

Author

Nikhef

Recipient

Tendered

Q1. About BOM list: how many parts of AP-PF-005 shall be made?

A1: Apologies for the typo in the BOM list; the numbers of parts to be made is three (3)

Q2. Is the document IEST-STD-CC1266E available?

A2: The standard specified in the requirements is IEST-STD-CC1246E, as indicated in the Technical Specifications Documents. It is public and available via www.iest.org. There are costs associated to purchasing this standard (prices up to 550 USD, depending on membership benefits). Nikhef is not allowed to share this document for this tender. If the bidder does not avail over this standard, we urge him to purchase it as soon as possible. The cost can be claimed with Nikhef.

Q3. Where are post-processing treatments indicated in the drawings?

A3: For what concerns spring elements, i.e. parts AP-PF-003, 54898-D, 54899-D, 55058-E, 55057-F and Suspension blade spring, we do not require the bidder to provide the final heat treatment to reach the target tensile strength. We recommend the bidder to machine the parts starting from **raw material in solution annealed state**.

For what concerns cleanliness related aspects, we suggest the bidder to follow the guidelines given in the Technical Specifications Document. The parts shall be delivered **precision cleaned** according to the standard IEST-STD-CC1246E.

Q4. Product description missing from drawings

A4: We assume the Technical Specifications Document to complement sufficiently the production drawings. Can the bidder be more specific on the details he thinks are not covered?

Q5. Can Al-6082 be used as an alternative for Al-6061? Also for tooling plates/Alplan, that are important for some plates because of straightness and thickness tolerances.

A5: Al6082 is an acceptable alternative to Al6061, also for tooling plate/Alplan type raw material. In this respect, we acknowledge the difficulty in procuring the raw material for some of plates due to combination of large dimensions and tight tolerancing. For this reason, given the technology demonstration nature of the experimental apparatus of which the components being tendered are part, we also accept as raw material tooling plates that are cast.

Q6. About drawing AP-GP-001: Can the plate be produced in parts due to the size?

A6: This is not acceptable. For alternative raw material solutions please refer to the answer to question #5.

Q7. About drawing AP-HAVA-005: Location C3: radius in corners from flat to square allowed?

A7: Yes, allowed maximum radius $R=2\text{mm}$.

Q8. About drawing AP-L-002: Rounding in the corners of the bevel allowed? DC3?

A8: Yes, it is allowed.

Q9. About drawing AP-PS-008: internal right-angle corners not possible.

A9: Yes, we are aware of that. Small residual radius from the milling tool is not relevant for the functionality of the assembly.

Q10. About drawing AP-PF-003: is any alternative material possible?

A10: No alternative material is possible due to limit stress considerations.

Q11. About drawing AP-PF-002: Recess A7 are all right angles. Are radii possible?

A11: Yes, radii are possible up to $R=5\text{-mm}$.

Q12. About drawing AP-TP-005: Can the plate be produced in parts due to the size?

A12: This is not acceptable. For alternative raw material solutions please refer to the answer to question #5.

Q13. About drawing MS Safety ring: material aluminum: does the quality matter?

A13: 5083, 6061, 6082 are all acceptable

Q14. About drawing MS Pillar 2: material aluminum: does the quality matter?

A14: 5083, 6061, 6082 are all acceptable

Q15. About drawing MS Carter Bottom: material aluminum: does the quality matter?

A15: 5083, 6061, 6082 are all acceptable

Q16. About drawing IP-GF-Cover: Material 6082 Alplan. Don't know if this thickness is possible in this material. Does it have to be Alplan?

A16: Not necessarily, see answer to question #5

Q17. About drawing 54898: Material Custom 465 stainless H1000: alternative possible?

A17: As an alternative consider 13-8 PH Stainless steel to be precipitation hardened to temper H950 after manufacturing

Q18. About drawing 54899: Material Custom 465 stainless H1000: alternative possible?

A18: As an alternative consider 13-8 PH Stainless steel to be precipitation hardened to temper H950 after manufacturing

Q19. About drawing IP-LG-002: Tube dimension has no tolerances: diameter and wall thickness according to specs of supplier. Material 6061 may not be available. Alternative possible? Dimension has no tolerance from specs of supplier. This deviates from the standard specs.

A19: Tolerances from supplier are accepted. As alternative material please consider 5083, 6082, 6060

Q20. About drawing IP-LG-003: Tube dimension is not tolerated: diameter and wall thickness according to specs of supplier. Material 6061 may not be available. Alternative possible? Dimension is tolerated from specs of supplier. This deviates from the standard specs.

A20: Tolerances from supplier are accepted. As alternative material please consider 5083, 6082, 6060

Q21. About drawing IP-PT-003: width we do not know if it is available. Is it possible to make it in parts?

A21: This is not acceptable. For alternative raw material solutions please refer to the answer to question #5.

Q22. About drawing IP-PT-005: is rolling and welding permitted?

A22: Yes, this is the preferred method for manufacturing it.

Q23. About drawing IP-PT-006: width we do not know if it is available. Is it possible to make it in parts?

A23: This is not acceptable. For alternative raw material solutions please refer to the answer to question #5.

Q24. About drawing IP-PT-007: width we do not know if it is available. Is it possible to make it in parts?

A24: This is not acceptable. For alternative raw material solutions please refer to the answer to question #5.

Q25. About drawing MA-Inner Ballast: material: steel?

A25: It is stainless steel AISI304.