

GLASS CATALOGUE

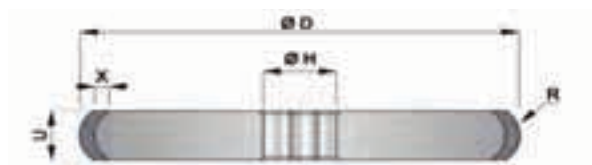


INCISIONE / ENGRAVING

Forma Shape	Ø D	U	U	U	U	U	U	U	U	X
1FF1	20-30	4	5	6	8	10	12	14	16	5
1FF1	35-40	4	5	6	8	10	12	14	16	5
1FF1	45-50	4	5	6	8	10	12	14	16	5
1FF1	55-60	4	5	6	8	10	12	14	16	5
1FF1	65-70	4	5	6	8	10	12	14	16	5
1FF1	80	4*	5*	6*	8*	10*	12	14	16	5
1FF1	100	4	5*	6*	8*	10*	12*	14*	16*	5
1FF1	110	4	5	6	8	10	12	14	16	5
1FF1	120	4	5	6	8	10	12	14	16	5
1FF1	125-130	4	5	6	8	10	12	14	16	5
1FF1	140	4	5	6	8	10	12	14	16	5
1FF1	150	4*	5*	6*	8*	10*	12*	14*	16*	5
1FF1	175-180	4	5	6	8	10	12	14	16	5
1FF1	200	4*	5*	6*	8*	10*	12*	14*	16	5
1FF1	220	4	5	6	8	10	12	14	16	5
1FF1	250	4*	5*	6*	8*	10*	12*	14	16	5
1FF1	300	4	5	6	8	10	12	14	16	5

* Disponibile X=10 / * Available X=10

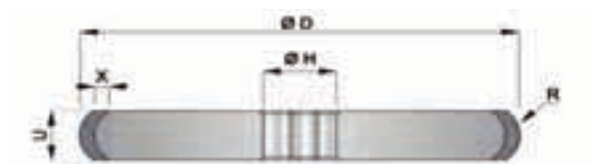
1FF1



Forma Shape	Ø D	U	U	U	U	U	U	U	U	X
1FF1	20-30	18	20	25	30					5
1FF1	35-40	18	20	25	30					5
1FF1	45-50	18	20	25	30					5
1FF1	55-60	18	20	25	30					5
1FF1	65-70	18	20	25	30					5
1FF1	80	18	20	25	30					5
1FF1	100	18*	20*	25	30	35	40			5
1FF1	110	18	20	25	30	35	40			5
1FF1	120	18	20	25	30	35	40			5
1FF1	125-130	18	20	25	30	35	40			5
1FF1	140	18	20	25	30	35	40			5
1FF1	150	18*	20*	25	30	35*	40	45	50	5
1FF1	175-180	18	20	25	30	35	40	45	50	5
1FF1	200	18*	20*	25	30	35	40	45	50	5
1FF1	220	18	20	25	30	35	40	45	50	5
1FF1	250	18*	20	25	30	35	40	45	50	5
1FF1	300	18	20	25	30	35	40	45	50	5

* Disponibile X=10 / * Available X=10

1FF1

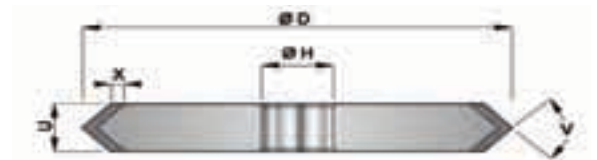


INCISIONE / ENGRAVING

Forma Shape	Ø D	U	U	U	U	U	U	U	U	X
1EE1	20-30	4	5	6	8	10	12	14	16	5
1EE1	35-40	4	5	6	8	10	12	14	16	5
1EE1	45-50	4	5	6	8	10	12	14	16	5
1EE1	55-60	4	5	6	8	10	12	14	16	5
1EE1	65-70	4	5	6	8	10	12	14	16	5
1EE1	80	4*	5*	6*	8*	10*	12	14	16	5
1EE1	100	4	5*	6*	8*	10*	12*	14*	16*	5
1EE1	110	4	5	6	8	10	12	14	16	5
1EE1	120	4	5	6	8	10	12	14	16	5
1EE1	125-130	4	5	6	8	10	12	14	16	5
1EE1	140	4	5	6	8	10	12	14	16	5
1EE1	150	4*	5*	6*	8*	10*	12*	14*	16*	5
1EE1	175-180	4	5	6	8	10	12	14	16	5
1EE1	200	4*	5*	6*	8*	10*	12*	14*	16	5
1EE1	220	4	5	6	8	10	12	14	16	5
1EE1	250	4*	5*	6*	8*	10*	12*	14	16	5
1EE1	300	4	5	6	8	10	12	14	16	5

* Disponibile X=10 / * Available X=10

1EE1



Forma Shape	Ø D	U	U	U	U	U	U	U	U	X
1EE1	20-30	18	20	25	30					5
1EE1	35-40	18	20	25	30					5
1EE1	45-50	18	20	25	30					5
1EE1	55-60	18	20	25	30					5
1EE1	65-70	18	20	25	30					5
1EE1	80	18	20	25	30					5
1EE1	100	18*	20*	25	30	35	40			5
1EE1	110	18	20	25	30	35	40			5
1EE1	120	18	20	25	30	35	40			5
1EE1	125-130	18	20	25	30	35	40			5
1EE1	140	18	20	25	30	35	40			5
1EE1	150	18*	20*	25	30	35*	40	45	50	5
1EE1	175-180	18	20	25	30	35	40	45	50	5
1EE1	200	18*	20*	25	30	35	40	45	50	5
1EE1	220	18	20	25	30	35	40	45	50	5
1EE1	250	18*	20	25	30	35	40	45	50	5
1EE1	300	18	20	25	30	35	40	45	50	5

* Disponibile X=10 / * Available X=10

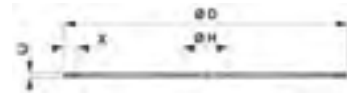
1EE1



DISCHI A FASCIA CONTINUA / METAL BOND CONTINUOUS RIM

Forma Shape	Ø D	U	X
1A1R	125	1,6	6
1A1R	150	1,2	6
1A1R	200	1,6	6
1A1R	250	1,9	8
1A1R	300	2,1	10
1A1R	350	2,5	10
1A1R	400	2,6	10

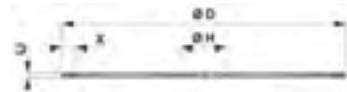
1A1R



DISCHI RESINA A FASCIA CONTINUA / RESIN BOND CONTINUOUS RIM

Forma Shape	Ø D	U	X
1A1R	125	1,2	6
1A1R	150	1,2	6
1A1R	200	1,3	6
1A1R	250	1,5	6
1A1R	300	2	10
1A1R	350	2	7

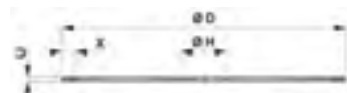
1A1R



DISCHI A SETTORI RAVVICINATI / NARROW SPACED SEGMENTED METAL BOND

Forma Shape	Ø D	U	X
1A1R	400	2,8	7
1A1R	450	2,8	7
1A1R	500	2,8	7

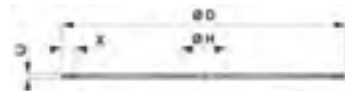
1A1R



DISCHI A FASCIA TURBO / METAL BOND TURBO SHAPE

Forma Shape	Ø D	U	X
TUR-VET	150	2,2	10
TUR-VET	180	2,6	10
TUR-VET	200	2,6	7
TUR-VET	250	2,8	7
TUR-VET	300	3	7
TUR-VET	350	3	7
TUR-VET	400	3,2	7

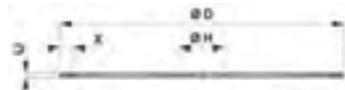
TUR-VET



DISCHI A FASCIA TURBO A SETTORI / METAL BOND SEGMENTED TURBO

Forma Shape	Ø D	U	X
SEC-TUR-VET	300	3	10
SEC-TUR-VET	350	3,2	10
SEC-TUR-VET	400	3,6	10
SEC-TUR-VET	450	3,8	10
SEC-TUR-VET	500	4	10

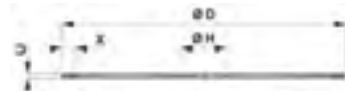
SEC-TUR-VET



DISCHI A SETTORI PER REFRAATTARI / METAL BOND DISKS FOR REFRACTORY

Forma Shape	Ø D	U	X
SEC-REF	350	3,2	8

SEC-REF

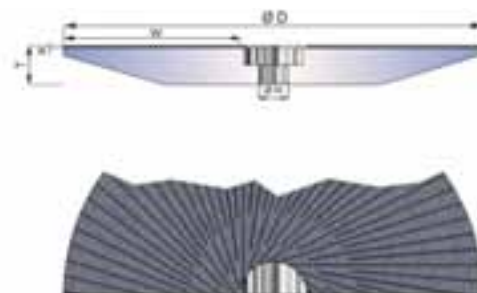




PLATEAU RESINOIDI / PLATEAU RESIN BOND

Forma Shape	Ø D	W	X
12A2	400	175	5
12A2	450	200	5
12A2	500	210	5
12A2	600	125	5
12A2	600	200	5
12A2	600	250	5
12A2	700	250	5
12A2	700	320	5

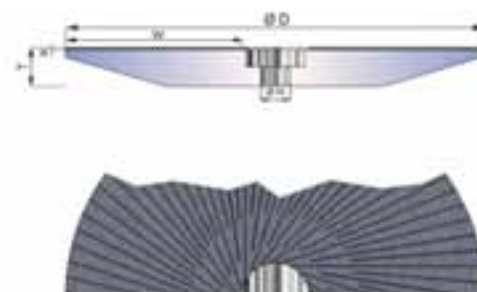
12A2



PLATEAU METALLICI / PLATEAU METAL BOND

Forma Shape	Ø D	W	X
12A2	400	175	3
12A2	500	210	3
12A2	600	250	3
12A2	700	165	3

12A2



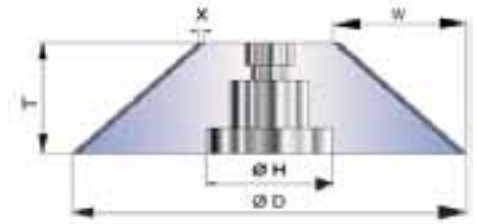


BISELLATURA / CHAMFERING

Forma Shape	Ø D	W	X	Vetro Glass	1V1
1V1	100	10	3	8	
1V1	100	12	3	10	
1V1	100	15	3	12	
1V1	100	18	3	15	

Forma Shape	Ø D	W	X	Vetro Glass	1V1
1V1	150	10	3	8	
1V1	150	12	3	10	
1V1	150	15	3	12	
1V1	150	18	3	15	

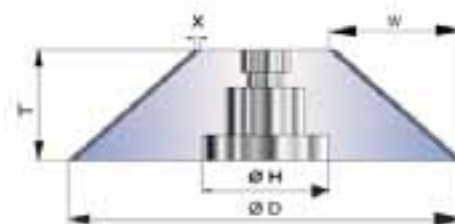
Forma Shape	Ø D	W	X	Vetro Glass	1V1
1V1	175	10	3	8	
1V1	175	12	3	10	
1V1	175	15	3	12	
1V1	175	18	3	15	



BISELLATURA / CHAMFERING

Forma Shape	Ø D	W	X	Vetro Glass
1V1-S	100	10	3	8
1V1-S	100	12	3	10
1V1-S	100	15	3	12
1V1-S	100	18	3	15
1V1-S	100	22	3	20
1V1-S	100	28	3	26

1V1-S



Forma Shape	Ø D	W	X	Vetro Glass
1V1-S	120	10	3	8
1V1-S	120	12	3	10
1V1-S	120	15	3	12
1V1-S	120	18	3	15
1V1-S	120	22	3	20
1V1-S	120	28	3	26

1V1-S

Forma Shape	Ø D	W	X	Vetro Glass
1V1-S	150	10	3	8
1V1-S	150	12	3	10
1V1-S	150	15	3	12
1V1-S	150	18	3	15
1V1-S	150	22	3	20
1V1-S	150	28	3	26

1V1-S

Forma Shape	Ø D	W	X	Vetro Glass
1V1-S	175	10	3	8
1V1-S	175	12	3	10
1V1-S	175	15	3	12
1V1-S	175	18	3	15
1V1-S	175	22	3	20
1V1-S	175	28	3	26

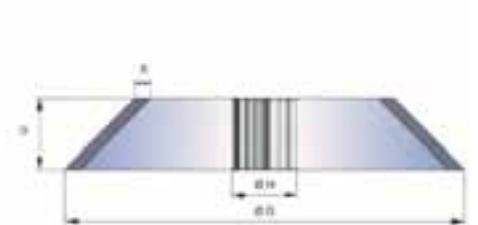
1V1-S

BISELLATURA / CHAMFERING

Forma Shape	Ø D	U	X	Vetro Glass	4V9/45°
4V9	100	12	3	10	
4V9	100	22	3	19	

Forma Shape	Ø D	U	X	Vetro Glass	4V9-S
4V9-S	100	13	5	10/12	
4V9-S	100	17	5	15	
4V9-S	100	22	5	19	

Forma Shape	Ø D	W	X	Vetro Glass	4V9-S
4V9-S	150	13	5	10/12	
4V9-S	150	17	5	15	
4V9-S	150	22	5	19	



PROFILATURA / PROFILING

CORPO ACCIAIO - LEGANTE METALLICO / STEEL BODY - METAL BOND

Forma Shape	Ø D	U	X	Vetro Glass
1FF6Y-0	100	4,5	3	3
1FF6Y-0	100	5,5	3	4
1FF6Y-0	100	6,5	3	5
1FF6Y-0	100	7,5	3	6
1FF6Y-0	100	8,6	3	7
1FF6Y-0	100	9,5	3	8
1FF6Y-0	100	11,5	3	10
1FF6Y-0	100	16,5	3	15

1FF6Y-O



Forma Shape	Ø D	U	X	Vetro Glass
1FF6Y-0	150	4,5	3	3
1FF6Y-0	150	5,5	3	4
1FF6Y-0	150	6,5	3	5
1FF6Y-0	150	7,5	3	6
1FF6Y-0	150	9,5	3,5	8
1FF6Y-0	150	11,5	5,5	10
1FF6Y-0	150	16,5	5	15

1FF6Y-O

Forma Shape	Ø D	U	X	Vetro Glass
1FF6Y-0	175	4,5	4	3
1FF6Y-0	175	5	4	4
1FF6Y-0	175	7,5	3,5	6
1FF6Y-0	175	11,5	5,5	10

1FF6Y-O

Forma Shape	Ø D	U	X	Vetro Glass
1FF6Y-0	200	4,5	5	5
1FF6Y-0	200	5,5	5	4
1FF6Y-0	200	6	4,5	5
1FF6Y-0	200	7	4,5	6
1FF6Y-0	200	9	4,5	8
1FF6Y-0	200	11	3	10

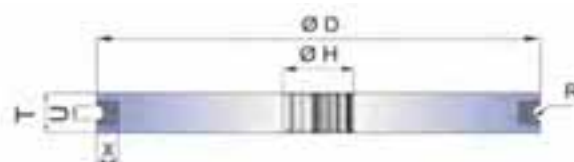
1FF6Y-O

PROFILATURA / PROFILING

CORPO ACCIAIO - LEGANTE METALLICO / STEEL BODY - METAL BOND

Forma Shape	Ø D	U	X	Vetro Glass
1FF6Y-MT 1/2 TONDA	100	3	4,5	2
1FF6Y-MT 1/2 TONDA	100	4	3	3
1FF6Y-MT 1/2 TONDA	100	5	3	4
1FF6Y-MT 1/2 TONDA	100	6	3	5
1FF6Y-MT 1/2 TONDA	100	7	3	6
1FF6Y-MT 1/2 TONDA	100	9	4	8
1FF6Y-MT 1/2 TONDA	100	11	3	10
1FF6Y-MT 1/2 TONDA	100	16	3	15
1FF6Y-MT 1/2 TONDA	100	21	3	20
1FF6Y-MT 1/2 TONDA	100	27	3	25

1FF6Y-MT 1/2 TONDA



Forma Shape	Ø D	U	X	Vetro Glass
1FF6Y-MT 1/2 TONDA	150	4	4	3
1FF6Y-MT 1/2 TONDA	150	5	3,5	4
1FF6Y-MT 1/2 TONDA	150	6	3	5
1FF6Y-MT 1/2 TONDA	150	7	2,5	6
1FF6Y-MT 1/2 TONDA	150	9	4	8
1FF6Y-MT 1/2 TONDA	150	11	3	10
1FF6Y-MT 1/2 TONDA	150	16	3	15

Forma Shape	Ø D	U	X	Vetro Glass
1FF6Y-MT 1/2 TONDA	175	4	4	3
1FF6Y-MT 1/2 TONDA	175	5	3,5	4
1FF6Y-MT 1/2 TONDA	175	6	3	5
1FF6Y-MT 1/2 TONDA	175	7	2,5	6

Forma Shape	Ø D	U	X	Vetro Glass
1FF6Y-MT 1/2 TONDA	200	3	5,5	2
1FF6Y-MT 1/2 TONDA	200	4	5	3
1FF6Y-MT 1/2 TONDA	200	5	4,5	4
1FF6Y-MT 1/2 TONDA	200	6	4	5
1FF6Y-MT 1/2 TONDA	200	7	3,5	6
1FF6Y-MT 1/2 TONDA	200	9	2,5	8
1FF6Y-MT 1/2 TONDA	200	11	2	10
1FF6Y-MT 1/2 TONDA	200	13	3	12

PROFILATURA / PROFILING

CORPO ACCIAIO - LEGANTE METALLICO / STEEL BODY - METAL BOND

Forma Shape	Ø D	U	X	Vetro Glass
1DD6Y-T	100	6	3	4
1DD6Y-T	100	7	3	5
1DD6Y-T	100	8	3	6
1DD6Y-T	100	9	3	7
1DD6Y-T	100	10	3	8
1DD6Y-T	100	11	3	9
1DD6Y-T	100	12	3	10
1DD6Y-T	100	13	3	11
1DD6Y-T	100	14	3	12
1DD6Y-T	100	17	3	15
1DD6Y-T	100	21	3	19

1DD6Y-T



Forma Shape	Ø D	U	X	Vetro Glass
1DD6Y-T	120	14	3	12
1DD6Y-T	120	14	3	15

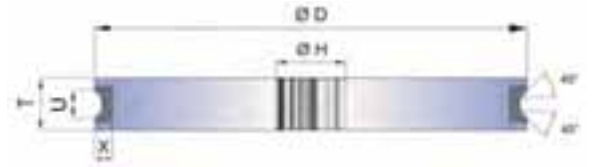
Forma Shape	Ø D	U	X	Vetro Glass
1DD6Y-T	150	6	3	4
1DD6Y-T	150	7	3	5
1DD6Y-T	150	8	3	6
1DD6Y-T	150	9	3	7
1DD6Y-T	150	10	3	8
1DD6Y-T	150	11	3	9
1DD6Y-T	150	12	3	10
1DD6Y-T	150	13	3	11
1DD6Y-T	150	14	3	12
1DD6Y-T	150	17	3	15

PROFILATURA / PROFILING

CORPO ACCIAIO - LEGANTE METALLICO / STEEL BODY - METAL BOND

Forma Shape	Ø D	U	X	Vetro Glass
1DD6Y-T	175	8	3	6
1DD6Y-T	175	10	3	8
1DD6Y-T	175	12	3	10
1DD6Y-T	175	14	3	12
1DD6Y-T	175	17	3	15

1DD6Y-T



Forma Shape	Ø D	U	X	Vetro Glass
1DD6Y-T	200	6	3	4
1DD6Y-T	200	7	3	5
1DD6Y-T	200	8	3	6
1DD6Y-T	200	9	3	7
1DD6Y-T	200	10	3	8
1DD6Y-T	200	11	3	9
1DD6Y-T	200	12	3	10
1DD6Y-T	200	13	3	11
1DD6Y-T	200	14	3	12

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.



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 BOND TYPE	AGGLOMERANTE CEMENT	CAPACITÀ DI ASPORTAZIONE FREEDOM OF CUT	RESISTENZA TERMICA HEAT RESISTANCE	DURATA LIFE	DESIGNAZIONE SAIDTOOLS DESIGNATION
RESINOIDE RESIN BONDED	Resina termoindurente Thermo setting resin	Alta High	Bassa Low	Media Medium	R1-R999
METALLICO METAL BOND	Metallo Metal	Bassa Low	Alta High	Altissima Excellent	M1-M999

PARAMETRI DI RETTIFICA:

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

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

$\pi = 3.14159265359$ - 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 : $G = Vw / Vs$

Vw = Volume di mola consumata (cm3)/Wheels Wear (cm3) - **Vs** = Volume di materiale asportato (cm3)/Total amount of material removed (cm3)

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 µm (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 µm (micron).

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



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