The SR "Dovetail" System – One Profile. Two Centrelines. That's it.

Why is SR's dovetail system the best choice?

The basic bodies of the interchangeable SR Dovetail tool attachments are cast in one piece from alloy tool steel. This manufacturing process delivers a strength and durability that is highly superior to the commonly used "cut-&-weld".

To achieve consistent tightening torques after changing tool heads, the lever length must remain exactly the same. The one-piece cast SR tool attachments have precisely the same distance from the base of the dovetail to the axis of rotation of the screw or nut. This constant "centre-to-centre distance" is hardly achievable with the "cut-&-weld" process mentioned above.

The ***centre-line*** is the distance between the base of the tool carrier and the centre of the axis of rotation of the tool head used (cf. drawing below). Consequently, when applying torque, the centre-line is part of the total lever length and for this reason a relevant parameter.

Why is common centerline important?

Torque is a force that is applied to the axis of rotation over a certain lever length. If either the lever length or the applied force is changed, the transmitted torque changes. If you add an extension, you change the lever length. The same effect is produced if you use an exchangeable head with a different centre-line. This also changes the lever length.

Tool attachments with the same centre-line can thus be interchanged at will without having to re-adjust the torque wrench. Conversely, if the centre-lines are different, it is imperative to re-calculate the torque or re-adjust the torque wrench in each case.

Due to physical size limitations, Sturtevant Richmont's standard interchangeable attachments have two centre-lines. For spanner sizes up to 32 mm, the centre-line is typically 36.5 mm (1 7/16"). For spanner sizes 33 mm and larger, the centre-line increases to 98.4 mm (3 7/8"). The respective centre-lines are always constant in Sturtevant Richmont's interchangeable head series, which makes Sturtevant Richmont's dovetail connection system unique.

Sturtevant Richmont's unique dovetail design, which joins the tool attachment to the torque wrench, provides an exceptionally wear-resistant connection and also ensures universal interchangeability of the tool attachments.

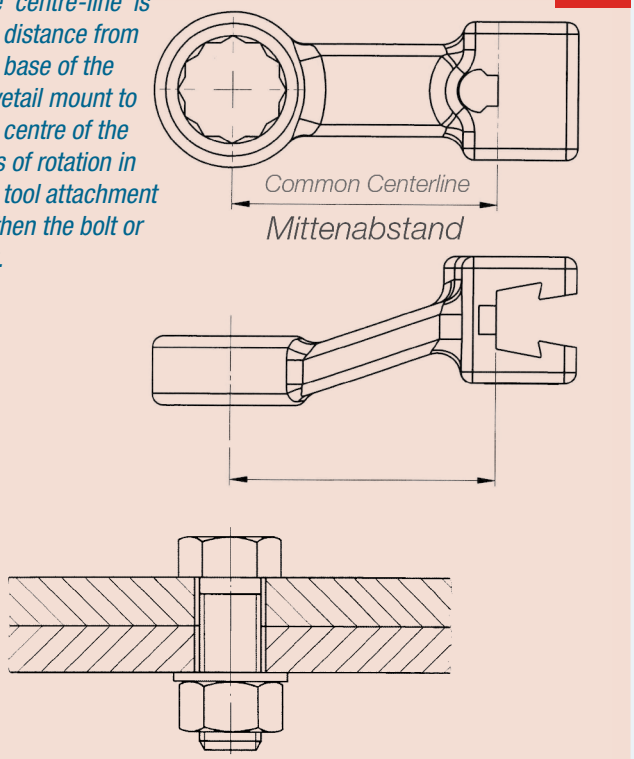
The situation is different, for example, with rectangular adaptors (9×12; 14×18; etc.): although the insertion cross-section is the same for the various manufacturers, they usually differ in the insertion depth and often have several different head lengths within the same series as the spanner size increases. There are therefore several different centre distances, which could be avoided, and you would therefore have to check the torque setting every time you change the head and adjust it if necessary.

The result is that these suppliers sell you two torque wrenches with the same torque capacity. One wrench for handling large screws and the other for handling the smaller ones. Do you want to buy and calibrate two wrenches for the same torque value when one is sufficient?

Why not just buy the wrench where all the heads fit all the spanners? That would be the Sturtevant Richmont.

INFO

The 'centre-line' is the distance from the base of the dovetail mount to the centre of the axis of rotation in the tool attachment or then the bolt or nut.



Sturtevant Richmont's globally unique 'Dovetail' profile fits any interchangeable head with a dovetail mount – from very small to very large.

With the SR dovetail system, you first increase the number of your heads – and not by any necessity the number of your wrenches!