## FORM Q-108 RECOMMENDED FORM FOR QUALIFYING THE VESSEL DESIGN AND THE PROCEDURE SPECIFICATION USED IN FABRICATING CONTACT-MOLDED, FIBER-REINFORCED PLASTIC PRESSURE VESSELS (CLASS I) (Revision B - 2011)

			(	,				
(A c	hange in any of the e	ssential variables de	noted by an asterisk b	elow requires a new P	rocedure Specification.)			
I.	Procedure Specificat	ion Number						
II.	Vessel or Vessel Part	Identification		////				
III.	Materials for Vessel	/Vessel Part or Secor	dary Overlay	(Use separate sheet for each separate part or component)				
				*••	*04			
	Reinforcements 1. Material No. 1	*Fiber Type	*Fiber Form	*Manufacture				
	2. Material No. 2							
	3. Material No. 3							
	4. Material No. 4 Resin System	Materia		Manufacturer	Manufacturing No.			
	*1. Resin	Wateria		Manufacturer				
	*2. Catalyst							
	*3. Promoter							
IV.	Laminate Construction for Vessel or Vessel Part (Use separate sheet for each part)							
	*Total Number of Plies Total Thickness *Ply Sequence and Orientation (Ply No. 1 next to process)							
	Ply No.	Fiber Material N		per Orientation	Reference Axis			
		<u></u>	<u></u>					
	(Use additional sheets if necessary)							
	*Cure Method		*Post Cure	°F (°	°C) hr			
	C		+/					
	*Design Fiber by W	/eight%	b +/−	%				
V.	Assembly of Vessel Parts							
	Bond to Join Vessel Part A to Vessel Part B							
	(Use separate sheet for each Joint)							
	*Method of Surface Preparation for Secondary Overlay							
	*Distance of S.P. Fr	om Mating Joint: Pa	art A	in. Part B	in.			
	Overlay Construction — Interior Surface (if applicable)							
		Thickn	ess *0v	erlay Length				
(07/11)	)							

## FORM Q-108 (CONT'D) (Revision B — 2011)

Ply No.	Fiber Material No.	Fiber Orientation	<u>1</u>	Reference Axis	
*Cure Method		*Post Cure	°F (°C)	hr	
*Design Barcol Hardness		+/			
*Design Fiber by W					
Overlay Construction					
		*Overlay Length			
*Ply Sequence and					
Ply No.	Fiber Material No.	Fiber Orientation	<u>1</u>	Reference Axis	
		se additional sheets if necessary)			
			°F (°C)	hr	
*Design Barcol Har	dness	*Post Cure	°F (°C)	hr	
*Design Barcol Har		*Post Cure	°F (°C)	hr	
*Design Barcol Har	dness	*Post Cure	°F (°C)	hr	
*Design Barcol Har *Design Fiber by W	dness% +	*Post Cure	°F (°C)	hr	
*Design Barcol Har *Design Fiber by W Summary	dness% +	*Post Cure		hr	
*Design Barcol Har *Design Fiber by W <u>Summary</u> <u>Component/Part Fal</u> <u>No.</u>	dness % + /eight % +  brication	*Post Cure +/ -/ %			
*Design Barcol Har *Design Fiber by W <u>Summary</u> <u>Component/Part Fal</u> <u>No.</u>	dness % + /eight % +  <u>brication</u> <u>Part Identification</u>	*Post Cure +/ -/ %			
*Design Barcol Har *Design Fiber by W <u>Summary</u> <u>Component/Part Fal</u> <u>No.</u>	dness % + % +  brication Part Identification	*Post Cure +/ ./%			
*Design Barcol Har *Design Fiber by W <u>Summary</u> <u>Component/Part Fal</u> <u>No.</u> <u>1</u> <u>2</u>	dness% + % +  brication Part Identification	*Post Cure +/ ./%			

## FORM Q-108 (CONT'D) (Revision B — 2011)

Comp	ponent/Part Assembly													
No.	Part A	To	Part B	Procedure Specification No.										
1														
<u>2</u> <u>3</u>				· · · · · · · · · · · · · · · · · · ·										
<u>4</u>														
5 6				·										
				in <sup>3</sup> (mm <sup>3</sup> )										
	*Vessel Volumeric Expansion in. <sup>3</sup> (mm <sup>3</sup> ) *Vessel Weight													
	Qualification													
	Vessel(s) Serial Number(s)													
	Design Report Number													
	·													
		Edition and Addenda	a (if applicable) Date	Code Case No.										
	We certify that the statements made in this Specification are correct.													
	Date(mm/dd/yyyy)	Signe												
	(, 20, 7777)	By	(Fabric	cator)										
	Certificate of Authorization I			Expires										
		CERTIFICAT	ION BY SHOP INSPECTO											
	OF		ESIGN AND FABRICATION											
	ocedure Specification of													
for			process of the second sec	of fabricating vessel(s) described in										
	(User)	C C		(Fabricator)										
De	sign Report number													
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by of have inspected the components described in Part I of the Procedure Specification and have examined the Quality Control records documenting its fabrication and state that, to the best of my knowledge and belief, the Fabricator has fabricated the vessel component(s) in accordance with this Procedure Specification and the requirements of Section X of the ASME BOILER AND PRESSURE VESSEL CODE, Fiber-Reinforced Plastic Pressure Vessels.														
										360	NON X OF THE ASIME BOILER	AND THESSORE VES	SEE CODE, I Iber-Meimor	
														any warranty, expressed or implied,
										concerning the design procedure covered by the Fabricator's Design Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising				
	m or connected with this in		,	,										
Dat	te	Commission												
	(mm/dd/yyyy)		(Nationa	al Board Number and Endorsement)										
	(Aut	horized Inspector's Signature)	)											