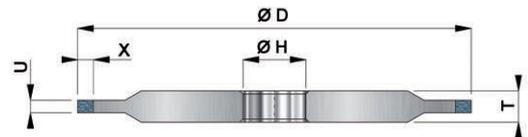
**14A1 / 1A1**

Forma Shape	Ø D	U	X	Ø H	T
14A1	100	6	6/10	20	12
14A1	100	8	6/10	20	12
14A1	100	10	6/10	20	12
1A1	100	12	6/10	20	12
1A1	100	14	6/10	20	14
1A1	100	16	6/10	20	16
1A1	100	20	6/10	20	20

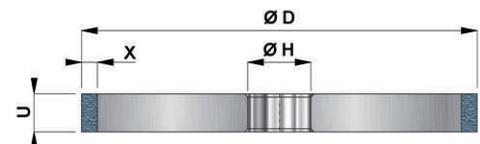
Forma Shape	Ø D	U	X	Ø H	T
14A1	125	6	6/10	20	12
14A1	125	8	6/10	20	12
14A1	125	10	6/10	20	12
1A1	125	12	6/10	20	12
1A1	125	14	6/10	20	14
1A1	125	16	6/10	20	16
1A1	125	20	6/10	20	20

Forma Shape	Ø D	U	X	Ø H	T
14A1	150	6	6/10	20	12
14A1	150	8	6/10	20	12
14A1	150	10	6/10	20	12
1A1	150	12	6/10	20	12
1A1	150	14	6/10	20	14
1A1	150	16	6/10	20	16
1A1	150	20	6/10	20	20

14A1



1A1



AFFILATURA - COSTRUZIONE CNC / CNC SHARPENING - CONSTRUCTION

**FRESE - PUNTE / MILLS - DRILLS**

CNC



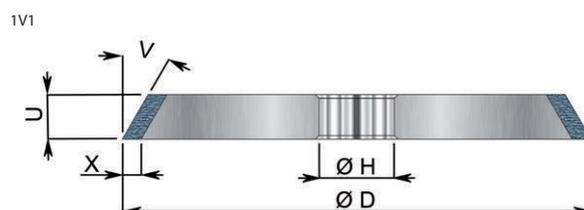
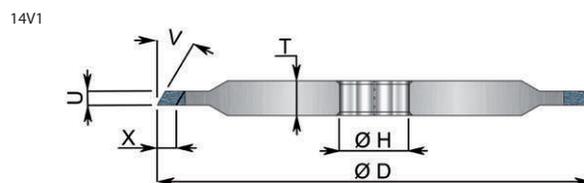
**14V1 / 1V1**

Forma Shape	Ø D	U	X	Ø H	T	V
14V1	75	6	6/10	20	12	2-55°
14V1	75	8	6/10	20	12	2-55°
14V1	75	10	6/10	20	12	2-55°
1V1	75	12	6/10	20	12	2-55°
1V1	75	14	6/10	20	14	2-55°
1V1	75	16	6/10	20	16	2-55°
1V1	75	20	6/10	20	20	2-55°

Forma Shape	Ø D	U	X	Ø H	T	V
14V1	100	6	6/10	20	12	2-55°
14V1	100	8	6/10	20	12	2-55°
14V1	100	10	6/10	20	12	2-55°
1V1	100	12	6/10	20	12	2-55°
1V1	100	14	6/10	20	14	2-55°
1V1	100	16	6/10	20	16	2-55°
1V1	100	20	6/10	20	20	2-55°

Forma Shape	Ø D	U	X	Ø H	T	V
14V1	125	6	6/10	20	12	2-55°
14V1	125	8	6/10	20	12	2-55°
14V1	125	10	6/10	20	12	2-55°
1V1	125	12	6/10	20	12	2-55°
1V1	125	14	6/10	20	14	2-55°
1V1	125	16	6/10	20	16	2-55°
1V1	125	20	6/10	20	20	2-55°

Forma Shape	Ø D	U	X	Ø H	T	V
14V1	150	6	6/10	20	12	2-55°
14V1	150	8	6/10	20	12	2-55°
14V1	150	10	6/10	20	12	2-55°
1V1	150	12	6/10	20	12	2-55°
1V1	150	14	6/10	20	14	2-55°
1V1	150	16	6/10	20	16	2-55°
1V1	150	20	6/10	20	20	2-55°



AFFILATURA - COSTRUZIONE CNC / CNC SHARPENING - CONSTRUCTION

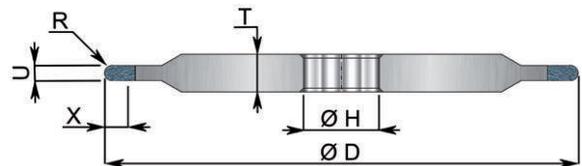
## FRESE - PUNTE / MILLS - DRILLS

CNC



14F1

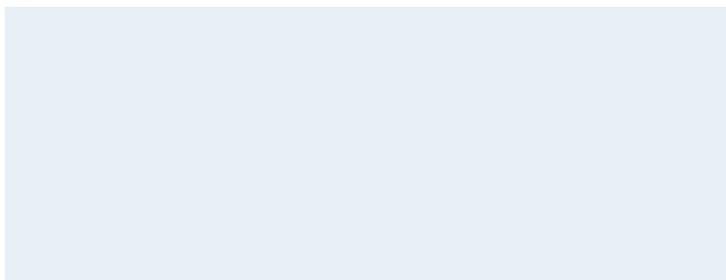
Forma Shape	Ø D	U	X	R	Ø H	T
14F1	75	3	6	1,5	20	10
14F1	75	4	6	2	20	10
14F1	75	6	6	3	20	10
14F1	75	8	6	4	20	10
14F1	75	10	6	5	20	10
Forma Shape	Ø D	U	X	R	Ø H	T
14F1	100	3	6	1,5	20	10
14F1	100	4	6	2	20	10
14F1	100	6	6	3	20	10
14F1	100	8	6	4	20	10
14F1	100	10	6	5	20	10
Forma Shape	Ø D	U	X	R	Ø H	T
14F1	125	3	6	1,5	20	10
14F1	125	4	6	2	20	10
14F1	125	6	6	3	20	10
14F1	125	8	6	4	20	10
14F1	125	10	6	5	20	10
Forma Shape	Ø D	U	X	R	Ø H	T
14F1	150	1,5	6	0,75	20	10
14F1	150	2	6	1	20	10
14F1	150	3	6	1,5	20	10
14F1	150	4	6	2	20	10
14F1	150	6	6	3	20	10
14F1	150	8	6	4	20	10
14F1	150	10	6	5	20	10
Forma Shape	Ø D	U	X	R	Ø H	T
14F1	175	1,5	6	0,75	20	8
14F1	175	2	6	1	20	8
14F1	175	3	6	1,5	20	8
14F1	175	4	6	2	20	8



AFFILATURA - COSTRUZIONE CNC / CNC SHARPENING - CONSTRUCTION

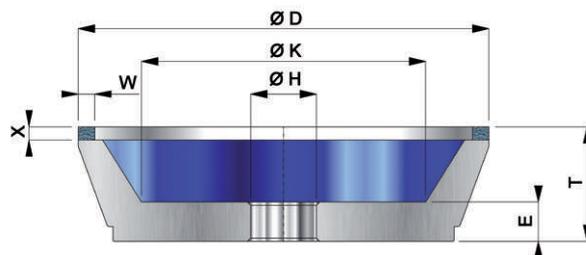
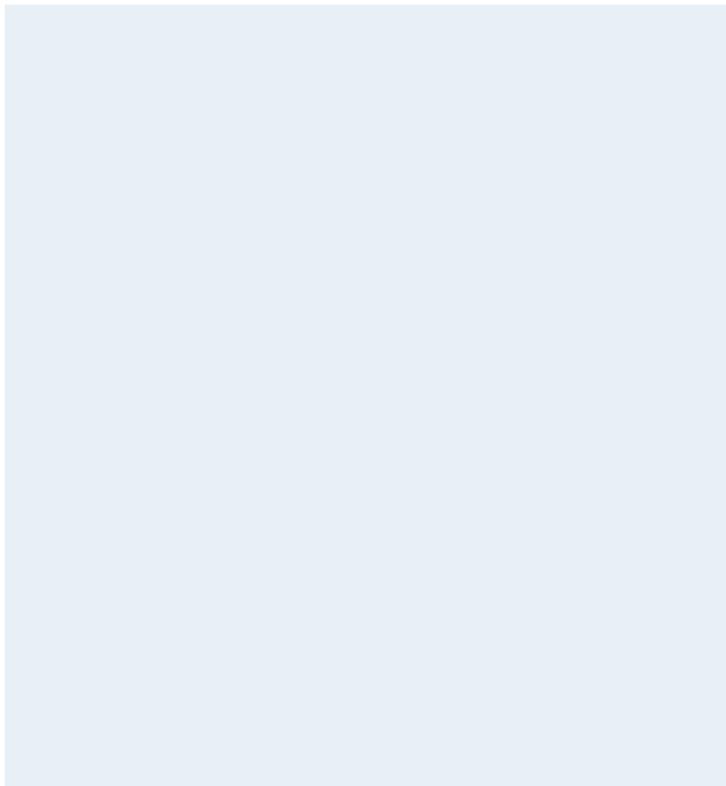
**FRESE - PUNTE / MILLS - DRILLS**

CNC



Forma Shape	Ø D	W	X	Ø H	T	E
11A2	125	6	6	20	30	12
11A2	125	8	6	20	30	12
11A2	125	10	6	20	30	12
11A2	125	12	6	20	30	12
11A2	125	14	6	20	30	12

**11A2**



AFFILATURA - COSTRUZIONE CNC / CNC SHARPENING - CONSTRUCTION

**LAME CIRCOLARI HSS / HSS SAW BLADE**

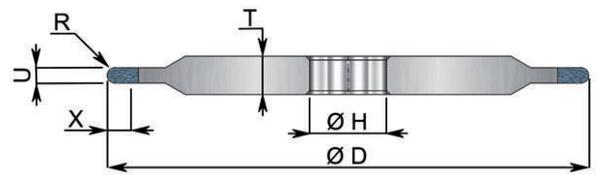
SHARP



Macchina Businaro

Forma Shape	Ø D	U	X	R	Ø H	T
14F1	150	1,3	7	0,65	32	8
14F1	150	1,6	7	0,8	32	8
14F1	150	2	7	1	32	8
14F1	150	3	7	1,5	32	8
14F1	150	4	7	2	32	8

14F1



Macchina Loroch

Forma Shape	Ø D	U	X	R	Ø H	T
14F1	200	1,3	7	0,65	32	8
14F1	200	1,6	7	0,8	32	8
14F1	200	2	7	1	32	8
14F1	200	3	7	1,5	32	8
14F1	200	4	7	2	32	8

**LAME CIRCOLARI HSS / HSS SAW BLADE**

SHARP

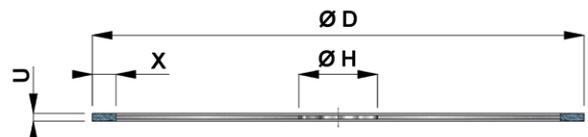


AFFILATURA - COSTRUZIONE CNC / AFFILATURA COSTRUZIONE CNC

Dischi integrali per rompitruciolo

Forma Shape	Ø D	U	Ø H
1A1R	25	0,3	2/3
1A1R	30	0,3	6
1A1R	30	0,4	6

1A1R





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