

## Clarifications Log

Title	Manufacturing of diagnostic generic Port Plug structures (Upper and Equatorial)
Reference	IO/MS/23/AJ1
Issuance Date	08/01/24
Log no	1

Clarif No	Log No	Clarification Request	Clarification Answer
1	1	<p><b>EWB</b> Should we do the EWB welding or can you do it yourself? If it has to be made by us, can you highlight what elements it should be made of? highlight the elements in the attached Drawing. Do I also need to weld the EWB hole plugs?</p>	<p>IO does not require but rather recommends using EBW type welding procedures in those joints that may be susceptible to large deformations during the process, which cannot be easily corrected later by other processes, such as for example the machining of the parts if they are designed with sufficient extra thickness.</p> <p>The welding of closing plugs of the cooling circuit can be carried out with automatic, robotic or manual welding processes based on GTAW (TIG) technology.</p> <p>GTAW (TIG) technology is also recommended for welding cooling pipes.</p> <p>For the rest of the weld cases, where PPs have mainly longitudinal welds, main tunnel welds or the joint of the tunnel with the flange, the EBW welding process can be recommended because this process potentially generates a low level of distortions. The correct justification of the use of other low distortion welding processes for the case would be advisable if selected. All welding processes, their selection, qualification, execution, inspection, quality control and incorporation within the global manufacturing plan must be studied, justified and carried out by the candidate/manufacturer and are not scope IO, therefore IO will not carry out the EBW.</p>
2	1	<p><b>RAW MATERIAL</b> Will you provide us with the material to make the doors or should we provide it?</p>	<p>As indicated in the Market Survey questionnaire, candidates are required to send their non-binding cost estimate according to Technical Description for both cases, including the component material and a second version without the material.</p>

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3	1	If we can supply them, can you confirm it should be AISI 316L grade or do you need AISI 316L ITER GRADE?	For the exercise of the market survey, it is indicated in the documentation and proposed drawings that the listed items must be supplied in grade X2CrNiMo 17-12-2 ITER GRADE. At this stage only pipes are not mandatory in IG.
4	1	<p><b>MECHANICAL TREATMENT ON INTERNAL SURFACE</b></p> <p>Should internal mechanical processes be carried out before or after welding?</p>	The supplier is responsible for analysing the drawings and defining the most appropriate welding and machining sequence to achieve the required dimensional tolerances (and rest of requirements). IO does not obligate any specific strategy for the internal surfaces, but in any case, the complete manufacturing process to achieve the requested tolerances must be sufficiently justified with technical reports, prior to manufacturing activities.