



DS 32-170-
9 April 2010

Criticality Rating Worksheet - Subsea Equipment

Project title:				
Purchase order title:				
Order/package no.:				
Vendor:				
CRITICALITY RATING CRITERIA		POINTS	COMMENTS	OVERRIDE
A	PERSONNEL SAFETY - CONSEQUENCES OF FAILURE			
1	No perceivable risk to personnel.	0		
2	Moderate risk to personnel mitigated by systems and equipment.	32		
3	Significant risk to personnel.	64		
4	High risk to personnel.	128		
B	HAZARD TO THE ENVIRONMENT – CONSEQUENCE OF FAILURE			
1	No significant consequence.	0		
2	Restricted to on plant vicinity.	32		
3	Potentially damaging to site and environment.	64		
4	Catastrophic to site and environment.	128		
C	FLUID CHARACTERISTICS			
1	Innocuous.	0		
2	Nonflammable/nontoxic/low pressure/low temperature.	16		
3	Flammable/toxic/medium pressure/medium temperature.	32		
4	Highly flammable/very toxic/high pressure/high temperature.	64		
D	ECONOMICS - OPERATIONAL FAILURE			
1	Negligible inconvenience an/or cost.	0		
2	Cause problems but no loss of integrity.	8		
3	Allow bypass or changeout at limited cost.	16		
4	Significantly downgrade service of facility resulting in significant cost.	32		
5	Seriously downgrade service of facility and result in serious cost.	64		
6	Result in total loss of service or jeopardise plant operation and result in serious consequences.	128		
E	ECONOMICS - DESIGN OR MANUFACTURING FAILURE/REWORK			
1	Off the shelf commonly available item.	0		
2	No impact - item not critical to progress.	2		
3	Minor impact - late delivery results in rescheduling of affected work.	4		
4	Moderate - late delivery results in reallocation of resources.	8		
5	Major - late delivery prevents completion of design or onshore construction.	32		
6	Critical - late delivery prevents offshore startup.	64		
F	DESIGN MATURITY			
1	Not applicable.	0		
2	Proven design available.	2		
3	Combination of proven design elements for same application is available.	4		
4	Modification of proven/tested design for different application.	16		
5	Redesign of existing item for different application.	32		
6	New design of complex item, from first design principles.	64		



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CRITICALITY RATING CRITERIA		POINTS	COMMENTS	OVERRIDE
G	DESIGN COMPLEXITY			
1	None.	0		
2	Minimal (insignificant effort).	4		
3	Moderate (requires unique design effort).	16		
4	Complex (design man hour intensive).	32		
5	Very complex (man hour intensive/multiple interfaces).	64		
H	COMPLEXITY OF MANUFACTURE/CONSTRUCTION/INSTALLATION			
1	Involving few simple processes.	0		
2	Involving many simple processes.	4		
3	Involving at least one complex process and/or the use of high grade alloys or exotic materials.	16		
4	Involving many complex process and/or the use of high grade alloys or exotic materials.	32		
I	COMPLEXITY OF INTERVENTION AFTER FAILURE			
1	None.	0		
2	Intervention of topsides equipment	4		
3	Minor intervention by ROV or special tooling Sub-sea	8		
4	Require sub-assembly change out subsea	16		
5	Require subsea recovery of full structures	32		
6	Considered "safety critical" (e.g., shall not fail or shall fail safe).	64		
J	MATERIAL TRACEABILITY/IDENTIFICATION			
1	No material certificates or statement of compliance required.	0		
2	Certificate of compliance.	8		
3	Representative certified test results and batch location.	16		
4	Independently certified direct test results and positive identification.	32		
TOTAL			REV TOTAL	
Total points	Criticality rating description.	Criticality	Override	Assigned rating
512 to 768	Quality of Item is vital and shall not be compromised.	1		
257 to 511	Quality of item is of significant importance.	2		
128 to 256	Quality of item is of moderate importance.	3		
< 128	Normal commercial quality is acceptable.	4		
Assessed by:		Date:		
Approved by:		Date:		
Approved by:		Date:		
NO.	DATE	REVISION		BY
				APP