

IMPERIAL & METRIC FASTENERS

We all know that metric and imperial are the two main measures for fastener sizes both here in SA and worldwide. While the US market uses imperial measurements, metric fasteners are more common in the Europe. Metric has been in general use in SA since the mid 1960's. but there are many other fastener types available.

It doesn't necessarily follow that US uses imperial and Europe uses metric, in reality, it will often depend on where manufacturing is taking place. Generally speaking the item being manufactured, will have metric or imperial designated at the design stage. Whilst Bolt & Engineerings customers will generally know which measure, we are able to help out, where there is some dispute over size and type.

The differences will often go further the measurement used. The thread flank angles differ between US and European standards, such that an American standard coarse thread has a 60° flank angle, whereas British/Southern Africa standards are at 55°.

WHAT IS A METRIC FASTENER?

While metric clearly refers to the basic unit of measurement, they are measured diameter, thread pitch and length in millimetres.

When it comes to grades (representing tensile strength), the most commonly used are 8.8, (10.9 and 12.9 are available), simply put, the higher the grade, the stronger the fastener.

Metric fasteners are manufactured to one of five specification standards:

DIN:- Deutschland Industrial Norms – these are the most readily available in the UK.

ISO:- International Standards Organization

EN:- European Norms

ASME:- American Society of Mechanical Engineers

JIS:- Japanese Industrial Standards

WHAT IS AN IMPERIAL FASTENER?

Imperial fastener sizes work in a similar way to metric, except they are measured by diameter and length in inches. Thread sizes range from approximately 6 – 40 threads per inch (tpi).

There's also the consideration of thread pitch, where they are measured by diameter, thread pitch and length.

Imperial fasteners are graded by strength, in a similar way to metric. The higher the grade number (indicated on the head of the fastener), the stronger the fastener. Common grades available in imperial fasteners are SAE grade 5 & SAE grade 8.

HOW BOLT & ENGINEERING DISTRIBUTORS CAN HELP

We primarily sell fasteners, so our knowledge of the products and industry is wide and deep. We have been trading for over 38 years, building up unique knowledge amongst our team, meaning that we can normally find you what you need, or suggest alternatives.

Each on of our 9 branches warehouses hold a vast array of both current and obsolete stock, so we can often supply from our own stock.

We have strong alliances with manufacturers and can arrange to have special items manufactured, often at short lead times.

