

4.19.2 U.S. Customary Form Specification Sheet For ASME Section VIII, Division 2 Bellows Expansion Joints, US Customary Units

Date: _____		Applicable ASME Code Edition: _____	
1. Item Number: _____		Vessel Manufacturer: _____	
2. Drawing/Tag/Serial/Job Number: _____		Vessel Owner: _____	
3. Quantity: _____		Installation Location: _____	
4. Size: _____ OD _____ ID in.		Expansion Joint Overall Length: _____ in.	
5. Internal Pressure: Design _____ psig			
6. External Pressure: Design _____ psig			
7. Vessel Manufacturer Hydrotest Pressure		Internal _____ psig	External _____ psig
8. Temperature	Design _____ °F	Operating _____ °F	Upset _____ °F
9. Vessel rating	MAWP _____ psig	MDMT _____ °F	Installed Position:
10. Design Movements: Axial Compression: (-) _____ in. Axial Extension: (+) _____ in. Lateral: _____ in. Angular: _____ deg			
11. Specified number of Cycles: _____			
12. Shell Material: _____		Bellows Material: _____	
13. Shell thickness _____ in. Shell Corrosion Allowance: Internal: _____ in. External: _____ in.			
14. Shell Radiography: Spot / Full			
15. End Preparation: Square Cut Outside Bevel Inside Bevel Double Bevel (Describe in Line 23 if special)			
16. Heat Exchanger Tube Length Between Inner Tubesheet Faces: _____ in.			
17. Maximum Bellows Spring Rate:		No	Yes – _____ lbs/in
18. Internal Liner:		No	Yes – Material _____
19. Drain Holes in Liner:		No	Yes – Quantity/Size: _____
20. Liner Flush with Shell ID:		No	Yes – Telescoping Liners? No Yes
21. External Cover:		No	Yes – Material: _____
22. Pre-Production Approvals Required:		No	Yes – Drawings / Bellows Calculations / Weld Procedures
23. Additional Recommendations: (i.e. bellows pre-set, ultrasonic examination, etc.)			

Temporary shipping bars are required to maintain assembly length during shipping and vessel fabrication only, and ARE NOT to be used during vessel hydrotest for expansion joint pressure restraint (see paragraph 4.19.3.1(c) and 4.19.3.1(d)).