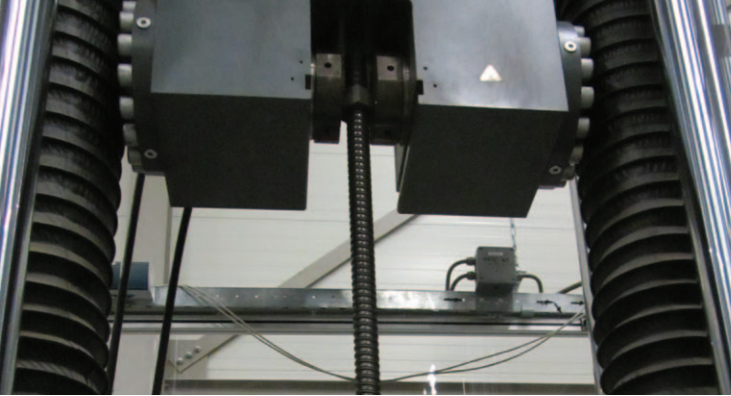


YOUR PARTNER IN ANCHORAGE



**WE STAND FOR RELIABLE
AND GUARANTEED QUALITY**

WWW.GEOTECHMETALS.COM



GEOTECH METALS IS A SPECIALIST IN THE PRODUCTION OF HOLLOW BAR (SELFDRILLING) ANCHORAGE

As an independent producer we are a suitable partner which is acting in a global market.

Our production facility is located in Werkendam, the Netherlands. From this site development, storage, distribution and manufacturing is done. Our large daily stock gives us flexibility towards our customers.

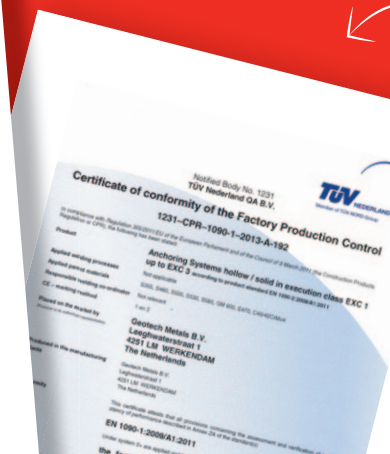
The Quality Assurance of our organization and our production processes are certified by ISO-9001:2008. From this system the internal quality checks on our end products are integrated.

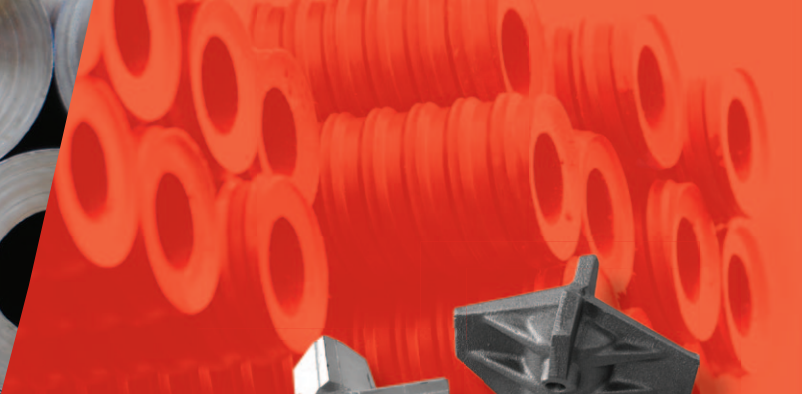
Beside these internal processes, a independent continuous quality testing program, at well known laboratories, is an essential and important addition to our own quality standards.

Our production is running under a Factory Production Control (FPC) System. This system is according the European standard EN 1090 (EX 3). By this we are delivering our main bearing elements with CE-marking and are into compliance with European Construction Product Regulations (EU no. 305/2011).

As notified body for Quality Assurance and our FPC-System the TÜV-Nord group is contracted as our partner.

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Our hollow bar systems are produced of high strength structural steel. Because of their composition and controlled fabrication, these steels have high yield strength, good impact strength and excellent weldability.

The systems are selfdrilling, very suitable for drilling with percussion or high torque drilling without percussion and fast to install.

The core of our selfdrilling anchor system is a hot rolled thick-walled tube. They are available in the steel grade S460NH and, our special steel, GM600. Both steel grades are produced according EN 10210-1 *"Hot finished structural hollow sections of non alloy and fine grain steels"* and have, thanks to their cleanliness and fine grain size, excellent capacity to the short time simultaneously dynamic loads (torque, frequent percussion impact, bending moments) during drilling as long term load and durability.

When using a suitable drillhead in combination with sufficient drilling capacity and skills these systems can be installed in every soil condition without serious problems.

Our systems fulfills the requirements of design following the European Standards:

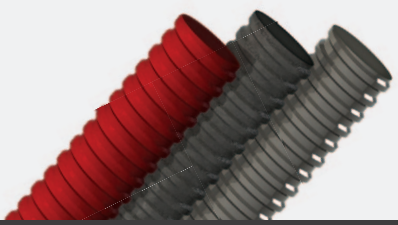
- **EN 1537** Execution of special geotechnical works - Ground Anchors
- **EN 14199** Execution of special geotechnical works - Micropiles
- **EN 14490** Execution of special geotechnical works - Soil nailing

They are suitable for temporary and permanent applications. By imbedding the hollow bar into a cement stone body a durable product, protected against corrosion, is realized.

When local conditions ask for additional corrosion protection this can be realized by:

- **Sacrificial corrosion (design principal)**
- **Galvanizing according to EN-ISO 1461**
- **Duplex coating according to EN 15773**

We offer a full scale stock of all necessary components as couplings, nuts, drill bits (for various soil conditions), centralizers, plates. Also flushing rods, flushing rings and other drill rig components are available.





TECHNICAL DATA SERIE S460NH

	UNIT	40/20	40/16	53/29	72/45	72/30	85/48	103/52
Nominal thread diameter	mm	40	40	53	72	72	85	103
External diameter ^{a)}	mm	37,0	37,0	50,5	69,5	69,5	81,5	101,8
Internal diameter ^{b)}	mm	20,9	15,0	29,3	44,6	29,1	46,8	53,6
Cross sectional area S _o ^{c)}	mm ²	730	900	1.325	2.230	3.130	3.500	5.875
Load at 0.2% Yield F _{0,2;yield} ^{d)}	kN	425	525	695	1.170	1.475	1.800	2.670
Yield strenght R _{p0,2} ^{e)}	N/mm ²	582	583	525	525	470	515	455
Ultimate load F _{ultimate} ^{d)}	kN	540	660	900	1.580	1.900	2.200	3.660
Thread (left/right)	-	left	left	right	right	right	right	right
Weight m	kg/m	5,7	7,1	10,4	17,5	24,6	27,5	46,1

TECHNICAL DATA SERIE GM600

	UNIT	53/29	63/32	72/42	72/30	85/48	85/38	103/67	103/52	117/64	135/53
Nominal thread diameter	mm	53	63	72	72	85	85	103	103	117	135
External diameter ^{a)}	mm	50,5	59,5	69,5	69,5	81,5	81,5	101,8	101,8	114,0	132,5
Internal diameter ^{b)}	mm	28,8	31,2	39,6	29,2	46,1	36,1	67,3	52,2	64,0	52,0
Cross sectional area S _o ^{c)}	mm ²	1.350	2.015	2.565	3.130	3.550	4.195	4.580	6.000	6.990	11.660
Load at 0.2% Yield F _{0,2;yield} ^{d)}	kN	810	1.210	1.540	1.875	2.110	2.500	2.680	3.470	4.050	6.650
Yield strenght R _{p0,2} ^{e)}	N/mm ²	600	600	600	600	595	595	585	585	580	570
Ultimate load F _{ultimate} ^{d)}	kN	1.135	1.610	2.050	2.470	2.770	3.275	3.530	4.620	5.245	8.450
Thread (left/right)	-	right	right	right	right	right	right	right	right	right	right
Weight m	kg/m	10,6	15,8	20,1	24,6	27,9	32,9	36,0	47,1	54,9	91,5

^{a)} calculated from the internal diameter and weight

^{b)} average value

^{c)} calculated from the weight (S_o = 10⁶ x m / 7.850 [kg/m³])

^{d)} characteristic value by EN1990 (5%-fractile value)

^{e)} calculated from the characteristic load value and weight

**AS A COMMITTED PARTNER WE ARE ABLE TO SUPPORT
OUR CUSTOMERS IN OFFERING EXPERTISE TOWARDS THEIR CLIENTS**

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