

Declaration of Performance, DoP 100/2013

1. Product type: Wire-welded collated nails for nailing tools
2. Identification: haubold nails
3. Intended use: For load-bearing wooden structures
4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5):

ITW Construction Products
Gl. Banegaardsvej 25
DK-5500 Middelfart

5. Authorised representative: N/A
6. System of assessment: 3
7. Notified body / Test laboratory:

STROJIRENSKY ZKUSEBNI USTAV, s.p.
no. 1015
Tovarni 5
466 21 JABLONEC nad Nisou
Czech Republic

performed ITT under system 3 (b) "determination of the product-type on the basis of type testing (based on sampling carried out by the manufacturer), type calculation".

8. Declared performance to ETA: N/A
9. Declared performance:

Notes to the table:

Characteristic values are calculated or tested according to EN 14592:2008+A1:2012

10. The performance of the products is in conformity with the declared performance in point 9.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:



Jan Ditlevsen
General Manager

Middelfart, June 2013

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Nail diameter [mm]	Shank profile	Nail length [mm]	Head diameter / Head area [mm/mm ²]	Length of nail point [mm]	Length of ring shank [mm]	Corrosion protection	Declared values according to EN 14592:2008 + A1:2012						
							Service class	Material	Steel standard	Characteristic values $f_{u,k}$ min. 600 or 700 N/mm ²			
										Withdrawal parameter $f_{ax,k}$ [N/mm ²]	Head pull- through parameter $f_{head,k}$ [N/mm ²]	Yield moment $M_{y,k}$ [Nmm]	Tensile capacity $f_{tens,k}$ [N]
2,1	Smooth	27-65	4,6/16 5/19	3,0	N/A	Bright Electro-Galv 5µm Electro-Galv 12µm	1 1 1-2	C9D C9D C9D	EN ISO 16120-2 EN ISO 16120-2 EN ISO 16120-2	2,45	8,58	1445	NPD
2,1	Ring	27-65	4,6/16 5/19	3,0	17-55	Bright ElectroGalv. 5µm ElectroGalv. 12µm A2 A4	1 1 1-2 1-3 1-3	C9D C9D C9D 1.4301 1.4401	EN ISO 16120-2 EN ISO 16120-2 EN ISO 16120-2 EN 10088-1 EN 10088-1	6,90 6,71 6,71 8,26 8,26	19,49	1118 1118 1118 1194 1194	NPD
2,3	Smooth	40-60	5,7/26	3,2	N/A	Bright ElectroGalv. 5µm ElectroGalv. 12µm	1 1 1-2	C9D C9D C9D	EN ISO 16120-2 EN ISO 16120-2 EN ISO 16120-2	2,45	8,58	1831	NPD
2,3	Helical Screw	40-60	5,7/26	3,2	17-37	Bright	1	C9D	EN ISO 16120-2	7,4	20,91	1708	NPD
2,5	Smooth	35-75	6,1/29	3,5	N/A	Bright ElectroGalv. 5µm ElectroGalv. 12µm	1 1 1-2	C9D C9D C9D	EN ISO 16120-2 EN ISO 16120-2 EN ISO 16120-2	2,45	8,58	2274	NPD
2,5	Ring	35-75	6,1/29	3,5	24-54	Bright ElectroGalv. 5µm ElectroGalv. 12µm A2 A4	1 1 1-2 1-3 1-3	C9D C9D C9D 1.4301 1.4401	EN ISO 16120-2 EN ISO 16120-2 EN ISO 16120-2 EN 10088-1 EN 10088-1	7,58 7,20 7,20 7,66 7,66	20,91	1564 1564 1564 1496 1496	NPD
2,5	Ring	50-65	5,8/26	3,5	38-53	HDG min. 55 µm	1-3	AISI 1008	ASTM A510	6,3	18	2150	3,1
2,5	Helical Screw	40-75	6,1/29	3,5	16-46	Bright ElectroGalv. 5µm ElectroGalv. 12µm	1 1 1-2	C9D C9D C9D	EN ISO 16120-2 EN ISO 16120-2 EN ISO 16120-2	6,23	20,91	2440	NPD
2,8	Smooth	50-90	6,5/33	3,9	N/A	Bright ElectroGalv. 5µm ElectroGalv. 12µm	1 1 1-2	C9D C9D C9D	EN ISO 16120-2 EN ISO 16120-2 EN ISO 16120-2	2,45	8,58	3054	NPD
2,8	Ring	36-90	6,5/33	3,9	25-60	Bright ElectroGalv. 5µm ElectroGalv. 12µm A2 A4	1 1 1-2 1-3 1-3	C9D C9D C9D 1.4301 1.4401	EN ISO 16120-2 EN ISO 16120-2 EN ISO 16120-2 EN 10088-1 EN 10088-1	6,85 7,34 7,34 7,33 7,33	21,64	2323 2470 2470 1964 1964	NPD
2,8	Helical Screw	45-90	6,5/33	3,9	21-66	Bright ElectroGalv. 5µm ElectroGalv. 12µm	1 1 1-2	C9D C9D C9D	EN ISO 16120-2 EN ISO 16120-2 EN ISO 16120-2	7,66	21,64	3379	NPD
2,8	Ring	75	6,5/33	3,9	61	HDG min. 55 µm	1-3	AISI 1008	ASTM A510	6,4	18	3150	4,2
3,0	Smooth	22-32 22-35 25	9,5/70	3,4	N/A	Electro-Galv 5µm HDG* min. 55 µm A2	1 1-3 1-3	C9D C9D 1.4301	EN ISO 16120-2 EN ISO 16120-2 EN 10088-1	2,4	8,5	3100	NPD
3,1	Smooth	50-90	7,1/40	3,4	N/A	Bright ElectroGalv. 5µm ElectroGalv. 12µm	1 1 1-2	C9D C9D C9D	EN ISO 16120-2 EN ISO 16120-2 EN ISO 16120-2	2,45	8,58	3979	NPD
3,1	Ring	50-90	7,1/40	3,4	39-60	Bright ElectroGalv. 5µm ElectroGalv. 12µm A2 A4	1 1 1-2 1-3 1-3	C9D C9D C9D 1.4301 1.4401	EN ISO 16120-2 EN ISO 16120-2 EN ISO 16120-2 EN 10088-1 EN 10088-1	6,87 7,99 7,17 8,41 8,41	15,37	3016 3016 3016 4007 4007	NPD
3,1	Helical Screw	50-90	7,1/40	3,4	26-66	Bright ElectroGalv. 5µm ElectroGalv. 12µm	1 1 1-2	C9D C9D C9D	EN ISO 16120-2 EN ISO 16120-2 EN ISO 16120-2	7,11	15,37	4616	NPD
3,1	Ring	90	6,5/33	3,4	26	HDG min. 55 µm	1-3	AISI 1008	ASTM A510	4,8	16	4500	5
3,4	Smooth	90	7,1/40	3,7	N/A	Bright ElectroGalv. 5µm ElectroGalv. 12µm	1 1 1-2	C9D C9D C9D	EN ISO 16120-2 EN ISO 16120-2 EN ISO 16120-2	2,45	8,58	5059	NPD
3,4	Ring	90	7,1/40	3,7	71	Bright ElectroGalv. 5µm ElectroGalv. 12µm	1 1 1-2	C9D C9D C9D	EN ISO 16120-2 EN ISO 16120-2 EN ISO 16120-2	7,24 8,74 8,74	15,26	4162	NPD
3,4	Helical Screw	98	7,1/40	3,7	66	Bright ElectroGalv. 5µm ElectroGalv. 12µm	1 1 1-2	C9D C9D C9D	EN ISO 16120-2 EN ISO 16120-2 EN ISO 16120-2	6,6	15,26	5821	NPD
2,1 - 3,8	Smooth	50-130	4,6/16 - 7,5/44	3,0/3,8	N/A	Bright Electro-Galv 5µm Electro-Galv 12µm Electro-Galv 25µm HDG 50 µm	1-3	SAE 1010	ASTM A510	1,7	22,1	3250	824
2,1 - 3,8	Helical screw	50-130	4,6/16 - 7,5/44	3,0/3,8	40-110	Bright Electro-Galv 5µm Electro-Galv 12µm Electro-Galv 25µm HDG 50 µm	1-3	SAE 1010	ASTM A510	3	25,8	3250	822
2,1 - 3,8	Ring	22-130	4,6/16 - 7,5/44	3,0/3,8	12-110	Bright Electro-Galv 5µm Electro-Galv 12µm Electro-Galv 25µm HDG 50 µm	1-3	SAE 1010	ASTM A510	10,7	22,3	2800	709

Coating type: 2 (to facilitate insertion)

HDG = Hotdipped galvanized

NPD = No Performance Determined

$f_{ax,k}$ and $f_{head,k}$ are tested at a characteristic timber density of 350 kg/m³