



# RORSAK

FASTENERS FOR LIFE

## ABOUT US:

RORSAK GROUP has been in the fastening sector for last three decades and is a producer and supplier of Hex Bolts, Nuts, Screws, Threaded Rods, Anchor Bolts, Washers and Special Bolts. RORSAK GROUP produces the products as Hot Dip Galvanized ( HDG ), Zinc Plated, Geomet Plated, Black Oxidized and Plain coatings. We can also supply EN 15048 SB Bolts, Nuts, Washers and EN 14399 HV Bolts, Nuts, Washers. Rorsak Group complies with DIN and ISO standards.

RORSAK GROUP is serving the sectors like Power Transmission Lines, Electrical Towers, Electric Plants, Polygonal Poles, GSM poles, Lighting Poles, Wind Turbine Towers, and Solar Energy. RORSAK GROUP is also specialized in fasteners for Road Safety Barriers, Highway Guardrail, Railways, Petrochemical Plants, Gas Plants, Piping Lines, and Construction.

## MAIN PRODUCTS:

**BOLTS :** EN 15048 SB CE, EN 14399, DIN 931, DIN 933, DIN 7990, DIN 6914, ISO 4014, ISO 4016, ISO 4017, DIN 912, DIN 7991, DIN 603, DIN 607, DIN 960, DIN 961, DIN 571

**NUTS:** DIN 934, DIN 555, ISO 4032, ISO 4034, DIN 6915, DIN 935, DIN 936

**THREADED RODS:** DIN 975, DIN 976

**WASHERS:** DIN 125, DIN 126, DIN 127, ISO 7089, ISO 7090, ISO 7091, ISO 7349 and all flat, plain types of washers

## OUR VISION:

To be one of the leading companies in fasteners industry and improve ourselves with every step and investment on our way to the top.

## OUR MISSION:

- ▶ Customer satisfaction
- ▶ Widespread customer network
- ▶ Sustainability
- ▶ Long term relations with stakeholders
- ▶ Improve and Increase the export volume



## PRODUCTION PROCESS

### 1. RAW MATERIAL

Raw material wire rods for production are purchased from domestic and overseas steel mills certified with ISO 9001 and IATF 16949 as hot rolled, spheroidal annealed. Mechanical, dimensional and chemical inspections, performed for the incoming materials from our own inspection team with clear inspection instructions and then record their results to the ERP system.

### 4. HEAT TREATMENT

RORSAK GROUP has in house heat treatment plant with 300 tons per month capacity. The products are subjected to the heat treatment process for acquiring the hardness values determined by the standards. Our Computerized heat treatment furnace with dephosphorization feature have automatic loading and pre-wash systems before curing and tempering.

## QUALITY CONTROL EQUIPMENTS

- ▶ Universal Tensile Tester
- ▶ Charpy Impact Test Machine - Zwick Roell 300 Joule
- ▶ Friction Test Machine ( M 12 - M 72)
- ▶ Hardness Tester (Micro Vickers)
- ▶ Hardness Tester (Mechanical) (HRC-HRB)
- ▶ Impact Test Machine
- ▶ Coating Thickness Measurement Device
- ▶ Magnetic Particle Testing Device
- ▶ Spectral Analyzer
- ▶ Calipers, micrometers and other measuring instruments
- ▶ Profile Projector
- ▶ Metal Microscope
- ▶ Cutting Machine
- ▶ Bakelite Press
- ▶ Polishing Machine
- ▶ Nuts & Bolts Gauges

### 2. SURFACE TREATMENT

After inspection, the raw materials are pickled into the chemical bath in order to remove stains and remains which come from hot rolling process and then raw material goes to the wire drawing process in order to obtain suitable production diameter and then is treated with the phosphate

### 5. HOT DIP GALVANIZATION (HDG)

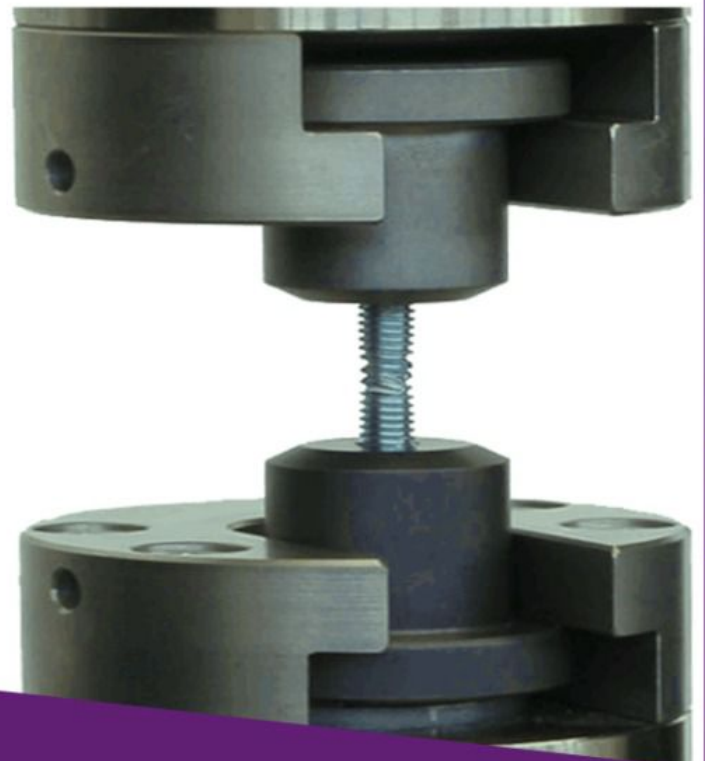
RORSAK GROUP also has in house centrifugal HDG furnace with 700 tons per month capacity. We galvanize all our products with ISO 1461 and ISO 10684 standards which can be checked via third party inspections inside our own laboratory.

### 3. COLD & HOT FORGING

RORSAK GROUP has both cold and hot forming types of productions. Depending on the parts' complexity, the manufacturing site applies double stroke or multi stationary cold forging in order to finalise the pressing of the parts or the parts can be hot forged. Final parts are monitored and recorded on the basis of ERP program.

### 5. QUALITY CONTROL

All our quality checks and tests are done by our qualified engineers and their assistants from the raw material handling whose results are registered by the help of ERP program, to the related 3.1 certificates according to EN 10204 standard so that we can guarantee traceability to our clients for years. We can do third party inspections with the likes of SGS and other international organizations in our calibrated laboratory and also provide 3.2 certificates to our customers arranged by 3rd party inspection companies.



**BOLTS**

- ▶ Hex Head Bolt
- ▶ T Head Bolt
- ▶ Eye Bolt
- ▶ Countersunk Head Screw
- ▶ U Bolt
- ▶ Imbus Screw
- ▶ Bomber Head Bolt
- ▶ Round Head Bolt
- ▶ Square Head Bolt
- ▶ Rebar Bolt
- ▶ Stud Bolts, J & L Anchor Bolt
- ▶ Heavy Duty Bolts



**DIAMETERS:**

M6-M200(COLD & HOT FORGED)

**SIZES:**

Min 10 mm - Max 3000 mm

**QUALITIES:**

4.6- 5.8- 6.8- 8.8-10.9-12.9- A36- A193 B7-A 307-A490- A315- A449- F 1554- A320- ASME B16.5- A4- A2- F554

**STANDARDS:**

DIN 607, DIN 912, DIN 561, DIN 6914, DIN 6912, DIN 7990, DIN 931, DIN 933, DIN 960, DIN 961, EN 14399-4, EN 14399-3, EN 14399-10, EN ISO 4014, EN 15048, DIN 7991, EN ISO 4017, EN ISO 8765, ISO 7380, ISO 12747, DIN 478, DIN 479, DIN 480, DIN 186, DIN 188, DIN 261, DIN 787, DIN 835, DIN 938, DIN 939, DIN 940, DIN 976, DIN 975

**COATINGS:**

HDG ( Hot Dip Galvanized ), Cold Galvanized, Zinc Plated, Electro Galvanized, Geomet

**PACKINGS & LABELS:**

Carton Box (Also can be 2,4,8 small boxes inside big carton) OR Gunny bags on the pallets (EURO, EPAL or custom size pallets). Custom labels can be provided if needed.

## PRODUCTS

### NUTS & WASHERS

- ▶ Hexagon Nuts
- ▶ Special Nuts
- ▶ Flanged Nuts
- ▶ Railway Rail Nuts
- ▶ Butterfly Nuts
- ▶ Fiber Nuts
- ▶ Flat Washers
- ▶ Sprig Washers
- ▶ Rectangular Washers
- ▶ Special Washers



#### DIAMETERS:

M6-M200

#### QUALITIES:

Nuts: 5-6-8-10-12-ASTM A194 2H-ASTM A194 Gr8-A563

Washers: 100 HV, 140 HV, 200 HV, 300HV, 420 HV

#### STANDARDS:

Nuts: DIN 934, DIN 935, DIN 980, DIN 982, DIN 985, DIN 928, EN ISO 4032, DIN 6915

Washers: DIN 125, DIN 126, DIN 9021, DIN 6916, DIN 7989, DIN 127, DIN 440

#### COATINGS:

HDG ( Hot Dip Galvanized ), Cold Galvanized, Zinc Plated, Electro Galvanized, Geomet

#### PACKINGS & LABELS:

Carton Box (Also can be 2,4,8 small boxes inside big carton) OR Gunny bags on the pallets (EURO, EPAL or custom size pallets). Custom labels can be provided if needed.



**THREADED RODS & ANCHORS**

- ▶ Half Threaded Rods
- ▶ Full Threaded Rods
- ▶ L-Anchors
- ▶ J-Anchors
- ▶ U-V-L-J Bolts
- ▶ Anti Climbing Bolts



**DIAMETERS:**  
M6-M200

**QUALITIES:**  
4.6 - 6.8 - 8.8 - 10.9 - 12.9 - A36 - F 554 - A449 - A2 - A4 - A320 - A193 - A449 - A307 - ASME B16.5

**STANDARDS:**  
DIN 975, DIN 976, "Special Drawings if any"

**COATINGS:**  
HDG ( Hot Dip Galvanized ), Cold Galvanized, Zinc Plated, Electro Galvanized, Geomet

**PACKINGS & LABELS:**  
Smaller products with lengths less than 250 mm can be packed in carton Box OR Gunny bags on the pallets (EURO, EPAL or custom size pallets). Custom labels can be provided if needed.  
Larger products are packed straight on the pallets.



**HOT DIP GALVANIZED  
FASTENERS FOR  
STEEL LATTICE TOWERS AND  
ENERGY TRANSMISSION LINES**



**HOT DIP GALVANIZED  
FASTENERS FOR  
ROADSIDE BARRIERS**

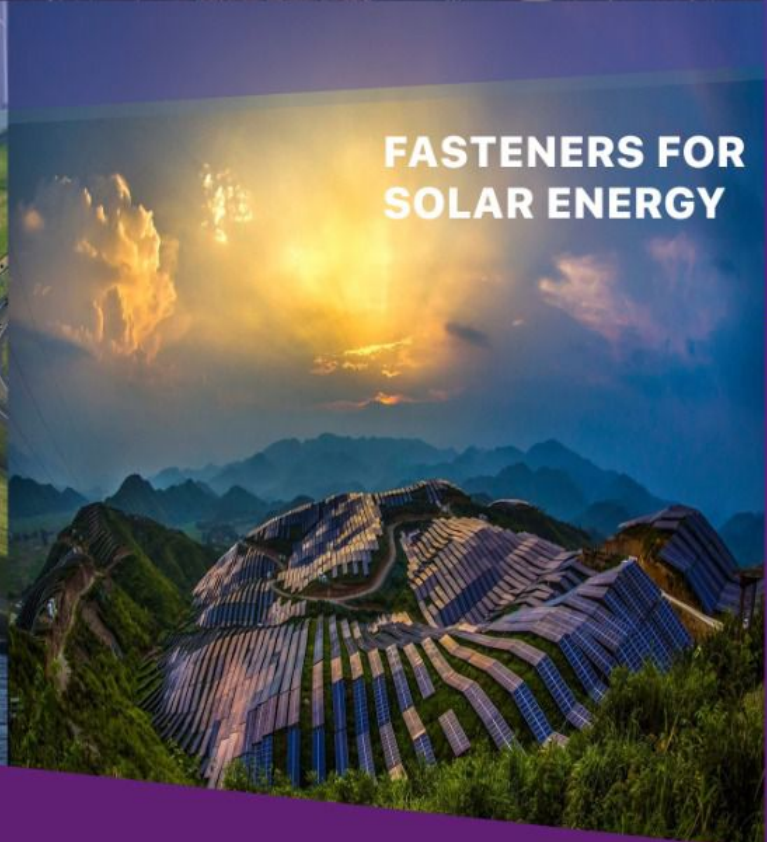




**HOT DIP GALVANIZED  
SB & HV FASTENERS FOR  
STEEL STRUCTURES AND  
CONSTRUCTION**

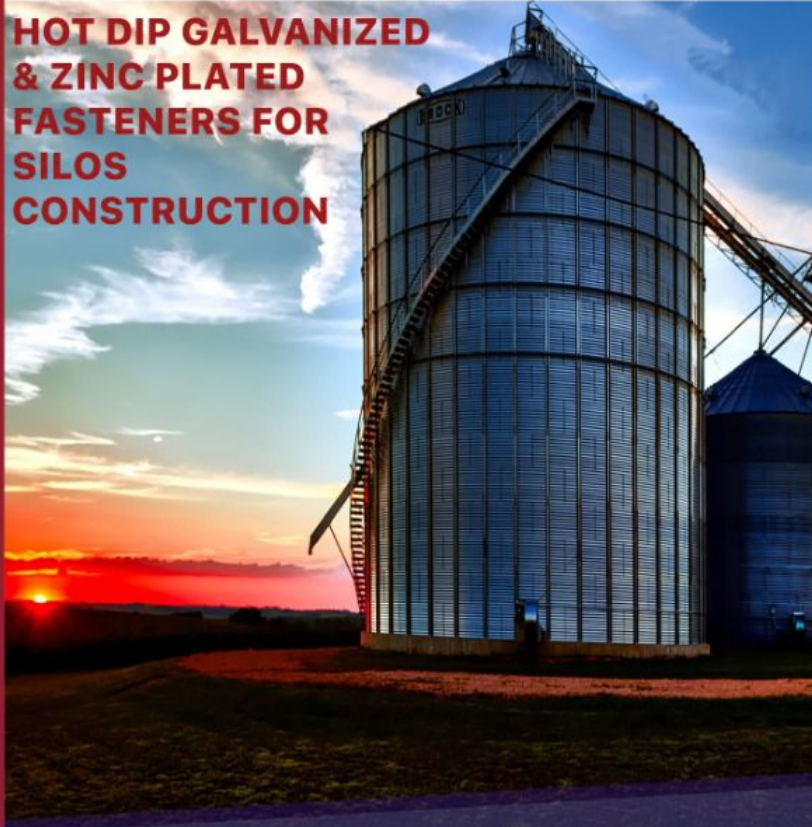


**FASTENERS FOR  
WIND ENERGY**



**FASTENERS FOR  
SOLAR ENERGY**

**HOT DIP GALVANIZED  
& ZINC PLATED  
FASTENERS FOR  
SILOS  
CONSTRUCTION**



**HOT DIP GALVANIZED  
FASTENERS FOR  
TELECOMMUNICATION  
TOWERS**



**GEOMET COATED  
FASTENERS FOR  
AUTOMOTIVE SECTOR**



**ALL KIND OF FASTENERS  
FOR STOCK HOLDERS AND  
WHOLESALEERS**

