

Nastavení MS Teams pro webinář



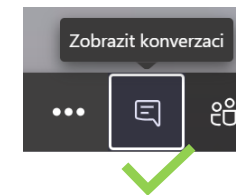
prosím vypněte si kameru i mikrofon



pro diskuzi si aktivujte zvuk



další tlačítka, chat



dotazy do chatu i během prezentace



Vítejte

Nová řada tvrdoměrů PRESI a spotřební materiál



1. Dělení



2. Zalévání



3. Broušení / Leštění



4. Analýza obrazu



5. Chemická analýza



6. Spotřební materiál



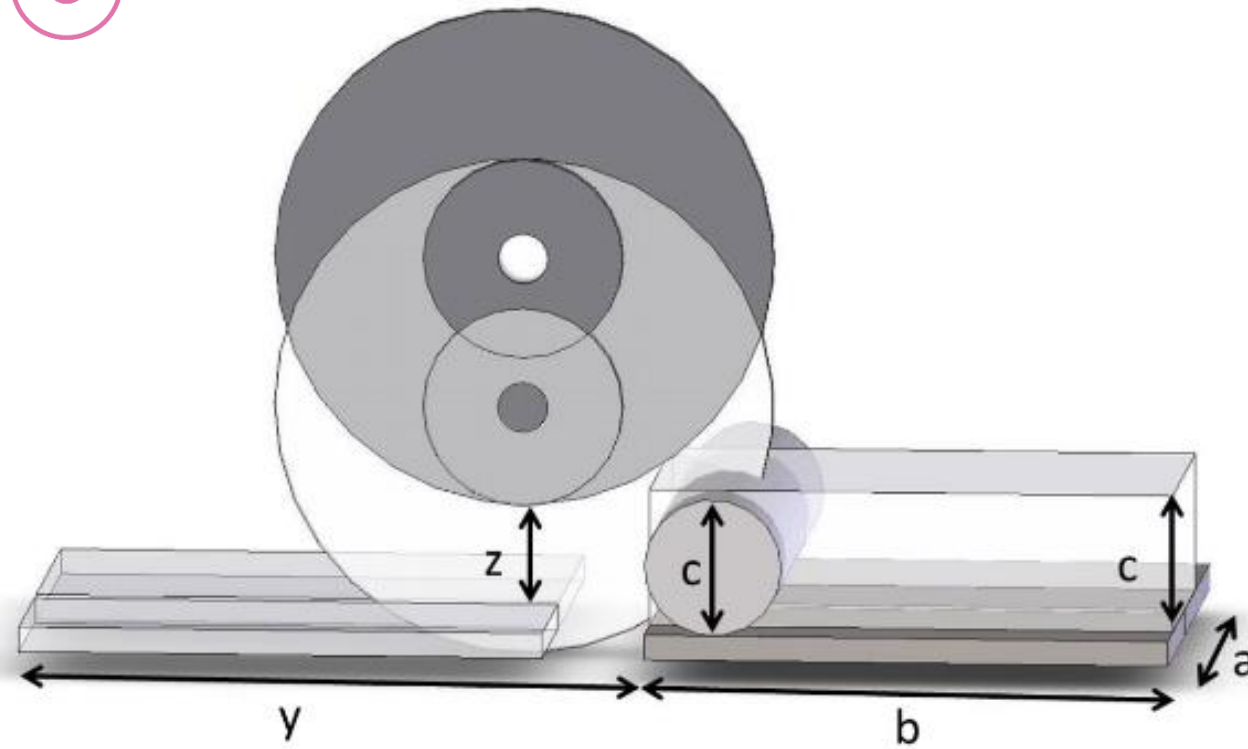
7. Měření tvrdosti



8. Školení



DĚLENÍ

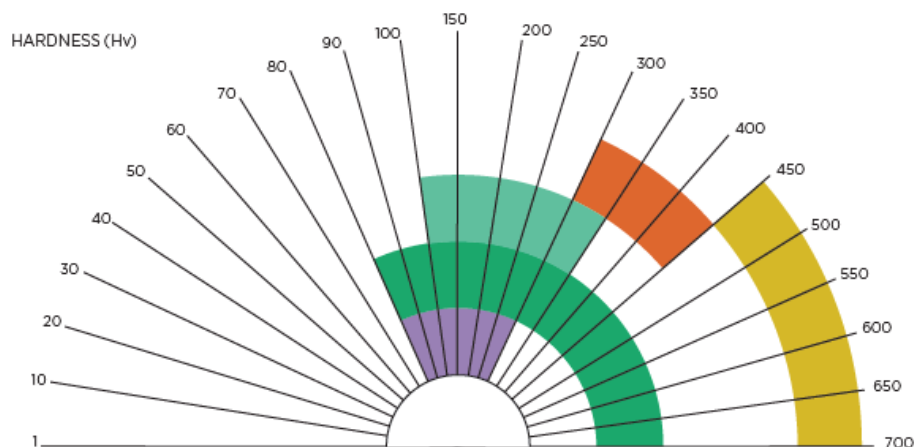


a (table width): 230 mm
b (table depth): 210 mm
c (maximum height of the part): 60 mm
y (travel of the y table): 251 mm
z (passage under the wheel): 40 mm (y table) and 30 mm (xy table)

RESINOID CUT-OFF WHEELS

FERROUS MATERIALS

Resinoid cut-off wheels are made of a mixture of resin and abrasive powder and are suitable for cutting most materials. The nature of the abrasive and the hardness of the resin used are fundamental elements to ensure a perfect cut. The harder the material is, the softer the cut-off wheel must be.

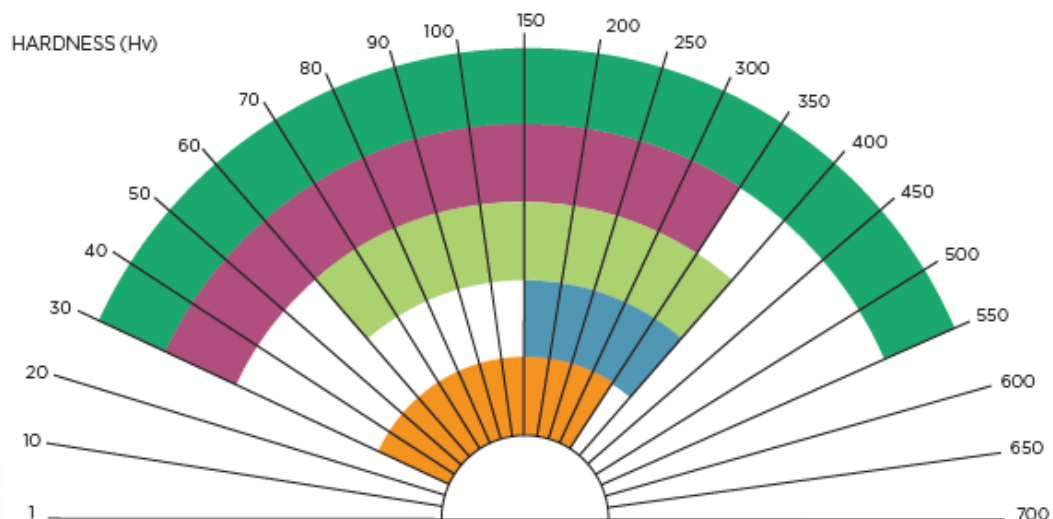


WHEELS RECOMMENDED MATERIALS

S	Treated steels, with fragile coatings, difficult materials.
AO	Treated steels, stainless steels, refractory metals, alloyed cast irons.
A	Low carbon, mild and extra mild and treated steels with medium cross-sections.
UTW	All types of metallic materials.
S	All types of metallic materials.
AOFII	Rubber bonded cut-off wheel, thin section cutting, low cross-section sintered steels, hard metal layers.

NON-FERROUS MATERIALS

Resinoid cut-off wheels are made of a mixture of resin and abrasive powder and are suitable for cutting most materials. The nature of the abrasive and the hardness of the resin used are fundamental elements to ensure a perfect cut. The harder the material is, the softer the cut-off wheel must be.



WHEELS RECOMMENDED MATERIALS

S	All types of metallic materials.
UTW	All types of metallic materials.
MNF	Aluminium, copper and alloys, non ferrous metals, titanium and alloys.
T	Titanium, titanium alloys, non ferrous metals.
F	White, grey and spheroidal graphite cast iron, titanium and alloys.
C	Aluminium, copper and alloys, non ferrous metals, titanium and alloys.

METALLIC CUT-OFF WHEELS

Metallic cut off-wheels and CBN cutting discs only cut hard materials. There are two types of abrasives: diamond and boron nitride (CBN). Resin bonds give better surface conditions than metal bonds. Metal bonds have a longer life than resin bonds.

HARD FERROUS MATERIALS

CBN CUTTING DISCS (BORON NITRIDE CARBIDE)

Delivered with a dressing stick

	REF.	DESIGNATION	Ø	
CBN	02059	CBN cutting disc	Ø 75 x 0.5 x 12.7mm	
	02062	CBN cutting disc	Ø 100 x 0.5 x 12.7mm	
	02050	CBN cutting disc	Ø 125 x 0.5 x 12.7mm	
	02065	CBN cutting disc	Ø 150 x 0.6 x 12.7mm	
	02056	CBN cutting disc	Ø 175 x 0.7 x 12.7mm	
	02039	CBN cutting disc	Ø 200 x 0.9 x 32mm	
	02043	CBN cutting disc	Ø 250 x 1.2 x 32mm	
	02047	CBN cutting disc	Ø 300 x 1.2 x 32mm	

CBN Resin bond

High boron nitride concentration disk for cutting hard ferrous materials, cast iron and treated, high-speed and hard steel.

HARD NON-FERROUS MATERIALS

METALLIC CUT-OFF WHEELS

Delivered with a dressing stick

	REF.	DESIGNATION	Ø	
LR	02058	Cut-off wheel	Ø 75 x 0.5 x 12.7mm	
	02033	Cut-off wheel	Ø 100 x 0.5 x 12.7mm	
	02035	Cut-off wheel	Ø 125 x 0.5 x 12.7mm	
	02037	Cut-off wheel	Ø 150 x 0.6 x 12.7mm	
	02067	Cut-off wheel	Ø 175 x 0.7 x 12.7mm	
	02041	Cut-off wheel	Ø 200 x 0.9 x 32mm	
	02045	Cut-off wheel	Ø 250 x 1.2 x 32mm	
	02049	Cut-off wheel	Ø 300 x 1.2 x 32mm	

LR

Resin bond

High concentration disc, advised when you want the best cutting quality. To cut hard and fragile materials, composites, plasma deposit, ceramics, electronic components.

	REF.	DESIGNATION	Ø	
LM	02030	Cut-off wheel	Ø 75 x 0.3 x 12.7mm	
	02031	Cut-off wheel	Ø 100 x 0.3 x 12.7mm	
	02034	Cut-off wheel	Ø 125 x 0.5 x 12.7mm	
	02036	Cut-off wheel	Ø 150 x 0.6 x 12.7mm	
	02055	Cut-off wheel	Ø 175 x 0.7 x 12.7mm	
	02038	Cut-off wheel	Ø 200 x 0.9 x 32mm	
	02042	Cut-off wheel	Ø 250 x 1.2 x 32mm	
	02046	Cut-off wheel	Ø 300 x 1.4 x 32mm	

LM

Metallic bond

Very polyvalent cut-off wheel, normal concentration, to cut very hard materials such as: ceramics, composites, alumina, sintered carbides, minerals, concretes, stones.

	REF.	DESIGNATION	Ø	
LM+	02057	Cut-off wheel	Ø 75 x 0.3 x 12.7mm	
	02060	Cut-off wheel	Ø 100 x 0.3 x 12.7mm	
	02063	Cut-off wheel	Ø 125 x 0.5 x 12.7mm	
	02064	Cut-off wheel	Ø 150 x 0.6 x 12.7mm	
	02066	Cut-off wheel	Ø 175 x 0.7 x 12.7mm	
	02040	Cut-off wheel	Ø 200 x 0.9 x 32mm	
	02044	Cut-off wheel	Ø 250 x 1.2 x 32mm	
	02048	Cut-off wheel	Ø 300 x 1.4 x 32mm	

LM+

Metallic bond

High concentration disc to cut hard materials such as: tungsten carbide, silicon carbide, plasma deposit, mounted samples, refractory materials.

GENERALITY

Cut off-wheels

To sum up :



	Fe	Fe
Resinoid 100<HV<800	Al ₂ O ₃	SiC
Metallic HV>500	CBN	Diamond

ZALÉVÁNÍ



WILL ANALYZE MATERIAL MEETS
ONE OF THE FOLLOWING CRITERIA:

- Fragile material / sensitive to the temperature or the pressure?
- Porous material? Honeycomb structures?
- Ceramics? Rocks?
- Studies of cracks?

YES

NO

Do you have
a hot mounting press?

NO

YES

Number of mounts
per day?

FEWER THAN 15

MORE THAN 15
with only one
hot mounting press

MORE THAN 15
with several
hot mounting presses

COLD
MOUNTING

COLD
MOUNTING

HOT
MOUNTING

COLD
MOUNTING

HOT
MOUNTING


Hot mounting is recommended to make:

- high quality mounts (observation of coating),
- hardness measurements,
- polishing in individual pressure.

GENERALITY

Cold mounting – Transparent resins



TYPE OF RESINS	USE	POLYMERISATION TIME	SHRINKAGE	EXOTHERMIC PEAK	HARDNESS	PROPORTION
IP (epoxy)	General use, observations of edges, very good impregnation capacity, suitable for hard materials	8 at 10h (3h at 50°C)	Very low	30°C	83 Shore D	10% catalyst
IP-FAST (epoxy) 	General use, visual control of material removal with fast polymerisation, suitable for hard materials	2h* at 20°C	Low	120°C	89 Shore D	30% catalyst
MA2+ (epoxy)	General use, visual control of material removal, suitable for soft materials	12h at 20°C	Low	60°C*	62 Shore D	10% catalyst
KM-U under pressure (acrylic)	General use with fast polymerisation	15min at 20°C	Low	115°C	90 Shore D	2 volumes of powder for 1 volume of liquid
2S (polyester)	General use with fast polymerisation, suitable for large quantity of mounts at one time	1h30 at 20°C	Medium	80°C	76 Shore D	2.5% catalyst



GENERALITY

Cold mounting – Opaque resins



TYPE OF RESINS	USE	POLYMERISATION TIME	SHRINKAGE	EXOTHERMIC PEAK	HARDNESS	COLOUR	PROPORTION
KM-U (acrylic)	Control/ General use with fast polymerisation	15min at 20°C	Medium	115°C	90 Shore D	White	2 volumes of powder for 1 volume of liquid
KM-V (acrylic)	Control/ General use with fast polymerisation. Mineral loaded for a reduction of shrinkage	15min at 20°C	Low	115°C	90 Shore D	Blue	2 volumes of powder for 1 volume of liquid
KM-B (acrylic)	Control/ General use with fast polymerisation. Mineral loaded for a reduction of shrinkage	15min at 20°C	Very low	115°C	91 Shore D	Blue	2 volumes of powder for 1 volume of liquid
KM-EM (acrylic)	Casting replica's of sample surface	8min at 20°C	-	95°C	87 Shore D	Yellow	2 volumes of powder for 1 volume of liquid
KM-CO (acrylic)	Conductive phenolic for SEM applications	30min at 20°C	Medium	70°C	62 Shore D	Black	8 volumes of powder for 5 volumes of liquid
KM-BACK (acrylic)	Resin 100% dissoluble into acetone. Allows to get back the sample.	10 at 15min at 20°C	Medium	115°C	83 Shore D	Green	2 volumes of powder for 1 volume of liquid



GENERALITY

Hot mounting

TYPE OF RESINS	USE	SHRINKAGE	HARDNESS	CONDUCTIVITY	COLOUR
EPOXY	Hard materials, edge observation, surface deposits, coatings	Very low	96 Shore D	-	Black
PHENOLIC	Standard mounting media for soft to medium hard materials	Low	90 Shore D	-	White, green, red, black
CONDUCTIVE PHENOLIC (with carbon)	SEM applications or electrolytic polishing	Low	90 Shore D	Good	Black
GLASS FIBER PHENOLIC	Standard mounting media for soft to medium hard materials	Low	95 Shore D	-	Black
GLASS FIBER ALLYLIC	Observation of sample edges	Very low	93 Shore D	-	Blue
ACRYLIC	When a transparent mount is required	Low	88 Shore D	-	Transparent
ACRYLIC COPPER POWDER	For electro-polishing or electrolytic etching	Low	90 Shore D	Good	Copper



BROUŠENÍ / LEŠTĚNÍ



REFLEX FIX



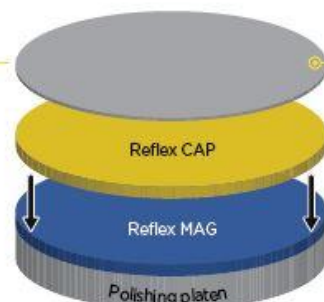
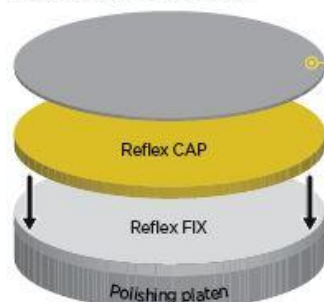
Consumables adapted to Reflex FIX:

- NAC abrasive papers
- I-MAX R diamond discs
- MED R polishing discs
- PAD-Mag polishing cloths
- Reflex CAP

REF.	DESIGNATION	Ø	
24030	1 device Reflex FIX	Ø 200 mm	
24031	1 device Reflex FIX	Ø 230 mm	
24032	1 device Reflex FIX	Ø 250 mm	
24033	1 device Reflex FIX	Ø 300 mm	
24034	1 device Reflex FIX	Ø 400 mm	

REFLEX CAP

The **Reflex CAP** (metallic plate) is a device that allows the use of adhesive consumables on the Reflex FIX or Reflex MAG.



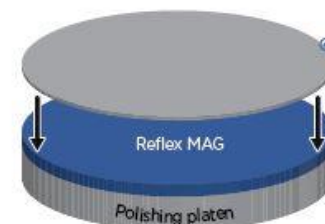
Consumables adapted:

- Tissediam
- Papers and/or adhesive clothes
- ZR+

REF.	DESIGNATION	Ø	
Box of 5 discs			
24040	Reflex CAP	Ø 200mm	
24042	Reflex CAP	Ø 250mm	
24043	Reflex CAP	Ø 300mm	

REFLEX MAG

The **Reflex MAG** is a device that allows the use of PRESI metal-backed consumables (for those who do not use the Reflex FIX) as well as all other magnetic consumables of a brand other than PRESI.



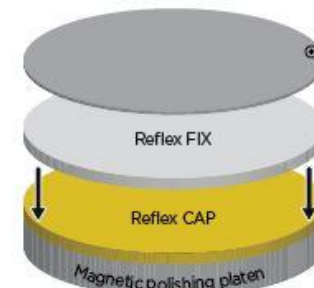
Consumables adapted to Reflex MAG:

- I-MAX R diamond discs
- MED R polishing discs
- PAD-Mag polishing cloths

REF.	DESIGNATION	Ø	
24036	1 Reflex MAG	Ø 200mm	
24038	1 Reflex MAG	Ø 250mm	
24039	1 Reflex MAG	Ø 300mm	

MAGNETIC FIX

The **Magnetic FIX** is a device that allows the use of Reflex consumables on any polishing machine equipped with a magnetic polishing platen.



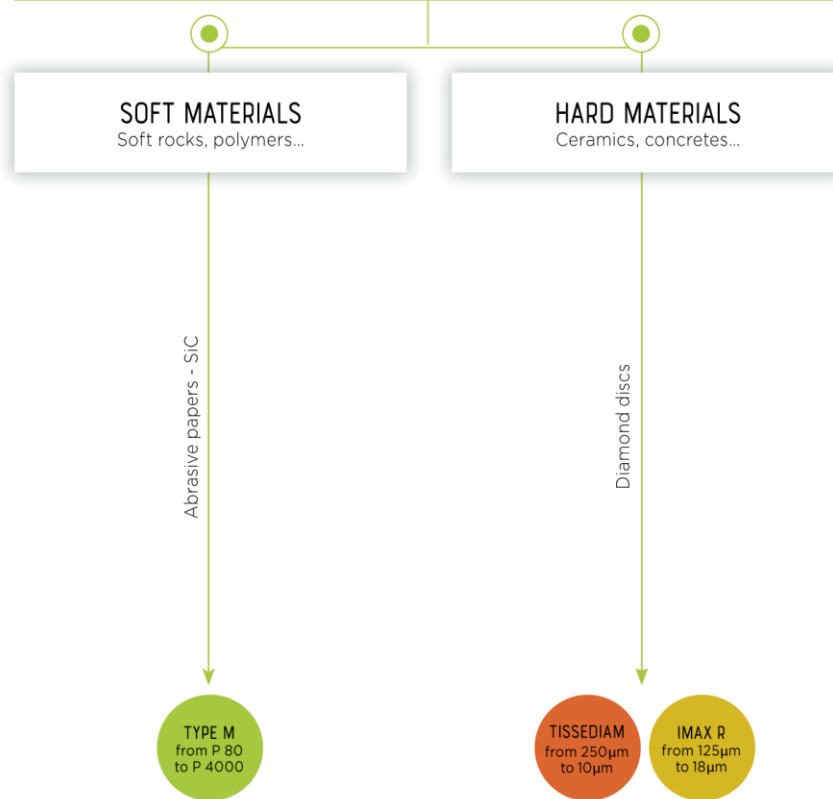
Consumables adapted to Reflex FIX:

- NAC abrasive papers
- I-MAX R diamond discs
- MED R polishing discs
- PAD-Mag polishing cloths
- Reflex CAP

REF.	DESIGNATION	Ø	
24025	Magnetic FIX (1 Reflex FIX + 1 Reflex CAP)	Ø 200mm	
24026	Magnetic FIX (1 Reflex FIX + 1 Reflex CAP)	Ø 250mm	
24027	Magnetic FIX (1 Reflex FIX + 1 Reflex CAP)	Ø 300mm	

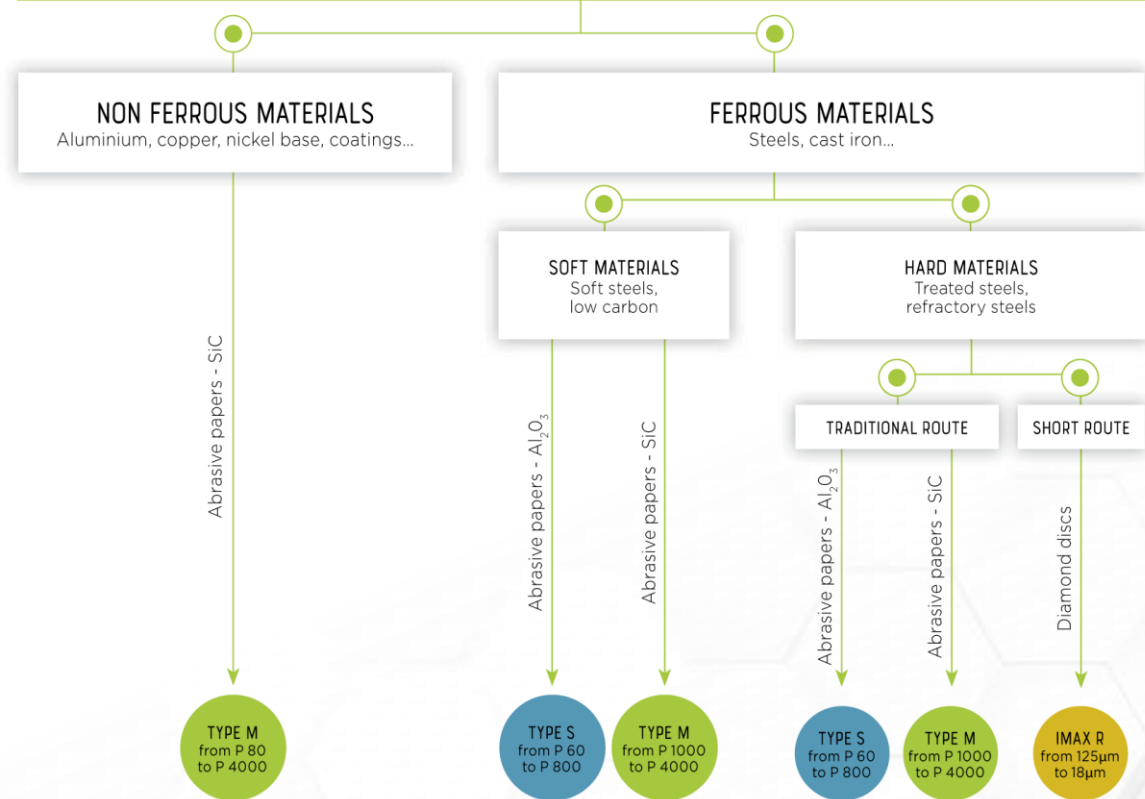
NON-METALLIC MATERIALS

Ceramics, geological applications



METALLIC MATERIALS



Steels, light alloys



LEGEND	Metallic or resin bond diamond discs for the levelling or grinding of very hard materials.	SiC abrasive.	Al ₂ O ₃ abrasive, except P1000, P1200, P2400 and P4000.	Resin bond diamond discs designed for hard metallic materials adapted to reduce process time.
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STANDARDS AND EQUIVALENTS														
FEPA P	P 60	P 80	P 100	P 120	P 180	P 240	P 320	P 400	P 600	P 800	P 1000	P 1200	P 2400	P 4000
US	60	80	100	120	180	240	-	320	-	400	600	-	800	1200
µ average	260	200	150	120	76	60	46	35	26	22	18	15	10	5
I-MAX R	125				75			54			18			

MED R AND FINE GRINDING

NAME	TYPE	COMPOSITION	MAIN APPLICATIONS	RECOMMENDED PRODUCTS	ASSOCIATED SUSPENSIONS	ADHESIVE	Metallic back-side version PAD MAG
MED R		Resinoids studs.	Levelling of all types of materials.	Polycrystalline super abrasive product / Diamond product	15 to 6μ		Ref. 24087: Ø 200mm Ref. 24089: Ø 250mm Ref. 24090: Ø 300mm
TMP		Wire gauze (stainless steel 18/8) fixed to a metallo-plastic support (polyethylene).	Very fast removal of material. Steels, carbides and ceramics.	Pastes / diamond solutions	45 to 6μ	Ref. 16208: Ø 200mm Ref. 16258: Ø 250mm Ref. 16308: Ø 300mm	Ref. 24174: Ø 200mm Ref. 24204: Ø 250mm Ref. 24232: Ø 300mm
TOP		Plasticised acetate silk taffeta.	Levelling of all types of materials.	Diamond products	15 to 6μ	Ref. 16214: Ø 200mm Ref. 16264: Ø 250mm Ref. 16314: Ø 300mm	Ref. 24161: Ø 200mm Ref. 24191: Ø 250mm Ref. 24206: Ø 300mm
RAM II		Acetate silk satin, plasticised and glued to a semi-rigid support.	Soft materials.	Diamond products	9 to 6μ	Ref. 16211: Ø 200mm Ref. 16261: Ø 250mm Ref. 16311: Ø 300mm	Ref. 24162: Ø 200mm Ref. 24192: Ø 250mm Ref. 24219: Ø 300mm

Reflex
CONCEPT

ROUGH-FINISHING CLOTHS

NAME	TYPE	COMPOSITION	MAIN APPLICATIONS	RECOMMENDED PRODUCTS	ASSOCIATED SUSPENSIONS	ADHESIVE	Metallic back-side version PAD MAG
RAM		Acetate silk satin, plasticised and glued to a semi-rigid support.	Polishing and finishing with excellent flatness Inclusion retention-All materials.	Diamond products	3 to 1μ	Ref. 16216: Ø 200mm Ref. 16266: Ø 250mm Ref. 16316: Ø 300mm	Ref. 24160: Ø 200mm Ref. 24190: Ø 250mm Ref. 24205: Ø 300mm
STA		Acetate silk satin, plasticised and glued to a semi-rigid support.	All materials.	Diamond products	9 to 6μ	Ref. 16212: Ø 200mm Ref. 16262: Ø 250mm Ref. 16312: Ø 300mm	Ref. 24170: Ø 200mm Ref. 24200: Ø 250mm Ref. 24215: Ø 300mm
ADR II		Wool cloth woven on a soft support.	Semi-finishing polishing with excellent flatness. All types of steels/stainless steels.	Diamond products	6 to 3μ	Ref. 16226: Ø 200mm Ref. 16276: Ø 250mm Ref. 16326: Ø 300mm	Ref. 24172: Ø 200mm Ref. 24202: Ø 250mm Ref. 24218: Ø 300mm
NWF +		Synthetic fibers, elastomer bonded to a rough surface.	Final polishing of hard materials, refractories, carbides, ceramics. Applications for optics: glass and quartz (alumina & cerium oxide).	Diamond products Cerium oxide Alumina	3 to 1μ 2,5μ (cerium) 0,3μ (alumina)	Ref. 16215: Ø 200mm Ref. 16265: Ø 250mm Ref. 16309: Ø 300mm	Ref. 24168: Ø 200mm Ref. 24198: Ø 250mm Ref. 24213: Ø 300mm

Reflex
CONCEPT

WOVEN

Made with **different fibres and weave sizes**, they are all laminated at the back to avoid penetration of the abrasive and extender into the adhesive layer. They generally offer "hard surface" polishing properties and guarantee flatness without edge deterioration.

FLOCKED

They are **classified according to their type, length, density and grade of flock, as well as flock support and bonding**. Only flocked cloths provide a super-polished finish. They must be used for the shortest possible time in order to avoid pull-out of inclusions.

NON-WOVEN


Mixture of various fibres impregnated with plastic, elastomer, latex... and often subject to mechano-chemical treatments. They are used on very hard materials in order to get a high removal rate and for the finishing of light alloys. They are an extension of metallographic methods for finishing of high precision surfaces such as glass, quartz, sapphire and semi-conductors.

FINISHING CLOTHS

NAME	TYPE	COMPOSITION	MAIN APPLICATIONS	RECOMMENDED PRODUCTS	ASSOCIATED SUSPENSIONS	ADHESIVE	Metallic back-side version PAD MAG
NT		Flock and fixed to soft cotton taffeta.	Polishing and super-polishing of all types of materials.	Diamond products Aluminas SPM	3 to 1/4μ 0.03μ (SPM)	Ref. 16206: Ø 200mm Ref. 16256: Ø 250mm Ref. 16306: Ø 300mm	Ref. 24165: Ø 200mm Ref. 24195: Ø 250mm Ref. 24210: Ø 300mm
TFR		Very soft, short rayon flock embedded in a layer of soft plastic.	Super-finishing for inclusion investigations and control of structure on steels, aluminium, zirconium, magnesium.	Diamond products	1 to 1/4μ	Ref. 16204: Ø 200mm Ref. 16254: Ø 250mm Ref. 16304: Ø 300mm	Ref. 24167: Ø 200mm Ref. 24197: Ø 250mm Ref. 24212: Ø 300mm
RFI		Short rayon flock on cotton cloth.	Final polishing for all steels and super-finishing (inclusions).	Diamond products	3 to 1μ	Ref. 16230: Ø 200mm Ref. 16280: Ø 250mm Ref. 16330: Ø 300mm	Ref. 24169: Ø 200mm Ref. 24199: Ø 250mm Ref. 24207: Ø 300mm
HS V		Very short rayon flock fixed to semi-rigid plastic.	Polishing and finishing of all materials.	Diamond products (or alumina in some cases)	3μ	Ref. 16201: Ø 200mm Ref. 16251: Ø 250mm Ref. 16301: Ø 300mm	Ref. 24163: Ø 200mm Ref. 24193: Ø 250mm Ref. 24208: Ø 300mm
HS B		Very short rayon flock on strong cotton cloth.	Polishing and finishing of all materials.	Diamond products (or alumina in some cases)	1μ	Ref. 16202: Ø 200mm Ref. 16252: Ø 250mm Ref. 16302: Ø 300mm	Ref. 24164: Ø 200mm Ref. 24194: Ø 250mm Ref. 24209: Ø 300mm
NWF +		Elastomer bonded synthetic fibers on rough surface.	Final polishing of hard materials, refractories, carbides, ceramics. Applications for optics: glass and quartz (alumina & cerium oxide).	Diamond products Cerium oxide Aluminas	3 to 1μ 2.5μ (cerium) 0.3μ (alumina)	Ref. 16215: Ø 200mm Ref. 16265: Ø 250mm Ref. 16309: Ø 300mm	Ref. 24168: Ø 200mm Ref. 24198: Ø 250mm Ref. 24213: Ø 300mm

Reflex
CONCEPT

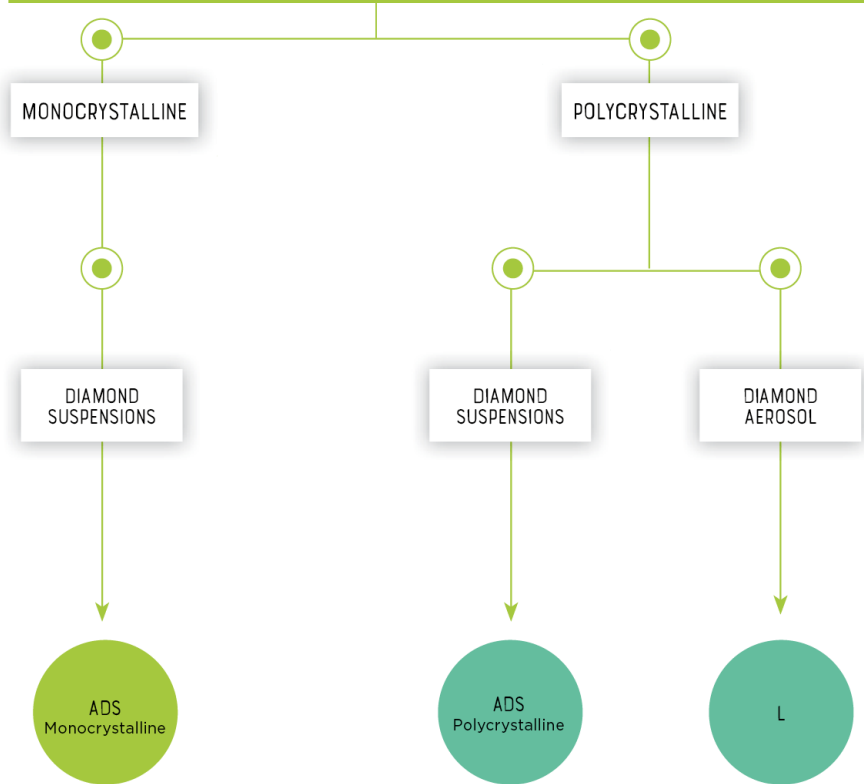
SUPER-FINISHING CLOTHS

NAME	TYPE	COMPOSITION	MAIN APPLICATIONS	RECOMMENDED PRODUCTS	ASSOCIATED SUSPENSIONS	ADHESIVE	Metallic back-side version PAD MAG
DBM		Billiard cloth 100% wool.	Polishing and super-finishing for soft material (tin, lead).	Alumina Cerium oxide	6 to 0.3μ	Ref. 16218: Ø 200mm Ref. 16268: Ø 250mm Ref. 16318: Ø 300mm	Ref. 24173: Ø 200mm Ref. 24203: Ø 250mm Ref. 24231: Ø 300mm
SUPRA		Felt made of synthetic fibers impregnated with latex and covered by a layer of polyurethane foam.	Super-finishing of all materials. Mirror polishing of semi-conductors, glass.	SPM Colloidal silica	0.03μ (SPM)	Ref. 16224: Ø 200mm Ref. 16274: Ø 250mm Ref. 16324: Ø 300mm	Ref. 24166: Ø 200mm Ref. 24196: Ø 250mm Ref. 24211: Ø 300mm
NV		Very soft flock cloth fixed to a soft cotton cloth.	Final polishing for soft materials (aluminium alloys, copper... Super -finishing for ceramics with cerium oxide.	Alumina Cerium oxide	0.8 - 1μ (alumine) 2.5μ (cérium)	Ref. 16207: Ø 200mm Ref. 16257: Ø 250mm Ref. 16307: Ø 300mm	Ref. 24171: Ø 200mm Ref. 24201: Ø 250mm Ref. 24217: Ø 300mm
LDR		Felt made of polyester fibers impregnated with polyurethane.	Electronic, carbon fiber Semi-conductor polishing.	Diamond products Alumina	1 to 1/4μ	Ref. 16223: Ø 200mm Ref. 16273: Ø 250mm Ref. 16323: Ø 300mm	On request

Reflex
CONCEPT

ALCOHOL BASE

Materials very sensitive to corrosion. Observation of inclusions



RECOMMENDED LUBRICANT

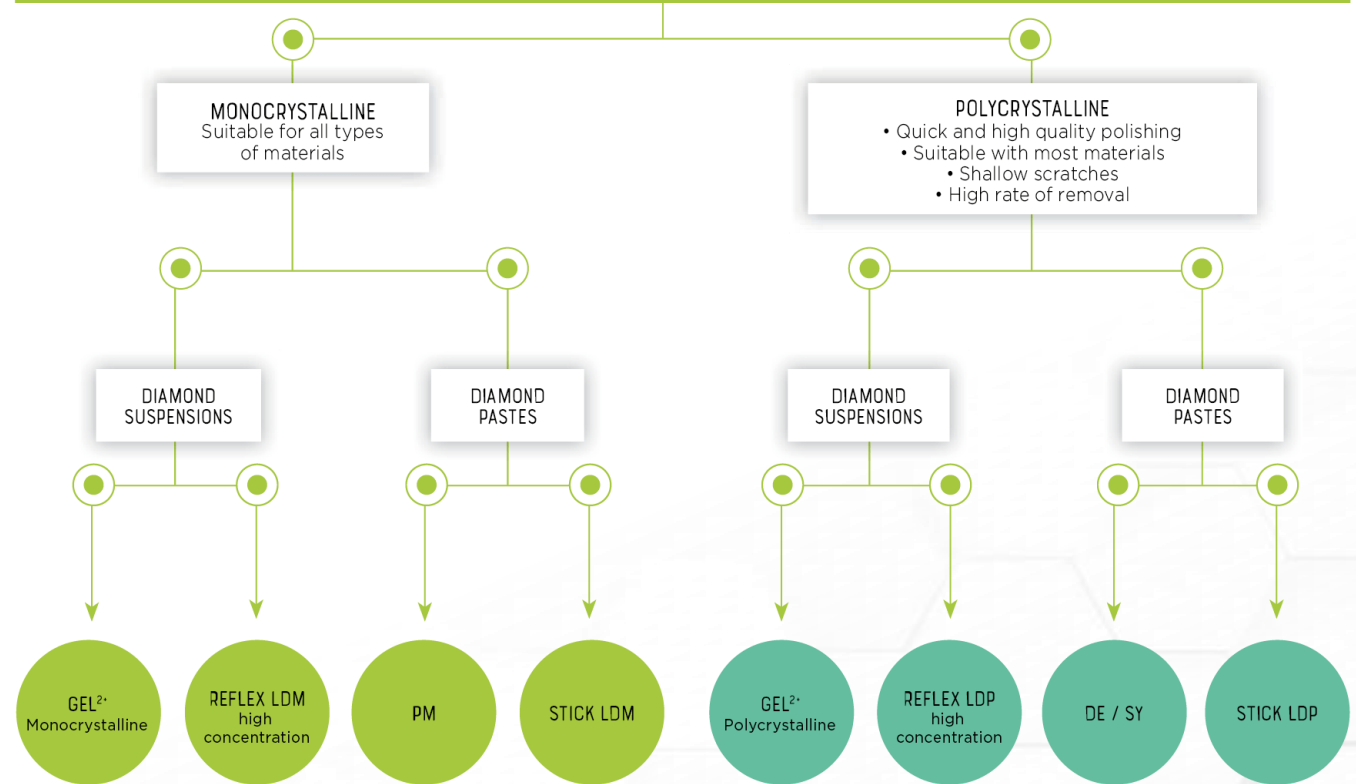
ADS

ADS

ADS

WATER BASE

Other applications



RECOMMENDED LUBRICANT

Ready for use

Reflex Lub

Lub PM

Reflex Lub

Ready for use

Reflex Lub

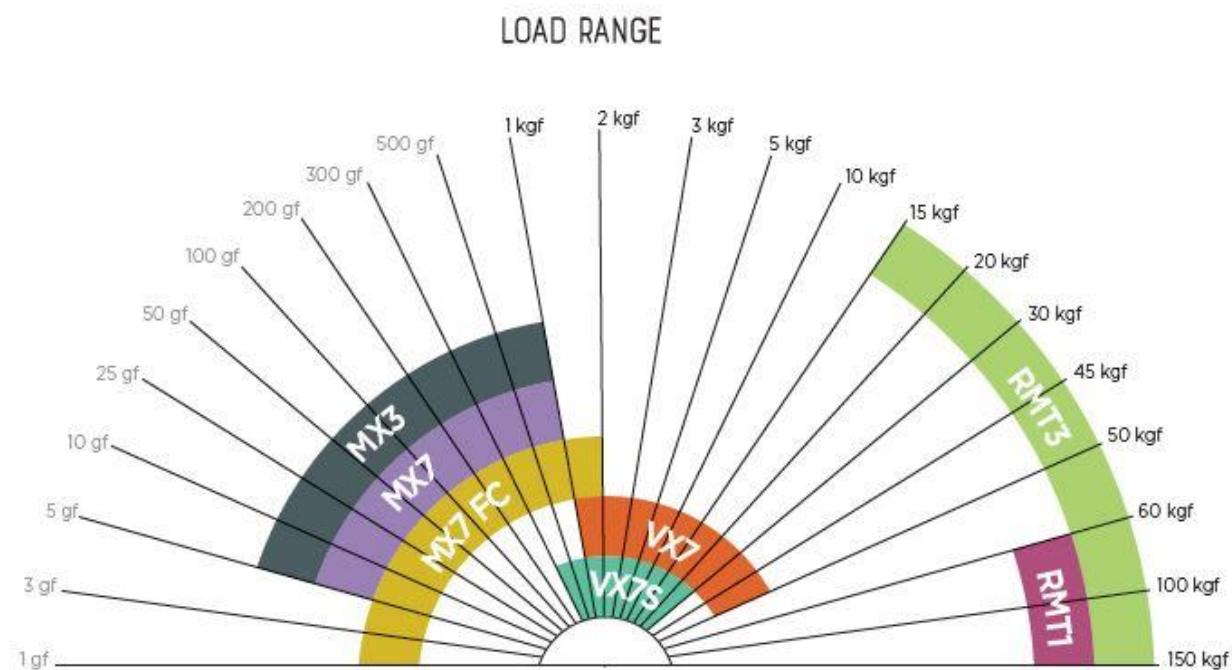
Lub DE

Reflex Lub

NB: all monocrystalline solutions are colored (except PM pastes).
The color is related to the grain size.

TVRDOST





	INDENTERS				TURRET	NUMBER OF OBJECTIVES + NUMBER OF INDENTERS					
	VICKERS	KNOOP	BRINELL	ROCKWELL	TYPE OF TURRET	2 + 1	2 + 2	3 + 1	3 + 2	4 + 1	4 + 2
MICROTECH MX3					Manual	standard					
MICROTECH MX7					Automatic	standard					
MICROTECH MX7 FC					Automatic				standard		
MACROTECH VX7					Automatic	standard					
MACROTECH VX7S					Automatic	standard					
MACROTECH RMT1											
MACROTECH RMT3											

Available objectives: x2,5 x5 x10 x20 x50 x100

HZ HARDNESS TESTERS	SEMI-AUTOMATIC			AUTOMATIC			
MODEL / REFERENCE	HZ2-2 71218	HZ10-2 71216	HZ30-2 71200	HZ2-4 71219	HZ10-4 71217	HZ30-4 71201	HZ50-4 71123
LOAD APPLICATION							
Load range	5 gr - 2 kgf	10 gr - 10 kgf	100 gr - 30 kgf	5 gr - 2 kgf	10 gr - 10 kgf	100 gr - 30 kgf	5 gr - 65 kgf
Indenter type	Vickers or Knoop	Vickers or Knoop	Vickers or Knoop	Vickers or Knoop	Vickers or Knoop	Vickers or Knoop	Vickers and Knoop
FRAME							
Load cells	1	1	1	1	1	1	2
Touch sensor	✓	✓	✓	✓	✓	✓	✓
Objectives	up to 4	up to 4	up to 4	up to 4	up to 4	up to 4	4
Magnification	200 to 2000x	200 to 2000x	200 to 2000x	200 to 2000x	200 to 2000x	200 to 2000x	200 to 2000x
Full HD microscopic camera	✓	✓	✓	✓	✓	✓	✓
Full HD macroscopic camera: observable field 62x50mm	-	-	-	o	o	o	✓
LED light source	✓	✓	✓	✓	✓	✓	✓
Z axis travel	250mm	250mm	250mm	250mm	250mm	250mm	250mm
TABLES							
Fixed 200 x 200mm Maximum work piece weight: 50kg Compatible with single place sample holder	✓	✓	✓	-	-	-	-
Manual 110 x 110mm XY travels 25 x 25 mm Table feeding accuracy with analog micrometers: 10µm Table feeding accuracy with digital micrometers: 1µm. Maximum work piece weight: 50kg Compatible with single place sample holder	o	o	o	-	-	-	-
Automatic standard 280 x 200mm XY travels 100 x 130mm Table feeding accuracy: 1µm Maximum work piece weight: 80kg Compatible with single place sample holder	-	-	-	✓	✓	✓	-
Automatic marble 420 x 210mm XY travels 180 x 200mm Table feeding accuracy: 1µm Maximum work piece weight: 100kg Compatible with multiple and single place sample holder	-	-	-	o	o	o	✓
SOFTWARE							
PRESI Touch Essential	✓	✓	✓	-	-	-	-
PRESI Touch Manual	o	o	o	-	-	-	-
PRESI Touch Pattern	-	-	-	✓	✓	✓	-
PRESI Touch Automatic "Full"	-	-	-	o	o	o	✓
External PC and 28" screen	✓	✓	✓	✓	✓	✓	✓
GENERAL							
Test load accuracy < 1%	✓	✓	✓	✓	✓	✓	✓
Dwell time: 5 - 999 s	✓	✓	✓	✓	✓	✓	✓
Standard compliance: ISO 6507 & 4545, ASTM E384 and E92	✓	✓	✓	✓	✓	✓	✓

HZ SEMI-AUTOMATIC HARDNESS TESTERS



HZ2-2



HZ10-2



HZ30-2

HZ AUTOMATIC HARDNESS TESTERS



HZ2-4



HZ10-4

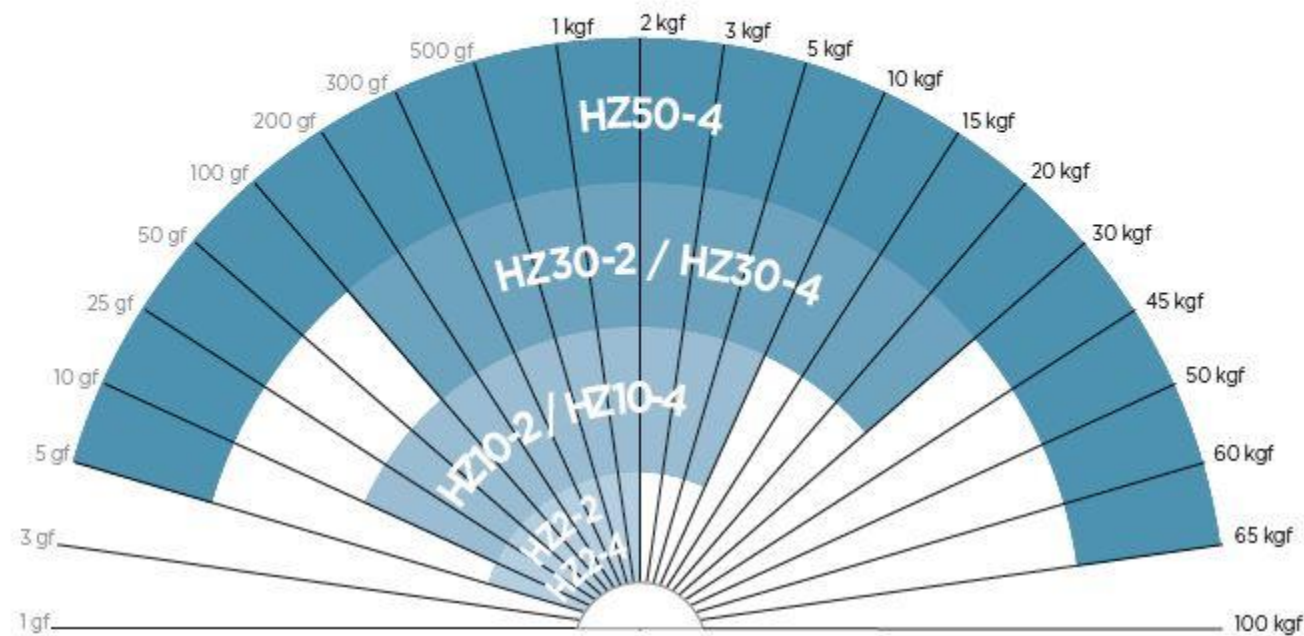


HZ30-4

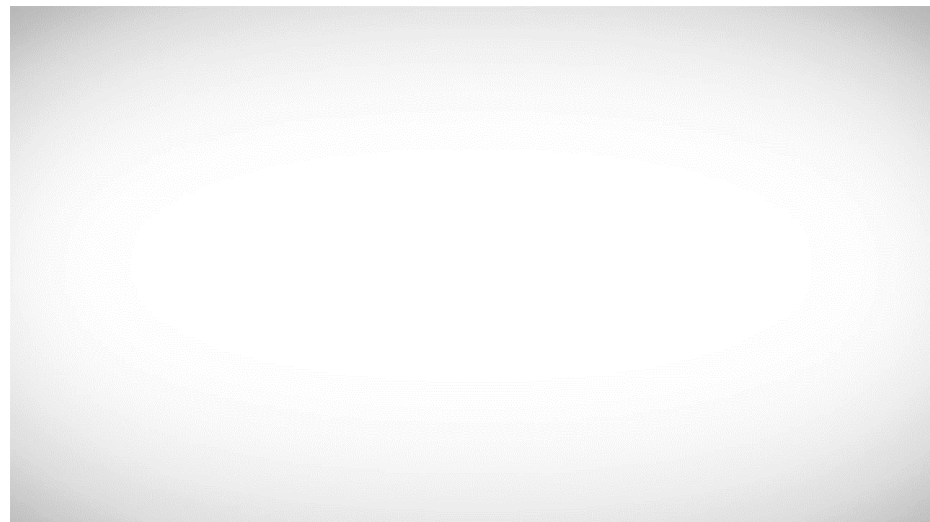


HZ50-4

LOAD RANGE



	HARDNESS TESTER	INDENTERS	TURRET	OBJECTIVES	INDENTERS
HZ2-2	Semi-automatic	Vickers or Knoop	Automatic	up to 4	1
HZ10-2	Semi-automatic	Vickers or Knoop	Automatic	up to 4	1
HZ30-2	Semi-automatic	Vickers or Knoop	Automatic	up to 4	1
HZ2-4	Automatic	Vickers or Knoop	Automatic	up to 4	1
HZ10-4	Automatic	Vickers or Knoop	Automatic	up to 4	1
HZ30-4	Automatic	Vickers or Knoop	Automatic	up to 4	1
HZ50-4	Automatic	Vickers and Knoop	Automatic	4	2



ODKAZ NA VIDEO (WEBOVÉ STRÁNKY PRAGOLAB)

HZ ŘADA

DISKUZE

Pro diskuzi si aktivujte zvuk



správně

Dotaz přes chat



Ďakujem za pozornosť

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