



金屬工業研究發展中心
METAL INDUSTRIES RESEARCH &
DEVELOPMENT CENTRE

Certificate of Conformity

Product(s) : Mechanical Fastener
Type/Model : Self Tapping Screw (High Thread, Sharp Point)
Series type : M2.9~M10 or #4~3/8" (see Annex)
Technical File : CE03, Homn Reen Enterprise Co., Ltd.

provided by

Homn Reen Enterprise Co., Ltd.

No. 136, Lane 513, Ta Tung Rd., Lu Chu Dist., Kaohsiung City, TAIWAN(R.O.C)

This is to certify that the type/model of product(s) has/have been assessed according to the conformity assessment procedures laid down in Chapter V of THE CONSTRUCTION PRODUCTS DIRECTIVE (89/106/EEC). The evaluation of conformity is based on the review of the above technical file. This certificate attests that all provisions concerning the attestation of conformity and the performances described in Annex ZA of the standard. The Result(s) is(are) in compliance with the requirements of the Directive & Applied Standard(s)

Article 7 of 89/106/EEC & EN 14566:2008 + A1:2009



This given Certificate is issued for screws supplied by Teemu-E OÜ

Certificate No. : VF S1105 03 01
The certificate is issued on 2012/03/01
The certificate is valid until 2015/02/28



VFS1105

Huang Chi-Chuan
Huang, Chi-Chuan
Chairman, MIRDC

Statement of Responsibility

This Certificate of conformity only approves that this product(s) capability show (s) conformity of the applicable Directive(s)/Regulation(s). The manufacturer & purchaser of this product are still responsible for controlling the quality of the material through their own quality system.



Certificate of Conformity

Annex (Certificate No. : VF S1105 03 01)

Product Specification & Description

| | |
|--------------------------------|--|
| Family of Screw Commodity | Self Tapping Screw (High Thread, Sharp Point) |
| Common Name of Commodity | <ul style="list-style-type: none"> ■ Self Tapping Screw (Coarse Thread) ■ Drywall Screw (Coarse Thread) ■ Wood Screw ■ Chipboard Screw |
| Common Use (Intended Use) | <ul style="list-style-type: none"> ■ Timber (Wood) / PB ■ Timber (Wood) / Timber (Wood) ■ PB / insulation |
| Materials | Carbon Steel AISI C1018~ C 1022 (case hardened) |
| DGN of EN 14566:2008 + A1:2009 | THN |

Description of Head Shape

| Description | Applicable Specifications & Standards |
|------------------------|--|
| Bugle Head | DIN 18182-2, AS 3566 |
| Flat Head | ASME B18.6.4, ASME B18.6.5M, ASME B18.6.7M, ASME B18.3.5M, DIN97, DIN965, DIN7972, DIN 7982, DIN7997, DIN8245, DIN604, DIN7991, DIN605, DIN608, ISO1482, ISO2009, ISO7050, ISO 14586, ISO 15482, AS 3566 |
| Double Flat Head | ASME B18.6.4, DIN 7972, DIN 7982, ISO 1482, ISO 7050, ISO 14586, ISO 15482, AS 3566 |
| Hex Head | ASME B18.6.3, ASME B18.6.4, ASME B18.6.5M, ASME B18.6.7M, DIN 571, DIN 931, DIN 933, DIN 7976, ISO 1479 |
| Hex Washer Head | ASME B18.6.4, DIN 6928, ISO 7053, ISO 15480 |
| Hex Washer Flange Head | ASME B18.6.4, DIN 7504, DIN 6921, DIN 6928, ISO 10509, AS 3566 |
| Pan Head | ASME B18.6.4, DIN 7971, DIN 7981, ISO 1481, ISO 7049, ISO 14585, ISO 15481 |
| Pan Washer Head | DIN 967, DIN 968 |
| Pan Framing Head | Modified from Pan Head |
| Round Head | ASME B18.6.3, ASME B18.5.2.1M, DIN 96, DIN 7996 |
| Round Washer Head | ASME B18.6.3 |
| Truss Head | ASME B18.6.3 |
| Truss Washer Head | Modified from Truss Head with washer, AS 3566 |
| Modified Truss Head | Modified from Truss Head or AS 3566 |



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|--------------|---|
| Pancake Head | Modified from Truss Head |
| Oval Head | ASME B18.6.4, ASME B18.6.5M, ASME B18.6.7M, DIN 95, DIN 966, DIN 7973, DIN 7995, DIN 7983, ISO 1483, ISO 2010, ISO 7047, ISO 7051, ISO 14587, ISO 15483 |
| Trim Head | ASME B18.6.3 |
| Wafer Head | AS 3566 |
| Square | ASME B18.2.1 (1996), Modified from ASME B18.9 |
| Socket | ASME B18.3.3M, DIN 912, DIN 6912, ISO 4762, ISO 14579 |
| Button | ASME B18.3, ISO 7380 |
| FILLISTER | ASME B18.6.4 |
| BINDING | ASME B18.6.3 |
| CHEESE | DIN 84, Din 7985, DIN 8243 |

Description of Slot/Drive Shape

| Description | Applicable Specifications & Standards |
|------------------------|---|
| Slotted (-) | ASME B18.6.4, DIN 7971, DIN 7972, DIN 7973, ISO 1481, ISO 1482, ISO 1483 |
| Phillips(+) | ASME B18.6.3 |
| Pozi (※) | ASME B18.6.3 |
| Square (□) | ASME B18.6.3 |
| (Six-Lobe *) | ISO 14579, ISO 14580, ISO 14583, ISO14584, ISO 14585, ISO 14586, ISO 14587 |
| Socket (Hexagon) | DIN 912, ASME B18.3, ISO 4762, ISO 7380, ISO 10642, ASME B18.3 |
| Phil/Slot(+/-) | ASME B18.6.3 |
| Pozi/Slot(※/-) | ASME B18.6.3 |
| Square/Slot(□/+) | ASME B18.6.3 |
| Cross Recessed (※ · +) | ASME B18.6.4(Type I, Type IA, Type II), ASME B18.6.3(Type I, Type IA, Type II,), DIN 967(Type H, Type Z), DIN 968(Type H, Type Z), DIN 7516(Type H, Type Z), DIN 7981(Type H, Type Z), DIN 7982(Type H, Type Z), DIN 7983(Type H, Type Z), ISO 7721-2(Type H, Type Z), DIN 7996(Type H, Type Z), ISO 7048 (Type H, Type Z), ISO 7049(Type H, Type Z), ISO 7050(Type H, Type Z), ISO 7051(Type H, Type Z), ISO 15481(Type H, Type Z), ISO 15482(Type H, Type Z), ISO 15483(Type H, Type Z), AS 3566, |



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| | |
|------------------|---|
| | JIS B1111, JIS B1112 |
| Six Lobe/Slot(-) | Modified from ASME B18.6.3, ISO 14579, ISO 14580, ISO 14583, ISO 14584, ISO 14585, ISO 14586, ISO 14587 |

Description of Thread

| Description | Applicable Specifications & Standards |
|---------------|--|
| Coarse Thread | ASME B18.6.4(Type A), DIN 7970, 18182-2(Coarse, Single Thread) |
| Wood Thread | ASME B18.6.1, DIN 7998 |

Description of Point

| Description | Applicable Specifications & Standards |
|-------------|---|
| Sharp point | ASME B18.6.4, DIN 18182-2, DIN 968, DIN 6928, DIN EN ISO 1478, DIN EN ISO 10510, ISO 1479, ISO 1481, ISO 1482, ISO 1483, ISO 7049, DIN 7981, ISO 7050, ISO 7051 |
| Cone end | ISO 1478, |
| Rounded end | ISO 1478, |

Description of Dimension

| Description | Applicable Scope of Dimension |
|-------------------|-------------------------------|
| Diameter of shank | M2.9~M10 or #4~3/8" |

Description of corrosion protection & Reaction to Fire

| Protective Treatment, Coating Thickness & Classes of corrosion protection(when tested in accordance with EN ISO 9227) | Reaction to Fire (EN 13501-1) |
|---|-------------------------------|
| Zinc Plating, Minimum 5 µm, above Class 24 | Classified A1 |
| Yellow Zinc Plating, Minimum 5 µm, above Class 24 | Classified A1 |
| Nickel Plated, Class 24 | Classified A1 |
| Black phosphate, above Class 48 | Classified A1 |
| Gray phosphate, above Class 48 | Classified A1 |
| Galvanizing(Mechanical Galvanizing) Minimum 25 µm, above Class 96 or specified in individual order | Classified A1 |
| Dacromet, above Class 96 or specified in individual order | Classified A1 |
| Ruspert, above Class 96 or specified in individual order | Classified A1 |

Note : The case hardened carbon steel heat treatment hardened fastener shall be with protective treatment to corrosion protection class appropriately.



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Description of Mechanical Behavior

| Mechanical Behavior specified in EN 14566:2008 + A1:2009 | Description |
|--|---|
| Withdrawing Force | <ul style="list-style-type: none">Minimum value of 450N when tested according to clause 5.4 of EN 14566:2008 + A1:2009 |
| Bending behavior | <ul style="list-style-type: none">The fastener is clamped in such a way as to resist bending at two points A and B (see Figure 3 of EN ISO 12777-3:2002). A force is then applied to the unclamped portion of the fastener at a set point C, using a pivot bending actuator to which torque is applied. Slowly apply a force to produce a bend (10° and 15° for pointed and flat end screws).There is no breakage or signs of cracking visible with 10 × magnifying lens |
| Drilling Performance | <ul style="list-style-type: none">Drilling Time test according to clause 5.6 of EN 14566:2008 + A1:2009Power Screwdriver : 300W ~ 350W (2,350 ± 350 RPM)Power Screwdriver + dead weight = 15 Kg1s for 0.6 ± 0.04 mm galvanized steel sheet to EN 10327 |
| Case Hardening Hardness | <ul style="list-style-type: none">Hardness Minimum case Depth 0.05 mm,Minimum Case Hardness HRC 55 according to clause 4.4.3.5 of EN 14566:2008 + A1:2009 |

Note :

1. The mandatory Mechanical Behavior of this screw family is based on the requirements of EN 14566:2008 + A1:2009.
2. The type testing shall be conducted and the results of type testing or factory inspection shall provide the conformity evidence of EN 14566:2008 + A1:2009.
3. The routine tests shall be carried out according to the requirements specified in the order(s) or invoice(s).
4. The inspection document(s) shall show the inspection result(s) for individual order(s) or invoice(s).

Facilities

No. 136, Lane 513, Ta Tung Rd., Lu Chu Dist., Kaohsiung City, TAIWAN(R.O.C)