

Agenda Item:		650-1110
Title:	Define b_{min} in Figure 5.25	
Date:	05-22-22	
Contact:	Name:	David Rosenkrantz
	Company:	Access Engineering
	Phone:	610 349-4429
	E-mail:	DavidR@Fast.net
Purpose 1:	To add clarity to Figure 5.25 when the top wind girder is used as a walkway or otherwise increased in width beyond that required to achieve the calculated section modulus.	
Purpose 2:	To fix Figure 5.24 Detail e – adding underside stiffener to shell weld	
Source:	SGD Doug Bayles Spring 2022 Meeting	
Revision:	0	
Impact:	Potentially significant cost savings in the top stiffener when it is used as a walkway	
Rationale:	Add clarity to the standard	
History:	None	
References:	Figure 5.24, Table 5.19, Sections 5.9.5.3 and 5.9.5.5, Figure 5.24, Section 5.5.5.8	
Discussion 1:	<p>5.9.5.7 includes this: The stiffening members shall extend beyond the end of the opening for a distance greater than or equal to the minimum depth of the regular ring sections.</p> <p>5.9.5.6 includes this: A top wind girder or any portion of it that is specified as a walkway shall have a width not less than 710 mm (28 in.)...</p> <p>Although the "min" in b_{min} suggests the reader choose the lowest value of all choices, it is not crystal clear how to choose, and I can see where the minimum width could be either, or the greater of the two, or the lesser of the two.</p> <p>Note that Figure 5.25 includes a "b" dimension and a "b_{min}" dimension. "b" is defined in Table 5.19 but not "b_{min}"</p>	
Change 1:	<p>Add note 6 to Figure 5.25 as follows:</p> <p>6. b_{min} is the minimum required stiffening ring width, chosen from Table 5.19 to satisfy Z as calculated in 5.9.5.3 and/or 5.9.5.5</p>	

<p>Discussion 2:</p>	<p>Per 5.1.5.8 the topside weld is a “continuous” weld while the underside weld is a “seal” weld unless otherwise specified by the purchaser. Per 5.1.3.6.2 the purchaser may elect to use intermittent welding and Annex L Section 11 includes an option for intermittent welding.</p> <p>Some of the illustration only show a topside weld even though an underside weld is required, whether it be a seal weld or an intermittent weld.</p>
<p>Change 2:</p>	<p>The original Figure 5.24 shows only a topside weld in three of the details b, c and e.</p> <p>See new Figure 5.24 with underside welds shown. The new underside welds are shown 75% of their corresponding topside welds to distinguish between “continuous” topside welds and “seal” or “intermittent” underside welds.</p>

