UNITEK®

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Carbon / SUS410 / Bi-metal

集成建筑、轻钢围护系统紧固件应用手册

Fastener Application Manual

UNITEK

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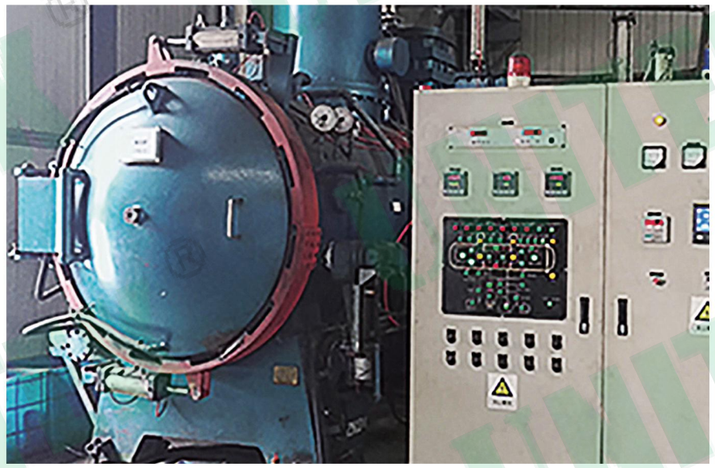
01

ADVANTAGE
Technical advantage
技术优势

热处理 Heat treatment



真空热处理被当代热处理界称为高效、节能和无污染的清洁热处理。真空热处理的零件具有无氧化、无脱碳、脱气、脱脂、表面质量好、变形小、综合力学性能高、可靠性好、重复性好、寿命稳定等一系列的优点。因此，真空热处理受到国内外广泛的重视和普遍的应用。并把真空热处理普及程度作为衡量一个国家热处理技术水平的重要标志。

Vacuum heat treatment is known as high efficiency, energy saving and clean heat treatment.Vacuum heat treatment of parts has no oxidation and decarburization, degassing, degreasing, good surface quality and small deformation, high comprehensive mechanical properties, good reliability, good repeatability, stable life and a series of advantages.Therefore, vacuum heat treatment is widely used in China and abroad.The popularity of vacuum heat treatment is regarded as an important indicator of the technical level of heat treatment in a country.

合邦科技技术团队经过多年的研究和实践，拥有了多项真空热处理及真空氮化的专利。经过合邦的热处理，螺钉表面硬度在HV580以上，从而能快速地一次性完成自钻孔、自攻牙的紧固过程，大大节省施工时间，提高工作效率，并且联结紧固；经过合邦特殊的热处理加工之后的不锈钢螺钉，会在表面形成一层致密的硬化层，该硬化层不仅硬度高，同时具备良好的耐蚀性。

After years of research and practice, the technical team of UNITEK technology owns many patents of vacuum heat treatment and vacuum nitriding. After UNITEK heat treatment, surface hardness of screw in HV580 above, which can quickly once the fastening process of drilling, tapping, greatly save the construction time, improve work efficiency, and tighten connection;After the special heat treatment process of hebang stainless steel screws, a dense hardening layer will be formed on the surface, which is not only high hardness, but also good corrosion resistance.

表面处理 Surface treatment

泰尼克涂层介绍

产品表面涂层采用锌锡合金涂层，符合AS3566.2-2002防腐技术标准；金相剖面显微密度8级要求，确保镀层结合力；底涂锌锡合金，360度滚镀；面涂铝环氧聚合物；

1、CLASS3防腐等级：涂层锡含量20-25%，锌含量75-80%，涂层厚度≥25μ，盐雾试验可达1000H以上无红锈，通过酸雨15个循环以上。

2、AS3566 CLASS2防腐等级：涂层锌含量100%，涂层厚度12-19μ，盐雾试验可达240H以上无红锈。

The product surface coating adopts zinc - tin alloy coating, which conforms to as3566.2-2002 anti-corrosion technology standard.The metallographic section microdensity-level 8 required to ensure the adhesion of the coating;Bottom coated zinc tin alloy, 360 degree roll plating;Aluminized epoxy polymer;

1. Class3 anti-corrosion level: 20-25% coating tin content, 75-80% zinc content, no less than 25mg coating thickness, and no red rust at above 1000H in salt spray test, and over 15 cycles through acid rain.

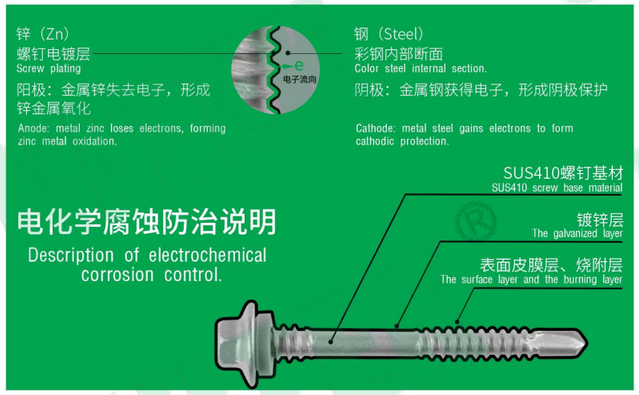
2. AS3566 Class2 anti-corrosion grade: the coating zinc content is 100%, the coating thickness is 12-19, and the salt mist test can reach 240H without red rust.

(高耐蚀——1000小时无红锈) High corrosion resistant-1000 hours with no red rust

皮膜层 Coating		防锈结构 Rustproof structure
第1层 1st layer	金属电镀层 Metalic zine layer	铁材被防腐蚀性电镀保护 The steel/iron substrate is protected from corrosion by the self-sacrificial galvanic effect of zinc coating.
第2层 2nd layer	化学成分皮膜层金属 Chemical conversion coating layer	防锈性加强，并在化成层和涂装层作不活性电镀和附着面 Rustproof performance is improved,as the chemical conversion inactivates the zinc plated surface and attributes to tight adhesion between chemically converted layer and paint-layer
第3层 3rd layer	表面烧附层 Baked ceramic surface coating layer	包含以强韧防锈材料之皮膜 Instrusion of corrosive factors are intercepted by the strong paint film made of ceramic materials.

(超耐蚀——2000小时无红锈) Super no red rust corrosion-2000 hours

高耐腐蚀性 High corrosion resistance	盐水喷雾试验2000小时以上 Saline spray test for more than 2000 hours.
无氢脆 No hydrogen brittleness	基材为不锈钢、处理过程无酸洗，毫无氢脆之虞 The base material is stainless steel, the treatment process has no pickling, millisecond.Risk of hydrogen embrittlement
绿色环保 Environmental protection	不含有害物质，如铬酸、铅、镉 Do not contain harmful substances, such as chromic acid, lead, cadmium.
低温处理 Subzero treatment	低200℃温度处理过程不会造成物质变化 Low temperature 200 ℃ process will not result in a material change
耐药物性 The drug resistance	耐碱、耐紫外线、强烈耐酸雨 Alkali resistance, uv resistance, strong acid rain.
耐候性 weather resistance	-60℃-550℃



金属复合 Bi-metal recombination

合邦科技于2008年成功开发出TECHNIK双金属复合钻尾自攻螺钉，此系列产品是由奥氏体不锈钢与马氏体不锈钢的组合，而目前市场上均是奥氏体不锈钢与低合金碳素钢组合的产品。这自然也使得我司产品在攻钻性能和耐腐蚀性能上更胜一筹。此突破得益于公司拥的马氏体不锈钢热处理的核心技术。且公司产品交付迅捷，一般交期可达10天。

UNITEK in 2008 successfully developed TECHNIK double metal composite drlling self tapping screw, this series product is composed of austenitic stainless steel with a combination of martensite stainless steel, and are on the market at present is combination of austenitic stainless steel and low alloy carbon steel products.This naturally makes our products superior in drilling performance and corrosion resistance.This breakthrough is due to the company's own martensite stainless steel heat treatment core technology.And the company's products delivered quickly, the general delivery date can be up to 10 days.

2014-2015年度，服务于上海迪斯尼项目及杭州亚运主场馆杭州奥体中心项目近千万支产品的成功顺利应用，亦展示了TECHNIK产品的成熟和品质的稳定。

2014-2015, in the service of Shanghai Disney project and Asian games hangzhou hangzhou Olympic sports center stadium project success of tens of millions of the product application, also shows the TECHNIK products mature and stable quality.

设计与制造 Design and Manufacture

合邦科技每支钻尾钉刀头的刃口，都由业内具有多年技术经验的技师制造，刀刃切料快速，排屑顺畅，使安装更快速、更轻松、更高效。合邦科技的割尾自攻钉（TYPE17）均采用大长尾设计，割尾长度（6.3规格）达12m长，割尾角度90，刃口锋利，切入快速，缔结口整齐漂亮，无剥落无开裂；材质SUS410 TYPE17型螺钉，无需预钻孔即可穿透1.2mm以下碳素钢檩条。给您带来意想不到的方便、实用、快捷和高效。

Each blade of UNITEK drill tail nail head is made by technicians with many years of technical experience in the industry. The cutting edge is fast, the chip is discharged smoothly, and the installation is faster, easier and more efficient. The UNITEK self driling tapping screw(Type 17) adopts a large and long drill point design with a drill point length of 12mm(ST6.3)and point angle of 90. The sharp edge can quickly cut into materials with clean cuts, leaving no cracking and flanking; the SUS410 Type 17 screw can cut through less than 1.2mm carbon steel purlin without any pre-drilling. Thus it can bring unexpected convenience, utility, rapidity and effciency to you.

紧固方案 Fastening solutions

合邦科技拥有完善的紧固件产品体系，拥有一支经验丰富的施工现场紧固设计的工程团队。可以从材质、规格、涂层、特殊结构等各方面，根据客户的实际需求，为客户量身定制适合的紧固系统整体解决方案。

UNITEK has a perfect fastener product system, with an experienced construction site fastening design team of engineering.We can customize the overall solution of the fastening system according to the actual needs of customers, according to the actual needs of customers.

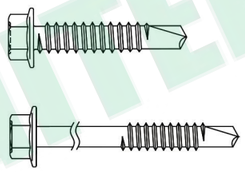
02

SELECTION

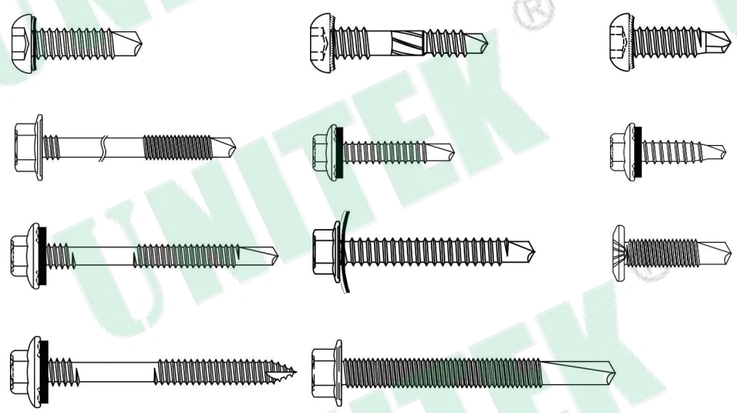
Guidance for selection

选择指南

1 TK 碳素钢涂层钉系列 (TK Carbon steel coated screw series)



2 TEK 不锈钢410系列 (TEK Stainless steel 410 series)



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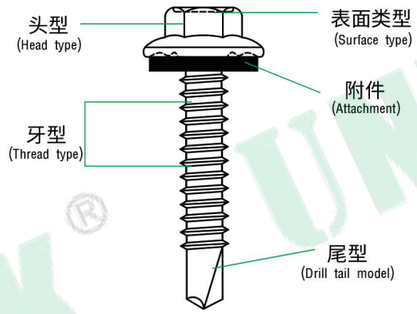
产品基本构成 Basic product composition



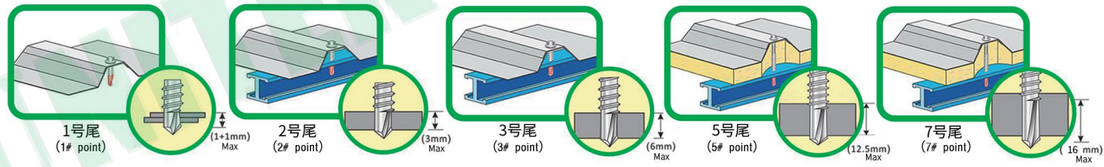
头型 (Head type)	六角华司	盘头	扁平头	沉头	华威头	
驱动槽型 (Drive groove type)	米字槽	内六角	方槽	十字槽	梅花槽	一字槽
牙型 (Thread type)	粗牙	细牙	双段螺纹			
尾型 (Drill tail model)	1号尾	3号尾	5号尾			
表面类型 (Surface type)	泰尼克					
附件 (Attachment)	EPDM	防锈铝+EPDM	SUS430+EPDM	SUS304+EPDM		

螺钉标识说明 Screw identification

规格尺寸对照表 Specification and size comparison table.

规格对照表 Specification table								
规格 Specifications	#6	#7	#8	#10	#12	#14	1/4	#17
公制尺寸 (mm) Metric size (mm)	3.5	3.9	4.2	4.8	5.5	6.3	6.3	7.5
英制尺寸 (inch) Inch size (inch)	.140	.150	.160	.190	.210	.240	.250	.286

攻钻能力介绍 Introduction of drilling capability.



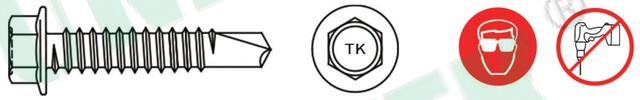
03 INTRODUCTION

Product introduction

产品介绍

4.1 TK 碳素钢涂层钉系列

六角法兰面钻尾钉



规格尺寸 Specification and dimension

料号 Part number	产品规格 Product Size	钻尾型号 Drill tail model	垫片 Gasket	攻钻能力(mm) Tapping drilling capacity	有效紧固厚度(mm) Effective tightening thickness	表面处理 Surface treatment
F31	1/4-14*1-1/4 "	3	/	6	24	TECHNIK1000
F31A	1/4-14*1-1/2 "	3	/	6	30	TECHNIK1000
F31B	1/4-14*70	3	/	6	42	TECHNIK1000

机械性能 Mechanical properties

规格 Size	扭断力 N·m(min) Wring force	抗拉强度 N(min) Tensile strength	剪切力 N(min) The shear stress
1/4-14*1-1/4 "	22	23000	21000
1/4-14*1-1/2 "	21	23000	21000
1/4-14*70	22	23000	21000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

拉拔测试 Pullout test

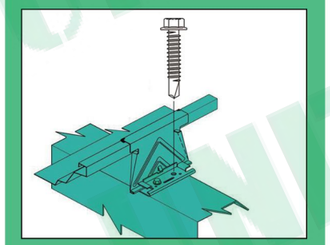
规格 Size	拉拔力 N(min) Drawing force			
	2mm Q235(Min)	3mm Q235(Min)	4mm Q235(Min)	5mm Q235(Min)
1/4-14*1-1/4 "	4000	8000	11000	15000
1/4-14*1-1/2 "	4000	8000	11000	15000
1/4-14*70	4000	8000	11000	15000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

攻速测试 Drilling test

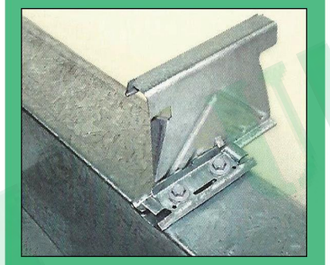
螺纹规格 Thread specification	测试板厚度(mm) Test plate thickness	轴向力(N) Axial force	拧入时间(S)Max Screw in time	载荷下螺钉转速/min Screw speed under load.
ST6.3	2+3=5	350	13	1000-1800

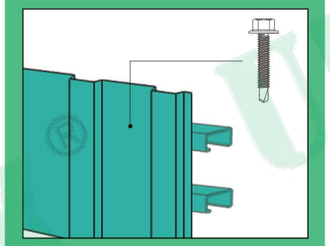
注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.



（LSIII支座结构钉）/（檩条结构长钉）

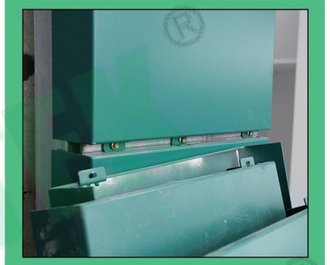
应用实例：





（内板结构钉）/（内板缝合钉）

应用实例：



六角法兰面钻尾钉

规格尺寸 Specification and dimension

料号 Part number	产品规格 Product Size	钻尾型号 Drill tail model	垫片 Gasket	攻钻能力(mm) Tapping drilling capacity	有效紧固厚度(mm) Effective tightening thickness	表面处理 Surface treatment
F21	12-24*1 "	3	/	6	18	TECHNIK1000
F22	12-24*1-1/2 "	3	/	6	31	TECHNIK1000

机械性能 Mechanical properties

规格 Size	扭断力 N·m(min) Wring force	抗拉强度 N(min) Tensile strength	剪切力 N(min) The shear stress
12-24*1 "	10	20000	16000
12-24*1-1/2 "	10	20000	16000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

拉拔测试 Pullout test

规格 Size	拉拔力 N(min) Drawing force			
	2mm Q235(Min)	3mm Q235(Min)	4mm Q235(Min)	5mm Q235(Min)
12-24*1 "	4000	6000	13000	16000
12-24*1-1/2 "	4000	6000	13000	16000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

攻速测试 Drilling test

螺纹规格 Thread specification	测试板厚度(mm) Test plate thickness	轴向力(N) Axial force	拧入时间(S)Max Screw in time	载荷下螺钉转速/min Screw speed under load.
ST5.5	2+3=5	350	11	1000-1800

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

碳素钢涂层钉
Carbon steel coated screw

六角大蘑菇台阶钻尾钉

规格尺寸 Specification and dimension

料号 Part number	产品规格 Product Size	钻尾型号 Drill tail model	垫片 Gasket	攻钻能力(mm) Tapping drilling capacity	有效紧固厚度(mm) Effective tightening thickness	表面处理 Surface treatment
F34	1/4-14*7/8 "	3	/	6	14	TECHNIK1000

机械性能 Mechanical properties

规格 Size	扭断力 N·m(min) Wring force	抗拉强度 N(min) Tensile strength	剪切力 N(min) The shear stress
1/4-14*7/8 "	22	23000	21000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

拉拔测试 Pullout test

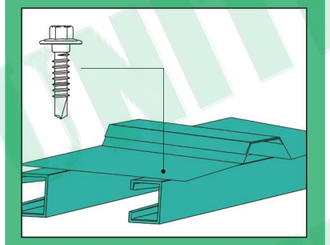
规格 Size	拉拔力 N(min) Drawing force			
	2mm Q235(Min)	3mm Q235(Min)	4mm Q235(Min)	5mm Q235(Min)
1/4-14*7/8 "	4000	8000	11000	15000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

攻速测试 Drilling test

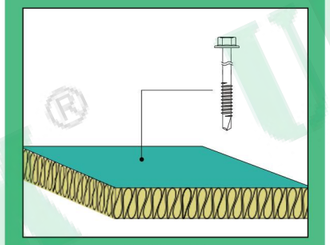
螺纹规格 Thread specification	测试板厚度(mm) Test plate thickness	轴向力(N) Axial force	拧入时间(S)Max Screw in time	载荷下螺钉转速/min Screw speed under load.
ST6.3	2+3=5	350	13	1000-1800

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.



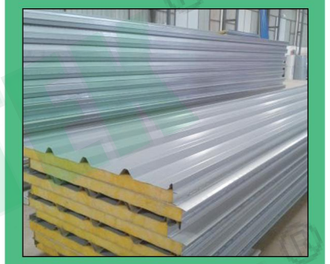
（屋面板长孔钉）

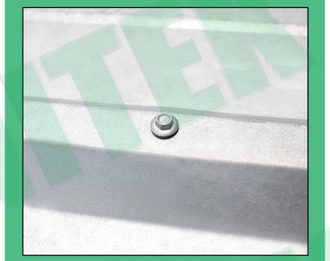
应用实例：



（夹芯板螺钉）

应用实例：





六角法兰面钻尾钉(半牙)

规格尺寸 Specification and dimension

料号 Part number	产品规格 Product Size	钻尾型号 Drill tail model	垫片 Gasket	攻钻能力(mm) Tapping drilling capacity	有效紧固厚度(mm) Effective tightening thickness	表面处理 Surface treatment
/	ST5.5-14*70 3#	3	/	6	63	TECHNIK1000
/	ST5.5-14*75 3#	3	/	6	68	TECHNIK1000
/	ST5.5-14*100 3#	3	/	6	93	TECHNIK1000
/	ST5.5-14*125 3#	3	/	6	118	TECHNIK1000

机械性能 Mechanical properties

规格 Size	扭断力 N·m(min) Wring force	抗拉强度 N(min) Tensile strength	剪切力 N(min) The shear stress
ST5.5-14*70 3#	10	20000	16000
ST5.5-14*75 3#	10	20000	16000
ST5.5-14*100 3#	10	20000	16000
ST5.5-14*125 3#	10	20000	16000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

拉拔测试 Pullout test

规格 Size	拉拔力 N(min) Drawing force			
	2mm Q235(Min)	3mm Q235(Min)	4mm Q235(Min)	5mm Q235(Min)
ST5.5-14*70 3#	4000	7000	10000	15000
ST5.5-14*75 3#	4000	7000	10000	15000
ST5.5-14*100 3#	4000	7000	10000	15000
ST5.5-14*125 3#	4000	7000	10000	15000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

攻速测试 Drilling test

螺纹规格 Thread specification	测试板厚度(mm) Test plate thickness	轴向力(N) Axial force	拧入时间(S)Max Screw in time	载荷下螺钉转速/min Screw speed under load.
ST5.5	2+3=5	350	11	1000-1800

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

4.2 TEK 410系列

大盘头梅花槽钻尾钉

规格尺寸 Specification and dimension

料号 Part number	产品规格 Product Size	钻尾型号 Drill tail model	垫片 Gasket	攻钻能力(mm) Tapping drilling capacity	有效紧固厚度(mm) Effective tightening thickness	表面处理 Surface treatment
F11	12-14*1 "	3	SUS430+EPDM	6	18	TECHNIK1000
F11A	12-14*1-1/2 "	3	SUS430+EPDM	6	31	TECHNIK1000

机械性能 Mechanical properties

规格 Size	扭断力 N·m(min) Wring force	抗拉强度 N(min) Tensile strength	剪切力 N(min) The shear stress
12-14*1 "	10	20000	16000
12-14*1-1/2 "	10	20000	16000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

拉拔测试 Pullout test

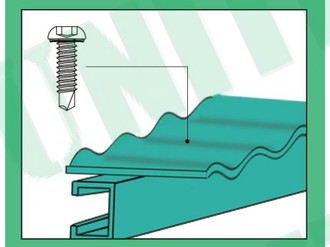
规格 Size	拉拔力 N(min) Drawing force			
	2mm Q235(Min)	3mm Q235(Min)	4mm Q235(Min)	5mm Q235(Min)
12-14*1 "	4000	7000	10000	15000
12-14*1-1/2 "	4000	7000	10000	15000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

攻速测试 Drilling test

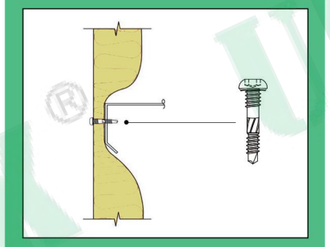
螺纹规格 Thread specification	测试板厚度(mm) Test plate thickness	轴向力(N) Axial force	拧入时间(S)Max Screw in time	载荷下螺钉转速/min Screw speed under load.
ST5.5	2+3=5	350	11	1000-1800

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.



（外墙板结构钉）

应用实例：



（限位钉）

应用实例：

大盘头梅花槽限位钻尾钉

规格尺寸 Specification and dimension

料号 Part number	产品规格 Product Size	钻尾型号 Drill tail model	垫片 Gasket	攻钻能力(mm) Tapping drilling capacity	有效紧固厚度(mm) Effective tightening thickness	表面处理 Surface treatment
F12A	16/12-14*32	3	SUS430+EPDM	6	25	TECHNIK1000
F12B	16/12-14*36	3	SUS430+EPDM	6	29	TECHNIK1000
F12C	16/12-14*42	3	SUS430+EPDM	6	35	TECHNIK1000

机械性能 Mechanical properties

规格 Size	扭断力 N·m(min) Wring force	抗拉强度 N(min) Tensile strength	剪切力 N(min) The shear stress
16/12-14*32	10	20000	16000
16/12-14*36	10	20000	16000
16/12-14*42	10	20000	16000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

拉拔测试 Pullout test

规格 Size	拉拔力 N(min) Drawing force			
	2mm Q235(Min)	3mm Q235(Min)	4mm Q235(Min)	5mm Q235(Min)
16/12-14*32	4000	7000	10000	15000
16/12-14*36	4000	7000	10000	15000
16/12-14*42	4000	7000	10000	15000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

攻速测试 Drilling test

螺纹规格 Thread specification	测试板厚度(mm) Test plate thickness	轴向力(N) Axial force	拧入时间(S)Max Screw in time	载荷下螺钉转速/min Screw speed under load.
ST5.5	2+3=5	350	11	1000-1800

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

大盘头梅花槽缝合钉

规格尺寸 Specification and dimension

料号 Part number	产品规格 Product Size	钻尾型号 Drill tail model	垫片 Gasket	攻钻能力(mm) Tapping drilling capacity	有效紧固厚度(mm) Effective tightening thickness	表面处理 Surface treatment
F13	1/4-14*3/4 "	1	SUS430+EPDM	2.4	13	TECHNIK1000

机械性能 Mechanical properties

规格 Size	扭断力 N·m(min) Wring force	抗拉强度 N(min) Tensile strength	剪切力 N(min) The shear stress
1/4-14*3/4 "	22	23000	21000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

拉拔测试 Pullout test

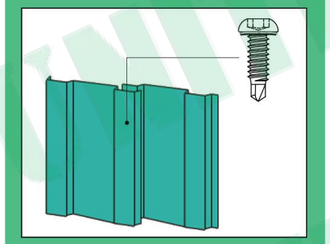
规格 Size	拉拔力 N(min) Drawing force	
	1mm 彩钢瓦	2mm 彩钢瓦
1/4-14*3/4 "	3500	7000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

攻速测试 Drilling test

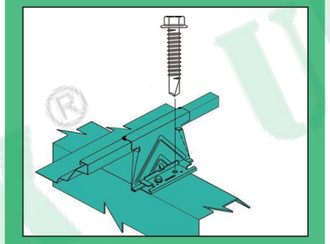
螺纹规格 Thread specification	测试板厚度(mm) Test plate thickness	轴向力(N) Axial force	拧入时间(S)Max Screw in time	载荷下螺钉转速/min Screw speed under load.
ST6.3	1.2	150	5	1800-2500

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.



（外墙板缝合钉）

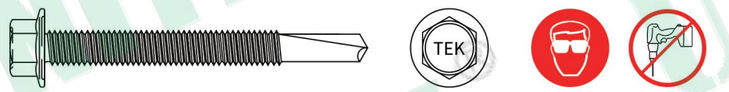
应用实例：



（LSIII支座结构长钉）/（檩条结构长钉）

应用实例：

六角法兰面钻尾钉



规格尺寸 Specification and dimension

料号 Part number	产品规格 Product Size	钻尾型号 Drill tail model	垫片 Gasket	攻钻能力(mm) Tapping drilling capacity	有效紧固厚度(mm) Effective tightening thickness	表面处理 Surface treatment
F31C	12-24*38 5#	5	/	12	24	TECHNIK1000
F31C	12-24*50 5#	5	/	12	36	TECHNIK1000

机械性能 Mechanical properties

规格 Size	扭断力 N·m(min) Wring force	抗拉强度 N(min) Tensile strength	剪切力 N(min) The shear stress
12-24*38 5#	10	20000	16000
12-24*50 5#	10	20000	16000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

拉拔测试 Pullout test

规格 Size	拉拔力 N(min) Drawing force			
	2mm Q235(Min)	3mm Q235(Min)	4mm Q235(Min)	5mm Q235(Min)
12-24*38 5#	4000	6000	13000	16000
12-24*50 5#	4000	6000	13000	16000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

攻速测试 Drilling test

螺纹规格 Thread specification	测试板厚度(mm) Test plate thickness	轴向力(N) Axial force	拧入时间(S)Max Screw in time	载荷下螺钉转速/min Screw speed under load.
ST5.5	8	350	18	1000-1800

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

六角大蘑菇状钻尾钉

规格尺寸 Specification and dimension

料号 Part number	产品规格 Product Size	钻尾型号 Drill tail model	垫片 Gasket	攻钻能力(mm) Tapping drilling capacity	有效紧固厚度(mm) Effective tightening thickness	表面处理 Surface treatment
F32	12-14*1-1/4 "	3	EPDM	6	25	TECHNIK1000
F32A	12-14*1-1/2 "	3	EPDM	6	31	TECHNIK1000

机械性能 Mechanical properties

规格 Size	扭断力 N·m(min) Wring force	抗拉强度 N(min) Tensile strength	剪切力 N(min) The shear stress
12-14*1-1/4 "	10	20000	16000
12-14*1-1/2 "	10	20000	16000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

拉拔测试 Pullout test

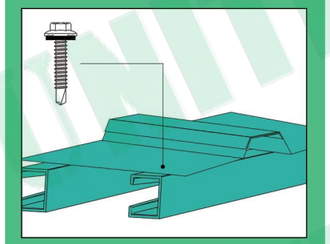
规格 Size	拉拔力 N(min) Drawing force			
	2mm Q235(Min)	3mm Q235(Min)	4mm Q235(Min)	5mm Q235(Min)
12-14*1-1/4 "	4000	7000	10000	15000
12-14*1-1/2 "	4000	7000	10000	15000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

攻速测试 Drilling test

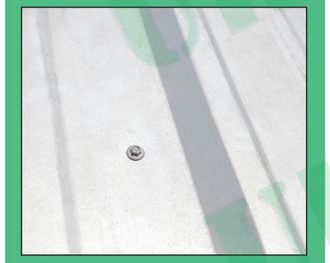
螺纹规格 Thread specification	测试板厚度(mm) Test plate thickness	轴向力(N) Axial force	拧入时间(S)Max Screw in time	载荷下螺钉转速/min Screw speed under load.
ST6.3	2+3=5	350	13	1000-1800

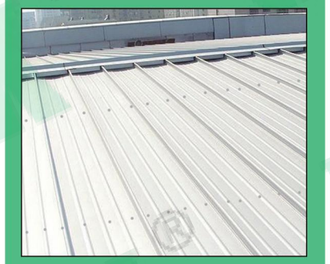
注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

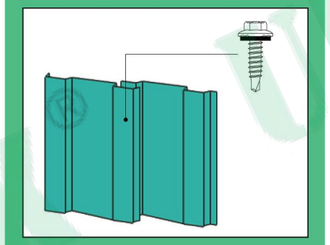


（屋面板结构钉）

应用实例：

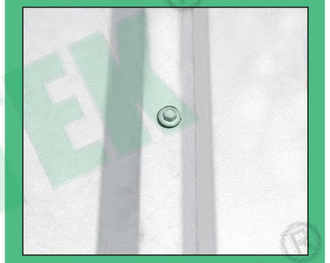




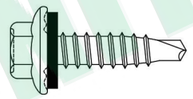


（屋面板缝合钉）

应用实例：



六角大蘑菇缝合钉



规格尺寸 Specification and dimension

料号 Part number	产品规格 Product Size	钻尾型号 Drill tail model	垫片 Gasket	攻钻能力(mm) Tapping drilling capacity	有效紧固厚度(mm) Effective tightening thickness	表面处理 Surface treatment
F33	1/4-14*7/8 "	1	SUS430+EPDM	2	14	TECHNIK1000

机械性能 Mechanical properties

规格 Size	扭断力 N·m(min) Wring force	抗拉强度 N(min) Tensile strength	剪切力 N(min) The shear stress
1/4-14*7/8 "	22	23000	21000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

拉拔测试 Pullout test

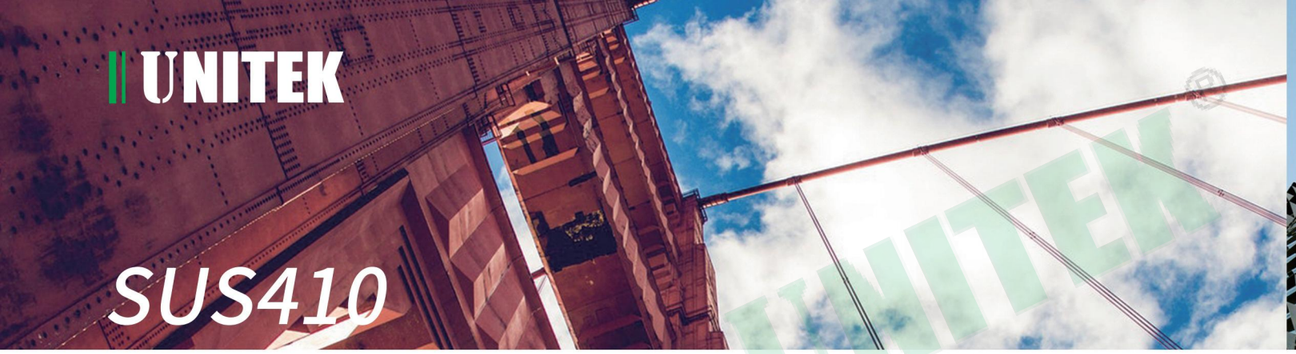
规格 Size	拉拔力 N(min) Drawing force	
	1mm 彩钢瓦	2mm 彩钢瓦
1/4-14*7/8 "	3500	7000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

攻速测试 Drilling test

螺纹规格 Thread specification	测试板厚度(mm) Test plate thickness	轴向力(N) Axial force	拧入时间(S)Max Screw in time	载荷下螺钉转速/min Screw speed under load.
ST6.3	1.2	150	5	1800-2500

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.



六角法兰面钻尾钉

规格尺寸 Specification and dimension

料号 Part number	产品规格 Product Size	钻尾型号 Drill tail model	垫片 Gasket	攻钻能力(mm) Tapping drilling capacity	有效紧固厚度(mm) Effective tightening thickness	表面处理 Surface treatment
F36	12-14*1-1/2" 3#	3	SUS304+EPDM	6	31	TECHNIK1000

机械性能 Mechanical properties

规格 Size	扭断力 N·m(min) Wring force	抗拉强度 N(min) Tensile strength	剪切力 N(min) The shear stress
12-14*1-1/2" 3#	10	20000	16000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

拉拔测试 Pullout test

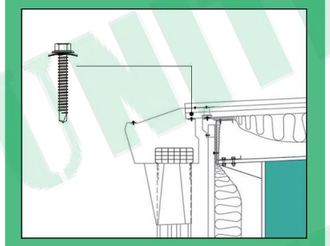
规格 Size	拉拔力 N(min) Drawing force			
	2mm Q235(Min)	3mm Q235(Min)	4mm Q235(Min)	5mm Q235(Min)
12-14*1-1/2" 3#	4000	7000	10000	15000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

攻速测试 Drilling test

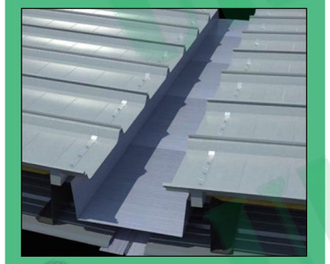
螺纹规格 Thread specification	测试板厚度(mm) Test plate thickness	轴向力(N) Axial force	拧入时间(S)Max Screw in time	载荷下螺钉转速/min Screw speed under load.
ST5.5	2+3=5	350	11	1000-1800

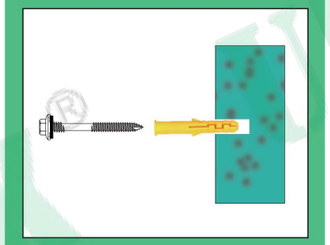
注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.



（檐口结构钉）

应用实例：

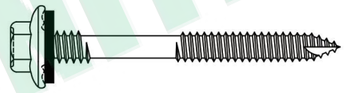




（塑料胀管结构钉）

应用实例：

六角大蘑菇尖铣尾自攻钉



规格尺寸 Specification and dimension

料号 Part number	产品规格 Product Size	钻尾型号 Drill tail model	垫片 Gasket	攻钻能力(mm) Tapping drilling capacity	有效紧固厚度(mm) Effective tightening thickness	表面处理 Surface treatment
F37	12-14*55	3	EPDM	6	48	TECHNIK1000

机械性能 Mechanical properties

规格 Size	扭断力 N·m(min) Wring force	抗拉强度 N(min) Tensile strength	剪切力 N(min) The shear stress
12-14*55	10	20000	16000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

拉拔测试 Pullout test

规格 Size	拉拔力 N(min) Drawing force			
	2mm Q235(Min)	3mm Q235(Min)	4mm Q235(Min)	5mm Q235(Min)
12-14*55	4000	7000	10000	15000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

攻速测试 Drilling test

螺纹规格 Thread specification	测试板厚度(mm) Test plate thickness	轴向力(N) Axial force	拧入时间(S)Max Screw in time	载荷下螺钉转速/min Screw speed under load.
ST5.5	2+3=5	350	11	1000-1800

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

华夫头十字槽钻尾钉

规格尺寸 Specification and dimension

料号 Part number	产品规格 Product Size	钻尾型号 Drill tail model	垫片 Gasket	攻钻能力(mm) Tapping drilling capacity	有效紧固厚度(mm) Effective tightening thickness	表面处理 Surface treatment
F41	10-24*16	3	/	3	11	TECHNIK1000

机械性能 Mechanical properties

规格 Size	扭断力 N·m(min) Wring force	抗拉强度 N(min) Tensile strength	剪切力 N(min) The shear stress
10-24*16	10	12000	15000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

拉拔测试 Pullout test

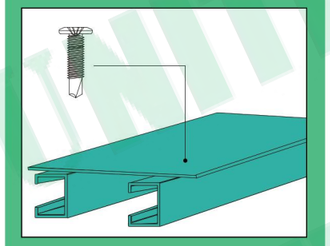
规格 Size	拉拔力 N(min) Drawing force			
	2mm Q235(Min)	3mm Q235(Min)	4mm Q235(Min)	5mm Q235(Min)
10-24*16	4000	6500	9800	15000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

攻速测试 Drilling test

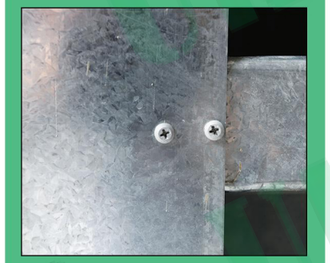
螺纹规格 Thread specification	测试板厚度(mm) Test plate thickness	轴向力(N) Axial force	拧入时间(S)Max Screw in time	载荷下螺钉转速/min Screw speed under load.
ST4.8	2+2=4	250	7	1800-2500

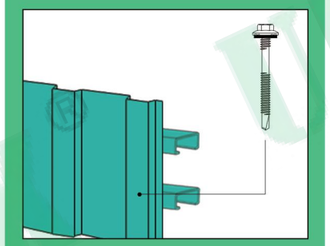
注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.



（VCU结构钉）

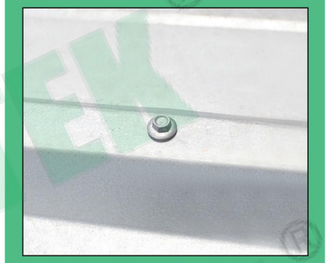
应用实例：



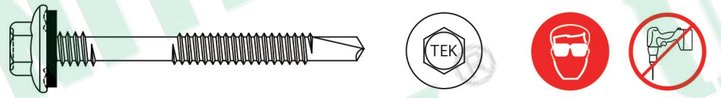


（波峰固定钉）

应用实例：



六角法兰面钻尾钉



规格尺寸 Specification and dimension

料号 Part number	产品规格 Product Size	钻尾型号 Drill tail model	垫片 Gasket	攻钻能力(mm) Tapping drilling capacity	有效紧固厚度(mm) Effective tightening thickness	表面处理 Surface treatment
/	12-14*55	3	EPDM	6	48	TECHNIK1000
/	12-14*68	3	EPDM	6	61	TECHNIK1000

机械性能 Mechanical properties

规格 Size	扭断力 N·m(min) Wring force	抗拉强度 N(min) Tensile strength	剪切力 N(min) The shear stress
12-14*55	10	20000	16000
12-14*68	10	20000	16000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

拉拔测试 Pullout test

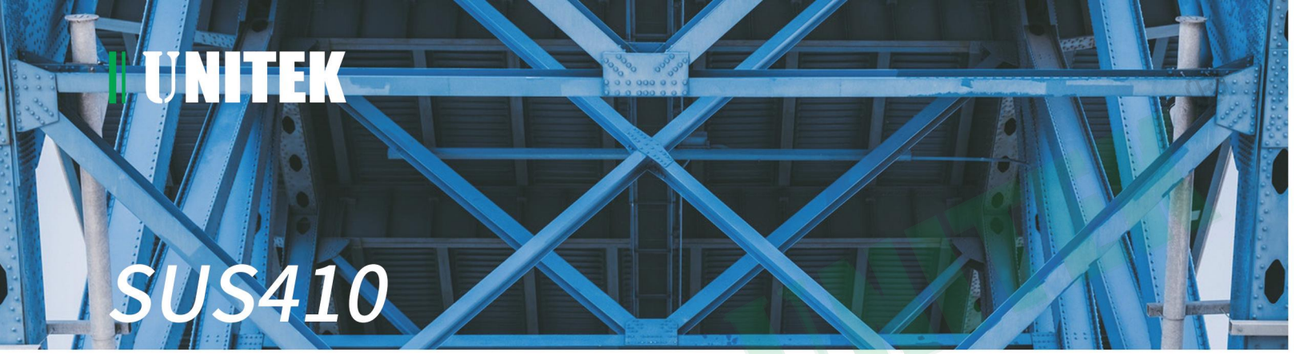
规格 Size	拉拔力 N(min) Drawing force			
	2mm Q235(Min)	3mm Q235(Min)	4mm Q235(Min)	5mm Q235(Min)
12-14*55	4000	7000	10000	15000
12-14*68	4000	7000	10000	15000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

攻速测试 Drilling test

螺纹规格 Thread specification	测试板厚度(mm) Test plate thickness	轴向力(N) Axial force	拧入时间(S)Max Screw in time	载荷下螺钉转速/min Screw speed under load.
ST5.5	2+3=5	350	11	1000-1800

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.



UNITEK

SUS410

六角法兰面钻尾钉

规格尺寸 Specification and dimension

料号 Part number	产品规格 Product Size	钻尾型号 Drill tail model	垫片 Gasket	攻钻能力(mm) Tapping drilling capacity	有效紧固厚度(mm) Effective tightening thickness	表面处理 Surface treatment
/	12-24*75	3	/	6	68	TECHNIK1000
/	12-24*90	3	/	6	83	TECHNIK1000
/	12-24*100	3	/	6	93	TECHNIK1000
/	12-24*125	3	/	6	118	TECHNIK1000

注：更长规格请来图定做。
Note: More specification can be made to the drawings

机械性能 Mechanical properties

规格 Size	扭断力 N·m(min) Wring force	抗拉强度 N(min) Tensile strength	剪切力 N(min) The shear stress
12-24*75	10	20000	16000
12-24*90	10	20000	16000
12-24*100	10	20000	16000
12-24*125	10	20000	16000

注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

拉拔测试 Pullout test

规格 Size	拉拔力 N(min) Drawing force			
	2mm Q235(Min)	3mm Q235(Min)	4mm Q235(Min)	5mm Q235(Min)
12-24*75	4000	6000	13000	16000
12-24*90	4000	6000	13000	16000
12-24*100	4000	6000	13000	16000
12-24*125	4000	6000	13000	16000

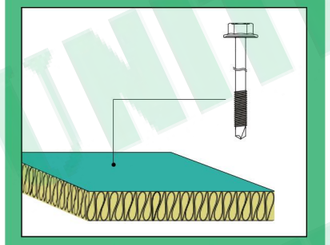
注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

攻速测试 Drilling test

螺纹规格 Thread specification	测试板厚度(mm) Test plate thickness	轴向力(N) Axial force	拧入时间(S)Max Screw in time	载荷下螺钉转速/min Screw speed under load.
ST5.5	2+3=5	350	11	1000-1800

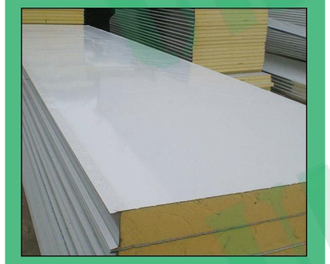
注：以上数据是在实验室条件下测出的平均数值，在设计时要考虑安全系数。
Note: the above data is the average value measured in laboratory conditions. Safety factor should be considered when designing.

本册所述产品仅为我司常规产品，若有其他需求请来样、来人、来函定做。



（夹芯板主螺钉）

应用实例：



04

ENGINEERING

Engineering Projects

工程案例

上海迪士尼

迪拜塔

澳门银河酒店

杭州奥体中心

成都双流机场

天津机场

上海虹桥站

西安咸阳机场

银川机场