



**YOUR PARTNER IN
ANCHORAGE**

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The specialist in the production of anchorage systems

We are an independent and service-oriented supplier of various anchorage systems for numerous applications within the foundation industry.

Based on many years of experience and expertise, we develop and produce our various systems, whereby we are prepared to think along with the customer about the most suitable project-specific solution for each customer at every level. The ultimate quality of the systems we produce is always paramount, as our products form an important basis of the construction in which they are applied. With **custom-made** sizes and threads, we are able to create a fitting solution for any project.

Our systems, consisting of steel tubes or bars, can be processed horizontally, vertically or diagonally. This creates a stable and, in many cases, **future-proof** form of anchoring for steel sheet piling, quay walls or (concrete) foundations.

For the production of our various anchor systems and the application of possible **double corrosion protection**, we have a spacious and modern production hall, which is equipped with all necessary modern technical means to guarantee the quality of our end product.

Due to the spacious dimensions of our production hall, we are able to produce long lengths under **conditioned conditions**, which minimizes the sensitive on-site work on certain projects.

Production takes place under the applicable standards and guidelines. The production process is guaranteed by a certified **Factory Production Control System** in accordance with EN 1090.

Anchorage systems with a 72/100 sustainability score

Through a Life Cycle Assessment calculation, our HTAB anchor systems have achieved a MKI (Environmental Cost Indicator) score of 72/100 sustainability compared to the results of the Dutch Environmental Database. These calculations were performed by an independent and certified third party after which a second verification also took place.

With this MKI score based on the LCA calculation, our customers can be confident that they are getting a product that not only meets current quality standards, but also contributes to sustainable production and application of materials.

WE STAND FOR RELIABLE AND GUARANTEED QUALITY



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SOLID THREADED ANCHOR BARS

This system consists of a Solid Round Steel Rod, which is threaded along its entire length. The thread is cold rolled onto the rod during the production process. The full-length thread makes it possible to connect bar segments to the desired length by means of coupling sleeves.

This massive system can be installed in the ground via a drilling process with single or double Casing Tubes, but can also be used as an Anchor between a quay wall and anchor wall construction.

Optionally, this system can be executed with double corrosion protection, whereby a plastic casing is placed around the steel rod, which is injected with grout. This process takes place under conditioned and controlled circumstances, which in principle results in an infinite life span.

Various (tailor-made) options are available for connecting the Anchor Rod to the construction in the form of nuts, plates, anchor seats, etc.

The system is available in two steel qualities (S355 and S500) and in a wide range of diameters. Because of the possibility to optimise the bar diameter down to the mm, it is possible to avoid the unnecessary use of too much steel. The careful and efficient use of raw materials is certainly an advantage here, our STAB System enables both cost- and environmentally-conscious Anchoring.

Suitable and sufficient coupling sleeves and nuts are available for every diameter.

Project: Delfzijl, the Netherlands

We supplied a total of 100 tons of solid threaded anchor bars for a project in the Netherlands. The anchor bars have lengths of 31.8 - 82.0 feet.

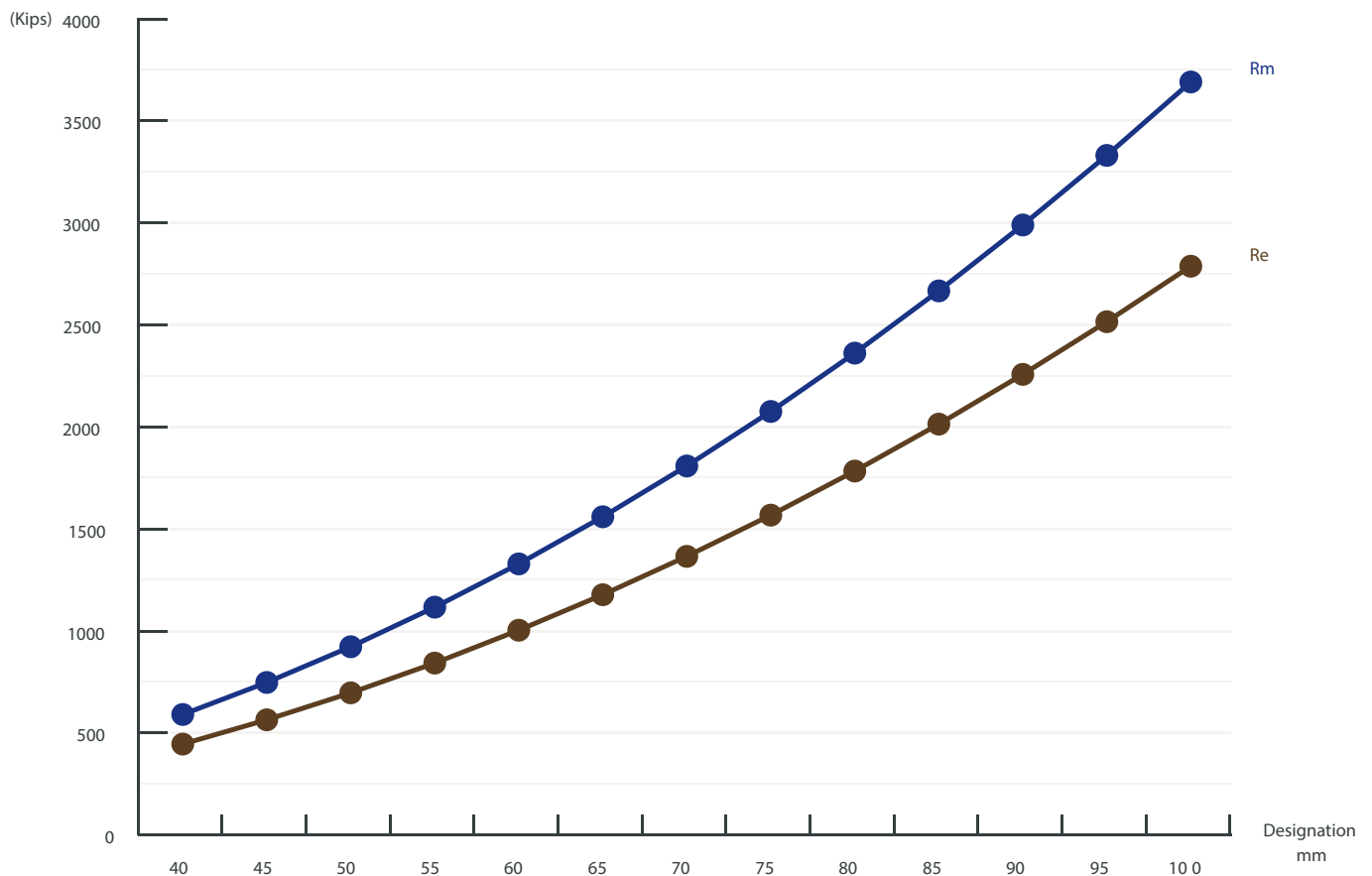


SOLID THREADED ANCHOR BARS (S355/470)

Designation	Diameter	Cross-sectional	Grade	Weight	Min. yield Stress	Min. yiel Strength
	[mm]	[mm ²]	[MPa]	[Kg/m]	[N/mm ²]	[kN]
40	1.257	9,86	355	470	446	591
45	1.590	12,48	355	470	565	748
50	1.963	15,41	355	470	697	923
55	2.376	18,65	355	470	843	1.117
60	2.827	22,20	355	470	1.004	1.329
65	3.318	26,05	355	470	1.178	1.560
70	3.848	30,21	355	470	1.366	1.809
75	4.418	34,68	355	470	1.568	2.076
80	5.027	39,46	355	470	1.784	2.362
85	5.675	44,54	355	470	2.014	2.667
90	6.362	49,94	355	470	2.258	2.990
95	7.088	55,64	355	470	2.516	3.331
100	7.854	61,65	355	470	2.788	3.691

- ✓ Steel Grade 'S355/470'
- ✓ Including Charpy test min. 27J at -20°C on base material
- ✓ Additional diameters available on request
- ✓ STAB's are also available with double corrosion protection (DCP)

Customisation
is possible



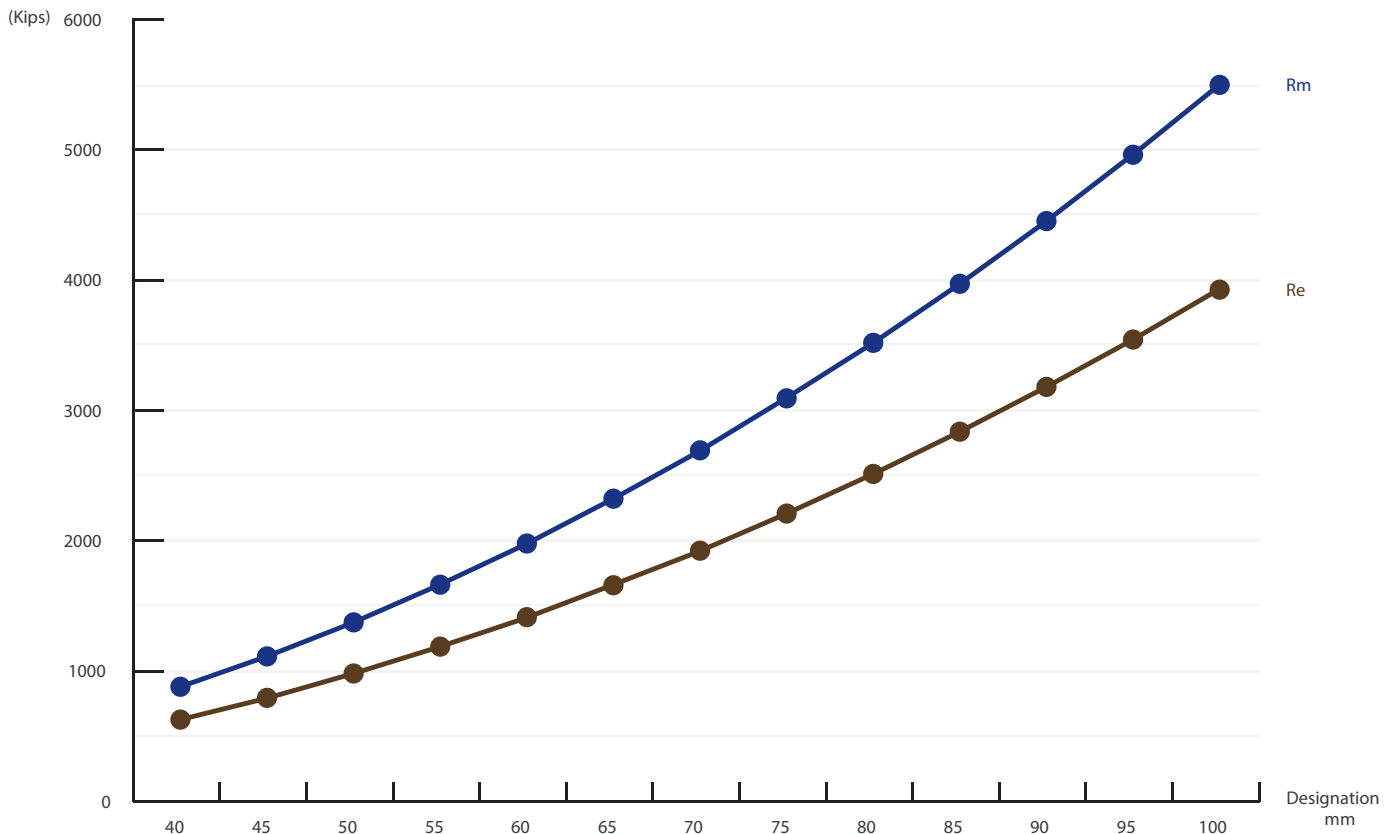
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SOLID THREADED ANCHOR BARS (S500/700)

Designation	Diameter	Cross-sectional	Grade	Weight	Min. yield Stress	Min. yields Strength
	[mm]	[mm ²]	[MPa]	[Kg/m]	[N/mm ²]	[kN]
40	1.257	9,86	500	700	628	880
45	1.590	12,48	500	700	795	1.113
50	1.963	15,41	500	700	982	1.374
55	2.376	18,65	500	700	1.188	1.663
60	2.827	22,20	500	700	1.414	1.979
65	3.318	26,05	500	700	1.659	2.323
70	3.848	30,21	500	700	1.924	2.694
75	4.418	34,68	500	700	2.209	3.093
80	5.027	39,46	500	700	2.513	3.519
85	5.675	44,54	500	700	2.837	3.972
90	6.362	49,94	500	700	3.181	4.453
95	7.088	55,64	500	700	3.544	4.962
100	7.854	61,65	500	700	3.927	5.498

- ✓ Steel Grade 'S500/700'
- ✓ Including Charpytest min. 27J at -20°C on basematerial
- ✓ Additional diameters available on request
- ✓ All thicknesses between 40-100 mm possible
- ✓ STAB's are also available with double corrosion protection (DCP)

Customisation
is possible



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HOLLOW THREADED ANCHOR BARS

The principle of this Anchor System is characterised by a Hollow Tube that is threaded over its entire length. The thread is cold rolled onto the Seamless Pipe during the production process. With the use of a suitable drill head, this tube can be drilled into any possible base. The full-length thread makes it possible to use coupling sleeves to constantly connect pipe segments until the desired depth is reached.

The Hollow Tube functions as a Drill and Injection Tube during the installation process and as a tensile, compression and reinforcement element in the final phase. During installation, a bond is created between the grout body, the surrounding soil layers and the Hollow Tube acting as a tensile element. This creates a foundation element that can support tensile, compressive and cyclic loads.

Various (custom) options are available for connecting the Anchor to the construction in the form of nuts, plates, anchor seats, etc.

The system is supplied as standard with base pipes in steel quality E500/700 and a minimum impact value of 27J at -20 °C. We have a wide range of available diameters/wall thicknesses. Required segment lengths can be determined on a project-specific basis. Suitable and sufficient coupling sleeves and nuts are available for each Anchor Type.

Project: Quay construction Smulders

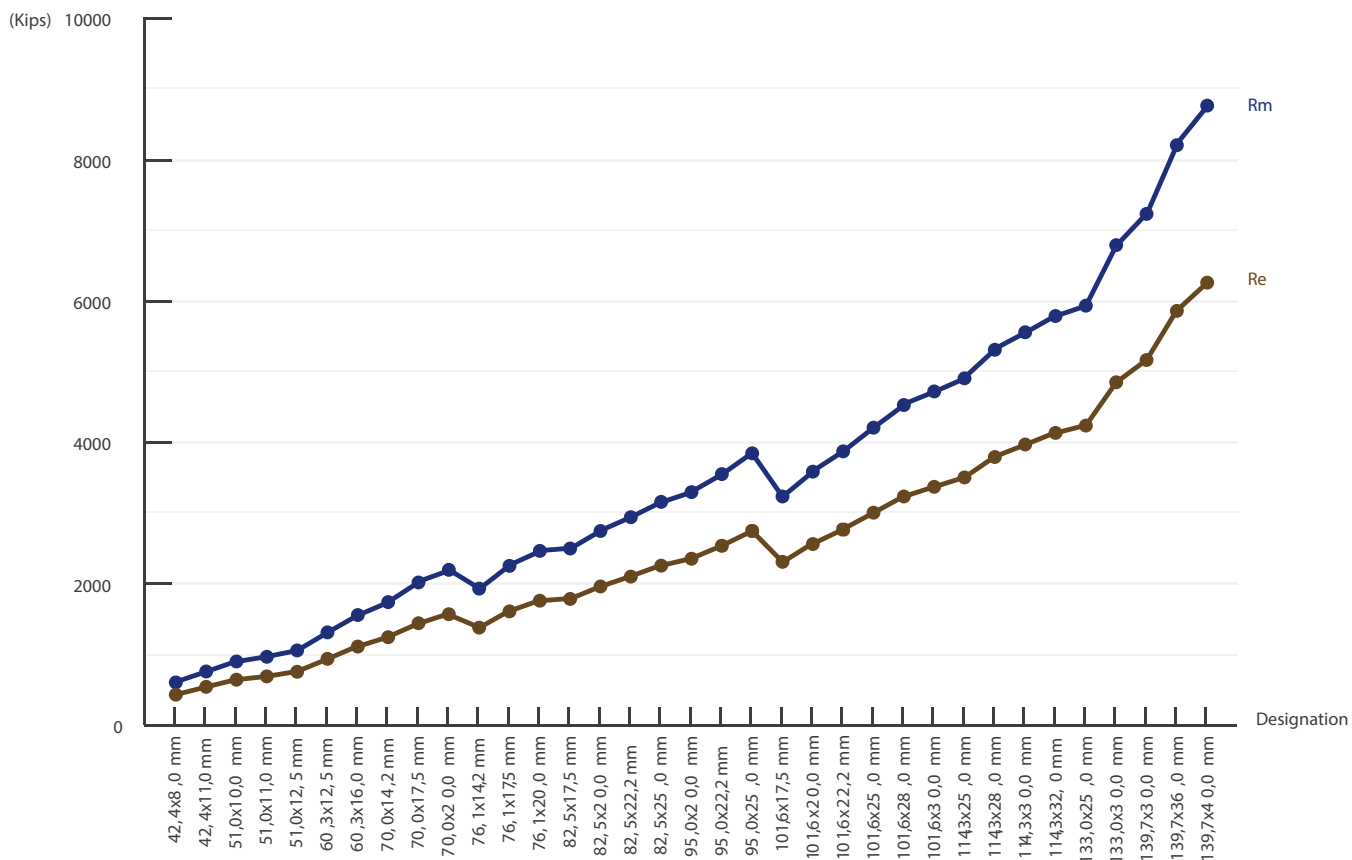
For Smet Group Nederland BV, we were commissioned to supply the materials for anchoring a quay construction on the Smulders site in Vlissingen, the Netherlands. Smet-F&C successfully applied 237 heavy-duty self-drilling anchors with diameters of 4 and 4.5 inch and increasing lengths up to 160.8 ft long. In total, this involved approximately 600 tons of anchor materials.



HOLLOW THREADED ANCHOR BARS (E500/700)

Designation	Diameter	Cross-sectional	Grade	Weight	Min. yield Stress	Min. yields Strength
	[mm]	[mm ²]	[MPa]	[Kg/m]	[N/mm ²]	[kN]
42,4 x 8,0	865	6,79	500	700	432	605
42,4 x 11,0	1.085	8,52	500	700	543	760
51,0 x 10,0	1.288	10,11	500	700	644	902
51,0 x 11,0	1.382	10,85	500	700	691	968
51,0 x 12,5	1.512	11,87	500	700	756	1.058
60,3 x 12,5	1.877	14,74	500	700	939	1.314
60,3 x 16,0	2.227	17,48	500	700	1.113	1.559
70,0 x 14,2	2.489	19,54	500	700	1.245	1.742
70,0 x 17,5	2.886	22,66	500	700	1.443	2.020
70,0 x 20,0	3.142	24,66	500	700	1.571	2.199
76,1 x 14,2	2.761	21,68	500	700	1.381	1.933
76,1 x 17,5	3.222	25,29	500	700	1.611	2.255
76,1 x 20,0	3.525	27,67	500	700	1.762	2.467
82,5 x 17,5	3.574	28,05	500	700	1.787	2.501
82,5 x 20,0	3.927	30,83	500	700	1.963	2.749
82,5 x 22,2	4.206	33,01	500	700	2.103	2.944
82,5 x 25,0	4.516	35,45	500	700	2.258	3.161
95,0 x 20,0	4.712	36,99	500	700	2.356	3.299
95,0 x 22,2	5.077	39,86	500	700	2.539	3.554
95,0 x 25,0	5.498	43,16	500	700	2.749	3.848
101,6 x 17,5	4.624	36,30	500	700	2.312	3.237
101,6 x 20,0	5.127	40,25	500	700	2.564	3.589
101,6 x 22,2	5.538	43,47	500	700	2.769	3.876
101,6 x 25,0	6.016	47,23	500	700	3.008	4.211
101,6 x 28,0	6.474	50,82	500	700	3.237	4.532
101,6 x 30,0	6.748	52,97	500	700	3.374	4.724
114,3 x 25,0	7.014	55,06	500	700	3.507	4.910
114,3 x 28,0	7.591	59,59	500	700	3.796	5.314
114,3 x 30,0	7.945	62,37	500	700	3.973	5.562
114,3 x 32,0	8.274	64,95	500	700	4.137	5.792
133,0 x 25,0	8.482	66,59	500	700	4.241	5.938
133,0 x 30,0	9.708	76,20	500	700	4.854	6.795
139,7 x 30,0	10.339	81,16	500	700	5.169	7.237
139,7 x 36,0	11.728	92,07	500	700	5.864	8.210
139,7 x 40,0	12.529	98,35	500	700	6.264	8.770

- ✓ Steel Grade '75/100'
- ✓ Including Charpytest min. 27J at -20°C on basematerial
- ✓ Additional dimensions available on request



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HOT ROLLED ANCHOR BARS

This Solid Anchor Rod is supplied as a fully Hot-Rolled Product including threads. The full-length thread makes it possible to connect bar segments to the desired length using coupling sleeves.

This Massive System can be installed in the ground via a drilling process with single or double Casing Tubes, but can also be used as an Anchor between a quay wall and anchor wall construction.

Optionally, this system can be executed with double corrosion protection, whereby a plastic casing is placed around the steel rod, which is injected with grout. This process takes place under conditioned and controlled circumstances, which in principle results in an infinite life span.

Various (tailor-made) options are available for connecting the Anchor Rod to the construction in the form of nuts, plates, anchor seats, etc.

The system is available in two steel qualities (550/620 and 670/800) and in a standard range of diameters.

Suitable and sufficient coupling sleeves and nuts are available for every diameter.

Project: Fifth Harbour Dock No

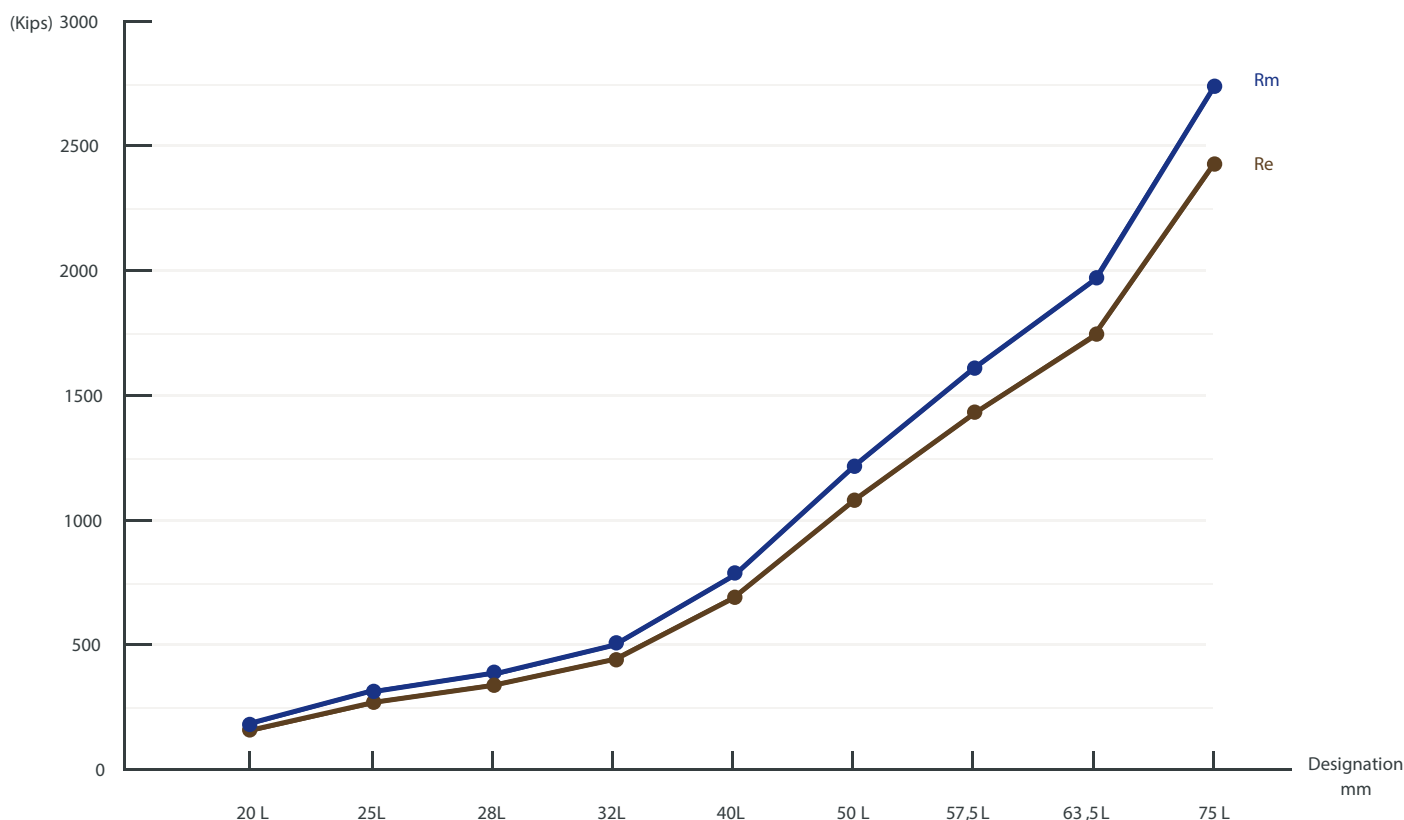
We delivered 112 anchors of type HRAB-75.0-R with a length of 119.8 ft to the Fifth Harbouw Dock. These anchors are of steelgrade 670/800 and, due to the length, delivered to the construction site in two parts. The anchor rods are factory fitted with double-corrosion protection to ensure "endless" service life. All parts susceptible to corrosion are expertly packaged using plastic and cement encasings.



HOT ROLLED ANCHOR BARS (550/620)

Designation	Diameter [mm]	Cross-sectional [mm ²]	Grade [MPa]	Weight [Kg/m]	Min. yield Stress [N/mm ²]	Min. yields Strength [kN]
20L	314	2,47	550	620	173	195
25L	491	3,85	550	620	270	304
28L	616	4,83	550	620	339	382
32L	804	6,31	550	620	442	499
40L	1.257	9,86	550	620	691	779
50L	1.963	15,41	550	620	1.080	1.217
57,5L	2.597	20,38	550	620	1.428	1.610
63,5L	3.167	24,86	550	620	1.742	1.963
75L	4.418	34,68	550	620	2.430	2.739

- ✓ Steel Grade '550/620'
- ✓ HRAB's are also available with double corrosion protection (DCP)

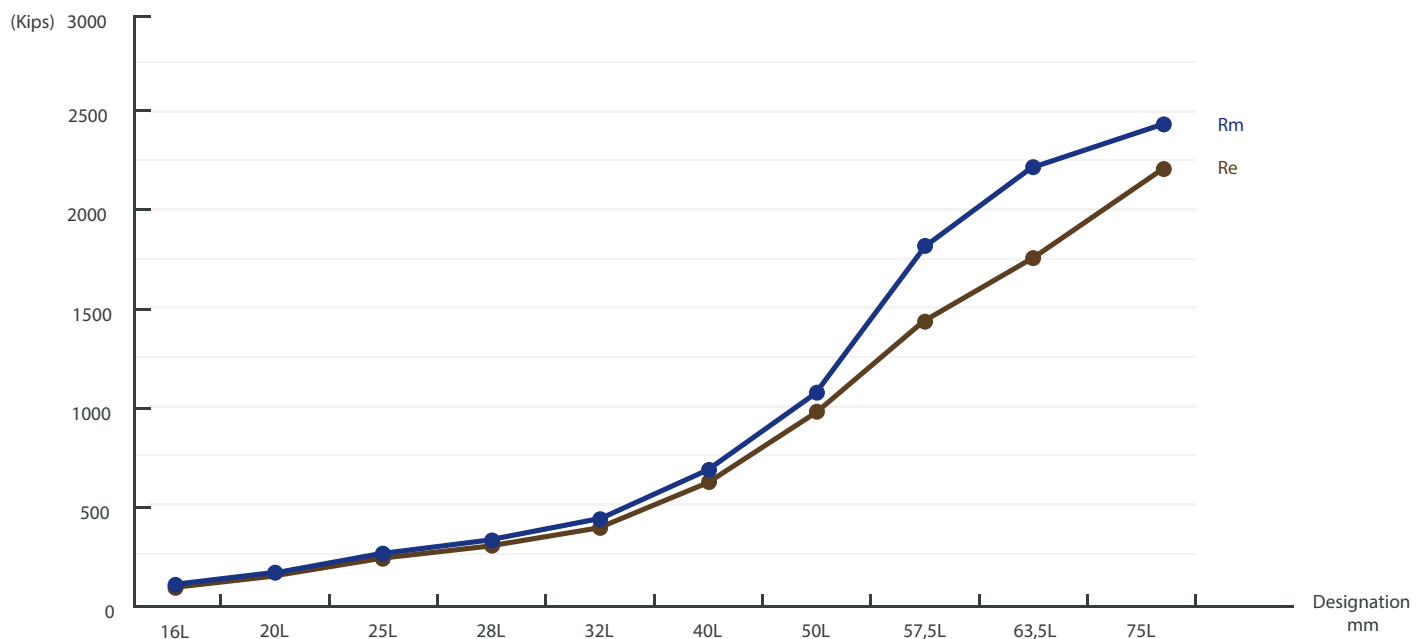


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HOT ROLLED ANCHOR BARS (500/550 & 555/700)

Designation	Diameter [mm]	Cross-sectional [mm ²]	Grade [MPa]	Weight [Kg/m]	Min. yield Stress [N/mm ²]	Min. yiel Strength [kN]
16L	201	1,58	500	550	101	111
20L	314	2,47	500	550	157	173
25L	491	3,85	500	550	245	270
28L	616	4,83	500	550	308	339
32L	804	6,31	500	550	402	442
40L	1.257	9,86	500	550	628	691
50L	1.963	15,41	500	550	982	1.080
57,5L	2.597	20,38	555	700	1.441	1.818
63,5L	3.167	24,86	555	700	1.758	2.217
75L	4.418	34,68	500	550	2.209	2.430

- ✓ Steel Grade '500/550 & 555/700'
- ✓ HRAB's are also available with double corrosion protection (DCP)

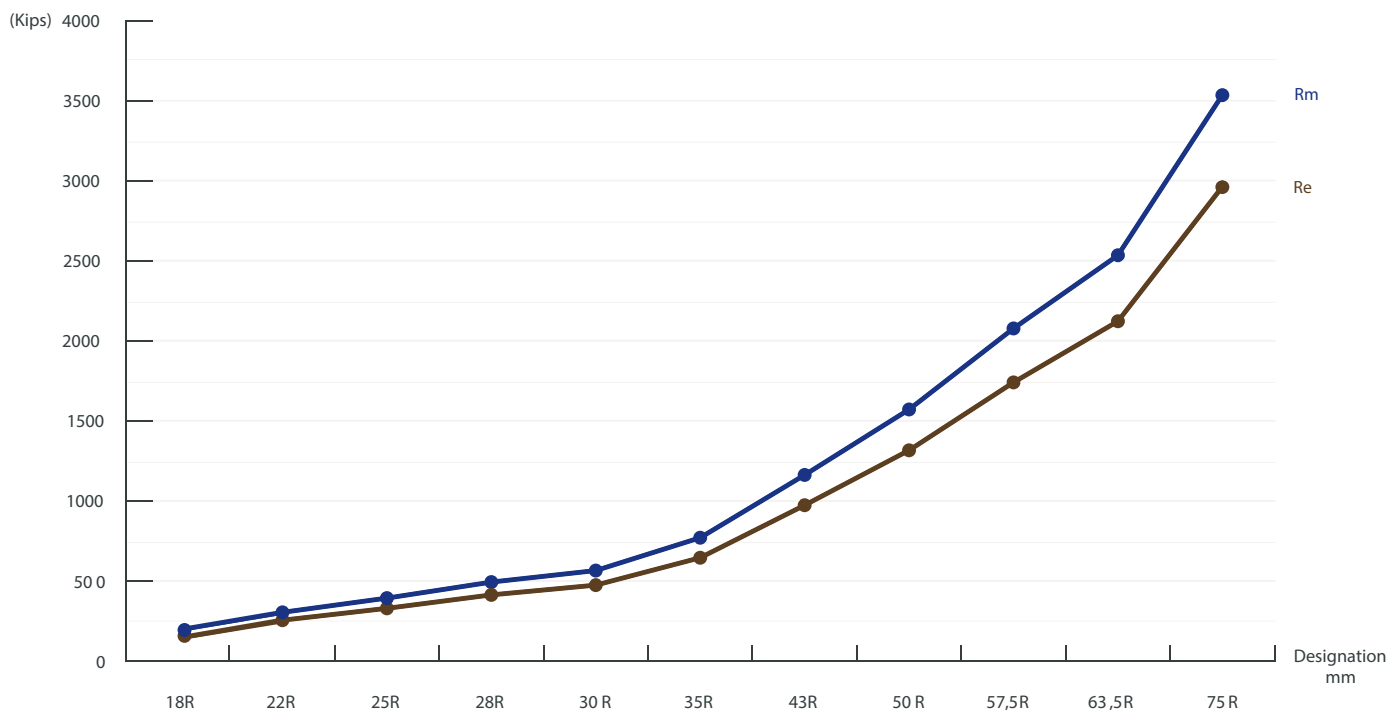


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HOT ROLLED ANCHOR BARS (670/800)

Designation	Diameter [mm]	Cross-sectional [mm ²]	Grade [MPa]	Weight [Kg/m]	Min. yield Stress [N/mm ²]	Min. yiel. Strength [kN]
18R	254	2,00	670	800	170	204
22R	380	2,98	670	800	255	304
25R	491	3,85	670	800	329	393
28R	616	4,83	670	800	413	493
30R	707	5,55	670	800	474	565
35R	962	7,55	670	800	645	770
43R	1.452	11,40	670	800	973	1.162
50R	1.963	15,41	670	800	1.316	1.571
57,5R	2.597	20,38	670	800	1.740	2.077
63,5R	3.167	24,86	670	800	2.122	2.534
75R	4.418	34,68	670	800	2.960	3.534

- ✓ Steel Grade '670/800'
- ✓ HRAB's are also available with double corrosion protection (DCP)



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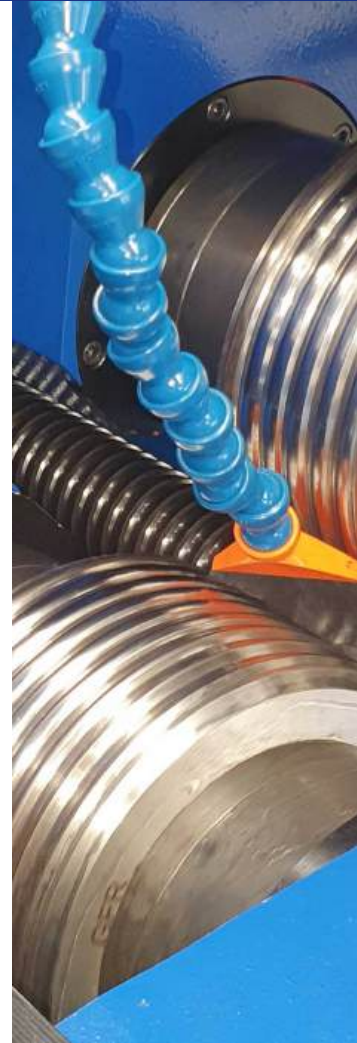
PRODUCTION

For the production of our various anchor systems and the application of double corrosion protection, we have a spacious and modern production hall equipped with all the necessary technical means to guarantee the quality of our end product. The generous dimensions of this production hall allow us to produce long lengths under temperature-controlled conditions, which minimizes on-site work for certain projects. Production is carried out in compliance with the applicable standards and guidelines. The production process is guaranteed by a certified factory production control system in accordance with EN 1090.

“The systems that we develop primarily for large start-up projects are produced in-house and can be used worldwide.”

Our anchor systems can be used as follows:

- Wall anchoring in cofferdams, sheet piling, retaining walls and quay walls
- Surface anchoring in (underwater) concrete floors of cofferdams and/or tunnel entrances
- Micropiles in pile and post foundations or in the repair of buildings and foundations
- Anchorages between quay walls and anchor wall constructions
- Nailing in embankments, wall stabilization
- Wall and shaft protection in mining and tunnel construction
- Specific applications for geothermal energy, nozzle injection and other injection techniques







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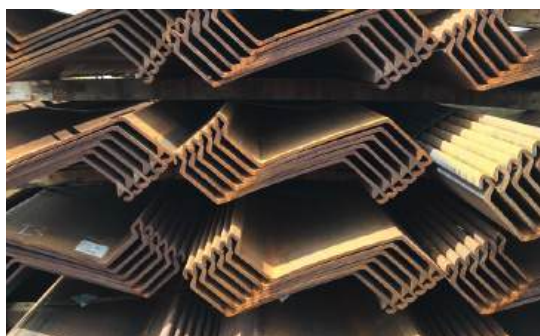
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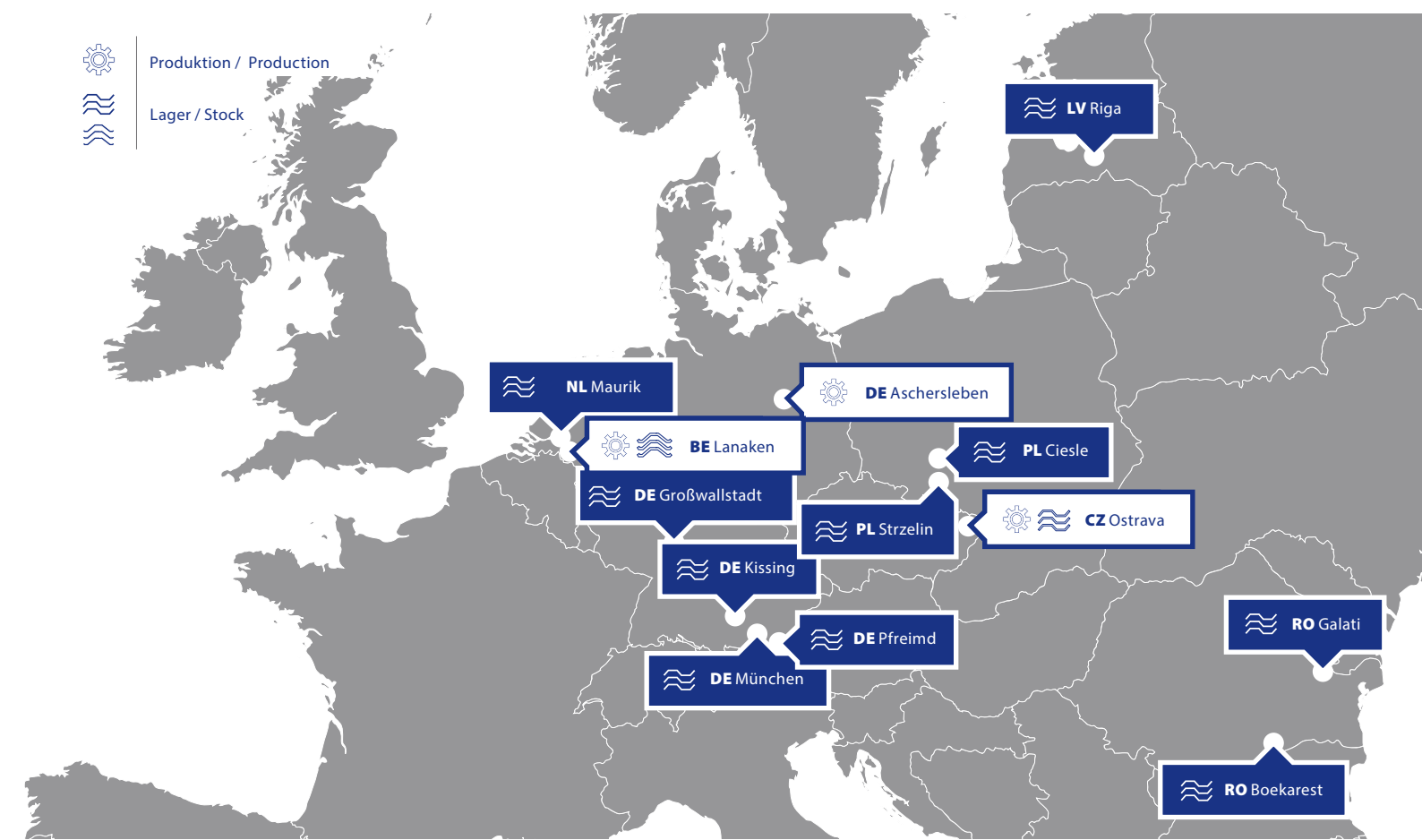




Produktion / Production



Lager / Stock



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