



GROUND SCREWS

CHANGING BUILDING CULTURE



ALTEKEUROPE.CZ

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01



ABOUT US

About us

Altek is the first manufacturer of ground screws in Ukraine founded in 2010. Our company is an expert in solving complex tasks of engineering and construction of the ground screw foundations. This type of foundation has many advantages such as high speed and ease of installation, all-season performance, and the possibility of installation on any type of soil.

The key competencies of the company are the design, production and installation of pile-and-screw foundations. There are more than 2000 objects successfully finished in Ukraine and abroad. We keep to European quality standards at each stage of production, which ensures consistent high quality of the foundation for 50 years.

Altek specializes in creating unique solutions for the quick and efficient construction of foundations for residential, administrative and commercial buildings on water saturated and moist soil, hard-to-reach natural areas, slopes and other terrain and geology complexities:

- solar energy
- electrical substations
- power transmission tower masts
- arched hangars
- frame hangars
- low-rise housing construction
- urban and road infrastructure
- hydraulic works

02

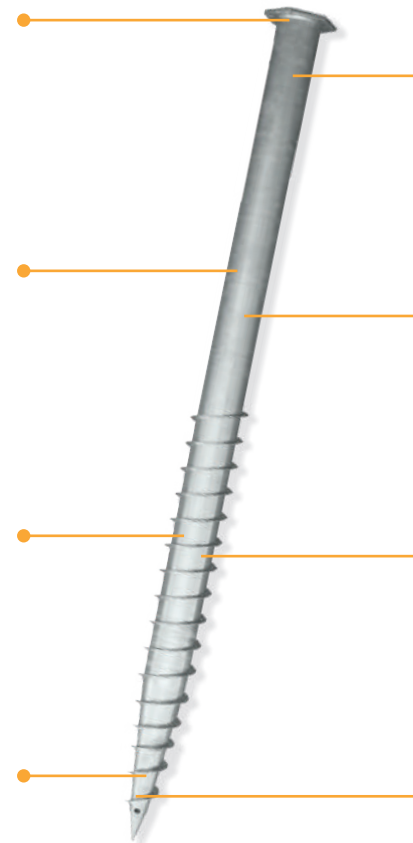
The Advantages of Altek Europe groundscrews.

Different head types are designed to connect to various above ground structures such as wooden posts, beams, metal plates, etc.

Ground screw is a second generation of the helix pile that is a tube with thread-blades of a specific configuration. Thereby to this design, ground screw is easily installed in the ground by the screwing method.

Ground screw is zinc hot-dip galvanized according to ISO 1461 both inside and outside surfaces with minimum layer thickness 75µm, that provides corrosion resistance, sustainability, and a lifetime up to 120 years.

The installation is fast in different weather conditions.



Altek produces ground screws with the length of up to 7m and the diameter of up to 140mm. The wide range of products meets most of the requirements of the foundation load-bearing capacity.

Loosening of the soil during the installation of the ground screw is excluded, it guarantees the highest load-bearing capacity. Altek tests confirm the load-bearing capacity up to 27t.

Ground screw minimizes waste and environmental impact during the installation and exploitation.

The forged cone eliminates the destruction of the conic part in difficult installation conditions. It is less prone to deformation and allows easy pass-through of obstacles underground.

Head types of ground screws

Each project of your foundation is unique and made of different materials and cross-sections of the foundation elements. We have developed a different head plate types to meet the requests for all of your ideas.

Ground screws with an open top are designed to have a pipe inserted into the ground screw and secured with three or four bolts. It finds application for the solar ground mounting systems, fences, decks, and temporary structures.

Ground screws with a welded flange are designed to connect to various above-ground structures such as wooden posts, beams, metal plates, etc. It finds application for the houses, carports, decks, pergolas, and temporary structures.

HEAD PLATE



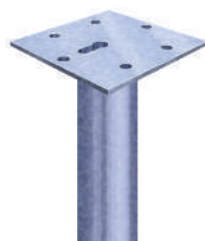
FH-series



FC-series



FU-series



FS-series

OPEN TOP



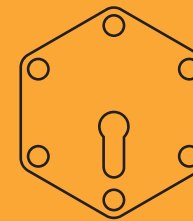
N-series



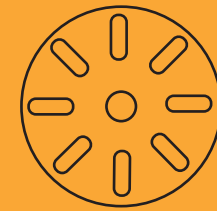
NC-series



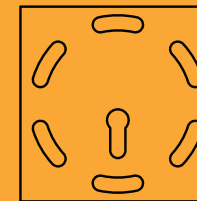
Types of holes



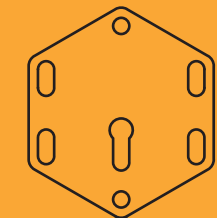
Round holes



Slotted holes



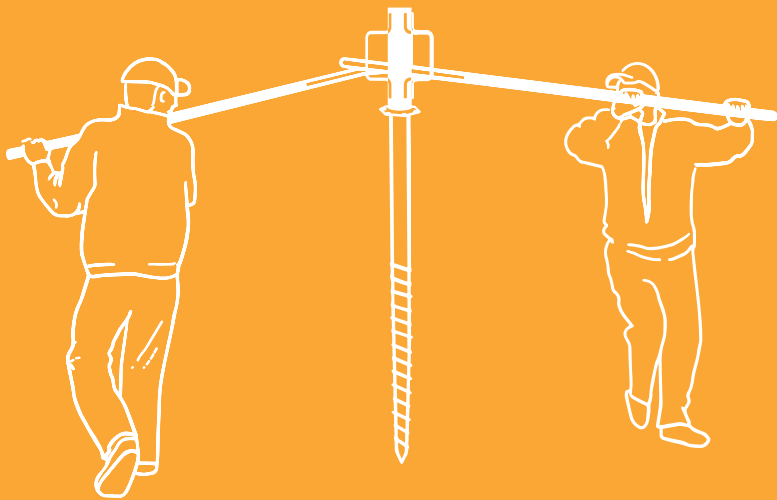
Curved Slot Holes



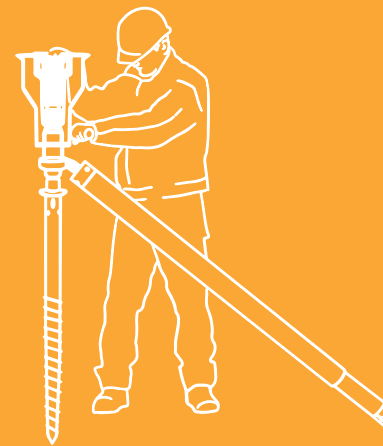
Customized holes

Ground screws can be easily installed on the site and adjusted to above-ground parts of the foundation by the holes of different forms.

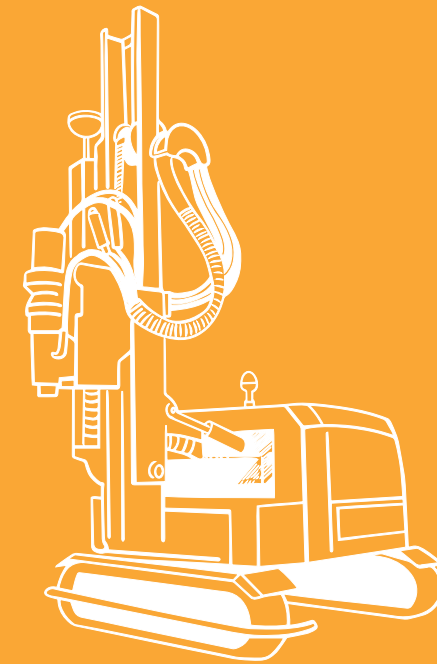
The installation method depends on the soil conditions and the length of the ground screws. The installation could be done by the manual, hand-held electric driver, or machine-mounted hydraulic driver methods.



Manual – an installation method for several persons provided with the special manual tool. Each person should pull on either side of the handle until the ground screw is fully installed. This method could be used for the screws with the length up to 1500 mm (two persons), up to 3000 mm (four persons).



Hand-held electric driver – a comfortable installation method, suitable for one person. It could be used for places with tight space and for ground screws with lengths up to 3000 mm.



Machine-mounted hydraulic driver – a professional installation method, suitable for the large projects with massive ground screws or hard soil conditions using a variety of low speed, high torque drivers.



Foundations for energy efficient houses
Location: Dnipro city
Construction duration: 3 days
Number of ground screws: 78 pcs



Foundations for structures on the water
Location: Dnipro city
Construction duration: 7 days
Number of ground screws: 79 pcs



Solar Mounting Systems
Location: Dnipro region
PV modules : 19 818 pcs
Number of ground screws: 8 164 pcs



Foundations for industrial facilities
Location: Kyiv city
Construction duration: 22 days
Number of ground screws: 1382 pcs



Foundations for the structures on the slope
Location: Kyiv region
Construction duration: 4 days
Number of ground screws: 76 pcs



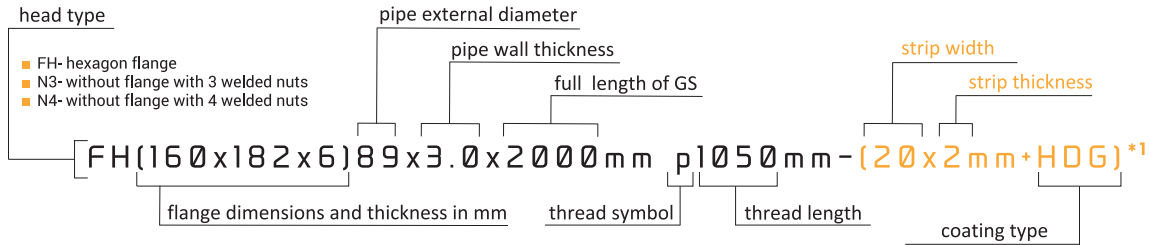
Foundations for infrastructure facilities
Location: Kyiv region
Construction duration: 25 days
Number of ground screws: 124 pcs

Ground screw FH-series

Model with flange FH Ø57, manufactured in accordance with TU U 25.1- 39937935-001:2016 Steel grade S235JR.

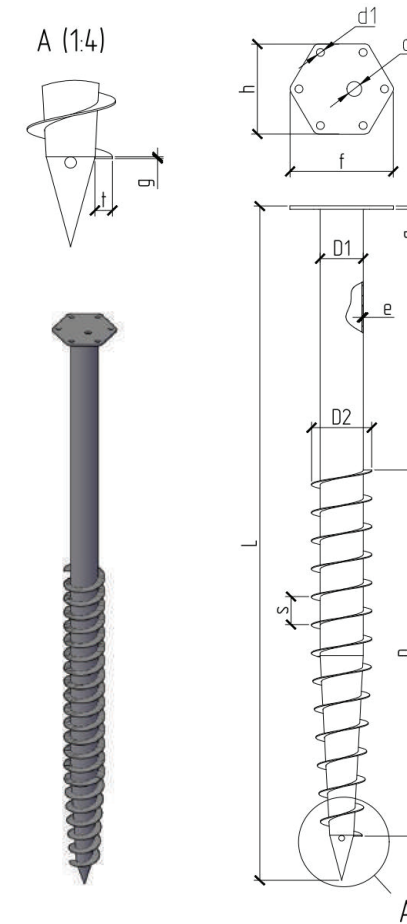
Type of coatings:

1. hot-dip galvanized according to ISO 1461:2009
2. zinc-containing or RAL#### paint
3. primer



- HDG-hot dip galvanized
- Zn- zinc-containing paint
- Primer-primer
- RAL####-primer+paint
- w/o-without coating

NAME OF PRODUCT SYMBOL NAME	FH (160x182x4) 57x2.0x800mm p400mm	FH (160x182x4) 57x2.0x1000mm p400mm	FH (160x182x4) 57x2.0x1200mm p650mm	FH (160x182x6) 57x3.0x1500mm p650mm	FH (160x182x6) 57x3.0x2000mm p650mm	FH (160x182x6) 57x3.0x2500mm p650mm
D1	Pipe diameter (mm)					
	57	57	57	57	57	57
e	Pipe wall thickness (mm)					
	2.0	2.0	2.0	3.0	3.0	3.0
L	Pile length (mm)					
	800	1000	1200	1500	2000	2500
p	Thread length (mm)					
	400	400	650	650	650	650
t x g	Strip size (mm)					
	20x2	20x2	20x2	20x2	20x2	20x2
D2	Strip width + pipe diameter (mm)					
	97	97	97	97	97	97
a	Flange thickness (mm)					
	4.0	4.0	4.0	6.0	6.0	6.0
h x f	Flange dimensions (mm)					
	160x182	160x182	160x182	160x182	160x182	160x182
d1	Mounting hole diameter (mm)					
	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14
d2	Diameter of the zinc drain hole (mm)					
	26	26	26	26	26	26
S	Distance between turns (mm)					
	50	50	50	50	50	50
	Support area*2 (over the entire surface of the threaded part), (m²)					
	0.040	0.040	0.065	0.065	0.065	0.065
	Load-bearing capacity of the pile (t)*3					
	0.39	0.55	0.98	1.35	1.98	2.61
	Pile weight (kg)					
	4.55	5.41	6.6	7.52	9.52	11.52



*1 The standard dimensions of the stripe and coating are shown in the main name.

*2 Provides reliable perception of large loads.

*3 The specified values of the possible load-bearing capacity are determined for the soil: medium-density sand. Information is given only for the initial selection of possible types of screw foundations at the design level.

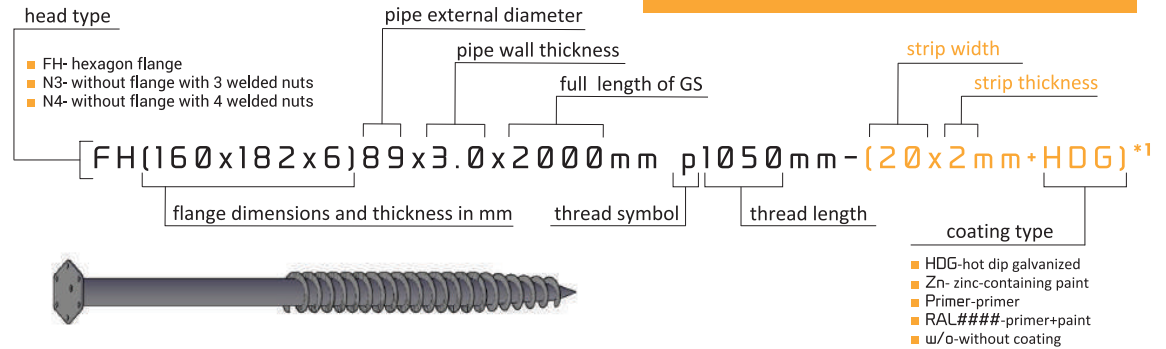
Basis for final determination of foundation dimensions is the on-site load tests and static data on the internal load-bearing capacity of TM Altek Europe ground screws. It is necessary to take into account the law on building products, the rules on building products, other EU regulations and the relevant state building regulations.

Ground screw FH-series

Model with flange FH Ø76, manufactured in accordance with TU U 25.1- 39937935-001:2016 Steel grade S235JR.

Type of coatings:

1. hot-dip galvanized according to ISO 1461:2009
2. zinc-containing or RAL#### paint
3. primer



NAME OF PRODUCT / SYMBOL NAME	FH (160x182x4) 76x2.0x800mm p400mm	FH (160x182x4) 76x2.0x1000mm p650mm	FH (160x182x4) 76x2.0x1200mm p650mm	FH (160x182x6) 76x3.0x1500mm p1050mm	FH (160x182x6) 76x3.0x2000mm p1050mm	FH (160x182x6) 76x3.0x2500mm p1050mm	FH (160x182x6) 76x3.0x3000mm p1050mm	FH (160x182x6) 76x3.5x3500mm p1050mm	FH (160x182x6) 76x3.5x4000mm p1050mm	FH (160x182x6) 76x3.5x4500mm p1050mm	
D1	Pipe diameter (mm)										
	76	76	76	76	76	76	76	76	76	76	
e	Pipe wall thickness (mm)										
	2.0	2.0	2.0	3.0	3.0	3.0	3.0	3.5	3.5	3.5	
L	Pile length (mm)										
	800	1000	1200	1500	2000	2500	3000	3500	4000	4500	
p	Thread length (mm)										
	400	650	650	1050	1050	1050	1050	1050	1050	1050	
t x g	Strip size (mm)										
	20x2	20x2	20x2	20x2	20x2	20x2	20x2	20x2	20x2	20x2	
D2	Strip width + pipe diameter (mm)										
	116	116	116	116	116	116	116	116	116	116	
a	Flange thickness (mm)										
	4.0	4.0	4.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
h x f	Flange dimensions (mm)										
	160x182	160x182	160x182	160x182	160x182	160x182	160x182	160x182	160x182	160x182	
d1	Mounting hole diameter (mm)										
	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	
d2	Diameter of the zinc drain hole (mm)										
	26	26	26	26	26	26	26	26	26	26	
S	Distance between turns (mm)										
	50	50	50	50	50	50	50	50	50	50	
	Support area*2 (over the entire surface of the threaded part), (m ²)										
	0.0414	0.0667	0.0667	0.1194	0.1194	0.1194	0.1194	0.1194	0.1194	0.1194	
	Load-bearing capacity of the pile (t)*3										
	0.42	0.82	1.11	1.82	3.05	4.25	5.45	6.65	7.85	9.05	
	Pile weight (kg)										
	5.42	7.03	8.11	10.17	12.87	15.57	18.27	23.97	27.1	30.23	

*1 The standard dimensions of the stripe and coating are shown in the main name.

*2 Provides reliable perception of large loads.

*3 The specified values of the possible load-bearing capacity are determined for the soil: medium-density sand. Information is given only for the initial selection of possible types of screw foundations at the design level.

Basis for final determination of foundation dimensions is the on-site load tests and static data on the internal load-bearing capacity of TM Altek Europe ground screws. It is necessary to take into account the law on building products, the rules on building products, other EU regulations and the relevant state building regulations.

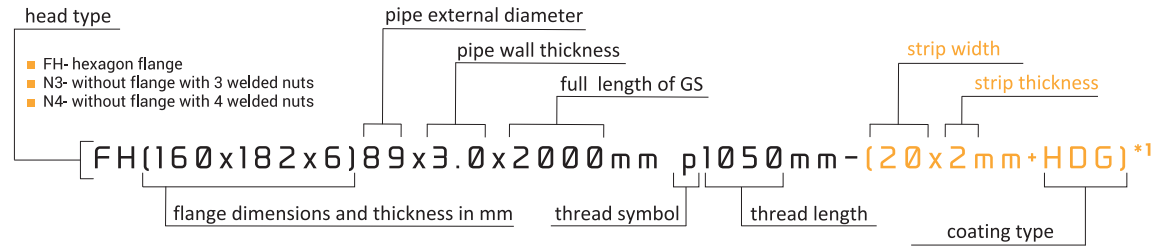
MODEL ABBREVIATION DESCRIPTION:

Ground screw FH-series

Model with flange FH Ø89, manufactured in accordance with TU U 25.1- 39937935-001:2016 Steel grade S235JR.

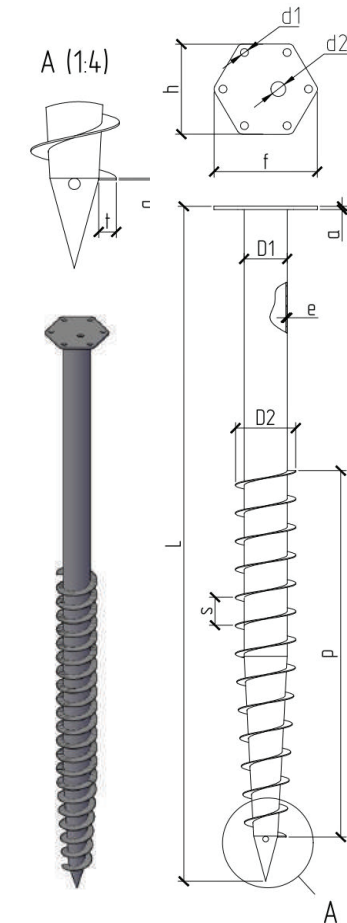
Type of coatings:

1. hot-dip galvanized according to ISO 1461:2009
2. zinc-containing or RAL#### paint
3. primer



- HDG-hot dip galvanized
- Zn- zinc-containing paint
- Primer-primer
- RAL####-primer+paint
- w/o-without coating

NAME OF PRODUCT SYMBOL NAME	FH (160x182x6) 89x3.0x1200mm p650mm	FH (160x182x6) 89x3.0x1500mm p1050mm	FH (160x182x6) 89x3.0x2000mm p1050mm	FH (160x182x6) 89x3.0x2500mm p1500mm	FH (160x182x6) 89x3.0x3000mm p1500mm	FH (160x182x6) 89x3.0x3500mm p1500mm	FH (160x182x6) 89x3.5x4000mm p1500mm	FH (160x182x6) 89x3.5x4500mm p1500mm	FH (160x182x6) 89x4.0x5000mm p1500mm	
D1	Pipe diameter (mm)									
	89	89	89	89	89	89	89	89	89	
e	Pipe wall thickness (mm)									
	3.0	3.0	3.0	3.0	3.0	3.0	3.5	3.5	4	
L	Pile length (mm)									
	1200	1500	2000	2500	3000	3500	4000	4500	5000	
p	Thread length (mm)									
	650	1050	1050	1500	1500	1500	1500	1500	1500	
t x g	Strip size (mm)									
	20x2	20x2	20x2	20x2	20x2	20x2	20x2	20x2	20x2	
D2	Strip width + pipe diameter (mm)									
	129	129	129	129	129	129	129	129	129	
a	Flange thickness (mm)									
	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
h x f	Flange dimensions (mm)									
	160x182	160x182	160x182	160x182	160x182	160x182	160x182	160x182	160x182	
d1	Mounting hole diameter (mm)									
	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	
d2	Diameter of the zinc drain hole (mm)									
	26	26	26	26	26	26	26	26	26	
S	Distance between turns (mm)									
	55	55	55	55	55	55	55	55	55	
	Support area*2 (over the entire surface of the threaded part), (m ²)									
	0.0733	0.1209	0.1209	0.1753	0.1753	0.1753	0.1753	0.1753	0.1753	
	Load-bearing capacity of the pile (t)*3									
	0.98	1.87	3.08	5.1	6.86	8.62	10.38	12.14	13.91	
	Pile weight (kg)									
	9.4	12.1	14.88	18.59	21.77	24.95	32.2	35.89	44.61	



*1 The standard dimensions of the stripe and coating are shown in the main name.

*2 Provides reliable perception of large loads.

*3 The specified values of the possible load-bearing capacity are determined for the soil: medium-density sand.

Information is given only for the initial selection of possible types of screw foundations at the design level.

Basis for final determination of foundation dimensions is the on-site load tests and static data on the internal load-bearing capacity of TM Altek Europe groundscrews.

It is necessary to take into account the law on building products, the rules on building products, other EU regulations and the relevant state building regulations.

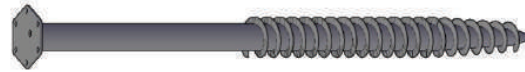
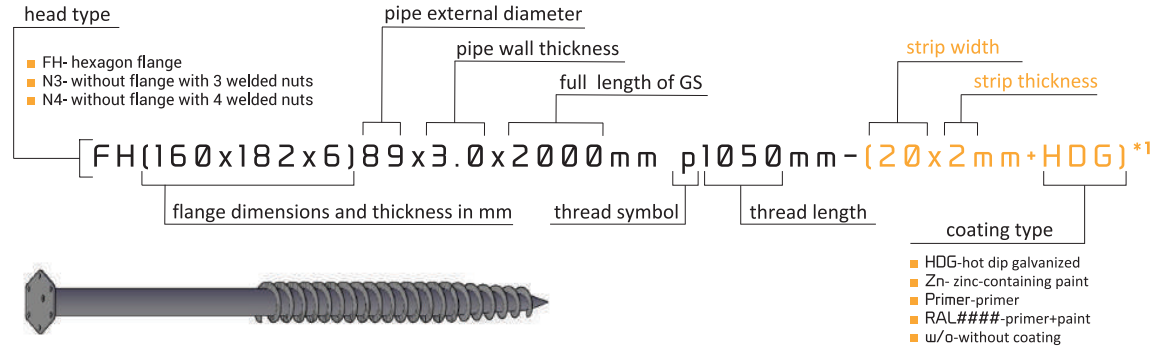
Ground screw FH-series

Model with flange FH Ø108, manufactured in accordance with TU U 25.1 - 39937935-001: 2016 Steel grade S235JR.

Type of coatings:

1. hot-dip galvanized according to ISO 1461:2009
2. zinc-containing or RAL#### paint
3. primer

MODEL ABBREVIATION DESCRIPTION:



NAME OF PRODUCT SYMBOL NAME	FH (160x182x6) 108x3.0x1500mm p1100mm	FH (160x182x6) 108x3.0x2000mm p1100mm	FH (160x182x6) 108x3.0x2500mm p1700mm	FH (160x182x6) 108x3.0x3000mm p1700mm	FH (160x182x6) 108x3.0x3500mm p1700mm	FH (160x182x6) 108x3.5x4000mm p1700mm	FH (160x182x6) 108x3.5x4500mm p1700mm	FH (160x182x6) 108x4.0x5000mm p1700mm	FH (160x182x6) 108x4.0x5500mm p1700mm	FH (160x182x6) 108x5.0x6000mm p1700mm	FH (160x182x6) 108x5.0x6500mm p1700mm	FH (160x182x6) 108x5.0x7000mm p1700mm	FH (160x182x6) 108x5.0x7500mm p1700mm	FH (160x182x6) 108x5.0x8000mm p1700mm	
D1	Pipe diameter (mm)														
	108	108	108	108	108	108	108	108	108	108	108	108	108	108	
e	Pipe wall thickness (mm)														
	3.0	3.0	3.0	3.0	3.0	3.5	3.5	4.0	4.0	5.0	5.0	5.0	5.0	5.0	
L	Pile length (mm)														
	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	8000	
p	Thread length (mm)														
	1100	1100	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	
t x g	Strip size (mm)														
	20x2	20x2	20x2	20x2	20x2	20x2	20x2	20x2	20x2	20x2	20x2	20x2	20x2	20x2	
D2	Strip width + pipe diameter (mm)														
	148	148	148	148	148	148	148	148	148	148	148	148	148	148	
a	Flange thickness (mm)														
	4.0-6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
h x f	Flange dimensions (mm)														
	160x182	160x182	160x182	160x182	160x182	160x182	160x182	160x182	160x182	160x182	160x182	160x182	160x182	160x182	
d1	Mounting hole diameter (mm)														
	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	6Ø14	
d2	Diameter of the zinc drain hole (mm)														
	26	26	26	26	26	26	26	26	26	26	26	26	26	26	
S	Distance between turns (mm)														
	60	60	60	60	60	60	60	60	60	60	60	60	60	60	
	Support area*2 (over the entire surface of the threaded part), (m ²)														
	0.1332	0.1332	0.2132	0.2132	0.2132	0.2132	0.2132	0.2132	0.2132	0.2132	0.2132	0.2132	0.2132	0.2132	
	Load-bearing capacity of the pile (t)*3														
	1.86	3.06	5.75	7.89	10.04	12.18	14.32	*4	*4	*4	*4	*4	*4	*4	
	Pile weight (kg)														
	14.37	18.21	22.53	26.41	30.3	39.19	43.7	54.41	59.53	79.32	85.67	92.02	98.37	104.72	

*1 The standard dimensions of the stripe and coating are shown in the main name.

*2 Provides reliable perception of large loads.

*3 The specified values of the possible load-bearing capacity are determined for the soil: medium-density sand.

Information is given only for the initial selection of possible types of screw foundations at the design level.

Basis for final determination of foundation dimensions is the on-site load tests and static data on the internal load-bearing capacity of TM Altek Europe groundscrews.

It is necessary to take into account the law on building products, the rules on building products, other EU regulations and the relevant state building regulations.

*4 It is calculated individually, since it is necessary to take into account the strength of the pile material.

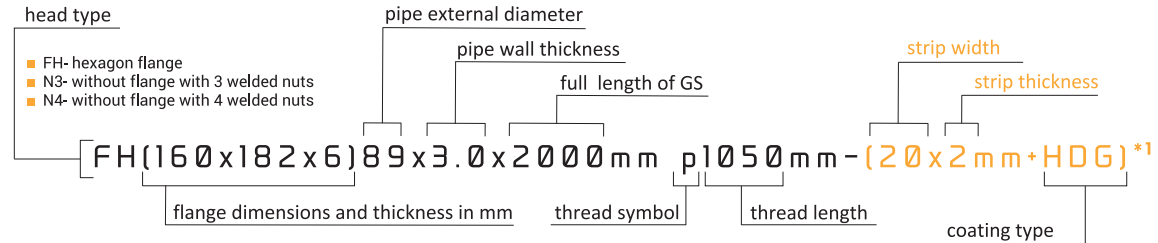
MODEL ABBREVIATION DESCRIPTION:

Ground screw N-series

Model without flange N4/N3 Ø57, manufactured in accordance with TU U 25.1- 39937935-001:2016 Steel grade S235JR.

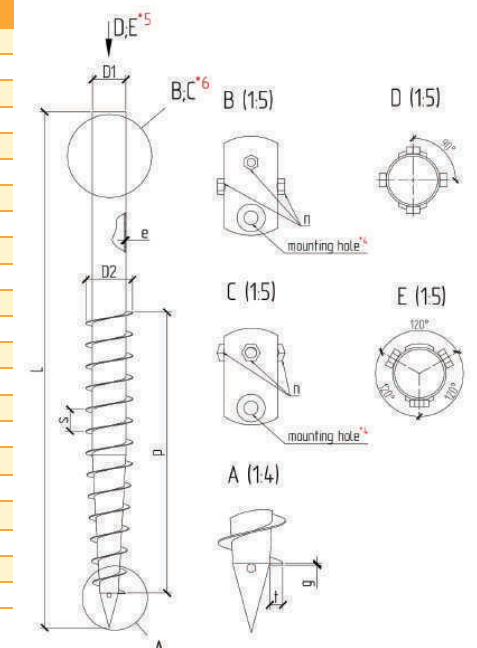
Type of coatings:

1. hot-dip galvanizing, according to ISO 1461:2009
2. zinc-containing or RAL#### paint
3. primer



- HDG-hot dip galvanized
- Zn- zinc-containing paint
- Primer-primer
- RAL####-primer+paint
- w/o-without coating

NAME OF PRODUCT SYMBOL NAME	N4/N3 57x2.0x550mm p320mm	N4/N3 57x2.0x650mm p320mm	N4/N3 57x2.0x800mm p400mm	N4/N3 57x2.0x1000mm p400mm	N4/N3 57x2.0x1200mm p650mm	N4/N3 57x3.0x1500mm p650mm	N4/N3 57x3.0x2000mm p650mm	N4/N3 57x3.0x2500mm p650mm
D1	Pipe diameter (mm)							
	57	57	57	57	57	57	57	57
e	Pipe wall thickness (mm)							
	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0
L	Pile length (mm)							
	550	650	800	1000	1200	1500	2000	2500
p	Thread length (mm)							
	320	320	400	400	650	650	650	650
t x g	Strip size (mm)							
	20x2	20x2	20x2	20x2	20x2	20x2	20x2	20x2
D2	Strip width + pipe diameter (mm)							
	97	97	97	97	97	97	97	97
n	Quantity of nuts (pcs.), for N4/for N3							
	4/3	4/3	4/3	4/3	4/3	4/3	4/3	4/3
S	Distance between turns (mm)							
	50	50	50	50	50	50	50	50
	Support area*2 (over the entire surface of the threaded part), (m ²)							
	0.030	0.030	0.040	0.040	0.065	0.065	0.065	0.065
	Load-bearing capacity of the pile (t)*3							
	0.19	0.25	0.39	0.55	0.98	1.35	1.98	2.61
	Pile weight (kg)							
	1.77	2.04	2.61	3.15	4.08	6.77	8.77	10.77



*1 The standard dimensions of the stripe and coating are shown in the main name.

*2 Provides reliable perception of large loads.

*3 The specified values of the possible load-bearing capacity are determined for the soil: medium-density sand.

Information is given only for the initial selection of possible types of screw foundations at the design level.

Basis for final determination of foundation dimensions is the on-site load tests and static data on the internal load-bearing capacity of TM Altek Europe ground screws.

It is necessary to take into account the law on building products, the rules on building products, other EU regulations and the relevant state building regulations.

*4 Washer-reinforced mounting hole.

*5 View D - ground screws N4, view E - ground screws N3.

*6 Subassembly B - view of ground screws N4, subassembly C - view of ground screws N3.

Ground screw N-series

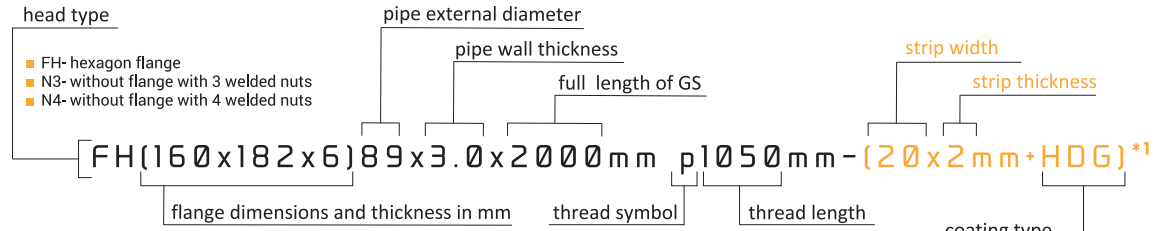
Model without flange N4/N3 Ø76, manufactured in accordance with TU U 25.1- 39937935-001:2016 Steel grade S235JR.

Type of coatings:

1. hot-dip galvanizing, according to ISO 1461:2009
2. zinc-containing or RAL#### paint
3. primer

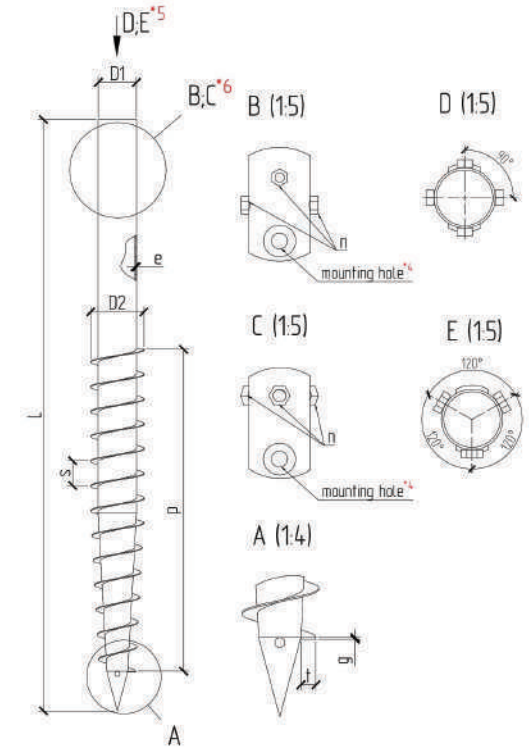


MODEL ABBREVIATION DESCRIPTION:



- HDG-hot dip galvanized
- Zn- zinc-containing paint
- Primer-primer
- RAL####-primer+paint
- w/o-without coating

NAME OF PRODUCT SYMBOL NAME	N4/N3 76x2.0x800mm p400mm	N4/N3 76x2.0x1000mm p650mm	N4/N3 76x2.0x1200mm p650mm	N4/N3 76x3.0x1500mm p1050mm	N4/N3 76x3.0x2000mm p1050mm	N4/N3 76x3.0x2500mm p1050mm	N4/N3 76x3.0x3000mm p1050mm
D1	Pipe diameter (mm)						
	76	76	76	76	76	76	76
e	Pipe wall thickness (mm)						
	2.0	2.0	2.0	3.0	3.0	3.0	3.0
L	Pile length (mm)						
	800	1000	1200	1500	2000	2500	3000
p	Thread length (mm)						
	400	650	650	1050	1050	1050	1050
t x g	Strip size (mm)						
	20x2	20x2	20x2	20x2	20x2	20x2	20x2
D2	Strip width + pipe diameter (mm)						
	116	116	116	116	116	116	116
n	Quantity of nuts (pcs.), for N4/for N3						
	4/3	4/3	4/3	4/3	4/3	4/3	4/3
S	Distance between turns (mm)						
	50	50	50	50	50	50	50
	Support area*2 (over the entire surface of the threaded part), (m ²)						
	0.0414	0.0667	0.0667	0.1194	0.1194	0.1194	0.1194
	Load-bearing capacity of the pile (t)*3						
	0.42	0.82	1.11	1.82	3.05	4.25	5.45
	Pile weight (kg)						
	3.29	4.49	5.22	9.42	12.12	14.82	17.52



*1 The standard dimensions of the stripe and coating are shown in the main name.

*2 Provides reliable perception of large loads.

*3 The specified values of the possible load-bearing capacity are determined for the soil: medium-density sand.

Information is given only for the initial selection of possible types of screw foundations at the design level.

Basis for final determination of foundation dimensions is the on-site load tests and static data on the internal load-bearing capacity of TM Altek Europe ground screws.

It is necessary to take into account the law on building products, the rules on building products, other EU regulations and the relevant state building regulations.

*4 Washer-reinforced mounting hole.

*5 View D - ground screws N4, view E - ground screws N3.

*6 Subassembly B - view of ground screws N4, subassembly C - view of ground screws N3.

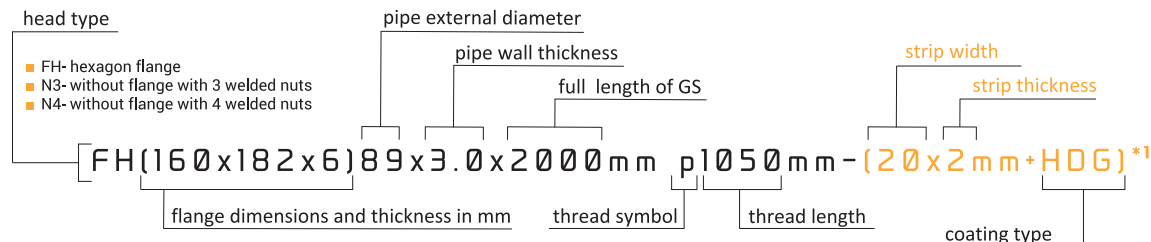
MODEL ABBREVIATION DESCRIPTION:

Ground screw N-series

Model without flange N4/N3 Ø89, manufactured in accordance with TU U 25.1- 39937935-001:2016 Steel grade S235JR.

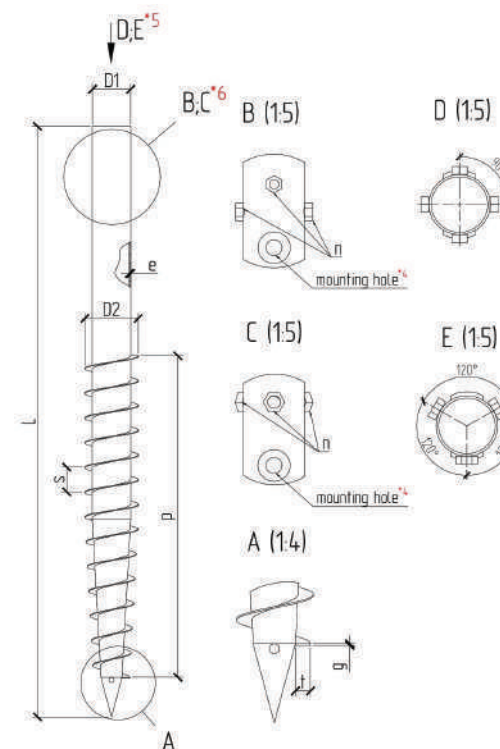
Type of coatings:

1. hot-dip galvanizing, according to ISO 1461:2009
2. zinc-containing or RAL#### paint
3. primer



- HDG-hot dip galvanized
- Zn- zinc-containing paint
- Primer-primer
- RAL####-primer+paint
- w/o-without coating

NAME OF PRODUCT SYMBOL NAME	N4/N3 89x3.0x1000mm p650mm	N4/N3 89x3.0x1200mm p650mm	N4/N3 89x3.0x1500mm p1050mm	N4/N3 89x3.0x2000mm p1050mm	N4/N3 89x3.0x2500mm p1500mm	N4/N3 89x3.0x3000mm p1500mm	N4/N3 89x3.0x3500mm p1500mm
D1	Pipe diameter (mm)						
	89	89	89	89	89	89	89
e	Pipe wall thickness (mm)						
	3.0	3.0	3.0	3.0	3.0	3.0	3.0
L	Pile length (mm)						
	1000	1200	1500	2000	2500	3000	3500
p	Thread length (mm)						
	650	650	1050	1050	1500	1500	1500
t x g	Strip size (mm)						
	20x2	20x2	20x2	20x2	20x2	20x2	20x2
D2	Strip width + pipe diameter (mm)						
	129	129	129	129	129	129	129
n	Quantity of nuts (pcs.), for N4/for N3						
	4/3	4/3	4/3	4/3	4/3	4/3	4/3
s	Distance between turns (mm)						
	55	55	55	55	55	55	55
	Support area*2 (over the entire surface of the threaded part), (m²)						
	0.0733	0.0733	0.1209	0.1209	0.1753	0.1753	0.1753
	Load-bearing capacity of the pile (t)*3						
	0.68	0.98	1.87	3.08	5.1	6.86	8.62
	Pile weight (kg)						
	7.26	8.65	11.35	14.13	17.84	21.02	24.2



*1 The standard dimensions of the stripe and coating are shown in the main name.

*2 Provides reliable perception of large loads.

*3 The specified values of the possible load-bearing capacity are determined for the soil: medium-density sand.

Information is given only for the initial selection of possible types of screw foundations at the design level.

Basis for final determination of foundation dimensions is the on-site load tests and static data on the internal load-bearing capacity of TM Altek Europe groundscrews.

It is necessary to take into account the law on building products, the rules on building products, other EU regulations and the relevant state building regulations.

*4 Washer-reinforced mounting hole.

*5 View D - ground screws N4, view E - ground screws N3.

*6 Subassembly B - view of ground screws N4, subassembly C - view of ground screws N3.

Ground screw NC-series

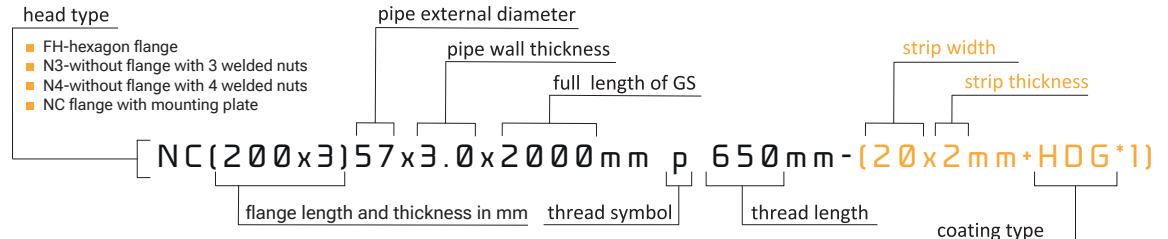
Model without flange NC, manufactured in accordance with TC U 25.1-39937935-001:2016 Steel grade S235JR.

Type of coatings:

1. hot-dip galvanizing, according to ISO 1461:2009
2. zinc-containing or RAL#### paint
3. primer

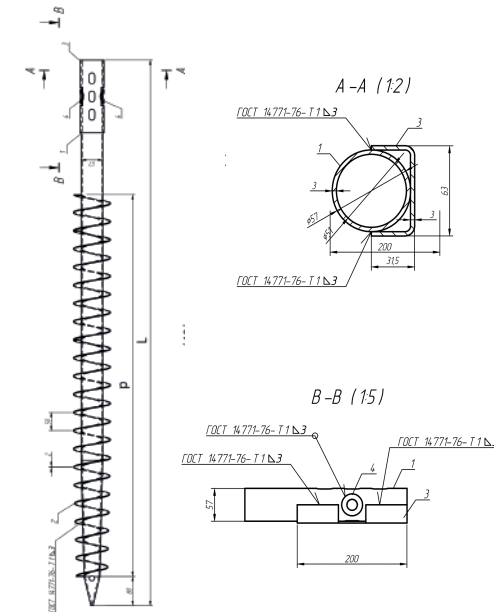


MODEL ABBREVIATION DESCRIPTION:



- HDG-hot dip galvanized
- Zn- zinc-containing paint
- Primer-primer
- RAL####-primer+paint
- w/o-without coating

NAME OF PRODUCT SYMBOL NAME	NC 57x3.0x550mm p320mm	NC 57x3.0x650mm p320mm	NC 57x3.0x800mm p400mm	NC 57x3.0x1000mm p400mm	NC 57x3.0x1200mm p650mm	NC 57x3.0x1500mm p650mm	NC 57x3.0x2000mm p650mm	NC 57x3.0x2500mm p650mm
D1	Pipe diameter (mm)							
	57	57	57	57	57	57	57	57
e	Pipe wall thickness (mm)							
	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
L	Pile length (mm)							
	550	650	800	1000	1200	1500	2000	2500
p	Thread length (mm)							
	320	320	400	400	650	650	650	650
t x g	Thread size (mm)							
	20x2	20x2	20x2	20x2	20x2	20x2	20x2	20x2
D2	Thread width + pipe diameter(mm)							
	97	97	97	97	97	97	97	97
n	Length of the mounting plate (mm)							
	200	200	200	200	200	200	200	200
s	Quantity of mounting holes + mounting holes (pcs.)							
	3+1	3+1	3+1	3+1	3+1	3+1	3+1	3+1
	Painting area (m²) *2							
	0,194	0,207	0,237	0,323	0,363	0,422	0,507	0,592
	Bearing capacity of the pile (ton) *3							
	0,23	0,25	0,37	0,43	0,74	0,89	1,15	1,41
	Pile weight (kg)							
	3,18	3,6	4,44	5,27	6,78	8,35	10,43	12,5



*1 The standard dimensions of the stripe and coating are shown in the main name.

*2 Provides reliable perception of large loads.

*3 The specified values of the possible load - bearing capacity are determined for the soil medium - density sand.

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It is necessary to take into account the law on building products, the rules on building products, other EU regulations and the relevant state building regulations.

Ground screw NC-series

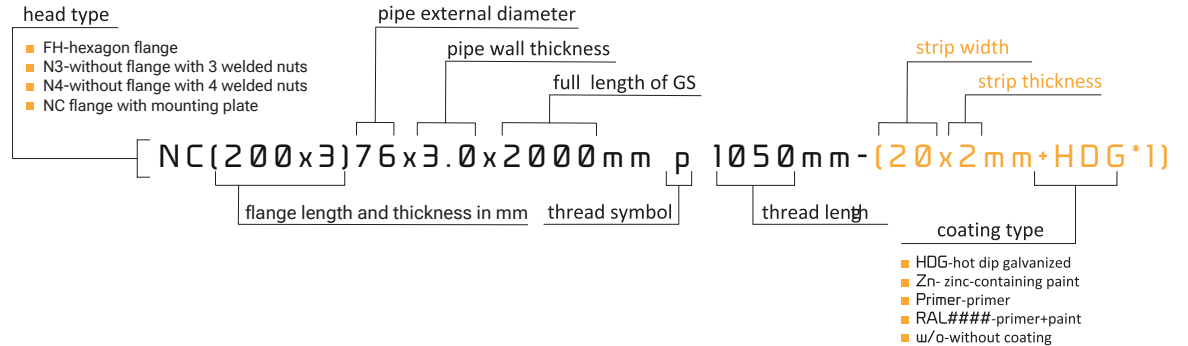
Model without flange NC, manufactured in accordance with TC U 25.1-39937935-001:2016 Steel grade S235JR.

Type of coatings:

1. hot-dip galvanizing, according to ISO 1461:2009
2. zinc-containing or RAL#### paint
3. primer



MODEL ABBREVIATION DESCRIPTION:



NAME OF PRODUCT SYMBOL NAME	NC 76x3.0x800mm p650mm	NC 76x3.0x1000mm p650mm	NC 76x3.0x1200mm p650mm	NC 76x3.0x1500mm p1050mm	NC 76x3.0x2000mm p1050mm	NC 76x3.0x2500mm p1050mm	NC 76x3.0x3000mm p1050mm
D1	Pipe diameter (mm)						
	76	76	76	76	76	76	76
e	Pipe wall thickness (mm)						
	3.0	3.0	3.0	3.0	3.0	3.0	3.0
L	Pile length (mm)						
	800	1000	1200	1500	2000	2500	3000
p	Thread length (mm)						
	650	650	650	1050	1050	1050	1050
t x g	Thread size (mm)						
	20x2	20x2	20x2	20x2	20x2	20x2	20x2
D2	Thread width + pipe diameter(mm)						
	116	116	116	116	116	116	116
n	Length of the mounting plate (mm)						
	200	200	200	200	200	200	200
s	Quantity of mounting holes + mounting holes (pcs.)						
	3+1	3+1	3+1	3+1	3+1	3+1	3+1
	Painting area (m²) *2						
	0,383	0,43	0,478	0,638	0,758	0,877	0,996
	Bearing capacity of the pile (ton) *3						
	0,5	0,66	0,78	1,3	1,8	2,3	2,79
	Pile weight (kg)						
	6,09	7,21	8,33	11,3	14,1	16,9	19,7

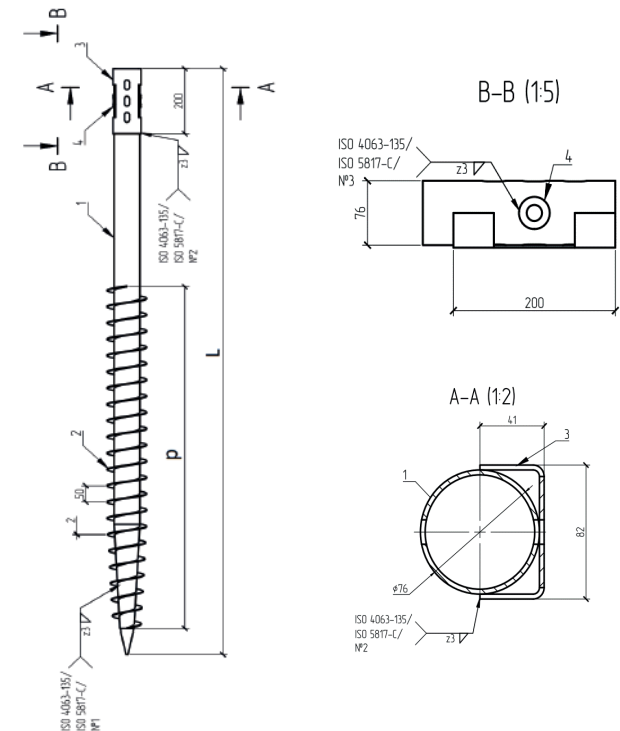
*1 The standard dimensions of the stripe and coating are shown in the main name.

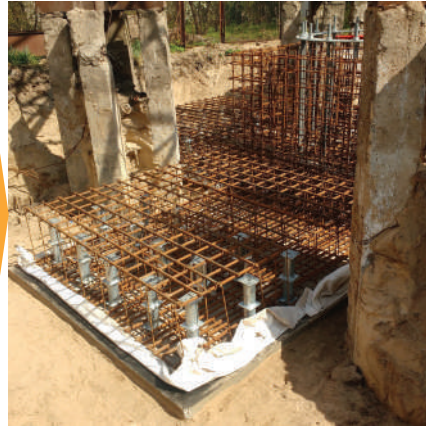
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Foundation reconstruction of power transmission tower

Location: Kyiv city
 Quantity: 6 pcs.
 Works: design, production, installation
 Features of the construction site:
 - high level of groundwater
 - densely construction area



Honeywell

01/02/2022

Business Letter of Recommendation

To Whom It May Concern,

This reference letter is to confirm that PILLAR company, represented by Oleksander Gostiev, was involved in a large-scale project "Technical re-equipment of the well monitoring system of Ukrigas-ydubuvannya" (Ukraine) in the field of construction services.

As a chief project supervisor I had the pleasure to work directly with Mr. Gostiev as described above. The scope of work for this project included the installation of anti-vandal fencing systems and data towers at 386 gas wells. The total duration of the project was 1.5 years.

The scope of PILLAR's work included the development of integrated design solutions, manufacture of foundations and enclosing structures, planning and preparation of sites, installation of 386 gas wells, various plumbing, carpentry and general construction works throughout all seasons of the year and in different regions of the country.

PILLAR and its Managing Director Mr. Gostiev, has repeatedly demonstrated its attention to details, quality of production and installation, and safety. The company's policy is to strive for the highest safety standards. The construction process required serious dedication from all employees of the organization. PILLAR has met all of its safety obligations.

PILLAR effectively met the requirements of the project schedule on time. The team was able to quickly adapt schedule changes from other subcontractors and bring them in line with the overall project schedule. Any unforeseen situations were resolved quickly and smoothly.

By now the overall project has been successfully executed to the full satisfaction of the Client and I would recommend Oleksander Gostiev and his company, PILLAR as a reliable manufacturer and partner that fulfills its obligations in a timely manner.

Honeywell Ukraine
 Technical Director
 Vitalio Pavluc

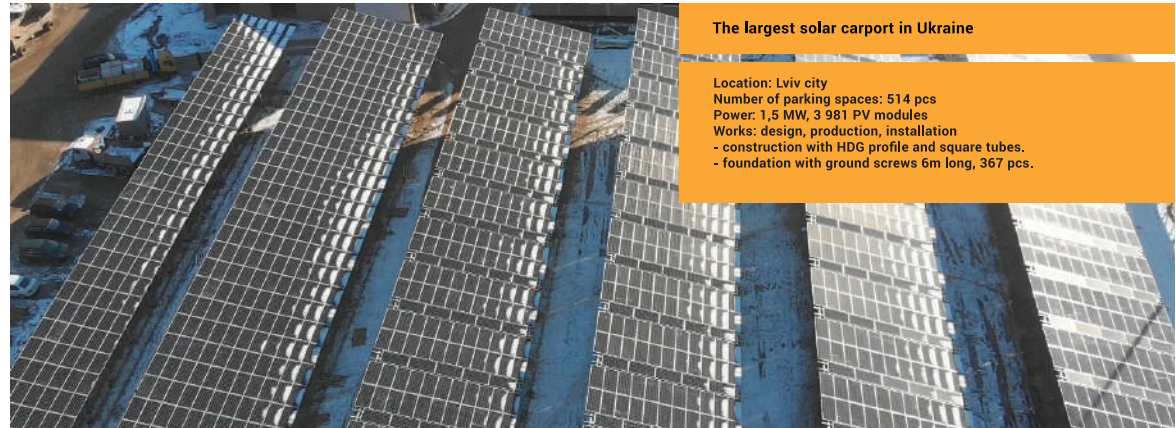


Автори документа:



Fences and supports for gas well monitoring systems

Location: Poltava, Kharkiv and Lviv regions
 Quantity: 386 gas wells
 Works: design, production, installation
 - security fence
 - foundation for autonomous power supply equipment
 - foundation and supports for gas well remote monitoring systems



The largest solar carport in Ukraine

Location: Lviv city
 Number of parking spaces: 514 pcs
 Power: 1,5 MW, 3 981 PV modules
 Works: design, production, installation
 - construction with HDG profile and square tubes.
 - foundation with ground screws 6m long, 367 pcs.

GROUNND SCREWS



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