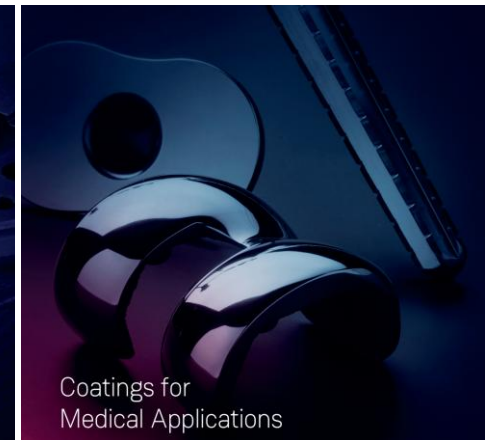
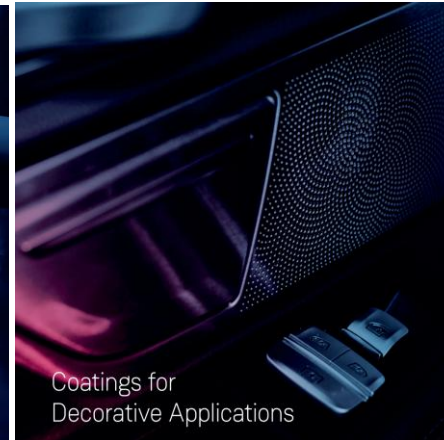
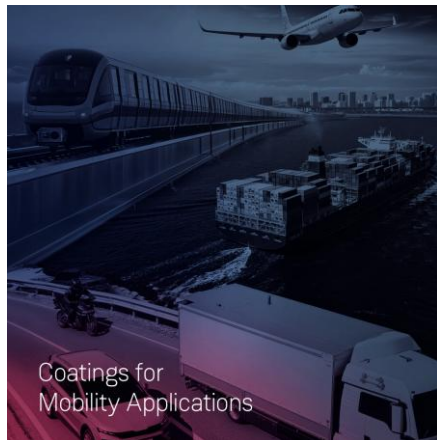
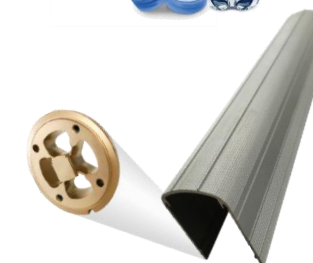


Ionbond Austria Product-Portfolio





General Classification	Wear-Resistance		Wear-Resistance, Thermal Resistance	Tribol. Friction-Reduction	
Coating	Ionbond™ 01	Ionbond™ 30	Ionbond™ 347	Tribobond™ 42 DLC	Tribobond™ 46 Me:DLC
Coating Structure	TiN	CrN	CrON	CrN + a-C:H	CrN + a-C:H:Me WC/C
Hardness HV	2700+/-300	1800+/-150	2800+/-400	Function Layer ~3000	Function Layer ~2000
Coefficient of Friction (vs.steel dry)	~ 0,4	~ 0,4	~ 0,6	< 0,1	< 0,1
Standard Thickness (μ)	2 to 4	3 to 6	3 to 7	2 to 6	3 to 6
Coating-Temp. C°	< 350°C (< 200°C possible)	< 200°C	< 230°C	< 220°C	< 200°C
max. temperature Resistance	500°C	800°C	> 800°C	~350°C	~350°C
Protection against Abrasion	✓ ✓	✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓
Protection against Adhesion	✓	✓ ✓	✓ ✓	✓ ✓ ✓	✓ ✓ ✓
Protection against Fatigue	✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓
Color	Gold	Light-Grey	Rainbow (Anthracite)	Anthracite	Anthracite
Coating properties	Ductile coating with very good resistance of abrasion	Very ductile coating with fine structure and good resistance of abrasion, High thermic stability	fine structured coating with very good resistance against abrasion, and fatigue and especially high thermal durability Anti-Stick-Effect against many materials	Fine structured multi-functional layer for precision components with insufficient lubrication, scuffing risk and high abrasive wear	Very well to use for precision parts with insufficient lubrication and seizure risk.
Application	Hydrl. components, tools mechanical components, valves	Tool manufacture, components, medical technology, textile industry, food industry	Tools with the need of high thermal durability as for example casting components with high needs to thermal durability or/and abrasion Best solution for a lot of plastic inj. molding appl.	Engine components, bearings, hydrl. Components, fuel injection systems, bearings, various Mechanical components	Engine components, gears, bearings, hydrl. Components, racing, shafts,



Coating	Medthin™ 01 Ionbond™ 01	Ionbond™ 347	Medthin™ 30 Ionbond™ 30	Medthin™ 42 Ionbond™ 42	Ionbond™ 36
Coating structure	TiN	CrON	CrN	a-C:H DLC	CrWCC
Technology	PVD	PVD	PVD	PVD/PACVD	PVD
Hardness HV	2900 +/-300	2800+/-400	1800+/-150	2400 +/-400	1400+/-400
Coefficient of friction	~ 0,4	~ 0,5	~ 0,4	~ 0,1	~ 0,2
Standard thickness (μ)	1,5 - 4	3 to 7	2 - 6	1,5 - 4	1 to 3
Coating-temp. (° C)	< 350°C (but <200°C possible)	< 230°C	< 200°C	< 220°C	< 200°C
max. temperaure resistance	500°C	> 800°C	800°C	350°C	350°C
Protection against abrasion	✓ ✓	✓ ✓ ✓	✓	✓ ✓ ✓	✓
Protection against adhesion	✓	✓ ✓	✓	✓ ✓ ✓	✓ ✓
Reduction of light-reflection				✓ ✓	✓ ✓ ✓
Easy cleaning	✓ ✓	✓ ✓ ✓	✓ ✓	✓ ✓ ✓	✓ ✓ ✓
Color	gold	Rainbow (Anthracite)	silver grey	black grey- glossy	deep black
Application	Very wear resistant, builds very good chemical barrier; gives your instruments a high value look	very good resistance against abrasion, and fatigue especially high thermal durability Anti-Stick-Effect against many materials	high wear resistant, builds very good chemical barrier	features very low friction, an ultra smooth surface and extremely high wear resistance.	Decorative but also functional coating, scratch protection, friction reduction and -90% light reflection!
Usage	Implants, Instruments, orthopädic implants; trauma and fixation components made of titanium and stainless steels For food-contact applications	Components, tools or instruments with the need of high thermal durability as or/and abrasion Best solution for a lot of „plastic“ applications	Surgical Instruments which requires save functionality ; Instruments and tools For food-contact applications	Components and instruments for spine surgery, cardiovas. device components ,guiding wires , applications where low friction and very good wear resistance is required For food-contact applications	All kinds of components, instruments or tools in the contact to the human body; for food contact applications



Temperature can be modified (70-200°C)

	Color values measured on a grinded testplate			Hardness	Thickness	Coating-Temp.	
	L	a	b	[HV]	[μm]	[°C]	
Decobond™ Gold	L 69-76	a 3-5	b 29-34	2000	0,5 to 1	<200	Temperature can be modified (70-200°C)
Decobond™ Light Gold	L 71-77	a 0,5-2,5	b 17-22	2000	0,5 to 1	<200	
Decobond™ Gold Sand	L 68-73	a 3-5	b 13,5-17	2000	0,5 to 1	<200	
Decobond™ Champagne	L 69-74	a 1-3	b 8-12	2000	0,5 to 1	<200	
Decobond™ Light Brown	L 62-68	a 4-7	b 6-9	2000	0,5 to 1	<200	
Decobond™ Bronze	L 67-72	a 7-9	b 21-25	2000	0,5 to 1	<200	
Decobond™ Copper	L 58-63	a 9-12	b 14-18	2000	0,5 to 1	<200	
Decobond™ Mocca	L 46-50	a 4-7	b 3,5-6,5	2000	0,5 to 1	<200	
Decobond™ FDE	L 53-58	a 4-6	b 12-16	2000	0,5 to 1	<200	
Decobond™ Desert	L 56-61	a 2-5	b 6-10	2000	0,5 to 1	<200	
Decobond™ Stainless Steel	L 75-81	a 0-1	b 2-6	2000	0,5 to 1	<200	
Decobond™ Smoked Silver	L 51-56	a 0-1	b 1-3	2000	0,5 to 1	<200	
Decobond™ Anthrazit	L 44-49	a 0-1	b 0,5-2,5	1600	0,5 to 1	<200	
Decobond™ Black	L 30,5-35,5	a -1 - 1	b -1 - 2	1300	0,5 to 1	<200	
Decobond™ Rainbow	INTERFERENCE Color (green or blue touch possible)			1000	0,5 to 1	<200	
Ionbond™ 347 Anthracite „Ducro“	CrON Anthracite (L~50) with extensive chemical and thermal resistance			2500	1,5 bis 2,5	<200	
Applications	Design for every part in our life. Examples: faucets, automotive exterior and interior, fashion industry, facility, sports goods, cutlery, eye wear, office supplies, weapons, jewelry etc...						
PVD-Decobond coatings are well known for:	– Enormous Hardness, scratch resistance – High resistance against chemical impacts – “Metallic - HIGH TECH LOOK“ – Bring FUNCTION & DESIGN together						