CWA UpDate

Canadian Welding Association | Association canadienne de soudage

Issue 4- February 1st (2016/2017 season) **Hamilton and Region Chapter**

Please plan to attend our next seminar

Wednesday February 1, 2017
Holiday Inn Burlington Hotel & Conference Centre"
Located at 3063 South Service Road, Burlington. Attitude adjustment: 5:30 p.m. Dinner: 6:00 (Sharp) Seminar 7:00 pm Dinner entrance fees for this meeting are: $20 for students, $35.00 (members and $40 for non-members
Note: "*First year"* basic membership is free (*at present*)
You **must** reserve for Dinner.

Topic

Seminar Topic: Waveforms in Arc Welding of Aluminum Alloys

By: **Jian Zhang**

Manager, Alloy Welding Technology Centre and Application Engineering, Indalco Alloys, a Lincoln Electric Company of Canada

Jian has worked in welding industrial for over 30 years and been with Lincoln Electric since 2005. His focuses are welding of Ferro and non-Ferro alloys, especially aluminum alloys, R&D of filler metals, welding process & procedures development, solidification and cracking.

Jian holds degrees in Welding Engineering from Tsinghua University and University of Waterloo. He has number of publications on solidification cracking and fracture mechanics of welded structures. He is the co-author of Chapter 1 of AWS Welding Handbook, Volume 5 on Aluminum and Aluminum Alloys, and member of AWS A5 main committee on Filler Metal and Applied Materials, and A5C committee on Aluminum-Alloy Filler Metals.

Wednesday March 1/2017
Topic: Education / Industry Question Panel
Contact any Hamilton Chapter Board Member for Tickets.
Note! You must reserve in advance

Please register
by contacting **Franco Piccoli**
(905) 317-6543
by Friday January 27, 2017
Alternate Contact:
Don Hutt (905) 548-7200 (ext.3079)

Educational Information:

Extracted from CWB module 03 (page 133)

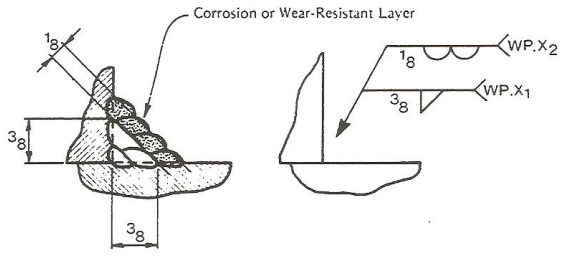
6.3 Other Applications

6.3.1 Surfacing a Weld Face

As pointed out earlier, another possible application of surfacing is to provide corrosion- or wear-resistance to mild steel weld metal. This is shown in Example 5, as applied to the face of a fillet weld:

EXAMPLE 5

SURFACING A FILLET WELD



Desired Weld

Symbol

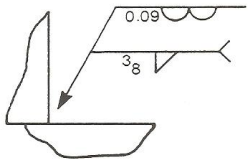
References to pertinent welding procedure specifications are placed in the tail of the symbol to ensure that the intended filler materials are used for each weld.

The same Example may be used to illustrate the application of a surfacing symbol for the purpose of increasing the size of the fillet. In such case, however, the size of the surfacing weld will have to be calculated from the increment in the leg size as required for the new fillet weld.

If the new required size were to be ½ inch, the leg size increment would amount to 1/8 inch. Translated into the thickness of a surfacing weld, this dimension would become:

$$1/8 \times 1/1.4 = 0.089 = 0.09 \text{ in.}$$

Hence, in order to obtain a ½-inch fillet weld from the 3/8-inch size by surfacing, the required welding symbol would be:



(for more information see page 133 CWB module 03 *"Welding Symbols"*)

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