

ZAKŁAD CERTYFIKACJI**CERTIFICATE OF CONFORMITY
OF THE FACTORY PRODUCTION CONTROL****No. 1436 – CPR – 0032**

*In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the **construction product**:*

**Hot rolled or cold rolled sheets, plates, strips and hot rolled or cold rolled tread sheets
and strips made of aluminium and aluminium alloys, intended for internal
and external loaded construction elements of buildings
acc. to Enclosure no. 1.**

placed on the market under the name or trade mark of:

**GRÄNGES KONIN S.A.
ul. Bolesława Prusa 2
00-493 Warszawa**

and produced in the manufacturing plant:

**GRÄNGES KONIN S.A.
str. Hutnicza 1
62-510 Konin**

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard(s):

EN 15088:2005

under system 2⁺ are applied and that

the factory production control is assessed to be in conformity with the applicable requirements.

This certificate was first issued on 30.10.2013 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified factory production control certification body.

DYREKTOR DS. CERTYFIKACJI



dr inż. Tomasz Włodek



PREZES ZARZĄDU



mgr inż. Edward Makiela

**Enclosure No. 1
to the Certificate No. 1436-CPR-0032
of 13.01.2021**

**Sheets, plates, strips and tread sheets and strips of aluminium and aluminium alloys
acc. to PN-EN 15088:2006, PN-EN 485-1+A1:2010, PN-EN 1386:2009
of aluminium alloys acc. to PN-EN 485-2**

No.	Product	Classification Standard	Grade	Temper	Dimensions	Essential characteristics
1.	Sheets, plates, strips	PN-EN 485-1+A1:2010	EN-AW-1050A EN AW-1200 EN AW-3003 EN AW-3004 EN AW-3005 EN AW-3103 EN AW-3105 EN AW-5005A EN AW-5049 EN AW-5052 EN AW-5083 EN AW-5086 EN AW-5182 EN AW-5251	F, O, H111, H12, H14, H16, H18, H19, H22, H24, H26, H28 F, O, H111, H12, H14, H16, H18, H19, H22, H24, H26 F, O, H111, H12, H14, H16, H18, H19, H22, H24, H26, H28 F, O, H111, H12, H14, H16, H18, H19, H22, H32, H24, H34, H26, H36, H28, H38 F, O, H111, H12, H14, H16, H18, H19, H22, H24, H26, H28 F, O, H111, H12, H14, H16, H18, H19, H22, H24, H26, H28 F, O, H111, H12, H14, H16, H18, H19, H22, H32, H24, H34, H26, H36, H28, H38 F, O, H111, H12, H14, H16, H18, H22, H32, H24, H34, H26, H36, H28, H38 F, O, H111, H12, H14, H16, H22, H32, H24, H34, H26, H36 F, O, H111, H12, H14, H16, H18, H22, H32, H24, H34, H26, H36 F, O, H111, H19 F, O, H111, H12, H14, H16, H18, H22, H32, H24, H34, H26, H36, H28, H38	thickness 0,2÷20mm	<ul style="list-style-type: none"> - acc. to PN-EN 485-3 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (hot-rolled products) - acc. to PN-EN 485-4 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (cold-rolled products) - acc. to PN-EN 485-2 <ul style="list-style-type: none"> • elongation • tensile strength • yield strength - acc. to PN-EN 15088 <ul style="list-style-type: none"> • weldability • durability

No.	Product	Classification Standard	Grade	Temper	Dimensions	Essential characteristics
2.	Tread sheets, strips	PN-EN 1386:2009	EN AW-5454	F, O, H111, H12, H14, H22, H32, H24, H34, H26, H36, H28, H38	thickness 1,2÷20 mm	<ul style="list-style-type: none"> - acc. to PN-EN 1386 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape • elongation • tensile strength • yield strength - acc. to PN-EN 15088 <ul style="list-style-type: none"> • weldability • durability
			EN AW-5754	F, O, H111, H12, H14, H16, H18, H22, H32, H24, H34, H26, H36, H28, H38		
			EN AW-8011A	F, O, H111, H14, H16, H18, H22, H24, H26		
			EN AW-1050A	F, H244		
			EN AW-3003	F, H224, H244		
			EN AW-3103	F, H224, H244		
			EN AW-5052	F, H114, H224, H244		
3.	Sheets, strips	PN-EN 485-1 +A1:2010	EN AW-5083	H114, H116, H224, H244	thickness 0,2÷25 mm	<ul style="list-style-type: none"> - acc. to PN-EN 485-3 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (hot-rolled products) - acc. to PN-EN 485-4 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (cold-rolled products) - acc. to PN-EN 485-2 <ul style="list-style-type: none"> • elongation • tensile strength • yield strength
			EN AW-5086	H114, H116, H224, H244		
			EN AW-5754	F, H114, H224, H244		
			EN AW-4015	O, H111, H12, H14, H16, H18		
			EN AW-4016			
			EN AW-4016	O		
			EN AW-4016	H12		
EN AW-4016	H14					
			EN AW-4016		thickness 0,2÷25 mm	<ul style="list-style-type: none"> - acc. to PN-EN 485-3 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (hot-rolled products) - acc. to PN-EN 485-4 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (cold-rolled products) - acc. to PN-EN 485-2 <ul style="list-style-type: none"> • elongation • tensile strength • yield strength

No.	Product	Classification Standard	Grade	Temper	Dimensions	Essential characteristics
				H16		<ul style="list-style-type: none"> yield strength: min. 140 MPa tensile strength: 165÷205 MPa elongation: min. 1%
				H18		<ul style="list-style-type: none"> yield strength: min. 170 MPa tensile strength: 200 MPa elongation: min. 1%
				H26		<ul style="list-style-type: none"> yield strength: min. 120 MPa tensile strength: 165÷205 MPa elongation: min. 3%
				H28		<ul style="list-style-type: none"> yield strength: min. 160 MPa tensile strength: 190÷230 MPa elongation: min. 2%
			EN AW-4017		thickness 0,2÷25 mm	<ul style="list-style-type: none"> - acc. to PN-EN 485-3 <ul style="list-style-type: none"> allowed tolerances of dimensions and shape (hot-rolled products) - acc. to PN-EN 485-4 <ul style="list-style-type: none"> allowed tolerances of dimensions and shape (cold-rolled products)
				O		<ul style="list-style-type: none"> yield strength: min. 35 MPa tensile strength: 100÷145 MPa elongation: min. 10%
				H12		<ul style="list-style-type: none"> yield strength: min. 90 MPa tensile strength: 120÷160 MPa elongation: min. 4%
				H14		<ul style="list-style-type: none"> yield strength: min. 120 MPa tensile strength: 150÷190 MPa elongation: min. 2%
				H16		<ul style="list-style-type: none"> yield strength: min. 140 MPa tensile strength: 180÷220 MPa elongation: min. 1%
				H18		<ul style="list-style-type: none"> yield strength: min. 170 MPa tensile strength: 200 MPa elongation: min. 1%
				H26		<ul style="list-style-type: none"> yield strength: min. 120 MPa tensile strength: 180÷220 MPa elongation: min. 1%

No.	Product	Classification Standard	Grade	Temper	Dimensions	Essential characteristics
			EN AW-5449	O, H111, H22, H24, H26, H28	thickness 0,2÷25 mm	<ul style="list-style-type: none"> - acc. to PN-EN 485-3 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (hot-rolled products) - acc. to PN-EN 485-4 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (cold-rolled products) - acc. to PN-EN 485-2 <ul style="list-style-type: none"> • elongation • tensile strength • yield strength
			EN AW-5449A	O, H111, H22, H24, H26, H28	thickness 0,2÷25 mm	<ul style="list-style-type: none"> - acc. to PN-EN 485-3 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (hot-rolled products) - acc. to PN-EN 485-4 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (cold-rolled products) - acc. to PN-EN 485-2 <ul style="list-style-type: none"> • elongation • tensile strength • yield strength
			EN AW-6082	O	thickness 0,2÷25 mm	<ul style="list-style-type: none"> - acc. to PN-EN 485-3 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (hot-rolled products) - acc. to PN-EN 485-4 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (cold-rolled products) - acc. to PN-EN 485-2 <ul style="list-style-type: none"> • elongation • tensile strength • yield strength - acc. to PN-EN 15088 <ul style="list-style-type: none"> • weldability • durability

No.	Product	Classification Standard	Grade	Temper	Dimensions	Essential characteristics
		—	AK4B		thickness 0,2÷25 mm	<ul style="list-style-type: none"> - acc. to PN-EN 485-3 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (hot-rolled products) - acc. to PN-EN 485-4 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (cold-rolled products)
				O		<ul style="list-style-type: none"> • yield strength: min. 45 MPa • tensile strength: 120÷150 MPa • elongation: 13÷17%
				H12		<ul style="list-style-type: none"> • yield strength: min. 110 MPa • tensile strength: 130÷170 MPa • elongation: 2÷5%
				H14		<ul style="list-style-type: none"> • yield strength: min. 140MPa • tensile strength: 160÷190MPa • elongation: 2÷4%
				H16		<ul style="list-style-type: none"> • yield strength: min. 160 MPa • tensile strength: 175÷205 MPa • elongation: 2%
				H18		<ul style="list-style-type: none"> • yield strength: min. 180 MPa • tensile strength: min. 190 MPa • elongation: 1÷2%
				H22		<ul style="list-style-type: none"> • yield strength: min. 90 MPa • tensile strength: 130÷170 MPa • elongation: 6÷10%
				H24		<ul style="list-style-type: none"> • yield strength: min. 130 MPa • tensile strength: 160÷190 MPa • elongation: 4÷9%
				H26		<ul style="list-style-type: none"> • yield strength: min. 150 MPa • tensile strength: 175÷205 MPa • elongation: 3÷7%
				H28		<ul style="list-style-type: none"> • yield strength: min. 170 MPa • tensile strength: min. 190 MPa • elongation: 3÷4%

No.	Product	Classification Standard	Grade	Temper	Dimensions	Essential characteristics
		—	AK4C		thickness 0,2±25 mm	<ul style="list-style-type: none"> - acc. to PN-EN 485-3 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (hot-rolled products) - acc. to PN-EN 485-4 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (cold-rolled products)
				O		<ul style="list-style-type: none"> • yield strength: min. 45 MPa • tensile strength: 120±160 MPa • elongation: 13±17%
				H12		<ul style="list-style-type: none"> • yield strength: min. 100 MPa • tensile strength: 130±180 MPa • elongation: 2±5%
				H14		<ul style="list-style-type: none"> • yield strength: min. 130 MPa • tensile strength: 150±200 MPa • elongation: 2±4%
				H16		<ul style="list-style-type: none"> • yield strength: min. 150 MPa • tensile strength: 170±220 MPa • elongation: 2%
				H18		<ul style="list-style-type: none"> • yield strength: min. 180 MPa • tensile strength: min. 200 MPa • elongation: 1±2%
				H22		<ul style="list-style-type: none"> • yield strength: min. 90 MPa • tensile strength: 130±180 MPa • elongation: 6±10%
				H24		<ul style="list-style-type: none"> • yield strength: min. 110 MPa • tensile strength: 150±200 MPa • elongation: 4±9%
				H26		<ul style="list-style-type: none"> • yield strength: min. 130 MPa • tensile strength: 170±220 MPa • elongation: 3±7%
				H28		<ul style="list-style-type: none"> • yield strength: min. 160 MPa • tensile strength: min. 200 MPa • elongation: 3±4%

No.	Product	Classification Standard	Grade	Temper	Dimensions	Essential characteristics
		—	AK4M1		thickness 0,2±25 mm	<ul style="list-style-type: none"> - acc. to PN-EN 485-3 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (hot-rolled products) - acc. to PN-EN 485-4 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (cold-rolled products)
				O		<ul style="list-style-type: none"> • yield strength: min. 45 MPa • tensile strength: 120÷160 MPa • elongation: 13÷17%
				H12		<ul style="list-style-type: none"> • yield strength: min. 120 MPa • tensile strength: 140÷180 MPa • elongation: 2÷5%
				H14		<ul style="list-style-type: none"> • yield strength: min. 140 MPa • tensile strength: 160÷200 MPa • elongation: 2÷4%
				H16		<ul style="list-style-type: none"> • yield strength: min. 160 MPa • tensile strength: 180÷220 MPa • elongation: 2%
				H18		<ul style="list-style-type: none"> • yield strength: min. 180 MPa • tensile strength: min. 200 MPa • elongation: 1÷2%
				H22		<ul style="list-style-type: none"> • yield strength: min. 100 MPa • tensile strength: 140÷180 MPa • elongation: 6÷10%
				H24		<ul style="list-style-type: none"> • yield strength: min. 120 MPa • tensile strength: 160÷200 MPa • elongation: 4÷9%
				H26		<ul style="list-style-type: none"> • yield strength: min. 140 MPa • tensile strength: 180÷220 MPa • elongation: 3÷7%
				H28		<ul style="list-style-type: none"> • yield strength: min. 160 MPa • tensile strength: min. 200 MPa • elongation: 3÷4%

No.	Product	Classification Standard	Grade	Temper	Dimensions	Essential characteristics
		—	AK4M2		thickness 0,2÷25 mm	<ul style="list-style-type: none"> - acc. to PN-EN 485-3 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (hot-rolled products) - acc. to PN-EN 485-4 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (cold-rolled products) • yield strength: min. 50 MPa • tensile strength: 145÷185 MPa • elongation: 13÷17%
				O		<ul style="list-style-type: none"> • yield strength: min. 145 MPa • tensile strength: 165÷205 MPa • elongation: 2÷5%
				H12		<ul style="list-style-type: none"> • yield strength: min. 165 MPa • tensile strength: 185÷225 MPa • elongation: 2÷4%
				H14		<ul style="list-style-type: none"> • yield strength: min. 185 MPa • tensile strength: 205÷245 MPa • elongation: 2%
				H16		<ul style="list-style-type: none"> • yield strength: min. 205 MPa • tensile strength: min. 225 MPa • elongation: 1÷2%
				H18		<ul style="list-style-type: none"> • yield strength: min. 120 MPa • tensile strength: 165÷205 MPa • elongation: 6÷10%
				H22		<ul style="list-style-type: none"> • yield strength: min. 140 MPa • tensile strength: 185÷225 MPa • elongation: 4÷9%
				H24		<ul style="list-style-type: none"> • yield strength: min. 160 MPa • tensile strength: 205÷245 MPa • elongation: 3÷7%
				H26		<ul style="list-style-type: none"> • yield strength: min. 180 MPa • tensile strength: min. 225 MPa • elongation: 3÷4%
				H28		<ul style="list-style-type: none"> • yield strength: min. 180 MPa • tensile strength: min. 225 MPa • elongation: 3÷4%

No.	Product	Classification Standard	Grade	Temper	Dimensions	Essential characteristics
		ASTM B209 - 14	1100		thickness 0,2÷25 mm	<ul style="list-style-type: none"> - acc. to PN-EN 485-3 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (hot-rolled products) - acc. to PN-EN 485-4 <ul style="list-style-type: none"> • allowed tolerances of dimensions and shape (cold-rolled products)
				O		<ul style="list-style-type: none"> • yield strength: min. 24 MPa • tensile strength: 75 ÷ 106 MPa • elongation: min. 15%
				H12/H22		<ul style="list-style-type: none"> • yield strength: min. 76 MPa • tensile strength: 96 ÷ 131 MPa • elongation: min. 3%
				H14/H24		<ul style="list-style-type: none"> • yield strength: min. 96 MPa • tensile strength: 110 ÷ 145 MPa • elongation: min. 1%
				H16/H26		<ul style="list-style-type: none"> • yield strength: min. 117 MPa • tensile strength: 131 ÷ 165 MPa • elongation: min. 1%
				H18/H28		<ul style="list-style-type: none"> • yield strength: - • tensile strength: min. 152 MPa • elongation: mn. 1%

DYREKTOR DS. CERTYFIKACJI



dr inż. Tomasz Włodek

PREZES ZARZĄDU



mgr inż. Edward Makiela

