

Checklist	Remarks	Action (X)
<p style="text-align: center;">Project System Audit Painting/Insulation Group</p> <p>Note: Not all items of the checklist shall be checked. It depends on the status of the work and whether it is the first, second or third audit.</p> <p>1. Project Definition</p> <p>1.1 Is the Project Procedure and Execution Manual (PPEM) available? What is the status, issue and date?</p> <p>1.2 Does the PPEM properly describe the scope of work and services expected from your discipline to execute the work?</p> <p>1.3 Have the relevant and applicable governmental, local authorities design codes/ norms/rules/ standards and design guides been listed in the PPEM?</p> <p>Are they available in the discipline group?</p> <p>Have they been specifically mentioned for the N/R account?</p> <p>1.4 Have Company/client, standards/norms/ guides/practices/procedures/ forms and specifications, applicable and to be used by your discipline, been listed in the PPEM? are they available in your group?</p> <p>Are they available in your group?</p> <p>1.5 Are specific project (account) specifications and/or amendments applicable and to be used?</p> <p>Have these been certified, including client's comments incorporated?</p> <p>Have they been listed in the PPEM?</p> <p>2. Engineering</p> <p>2.1 Have painting, insulation, fireproofing and refractory specifications been issued and have they been certified including client's approval?</p> <p>2.2 Have the paint, insulation, fire-proofing and refractory spec. been checked and approved?</p>		
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<p>2.3 To what extent do painting, insulation, fireproofing and refractory specifications give due consideration to local ambient conditions, such as the harsh environment of a seaside operation?</p>		
<p>2.4 Do specs clearly define which operating conditions determine the paint system, the insulation type and thickness, the fireproofing and the refractory requirements?</p> <p>Where are these conditions specified?</p>		
<p>2.5 Is painting and refractory application expected during winter or rainy season? If yes, what provisions have been dictated to avoid improper quality?</p> <p>If yes, what provisions have been dictated to avoid improper quality?</p>		
<p>2.6 To what extent have painting, insulation and refractory requirements been specified for package units and supplier designed equipment?</p>		
<p>2.7 Have quantification sheets for coating work, insulation and refractory been explained to suppliers by the mechanical dept. during the bidding/award phase?</p>		
<p>2.8 To what extent is stainless steel to be painted?</p>		
<p>2.9 Does the paint system spec cover ocean transport?</p> <p>If so, have below and/or above deck stowage been addressed?</p>		
<p>2.10 To what extent have locally available paint materials been considered in the paint spec.?</p>		
<p>2.11 To what extent has the P&I group been involved in the scope of equipment suppliers, package unit suppliers and subcontractors with regard to supply and application of paint and insulation?</p>		
<p>2.12 How has simplicity been achieved in specifying the various paint layers for one equipment item?</p>		
<p>2.13 How have inspection requirements been specified to guarantee a durable painting</p>		
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<p>and/or refractory application?</p>		
<p>2.14 Is an approved supplier list available for the supply of paint and insulation materials?</p>		
<p>3. Interface Control</p>		
<p>3.1 What evidence is available showing that engineering disciplines have been properly informed about timing and content of relevant information to be submitted to the Painting / Insulation Group?</p>		
<p>3.2 What is the status of supplier quantification sheets in relation to due dates indicated in PO's?</p> <p>Who is expediting the suppliers on these items?</p>		
<p>3.3 What is the type of interface with the other disciplines, such as:</p> <ul style="list-style-type: none"> • Project Management? • Process? • Mechanical Equipment? • Civil/Structural? • Piping? • Control Systems? • Subcontracting? 		
<p>4. Job Control</p>		
<p>4.1 Where has the budget for the painting/insulation group been defined?</p>		
<p>4.2 Did the lead Painting/Insulation engineer prepare or accept the manhour estimate, planning and manpower curve for executing his scope of work?</p>		
<p>4.3 Does a discipline (level IV) planning schedule exist for all discipline activities incl. the issue of painting, insulation, fireproofing and refractory specs.?</p>		
<p>4.4 Has the Project Execution Control System (PEC) been prepared for the scope of work</p>		
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<p>and services of the P&I group?</p>		
<p>4.5 Did the lead Painting/Insulation engineer specify the allocation of progress percentage for each step?</p>		
<p>4.6 How much is the progress measured against the PEC summary for the Painting/Insulation group?</p> <p>State date.</p>		
<p>4.7 If PEC is not used for progress measurement, what system is being applied?</p>		
<p>4.8 What is the efficiency being reported?</p>		
<p>4.9 How does the final expected manhours requirement relate to the assigned manhour budget?</p>		
<p>4.10 Have the PEC and scheduled manhours been adjusted based on the approved project variations?</p>		
<p>4.11 Are planned milestones met in time?</p>		
<p>4.12 Does the lead Painting/Insulation engineer receive a copy of the weekly LDS printout?</p>		
<p>4.13 What coordination has taken place with the project/engineering management and other lead engineers, including planning and cost control?</p>		
<p>4.14 Is there evidence of communication problems with other disciplines/departments? (ref. 3.3)</p>		
<p>4.15 To what extent and by whom are the planning, cost and engineering managers informed when changes and/or slippages are encountered?</p>		
<p>5. Additional Questions</p>		
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Product Audit Checklist

Note:

Any major deviation from requirements shall be tagged in the 'No' column and be elaborated on in the main report under Product Audit Findings.

Documents reviewed:

Questions	YES	NO	NA
1. Are input data available?			
2. Have they been formally issued?			
3. Have the data been qualified? (what is/is not included)			
4. Have they been screened for completeness?			
5. Have calculations been performed?			
6. Have these calculations been checked?			
7. Has the product been formally checked?			
8. Is checking evidence available?			
9. Do the issued documents contain sufficient information?			
10. Have multi-discipline input/comments been obtained?			
11. Are the issued documents checked for compliance with client, licensor and authority specifications?			
12. Have all deviations from client, licensor and authority specifications been discussed and formally agreed upon with the relevant party?			
13. Are supplier data included in the document?			
14. Have supplier data been qualified?			
15. Have all requirements of the document been covered?			
16. Have the document requirements been discussed with the internal client?			
17. Have the document requirements been discussed with the external client?			
18. Have any comments been received on earlier issues of the document?			
19. Have all comments been incorporated in later issues?			
20. If not, has agreement been reached about the implementation of comments?			
21. Have changes been clearly indicated?			
22. Has the PM or EM been involved in this discussion in case of comments from the client?			
23. Has the document been reviewed by the discipline manager or his delegate, if required?			
24. Has the document been formally approved at the proper authorization level?			