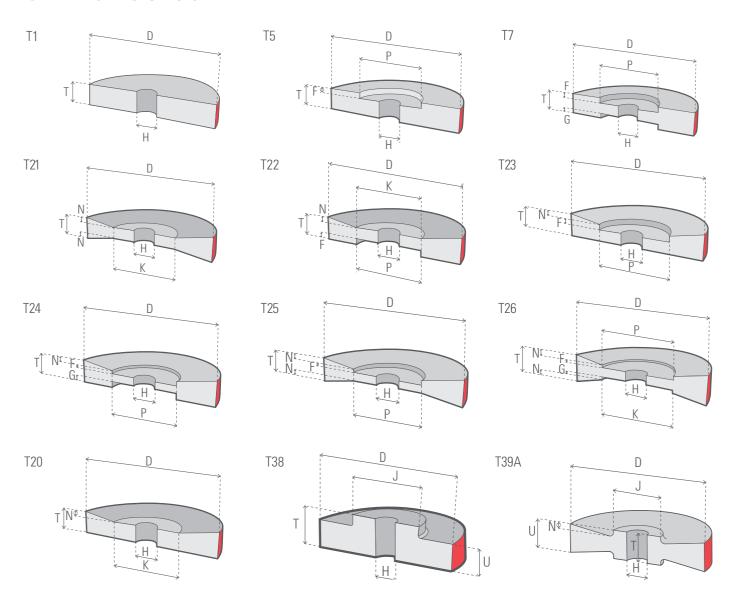
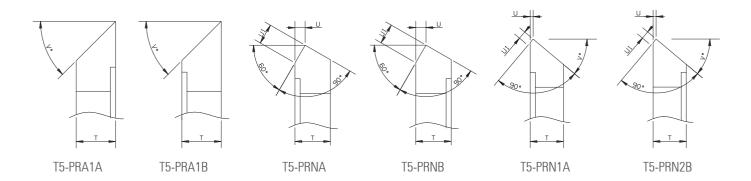
# CYLINDRICAL GRINDING (O.D.) GRINDING WHEELS



## SHAPES molemab

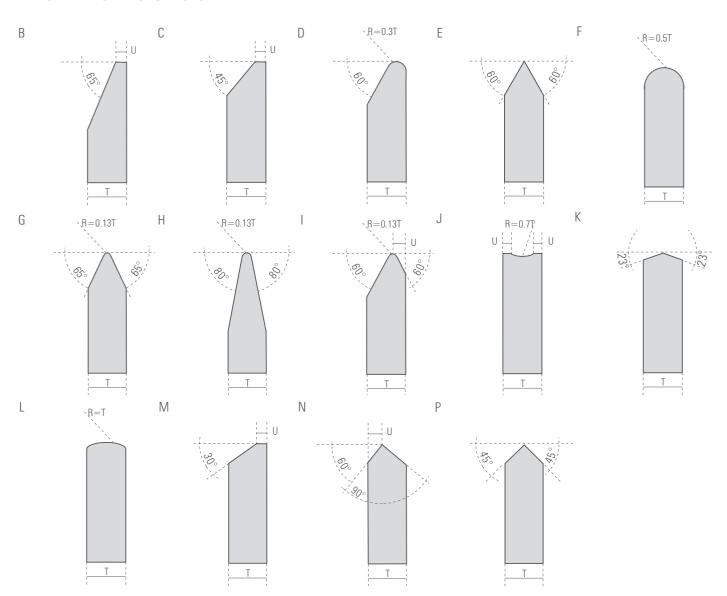


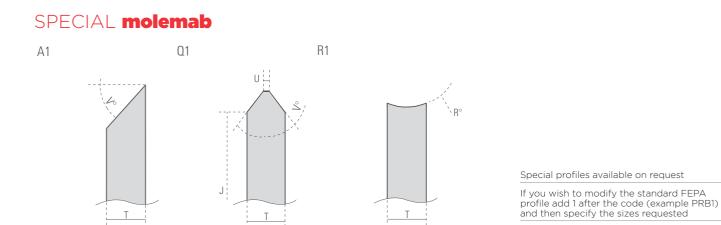
## SPECIAL molemab



Naphthalene-Free since 1961 With our products we contribute to a cleaner environment and a greener future for generations to come

## PROFILES molemab





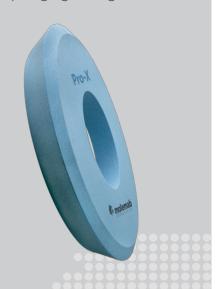


## CYLINDRICAL GRINDING (O.D.) GRINDING WHE

.D. Grinding / Pro-X line	e		Pro-X	Pro-X
Material		Hardness	T < 35	T > 35
Carbon steel		HRC 24 ÷ 38	11A 080 K08 V86	11A 070 IJ8 V30
Carbon steel		HRC 24 ÷ 38		11A 060 J06 V86
Carbon steel		HRC 24 ÷ 38		11A 070 J08 V86
Material		Hardness	T < 35	T > 35
Steel-Low alloyed		HRC 40 ÷ 52	09A 060 K07 V86	09A 060 J08 V86
Steel-Low alloyed		HRC 40 ÷ 52	10A 080 J08V86	09A 060 I10 V86 P1
Steel-Low alloyed		HRC 40 ÷ 52		09A 070 JK8 VK PF
Steel-Low alloyed		HRC 40 ÷ 52	09A 120 J08 V86	10A 080 J09 V86
Steel-Low alloyed		HRC 40 ÷ 52		09A 120 J08 V86
Material	Heat treatment	Hardness	T < 35	T > 35
Steel-Alloyed	Heat-treated / Hardened steel	HRC 42 ÷ 56	45A 060 J08 V86	45A 060/2 109 V86
Steel-Alloyed	Heat-treated / Hardened steel	HRC 42 ÷ 56	45A 080 J08 VK PF	43A 070 IJ09 V11
Steel-Alloyed	Heat-treated / Hardened steel	HRC 42 ÷ 56	45A 080 J08 V92	45A 070 J08 VK PF1
Steel-Alloyed	Heat-treated / Hardened steel	HRC 42 ÷ 56		45A 080 J08 VK PF
Steel-Alloyed	Heat-treated / Hardened steel	HRC 42 ÷ 56		44A 080 J10 V86
Material	Heat treatment	Hardness	T < 35	T > 35
Steel-Alloyed	Hardened steel	HRC 52 ÷ 58	43A 070 J08 V86	43A 070 IJ09 V11
Steel-Alloyed	Hardened steel	HRC 52 ÷ 58	43A 080/1 JK08 VK	43A 080 J08 VK7 PF
Steel-Alloyed	Hardened steel	HRC 52 ÷ 58		48A 120 IJ08 V86
Material	Heat treatment	Hardness	T < 35	T > 35
Steel-Alloyed / HSS	Hardened / Cemented / Nitrided	HRC 52 ÷ 64	3AK 080 J08 VK4	3AK 080 108 VK4 PF
Steel-Alloyed / HSS	Hardened / Cemented / Nitrided	HRC 52 ÷ 64		3AK 080 J08 VK4
.D. Grinding / sYnchro8	line		sYnchro8	sYnchro8
Material	Heat treatment	Hardness	T < 35	T > 35
Steel-Alloyed / HSS	Hardened / Cemented / Nitrided	HRC 52 ÷ 64	1CA 060 H08 V40 P1	1CA 060 I08 V40
Steel-Alloyed / HSS	Hardened / Cemented / Nitrided	HRC 52 ÷ 64	2CA 080/1 HI10 V40 P1	2CA 060 I10 V40 P1
Steel-Alloyed / HSS	Hardened / Cemented / Nitrided	HRC 52 ÷ 64		2CA 080/1 HI10 V40 I
Steel-Alloyed / HSS	Hardened / Cemented / Nitrided	HRC 52 ÷ 64		2CA 080 I10 V40 P1
Steel-Alloyed / HSS	Hardened / Cemented / Nitrided	HRC 52 ÷ 64		2CA 100 I10 V40 P1
.D. Grinding / Arctic Plu	us line		Arctic Plus	Arctic Plus
Material	Heat treatment	Hardness	T < 35	T > 35
Steel-Alloyed / HSS	Hardened / Cemented / Nitrided	HRC 52 ÷ 64	1GA 080/8 H12 V86 P1	1GA 080/8 H10 V86 F
Steel-Alloyed / HSS	Hardened / Cemented / Nitrided	HRC 52 ÷ 64		1GA 100/8 I10 V86 P
.D. Grinding / Special a	pplication			
Material	Туре	Hardness	T < 35	T > 35
Hard chrome	Chrome plated	HRC 64 ÷ 69	09A 080 IJ6 V86	09A 070 I 10 V86
Hard chrome	Chrome plated	HRC 64 ÷ 69		09A 080 IJ6 V86
Hard chrome	Chrome plated	HRC 64 ÷ 69		1GA 080/8 H10 V86 F
Hard chrome	Chrome plated	HRC 64 ÷ 69		1BK 120/1 H10 V86
.D. Grinding / Special a	pplication			
Material	Туре	Heat treatment	T < 35	T > 35
Stainless steel	AISI family 400	Hardened and unhardened	45A 080 JK08 VK PF1	45A 070 J08 VK PF
Stainless steel	AISI family 400	Hardened and unhardened		45A 080 J08 VK PF
Stainless steel	AISI 420 Hardened (< 55 HRC)	Hardened < 55 HRC		2CA 100 I10 V40 P1
Stainless steel Stainless steel	AISI family 300	Unhardened	08C 60/2 JK8 V11	08C 80 J08 V1 P1
Stainless steel	AISI 304 (medical)	Unhardened	2CA 100 I10 V40 P1	
.D. Grinding / Special a	pplication			
Material		Hardness	T < 35	T > 35
Spheroidal cast iron		HRC 21 ÷ 26	08C 080/1 JK08 V11	08C 080/1 J08 V11

## Pro-X

A line of standard vitrified bonded grinding wheels. They provide excellent performances combined with low grinding cost per workpiece. Ideal for both through feed and plunge grinding.



Cylindrical grinding allows to remove over material on the workpiece granting perfect geometrical shape and high degree of finishing. Choosing a wheel made by the best raw materials will ensure the best results in the grinding operation.

## **Arctic Plus**

The new line was designed and developed using new abrasives and bonds of last generation, featuring improved mechanical strength to take full advantage of the potential of Aluminium Oxide and Ceramic Abrasives. Ideal on hardened steels up to 62 HRC.

Ideal on hardened steels up to 62 HRC

Standard grits: 1GA 80 - 1GA 100

Standard bonds: VG4 - V86



## sYnchro8

This new line is the result of a combination between the best abrasives available on the market with the new generation of Molemab bonds. It features:

High stock removal rate

**Excellent profile retention** 

**Reduced heat generation** 

sYnchro8 is the ideal solution to improve the production efficiency by increasing the process quality.



### **Application**

Hardened, cemented, nitride and tempered carbon steels hardness from 48 to 62 HRC / Metal alloys (MnCr, CrMo, NiCrMo, MnCrB5, etc.) hardness from 48 to 62 HRC.

## **Application areas**

Aerospace, agricultural and earthmoving machinery manufacturing, automotive, energy.

Cubic Boron Nitride (CBN) ranks second in the hardness scale of known materials. When compared to conventional abrasives it has significant advantages in hardness and thermal and chemical resistance. Molemab combines the features of the CBN grit with special bonds designed by our R&D department to achieve the best results even in the most critical grinding operations.

## DIA/CBN VIT Vitrified bond diamond

Vitrified bond diamond and CBN grinding wheels

The increasing need to improve machine performances and reduce production difficulties require always better tools. To offer excellent results in O.D. grinding, Molemab has developed a line of vitrified bonded diamond and CBN grinding wheels.

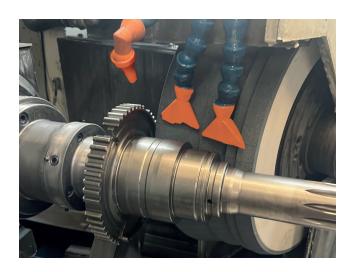
### **Advantages**

Longer life

Higher profile retention

Cool cut





## Titan-X

The Titan-X line is the new line of vitrified CBN wheels which offers extraordinary versatility and resistance. A special vitrified bond has been specifically designed for this application. These grinding wheels offer exceptional wear resistance and much longer profile retention than conventional grinding wheels. Titan-X wheels are ideal for machining hard alloys, hardened and case-hardened steels, cast iron and other metal alloys based on nickel, chromium, and molybdenum, usually very difficult to grind.

#### **Advantages**

**Cost reduction** 

Improved performances

**Reduced cycle times** 

**Excellent surface finishing** 





## Diamond and CBN wheels with hybrid and resin bonds

The state-of-the-art hybrid and resinoid bonds developed by Molemab, combined with the best quality Diamond and CBN, enable a steady grinding process, cold cut and reduction in cycle time.

Ideal for HSS and Hard Metal.

## **Power Spark**

Achieve outstanding grinding results with unmatched precision and consistency. Electroplating technology provides a uniform abrasive layer, ensuring precise cut and consistent finishing every time. Made to withstand the toughest grinding jobs, Power Spark provides long-lasting performances, saving you time and money avoiding frequent wheel replacements. Its rugged construction ensures long life even in high-intensity applications.





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