



BEARING MAN GROUP



FASTENERS



## FASTENER PRODUCT Overview Brochure

BEARINGS • SEALS • POWER TRANSMISSION • FILTRATION  
DRIVES & MOTORS • BELTING • FASTENERS • HYDRAULICS

SANS ISO 9001:2008

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A DIVISION OF THE BEARING MAN GROUP

SANS ISO 9001:2008



## BOLTS & SET SCREWS

### TYPES

- **XOX Bolt & Nut**  
Used very extensively in most industries e.g. Construction, Timber, General engineering etc.
- **Flange**  
Often the underside of the flanged section is serrated. This cuts into the fastening surface and prevents loosening.
- **Hexagon**  
Hexagon bolts have a 6 sided head and are partially threaded. They are used with flat washers to fasten wood parts together and with or without lock washers to hold steel parts together.
- **Cup Square**  
Mushroom head bolts with a square neck under the head. Also known as 'Carriage Bolts'. Often used in wood. The square section is hammered into a drilled hole. This prevents the bolt from turning when the nut is tightened.
- **Set Screw**  
Simply a fully threaded Bolt.
- **Countersunk Square Neck**  
Commonly known as "Plough bolts" General application for steel or timber where a flat Countersunk Finish is required on the fastened surface
- **Nib**  
The head has a protruding nib which when hammered into timber prevents the bolt from turning.
- **Countersunk Nib**  
A countersunk version of a Nib bolt
- **U-Bolt**  
Has a 'U' shaped shank with a thread on each end. Used to secure items to circular objects e.g. poles.

### DIAMETERS

- M5 – M36 (off the shelf)
- M39 upwards (subject to availability)

### MATERIALS

- Steel - mild steel (MS - Grade 4.8)
- Steel - high tensile (HT - Grade 8.8)
- Steel - high tensile (HT - Grade 10.9)
- Steel - high tensile (HT - Grade 12.9)
- Stainless steel - (A2-304)
- Stainless steel - (A4-316)

### PLATING

- Zinc
- Yellow Zinc
- Black Japan
- Super Zinc
- Hot Dip Galvanised

### THREADING

- Metric
- Metric Fine
- Metric Extra Fine
- Imperial

### TYPICAL APPLICATIONS

- Construction
- Timber
- General engineering
- Agricultural

## LOCK BOLTS

### LOCK BOLT PINS AND COLLARS

#### BENEFITS

- Vibration resistant
- Provides high shear and tensile strength
- Tamper proof
- Consistent controlled clamp up
- No need to re-torque
- Fast and easy installation
- Replaces bolted and welded joints
- Fully compatible with existing tooling

#### DIAMETERS

- 13mm
- 16mm
- 19mm
- 22mm

#### PLATINGS

- Plain & Zinc

#### COLLAR TYPES

- Standard
- Flanged

### TYPICAL APPLICATIONS

- Railway
- Mining
- Sugar mills
- Construction
- Heavy engineering



## HUCK

### TYPES

- **Magna bulbs©**  
One-piece structural self-locking, bulbing fastener with 360 degree circle lock
- **Auto-Bulbs©**  
High clamp structural blind fastener
- **BOM©**  
Structural high strength blind steel fastener
- **Floortight©**  
Superior performance over conventional flooring fasteners
- **Magna-Grip©**  
Consistent, high clamp force two piece fastener
- **C6L/C120L©**  
High tensile strength and vibration resistant two piece fastener
- **Hucktainer Plus©**  
Two piece fastener specifically for joining composite board to metal frame
- **C50L©**  
Heavy duty two piece fastener
- **Huck-Fit©**  
Heavy duty two piece fastener with unique lock groove form
- **Magnalok©**

### BENEFITS

- Will not loosen even under extreme vibration
- Maintenance free joints - no need to torque or re-torque
- Lower lifetime total cost of joint - high shear and tensile strengths for increased fatigue life of the joint
- High speed, easy to install systems can reduce production time by 75%
- Improve your employees health and safety - remove welding and vibration installation processes
- Tamperproof - once installed cannot be removed without specialist tooling

### TYPICAL APPLICATIONS

- Automotive
- Transport
- Manufacturing
- Ship Building
- Power Generation
- Medical
- Electronics

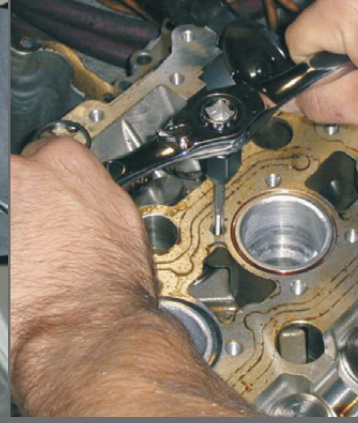
## RIVETS

### TYPES

- **Aluminium Rivet (AS Type)**  
Consists of an aluminium shell and steel stem. Most common of all rivets and used in applications to hold pieces together where no strength is required. Also known as POP Rivets.
  - **Steel Open Ended (SS Type)**  
Consists of a steel body/shell and a steel stem. Used in applications where a certain amount of strength is required
  - **Half Stainless Steel Rivet Open Ended (SSS Type)**  
Consists of a steel body/shell (grade 304) and a steel stem. Used where corrosion resistance is required
  - **Full Stainless Steel Rivet Open Ended (FSS Type)**  
Consists of a steel body/shell (grade 304) and a steel stem. Used where high corrosive resistance is required
  - **Full Aluminium Rivet Open Ended**  
Consists of an aluminium body/shell and an aluminium stem. Used where strength is not required but corrosion resistance is essential.
  - **Aluminium Large Flange Rivet Open Ended (ASLF Type)**  
Consists of an aluminium body/shell with a large flange diameter and a steel stem. Used in applications where a large bearing area is required
  - **Aluminium Countersunk Rivet Open Ended (ASC Type)**  
Consists of an aluminium body/shell, which is countersunk, and a steel stem. Used in applications where a flush finish is required
  - **Aluminium Grooved Rivet Open Ended (ASG Type)**  
Consists of an aluminium body/shell that is grooved and a steel stem. Used in blind holes where a strong pull out resistance is required
  - **Aluminium Peel Rivet Open Ended (PAS Type)**  
Consists of an aluminium body/shell and a steel stem. The steel stem has 4 points on the end. Used in applications where a normal rivet would pull through
- |                   |                  |
|-------------------|------------------|
| • Sealed          | • Aluminium      |
| • Stainless Steel | • Half Stainless |
| • Epoxy           | • Large Flange   |
| • Peeled          | • Solid          |
| • Semi-Tubular    | • CSK            |
| • Steel           | • Multigrip      |

### TYPICAL APPLICATIONS

- Ladders
- Canopies
- Ducting
- Roofing
- Ventilation
- Steel Appliances
- Electrical
- Vehicle Bodies
- Marine



## NUTS

### TYPES

- **Hexagon Nuts**  
Available in mild Steel, high tensile, Stainless steel (Grade 304 & 316) and brass
- **Nyloc Nuts**  
A hexagon nut that has a Nylon ring inserted in the top. When tightening occurs, the nylon ring locks onto the threads of the fasteners and prevents the nut from working itself loose
- **Half Lock Nuts**  
A Hexagon nut, which is half the height of a normal nut
- **Cleavelock Nuts**  
An all-metal Lock nut ideal for use in applications where heat is a problem and a Nyloc nut is unsuitable
- **Square Pressed Nuts**  
Most commonly used with gutter bolts
- **Dome Nuts**  
Used for a decorative finish
- **Wing Nuts**  
Used for finger tightening
- **Drive In Nuts**  
Commonly known as furniture nuts. Used in the manufacture of furniture
- **Shear Nuts or Security Nuts**  
The Hex portion snaps off on tightening leaving the tapered section behind which is then very difficult to undo
- **Caged nuts**
- **Spring nuts**
- **Flange nuts**
- **Stover**
- **Weld nuts**
- **Rivet nuts**
- **Clinch nuts**
- **'T' nuts**
- **Coupling nuts**
- **Friction nuts**
- **Castle nuts**
- **Wheel nuts**

### MATERIALS

- Steel - mild steel (MS - Class 6)
- Steel - high tensile (HT - Class 8)
- Steel - high tensile (HT - Class 10)
- Steel - high tensile (HT - Class 12)
- Stainless steel - (A2-304)
- Stainless steel - (A4-316)
- Brass

### PLATING

- Zinc
- Yellow Zinc
- Black Japan
- Super Zinc
- Hot Dip Galvanised

### THREADING

- Metric
- Metric Fine
- Metric Extra Fine
- Imperial

### TYPICAL APPLICATIONS

- Light Engineering
- Heavy Engineering
- General Engineering
- Automotive
- Electrical
- Mining

## GEARWRENCH

### SPANNERS\*

#### FEATURES

- Ratcheting box-end needs as little as 5° movement
- Fully hardened metal construction
- Ratcheting box-end has a surface drive configuration that virtually eliminates rounding
- Available in SAE and metric sets and individuals

#### VARIATIONS

- Standard combination
- Stubby
- E-Torx
- XL Flex
- Reversible
- Half moon ('C' spanner)
- S-Reversible
- X-Beam
- Flex head
- Double box
- XL

### GEARRATCHET

#### FEATURES

- Unique design has an ultra low profile, extra strength and speed of a 5° precision movement
- Complete line of SAE and metric sockets
- The thin wall and arch design increases the torque strength by as much as 40%
- Slim profile design
- Adapters convert the GearRatchet into a traditional ratchet
- Available in 1/4, 3/8 and 1/2 sets
- Lightweight and ideal for overhead use

### GEARDRIVER

#### FEATURES

- Offers unparalleled access and flexibility for a variety of applications
- Interchangable shafts allow access to nearly any fastener
- Durometer grip for exceptional comfort and high torque
- Stubby handle and 'T' handle available

### TAP & DIE

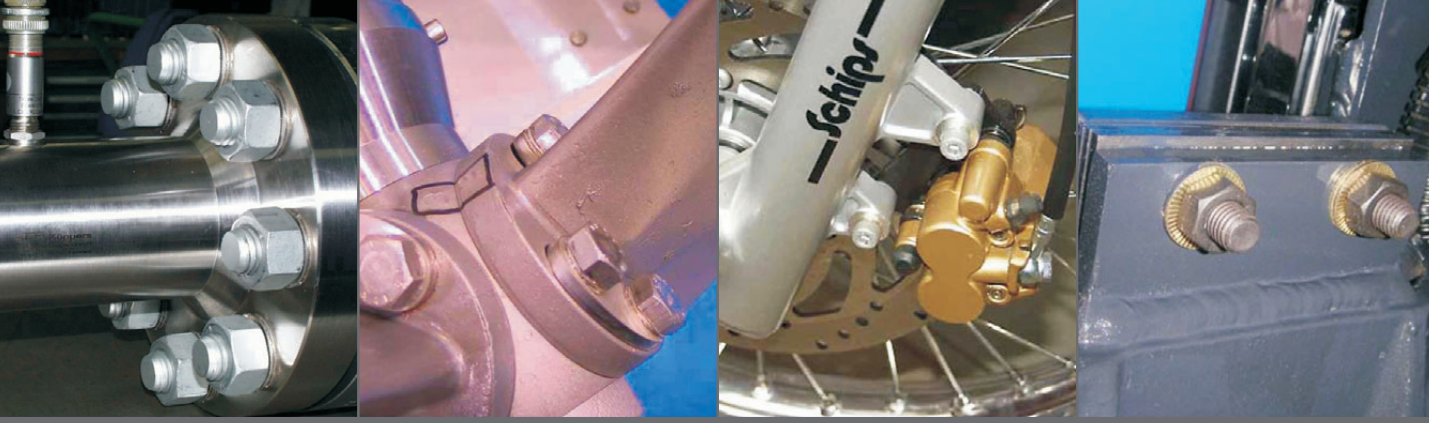
#### FEATURES

- 5° ratcheting arc with reversible level eliminates hand over turning
- Ideal for confined spaces
- Twist Lock Guide system keeps dies centred
- Works on hex shaped dies
- Taps range from 3 to 12mm
- Can be used with 3/8 GearRatchet handle
- Available in SAE and metric sets

### TYPICAL APPLICATIONS

- Counter Areas
- Speed
- General Mechanical Equipment
- Automotive

\* Non-ratcheting available on request



## NORD-LOCK

NORD-LOCK washers have cams on one side with a greater rise than the pitch of the bolt. In addition they have radial teeth on the opposite side. The washers are installed in pairs, cam face to cam face. When the bolt and or nut is tightened, the teeth grip and seat the mating surfaces. The tension created makes the bolt/nut self-locking.

### FEATURES

- Resists loosening caused by vibration and dynamic loads
- Ease of assembly and disassembly
- Locking function is not lost by lubrication
- Positive locking at low or high preload levels
- Same temperature characteristics as standard bolt/nut
- Minimum surface marring or scratching
- Reusable
- Achieves maximum safety when locking fasteners
- Can be used on standard or high grade bolts

### ASSEMBLY OPTIONS

- Tapped holes
- Counter-bored holes
- Can be used in combination with flange nut/bolt for larger holes
- Cannot be used with a washer that is not locked in place

### TYPICAL APPLICATIONS

- Automotive
- Electrical
- Railways
- Turbines
- Windfarms
- Steel Mills
- Sugar Mills
- Vibrating Screens



## SCREW PRODUCTS

### TYPES

- **Machine Screws**  
Screws normally threaded to the head and used with a nut, generally for steel work and for joining light components and household appliances
- **Chipboard Screws**  
Generally available in countersunk and pan heads, zinc yellow passivated but other finishes also available.
- **Self-Drilling Screws**  
Generally used in roofing applications, otherwise applications where speed of assembly is required. No drilling or punching of holes is necessary as the screw drills its own holes and fixes in the process
- Conformat
- PT
- Dry Wall
- Turbo
- Roofing
- Wafer Tek
- Top Speed
- Bin
- Hi-Low
- Self tapping
- Gutter bolt
- Wood
- Furniture
- Anti theft
- Decking
- Coach
- Tap Tite

### MATERIALS

- Steel - mild steel (MS - Grade 4.8)
- Brass
- Stainless steel - (A2-304)
- Stainless steel - (A4-316)

### PLATING

- Zinc
- Yellow Zinc
- Black Japan
- Super Zinc
- Hot Dip Galvanised
- Brass
- Kalgard

### THREADING

- Metric

### TYPICAL APPLICATIONS

- Kitchen Furniture
- General Appliances
- Electrical
- Light Engineering
- Carpentry
- Partitioning
- Sheeting



## SOCKET HEAD PRODUCTS

## THOME & SCHWIND

### TYPES

- **Cap Screw**  
Fastened with a socket. Typically made from Grade 12.9 steel
- **Cap Screw CSK**  
Typically made from Grade 10.9 steel. Used to hold thin section metals together in applications that also require a neat smooth surface.
- **Low Head Cap Screw**  
Suitable for use in parts too thin for standard socket head cap screws and for applications with limited clearances
- **Button Head Cap Screw**  
Ideally suited for use in material too thin to countersunk and also for non critical loading requiring heat-treated screws
- **Shoulder Screw**  
Shoulder screws are actually hardened shafts with a knurled head and a threaded portion
- **Socket Set Screw**  
Commonly known as grub screws

### MATERIALS

- Steel - high tensile (HT - Grade 10.9)
- Steel - high tensile (HT - Grade 12.9)
- Stainless steel - (A2-304)
- Stainless steel - (A4-316)

### PLATING

- Zinc
- Yellow Zinc
- Black Japan
- Super Zinc
- Cadmium

### THREADING

- Metric
- Imperial

### SPECS

- DIN 912
- DIN 7991
- DIN 916
- DIN 7380
- DIN 7379
- DIN 7984
- DIN 6912

### STANDARD SIZES

- M2-M36

### FEATURES

- Specialised fasteners for extreme conditions
- Corrosion resistant
- Customised fasteners available on request
- Accredited to leading international standards
- Over 300 alloys available

### TYPES

- Nuts
- Bolts
- Studbolts
- Washers

### STANDARDS

- DIN EN
- ISO
- BS
- ANSI

### MANUFACTURING

- CNC machining Ø3 - 150mmx2000mm
- Swiss turn machining Ø3-36mm
- Thread rolling up to M80 (3")
- Hot forging 4 - 56mm diameter

### ALLOYS

- Hastelloy ½
- C-4
- K-500
- Hastelloy C-2000 ½
- Kuprodur
- CuNi90/10, 70/30
- A4-70
- 1.4539 Alloy 904L
- SAF2205
- 1.4501
- 253MA ½
- Nimonic ½ 80A
- C-276
- Monel ½
- 2.4605
- Inconel ½ 686
- Zirkonium
- Titan
- A5-80
- 254 SMO ½
- Ferralium 255
- Inconel ½ 718
- Inconel ½ X-750
- 1.4980 Grade 660
- C-22
- 400
- Alloy 69
- Lloy 31
- Alluminium Bronze
- A3-50
- 1.4529 Alloy 926
- 1.4462 S31803
- Zeron 100
- Inconel ½ 601/617/625
- Incoloy ½ 800/800H/800HT

### TYPICAL APPLICATIONS

- Electrical
- Automotive
- Construction
- Pneumatics
- Valves
- Hydraulics

### TYPICAL APPLICATIONS

- Power & nuclear plants
- Petrochemical & pharmaceutical plants
- Mining
- Mills
- Environmental engineering
- Civil & mechanical construction
- Dairy & food processing
- Pump manufacturing



## MISCELLANEOUS

### TYPES

- Recoil / Helicoil  
Used in all applications. High quality wire thread inserts repair and strengthen threads giving longer life to most applications  
Available in: free running, locking, strip feed and tangless
- Studsaver and REThred  
Unique tools, incorporating floating blades which can adjust to any thread pitch and diameter, in order to quickly and easily repair damaged male or female threads
- Conepoint
- Thumbscrews
- GS Splice Clamps
- Basin Fixing  
Loose nut and hangerbolt facilitates easy fixing of basins to walls. No need to hold basin up while drilling holes
- Bath & Basin Chain  
Brass nickle plated chain with hook (bath) and stay (basin)
- U-Bolts / V-Bolts  
Made to specification from Stainless Steel, Mild Steel Hot Dip Galvanised and Zinc Plated
- Industry Specific Fasteners  
Chicken feeder rods, U-Bolt assemblies, levelling screws, brass inserts, and many more manufactured to specification

### TYPICAL APPLICATIONS

- Various Applications

## WASHERS

### TYPES

- Fender  
Also known as body washers. Larger than usual outer diameter to further distribute the load, caused by torquing over the surface being fastened
- Spring(square/flat) Washer  
A locking washer made from flat section material
- Heavy Duty Spring  
A thicker spring washer normally used with larger diameter, high tensile bolts
- Square Taper  
Used mainly in the construction industry
- Black Cut Washer  
Heavy duty washer used in environments where the look is not important
- Flat (DIN 125, Flat Brite)  
Used to distribute the load caused by torquing over the surface being fastened
- Taper  
Used in construction industry where one of the surfaces being fastened is not parallel to the other
- External Serrated Star
- Rivet
- Nordlock
- Bevel
- Fibre
- Conical
- Nu-Way Seal
- Bonded
- Cup
- Disc
- Nylon
- Tab

### PLATING

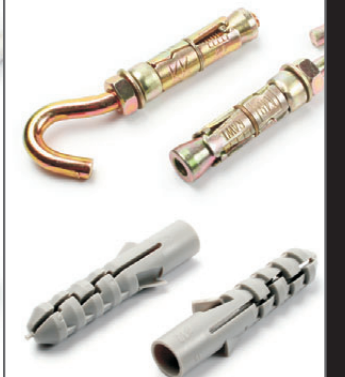
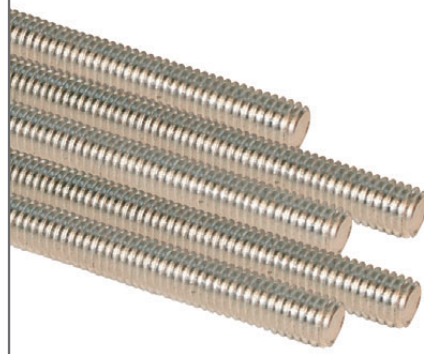
- Zinc
- Yellow Zinc
- Black Japan
- Super Zinc
- Nickel Plated
- Brass Plated
- Kalgard

### MATERIALS

- Steel
- Brass
- Nylon
- Stainless Steel (A2-304)
- Stainless Steel (A4-316)

### TYPICAL APPLICATIONS

- Construction
- Automotive
- General Engineering
- Light Engineering
- Heavy Engineering
- Mining
- Steel Mills



## THREADED ROD

### TYPES

- Engineering Stud  
Threaded on each end with a shank in the middle.
- Foundation bolts  
Normally embedded into concrete and allowing the attachment of a steel object
- Holding bolt
- L-Bolt
- Running stud  
Essentially a short threaded rod
- Threaded rod  
Used in thatching, ducting and signage

### MATERIALS

- Steel - High Tensile
- Steel - Mild steel
- Brass
- Stainless steel
- Aluminium

### GRADES

- 8
- B7
- A2-304
- 4.6 / 4.8
- EN8

### PLATINGS

- Zinc
- Hot Dip Galvanised
- Super Zinc

### TYPICAL APPLICATIONS

- Construction
- Refrigeration
- Airconditioning
- Ducting
- Strut
- General Engineering

## ANCHORS

### TYPES

- Shield Anchors  
Applications: Steelwork, garage doors, security gates and grilles, machinery and many other applications. Commonly know as a Rawlbolt. For use in brick, concrete or stone
- Sleeve Anchors  
Applications: Stadium seating, shelving, garage doors, signs, TV aerials and satellite dishes. For use in brick or concrete
- Wedge Anchors  
Applications: Balustrades, handrails, shelving, structural steel and machinery. For use in Concrete
- Drop In Anchors  
Applications: Suspended ceilings, air conditioner ducting and piping. For use in concrete
- Nail In Anchors  
An ideal through fixing for reasonably light components such as timber, frames, shelves and cupboards. For use in brick or concrete
- Nail in
- Eye shield
- Jetting - Nylon
- Thunder Bolts/Screw Bolts
- Spring Toggle
- Chemical
- Hollow wall
- Wedge
- Hook Shield

### PLATINGS

- Zinc
- Yellow Zinc

### MATERIALS

- Mild Steel
- Stainless Steel
- Nylon
- Plastic

### TYPICAL APPLICATIONS

- Construction
- Carpentry
- Assembly of Various Applications onto Brickwork, Concrete etc