

## STEELMASTERS AUCKLAND LTD

79-81 O'RORKE RD, PENROSE, AUCKLAND

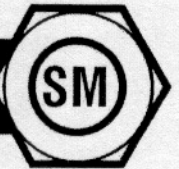
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# STEELMASTERS

Fastener Manufacturers and Distributors



## The Nuts & Bolts of it – June '06

Here we are nearly half way through the year already. Where has it gone?

What do you reckon about a Super 14 Final, in a sold out stadium, and nobody saw more than half the game. Fog was the winner on the day, according to Fitzy.

There are price increases starting to filter through as our Dollar weakens and the Bogey of China's insatiable appetite for metals and minerals pushes commodity prices up. Stainless Steels and Zinc are probably having the greatest effect on fastenings.

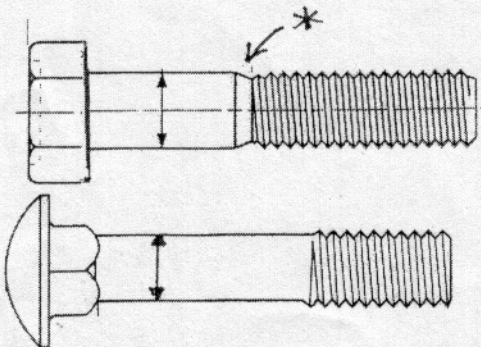
### Threaded Rods & Threading

Threaded rods come in many diameters, lengths, materials and finishes. These headless fasteners have a wide variety of uses, and we offer a vast array from stock as well as a fast turnaround on custom products.

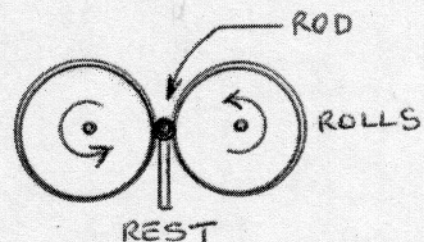
On Threaded Rod the thread can be the whole length or on one or both ends – Single or Double Ends. Threads can be Left Hand or Right Hand.

Threads can be produced by Cutting or Rolling. The Cutting process dictates that material is removed from full diameter bar, where as Rolling is actually a Cold Forming process in that it does not remove any material, and commences with a smaller bar diameter of approximately Pitch diameter.

If one looks carefully at a standard hexagon head bolt one can see taper into the thread where the shank has been extruded down to allow the thread to be rolled up to diameter.\* On a cup head bolt the bare shank is smaller (thread roll diameter) than the thread

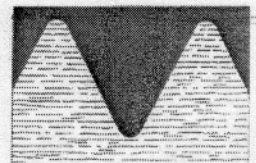


The Thread Rolling process involves one, two or sometimes three dies with grooves to form threads, or in some cases Knurls. As pressure is applied the feed stock is forced into the grooves on the dies and as the dies turn the thread is roll formed. Bolt machines usually have one stationary die and one reciprocating, while Threaded rod rollers will have two or three dies, all of which are in motion.

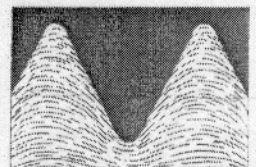


Advantages of thread rolling over cutting include:

- Material savings as no material is removed.
- Cold working produces a thread which most agree is 10% to 20% stronger, due to the grain being uninterrupted.
- The surface finish of a rolled thread is harder (and often smoother) than a cut thread offering greater wear resistance.
- Threads can be rolled at high speeds – much faster than cutting.
- The process is accurate and uniform.



CUT THREAD



ROLLED THREAD

**STEELMASTERS** can supply a full range of Threaded Rod, and Single and Double Bolt Ends, in standard sizes from stock. Further "specials" can be manufactured to order in most materials and finishes at short notice. The availability of feed stock for thread rolling may limit options for the less common threads. Please enquire.

**Branches at: WHANGAREI**

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**Fax 06 356 5630**

**NAPIER**

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**Fax 06 842 0098**

**Also in Australia:- Brisbane, Melbourne, Townsville, Rockhampton & Cairns**

**Visit our website at [www.steelmasters.co.nz](http://www.steelmasters.co.nz)**