**Record #20-1431: Proposed Revision to update Division 2 to be consistent with Division 1 Paragraph IWB-3600**

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### DIVISION 1 REVISION (Division 1 changes shown for information)  
### DIVISION 2 REVISION

<table>
<thead>
<tr>
<th>Section IWB-3600</th>
<th>RIM 1.5 &amp; 3.5</th>
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<tbody>
<tr>
<td><strong>IWB-3600</strong></td>
<td><strong>VII-1.5</strong></td>
</tr>
<tr>
<td><strong>ANALYTICAL EVALUATION OF PLANAR FLAWS</strong></td>
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<tr>
<td><strong>(17)</strong> IWB-3610</td>
<td><strong>VII-1.5.1 Acceptance Criteria for Ferritic Steel Components 4 in. (100 mm) and Greater in Thickness</strong></td>
</tr>
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<td><strong>ACCEPTANCE CRITERIA FOR FERRITIC STEEL COMPONENTS 4 in. (100 mm) AND GREATER IN THICKNESS</strong></td>
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<tr>
<td><em>(a)</em> A flaw that exceeds the size of allowable flaws defined in IWB-3500 may be analytically evaluated using procedures such as described in Nonmandatory Appendix A to calculate its growth until the next inspection or the end of service lifetime of the component.</td>
<td><em>(a)</em> A flaw that exceeds the size of allowable flaws defined in VII-1.4 may be analytically evaluated using procedures such as described in Division 1, Nonmandatory Appendix A to calculate its growth until the next inspection or the end of service lifetime of the component.</td>
</tr>
<tr>
<td><em>(b)</em> For purposes of analytical evaluation, the depth of flaws in clad components shall be defined in accordance with Figure IWB-3610-1 as follows:</td>
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<tr>
<td><em>(1)</em> Category 1 — A flaw that lies entirely in the cladding need not be analytically evaluated.</td>
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<td><em>(2)</em> Category 2 — A surface flaw that penetrates the cladding and extends into the ferritic steel shall be analytically evaluated on the basis of the total flaw depth in both the ferritic steel and cladding.</td>
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<tr>
<td><em>(3)</em> Category 3 — A subsurface flaw that lies in both the ferritic steel and the cladding shall be treated as either a surface or a subsurface flaw depending on the relationship between S and d as shown in Figure IWB-3610-1.</td>
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<td><em>(4)</em> Category 4 — A subsurface flaw that lies entirely in the ferritic steel and terminates at the weld metal interface shall be treated as either a surface or subsurface flaw depending on the relationship between S and d as shown in Figure IWB-3610-1.</td>
<td><em>(4)</em> Category 4 — A subsurface flaw that lies entirely in the ferritic steel and terminates at the weld metal interface shall be treated as either a surface or subsurface flaw depending on the relationship between S and d as shown in Figure IWB-3610-1.</td>
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<tr>
<td><em>(5)</em> Category 5 — A subsurface flaw contained entirely in the ferritic steel that lies in both the ferritic steel and the cladding shall be treated as either a surface or a subsurface flaw depending on the relationship between S and d as shown in Figure IWB-3610-1.</td>
<td><em>(5)</em> Category 5 — A subsurface flaw contained entirely in the ferritic steel that lies in both the ferritic steel and the cladding shall be treated as either a surface or a subsurface flaw depending on the relationship between S and d as shown in Figure IWB-3610-1.</td>
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<td><em>(6)</em> When examination results do not permit accurate determination of the flaw category, the more conservative category shall be selected.</td>
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<td><img src="image" alt="IWB-3514" /></td>
<td><img src="image" alt="VII-1.4.3" /></td>
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**INSERT A**

The analytical evaluation of flaws is addressed by the procedures in this subsection.

(a) A flaw that exceeds the size of allowable flaws defined in IWB-3500 may be analytically evaluated using procedures described in this subsection to calculate flaw growth until the next inspection or the end of the service lifetime of the component or piping item.

(b) For purposes of analytical evaluation, the depth of flaws in clad components and piping items shall be defined in accordance with Figure IWB-3600-1 as follows:

1. Category 1 — A flaw that lies entirely in the cladding, as shown in Figure IWB-3600-1, need not be analytically evaluated.

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<td>(4) Category 4 — A subsurface flaw that lies entirely in the ferritic steel and terminates at the weld metal interface shall be treated as either a surface or subsurface flaw depending on the relationship between $S$ and $d$ as shown in Division 1, Figure IWB-3600-1.</td>
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<tr>
<td>(5) Category 5 — A subsurface flaw contained entirely in the ferritic steel shall be treated as either a surface or a subsurface flaw depending on the relationship between $S$ and $d$ as shown in Division 1, Figure IWB-3600-1.</td>
<td></td>
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<tr>
<td>(c) The flaw characterization rules of Division 1, IWA-3300 shall be used for transformation of a subsurface flaw to a surface flaw using dimensions $S$ and $d$ illustrated in Division 1, Figure IWB-3600-1.</td>
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<td>(d) When examination results do not permit accurate determination of the flaw category, a more conservative category shall be selected.</td>
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**INSERT D**

(a) A flaw that exceeds the size of allowable flaws defined in VII-3.4.1 and VII-3.4.2 may be analytically evaluated using procedures such as described in Division 1, Nonmandatory Appendix A to calculate its growth until the next inspection or the end of service lifetime of the component.

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