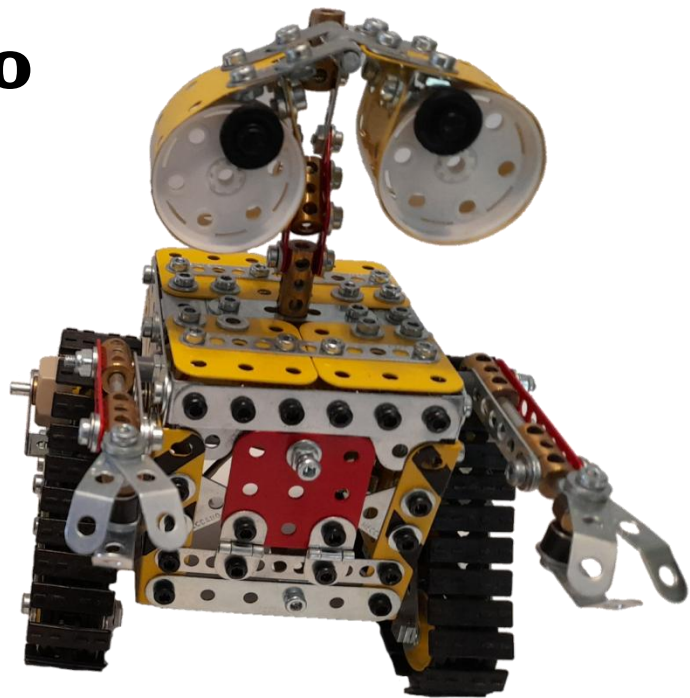


# Steel World vs Meccano



Actual size comparison



**MECCANO**  
ENGINEERING & ROBOTICS



Hex M3

Torx T8



The Steel World bolts are tiny in comparison to Meccano bolts. The early version of SW bolts were hex head but it was soon realised that the hex key supplied was rounding off and this resulted in the hex head in the bolts also rounding off. This was remedied by changing to Torx head bolts. Some of the older SW outfits may still have the hex key and hex bolts but SW tell me that all the new outfits like the tank have the new Torx bolts.

M2.5

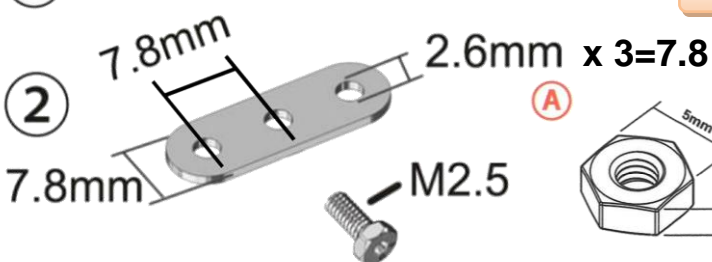
5/32" BSW

Since the inception of Meccano there have been literally hundreds of Metal Construction Systems spawned by competitors. Some that come to mind are the Australian Buz and EzyBilt that were virtually exact copies. There were also many systems that were similar but metric based. Many Chinese copies have 10mm spaced strips which make them appear roughly the same size, however Meccano constructors are well aware that close enough isn't good enough as the holes don't line up. If you look at the [MeccanoIndex](https://www.meccanoindex.co.uk/Other/index.php?id=1629688278) website by Tim Edwards you will see that there are 810 "Other Systems" listed!

<https://www.meccanoindex.co.uk/Other/index.php?id=1629688278>

Steel World stands apart from the Meccano clones mainly due to its size. Although the fully built models look to be similar in size to Meccano they are in fact much smaller and more intricate. With my fat fingers, and less than perfect eyesight, I struggle to build SW models but I do love the challenge. Of course my loyalties remain with Meccano as it was my childhood hobby and remains so to this day but Steel World isn't the same. It's a different system. So why is the hole spacing 7.8mm? It's the [Golden Ratio](#). (Google it.) Steel World designers wanted something smaller but still with the same ratio as Meccano and so the Golden Ratio was applied. Frank Hornby probably chose 1/2" spacing because an inch was the standard UK measurement. Chinese metric copies probably chose 10mm because it was close enough to 1/2" but Steel World sizing is quite deliberately based on the golden ratio.

① 1/2 inch × 0.618 ≈ 7.8mm



Torx

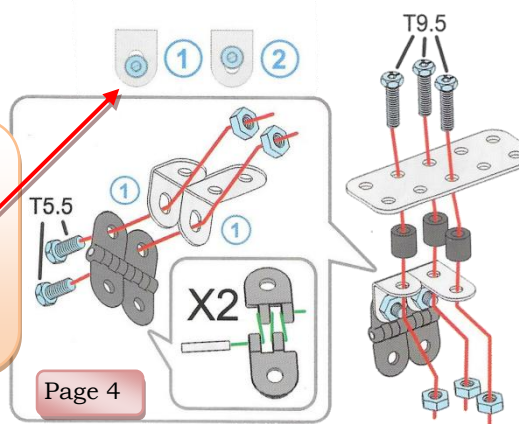
A

B

Steel World is not compatible with Meccano so don't buy it expecting to supplement your existing Meccano. It's a different experience altogether requiring a sharp eye and a steady hand. The quality is excellent and the radio controlled outfits are very easy to use as in my Meccano version of Wall-E. Currently you can only buy SW from Amazon USA and don't search for Wall-E as it's a trademark. Use the link below instead.

<https://www.amazon.com/stores/page/6ABBAED-DEEC-42A2-B63A-8D35C4110D19>

The SW manuals are clear and have some innovative features such as showing where to position bolts in a slotted hole.



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