

Unbrako
The widest
range in the world

APPROVED TO
BS EN ISO 9002 : 1994



RS 432



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(Socket Screws) Ltd**

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Unbrako

Uncompromising



A master distributor of Unbrako Products.

Please Contact us with any enquiries.



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Why do people choose Unbrako?

Unbrako, part of the Engineered fasteners division of SPS technologies Ltd, is a principal European subsidiary of SPS Technologies INC of Pennsylvania. SPS is the world's largest manufacturer of precision mechanical fasteners and has earned a reputation for quality and performance in the production of hexagon socket screws, aerospace and automotive fasteners, special hot and cold forged components.


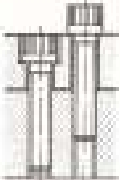





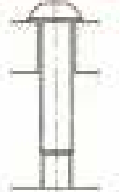



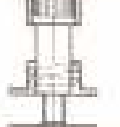


SPS is involved with quality control at its specialist steel suppliers, enabling SPS to control the production of high grade alloy steels with metallurgical and chemical characteristics specifically to suit Unbrako fasteners. It also allows complete control of material from original steel melt to finished product ensuring ultimate fastener reliability.

Unbrako standard fasteners—"The widest range in the world" are available from Francis Kirk (Socket Screws) Ltd, who have the support of trained sales and applications engineers who will solve fastening problems in all types of industrial environments.

Key Benefits of the Unbrako Brand

4 easy ways to see how Unbrako hold their superior position:-

1. Deep accurate socket for uniform wrenching power, high maximum torques.
2. Precision-forged head with continuous grain flow and maximum strength. Elliptical head-to-shank fillet for increased fatigue.
3. Heat treated in a controlled atmosphere for maximum uniform strength and surface integrity.
4. Fully-formed threads rolled to maintain continuous grain flow for greater tensile and fatigue strength.

Type	Application	Features
Socket Head Cap Screws  Alloy Steel		Suitable for all high torque applications.
Socket Low Head Cap Screw  Alloy Steel		Suitable for use in parts too thin for std. SHCS; and for applications with limited clearance.
Countersunk Socket Head Screws  Alloy Steel		Controlled angle under the head ensures maximum firmness and sidewall contact. Non-slip flat socket prevents marring of material. Note: inclined angle under the head varies as follows: 60° & 80° Threads - 80° UNF & UNF Threads - 82° Metric Threads - 80° Above M20 - 82°
Button Head Screws  Alloy Steel		Low height cylindrical design. Use them in materials too thin to countersink etc for non-critical loading requiring neat finished screws.
Flange Button Head Screws  Alloy Steel		Allows covering of large diameter holes in sheet metal. Can be used with water resistant.
Shoulder Screws  Alloy Steel		Fastened easily against parts - shafts, pins, guides, linkages and bumper mountings. Also standard for tool and die industries.
Socket Set Screws  Alloy Steel		Fasten rollers, sleeves, gears, locks on shafts. Locks machine parts. Cone, ball, dog, flat, cup and self locking. Insulated cup points are standard.



WHY?

Unbrako products exceed the ISO standards! Therefore, Unbrako's Quality is vitally important. Anonymous fasteners may cost less initially, but what will be the cost of their failure in service? It could be catastrophic ... and it does happen.

No other fasteners match Unbrako's quality and strength. No other fasteners match Unbrako's reliability or performance. And no other manufacturer can match the Widest range in the World, **Unbrako**.

All Unbrako products have traceability and meet the highest quality standards. Product traceability provides the user with complete satisfaction that the correct material and process control has been carried out against the international standards for the product.

Tensile and Fatigue Strength

Our socket head cap screws have the highest levels of strength and fatigue resistance in the industry exceeding all government and industry standards. Unbrako manufacture to strength level 1300 N/mm² through to M16 Diameter and 1250 N/mm² over M16, (as high as 84 tons per square inch!) without sacrificing ductility and fatigue resistance.

Design

Inspired by our research into aerospace fasteners Unbrako socket head screws have features of major importance. Socket depth is carefully controlled to maximise full tightening without reaming or cracking. Elliptical head to shank fillet, radiused-root runout and fully formed radiused threads all add to increased fatigue life.

Properties

Every melt of our steel is pre-tested and its treatment tailored to produce a consistent product with the exact amount of carbon in the atmosphere. Ensuring consistently higher stress levels.

Manufacturing Control

Close control at all stages of manufacture provides a reliable performance. We forge our socket screw heads for extra strength. The head bearing area is strictly perpendicular to screw body to provide satisfactory seating. Thread rolling gives extra strength to the product and also controls the accuracy of the thread geometry.

BUILD YOUR REPUTATION ON OURS

Insist on

