

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

Date: _____/_____/_____		Applicable ASME Code Edition: _____	
		Vessel Class: _____	
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: Horz. Vert.
10. Design Movements: Axial Compression: (–) _____ in. Axial Extension: (+) _____ in. Lateral: _____ in. Angular: _____ deg			
11. Specified Number of Cycles: _____			
12. Design Torsion: Moment _____ in.-lb		or Twist Angle: _____ deg	
13. Shell Material: _____		Bellows Material: _____	
14. Shell Thickness: _____ in. Shell Corrosion Allowance: Internal: _____ in. External: _____ in.			
15. Shell Radiography: Spot / Full			
16. End Preparation: Square Cut Outside Bevel Inside Bevel Double Bevel (Describe in Line 24 if special)			
17. Heat Exchanger Tube Length Between Inner Tubesheet Faces: _____ in.			
18. Maximum Bellows Spring Rate:		No	Yes – _____ lb/in.
19. Internal Liner:		No	Yes – Material _____
20. Drain Holes in Liner:		No	Yes – Quantity/Size: _____
21. Liner Flush with Shell ID:		No	Yes – Telescoping Liners? No Yes
22. External Cover:		No	Yes – Material: _____
23. Pre-Production Approvals Required:		No	Yes – Drawings/Bellows Calculations/Weld Procedures
24. Additional Recommendations (i.e., bellows pre-set, ultrasonic examination, etc.):			