

4.19.1 Metric Form Specification Sheet For ASME Section VIII, Division 2 Bellows Expansion Joints, Metric Units

Date: ____/____/____		Applicable ASME Code Edition: _____	
1. Item Number: _____		Vessel Class: _____	
2. Drawing/Tag/Serial/Job Number: _____		Vessel Manufacturer: _____	
3. Quantity: _____		Vessel Owner: _____	
4. Size: ____ OD ____ ID mm		Installation Location: _____	
		Expansion Joint Overall Length: _____ mm	
5. Internal Pressure: Design ____ MPa			
6. External Pressure: Design ____ MPa			
7. Vessel Manufacturer Hydrotest Pressure		Internal ____ MPa	External ____ MPa
8. Temperature	Design ____ °C	Operating ____ °C	Upset ____ °C
9. Vessel Rating	MAWP ____ MPa	MDMT ____ °C	Installed Position: Horz. Vert.
10. Design Movements [Note (1)]: Axial Compression: (-) ____ mm Axial Extension: (+) ____ mm Lateral: ____ mm Angular: ____ deg			
11. Specified Number of Cycles: _____			
12. Design Torsion: Moment ____ N-mm or Twist Angle: ____ deg			
13. Shell Material: _____		Bellows Material: _____	
14. Shell Thickness: ____ mm Shell Corrosion Allowance: Internal: ____ mm External: ____ mm			
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: ____ mm			
18. Maximum Bellows Spring Rate:		No	Yes – ____ N/mm
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 Requirements (i.e., bellows pre-set, ultrasonic examination, etc.): 			

NOTE:

- (1) For multiple movements, design movements (line 10) can be replaced by operating movements, which should then be described under "Additional Requirements" (line 24). For each one of them, axial compression or axial extension, lateral deflection and angular rotation at each extremity of cycle, together with the specified number of cycles, should be indicated. When known, the order of occurrence of the movements should also be indicated.