


**Atlas Copco Rock Drills Tekniska Riktlinjer
AB**
Approved

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Document name:

Weld Sizes - General Guidelines**Document text**

Copy of old document ENG-0034.

1.0 Document Overview :

- 1.1 To establish an engineering and guideline for sizing welds on drawings that do not call out weld sizes . Where weld size is specified on drawing , follow those instructions.
- 1.2 To be used in manufacturing on old drawings that are prior to part number 610000 (5561000000). Drawings created after that point will have their weld sizes determined by engineering , and missing weld sizes will subsequently be added to the print.
- 1.3 This document can be used outside of Atlas Copco Rock Drills AB . for determination of missing weld sizes only on old drawings that are prior to part number 610000 (5561000000). Contact Atlas Copco Rock Drills AB. Engineering for weld size determination on newer drawings or clarification of the application of this specification.

2.0 Process Overview :

- 2.1 Description: The weld sizing for the various areas is as follows and as shown on charts A and B and Figure 1 and 2.
 - 2.2.1 General Guidelines for Fillet Welds on One or Two Sides:
 - 2.2.1.1 Booms, Buckets and Loadframes: Weld size = 1/2 thickness of thinnest plate.
 - 2.2.1.2 All Other Areas:
 - 2.2.1.2.1 Two sides weld size = 2/7 thickness of thinnest plate.
 - 2.2.1.2.2 One side weld size = 1/2 thickness of thinnest plate.
 - 2.2.2 Supplementary Guidelines:
 - 2.2.2.1 For plate over 25mm thick, use weld size established for the 25mm thick material.
 - 2.2.2.2 For 6mm and lighter plate, use a weld size $a=0.7 \times T$, but in no case should the weld be smaller than 3mm unless plate is thinner than 3mm.
 - 2.2.3 Weld Size Specifications:
 - 2.2.3.1 Booms, Buckets and Loadframes:

Chart A

Thickness of Inner Plate (T)	Fillet Weld Size	
	Weld Both Sides (1/2T) Throat Thickness (a)	Weld One Side (1/2T) Throat Thickness (a)
mm	mm	mm
3	2	2
6	3	3
10	5	5
12	6	6
20	10	10
25	13	13
> 25	13	13

- 2.2.3.2 All Areas Except Boom, Bucket and Loadframe:

Chart B

Thickness of Inner Plate (T)	Fillet Weld Size	
	Weld Both Sides (3/4T) Throat Thickness (a)	Weld One Side (3/4T) Throat Thickness (a)
mm	mm	mm
3	1	1
6	2	2
10	3	3
12	4	4
20	6	6
25	7	7
>25	7	7

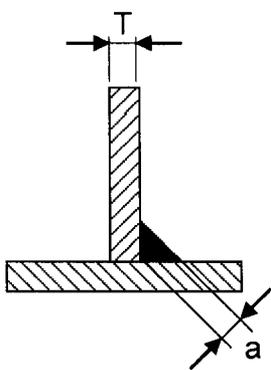


Figure 1. Weld one side

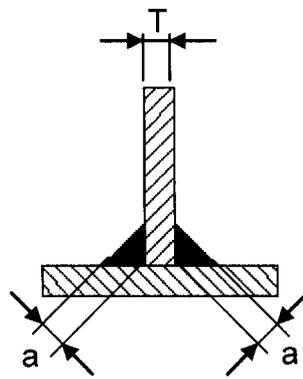


Figure 2. Weld two sides

Chart B

2.3 Symbols: Symbols are to be per 6890 K Symbols and Designations -Welding