

Vitaş Fasteners Presentation

Vitaş Fasteners provides logistics support for international projects at home and abroad, with our special productions and patented products for all sectors using fasteners.

Our company is an approved supplier in social projects with high construction technology connected to the European Union.

We are an exemplary business that offers quality and safe products that will cover all physical conditions, occupational and worker safety aspects of our suppliers.

Since its establishment, Vitaş Fasteners strives to keep customer satisfaction at the highest level with the most affordable prices according to the conditions of the day without compromising on quality.

Fasteners do not accept errors, negligence or ignorance. Quality connection can be achieved with a strong quality control system and production in accordance with standards.

The quality and reliability of the Fasteners is possible with the right raw material selection, trained staff and necessary equipment.

Our company has the technical infrastructure for all kinds of fasteners, to reduce system costs and to respond accurately to the needs of the customer. It has become the solution partner of its customers with its wide product range.

Our Production Capability So far Metric screws and bolts Diameter / Length M2x4 mm - M72x600 mm,

Sheet screws Diameter Q2.2x4 mm up to 7.3x100 mm. Stud lengths are produced up to 6000 mm.

Vitas Fasteners has proven itself with its quality abroad, in EU countries, especially in exports to Germany.

Various industrial facilities in Canada, Germany, Austria, France, Italy, Turkmenistan, Kazakhstan, Azerbaijan, Poland, Romania, Bulgaria, Croatia, Russia, Georgia, Iraq, Morocco, Algeria, Tunisia, Albania, Greece, manufacturing companies and We supply materials to construction sites. The countries we export to are increasing day by day.

Our products comply with ISO / TSE Standards. Our products are under warranty. Our company has signed the ITO / TSE Consumer Protection Commitment.

We have ETA fire resistance certified products used for structural steels in line with the European Technical Assessment Organization (EOTA) directive.

Production is carried out with the assurance of ROSH, REACH, in accordance with the specifications of materials that do not threaten human health in accordance with the European Union 2002 directive.

Main sectors served

Construction - Housing - Infrastructure - Steel Construction and Prefabricated Buildings

Electricity Transmission Lines

Wind and Solar Energy Systems

Machinery Manufacturing Sector

Metro and Rail Systems, Electrification

Tube Passes and Tunnels

Natural Gas Cycle Power Plants

Petroleum Chemical Plants

Defense industry

Aircraft and Space Industry

White Goods Main Industry and Sub-Industries

Automotive Main Industry and Sub-Industries

Telecommunication

Furniture, Landscape Decoration, Park and Garden design, Interior architecture

Vitas Fasteners Raw material and test certificate EN 10204: 2007 3.1 B is given to project companies for each desired product.

EN 10204: 2007 (2.1, 2.2, 2.3, 3.1A, 3.1B, 3.1C and 3.2) can be provided on request.

Materials are manufactured with raw materials in accordance with the desired quality specifications. Standard products are produced according to DIN / ISO / ASTM norms. Technical drawing and sample approval is required for special products.

GOST K- GOST R- EAC certificate is available upon request.

Dimensional Reports on Materials, Chemical analysis, Hardness measurement, Heat treatment, Coating report, Technical Information, certificates, product catalogs, etc. are arranged and issued according to customer demand after product delivery.

In order to minimize risk analysis in our products, PPAP / APQP / FMEA / FMECA / SPC / MSA Procedures are applied on a sectoral basis.

PPAP (Production Part Approval Process)

APQP (Advanced Product Quality Planning)

FMEA (Failure Mode and Effects Analysis)

FMECA (Failure Mode, Effects and Criticality Analysis)

SPC (Statistical Process Control / Statistical Process Control)

MSA (Measurement System Analysis)

Documents at Level 1-2-3-4-5 levels can be prepared for the Automotive Main Industry and subsidiary industries according to customer demand.

Our products are under warranty. ISO 9001: 2015 has a management system.

We meet the Pressure Equipment Directive PED 2014/68 / EU requirements. Our fasteners are suitable for AD 2000-MERKBLATT W0, W2, W7, W10.

Thanks to our proven safety fasteners that are resistant to high heat and pressure, which should be used during the operation of the pressure boiler, we receive very good praise from the projects.

We have ETA fire resistance certified products used for structural steels in line with the European Technical Assessment Organization (EOTA) directive.

Production is carried out with the assurance of ROHS, REACH, in accordance with the specifications of materials that do not threaten human health in accordance with the European Union 2002 directive.

Our company has ISO 9001: 2015 Quality Management System Certificate, ISO 14001: 2015 Environmental Management System Certificate, ISO 45001: 2018 Occupational Health and Safety Management Systems Certificate.

We continue to work on IATF 16949: 2016, Information Management System Certificate ISO / IEC 27001: 2013 for the Automotive Management system for the sector.

We have brand registration for TSE, our products are TS 432-1 EN ISO 1478: 2000, TS 432-2 EN 27721: 2000, TS 432-3 EN ISO 1481: 2000, TS 432-4 EN ISO 1483: 2000, TS 432- 6 EN ISO 1482: 2000, TS 432-7 EN ISO 7051: 2000, TS 432-8 EN ISO 7049: 2000, TS 432-9 EN ISO 1479: 2000, TS 432-10 EN ISO 2702: 2000, TS 432- 11: 2000, TS 432-5 EN ISO 7050: 2000, TS EN ISO 4014: 2012, TS EN ISO 4014: 2011, TS EN ISO 4017: 2011, TS EN ISO 4017: 2013, TS EN 14399-4: 2015, It has TS EN 15048-1: 2008, EN ISO 4032: 2012 manufacturing competence certificate.

All experiments are checked with calibrated devices in accordance with EN ISO / IEC 17025: 2017 standard.

Control tests are carried out according to EN ISO 898-1: 2013 for bolts and studs and according to EN ISO 898-2: 2013 for nuts.

Special tests, which are requested upon request, can be performed upon request in the request for proposal form.

Notch Impact Test (ASTM E 23, EN 10045, ISO 148-1, GOST 9454; AS 1544; JIS Z 2242, B 7722) ",

Tensile Test (ISO 6892-1 and ASTM A370, ISO 4136) ",

Spectral Analysis Test (ASTM E 415: 2017, ASTM E1085-16, 'ASTM E1086- 14, ASTM A751- 14a, ASTM E 572-02a, ASTM E2209-13, ASTM A1016 / A1016M- 18a) ",

Torque Test (ISO16047, BS EN 14399-2, 'GB / T 1231, GB / T 3623)' ',

Torsion Test ISO 20898-7: 1999

Friction Coefficient Test (EN ISO 16047) ",

'100% Crack Test (EN 12681-1: 2017, EN 12681-2: 2017, ASTM E: 446, ASTM E: 186, ASTM E280)' ',

Hydrogen Embrittlement Test EN ISO 15330: 1999 (ASTM F1940 - 99, ASTM F1940-07A (2019)) ", (ASTM F519-18)

Salt spray tests ", " ISO 9227: 2017

Neutral Salt Spray Test DIN 50 021-SS

Sulfur dioxide Kesternich Test ISO 3231 ASTM G87,

Corrosion Resistance tests (ASTM B117)

Surface Appearance, Coating Thickness Test (ASTM B499),

Adhesion Test (ASTM B571),

Porosity test (ASTM B733),

Internal Stress Test (ASTM B636),

Microhardness test (ASTM B578)

Ultrasonic Control Tests (EN ISO 16810, EN ISO 16828) "

From micro screws to 0.5 mm - 4 mm / 2.5 mm - 12 mm / 12 mm - 20 mm large bolts, 6 cameras 360 ° - 100% optical selection and sorting are performed.



VITAS FASTENERS PRODUCTION PROGRAM

SHEET SCREWS
HEAD TYPE

PHILIPS,SLOTTED,PHILIPS/SLOT,SIX LOBE,SIX-LOBE TAMPER,
SIX - LOBE/SLOT,POZIDRIVE, POZIDRIVE/ROUND
HOLE,SQUARE,SQUARE/SLOT, PHILIPS/SQUARE,TRIANGLE,Y-TYPE,

SCREW POINT THREAD TYPES MATERIAL QUALITY DIN / ISO STANDARDS DIAMETER / LENGTH	TRI-WING,S-TYPE,H-TYPE,HEXAGON,5-POINT,8-POINT,SPLINE,SPANNER,CLUTCH,PHILIPS/SLOT.IND,SLOT.IND FROM C , FROM F , FROM R 6.8 - 8.8 - 9.8 -10.9 as Carbon Steel / A2 - A4 as Stainless steel / Brass / Bronze DIN 968 – DIN 6928 – DIN 7971- DIN 7972 – DIN 7973 – DIN 7976 – DIN 7981 – DIN 7982 – DIN 7983 – ISO 14585 -ISO 14586 - ISO 14587 - DIN 34819 Diameter 2.2. Production between mm - 8.3 mm / Length 4 mm - 150 mm
DRILLED SHEET SCREWS /SELF DRILLING SCREWS HEAD TYPE SCREW POINT THREAD TYPES MATERIAL QUALITY DIN / ISO STANDARTS DIAMETER / LENGTH	PHILIPS,SLOTTED,PHILIPS/SLOT,SIX LOBE,SIX-LOBE TAMPER, SIX-LOBE/SLOT,POZIDRIVE, POZIDRIVE/ROUND HOLE,SQUARE,SQUARE/SLOT, PHILIPS/SQUARE,TRIANGLE,Y-TYPE, TRI-WING,S-TYPE,H-TYPE,HEXAGON,5-POINT,8-POINT,SPLINE,SPANNER,CLUTCH,PHILIPS/SLOT.IND,SLOT.IND 5 mm in thickness - 12 mm in thickness 6.8 - 8.8 - 9.8 -10.9 as Carbon Steel / A2 - A4 as Stainless steel DIN 7504 N – DIN 7504 P – DIN 7504 Q –DIN 7504 K – DIN 7504 L – DIN 7504 R – DIN 7504 T –DIN 7504 V DIN 7504 M – DIN 7504 O – DIN 7504 NH – DIN 7504 MH Diameter 3.5. Production is made between mm - 6.3 mm / Length 9.5 mm - 100 mm.
ROOF PANEL TRAPEZOIDAL SCREWS / HEX HEAD SELF DRILLING SCREWS HEAD TYPE SCREW POINT THREAD TYPES MATERIAL QUALITY DIAMETER / LENGTH	HEXAGON 5 mm in thickness - 12 mm in thickness 8.8 -10.9 as Carbon Steel Diameter 4.8. Production is made between mm - 6.3 mm / Length 16 mm - 200 mm.
POINTED HEX HEAD SCREWS HEX HEAD WOOD SCREWS HEAD TYPE MATERIAL QUALITY DIAMETER / LENGTH	HEXAGON 8.8 -10.9 as Carbon Steel Production is made between Diameter 6.3 mm - Length 200 mm.
METRIC SCREW – MACHINE SCREW AND BOLTS HEAD TYPE MATERIAL QUALITY DIN / ISO / ASTM STANDARTS	PHILIPS,SLOTTED,PHILIPS/SLOT,SIX LOBE,SIX-LOBE TAMPER, SIX-LOBE/SLOT,POZIDRIVE, POZIDRIVE/ROUND HOLE,SQUARE,SQUARE/SLOT, PHILIPS/SQUARE,TRIANGLE,Y-TYPE, TRI-WING,S-TYPE,H-TYPE,HEXAGON,5-POINT,8-POINT,SPLINE,SPANNER,CLUTCH,PHILIPS/SLOT.IND,SLOT.IND STEELS INCLUDING EN16T, EN19T AND EN24T DUPLEX AND SUPER DUPLEX FERRALUM 255 NYLON PHOSPHOR BRONZE TITANIUM INCONEL CUPRO NICKEL Carbon Steels 5.8 - 6.8 - 8.8 - 10.9 -12.9 - 14.9 ASME SA193 Gr B3 - Gr B5 - Gr B6 - Gr B7 - Gr B7M - Gr B16 - Gr 11 - Gr L7 – Gr L7M - Gr L43
	AISI 303 - 304 - 304H - 304L - 304LN - 309 - 309S - 310 - 310S - 310H - 316 - 316H - 316L - 316LN - 316Ti - 317 - 317L - 321 - 321H - 347 - 347H - 410 - 416 - 420 - 430 - 430F - 431 - 440M - 446 - 630 - 904L - 17/4PH - AL/6XN ASTM A36 ASTM A47 - ASTM A48 ASTM A53 Gr A - Gr B ASTM A105 ASTM A106 Gr A - Gr B - Gr C

ASTM A153
ASTM B166
ASTM A179
ASTM A182 Gr F51 -F53 - F55 -F60
ASTM B187
ASTM A192
ASTM A193 Gr B1 - Gr B2 - Gr B3 - Gr B5 Gr B5 B6 - B6X - B7 - B7M - B8 - B8C - B8C1 - B8C2 - B8 CL1 - B8 CL2 - B8M - B8M CL1 - B8M CL2 - B8T - B8T CL1 – B8T CL2 - B16
ASTM A199-T4 - ASTM A199-T5 - ASTM A199-T7 - ASTM A199-T9 - ASTM A199-T11 - ASTM A199-T22
ASTM A200-T4 - ASTM A200-T5 - ASTM A200-T7 - ASTM A200-T11 – ASTM A200-T22
ASTM A209 T1 - T1A - T1B
ASTM A210 Gr F1 - ASTM A210 Gr L1 - ASTM A210 Gr J4 - ASTM A210 Gr K0 - ASTM A210 Gr T1
ASTM A213 T2 - T5 - T11 - T12 - T22
ASTM A214
ASTM A240 - ASTM A276 - ASTM A286
ASTM B301
ASTM A307 Gr A - B - C - ASTM F1554 Gr 36
ASTM A320 L7 - L7M - L43 - B8 - B8 CL1 - B8 CL2 - B8M - B8M CL1 - B8M CL2
ASTM A325 - ASTM A325 TYPE 1 - ASTM A325 TYPE 2 - ASTM A325M
ASTM A333-1 - ASTM A333-6
ASTM A334-1 - ASTM A334-6
ASTM A335-P1 - ASTM A335-P2 - ASTM A335-P5 - ASTM A335-P9 – ASTM A335-P11 - ASTM A335-P12 - ASTM A335-P22
ASTM A350 LF2
ASTM A354 - BC - BD
ASTM A387
ASTM A434 - ASTM A434M Gr 18
ASTM A449 - ASTM A449 TYPE 1 - ASTM A449 TYPE 3
ASTM A453 Gr 660 - 661 - 662 -665 -668
ASTM A479
ASTM A490 - ASTM A490-1 - ASTM A490-2 - ASTM A490M
ASTM A536
ASTM A568 Gr 4.6 - 4.8 - 5.8 - 8.8 - 9.8 -10.9 - 12.9
ASTM A572
ASTM A588
ASTM A593 A - B - C - D - E - F - G - H
ASTM A615 - ASTM A668
ASTM A698
ASTM A706
ASTM A1014
ASTM A1082
ASTM F468
ASTM F593
ASTM F835
ASTM F837
ASTM F1554 - ASTM F1554 Gr 36 - ASTM F1554 Gr 55 - ASTM F1554 Gr 105
ASTM F1852
ASTM F2280 - ASTM F2281
ASTM F3125
SAE J429 Gr 2 - Gr 5 - Gr 8

DIAMETER / LENGTH	AASHTO M111 - AASHTO M164 - AASHTO M183 - AASHTO M222 - AASHTO M223 - AASHTO M232 - AASHTO M253 - AASHTO M291 - AASHTO M293 - AASHTO M314 DIN 84 - DIN 85 - DIN 186 - DIN 188 - DIN 84 - DIN 85 - DIN186 - DIN 188 - DIN 464 - DIN 478 - DIN 479 - DIN - 480 - DIN 561 - DIN 564 - DIN 558 - DIN 601 - DIN 604 - DIN 605 - DIN 608 - DIN 609 - DIN 610 - DIN 653 - DIN 660 - DIN 661- DIN 787 - DIN 792 - DIN 797 - DIN 835 - DIN 912 - DIN 920 - DIN 921 - DIN 922 - DIN 923 - DIN 924 - DIN 925 - DIN 927 - DIN 931 - DIN 933 - DIN 960 - DIN 961 - DIN 962 - DIN 963 - DIN 964 - DIN 965 - DIN 966 - DIN 967 - DIN 6912 - DIN 6914 - DIN 6921 - DIN 7964 - DIN 7968 - DIN 7969 - DIN 7984 - DIN 7985 - DIN 7990 - DIN 7991 - DIN 7992 - DIN 7999 - EN ISO 7380-1 - EN ISO 7380-2 Çap M2 mm - M125 mm arası / 4.5 mm den 6000 mm arası üretim yapılır. Çap 1/8" UNC - 7" UNC arası / Boy 20 mm - 6.000 mm arası üretim yapılır.
STUDS BOLTS MATERIAL QUALITY DIN / ISO / ASTM STANDARTS DIAMETER / LENGTH	STEELS INCLUDING EN16T, EN19T AND EN24T DUPLEX AND SUPER DUPLEX FERRALUM 255 NYLON PHOSPHOR BRONZE TITANIUM INCONEL CUPRO NICKEL Carbon Steel 5.8 - 6.8 - 8.8 - 10.9 -12.9 - 14.9 - B7 - B7M - B16 -L7 - L7M - L43 / Stainless Steel A2 (304) - A2 (304L) - A4 (316) - A4 (316L) - 317 - 317L - 310 - 321 - 347 - 410 - 904L - 17/4PH - AL/6XN - B6 - B8 - B8C - B8 CL1 - B8 CL2 - B8M - B8M CL1 - B8M CL2 - B8M CL2B - B8T / DUBLEX 2205 660A - 660B - S31803 / SUPER DUBLEX 2507 / Brass - Bronze / ASTM B348 Titanium GR I, GR -2, GR-3, GR- 5, GR-7, GR-11 ASTM A 193 - ASTM A 307 - ASTM A 320 - ASTM A325 - ASTM A354 - ASTM A449 - ASTM A490 - ASTM A453 - ASTM A593 - ASTM F 1554 - ASTM A3125 - UNS DIN 525 - DIN 835 - DIN 938 - DIN 939 - DIN 940 - DIN 949 TYPE 1 - DIN 949 TYPE 2 - DIN 2509 - DIN 2510 - DIN 6379 Diameter M4 mm - M 125 mm / Length 20 mm - 700 mm are produced. Diameter 1/8 "UNC - 5" UNC / Length between 20 mm - 10.000 mm is produced
CHIPBOARD SCREWS – WOOD SCREWS HEAD TYPE SCREW POINT THREAD TYPES MATERIAL QUALITY DIN / ISO / STANDARTS DIAMETER / LENGTH	PHILIPS,SLOTTED,PHILIPS/SLOT,SIX LOBE,SIX-LOBE TAMPER, SIX-LOBE/SLOT,POZIDRIVE, POZIDRIVE/ROUND HOLE,SQUARE,SQUARE/SLOT, PHILIPS/SQUARE,TRIANGLE,Y-TYPE,TRI-WING,S-TYPE,H-TYPE,HEXAGON, 5-POINT,8-POINT,SPLINE,SPANNER,CLUTCH,PHILIPS/SLOT.IND,SLOT.IND FROM C , FROM F , FROM R Carbon Steel 6.8 - 8.8 -10.9 / Stainless Steel A2 - A4 / Brass / Bronze DIN 95 - DIN 96 - DIN 97 - DIN 7995 - DIN 7996 – DIN 7997 - DIN 7505 - DIN 7505-A - DIN 7505-B - DIN 7505-C - DIN 7505-AX - DIN 7505-BX - DIN 7505 - CX Diameter 2.5. Production is made between mm - 6 mm / Length 13 mm - 200 mm.
HEX WOOD SCREWS HEAD TYPE MATERIAL QUALITY DIN / ISO STANDARTS DIAMETER / LENGTH	HEXAGON,PHILIPS/SLOT.IND,SLOT.IND Carbon Steel 6.8 - 8.8 -10.9 / Stainless Steel A2 - A4 / Brass / Bronze DIN 571 - DIN 572 Production is made between Diameter 4 mm - 20 mm / Length 16 mm - 200 mm.
CARRIAGE BOLTS MUSHROOM HEAD SQUARE NECK BOLTS MATERIAL QUALITY DIN / ISO STANDARTS DIAMETER / LENGTH	Carbon Steel 6.8 - 8.8 -10.9 / Stainless Steel A2 - A4 / Brass / Bronze DIN 603 - DIN 607 Production is made between Diameter M5 mm - M20 mm / Length 16 mm - 200 mm.
SELF TAPPING THREAD CUTTING SCREWS HEAD TYPE	PHILIPS,SLOTTED,PHILIPS/SLOT,SIX LOBE,SIX-LOBE TAMPER, SIX-LOBE/SLOT,POZIDRIVE, POZIDRIVE/ROUND HOLE,SQUARE,SQUARE/SLOT,

MATERIAL QUALITY DIN / ISO STANDARTS DIAMETER / LENGTH	PHILIPS/SQUARE, TRIANGLE, Y-TYPE, TRI-WING, S-TYPE, H-TYPE, HEXAGON, 5-POINT, 8-POINT, SPLINE, SPANNER, CLUTCH, PHILIPS/SLOT.IND, SLOT.IND Carbon Steel 10.9 / Stainless Steel A2 - A4 Thread Cutting Screws DIN 7516 A - DIN 7516 D - DIN 7516 E. Diameter 2.5 mm - 8 mm / Length 4 mm - 60 mm is produced.
TAPTITE SCREWS / TRI-LOBE SCREWS / TRI-LOBULAR THREAD FORMING SCREWS HEAD TYPE MATERIAL QUALITY DIN / ISO STANDARTS DIAMETER / LENGTH	PHILIPS, SLOTTED, PHILIPS/SLOT, SIX LOBE, SIX-LOBE TAMPER, SIX-LOBE/SLOT, POZIDRIVE, POZIDRIVE/ROUND HOLE, SQUARE, SQUARE/SLOT, PHILIPS/SQUARE, TRIANGLE, Y-TYPE, TRI-WING, S-TYPE, H-TYPE, HEXAGON, 5-POINT, 8-POINT, SPLINE, SPANNER, CLUTCH, PHILIPS/SLOT.IND, SLOT.IND Carbon Steel 10.9 / Stainless Steel A2 - A4 DIN 7500 C - DIN 7500 E - DIN 7500 M - DIN 7500 N - DIN 7500 D self-tapping triangular tip guide screws. Diameter M2.5 mm - M8 mm / Length 4 mm - 60 mm are produced.
SCREW FOR PLASTIC / PLASTITE SCREW HEAD TYPE MATERIAL QUALITY DIN / ISO STANDARTS DIAMETER / LENGTH	PHILIPS, SLOTTED, PHILIPS/SLOT, SIX LOBE, SIX-LOBE TAMPER, SIX-LOBE/SLOT, POZIDRIVE, POZIDRIVE/ROUND HOLE, SQUARE, SQUARE/SLOT, PHILIPS/SQUARE, TRIANGLE, Y-TYPE, TRI-WING, S-TYPE, H-TYPE, HEXAGON, 5-POINT, 8-POINT, SPLINE, SPANNER, CLUTCH, PHILIPS/SLOT.IND, SLOT.IND Carbon Steel 10.9 / Stainless Steel A2 - A4 PT - WN1411 - WN1412 - WN1413 - WN1423 - WN1446 - WN1447 - WN1451 - WN1452 - WN1453 DELTA PT - WN5411 - WN5412 - WN5447 - WN5451 - WN5452 - WN5453 - WN5454 Diameter 2 mm - 8 mm / Length 4 mm - 60 mm are produced.
HI-LO SCREWS HIGHT LOW SCREW FOR PLASTIC HEAD TYPE MATERIAL QUALITY DIN / ISO STANDARTS DIAMETER / LENGTH	PHILIPS, SLOTTED, PHILIPS/SLOT, SIX LOBE, SIX-LOBE TAMPER, SIX-LOBE/SLOT, POZIDRIVE, POZIDRIVE/ROUND HOLE, SQUARE, SQUARE/SLOT, PHILIPS/SQUARE, TRIANGLE, Y-TYPE, TRI-WING, S-TYPE, H-TYPE, HEXAGON, 5-POINT, 8-POINT, SPLINE, SPANNER, CLUTCH, PHILIPS/SLOT.IND, SLOT.IND Carbon Steel 10.9 / Stainless Steel A2 - A4 UNI 9707 - UNI 9708 - UNI 9709 - UNI 9710 Diameter 2 mm - 8 mm / Length 4 mm - 60 mm are produced.
PINS / TAPER PINS / DOWEL PINS / SPRING PINS / GROOVED PINS / CLEVIS PINS / SNAP HEAD PINS MATERIAL QUALITY DIN / ISO STANDARTS DIAMETER / LENGTH	Carbon Steel 5.8 - 6.8 - 8.8 - 10.9 - 12.9 / Stainless Steel A2 - A4 DIN 1 - DIN 7 - DIN 1433 B - DIN 1434 A - DIN 1434 B - DIN 1444 A - DIN 1444 B - DIN 1445 - DIN 1446 - DIN 1470 - DIN 1471 - DIN 1472 - DIN 1473 -- DIN 1474 - DIN 1475 - DIN 1476 - DIN 1477 - DIN 1481 - DIN 5525 B - DIN 5526 A - DIN 5526 B - DIN 6325 - DIN 22340 - DIN 22341 - DIN 28734 Production is made between Diameter 2 mm - 60 mm / Length 4 mm - 200 mm.
FURNITURE SCREWS	

MATERIAL QUALITY HEAD TYPE DIAMETER / LENGTH	Carbon Steel 6.8 - 8.8 / Stainless Steel A2 - A4 PHILIPS, HEXAGON SOCKET Production is made between Diameter 5 mm - 7 mm / Length 30 mm - 70 mm.
SOCKET SET SCREWS MATERIAL QUALITY DIN / ISO STANDARTS DIAMETER / LENGTH	Carbon Steel 14.9 / Stainless Steel A2 - A4 / Brass / Bronze / Titanium DIN 417 - DIN 427 - DIN 438 - DIN 551 - DIN 553 - DIN 913 - DIN 914 - DIN 915 - DIN 916 Diameter 2 mm - 30 mm / Length 3 mm - 100 mm are produced.
THREAD ROD MATERIAL QUALITY DIN / ISO / ASTM STANDARTS DIAMETER / LENGTH	STEELS INCLUDING EN16T, EN19T AND EN24T DUPLEX AND SUPER DUPLEX FERRALUM 255 NYLON PHOSPHOR BRONZE TITANIUM INCONEL CUPRO NICKEL Carbon Steel 5.8 - 6.8 - 8.8 - 10.9 - 12.9 - 14.9 - B7 - B7M - B16 - L7 - L7M - L43 / Stainless Steel A2 (304) - A2 (304L) - A4 (316) - A4 (316L) - 317 - 317L - 310 - 321 - 347 - 410 - 904L - 17/4PH - AL/6XN - B6 - B8 - B8C - B8 CL1 - B8 CL2 - B8M - B8M CL1 - B8M CL2 - B8M CL2B - B8T / DUBLEX 2205 660A - 660B - S31803 / SUPER DUBLEX 2507 / Brass - Bronze / ASTM B348 Titanium GR I, GR -2, GR-3, GR-5, GR-7, GR-11 ASTM A 193 - ASTM A 307 - ASTM A 320 - ASTM A325 - ASTM A354 - ASTM A449 - ASTM A490 - ASTM A453 - ASTM A593 - ASTM F 1554 - ASTM A3125 - UNS DIN 975 - DIN 976 Diameter M4 mm - M125 mm / Length 20 mm - 700 mm are produced. Diameter 1/8 "UNC - 7" UNC / Length between 20 mm and 10.000 mm are produced.
U-BOLT MATERIAL QUALITY DIN / ISO / ASTM STANDARTS DIAMETER / LENGTH	STEELS INCLUDING EN16T, EN19T AND EN24T DUPLEX AND SUPER DUPLEX FERRALUM 255 NYLON PHOSPHOR BRONZE TITANIUM INCONEL CUPRO NICKEL Carbon Steel 5.8 - 6.8 - 8.8 - 10.9 - 12.9 - 14.9 - B7 - B7M - B16 - L7 - L7M - L43 / Stainless Steel A2 (304) - A2 (304L) - A4 (316) - A4 (316L) - 317 - 317L - 310 - 321 - 347 - 410 - 904L - 17/4PH - AL/6XN - B6 - B8 - B8C - B8 CL1 - B8 CL2 - B8M - B8M CL1 - B8M CL2 - B8M CL2B - B8T / DUBLEX 2205 660A - 660B - S31803 / SUPER DUBLEX 2507 / Brass - Bronze / ASTM B348 Titanium GR I, GR -2, GR-3, GR-5, GR-7, GR-11 ASTM A 193 - ASTM A 307 - ASTM A 320 - ASTM A325 - ASTM A354 - ASTM A449 - ASTM A490 - ASTM A453 - ASTM A593 - ASTM F 1554 - ASTM A3125 - UNS DIN 3570 A Production is made between diameter M6 mm - M24 mm.
SQUARE U-BOLT MATERIAL QUALITY DIN / ISO / ASTM STANDARTS DIAMETER / LENGTH	STEELS INCLUDING EN16T, EN19T AND EN24T DUPLEX AND SUPER DUPLEX FERRALUM 255 NYLON PHOSPHOR BRONZE TITANIUM INCONEL CUPRO NICKEL Carbon Steel 5.8 - 6.8 - 8.8 - 10.9 - 12.9 - 14.9 - B7 - B7M - B16 - L7 - L7M - L43 / Stainless Steel A2 (304) - A2 (304L) - A4 (316) - A4 (316L) - 317 - 317L - 310 - 321 - 347 - 410 - 904L - 17/4PH - AL/6XN - B6 - B8 - B8C - B8 CL1 - B8 CL2 - B8M - B8M CL1 - B8M CL2 - B8M CL2B - B8T / DUBLEX 2205 660A - 660B - S31803 / SUPER DUBLEX 2507 / Brass - Bronze / ASTM B348 Titanium GR I, GR -2, GR-3, GR-5, GR-7, GR-11 ASTM A 193 - ASTM A 307 - ASTM A 320 - ASTM A325 - ASTM A354 - ASTM A449 - ASTM A490 - ASTM A453 - ASTM A593 - ASTM F 1554 - ASTM A3125 - UNS Production is made between diameter M6 mm - M24 mm.
V-BOLT	



GROUP®



Asia Screw Bolt



VITAS SCHRAUBE®



MATERIAL QUALITY	STEELS INCLUDING EN16T, EN19T AND EN24T DUPLEX AND SUPER DUPLEX FERRALIUM 255 NYLON PHOSPHOR BRONZE TITANIUM INCONEL CUPRO NICKEL Carbon Steel 5.8 - 6.8 - 8.8 - 10.9 -12.9 - 14.9 - B7 - B7M - B16 -L7 - L7M - L43 / Stainless Steel A2 (304) - A2 (304L) - A4 (316) - A4 (316L) -317 - 317L - 310 - 321 - 347 - 410 - 904L - 17/4PH - AL/6XN - B6 - B8 - B8C - B8 CL1 - B8 CL2 - B8M - B8M CL1 - B8M CL2 - B8M CL2B - B8T / DUBLEX 2205 660A - 660B - S31803 / SUPER DUBLEX 2507 / Brass - Bronze / ASTM B348 Titanium GR I, GR -2, GR-3, GR-5, GR-7, GR-11
DIN / ISO / ASTM STANDARTS DIAMETER / LENGTH	ASTM A 193 - ASTM A 307 - ASTM A 320 - ASTM A325 - ASTM A354 - ASTM A449 - ASTM A490 - ASTM A453 - ASTM A593 - ASTM F 1554 - ASTM A3125 - UNS Production is made between diameter M6 mm - M24 mm.
TRIANGLE U-BOLT MATERIAL QUALITY	STEELS INCLUDING EN16T, EN19T AND EN24T DUPLEX AND SUPER DUPLEX FERRALIUM 255 NYLON PHOSPHOR BRONZE TITANIUM INCONEL CUPRO NICKEL Carbon Steel 5.8 - 6.8 - 8.8 - 10.9 -12.9 - 14.9 - B7 - B7M - B16 -L7 - L7M - L43 / Stainless Steel A2 (304) - A2 (304L) - A4 (316) - A4 (316L) -317 - 317L - 310 - 321 - 347 - 410 - 904L - 17/4PH - AL/6XN - B6 - B8 - B8C - B8 CL1 - B8 CL2 - B8M - B8M CL1 - B8M CL2 - B8M CL2B - B8T / DUBLEX 2205 660A - 660B - S31803 / SUPER DUBLEX 2507 / BRASS - BRONZE / ASTM B348 Titanium GR I, GR -2, GR-3, GR-5, GR-7, GR-11
DIN / ISO / ASTM STANDARTS DIAMETER / LENGTH	ASTM A 193 - ASTM A 307 - ASTM A 320 - ASTM A325 - ASTM A354 - ASTM A449 - ASTM A490 - ASTM A453 - ASTM A593 - ASTM F 1554 - ASTM A3125 - UNS Production is made between diameter M6 mm - M24 mm.
NEOPRENE U-BOLT MATERIAL QUALITY	STEELS INCLUDING EN16T, EN19T AND EN24T DUPLEX AND SUPER DUPLEX FERRALIUM 255 NYLON PHOSPHOR BRONZE TITANIUM INCONEL CUPRO NICKEL Carbon Steel 5.8 - 6.8 - 8.8 - 10.9 -12.9 - 14.9 - B7 - B7M - B16 -L7 - L7M - L43 / Stainless Steel A2 (304) - A2 (304L) - A4 (316) - A4 (316L) -317 - 317L - 310 - 321 - 347 - 410 - 904L - 17/4PH - AL/6XN - B6 - B8 - B8C - B8 CL1 - B8 CL2 - B8M - B8M CL1 - B8M CL2 - B8M CL2B - B8T / DUBLEX 2205 660A - 660B - S31803 / SUPER DUBLEX 2507 / BRASS - BRONZE / ASTM B348 Titanium GR I, GR -2, GR-3, GR-5, GR-7, GR-11
DIN / ISO / ASTM STANDARTS DIAMETER / LENGTH	ASTM A 193 - ASTM A 307 - ASTM A 320 – ASTM A325 - ASTM A354 - ASTM A449 - ASTM A490 - ASTM A453 - ASTM A593 - ASTM F 1554 - ASTM A3125 - UNS Production is made between diameter M6 mm - M24 mm.
ANCHOR STUD BOLTS I BOLT / J BOLT / L BOLT MATERIAL QUALITY	STEELS INCLUDING EN16T, EN19T AND EN24T DUPLEX AND SUPER DUPLEX FERRALIUM 255 NYLON PHOSPHOR BRONZE TITANIUM INCONEL CUPRO NICKEL Carbon Steel 5.8 - 6.8 - 8.8 - 10.9 -12.9 - 14.9 - B7 - B7M - B16 -L7 - L7M - L43 / Stainless Steel A2 (304) - A2 (304L) - A4 (316) - A4 (316L) -317 - 317L - 310 - 321 - 347 - 410 - 904L - 17/4PH - AL/6XN - B6 - B8 - B8C - B8 CL1 - B8 CL2 - B8M - B8M CL1 - B8M CL2 - B8M CL2B - B8T / DUBLEX 2205 660A - 660B - S31803 / SUPER DUBLEX 2507 / Brass - Bronze / ASTM B348 Titanium GR I, GR -2, GR-3, GR-5, GR-7, GR-11
DIN / ISO / ASTM STANDARTS DIAMETER / LENGTH	ASTM A 193 - ASTM A 307 - ASTM A 320 - ASTM A325 - ASTM A354 - ASTM A449 - ASTM A490 - ASTM A453 - ASTM A593 - ASTM F 1554 - ASTM A3125 - UNS Diameter M4 mm - M125 mm / Diameter 1/8 "UNC - 7" UNC is produced.
EYE BOLTS	

MATERIAL QUALITY DIN / ISO STANDARTS DIAMETER / LENGTH	Carbon Steel 5.8 – 6.8 – 8.8 – 10.9 – 12.9 / Paslanmaz çelik olarak A2 - A4 / Brass DIN 444 Diameter M5 mm - M39 mm / Length 40 mm - 300 mm are produced.
LIFTING EYE BOLTS MATERIAL QUALITY DIN / ISO STANDARTS DIAMETER / LENGTH	C15 - C15E - G43 - G70 - G80 - G100 / Paslanmaz Çelik A2 - A4 DIN 580 - DIN 581 Diameter M6 mm - M100 mm / Diameter 1/8 "UNC - 5" UNC is produced.
LIFTING EYE NUTS MATERIAL QUALITY DIN / ISO STANDARTLARI DIAMETER / LENGTH	C15 - C15E - G43 - G70 - G80 -G100 / Paslanmaz Çelik A2 - A4 DIN 582 Diameter M6 mm - M100 mm / Diameter 1/8 "UNC - 5" UNC is produced.
NUTS MATERIAL QUALITY DIN / ISO / ASTM STANDARTS DIAMETER / LENGTH	6-8-10 Quality / as stainless steel ASTM A320 - ASTM A 563 - ASTM F 594 - ASTM A194 Gr 2H - Gr 2HM - Gr 2 - Gr 3 -Gr 6 - Gr 7 - Gr 7L - Gr 7M - Gr 8 - Gr 8C - Gr 8 CL1 - 8 Gr CL2 - Gr 8M - Gr 8M CL1 - Gr 8M CL2 - Gr 8T - Gr 16 ASTM A286 ASTM A320 L7 - L7M - L43 - B8 - B8 CL1 - B8 CL2 - B8M - B8M CL1 - B8M CL2 ASTM A563 A - C - C3 - D - DH - DH3 ASTM A594 C -D G SAE J995 - AASHTO M291 - AASHTO M292 - ASTM F1554 DIN 315 - DIN 431 - DIN 439 - DIN 557 - DIN 562 - DIN 582 - DIN 917 - DIN 928 - DIN 934 - DIN 935 - DIN 936 - DIN 980 - DIN 982 - DIN 985 - DIN 986 - DIN 1587- DIN 1624 - DIN 3307 - DIN 6330 - DIN 6331 - DIN 6334 - DIN 6915 - DIN 6923 - DIN 6926 - DIN 6927 Production is made between diameter M2 mm - M125 mm. Production is made between 1/8 "UNC - 7" UNC in diameter.
WASHERS MATERIAL QUALITY DIN / ISO / ASTM STANDARTS DIAMETER / LENGTH	6-8-10 Quality / as stainless steel A2 - A4 / Brass / Bronze ASTM A36 - ASTM A48 - ASTM A240 - ASTM A572 - ASTM F436 - F436-1 - F436-3 - C245 - ASTM F844 - ASTM F959 - ASTM F2437 - C240 A48 - AASHTO M293 ASTM F837 - ASTM F837B ASTM F837C - ASTM F837E DIN 125 - DIN 126 - DIN 127 - DIN 128 - DIN 137 - DIN 432 - DIN 433 - DIN 434 - DIN 435 - DIN 436 - DIN 440 - DIN 471 DIN 472 - DIN 988 - DIN 1052 - DIN 1440 - DIN 1441 - DIN 6916 - DIN 6340 - DIN 6796 - DIN 6797 - DIN 6798 - DIN 6799 - DIN 7089 - DIN 7093 - DIN 7349 - DIN 7603 - DIN 7980 - DIN 9021 - DIN 9022 Production is made between diameter M2 mm - M125 mm. Production is made between 1/8 "UNC - 7" UNC in diameter.
DTI WASHERS MATERIAL QUALITY DIN / ISO / ASTM STANDARTS ÇAP	TYPE 325 -TYPE 325-3 - TYPE 490 - TYPE 490-3 ASTM F959 - 09 / ASTM F959M - 09 Diameter between M16 mm - M36 mm / Diameter between 1/2 "UNC - 1 1/2" UNC.
TITANIUM FASTENERS	

MATERIAL QUALITY DIN / ISO / ASTM STANDARTS DIAMETER / LENGTH	Titanium Gr1 - Gr2 - Gr3 - Gr4 - Gr5 - Gr6 - Gr7 - Gr11 - UNS R50400 - UNS R56400 - UNS R52400 ASTM F486 - WERKSTOFF NR. 3.7035 / 3.7165 / 3.7235 Diameter M3 mm - M125 mm / Diameter 1/8 "UNC - 7" UNC is produced.
DUBLEX FASTENERS MATERIAL QUALITY DIN / ISO / ASTM STANDARTS DIAMETER / LENGTH	LDX 2101® (UNS S32101) - DUBLEX 2202 (UNS S32202) - DUBLEX 2205 (UNS S31803 / UNS S32205) - 2304 (UNS S32304) - 2507 (UNS S32750) - ZERON® 100 (UNS S32760) - FERRALUM® 255 (UNS S32550) ASTM A182 F53 - ASTM A479 - ASTM A790 Diameter M3 mm - M125 mm / Diameter 1/8 "UNC - 7" UNC is produced.
INCONEL® FASTENERS MATERIAL QUALITY DIN / ISO / ASTM STANDARTS DIAMETER / LENGTH	INCONEL® 600 - INCONEL® 601 - INCONEL® 602CA - INCONEL® 617 - INCONEL® 625 - INCONEL® 625LCF - INCONEL® 686 - INCONEL® 690 - INCONEL® 718 - INCONEL® 725 - INCONEL® X/750 ASTM B160 - ASTM B164 - ASTM B166 - ASTM B168 - ASTM B409 - ASTM B425 - ASTM B443 - ASTM B446 - ASTM B472 - ASTM B574 - ASTM B637 - ASTM B670 Diameter M3 mm - M125 mm / Diameter 1/8 "UNC - 7" UNC is produced.
INCOLOY® FASTENERS MATERIAL QUALITY DIN / ISO / ASTM STANDARTS DIAMETER / LENGTH	INCOLOY® 20 - INCOLOY® A286 - INCOLOY® 330 - INCOLOY® 800 - INCOLOY® 800H - INCOLOY® 800HT - INCOLOY® 800AT - INCOLOY® 825 - INCOLOY® 901 - INCOLOY® 925 - INCOLOY® 926 - INCOLOY® 945 ASTM B366 - B408 - B564 - Diameter M3 mm - M125 mm / Diameter 1/8 "UNC - 7" UNC is produced.
MONEL® BAĞLANTI ELEMANLARI MATERIAL QUALITY DIN / ISO / ASTM STANDARTS DIAMETER / LENGTH	MONEL® 400 - MONEL® 400 HF - MONEL® K405 - MONEL® K500 ASTM B127 - ASTM B160 - ASTM B164 - ASTM F486 Diameter M3 mm - M125 mm / Diameter 1/8 "UNC - 7" UNC is produced..
HASTELLOY® BAĞLANTI ELEMANLARI MATERIAL QUALITY DIN / ISO / ASTM STANDARTS DIAMETER / LENGTH	HASTELLOY® C-276 - HASTELLOY® B-2 - HASTELLOY® C-22 - HASTELLOY® C-2000 - HASTELLOY® B2 - HASTELLOY® B3 - HASTELLOY® G30 - HASTELLOY® X ASTM B160 - ASTM B164 - ASTM B166 - ASTM B425 - ASTM B446 - ASTM B472 - ASTM B574 - ASTM B575 Diameter M3 mm - M125 mm / Diameter 1/8 "UNC - 7" UNC is produced.
NITRONIC® BAĞLANTI ELEMANLARI MATERIAL QUALITY DIN / ISO STANDARTS DIAMETER / LENGTH	NITRONIC® 32 - NITRONIC® 40 - NITRONIC® 50 - NITRONIC® 60 ASTM A193 ASTM A194 ASTM A276 ASTM A479 F899 AMS 5848 Diameter M3 mm - M125 mm / Diameter 1/8 "UNC - 7" UNC is produced.
COPPER FASTENERS MATERIAL QUALITY DIN / ISO / ASTM STANDARTS	UNS C 70600 (Cu -Ni- 90/10) - UNS C 71500 (Cu -Ni- 70/30) - UNS C 71520 - UNS C 71580 - UNS C 70620 - UNS C 72900 - UNS C 72150 - UNS C 74420 ASTM B151 - ASTM B152 - ASTM B446 - ASTM B453 - ASTM F468 - ASTM B564 - ASTM F467 - ASTM F468

DIAMETER / LENGTH	Diameter M3 mm - M125 mm / Diameter 1/8 "UNC - 7" UNC is produced.
SILICONE BRONZE FASTENERS MATERIAL QUALITY DIN / ISO / ASTM STANDARTS DIAMETER / LENGTH	ASTM F468 UNS C65100 - UNS C65500 - UNS C66100 ASTM B98 - ASTM B443 - ASTM B446 - ASTM B453 - ASTM F468 - ASTM B564 - ASTM F467 - ASTM F468 Diameter M3 mm - M125 mm / Diameter 1/8 "UNC - 7" UNC is produced.
PHOSPHOR BRONZE FASTENERS MATERIAL QUALITY DIN / ISO / ASTM STANDARTS DIAMETER / LENGTH	UNS C50500 - UNS C51000 - UNS C51100 - UNS C51900 - UNS C52100 - UNS C52400 - UNS C53400 - UNS C54400 ASTM B98 - ASTM B443 - ASTM B446 - ASTM B453 - ASTM F468 - ASTM B564 - ASTM F467 - ASTM F468 Diameter M3 mm - M125 mm / Diameter 1/8 "UNC - 7" UNC is produced.
BRASS FASTENERS MATERIAL QUALITY DIN / ISO / ASTM STANDARTS DIAMETER / LENGTH	UNS C21000 - UNS C22000 - UNS C22600 - UNS C23000 - UNS C24000 - UNS C26000 - UNS C26800 - UNS C27000 - UNS C27200 - UNS C28000 - UNS C33000 - UNS C33500 - UNS C34000 - UNS C34200 - UNS C35300 - UNS C35600 - UNS C36000 - UNS C37000 - UNS C37700 - UNS C37710 - UNS C38500 - UNS C44400 - UNS C46200 - UNS C46400 - UNS C47940 - UNS C48200 - UNS C48500 - UNS C68700 - UNS C69400 - UNS C86300 ASTM B98 - ASTM B443 - ASTM B446 - ASTM B453 - ASTM F468 - ASTM B564 - ASTM F467 - ASTM F468 Diameter M3 mm - M125 mm / Diameter 1/8 "UNC - 7" UNC is produced.
HIGHT NICKEL ALLOY FASTENERS	
ALLOY A 286	A-286 alloy is designed for applications requiring high strength and good corrosion resistance at temperatures up to 704 ° C. This alloy offers high ductility in notched sections. In fact, the notched rupture strength of the A-286 alloy is superior to many other commercial alloys with comparable high temperature properties. An advantage of this alloy is that it can be hardened and strengthened by precipitation through heat treatments. This enables a high degree of homogeneity in maximum strength development that can be reproduced after application. Some typical applications: Alloy A-286 has been used in jet engines, superchargers and various high temperature applications such as turbine wheels and blades, frames, housings, burner parts and fasteners. This alloy's corrosion resistance is up to 704 ° C against most atmospheres encountered in jet engine service. so perfect. Up to 982 ° C up to 1800 ° F, the oxidation resistance of A-286 alloy, It is equivalent to that of Type 310 stainless.

ALLOY AM 350	Alloy 350 is a chrome-nickel-molybdenum stainless steel that can be hardened by martensitic transformation and / or precipitation hardening. It has been used for gas turbine compressor components such as blades, discs, rotors and shafts and similar parts where high strength at room and intermediate temperatures is required. Depending on the heat treatment, the alloy 350 can have an austenitic structure for best formability or a martensitic structure with strengths comparable to martensitic steels. The alloy normally contains about 5% to 10% delta ferrite. The corrosion resistance of Alloy 350 approaches that of chromium-nickel austenitic stainless steel. Alloy 350 has higher corrosion resistance than other martensitic stainless steels that can be hardened by quenching. It has shown good corrosion resistance in ordinary atmospheres and many other mild chemical environments. In the double aged or equalized state, the material is susceptible to intergranular corrosion due to precipitation of chromium carbides. The alloy is not subject to intergranular attack when hardened using sub-zero cooling processes as in the following paragraph.
ALLOY 40 (21Cr-6Ni-9Mn)	21Cr-6Ni-9Mn is a high magane nitrogen reinforced, austenitic stainless steel that combines high strength in the annealed condition, excellent resistance to oxidation at high temperatures, good resistance to lead oxide, and high corrosion resistance at ambient temperatures. The alloy can be produced and formed in the same way as Types 304 and 316 and can be easily welded. It remains non-magnetic after severe cold work. The 21Cr-6Ni-9Mn has been used for chemical process and pollution control equipment, steam and autoclave applications, and a variety of aircraft engine components and numerous other applications. 21Cr-6Ni-9Mn has corrosion resistance approaching Type 304L. Provides resistance to intergranular corrosion even in the case of low carbon content.
ALLOY PH 13-8 Mo	PH 13-8 Mo * stainless is martensitic precipitation / wet hardening stainless steel with high strength and hardness as well as good levels of resistance to both general corrosion and stress corrosion cracking. In addition, the alloy shows good ductility and toughness in large sections in both longitudinal and transverse directions. The excellent properties of PH 13-8 Mo stainless are achieved by its chemical composition and microstructure plus special melting control, which reduces impurities and minimizes segregation. Compared to other ferrous materials, this alloy offers a high level of useful mechanical properties in harsh environmental conditions.
ALLOY PH 15-7 Mo	15-7 Mo is a semi-austenitic precipitation hardener stainless steel with high strength and hardness, good corrosion resistance and minimal distortion in heat treatment. It forms easily in the annealed state and develops an effective balance of properties with simple heat treatment. In applications requiring exceptionally high strength, the cold reduced 15-7 Mo Stainless Steel at CH 900 Condition is particularly useful for applications that provide limited ductility and workability. This alloy is particularly useful for a wide variety of applications including retaining rings, springs, diaphragms, aircraft pods, welded and brazed honeycomb panels, and other aircraft components that require high strength at high temperatures. Superior to standard hardenable stainless types such as Types 410, 420 and 431, but not as good as Type 304
ALLOY 60(NIT)	Alloy (NIT) 60 is an anti-ballast stainless steel with excellent wear resistance. This alloy has uniform corrosion resistance and also provides excellent high temperature oxidation resistance. Due to its outstanding ballast resistance in both ambient and high temperatures, Alloy 60 is used in applications such as bridge pins, valve stems, roller bearings and bushings, and pump wear rings and lobes. It performs well in nominal inert atmospheres where metal to metal wear is important.
GREEK ASCOLOY (418)	Greek Ascoloy (418) is a hardenable chromium-nickel-tungsten martensitic alloy designed for service in high stress parts at temperatures up to 1200 ° F. This steel is extremely deep-hardening and has mild superior creep in addition to the general properties of 12% chromium stainless steels. It is used where strength and resistance to tempering and stress corrosion cracking are desired. Typical applications are steam turbine buckets and blades, as well as compressor parts and high temperature bolts in gas turbines.

CUSTOM 455®	To accept the need for high strength alloys with good corrosion resistance to atmospheric environments and martensitic age hardenable stainless steel. This alloy is relatively soft and malleable in the annealed state. The single-stage aging treatment develops exceptional alloy high yield strength with good ductility and toughness. This stainless can be machined in the annealed state and welded in the same way as other precipitation hardenable stainless steels. Due to the low work hardening rate, it can be extremely cold formed. Dimensional change during hardening is only -0.001 inch / inch, allowing close tolerance finishing in the annealed state. Custom 455 stainless represents a significant advance in the field of precipitation hardened stainless steels. It should be noted that together with heat treatment simplicity, ease of manufacture, high strength and corrosion resistance are required. Custom 455 stainless is resistant to staining in normal air environments and does not show corrosion in fresh water. The 5% salt spray at 35 ° C and the 5% ferric chloride test at room temperature showed good resistance to pitting and rusting. Laboratory tests in various mild chemical environments have shown that overall corrosion resistance is superior to 12% chromium steels (Type 430). In most tests, the aging temperature did not have a significant effect on corrosion resistance. Hydrogen embrittlement tests in 5% acetic acid saturated with sulfuric hydrogen at room temperature show the same sensitivity as other high strength martensitic stainless steels. All high strength steels are subject to stress corrosion under certain stress conditions and in certain environments. Numerous rigorous tests have been conducted to evaluate the behavior of the Custom 455 stainless product in different environments and to determine the effect of aging temperature on resistance to stress-corrosion cracking. These tests include U-bend samples, direct tension samples, C-rings, and pre-broken cantilever beam samples. Mediums include marine environments, 20% salt spray and 3-1 / 2% sodium chloride solutions. All tests have shown that Custom 455 stainless steel has inherently good resistance to stress-corrosion cracking, and that resistance improves significantly as the aging temperature increases.
HASTELLOY C276 (UNS N10276)	HASTELLOY C276 is a Nickel-chromium-molybdenum wrought alloy considered to be the most versatile corrosion resistant alloy available. This alloy is resistant to the formation of grain boundary deposits in the zone affected by the weld heat, thus making it suitable for most chemical treatment applications in a welded state. Alloy C-276 also has excellent resistance to pitting, stress corrosion cracking, and oxidizing atmospheres up to 1900 ° F. Alloy C-276 has outstanding resistance to a wide variety of chemical environments. HASTELLOY C276 is one of the few alloys resistant to wet chloride gas, hypochlorite and chlorine dioxide solutions. HASTELLOY C276 has outstanding resistance to strong oxidizing salt solutions such as ferric and cupric chlorides. HASTELLOY C-276 is a nickel-chromium-molybdenum alloy with unmatched universal corrosion resistance with any other alloy. Ferric and cupric chlorides, hot contaminated mineral acids, solvents, chlorine and chlorine contaminated (both organic and inorganic), dry chlorine, formic and acetic acids, acetic anhydride, seawater and brine solutions, and hypochlorite and chlorine dioxide solutions. The alloyed C276 also counteracts the formation of grain boundary deposits in the zone affected by the source heat, which is useful for most chemical processes in the welded state. It has excellent resistance to pitting and stress corrosion cracking. HASTELLOY C276 is not prone to grain boundary precipitation in the induced condition and is therefore suitable for many chemical treatment applications. Digesters and bleaching plants in the paper industry Components exposed to sour gas Equipment for flue gas desulfurization plants Evaporators, heat exchangers, filters and mixers used in sulfuric acid environments Sulfuric acid reactors Organic chloride process equipment. Bolts used in equipment connections for processes using acid catalysts.
NITRONIC 50 (XM-19) (UNS S20910)	NITRONIC ® 50 / UNS S20910 / XM-19 is a manganese alloyed austenitic stainless steel with improved corrosion resistance compared to 316L and 317L due to the increased chromium content. Unlike many austenitic alloys, NITRONIC ® 50 does not become magnetic when cold occurs. NITRONIC ® 50 Stainless has very good mechanical properties at both high and sub-zero temperatures. The combination of corrosion resistance and mechanical strength is used in the marine hardware, pump shafting, petrochemical, pulp and paper, food processing and oil industries. Due to the sulfur stress cracking resistance it can also be used in "down hole" applications. Field service experience has shown that NITRONIC® 50 has excellent resistance to sulfur stress in stainless weather conditions. NITRONIC® 50 is included in NACE Standard MR01-75 / ISO 15156-3 "Sulfide Stress Cracking Resistant Metallic Material for Oilfield Equipment," at hardness levels up to hrc 35 maximum in both maternal and high strength (hot rolled) conditions.

INCONEL 600	Alloy 600 is a non-magnetic nickel-based high temperature alloy with an excellent combination of high strength, hot and cold workability, and resistance to the ordinary form of corrosion. This alloy also shows good heat resistance and relief from aging or stress corrosion in the range of extreme cold working conditions throughout the annealed. The high chromium content of the alloy 600 significantly increases the oxidation resistance than that of pure nickel, while the high nickel content provides good corrosion resistance under reducing conditions. This alloy has high resistance to stress and salt water, exhaust gases and most organic acids and compounds. Some typical applications: Barge and tank truck liners, Carburizing atmospheres, Ethylene dichloride crackers, Baking trays, silencers, hangers, Gas stabilizer production, MgC 2 evaporates, Phenol condensers, Soap production, Titanium dioxide, Vegetable and fatty acid containers
INCONEL 601	An aluminum-added nickel-chromium alloy for exceptional resistance to oxidation and other forms of high temperature corrosion. It also has high mechanical properties at high temperatures. Some typical applications: Used for industrial furnaces; heat treatment equipment such as baskets, muffles, and retorts; petrochemical and other process equipment; and gas turbine components.
INCONEL 617	Alloy 617 is a solid solution, nickel-chromium-cobalt-molybdenum alloy with an outstanding combination of high temperature strength and oxidation resistance. The alloy also has excellent resistance to a wide variety of corrosive environments and is easily formed and welded by conventional techniques. The high nickel and chromium content makes the alloy resistant to both reducing and oxidizing environments. Aluminum provides oxidation resistance at high temperatures along with chromium. Solid solution strengthening is given by cobalt and molybdenum. The combination of high strength and oxidation resistance at temperatures above 1800 ° F makes the 617 alloy an attractive material for components such as duct, combustion boxes and transition liner in both aircraft and land-based gas turbines. Due to its resistance to high temperature corrosion, the alloy is used for catalyst grid supports in nitric acid production, heat treatment baskets, and the reduction of vessels in molybdenum refining. Alloy 617 offers attractive properties for components of both fossil fuel and nuclear power generating plants. The low density of the alloy is important in applications such as aircraft gas turbines where a high strength / weight ratio is desired compared to tungsten containing alloys of similar strength.
INCONEL 625	Alloy 625 is a non-magnetic, corrosion and oxidation resistant nickel-based alloy. Its outstanding strength and toughness in the cryogenic to 2000 ° F (1093 ° C) temperature range are derived primarily from the solid solution effects of refractory metals, columbium, and molybdenum in a nickel-chromium matrix. The alloy has excellent fatigue strength and stress-corrosion cracking resistance to chloride ions. Some typical applications for alloy 625 include heat shields, furnace hardware, gas turbine engine duct, combustion liners and spray rods, chemical plant hardware and special seawater applications. Alloy 625 has withstood many corrosive environments. Alkaline, salt water, fresh water, neutral salts and airborne almost no attack. Provides resistance to nickel and chromium oxidizing environments. It provides resistance against nickel and molybdenum non-oxidizing environments. Pitting and crevice corrosion are prevented by molybdenum. Niobium stabilizes the alloy against precipitation during welding. Chloride stress corrosion cracking resistance is excellent. The alloy is resistant to scaling and oxidation at high temperatures.
INCONEL 625LCF	Alloy 625LCF is a non-magnetic, corrosion and oxidation resistant nickel-based alloy. It was developed as a bellows grade version of Alloy 625 and also offers superior fatigue resistance. Its outstanding strength and toughness in the cryogenic to 2000 ° F (1093 ° C) temperature range are derived primarily from the solid solution effects of refractory metals, columbium, and molybdenum in a nickel-chromium matrix. The alloy has excellent fatigue strength and stress-corrosion cracking resistance to chloride ions. Some typical applications for alloy 625LCF include heat shields, furnace hardware, gas turbine engine duct, combustion liners and spray rods, chemical plant hardware, and special seawater applications. Alloy 625 has withstood many corrosive environments. Alkaline, salt water, fresh water, neutral salts and airborne almost no attack. Provides resistance to nickel and chromium oxidizing environments. It provides resistance against nickel and molybdenum non-oxidizing environments. Pitting and crevice corrosion are prevented by molybdenum. Niobium stabilizes the alloy against precipitation during welding. Chloride stress corrosion cracking resistance is excellent. The alloy is resistant to scaling and oxidation at high temperatures.
INCONEL 718	Alloy 718 is a nickel-based alloy that can be hardened by precipitation, designed to exhibit extremely high yield, tensile and creep fracture properties at temperatures up to 1300 ° F. Alloy 718's slow hardening response allows annealing and welding without self-hardening during heating and cooling. This alloy has excellent weldability compared to aluminum and titanium hardened nickel-based super alloys. This alloy has been used for jet engine and high speed body parts such as wheels, buckets, spacers and high temperature bolts and fasteners.

INCONEL X750	Alloy X-750 is a precipitation hardenable alloy used in applications such as gas turbines, jet engine parts, nuclear power plant applications, heat treatment fixtures, forming tools and high temperature structural members for extrusion dies. The alloy is highly resistant to chemical corrosion and oxidation and has high tensile strength and low creep rates under high stresses at temperatures up to 1500 ° F (1500 ° F) after proper heat treatment. Alloy X-750 has excellent resistance to chloride ion stress-corrosion cracking. It has satisfactory resistance to a large number of oxidizing environments. Alloy has similar corrosion resistance to alloy 600 in many environments. Alloy X-750 is a precipitation hardenable used in applications such as gas turbines, jet engine parts, nuclear power plant applications, heat treatment fixtures, forming tools and high temperature structural elements for extrusion molds. is alloy. The alloy is highly resistant to chemical corrosion and oxidation and has high tensile strength and low creep rates under high stresses at temperatures up to 1500 ° F (1500 ° F) after proper heat treatment.
INCOLOY® 800/800AT/800H	Alloy 800 is an iron-nickel-chromium alloy with moderate strength and good resistance to oxidation and carburization at high temperatures. It is particularly useful for high temperature equipment in the petrochemical industry because the alloy does not form the brittle sigma phase after prolonged exposure at 649 ° C. Excellent resistance to chloride stress-corrosion cracking is another important property of alloy 800. Typical applications for Alloy 800 and 800H are - Heat exchangers and process pipes; carburizing armatures and retorts; oven components; electric heating element coating; rolled tube for ethylene and steam methane treatment furnaces; Fasteners used in the assembly of ammonia aftercoolers
INCOLOY® 825	Alloy 825 is a nickel-iron-chromium-molybdenum alloy with good corrosion resistance to sulfuric and phosphoric acids and seawater. Similar to Alloy 800, but improved resistance to aqueous corrosion. While not completely resistant to stress-corrosion cracking in boiling magnesium chloride, the 825 alloy resists well in the neutral chloride environment. Typical applications are: phosphoric acid evaporators; pickling tank heater, pickling hooks and equipment; chemical process equipment; tankers; propeller shafts and recovery of spent nuclear fuel element.
INCOLOY® 901	Nickel-iron-chromium alloy containing titanium and aluminum for precipitation hardening and molybdenum for solid solution strengthening. The alloy has high yield strength and creep resistance at temperatures up to 600 ° C. A significant iron content allows the alloy to combine high strength with good forging properties. Used in gas turbines for discs and shafts. The standard product form is round.
INCOLOY® 330	INCOLOY® 330 is an austenitic alloy with high temperature and corrosion resistance. It has solid solution composition and cannot be hardened by heat treatment. It provides good resistance to high nickel and chromium oxidation and carburization. Oxidation resistance is improved with silicon content. Its strength at high temperatures and its resistance to oxidation make the alloy a useful material for industrial heating furnaces, air furnaces, cauldrons, conveyor systems, baskets and boxes, and various equipment.
DIAMETER / LENGTH	Production is made between diameter M6 mm - M125 mm. Production is made between 1/8 "UNC - 7" UNC in diameter.

COATING TYPES USED IN APPLICATIONS (ROHS) (REACH)

ALKALI ZINC PLATING

This process is an alkaline process with excellent metal dispersion and covering power. Provides high corrosion resistance with passivation and sealer applications.

Alkaline zinc coating is one of the most demanded coating types due to its excellent corrosion resistance, homogeneous coating distribution and environmental friendliness.

The main advantages of alkaline zinc coating are: Excellent homogenous coating distribution regardless of high or low current zone.

5 times more corrosion resistance than acidic zinc coating

Excellent resistance to high temperature parts

Covers micro cracks on the part

Fully automatic flux and Tamnur Line

Cr + 3 White passivation

This coating is the coating of zinc oxide, hydroxide chemicals and zinc metal on the parts by electrolysis. Zinc coating ensures that the parts used in automotive, telecommunication, electricity and construction industries have a longer life against corrosion. In order for the painted materials used in the external parts to be durable against corrosion, under paint zinc coating is also made. Under paint cleaning works are done. Under-paint phosphating is done.

Cr + 3 Blue passivation, Cr + 3 Yellow passivation

It is a Cr + 3 valued yellow passivation applied on zinc coating. After the process parameters are applied, it creates an aesthetic polished chromate layer.

Corrosion resistance is higher than blue passivation. Corrosion test results of passivation on 8-12 micron zinc coating
White Rust: 144-196, Red Rust: 288-360 hours.

Cr +3 Transparent Passivation, Cr +3 Black Passivation

We provide service with varnish application options with different friction coefficient to meet the product functionality and post passivation lacquer applications to make corrosion performance more efficient. In addition, under-paint zinc coating is also in our services to increase corrosion resistance. Every application is analyzed in our laboratories and recorded in accordance with the Quality Management Systems.

ALKALI ZINC-NICKEL PLATING

This process is a high corrosion resistant alloy coating process. It is mostly used in fittings in the automotive industry. Transparent and black passivation and seals are applied in the drum system.

MANGAN PHOSPHATE COATING

The low weight of the coating and the thin crystal structure ensure the adhesion of protective oils on the surface and reduce wear. It is used only by lubricating with protective oil without any coating on it.

ZINC PHOSPHATE COATING

It is preferred in conditions requiring higher corrosion resistance than iron phosphate. It can be used with zinc phosphate coating under paint, under plastic coating, cold drawing and protective oil.

NICKEL PLATED

Nickel plating processes are widely applied in decorative and engineering forms.

Nickel is perhaps the most common metal to be electroplated. This is because of the magnificent appearance of nickel, its high resistance to corrosion, and the large number of melts obtained by the coating process.

It is used in decorative coating and corrosion-resistant feature with the feature of adding a lot to the presentability of the material coated with its nickel polished surface.

TIN COATING

Tin is generally not used alone due to its weak strength and not being economical. It is used by coating steels by hot dip and electrolysis.

Thus, mechanical strength is provided by steel and resistance to corrosion is provided by tin. Tin is a soft metal and has a white appearance. Since tin itself is resistant to abrasion and exhibits a pleasant appearance in the air, it is frequently used for both decorative and protective topcoat coating on metals that are prone to corrosion and discoloration. Tin is resistant to food acids. Tin plating gives a more homogeneous and less porous coating on such goods by using less tin.

PASSIVATION AND SEALERS

It is the process of forming a protective film layer on the surface of the coated part. These film layers are in the micron level. In terms of environmental health, passivations that do not contain Cr + 6 are applied. Sealer application is also made on passivation in order to increase the corrosion resistance according to customer request.

HYDROGEN FREQUENCY

It is the process of removing hydrogen entering the material during cleaning and coating of heat treated steels.

DELTA ®- TONE 9000 ve DELTA-PROTEKT ®

Coating of large quantities of parts by immersion centrifuge method with KL 100 In practice, high-strength parts, which are mostly exposed to a large load, are used in areas where hydrogen embrittlement may be a risk.

GEOMET® 321, GEOMET® 321-A, GEOMET® 321-B, GEOMET® 321-B + PLUS

It is applied to fasteners and different metallic parts as corrosion protection and these are used in many industries.

GEOMET® 500, GEOMET® 500-A, GEOMET® 500-B, GEOMET® 500-B + PLUS

It is applied to fasteners and many kinds of metal parts to protect them from coating and is used in a wide variety of industries. ECHA TheEuropeanChemicalsAgency directives, which apply the European Union's chemical legislation in our process and work for the benefit of human health and the environment, "REACH TheRegulation on Registration, Evaluation, Authorization and Restriction of Chemicals) and RoHS (Restriction of Hazardous Substances). Coating chemicals suitable for "Restricting the Use of Substances) are used.

MOLYKOTE PAINTING

Molykote Anti-Friction painting, lubricating and protecting against corrosion; It is a glossy black painting applied to automotive parts such as seat belt buckle, lock components, disc brake hardware and fasteners. Molykote; It has a low coefficient of friction, a black appearance and excellent corrosion protection. It has a very wide operating range between – 60 °C and 240 °C.

HOT-DIP GALVANIZED SDG

Comparing the coating methods applied for surface coating of iron and steel materials with galvanized coating, the cost of hot dip galvanized coating is lower. The reason is; With hot-dip galvanized coating, it provides benefits in terms of time and labor costs in coating of bulk and segmented materials.

Hot dip galvanizing provides surface corrosion and deformation protection in the material without requiring maintenance for an average of 30-40 years depending on the environmental conditions. This situation has a large share of SDG benefits compared to alternative coating methods.

Hot dip galvanizing (HDG) is also a common surface coating for steel fasteners. Provides very robust and durable corrosion protection. Hot dip galvanizing for steel parts is standardized in ISO 1461, but there is a special ISO 10684 standard for fasteners. The hot dip galvanizing process is quite simple: the fasteners are dipped in a bath of molten zinc with normal temperatures between 455 ° C and 480 ° C and high temperatures between 530 ° C and 560 ° C). Next, the fasteners are rotated to remove excess zinc and then cooled in water to solidify the zinc. What remains is a layer of zinc (40 to 70 microns) on the surface of the products, which is relatively thick compared to zinc electroplating (3 to 20 microns). Nuts are machined in the same way, as long as the nut thread is not yet formed. Nut threads should always be threaded after HDG. This tapping exposes internal threads (not zinc plated), but does not adversely affect corrosion resistance as shown below. HDG process is generally considered suitable for M8 or larger diameter fasteners.

Degreasing Bath

Before the galvanization process of the materials, the oil rust on it is cleaned with a chemical front surface cleaning process. In this process, it is purified and cleaned of mineral oils while processing your materials with a special product that we call degreasing.

Acid Bath

In this part of the process, the oxide on the materials is purified from scale materials and a galvanized surface is obtained.

Rinse Bath

In order not to reduce the acidity of the bath by carrying the HCL (Hydrochloric Acid) bath, it is rinsed with water.

Flux Bath

In this part of the process, before immersing the materials in the hot dip galvanizing bath, a front surface coating process is performed in order for the materials to interact chemically with zinc more easily and quickly.

Drying

After the materials get out of the flux bath, the front surface coating in the material must be dried before they are immersed in the galvanizing furnace.

Galvanization

The galvanizing process, which is the last step of the hot dip galvanizing process, is the last step of the hot dip galvanizing process, while the material that passes through the front surface cleaning process is free from oxides and scales, and is immersed in the molten zinc-filled pool at approximately 450 degrees. From the entrance of the material into the pool, some chemical compounds occur between the molten zinc and the iron / steel material, and layers are formed on the material. These layers are zinc-iron alloy layers and thanks to these layers, the life of the material against oxidation is extended.

Cooling

After galvanizing according to the type and thickness of the material, the materials are cooled by immersion in the water in the cooling pool to increase the work flow rate.

Passivation

The passivation pool, which is used in line with the customer request and in our process, protects the materials against white oxide for a while.

PTFE COATING

PTFE-coated fasteners provide excellent corrosion resistance, very low coefficient of friction, consistent stretching, and ease of installation and removal. Extensive testing and field use have proven that the future of coated fasteners lies with Fluoropolymer coatings. Previously, hot dipped, galvanized, cadmium or zinc plated fasteners were accepted as standard.

However, these coatings could not withstand the corrosive environments common to many industries. The most common application is in B7 studs with 2H nuts.

PTFE coated studs are used in the bolting industry, especially in any application requiring corrosion resistance or offshore applications (salt spray is hard on Class B7 material) for many years
PTFE is also useful if you have "galled" and need lower breakout torque for safe removal.

PTFE should not be used in high temperature applications.

Fluoropolymer coating manufacturers use temperatures of -420 ° F to + 550 ° F as the maximum temperature (-250 ° C to 285 ° C). therefore you will not usually see alloy steel bolts (such as B8) with PTFE coatings

Application Areas of PTFE Coated Bolts and Nuts

In oil refineries, Petrochemical Gas Industry, Nuclear Power Plants, Paper and Cellulose Industry Structural Pipe installation, Food and Dairy Industry, Heat Exchangers, Gas Processing Plants, Sea Water Equipment, Power Generation facilities, Burner pipes and Spiral Welded pipe for fluids, Off Shore Petroleum Drilling Companies, Aircraft Exhaust Manifolds, facilities producing textile, agricultural, pharmaceutical and medical devices, Mining companies, Pharmaceutical applications

Why PTFE Coated Bolts?

- * Bare steel bolts in the field are difficult to clean and paint, expensive, and in some cases unsuitable.
- * Flat bolts, after being filled into the holes, are expected to settle in the air for a long time and dry and rust, this makes correct tightening difficult or impossible.
- * The bolt needs to be released or retightened in the foreseeable future.
- * Due to its unique benefits, Fluoropolymer Coating has been applied to various types and grades of fasteners. The waterworks industry benefits From superior corrosion resistance properties by coating hex head bolts for underground services. Stainless steel fasteners used in many different industries are coated for lubrication and anti-scale.
- * Fluoropolymer coatings are extremely durable and cannot be easily removed. However, during the assembly of fasteners on site, the coating can sometimes be damaged. In most other fluoropolymer coatings, this quickly begins to corrode and the coating starts to results in bare metal causing deterioration. Metallic base coat provides superior corrosion resistance and protection even in the harshest conditions continues to provide.

Xylan 1070:

Reduces Breaking Torque Low Friction High Corrosion and Wear Resistance Operating temperature. range (continuous)
(-195 ° C to -320 ° F) (260 ° C to 500 ° F)

Xylan 1010:

Dry Film Lubricant for Wear Surfaces' Reduces Friction Prevents Scoring / Purification Low Friction Coefficient (0.04-1.00) Good Chemical and Abrasion Resistance, Temperatures up to 285 ° C (550 ° F)

Xylan 1014:

Increased Bonding Resin Harder, Less Porous and More Wear Resistant Low Friction Working Temperature. range (continuous) (-195 ° C to - 320 ° F) (260 ° C to 500 ° F)

Xylan 1052:

High Pressure, High Temperature Low Speed Wear Applications PTFE and MoS Bonded Lubrication Pressure up to 10,500 kg / cm² (150,000 psi) Temperatures up to 285 ° C (550 ° F)

Xylan 1270 (1400):

Xylan 1070 (1424) Alternative Low Lubrication Reduced Breaking Torque Operating temperature. range (continuous) (-50 ° C to -58 ° F) (175 ° C to 350 ° F)

Xylan 1311:

With PPS and PTFE where Critical Wear Resistance is more important than lubrication

Xylan 1331:

Xylan 1311 with more PTFE High Resistance to Solvents up to 205 ° C (400 ° F) for Chemical, Corrosion and Abrasion / Abrasion Resistance

REFERANSLAR / REFERENCES

Alstom Pover S.A. (Turkey) (France)	Berrang GMBH (Germany) (Mercedes-Benz)
Alstom Transport S.A.(France) (Turkey) (Tunisia) (Algeria)	Varyap Construction (Turkey)
İGA Airport (Turkey)	Siemens Power (Turkey)
SK Senimdi Energy (Kazakhstan)	Heinen Hopman
Socar Star Refinery (Turkey)	Vestel Digital (Turkey)
Ballard Power Systems (Canada)	Martur Automotive (Turkey)
Yapı Merkezi (Turkey) (United Arab Emirates) (Ethiopia)	Halla Automotive (Turkey)
EAE Electric Elevator (Turkey) (Russia) (Germany)	Kale Auto Radiator (Turkey)
EAE Electrotechnics (Turkey)	Çilek Furniture (Turkey)
EAE Lighting (Turkey)	Assan Aluminium (Turkey)
Tırsan Kaessbohrer Treyler (Turkey) (Germany)	Gaptek Construction (Turkey) (Spain)
Enka Construction (Turkey) (UK) (Georgia) (Kazakhstan) (Iraq) (Russia) (Oman)	Aksoy Aluminium (Turkey)
Cengiz Construction (Turkey)	Gökçelik Construction (Turkey)
Keller Kalmbach (Germany) (Daimler-Benz- Volkswagen- Bosch)	YDA Construction (Turkey)
Metro Istanbul Industry and Trade Corporation (Istanbul Metropolitan Municipality)	Doğuş Constructions (Turkey) (Saudi Arabia)
Belbim Electronic Money and Payment Services Inc (Istanbul Metropolitan Municipality)	Hekim Holding (Turkey) (Özge Yapı- Prefabrik Yapı)
Yapı Merkezi (Turkey) (United Arab Emirates) (Ethiopia)	Arı Automation (Turkey)
Hyundai Engineering (Korea) (kuwait) (Qatar)	Würth GmbH (Germany)
Hyundai Energy Solutions (Korea)	Bouygues Constructions (France)
Lindner Building (Germany) (Turkey)	Astaldi Group (Italy)
Sappino Srl (Italia)	OHL Group (Spain)

Reynaers Aluminium (Belgium)	Havelsan (Turkey)
Asaş - Agm Automotive (Turkey)	Savronik (Turkey)
Alsim Alarko Construction (Turkey) (Kazakhstan) (Russia)	Aselsan (Turkey)
77 Construction (Turkey) (Afghanistan) (Iraq)	Tübitak (Turkey)
Çelikler Construction (Turkey)	Tusaş (Turkey)
Aktürk Construction (Turkey)	Nokta Engineering Detection (Turkey)
Polimeks Construction (Turkey) (Turkmenistan)	Teta Kazan Boiler (Turkey)
Yamakoğlu Construction (Turkey) (Azerbaijan) (Afghanistan) (Iraq)	Tekfen Construction (Turkey)
MC System Electronics and Electrical Construction Industry Trade Inc.(Turkey)	Koray Construction (Turkey)
Acıbadem Proje Construction (Turkey)	Tempa Pano Board (Turkey)
Metal Yapı Aluminium Construction (Turkey) (Russia) (Germany)	Polfisan City Furniture (Turkey)
ENG Metal Construction (Turkey) (Poland) (Russia) (England) (Saudi Arabia)	Setisan Engineering (Turkey)
İnox Metal Construction (Turkey) (Russia)	Tav Construction- Sera Construction (Turkey)
Çuhadaroğlu Aluminium (Turkey)	Datakom Electronics Engineering (Turkey)
Limak Construction (Turkey) (Saudi Arabia) (Qatar) (Kuwait)	Spanschraub GmbH (Austria)
Antyapı Construction (Turkey)	Ones Technology (Turkey)
Çalık Enerji(Turkey) (Iraq)	Şölen Chocolate (Turkey)
BMC Auromotive (Turkey)	Daygas Heat Systems (Turkey)
F.Reyher Nchfg. GmbH & Co. KG (Germany)	Alke Pano Board (Turkey)
Korrodi GMBH (Germany)	Deha Aluminium (Turkey)
Alstertaler Schrauben & Prazisionsteile (Germany)	World Aluminium) (United Kingdom)
Bahçıvan BVN Ventilation Fans & Electrical Motors (Turkey)	Hueck Auminium (Germany)
Anadolusan Engineering Project & Installation Co (Turkey)	Aliş Aluminium (Turkey)
Fuchs + Sanders Schrauben GmbH (Germany)	AÇM Heat Industry (Turkey)

OUR VISION

Areas with pioneering solutions and services, with expertise that makes a difference, Turkey's leaders have a say in the international market. To inspire the world with our innovative products and designs that will make people's lives easier and contribute to social welfare in the future.

OUR VALUES

We act with common sense.

We work for continuous improvement.

We communicate openly.

We are fast, we do our job with passion.

We encourage continuity, creativity and integrity.

We are responsible and accountable.

OUR MISSION

To provide the most appropriate design, solution and service support with our experienced and competent team in order to meet the needs of our customers and increase their productivity. To be a company that is open to career opportunities, enjoyable and preferred to work.

To provide our customers with well-designed, functional products at the lowest possible prices.

Growing with its stakeholders and adding value to them. To be a trusted and monitored solution partner with our respect for people and the environment, and our correct and open communication approach.

OUR QUALITY POLICY

Quality has been of vital importance for VİTAŞ FASTENERS since its establishment. All parameters related to our fasteners are checked at every stage of production and findings are recorded. Machinery, equipment and personnel investments in fasteners are constantly increasing. Aiming the total quality philosophy

VİTAŞ FASTENERS provides service with its ISO 9001: 2015 certificate. VİTAŞ FASTENERS integrated facility offers customer-oriented service with its experienced engineers. We believe that success can be achieved with quality products and production philosophy in the process of integration of our country with Europe. The target is quality production.

OUR PRICE POLICY

Our goal is to offer products and services that increase productivity to reduce the total cost of our customers. It should not be forgotten that the cost of the unit in which the fastener is used is higher than the cost of the screw. Poor quality and cheap products cause much greater damage than the benefit it provides.

**The Real Cost Of Fasteners, Not With The Price Paid When Purchased,
It is determined by the efficiency and added value it provides in the system it is used in.**

OUR ENVIRONMENTAL POLICY

Our company has committed its determination and will in the environmental management system that it has created to protect the environment and increase environmental awareness with its environmental policy. The environmental policy is reviewed at the management review meetings held every year in accordance with the relevant legislation and changing environmental conditions, and revised if necessary. Trainings and various announcement methods are used to ensure that environmental policy is understood and implemented by all company personnel. "Environmental policy" is open to public scrutiny and knowledge. For this purpose, various methods are used for the promotion and announcement of environmental policy. The environmental policy has been approved by the General Manager and announced to all employees. A resource plan is created in order to achieve the EMS targets determined for the company. The resource plan, in which the activities to be done in order to achieve the targets, the responsible persons and the delivery are specified in the resource plans, are prepared annually by the integrated management officer. The resource plan approved by the management is published by the quality. The Resource Plan is monitored by the integrated management delegation in monthly delegation meetings, updated if necessary, and the resource plan is also discussed in the YGG meetings held periodically.

Our company has established and implemented procedures and instructions regarding the control of activities, and has created controlled conditions in the business by applying the necessary control measures.

In our company, the application principles regarding the environmental impacts arising as a result of the environmental impact assessment studies are defined in the Environmental Aspect and Impacts Assessment Procedure. With regard to waste management, activities and processes related to identified risks in places where control measures should be implemented are defined in the waste management procedure.

Transportation and disposal of wastes are carried out in accordance with environmental legislation. The main purpose is to reduce waste at source. Environmental effects are ensured in material handling, storage and application processes. While selecting new products, materials and investments, alternative practices are taken into consideration in terms of compliance with environmental legislation, minimization of wastes, recycling / recovery / reuse and environmental impacts. Subcontractors from which services and products are provided are informed and controlled in terms of environmental impacts.

Our company, consistent with its commitment to compliance, has established and maintained the Legal Conditions Compliance Procedure in order to periodically evaluate its compliance with the legal requirements in force.

Our company keeps records of the results of periodic evaluations.

Our company evaluates compliance with other conditions that it has accepted to comply with. This assessment has been considered together with the assessment of the referenced legal compliance. Records of the results of periodic evaluations are kept at YGG meetings.

VITAS FASTENERS, which adopts raising environmental awareness and protecting the environment as its basic principle, has established an environmental management system to ensure that its activities are in harmony with the environmental policy, goals and objectives approved by the senior management. The continuity of the system is ensured and developed with its managers and all employees. Resources and information required to support the operation and monitoring of processes are readily available. By measuring and analyzing processes, necessary activities are implemented to achieve the planned results and to continuously improve the processes.

The management, control and archiving of records within the ISO 14001: 2015 environmental management system are carried out in accordance with the relevant procedure. All records are kept accessible and protected against loss and destruction.

Our company, which operates in the field of production and sales of screws, bolts and special fasteners, determines the environmental dimensions and effects that occur while carrying out its activities;

To eliminate or minimize the environmental damage of these effects,

To comply with the current environmental legislation, administrative regulations and legal requirements,

To create environmental awareness among customers, suppliers, employees and other relevant parties,

Using Energy, Raw Materials and Natural Resources in the most efficient way

Observing the demands and expectations of our customers from our organization

Saving by minimizing the consumption of energy and other natural resources with the most efficient use in all activities,

Our main goal and aim is to implement a sustainable environmental management system in order to respect the environment and leave a good environment to future generations.

We are committed to allocating the necessary resources and using them in the most effective and efficient manner in order to achieve these goals and to continuously improve and develop the effectiveness of our integrated system.

OUR OCCUPATIONAL HEALTH AND SAFETY POLICY

As our institution and its employees, we comply with national and international legislation and regulations, and create a healthy and safe working environment within the Occupational Health and Safety Management System based on continuous improvement.

It has been updated and documented in accordance with the criteria stipulated by the ISO 45001: 2018 Occupational Health and Safety standard.

- Analyzing and minimizing health and safety risks that may arise in the working environment,
- Organizing training activities to create and develop Occupational Health and Safety awareness,
- In the workplace and its add-ons; In order to ensure the health and safety of our employees, suppliers, visitors and company personnel working outside the workplace, in accordance with the current OHS legislation and other requirements related to OHS, to take all kinds of precautions, to have tools and personal protective equipment,
- To identify and eliminate unsafe situations and movements, potential accident risks, which may cause work accidents and occupational diseases in the workplace and its attachments, by making an effective risk assessment,
- To identify the risks that may cause occupational accidents and occupational diseases in the workplace, to ensure the health, safety and social welfare of employees, visitors and subcontractors at all levels, to reduce any future financial and moral losses belonging to them and their families,
- To educate our employees in the field of occupational health and safety and to ensure that they reach a good awareness of occupational health and safety,
- Ensuring that subcontractors and visitors serving in the workplace also comply with the rules regarding occupational health and safety set by our Institution,
- Making our institution an exemplary company in terms of OHS practices before affiliated institutions, chambers of industry and associations,
- Considering the development of the energy world, predicting possible future situations from today, constantly improving and reviewing our situation,
- Increasing our productivity by taking the necessary precautions by adopting the goal of zero occupational accidents and zero occupational diseases,

We work with all our strength to be an exemplary organization in terms of occupational health and safety by managing our activities in the direction of Quality, Environment and Energy Efficiency Management Systems in an integrated manner.

OUR SUSTAINABILITY POLICY

Being aware of our social, environmental and economic impacts, encouraging bilateral dialogue with our stakeholders during all our activities and having an ethical and transparent management style is a vital part of our company culture. For this purpose,

- We will carry out a business approach that respects human rights and ethical values, against all kinds of discrimination and promotes equal opportunity,
- We will aim to prevent environmental pollution at its source, continuously improve our environmental performance, and our waste and carbon foot

- We will make an effort to reduce our mark,
- We will ensure the continuity and improvement of the environmental management system we have established,
- We will recycle our waste as much as possible,
- We will ensure the continuity and improvement of the occupational health and safety management system we have established,
- We will ensure the health and safety of our stakeholders by effectively protecting our stakeholders against all dangers while conducting our activities,
- We will comply with all relevant legal obligations,

- We measure and evaluate the environmental and social impacts of our investments on natural and cultural heritage; We take measures to reduce our impact.

Within the scope of combating climate change, it invests in high technology, improves our processes by considering energy efficiency and projects

- we develop and report our performance transparently.
- We will create social awareness on issues such as health, education and environment by making social investments,
- We invest in the establishment and operation of smart systems with our innovation and R&D studies that direct the industry.
- We will take an active role in solving social problems,
- We will establish a sustainable supply chain with the aim of mutual benefit with the companies in our supply chain.

As VITAS FASTENERS, we are committed to continuously working for a sustainable development and a livable world in line with this sustainable fastener production, sales and service policy.

OUR PRINCIPLES

VITAS FASTENERS regards compliance with internationally recognized environmental, social and ethical standards and principles among our main responsibilities of our suppliers and customers, whom we consider as important business partners in all of our companies. We take into account the compliance with VITAS FASTENERS Procurement Principles, which we have prepared in the light of all applicable national laws and regulations, especially its contracts.

CHILD LABOR AND PREVENTION OF FORCED LABOR

- Under no circumstances should child labor be employed. Within the scope of article 138 of the International Labor Organization Convention The minimum working age is 15 years, and 14 for some developing countries. Employees below the minimum age are included in the definition of child labor.

The education of young employees above the minimum working age should not be hindered and they should not be employed in dangerous jobs.

The work must be optional. Workers should not be forced or compulsory.

- No employee should be employed without assurance.

Payments of debts by labor should not be accepted under any circumstances.

NON-DISCRIMINATION

Gender, age, religion, race, sect, social status, physical structure in the work environment and practices related to recruitment, remuneration, education, promotion and retirement,

discrimination due to ethnic origin, nationality, political opinion, sexual orientation, pregnancy, political opinion, trade union membership or any other reason.

should not be tolerated.

HUMANITARIAN TREATMENT

- **Physical abuse or disciplinary practice, sexual, verbal or physical harassment and any form of mobbing are unacceptable.**
- **All business dealings should be treated fairly in accordance with basic moral and human value judgments.**

CHARGING

Employees should be paid at least in accordance with the minimum wage, and all fringe benefits must comply with the rules set by laws and regulations

payments should be made regularly and on time.

WORKING HOURS

Ensure that employees are provided with holiday and leave days in accordance with laws and regulations and that their working hours are in accordance with the regulations.

must be.

FREEDOM OF ASSOCIATION AND RIGHT TO COLLECTIVE BARGAINING

The right to join trade unions, to be a member, to be represented and to participate in workers' councils, as determined by local laws, must be respected.

OUR ETHICAL VALUES

Gifts should not be exchanged for the purpose of facilitating business, and no form of bribery and corruption should be allowed or tolerated.

- Situations that create conflict of interest should be avoided.
- Attempts with the aim of distorting, blocking or limiting competition should not be made.
- Intellectual property rights of business partners must be protected.



Phone : +90 216 3904570 / +90 216 4830331 / +90 212 2211540 / +90 262 7514570 / +90 532 1118432
Web Pages : <http://www.vitasfasteners.com> / <http://www.schraube-fasteners-turkey.com>
: <http://www.vitasfasteners-schraube-europe.com> / <http://www.vitasvida.com>
E-mail : info@vitasfasteners.com / info@schraube-fasteners-turkey.com
: info@vitasfasteners-schraube-europe.com / info@vitasvida.com