

APPENDIX 1 QC INSPECTION AND CERTIFICATION REQUIREMENTS GUIDELINES MATRIX

Harbour Energy QC Inspection and Certification Requirement Guidelines

Equipment/ Material	Indicative Criticality Rating	Certification Requirements													Inspection Requirements/SQS Intervention											
		No specific Safety requirements	Dangers Goods Declaration/MSDS	LOLER Certification/ Tagging/Colour coded	PED/Declaration of conformity	Certificate of Conformity	UKCA/CEC Marking	3.1 Material Certification	3.2 Material Certification	Function Test/Pressure Test Report	EX Certification/ ATEX Cert	Inspection Release Certificate	Export Compliance Licence		Pre-Qualification Audit/ Assurance	KOM/Pre-Production Meeting	Material Verification	Welding/Special Process	Pressure Test/ Function Test/FAT	IVB Input	Final Inspection	Goods-in at Warehouse	Packaging Checks	Maintenance at Warehouse		
Fabricated Items																										
Production Flowlines	High	X			X	X			X	X		X			X	X	X	X	X	X Company IVB	X	X	X			
Hydrocarbon Service Carbon Steel Spools	Med	X			X	X		X		X		X					X		X		X	X	X			
Hydrocarbon Service Stainless Steel Spools	Med	X			X	X		X	X For High Criticality Spools	X		X					X		X		X	X	X			
Hydrocarbon Service Duplex/Super-Duplex Spools	Med	X			X	X		X	X	X		X					X		X		X	X	X			
Carbon Steel Spools (Utility/ Non-Hydrocarbon)	Med	X				X		X		X		X					X		X		X	X	X			
Stainless Steel Spools (Utility/ Non-Hydrocarbon)	Med	X				X		X		X		X					X		X		X	X	X			
Duplex/Super-Duplex Spools (Utility/ Non-Hydrocarbon)	Med	X				X		X		X		X	TBC 2B250h				X		X		X	X	X			
Conductors	Med	X				X		X				X	TBC 2B250h				X	X			X	X				
Casing Joints	Med	X				X		X				X	TBC 2B250h				X	X			X	X				
Non-Certified Piping (e.g. Brass, Copper, Plastic)	Low	X				X																X				
Structural Steel (Primary and Secondary)	Med			X		X		X				X					X	X		X Company IVB for Primary Steel	X	X				
Structural Steel (Tertiary)	Low	X				X		X				X					X				X	X				

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Gratings	Low	X				X		X				X					X				X	X		
Fire Rated Doors	Med	X				X	X					X									X	X	X	
Crane Booms	High			X		X		X				X				X	X	X	X	X Company IVB Input	X		X	
Clamps/Connectors (Hydrocarbon Services)	Low	X				X		X				X					X				X	X	X	
Clamps/Connectors (Utility/Non-Hydrocarbon)	Low	X						X									X					X	X	
Flanges	Med	X				X		X				X					X				X	X	X	
Blank Flanges	Low	X				X		X		X		X					X				X	X	X	
Stud Bolts & nuts	Low	X				X		X									X					X		
Spiral Wound Gaskets	Bulks	X				X		X														X		
Gaskets	Bulks	X				X		X														X		
Pressure retaining bolts & nuts	Low	X				X		X									X					X		
Non-pressure retaining bolts & nuts	Bulks	X				X																X		
Valves																								
Emergency Shutdown Valves (ESDV) – including ESD/BDV	High	X			X	X	X		X	X		X	TBC 2B350g 2A226		X	X	X	X	X	X Contractor IVB & Company IVB	X	X	X	X
Company Specified Designed/ Engineered Valves	High	X			X	X	X		X	X		X	TBC 2B350g 2A226		X	X	X	X	X	X Contractor IVB & Company IVB	X	X	X	X
Manufactured to order – Actuated Valves	High/Med	X			X	X	X	X		X	X	X	TBC 2B350g 2A226			X	X		X		X	X	X	X
Manufactured to order Valves – Hydrocarbon Service	Med	X			X	X	X	X		X		X	TBC 2B350g 2A226			X	X		X		X	X	X	X
Manufactured to order Non-Hydrocarbon Service	Med	X				X	X	X		X		X	TBC 2B350g 2A226			X	X		X		X	X	X	X

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Check/Control Valves (Off the shelf)	Low	X			X	X	X	X		X		X	TBC 2B350g 2A226								X	X	X	X	
Double Block& Bleed (DBB) Valves (Off the Shelf)	Low	X			X	X	X	X		X		X	TBC 2B350g 2A226								X	X	X	X	
PSV/Instrumentation Valves (Off the Shelf)	Low	X			X	X	X	X		X		X	TBC 2B350g 2A226								X	X	X	X	
Actuators	Med	X				X	X			X	X	X							X		X	X	X		
Studs, Bolts and nuts (inc. kits) – Topside Valves	Low	X				X		X									X					X			
Gaskets	Low	X				X		X														X			
Control Pannels	Low	X				X	X			X	X	X							X		X	X			
Mechanical/Packages																									
Mechanical Packages for Hydrocarbon Service (e.g. Vessels, Gas Power Generation, Compression)	High			X	X	X	X	X	X For hydro-carbon containing items only	X	X	X	Pumps TBC 2B350i 2B233 Compress ors TBC 2B233		X	X	X	X	X	X Company IVB	X	X	X	X	
Mechanical Packages – Non-Hydrocarbon Service (e.g. Cranes, Pedestal, Chemical Injection Skids, Produced Water Systems, HPU Skids, Coiled Tubing, Jacking and Skidding Fames)	Med			X	X	X	X	X		X	X	X	Pumps TBC 2B350i 2B233 Compress ors TBC 2B233			X	X		X	X Company IVB for SECE only	X		X	x	
HVAC System Packages	Med			X		X	X			X	X	X				X			X		X		X	X	
Mechanical Spares – Bearings, Belts, Filters etc.	Bulk	X				X	X						Bearings TBC 2A001a 2A001b									X	X		

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Bulk Transfer Hoses	Med			X For Lifting Points		X	X			X		X				X For New Supplier			X		X	X	X			
Critical Hose Assemblies/ Class 4 Hoses	Med	X				X	X			X		X				X			X		X	X				
Non-Critical Hose Assemblies/ Class 1-3 Hoses	Low	X				X	X			X												X	X			
E&I, Systems and Comms																										
Distribution Boards	Low	X				X	X			X	X											X				
HV/LV Motors	Low	X				X	X			X	X											X				
UPS & Batteries	Low	X				X	X			X			UPS TBC 3A226 3A227 0b001.j.6									X				
HV/LV Switchgear	Low	X				X	X			X	X											X				
Control Centres	Low	X				X	X			X	X											X				
Transformers	Low	X				X	X			X	X											X				
Process Heaters	Low	X				X	X			X	X											X				
Junction Boxes/ Control Pannels	Low	X				X	X			X	X											X				
Process Regulators, Thermowell, Level Transmitters, Flow Meters	Med	X				X	X			X	X	X							X		X					
MCS Updates	Med	X				X	X			X									X		X					
Ex Accessories – Electric Motors, heaters, light Fixtures, Plugs, Barriers, proximity Switch, Limit Switch, Flying Leads etc	Low	X				X	X				X		Proximity Switches TBC 3A001									X	X			
Ex Glands, Adaptors, Reducers, Plugs etc.	Low	X				X	X				X											X				
Instrumentation Tube	Low	X				X	X	X														X	X			

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Cable- General purpose, Electrical, Instrumentation etc	Low	X				X	X				X											X	X	
Fire and gas Detectors	Low	X				X	X			X	X											X		
Orifice Plates	Low	X				X	X															X		
Burst Discs	Low	X				X	X															X		
Pressure/Temperature gauges – Non-Fiscal	Low	X				X	X			X	X											X	X	
Solenoid Valves	Low	X				X	X			X	X											X	X	
Probes/Monitors	Low	X				X	X			X	X											X		
Non-Ex Equipment/ Accessories (Fuses, Conduit, Inverters, Light Bulbs, Motor Spares, Batteries, Stands, Brackets, Unistrut)	Bulks	X				X	X															X		
Safety Equipment																								
Lifeboats	Med			X		X	X			X	X	X				X			X	X Company IVB	X			
Davits including Winches	Med			X		X	X			X	X	X				X			X	X Company IVB	X			
Safety Harness	Low			X		X	X															X	X	
Fire Extinguishers	Low		X			X	X															X	X	
Life Rafts, Donuts	Low		X	X		X	X															X	X	
PPE, Signage	Bulks	X				X	X															X		
Lifejackets, Abandonment Suits	Bulks	X				X	X															X		
Electrical Safety Equipment	Bulks	X				X	X															X		

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Subsea																									
Manifolds	High			X		X		X Structural componen ts	X Hydro-carbon componen ts	X		X			X	X	X	X	X	X Company IVB	X		X		
Flowlines (Rigid/Pipe-in-Pipe)	High	X				X			X	X		X	TBC 2B250h		X	X	X	X	X	X Company IVB	X				
Flowlines (Flexible)	High			X Installati on Reels Only		X			X Steel Tubing Only	X		X	TBC 2B250h		X	X	X	X	X	X Company IVB	X		X		
Control Umbilicals	High			X Installati on Reels Only		X			X Steel Tubing Only	X		X			X	X	X	X	X		X		X		
SSIVs/Large Bore Valves	High	X				X			X	X		X			X	X	X	X	X	X Contractor IVB & Company IVB	X	X	X	X	
Control Systems	Med			X		X	X			X		X				X			X		X	X	X		
Tie-in Spools (including Flanges)	Med	X				X			X	X		X				X	X		X		X	X	X		
Small Bore Valves	Med	X				X			X	X		X				X	X		X		X	X	X		
Induction Bends	Med	X				X			X	X		X				X	X		X		X		X		
Jumpers and Cables	Low	X				X				X		X							X		X		X		
Pig Launchers/ Receivers	Med			X		X		X		X		X				X	X		X	X Company IVB	X				
Anodes	Low	X				X		X									X					X			
Flange Shrouds	Low	X				X																X	X		
Mattresses	Bulks			X		X																X			

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Wells & Drilling																										
Surface Tree inc. Tree Valves	High			X		X		X		X		X			X	X	X		X	X Contractor IVB	X	X	X	X		
Subsea Tree inc. Tree Valves	High			X		X			X	X		X			X	X	X		X	X Contractor IVB	X	X	X	X		
Wellhead Housing	Med	X				X		X		X		X				X	X		X	X Contractor IVB	X		X	X		
Wellhead Housing Assembly	Med	X				X		X		X		X				X	X		X		X		X	X		
Tubing Hangers	Med	X				X			X	X		X	TBC 2B250h			X	X		X	X Contractor IVB	X		X	X		
Casing Hangers	Med	X				X		X		X		X	TBC 2B250h			X	X		X	X Contractor IVB	X		X	X		
Tubulars	Low	X				X		X				X	TBC 2B250h			X	X				X	X	X	X		
Screens	Med	X				X		X Dependent on well conditions	X Dependent on well conditions	X		X				X	X		X		X	X	X	X		
Conductors	Med	X				X		X				X	TBC 2B250h				X				X	X	X	X		
Casing Joints	Med	X				X		X				X					X				X	X	X	X		
Completion Tools (Pressure Containing)	Med	X				X		X		X		X				X	X		X		X		X	X		
Completions Tools (Non-Pressure Containing)	Low	X				X		X				X							X		X		X	X		
Gas Lift Mandrels	Low	X				X		X		X		X							X		X		X	X		
Packers	Low	X				X		X		X		X							X		X		X	X		
Intervention Tools (Pressure Containing)	Low			X		X		X		X		X							X		X		X	X		

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Intervention Tools (Non-Pressure Containing)	Low			X		X		X				X							X		X		X	X