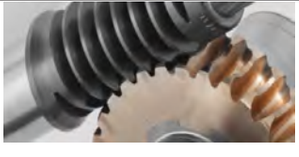
Mec® Tool®



HP®

Luxury®

Multi®

ARGOR-ALJBA

DLC & Superior coatings

SWISS MADE

EN

Foreword

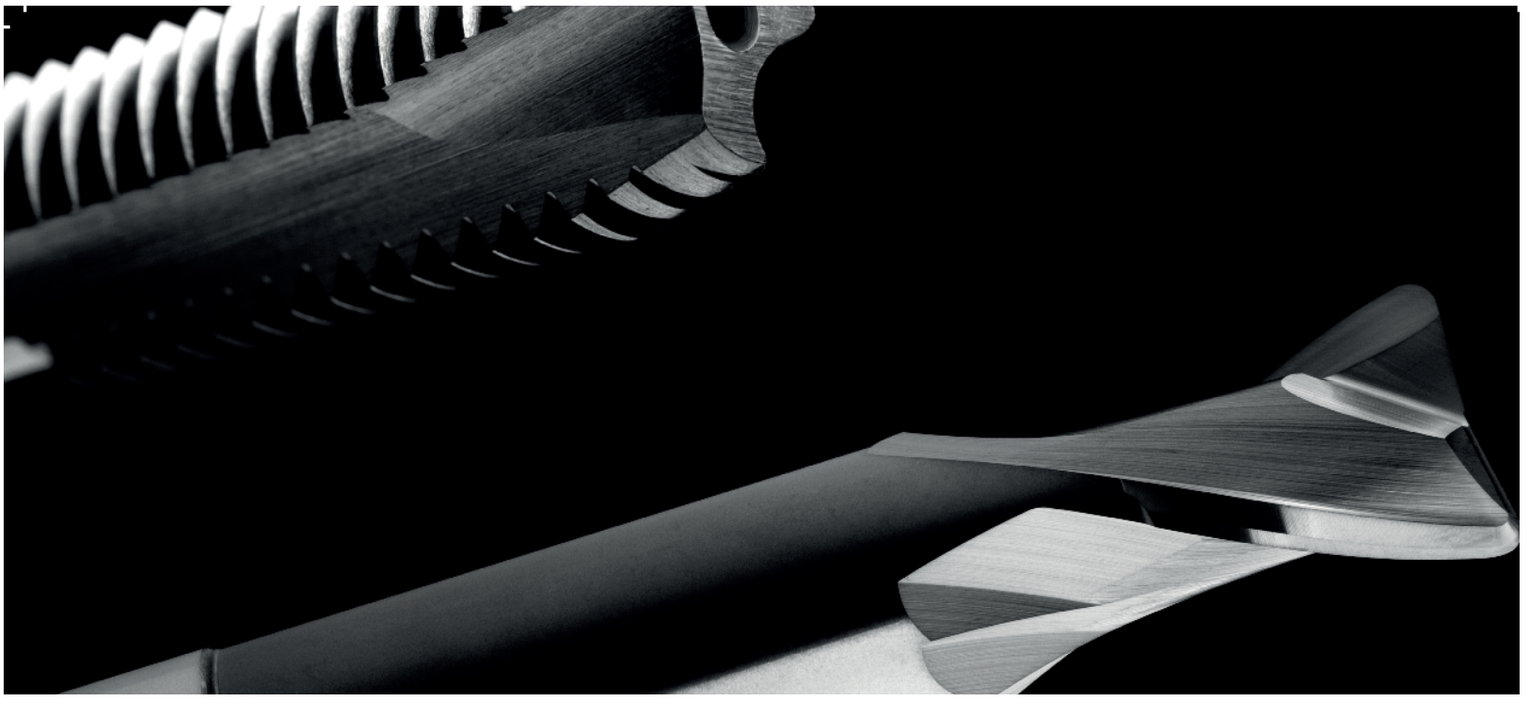
The focus of Argor-Aljba is the production and the development of high-tech coatings. The successful launch of the two coating lines dianoir® and dialong®, represented an important breakthrough of its market activity. The result of its decade of scientific research within the realm of extremely thin and high performance coatings is a unique patented filtered arc PVD process for the deposition of DLC coatings (Diamond-Like-Coating). It‘s a solution for industrial and aesthetical applications of exceptional hardness within the field of DLC-Coatings and is employed to protect surfaces from wear and to reduce friction. Today, Argor-Aljba is a fast growing company, serving the high demand for innovative new coatings for different industries and numerous applications.

The customer benefit in the industry
Continuing increase in productivity, higher flexibility and the pressure to reduce create a strong demand on producers, machine tool builders as well as tool manufacturers to search for improvements of geometries, materials and innovative coatings. The application of dialong® as a coating solution of processing tools for non-ferrous materials is a possibility to hold the pace with this development.
The reduction of lubrication solvents, wear protection or saving of material come to the fore in many mechanical applications: this leads to higher productivity.

Our solution for luxury segment
Highest aesthetical requirements combined with superior properties regarding scratch and wear resistance: the black-anthracite dianoir® coating allow to meet and anticipate the needs of the sectors: watchmaking, jewelry and fashion accessories. With our R&D team, we are able to develop special coatings on request.

Sustainability
Our coatings increase the environmental sustainability of components coated in the industrial and aesthetical sectors.

For more information we invite you to consult our website: www.argor-aljba.com



ta-C DLC Coatings

Argor-Aljba's ta-C DLC coatings, due to their tetrahedral structure, acquire the properties of a diamond. The share of the sp3-configured carbon lies around 75-85%, which is the reason for the high content of diamond structure. Furthermore, due to its procedure, Argor-Aljba's ta-C coatings are completely free of hydrogen. The thereby obtained structure endows the coatings with the following properties:

- Extreme hardness of about 5300 HV((twice as hard as other DLC layers))
- Utmost wear resistance (around two times compared to other DLC layers))
- Very low friction coefficient
- Perfect adherence, thanks to a special intermediate layer
- Humidity resistant
- 100% biological compatibility
- Chemical stability and corrosion resistance

Through their properties Argor-Aljba coatings clearly stand out compared to conventional coatings: considerably reduced friction and extreme hardness, the performance and life span of tools and components are increased by many times as well..

Coating		Hardness (HV)	Friction coefficient	Max. temperature of deposition [°C]	Typical machined materials
Argor-Aljba DLC ta-C dialong® dianoir®	ta-C	5’300	0.08-0.12	<100	Aluminium and copper alloys, precious metals, plastic composites and graphite
Titanium Nitride	TiN	2’300	0.40	<500	Steel, stainless steel
Titan aluminium Nitride	TiAlN	3’000	0.35	<500	Steel, stainless steel
Chrom Nitride	CrN	1’800	0.50	<500	Copper
Zirconium Nitride	ZrN	2’500	0.45	<500	Copper and titanium

Background Information on Diamond-Like-Carbon (DLC)

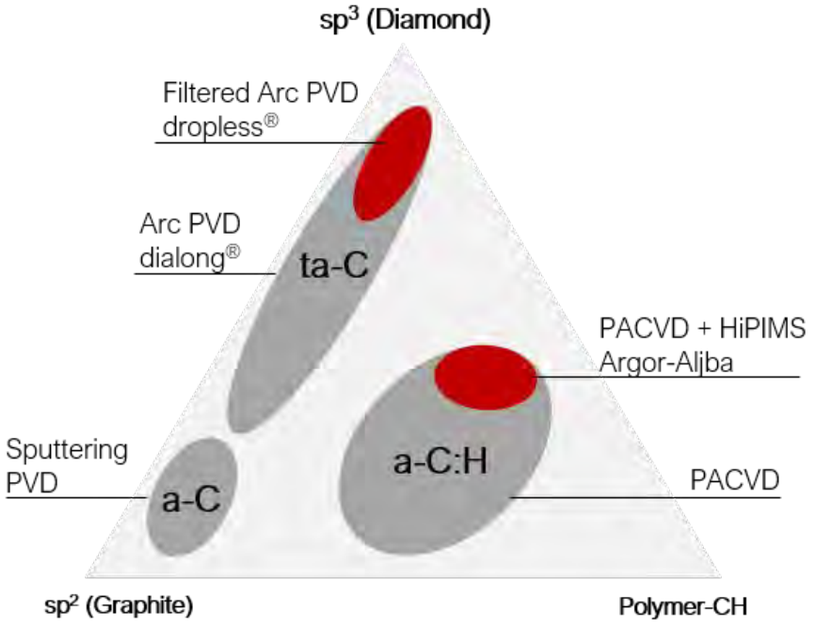
The following pyramid explains the different forms of appearance of graphite and therefore also its properties in the world of coatings:

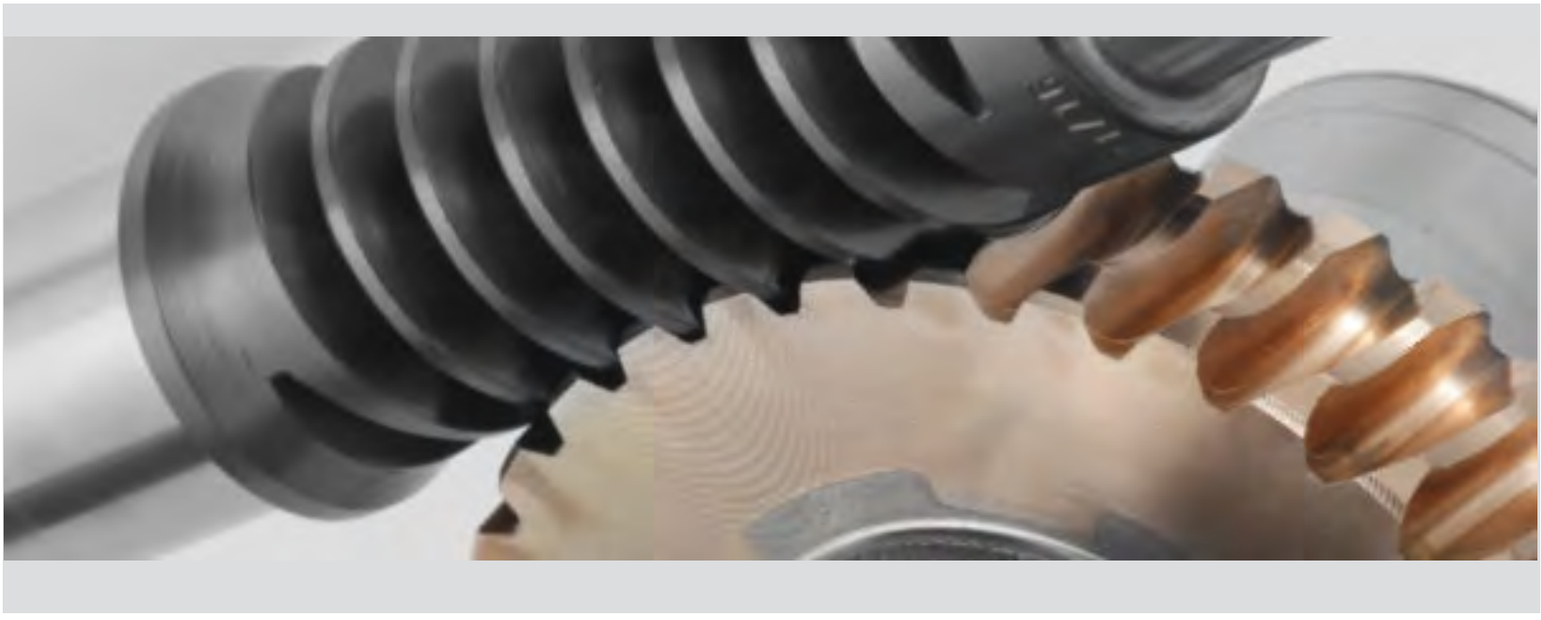
sp2: configured carbon is a black and very soft material. The greater the quotas of this form of carbon, the softer the layer. This combination is usually found amongst the amorphous carbon layers produced with the conventional sputter process.

Polymer-CH: through the CVD process, hydrogen is incorporated into the carbon layer. However, this reduces the hardness of the layer and entails very low application temperatures.

sp3: configured carbon is pure diamond, famous for its extreme hardness.

Layers produced through the Argor-Aljba arc PVD process possess a great proportion of diamond structure and are therefore particularly hard. The remaining residual portion of graphite improves the gliding properties of the layer: the optimal solution in the domain of carbon layers with almost unlimited application possibilities.





Argor MEC

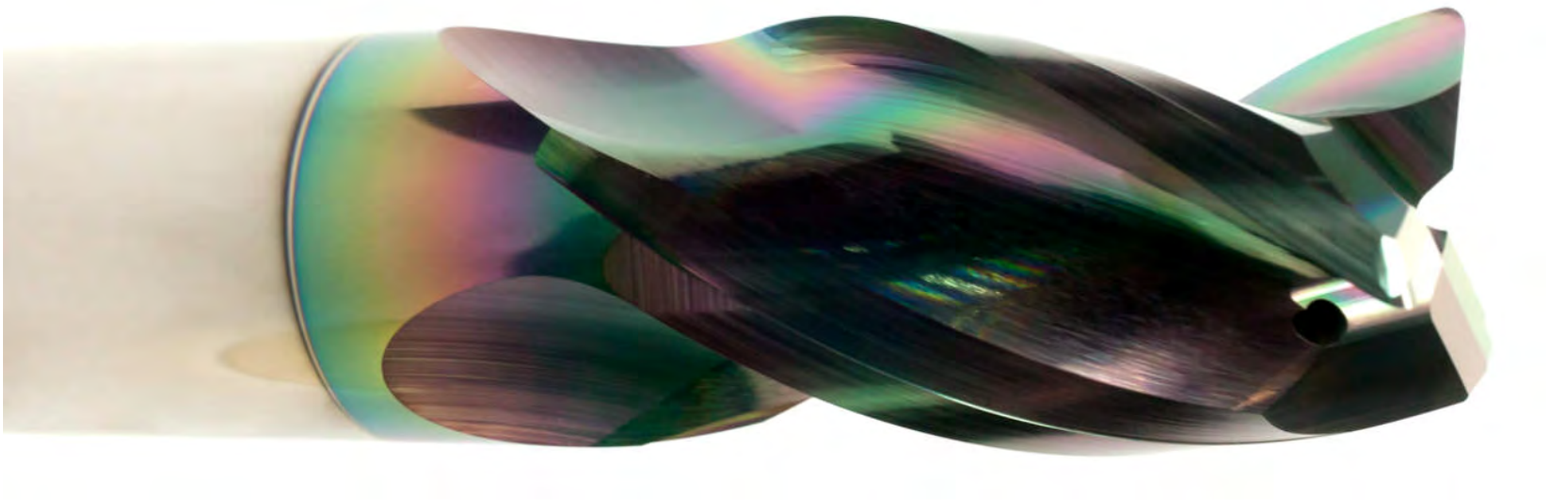
Type of coating	Argor WCC	Nitrocarbo	Argor a-C	Argor aDLC
VDI abbreviation	WC/C	CrN + WC/C	a-C	a-C:H
Process	PACVD	PACVD	PVD Sputtering	PACVD
Composition (C:H)			100:0	70:30
Structure			amorphous	amorphous
sp3 fraction [%]			25-40	40-60
Temperature of deposition [°C]	<200	<200	<120	190
Color	black	black	black	black
Thickness [µm]	1-4	2-5	1-2	2-3
Density [g/cm3]			1.8-2.5	1.8-2.0
Max. operating temperature [°C]	300	300	450	400
Transparency [µm]			0.3	0.5
Hardness [GPa]	14	19	9-14	19-24
Hardness HV 0.05	1500	2000	1000-1500	2000-2500
Adhesion	++++	++++	+++	++++
Biocompatibility *			+++	+++
Friction coefficient **	0.08	0.08	0.15	0.12
Electric resistivity [µΩcm]			$10-10^7$	10^7-10^{10}
Applications	Reduction of the friction coefficient in conditions of poor lubrification	WC/C on a CrN base to increase the resistance under load of the mechanical components	Machinery components, wear components	Technical and engine components
Protection against adhesive wear	++++	++++	++++	++++
Protection against abrasive wear	++	++	++	++

+, ++, +++, ++++ Fuctional properties
* The biocompatibility has to be verified by the customer for its specific application
** Friction coefficient, dry against carbide (at 50% humidity)

Products coated with Argor-Aljba technology offer superior properties compared to conventional DLC coatings

Argor TOOL

Type of coating	dialong® R	dialong® G	dialong® T	dialong®
VDI abbreviation	ta-C	ta-C	ta-C	ta-C
Process	PVD Arc	PVD Arc	PVD Arc	PVD Arc
Composition (C:H)	100:0	100:0	100:0	100:0
Structure	amorphous	amorphous	amorphous	amorphous
sp3 fraction [%]	75	75	75	75
Temperature of deposition [°C]	<100	<100	<100	<100
Color	rainbow blue	rainbow	grey	black-grey
Thickness [µm]	<0.5	<0.5	<1	1
Density [g/cm3]	2.8	2.9-3.0	2.9-3.0	2.9-3.0
Max. operating temperature [°C]	500	500	500	500
Transparency [µm]	0.7-1	0.7-1	0.7-1	0.5-0.7
Hardness [GPa]	44	47	50	52
Hardness HV 0.05	4500	4800	5000	5300
Adhesion	++++	++++	++++	++++
Biocompatibility *	+++	+++	++++	++++
Friction coefficient **	0.1	0.1	0.1	0.1
Electric resistivity [µΩcm]	10^7-10^{10}	10^7-10^{10}	10^7-10^9	10^7-10^9
Applications	Cuttig tools, Machine components	Cutting tools, Machine components	Cutting tools, Machine components	Cutting tools, Machine components
Protection against adhesive wear	++++	++++	++++	++++
Protection against abrasive wear	++	++	++	+++



Products coated with Argor-Aljba technology offer superior properties compared to conventional DLC coatings

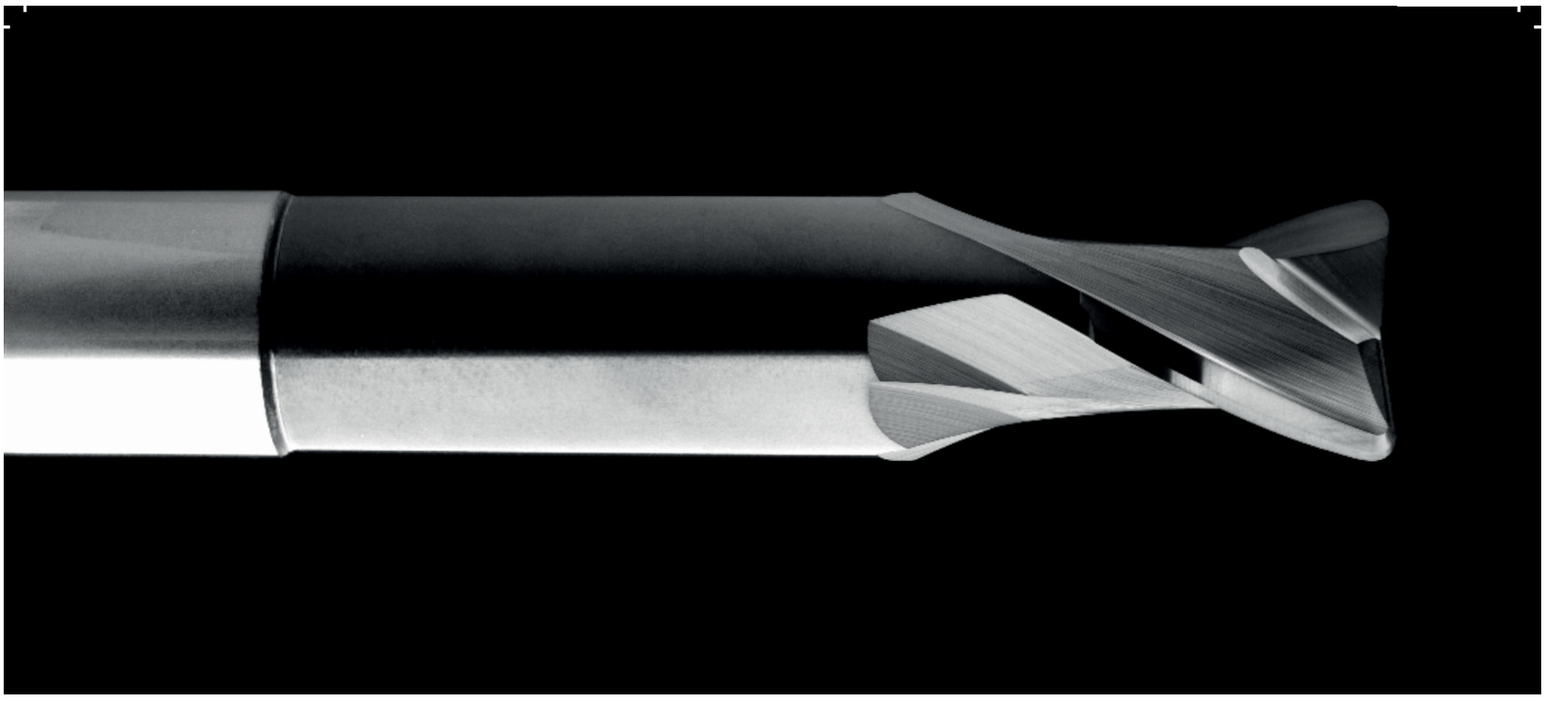
Argor HP

Type of coating	dropless® 5000	dropless® 5000 Plus	dropless® 7000
VDI abbreviation	ta-C	ta-C	ta-C
Process	PVD Arc	PVD Arc	PVD Arc
Composition (C:H)	100:0	100:0	100:0
Structure	amorphous	amorphous	amorphous
sp3 fraction [%]	85	85	85
Temperature of deposition [°C]	<100	<100	<100
Color	rainbow	black-grey	rainbow
Thickness [µm]	0.5	1	0.5
Density [g/cm3]	3.1	3.1	3.1
Max. operating temperature [°C]	500	500	500
Transparency [µm]	0.7-1	0.7-1	0.7-1
Hardness [GPa]	48	48	68
Hardness HV 0.05	5000	5000	7000
Adhesion	+++	+++	+++
Biocompatibiility *	++++	++++	++++
Friction coefficient **	0.1	0.1	0.1
Electric resistivity [µΩcm]	10^9-10^{11}	10^9-10^{11}	10^9-10^{11}
Applications	Moulds, Threading tools, Cutting tools	Cutting tools	Cutting tools
Protection against adhesive wear	++++	++++	++++
Protection against abrasive wear	++++	++++	++++

Products coated with Argor-Aljba technology offer superior properties compared to conventional DLC coatings

Argor LUXURY

Type of coating	dianoir®	dianoir® G2	dianoir® G3	dianoir® G4
VDI abbreviation	ta-C	ta-C + a-C	a-C:H	a-C:H
Process	PVD Arc	PVD Arc	PACVD	PACVD+HiPIMS
Composition (C:H)	100:0	100:0	70:30	70:30
Structure	amorphous	amorphous	amorphous	amorphous
sp3 fraction [%]	70	40	40-60	40-60
Temperature of deposition [°C]	<100	<120	<190	<190
Color	anthracite	black	intense black	intense black
Thickness [µm]	1	2	2-3	2-3
Density [g/cm3]	2.8	2.8-1.8	1.8-2.0	1.8-2.0
Max. operating temperature [°C]	500	450	400	400
Transparency [µm]	0.5-0-7	0.3	0.5	0.5
Hardness [GPa]	44	9-19	19-24	19-24
Hardness HV 0.05	4500	1000-2000	2000-2500	2000-2500
Adhesion	++++	++++	++++	++++
Biocompatibiility *	++++	++++	++++	++++
Friction coefficient **	0.1	0.15	0.12	0.12
Electric resistivity [µΩcm]	10^7-10^9	10^7-10^9	10^7-10^9	10^7-10^9
Applications	Decorative parts of watchmaking and jewelry	Decorative parts of watchmaking and jewelry	Decorative parts of watchmaking and jewelry	Decorative parts of watchmaking and jewelry
Protection against adhesive wear	++++	++++	++++	++++
Protection against abrasive wear	+++	++	+++	++++

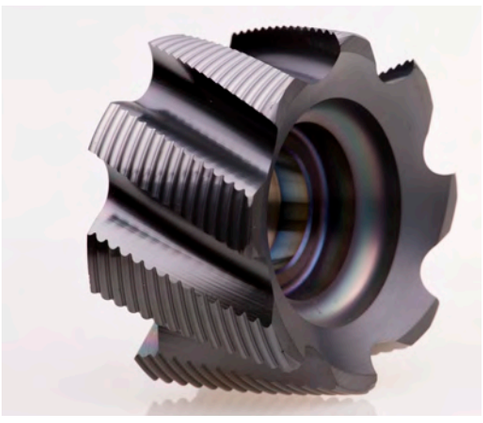


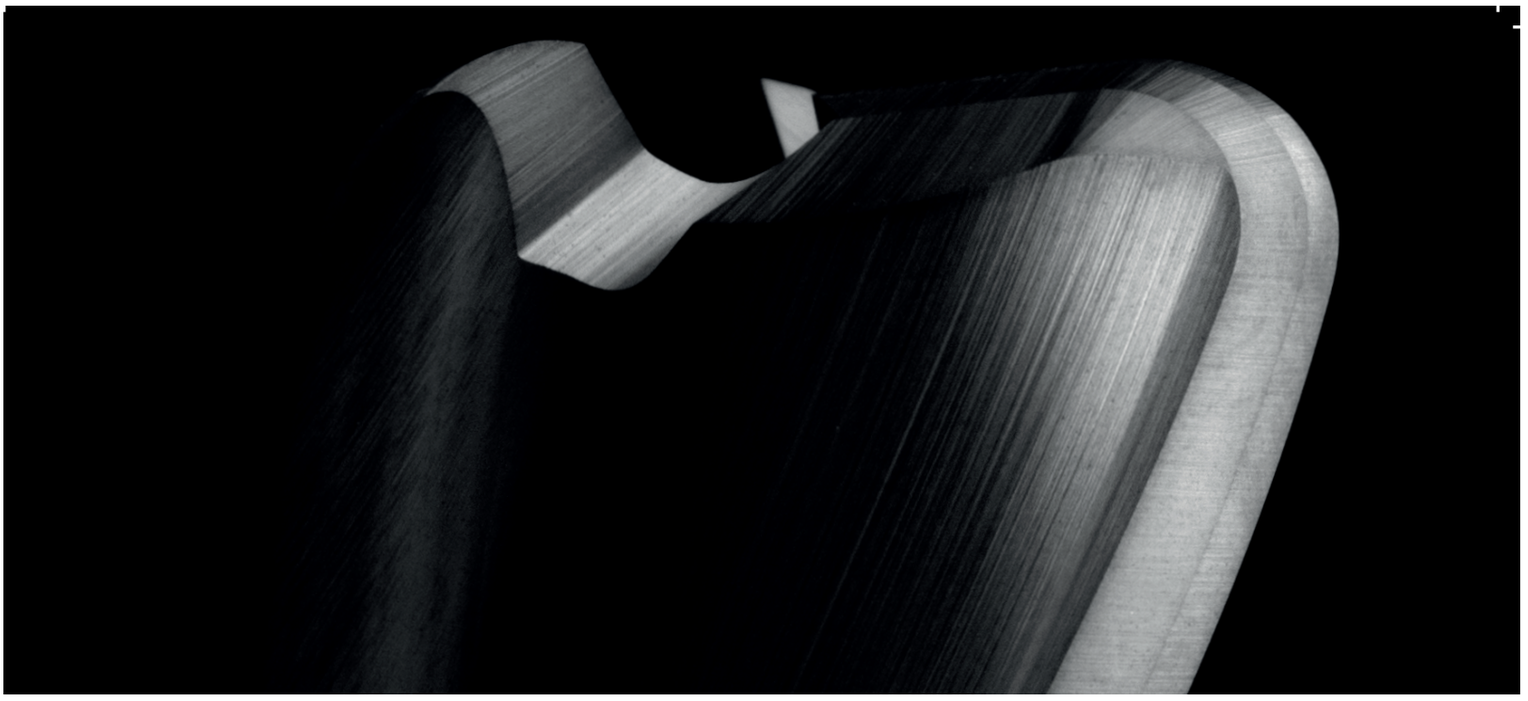
Argor Tool und Argor HP

Argor Tool and Argor HP are the optimal solutions for the increased performance of tools and forms for many diverse applications. Deposited with Argor-Aljba's patented pulsed arc PVD technology, they are perfect for coating tools that process non-ferrous materials. They are available in various thicknesses and hardnesses to offer maximum versatility to customers.
It is possible to prolong the tool life by six times with dialong® coating.
The corresponding cost savings surpass the coating costs by many times.

Machining (drilling, milling, turning, cutting, etc.)

- Higher cutting speed and inferior cutting forces thanks to extreme hardness and lower friction.
- Higher durability thanks to strong protection against wear: clear reduction of costs and increase of the installlation availability.
- Machining with less friction: reduction up to elimination of coolants and cooling solutions and therefore less production costs and environmental pollution.
- Etremely thin layers: the form stability and tool precision is conserved, no edge or blade rounding off.
- The low temperatures of the patented coating process (under 100%) grant constant material properties of the tool.





dialong®

Stamping & forming

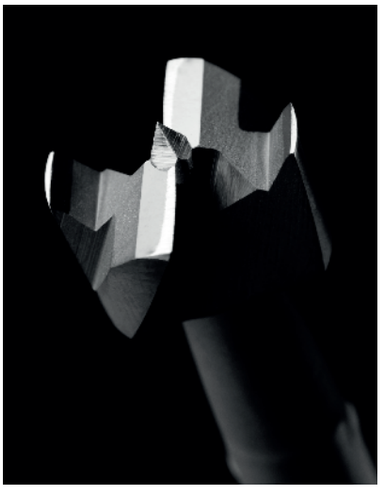
Frequent tool changes are to be avoided during stamping and reforming operations. The time lost by machine downtime costs money and tool wear additionally drives production costs up. With dialong® Argor-Aljba offers a product to protect effectively surfaces. Several aims can be met by applying dialong:

- Layer properties and reliable adherence lead to highly extended production cycles and reduced maintenance costs.
- High wear resistance prolongs life span of forms and stamps.
- The chemical stability of the layer allows the employment of the coated product even in difficult surroundings.

Wood machining

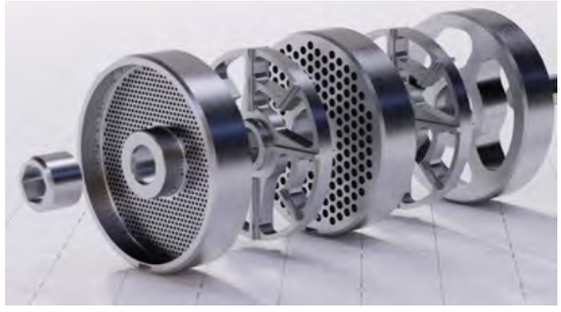
The application of wood machining tools coating is costantly growing:

- Tool life prolonged by many times thanks to strong protection against wear.
- Low friction coefficients lead to highly increased cutting speed.
- Higher surface finish of the machined wood thanks to great formconsistency of blades.
- Resharpen the tools is not a problem: they can be coated without difficulty.



dialong®

Food & Packaging



dialong® offers the following advantages on the coated components:

- Reduction of the friction coefficient.
- Detaching effect that avoids the accumulation of residues.
- Decrease in the processing temperature of equipment in contact with food, lower overheating problems.
- Formation of a protective barrier against numerous products used for cleaning and sterilization of machinery.
- Anti-corrosive, non-sticking, antifouling, biocompatible and food-saving properties, easy to polish.

Medical & Dental

dialong® coatings are used for:

- Protect devices from corrosion.
- Keep the original sharp edge.
- Increase the tool life.
- Reduce reflection problems during surgery.
- Increase the chemical inertness towards other substances.
- Decrease the friction coefficient.
- Increase the tool life that process zirconia.

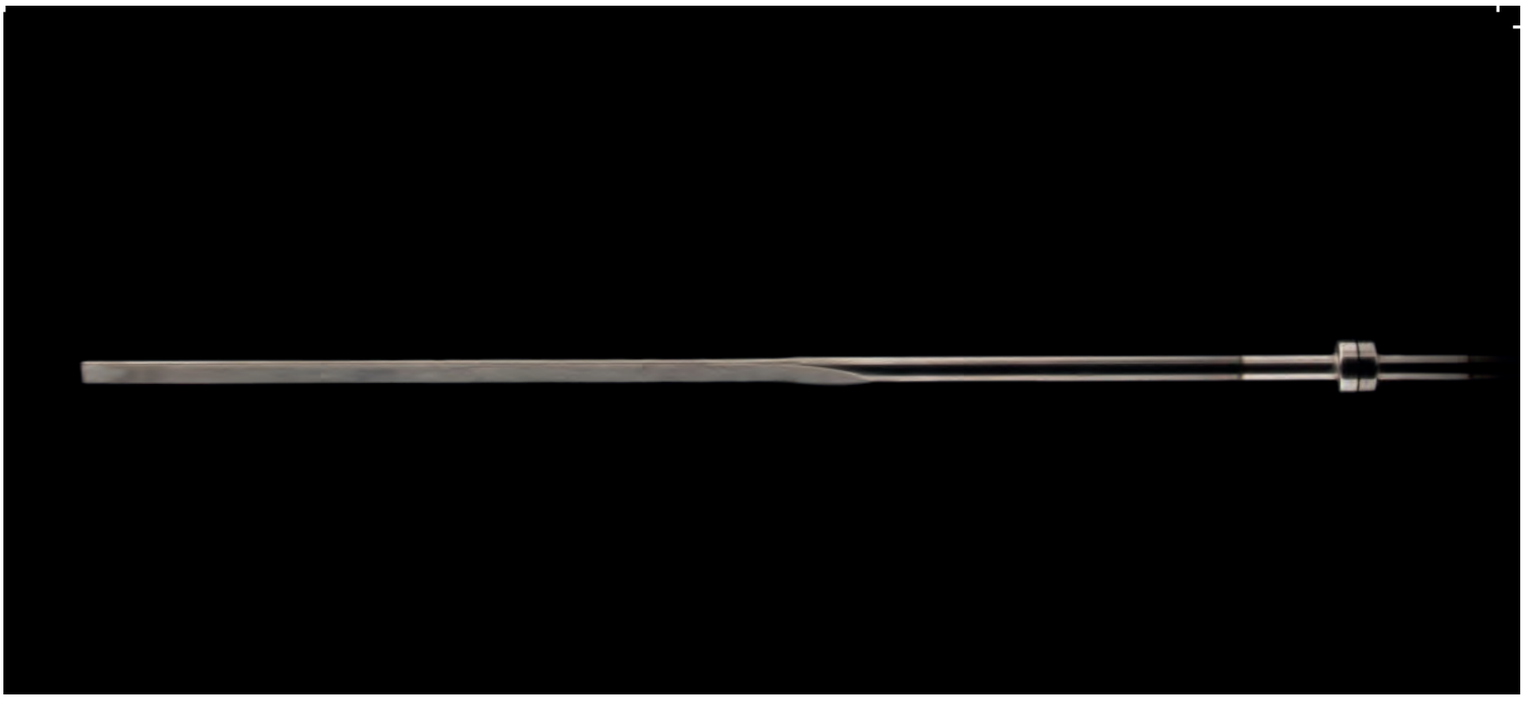
dropless®

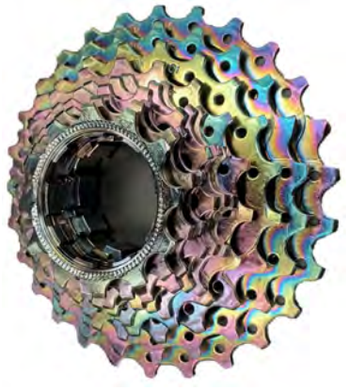
New DLC coating technology: dropless®

The patented dropless® technology is the latest and pioneering development from Argor-Aljba. The dialong layer produced with the new dropless® technology brings the following performance improvements:

- Even higher diamond content in the DLC (sp3>80%)
- Hardness up to 7000 HV
- A reduction of the droplets and thus an improvement in the surface roughness values
- An extremely dense layer and it provides a better protection against corrosion of the base material.

The new dropless® technology can be used for all technical applications where the layer dialong® achieves good results. With well-known customers has been demonstrated in long-term studies that dropless® layer had an increase in tool life by 75% compared to the standard dialong® layer.
Test whether the dropless® technology for your application brings even better performance and let yourself be convinced of the benefits.





Wear Parts

- The extremely thin layers, possibly in the range of nanometers, allow highly precise construction methods with simultaneous protection against wear.
- Coated components under high load show a clear increase of performance.
- The high wear resistance increases the lifespan of components and therefore cuts down maintenance costs.
- An extremely low friction coefficient allows the replacement of lubricants: a great advantage for example for applications in the medical or food processing domain.
- Reduced energy consumption due to less friction and lighter construction.
- Higher availability of systems due to increased lifetime with dialong® coated components

Mobility and Motor sport

- Particularly suitable for racing motors and high performance applications, has been developed a new coating with outstanding proprieties.
- Argor aDLC is the coating that has the lowest possible friction coefficient with an extreme smooth surface.

dianoir®

With dianoir® we offer the watch, jewelry industry and to fashion sector a solution for decorative and technical applications.

Watches and Jewelry

dianoir® coatings guarantee highest aesthetical requirements combined with superior properties regarding scratch and wear resistance:

- The decorative black-anthracite color creates optimal pre-conditions for aesthetical applications.
- The corrosion and high wear resistance of dianoir® allows the use in challenging environmental conditions.
- The nontoxic process and the biological compatibility are optimal properties for the use of dianoir® on products that are in continuous human contact.
- Special intermediate layer grants an extraordinary strong adherence.
- 100% Swiss made: dianoir® is made completely in Switzerland with a patented Swiss coating process..

Argor-Aljba is already supplier of well-known houses of the Swiss watch industry and holds broad experience in the coating of “carrures“, “lunettes“, “fonds”, “boucles“, and precision components, etc..
The superior properties of dianoir® were already confirmed by standard watch maker quality tests.

Standard watch maker quality tests of dianoir®	
• Resistance to saline agent test	excellent
• Resistance to artificial transpiration test	excellent
• Resistance to Vickers hardness HV 0.05 test	excellent
• Resistance to wear by vibration	excellent

dianoir® G2

Precision components

Wear protection, saving of material and the reduction of lubrication solvents come to the fore in many mechanical applications.
Be it parts of watch movements or gearbox construction parts, the use of dianoir® allows new solutions for precision watch components:

- The extremely thin layers, possibly in the range of nanometers, allow highly precise construction methods with simultaneous protection against wear.
- Coated components under high load show a clear increase of performance of dianoir® G2 coating.
- The high wear resistance increases the lifespan of components and therefore cuts down maintenance costs.
- An extremely low friction coefficient allows the replacement of lubricants.

Argor-Aljba detains broad experience in coating precision components of the most diverse materials (brass, steel, hard metals, precious metals, sapphires, etc.) and construction parts (wheels, anchors, mainsprings, barrels, ratchet wheels, quadrants, etc.).

dianoir® G2 e dianoir® G4

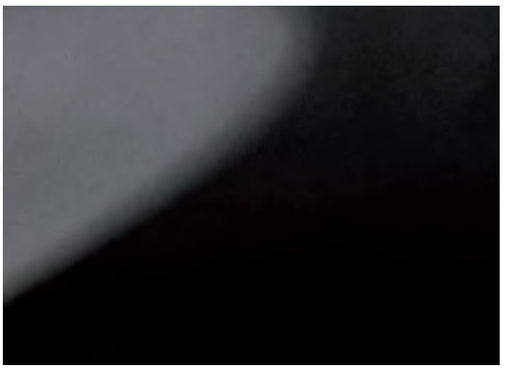
Intense black dianoir® G3 and dianoir® G4 for the world of luxury and fashion

For precision components in watch movements and fashion accessories, we developed two special dark coatings dianoir® G3 and dianoir® G4:

- Extreme good adhesion on steel, brass and nickel parts.
- Very high homogeneity of the coating.
- Excellent maintenance of the original geometry.
- Resistant to climate test and a excellent UV resistance.
- Utmost high chemical resistance.
- With dianoir® G3 and dianoir® G4 the world of luxury and fashion enters into a new technical and aesthetical dimension.

This technology is an excellent alternative to galvanic coatings, because is a black, stable coating with a long lifetime. dianoir® G3 and dianoir® G4 are 100% compatible with the REACH regulation, unlike the galvanic layers (e.g. Crom VI).





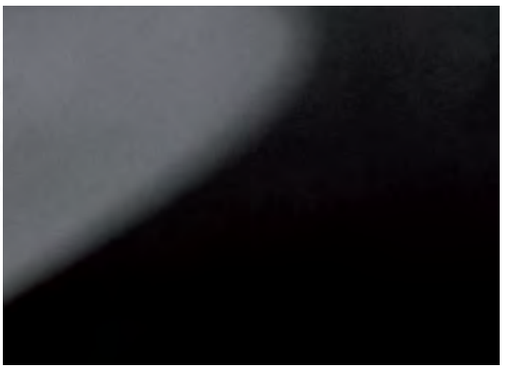
Argor MULTI

Argor Multi coatings are produced in technical cooperation with Swiss PVD Coating AG.
They are suitable for wear-resistant and decorative technical applications to improve the performance, durability, reliability of tools and components used in various industrial sectors.
Thanks to the innovative proprietary arc-PVD-technology named HDP (High Density Plasma), the coating has a higher density, more hardness and toughness as well as greater compactness which improves both the technical and aestetic characteristics of the coated component.

Here is some information about the maximal dimensions that can be covered:

- maximal load capacity of the mobile stand (carousel) dia. 800 mm, length 1200 mm, weight 500 kg
- maximal surface of the coated piece (usable plasma volume) dia. 800 mm, length 1000 mm
- maximal surface of the precision coated piece dia. 800 mm, length 850 mm



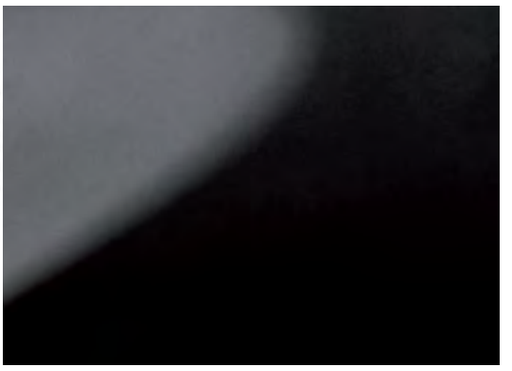


Argor MULTI

Coating	AlCrO	AlTiN
Basis material	AlCrN	AlTiN
Process	PVD	PVD
Color	light grey	anthracite
Thickness [µm]	0.5 -3	0.5- 4
Temperature of deposition [°C]	<500	200-500*
Hardness [GPa]	41±4	37±3
Friction coefficient**	0.6	0.5
Max. operating temperature [°C]	1100	900
Applications area	The HDP AlCrN based-coated is nanostructured and guarantees resistance to high temperatures with a higher thermal shock stability. With its high abrasion resistance, the AlCrO coating is versatile and recommended for a wide range of applications in materials processing hard, dry or MQL and high speed. HDP AlCrO coating achieves great results with milling, threading, forming and reaming of highly alloyed steel and titanium alloys and plastic processing dies.	The HDP AlTiN is a broad-based coating, it is very versatile with high oxidation resistance that retains a high surface hardness at relatively high temperatures and shows excellent toughness when submitted to mechanical stres. AlTiN improves tool life in applications with high cutting speeds and with hard and dry machining (MQL. We recommend AlTiN for applications such as milling and drilling. Due to its fine structure and morphology HDP AlTiN is also suitable for micro drills or miniature tools.

* AlTiN is available at coating temperatures ≤200 °C and can also therefore be used to coat steel tools without loosing the hardness properties or changing the dimensions of the component.
** Friction coefficient dry against carbide (at 50 % humidity)





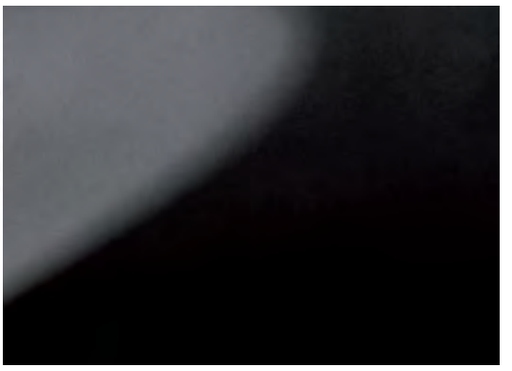
Argor MULTI

Coating	TiCN	AlTiSiN
Basis material	TiC	AlTiN + TiSiN
Process	PVD	PVD
Color	reddish	reddish-brown
Thickness [µm]	0.5-4	0.5-3
Temperature of deposition [°C]	<500	<500
Hardness [GPa]	38±3	40±3
Friction coefficient**	0.2	0.4
Max. operating temperature [°C]	600	1000
Applications area	The TiCN coating is mainly characterized by its high hardness and favourable toughness. With its good anti-abrasive and anti-sticking properties, TiCN demonstrates great results with tools made from High-speed steel (HSS). TiCN is mostly used in thread cutting and forming, gear hobbing, broaching, sawing, blanking of stainless steel and in the injection moulding of carbon fiber or glass fiber-reinforced plastics.	The HDP AlTiSiN coating is characterized by its high thermal stability and oxidation resistance. Its nanolayer structure prevents the formation and propagation of micro cracks. With its. silicon content, it exhibits strong anti-abrasive and anti-friction/anti-sticking properties. AlTiSiN shows great results in the cutting of demanding materials, such as hardened steel, cast iron, titanium and nickel alloys. and vibration-free conditions are important for this coating. With its properties, AlTiSiN demonstrates clear benefits during deep hole drilling, drilling without cooling lubricant or with minimal lubrication.



** Friction coefficient dry against carbide (at 50% humidity)





Argor MULTI

Coating	AliNOX	CrN
Basis material	AlTiCrN	CrN
Process	PVD	PVD
Color	anthracite	silver grey
Thickness [µm]	0.5-4	1-4**
Temperature of deposition [°C]	<500	200-500***
Hardness [GPa]	32.5±2.2	21±3
Friction coefficient**	0.5	0.5
Max.xoperating temperature [°C]	1100	700

Applications area

HDP AliNOX is specific for the process of stainless steel, CoCr-alloys, CuBe-alloys and it is optimized to prevent the adherence of work-material to the coating. With a moderate microhardness, high toughness and high coating density, AliNOX shows great results in dry hard milling and in minimal lubricant milling of steels with 50-64 HRC.

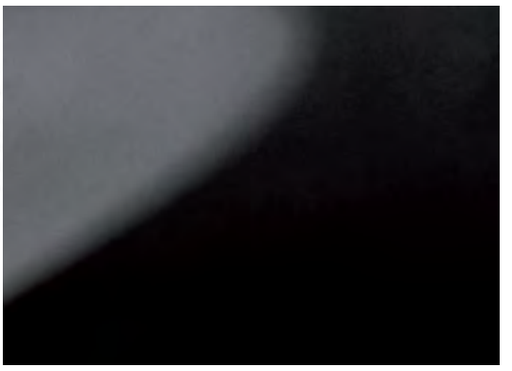
AliNOX has good anti-abrasive, anti-sticking properties and avoids microcrack formations on the coating. Thanks to the reduction of the friction coefficient, it achieves excellent results in processing softer materials like aluminum and copper.

The CrN coating guarantees good corrosion resistance, which is comparable with hard chrome planting, which is significantly harder. The coated surface is very easy to polish: a dense and smooth surface can be achieved.

CrN is the best metallic coating for injection moulding of plastics. It demostrates better demoulding behaviour than that of other low-friction coatings. CrN is also very well-suited for mouldmaking in the processing of special metals such as copper brass, bronze, nickel silver, galvanised or tinned sheet steel.

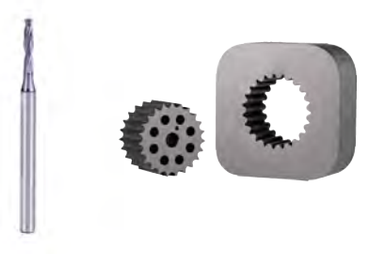

* Special thickness on request
** Fiction coefficient dry against carbide (at 50 % humidity)
*** CrN can be obtained at coating temperatures of 200°C and can also be used for steel tools without the loss of hardness or changing the dimensions of the component.





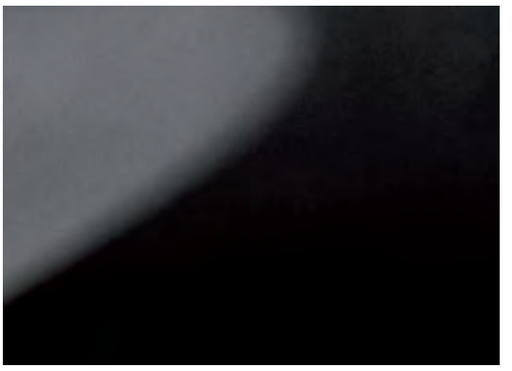
Argor MULTI

Coating	AlTiX	TiCX
Basis material	AlTiN	TiC
Process	PVD	PVD
Color	anthracite	grey
Thickness [µm]	1-3	0.5-2
Temperature of deposition [°C]	<500	<500
Hardness [GPa]	41±4	42±4
Friction coefficient**	0.5	0.15
Max. operating temperature [°C]	1100	400
Applications area	The HDP AlTiX coating is a new development of AlTiN with optimized micro structure and hardness compared with traditional AlTiN coatings shows higher density, hardness and toughness, as well as improved blade edge stability and abrasion resistance. AlTiX achieves improvements in performance with fine-grained carbine tools, used in the high-speed cutting, hard and dry machining (MQL) and deep hole drilling. AlTiX is recommended with resharpened tools and in applications such as fine blanking and forming.	The HDP TiCX coating is a new development of TiCN coating and has higher hardness and toughness. It is characterized by its outstanding anti-friction and anti-adhesion properties. Maximum performance is achieved with TiCX in fine blanking and forming of stainless steel, in thread cutting and forming on alloyed and corrosion-resistant steels. TiCX is also the coating of choice for gear hobbing, broaching and for the injection moulding of carbon fibre or glass fiber-reinforced plastics..




** Friction coefficient dry against carbide (at 50 % humidity))



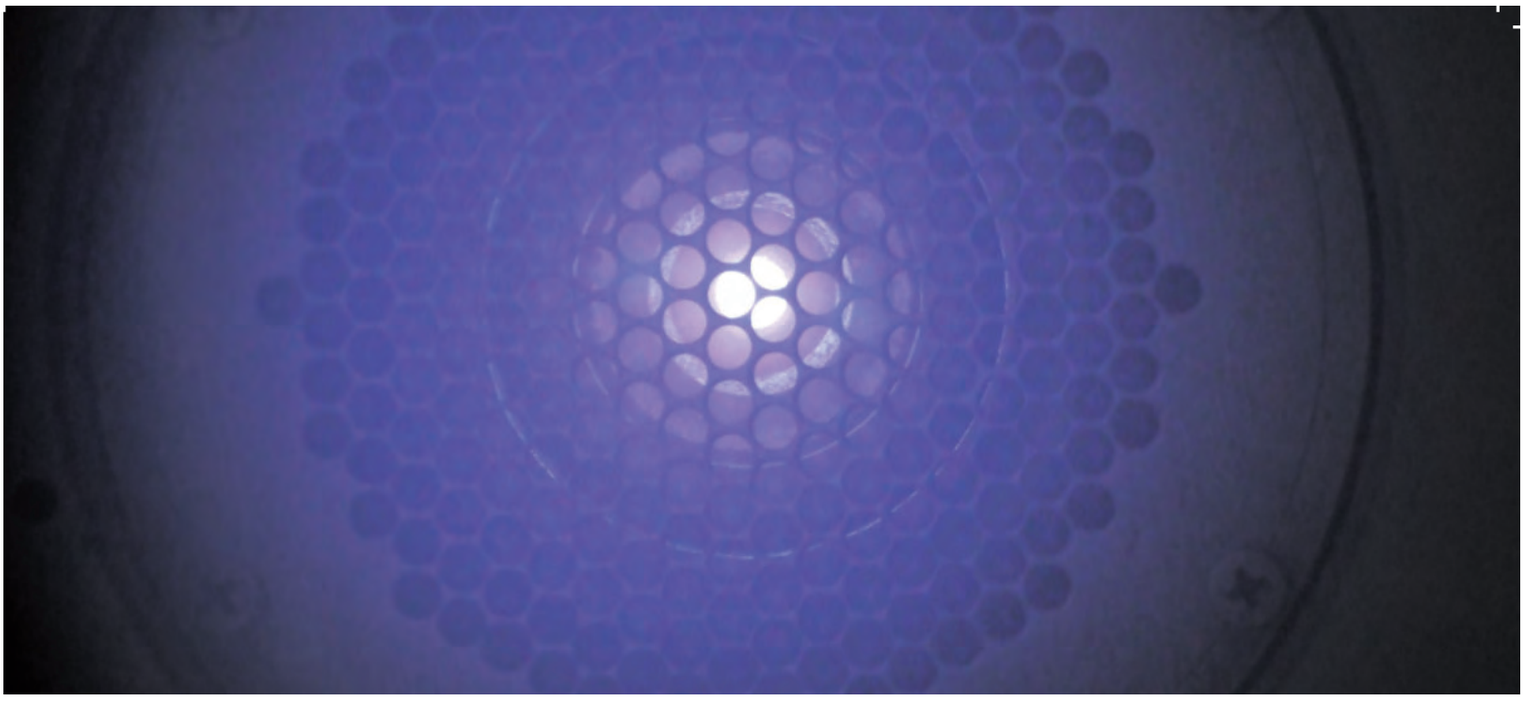


Argor MULTI

Coating	TiN	C35
Basis material	TiN	Cr
Process	PVD	PVD
Color	gold yellow	light grey
Thickness [µm]	1-4*	0.5-4
Temperature of deposition [°C]	200-500***	200-500
Hardness [GPa]	27±3	35±3
Friction coefficient **	0.6	0.2
Max. operating temperature [°C]	600	700
Applications area	TiN is an all-round coating and is suitable for cutting and forming iron-based materials. It is also used in the injection moulding of plastics and in the die casting of zinc. TiN is often used for slow-running machine conditions in milling and drilling.operations. With its outstanding hardness and toughness, TiN is ideal to withstand vibrations without cracking or flaking.	HDP C35 coating is a Cr-based hard coating ideal for coating molds for fine blanking of cobalt-chromium-nickel alloy, in the processing of special metals such as copper, brass, bronze, nickel, silver, galvanised or tin-plated sheet. Furthermore, it is proven effective for die casting alluminium, zinc, as well as in warm forming of steel and brass. C35 is an extremely compact coating characterized by a high microhardness betweek 35 and 40 GPa,it is very easy to polish and has anti-sticking properties.



* Special thickness on demand
** Friction coefficient dry against carbide (at 50% humidity)
*** TiN can be obtained at coating temperatures of 200°C and can therefore also be used for steel tools, without the loss of hardness and changing the dimensions of the component.



About us

Argor-Aljba develops and produces a wide range of DLC surface coatings and nano-coatings, deposited with patented proprietary technologies PVD, PACVD and PACVD + HiPIMS used in the sectors of tools, components for food & packaging machinery, punches and molds, medical and dental, luxury, fashion, etc.

Argor-Aljba also boasts a long experience in the design and construction of the coating machines that uses in its own production department. The results obtained with the Argor-Aljba technology are functional both from a technical and an aesthetic point of view.

The customer is placed at the center of our innovation and expertise and we are able to provide consulting on coatings and technology; thanks to our in-house laboratory, we can carry out measurements of microhardness, roughness, thickness, adhesion, abrasion, SEM, EDXS.

We pay considerable attention to environmental sustainability; nano-coatings represent a very valid solution in many application fields to decrease the use of basic resources, increase the component performance, reduce the energy consumption and the environmental pollution.

We also offer the possibility to customize the coatings according to the needs of customers by offering them a turnkey solution.

More information's on www.argor-aljba.com

June 2022/ english

ARGOR-ALJBA SA

Switzerland
Via F. Borromini 20, CH-6850 Mendrisio
Tel +41 91 222 83 59, Fax +41 91 646 46 60
info@argor-aljaba.com

www.argor-aljba.com

MADE IN SWITZERLAND