

例 1: Manufacturing Design Engineer TED-028 (P2 Grade)

General questions (赤字：職グレード P1～P4 の場合、必ず出題されます)

- 1) What is your educational, background, and professional experience which allows you to apply for this position, specifically? Please give a short summary within 3-5 min.
- 2) How many years of experience do you have in the field of manufacturing design engineering for a fusion reactor?
- 3) Describe relevancy between your current tasks and the tasks required for this position (mainly manufacturing and welding). How would you apply your experience to the job?
- 4) Have you ever supervised the design, procurement and manufacturing of components for Nuclear Pressure Equipment?
- 5) Which software do you often use and what is your skill level with this software (basic, good, advanced)?
- 6) What is your experience with CAD work and SSD software for schematics?
- 7) Do you have experience supervising or managing contracts with nuclear industries?
- 8) How do you manage and control design and manufacturing schedule of such nuclear component?
- 9) What is your international/cultural experience in your current/past jobs?
- 10) If you are selected for this position, what can you bring to the project that our people cannot? What is the added value to the project from your contribution? What are your strong features and why should we select you and not someone else? What other features besides your knowledge?
- 11) Do you think your knowledge and experience is applicable to improve efficiency of the ITER project? How do you implement your know-hows effectively in the project?
- 12) Do you have any experience of working in multi-cultural international environment?
- 13) How do you coordinate the design and manufacturing of ITER Vacuum Vessel being carried out among vendors, DAs and ITER organization?
- 14) How do you coordinate the interfaces of ITER VV in the integration of other ITER components, such as water cooling system, divertor, diagnostics?
- 15) What do you do if your direction and that by your supervisor conflicted?
- 16) Do you have any questions for us?

Technical questions

- 1) Describe briefly your understanding of Vacuum Vessel (VV) components design and fabrication.
- 2) The main job you are applying is not the manufacturing design. The manufacturing designs are to be done by industries under contract with Domestic Agencies, and ITER

Organization oversees and supervise of them. How do you oversee and supervise the manufacturing activities buy the Industries?

- 3) Tell us your experience of the manufacturing design activities on the following aspects:
 - (a) What objects/components/parts have you ever designed for manufacturing? In particular, have you ever designed any nuclear vessels that forms a part of safety confinement barrier? And are they actually manufactured?
 - (b) How does your manufacturing design activity flow? For example, starting from confirmation of design requirement, how do you develop the manufacturing design and how the manufacturing design is verified?
 - (c) What is the most important key element of the design for manufacturing of nuclear safety barrier? How did you designed that element? And how it was manufactured?
 - (d) In which document and/or in which part of the document do you put priority for oversee and supervise the manufacturing design, among those submitted by the DAs?
- 4) Do you have knowledge of RCC-MR/RCC-M or ASME codes in regards to Pressure Equipment? If yes, describe briefly the points of those standards.
- 5) What are the design standards you are familiar with?
- 6) Discuss your experience of pressure vessel design standards and design, manufacturing, test activities for licensing.
- 7) What is the highest priority activity in welding process in design and manufacturing of safety boundary in nuclear components?
- 8) ITER vacuum vessel has a double shell structure with shielding blocks in between, all connected with welding. What do you think the most important in design and manufacturing process of such structure?
- 9) What do you do if you find any cracks or excess distortion in the VV assembly in the course of welding?
- 10) Tell us how do you confirm validity of tolerance of parts, which would be finally integrated in an assembly.

例 2: Nuclear Engineer, Test Blanket Modules TED-006 (P3 Grade)

- 1) How many years of experience do you have in the field of blanket engineering for fusion reactor?
- 2) Describe relevancy between your current tasks and TBM-related activities (remote handling activities.)
- 3) Describe concretely how to apply your experience to the job.
- 4) Discuss pros and cons of various blanket breeding/cooling schemes.

- 5) Describe briefly your understanding of TBS maintenance process, and propose improvement, if any.
- 6) The shutdown dose rate in the hot cell area is a problem in the current configuration. How would you manage this problem?
- 7) Describe your engineering concerns of the test blanket modules.
- 8) How do you design a test blanket as a nuclear equipment in a way that would achieve enough radiation shielding/water cooling/tritium breeding?
- 9) How do you maintain and commit implementation and perpetuation of nuclear safety of ITER TBS?
- 10) Propose R&D required for the validation & demonstration of maintenance operations & for the assessment & monitoring of the associated external contracts.
- 11) Do you have experience of documentation for licensing, in particular for radiation/nuclear safety?
- 12) Do you have knowledge about maintenance requirement related to pressure equipment?
- 13) What kind of tools or equipment did you develop?
- 14) Which software do you often use and what is your skill level with this software (basic, good, advanced)?
- 15) How do you verify results of analyses that you or your colleagues have performed?
- 16) Do you have experience in welding?
- 17) Do you have knowledge about NDE after welding?
- 18) Do you have experience with work at a nuclear facility or RI facility?
- 19) When you cut the TBS connection pipe, what do you pay attention to at first?
- 20) What is your experience with CAD work and SSD software for schematics?
- 21) What are the design standards you are familiar with? For which system of the plant do you use this standard for?
- 22) Explain your experience of contract supervision and management with nuclear industry and laboratory for the R&D, design and manufacturing of components similar to the Test Blanket Systems and Test Blanket Modules (TBM), including maintenance tools & equipment;
- 23) Describe your experience of quality assurance applied to your research activity or contracts you had with industries.
- 24) How do you assess and monitor the R&D and industrial contracts addressing the maintenance of equipment such as TBS, taking into account the contamination and occupational radiation exposure?
- 25) Describe your style for project management? How do you monitor/manage and control

schedule and cost of contracts you have with industries and laboratories?

26) Do you have experience supervising or managing contracts with nuclear industries?

27) What is your international/cultural experience in your current/past jobs?

例 3: Project Control Office Deputy Head PCO-006 (P6 Grade)

1. How many years of experience do you have as a project manager?
2. What is a major point that you have put the highest priority on to run the project with less risks and issues?
3. Give us some examples of your experiences in project management in your field, including the number of staff under your management and number of staff involved in the project, as well as the budget you had for management and for the project.
4. How do you solve certain issues of the project, for example, cost saving/containment, schedule delay, product quality, production efficiency and KAIZEN operation?
5. How do you design a project's organization in a way that would reduce the project's risks?
6. How often do you use (this) project management tool (software) and what is your skill level with this tool (basic, good, advanced)? (自己評価によるもの)
7. How did you perform project schedule verification in the past?
8. How would you integrate the opinions of various sectors, to go forward with the project?
9. What is your international/cultural experience in your current/past jobs?
10. Do you have any questions for us?

注意: 上記の問題は、あくまでも想定の上でご提供するものです。面接でどのような質問が出るかをイメージしていただくために作成されました。実際の面接に上記と同じ質問がされない場合がありますので、ご了承ください。