

बिड दस्तावेज़ / Bid Document

बिड विवरण/Bid Details	
बिड बंद होने की तारीख/समय /Bid End Date/Time	23-01-2026 19:00:00
बिड खुलने की तारीख/समय /Bid Opening Date/Time	23-01-2026 19:30:00
बिड पेशकश वैधता (बंद होने की तारीख से)/Bid Offer Validity (From End Date)	90 (Days)
मंत्रालय/राज्य का नाम/Ministry/State Name	Ministry Of Science And Technology
विभाग का नाम/Department Name	Department Of Scientific And Industrial Research (dsir)
संगठन का नाम/Organisation Name	Council Of Scientific And Industrial Research (csir)
कार्यालय का नाम/Office Name	Csir-national Aerospace Laboratories, Bengaluru
कुल मात्रा/Total Quantity	54
वस्तु श्रेणी /Item Category	Tools 01 , Tools 02 , Tools 03 , Tools 04 , Tools 05 , Tools 06 , Tools 07 , Tools 08 , Tools 09 , Tools 10 , Tools 11 , Tools 12 , Tools 13 , Tools 14 , Tools 15 , Tools 16 , Tools 17 , Tools 18 , Tools 19 , Tools 20 , Tools 21 , Tools 22 , Tools 23 , Tools 24 , Tools 25 , Tools 26 , Tools 27 , Tools 28 , Tools 29 , Tools 30 , Tools 31 , Tools 32 , Tools 33 , Tools 34 , Tools 35 , Tools 36 , Tools 37 , Tools 38 , Tools 39 , Tools 40 , Tools 41 , Tools 42 , Tools 43 , Tools 44 , Tools 45 , Tools 46 , Tools 47 , Tools 48 , Tools 49 , Tools 50 , Tools 51 , Tools 52 , Tools 53 , Tools 54
GeMARPTS में खोजी गई स्ट्रिंग्स / Searched Strings used in GeMARPTS	Manufacturing and Supply of Metal tools
GeMARPTS में खोजा गया परिणाम / Searched Result generated in GeMARPTS	Fishing Tools of Different Sizes and Adopters (CMPDI), Reverse Osmosis based Water Treatment System above 50 LPH Capacity (V2), Package No. 3 Atal Tinkering Lab of Niti Aayog Mechanical, Electrical and Measurement Tools, Metal Beds (V3), Package No 4 - Atal Tinkering Lab of Niti Aayog Power Supply and Accessories and Safety Equipment, Modular Table / Meeting Table / Centre Table (V2), Covered Electrode for Manual Metal Arc Welding of Carbon and Carbon Manganese Steel (V2) ISI marked to IS 814, Mild Steel Sheet, Precast Concrete Reinforced Bench (RDSO), Covered Electrodes for Manual Metal Arc Welding of Stainless Steel and Other Similar High Alloy Steel (V2) conforming to IS 5206
अधिसूचना के लिए चयनित प्रासंगिक श्रेणियाँ / Relevant Categories selected for notification	- Covered Electrodes for Manual Metal Arc Welding of Stainless Steel and Other Similar High Alloy Steel (V2) conforming to IS 5206 - Fishing Tools of Different Sizes and Adopters (CMPDI)

बिड विवरण/Bid Details	
बीओक्यू शीर्षक /BOQ Title	ACD 175 25
वर्षों के अनुभव एवं टर्नओवर से एमएसई को छूट प्राप्त है / MSE Relaxation for Years Of Experience and Turnover	Yes Complete
स्टार्टअप के लिए अनुभव के वर्षों और टर्नओवर से छूट प्रदान की गई है / Startup Relaxation for Years Of Experience and Turnover	Yes Complete
विक्रेता से मांगे गए दस्तावेज़/ Document required from seller	Certificate (Requested in ATC),OEM Authorization Certificate,Additional Doc 1 (Requested in ATC) *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
क्या आप निविदाकारों द्वारा अपलोड किए गए दस्तावेजों को निविदा में भाग लेने वाले सभी निविदाकारों को दिखाना चाहते हैं? संदर्भ मेन् है/ Do you want to show documents uploaded by bidders to all bidders participated in bid?	Yes (Documents submitted as part of a clarification or representation during the tender/bid process will also be displayed to other participated bidders after log in)
बिड लगाने की समय सीमा स्वतः नहीं बढ़ाने के लिए आवश्यक बिड की संख्या। / Minimum number of bids required to disable automatic bid extension	1
दिनों की संख्या, जिनके लिए बिड लगाने की समय-सीमा बढ़ाई जाएगी। / Number of days for which Bid would be auto-extended	7
ऑटो एक्सटेंशन अधिकतम कितनी बार किया जाना है। / Number of Auto Extension count	1
बिड से रिवर्स नीलामी सक्रिय किया/ Bid to RA enabled	No
बिड का प्रकार/ Type of Bid	Two Packet Bid
प्राथमिक उत्पाद श्रेणी/ Primary product category	Tools 01
तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय / Time allowed for Technical Clarifications during technical evaluation	5 Days
निरीक्षण आवश्यक (सूचीबद्ध निरीक्षण प्राधिकरण /जेम के साथ पूर्व पंजीकृत एजेंसियों द्वारा)/ Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)	No
मूल्यांकन पद्धति/ Evaluation Method	Total value wise evaluation
मध्यस्थता खंड/ Arbitration Clause	No
सुलह खंड/ Mediation Clause	No

ईएमडी विवरण/EMD Detail

आवश्यकता/Required	No
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ईपीबीजी विवरण /ePBG Detail

एडवाइजरी बैंक/Advisory Bank	State Bank of India
ईपीबीजी प्रतिशत (%) /ePBG Percentage(%)	3.00
ईपीबीजी की आवश्यक अवधि (माह) /Duration of ePBG required (Months).	14

(a).ईएमडी और संपादन जमानत राशि, जहां यह लागू होती है, लाभार्थी के पक्ष में होनी चाहिए। / EMD & Performance security should be in favour of Beneficiary, wherever it is applicable.

लाभार्थी /Beneficiary :

DIRECTOR, CSIR-NAL

Csir-national Aerospace Laboratories, Bengaluru, Department of Scientific and Industrial Research (DSIR), Council of Scientific and Industrial Research (CSIR), Ministry of Science and Technology
(The Director)

बोली विभाजन लागू नहीं किया गया/ Bid splitting not applied.

एमआईआई खरीद वरीयता / MII Purchase Preference

एमआईआई खरीद वरीयता / MII Purchase Preference	Yes
मेक इन इंडिया विक्रेताओं को खरीद में प्राथमिकता, यदि उनका मूल्य L1+X% तक की सीमा में है / Purchase Preference to MII sellers available upto price within L1+X%	20
मेक इन इंडिया खरीद में प्राथमिकता के लिए बिड की मात्रा का अधिकतम प्रतिशत / Maximum Percentage of Bid quantity for MII purchase preference	50
सार्वजनिक खरीद (मेक-इन-इंडिया को प्राथमिकता) आदेश 2017 के अनुसार केवल क्लास 1/क्लास 2 के स्थानीय आपूर्तिकर्ताओं को ही भागीदारी की अनुमति है दिनांक 16.09.2020 (समय-समय पर संशोधित एवं लागू) / Allow participation only from Class 1/Class 2 local suppliers as per the Public procurement(Preference to Make-in-india) order 2017 date 16.09.2020(as amended and applicable time to time)	Yes, in compliance with the MII ORDER : DPIIT Order(as amended and applicable time to time)

एमएसई खरीद वरीयता/MSE Purchase Preference

एमएसई खरीद वरीयता/MSE Purchase Preference	Yes
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सूक्ष्म और लघु उद्यम मूल उपकरण निर्माताओं को खरीद में प्राथमिकता, यदि उनका मूल्य $L1+X\%$ तक की सीमा में हो / Purchase Preference to MSE OEMs available upto price within $L1+X\%$	15
सूक्ष्म और लघु उद्यम को खरीद में प्राथमिकता के लिए बिड की मात्रा का अधिकतम प्रतिशत / Maximum Percentage of Bid quantity for MSE purchase preference	25

1. If the bidder is a Micro or Small Enterprise as per latest orders issued by Ministry of MSME, the bidder shall be relaxed from the eligibility criteria of "Experience Criteria" as defined above subject to meeting of quality and technical specifications. The bidder seeking Relaxation from Experience Criteria, shall upload the supporting documents to prove his eligibility for Relaxation.
2. If the bidder is a Micro or Small Enterprise (MSE) as per latest orders issued by Ministry of MSME, the bidder shall be relaxed from the eligibility criteria of "Bidder Turnover" as defined above subject to meeting of quality and technical specifications. If the bidder itself is MSE OEM of the offered products, it would be relaxed from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. The bidder seeking Relaxation from Turnover, shall upload the supporting documents to prove his eligibility for Relaxation.
3. If the bidder is a DPIIT registered Startup, the bidder shall be relaxed from the the eligibility criteria of "Experience Criteria" as defined above subject to their meeting of quality and technical specifications. The bidder seeking Relaxation from Experience Criteria, shall upload the supporting documents to prove his eligibility for Relaxation.
4. If the bidder is a DPIIT registered Startup, the bidder shall be relaxed from the the eligibility criteria of "Bidder Turnover" as defined above subject to their meeting of quality and technical specifications. If the bidder is DPIIT Registered OEM of the offered products, it would be relaxed from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. The bidder seeking Relaxation from Turnover shall upload the supporting documents to prove his eligibility for Relaxation.
5. Preference to Make In India products (For bids < 200 Crore): Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020. Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 will be eligible to bid. Non - Local suppliers as per MII order dated 04.06.2020 are not eligible to participate. However, eligible micro and small enterprises will be allowed to participate .The buyers are advised to refer the OM No.F.1/4/2021-PPD dated 18.05.2023. [OM No.1 4 2021 PPD dated 18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017.
6. Purchase preference will be given to MSEs having valid Udyam Registration and whose credentials are validated online through Udyam Registration portal as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail themselves of the Purchase preference, the bidder must be the manufacturer / OEM of the offered product on GeM. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises and hence resellers offering products manufactured by some other OEM are not eligible for any purchase preference. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service and Buyer will decide eligibility for purchase preference based on documentary evidence submitted, while evaluating the bid. If L-1 is not an MSE and MSE Seller (s) has / have quoted price within $L-1+ 15\%$ (Selected by Buyer) of margin of purchase preference /price band defined in relevant policy, such MSE Seller shall be given opportunity to match L-1 price and contract will be awarded for 25% (selected by Buyer) percentage of total quantity. The buyers are advised to refer the OM No. F.1/4/2021-PPD dated 18.05.2023 [OM No.1 4 2021 PPD dated 18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017. Benefits of MSE will be allowed only if seller is

validated on-line in GeM profile as well as validated and approved by Buyer after evaluation of documents submitted.

7. Estimated Bid Value indicated above is being declared solely for the purpose of guidance on EMD amount and for determining the Eligibility Criteria related to Turn Over, Past Performance and Project / Past Experience etc. This has no relevance or bearing on the price to be quoted by the bidders and is also not going to have any impact on bid participation. Also this is not going to be used as a criteria in determining reasonableness of quoted prices which would be determined by the buyer based on its own assessment of reasonableness and based on competitive prices received in Bid / RA process.

Tools 01

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications

Specification Document	View File
BOQ Detail Document	View File

Advisory-Please refer attached BOQ document for detailed consignee list and delivery period.

परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.No.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017, Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 02

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 03

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 04

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 05

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 06

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 07

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 08

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 09

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
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Tools 10

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 11

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications

Specification Document	View File
BOQ Detail Document	View File

Advisory-Please refer attached BOQ document for detailed consignee list and delivery period.

परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 12

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 13

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 14

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications

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परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 15

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 16

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 17

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
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Tools 18

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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Tools 19

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 20

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 21

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 22

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 23

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications

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परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 24

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications

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परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 25

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 26

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 27

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 28

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 29

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 30

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 31

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 32

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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Tools 33

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications

Specification Document	View File
BOQ Detail Document	View File

Advisory-Please refer attached BOQ document for detailed consignee list and delivery period.

परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 34

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications

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परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 35

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 36

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 37

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 38

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 39

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications

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परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 40

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications

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परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

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1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 41

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 42

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications

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1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 43

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 44

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 45

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications

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परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 46

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications

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परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 47

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 48

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 49

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 50

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 51

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 52

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 53

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1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

Tools 54

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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1	E Damodara	560017,Old Airport Road, Kodihalli, Bangalore - 560 017,	1	120

क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें/Buyer Added Bid Specific Terms and Conditions

1. Generic

OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent of bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity up to 25% of the contracted quantity during the currency of the contract at the contracted rates. The delivery period of quantity shall commence from the last date of original delivery order and in cases where option clause is exercised during the extended delivery period the additional time shall commence from the last date of extended delivery period. The additional delivery time shall be $(\text{Increased quantity} \div \text{Original quantity}) \times \text{Original delivery period (in days)}$, subject to minimum of 30 days. If the original delivery period is less than 30 days, the additional time equals the original delivery period. The Purchaser may extend this calculated delivery duration up to the original delivery period while exercising the option clause. Bidders must comply with these terms.

2. Service & Support

Availability of Service Centres: Bidder/OEM must have a Functional Service Centre in the State of each Consignee's Location in case of carry-in warranty. (Not applicable in case of goods having on-site warranty). If service center is not already there at the time of bidding, successful bidder / OEM shall have to establish one within 30 days of award of contract. Payment shall be released only after submission of documentary evidence of having Functional Service Centre.

3. Certificates

Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any.

4. Buyer Added Bid Specific ATC

Buyer uploaded ATC document [Click here to view the file.](#)

5. Rate Contract

Performance Security: Against all Purchase Orders placed by any buyer against the Rate Contract Catalogue, the seller would be required to furnish a performance security of 3 % of total contract value of the relevant Purchase Order as per GeM GTC.

6. Rate Contract

Demurrage charges In case the rejected items are not lifted by the firm within 48 hrs, the demurrage charges at the rate of 0.5% of total contract value will be charged per day. In case the items are not lifted within a month, the same will be destroyed by the station board of officers and no claim will be admitted. Demurrage charges. In case the rejected items are not lifted by the firm within 48 hrs, the demurrage charges at the rate of 0.5% of total contract value will be charged per day. In case the items are not lifted within a month, the same will be destroyed by the station board of officers and no claim will be admitted.

7. Rate Contract

Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any.

8. **Rate Contract**

Malicious Code Certificate:

The seller should upload following certificate in the bid:-

(a) This is to certify that the Hardware and the Software being offered, as part of the contract, does not contain Embedded Malicious code that would activate procedures to :-

- (i) Inhibit the desires and designed function of the equipment.
- (ii) Cause physical damage to the user or equipment during the exploitation.
- (iii) Tap information resident or transient in the equipment/network.

(b) The firm will be considered to be in breach of the procurement contract, in case physical damage, loss of information or infringements related to copyright and Intellectual Property Right (IPRs) are caused due to activation of any such malicious code in embedded software.

9. **Rate Contract**

Escalation Matrix For Service Support : Bidder/OEM must provide Escalation Matrix of Telephone Numbers for Service Support.

10. **Rate Contract**

Dedicated /toll Free Telephone No. for Service Support : BIDDER/OEM must have Dedicated/toll Free Telephone No. for Service Support.

11. **Rate Contract**

AVAILABILITY OF OFFICE OF SERVICE PROVIDER: An office of the Service Provider must be located in the state of Consignee. DOCUMENTARY EVIDENCE TO BE SUBMITTED.

12. **Rate Contract**

ISO 9001: The bidder or the OEM of the offered products must have ISO 9001 certification.

13. **Rate Contract**

Availability of Service Centres: Bidder/OEM must have a Functional Service Centre in the State of each Consignee's Location in case of carry-in warranty. (Not applicable in case of goods having on-site warranty). If service center is not already there at the time of bidding, successful bidder / OEM shall have to establish one within 30 days of award of contract. Payment shall be released only after submission of documentary evidence of having Functional Service Centre.

14. **Rate Contract**

IT equipment shall be IPv6 ready from day one.

15. **Generic**

Consortium: In case of Contracts, wherein the seller alone does not have necessary expertise, the seller can form consortium with other sellers for submission of the bid, with one of the consortium company as leader. However, each and every member of the consortium shall be equally responsible for the complete execution of the project contract. An undertaking to this effect is to be uploaded with bid.

16. **Warranty**

Warranty period of the supplied products shall be 1 years from the date of final acceptance of goods or after completion of installation, commissioning & testing of goods (if included in the scope of supply), at consignee location. OEM Warranty certificates must be submitted by Successful Bidder at the time of delivery of Goods. The seller should guarantee the rectification of goods in case of any break down during the guarantee period. Seller should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service group in INDIA for attending the after sales service. Details of Service Centres near consignee destinations are to be uploaded along with the bid.

17. **Scope of Supply**

Scope of supply (Bid price to include all cost components) : Only supply of Goods

18. **Generic**

Supplier shall ensure that the Invoice is raised in the name of Consignee with GSTIN of Consignee only.

19. **Warranty**

Timely Servicing / rectification of defects during warranty period: After having been notified of the defects / service requirement during warranty period, Seller has to complete the required Service / Rectification within 3 days time limit. If the Seller fails to complete service / rectification with defined time limit, a penalty of 0.5% of Unit Price of the product shall be charged as penalty for each week of delay from the seller. Seller can deposit the penalty with the Buyer directly else the Buyer shall have a right to recover all such penalty amount from the Performance Security (PBG). Cumulative Penalty cannot exceed more than 10% of the total contract value after which the Buyer shall have the right to get the service / rectification done from alternate sources at the risk and cost of the Seller besides forfeiture of PBG. Seller shall be liable to re-imburse the cost of such service / rectification to the Buyer.

20. **Generic**

1. The Seller shall not assign the Contract in whole or part without obtaining the prior written consent of buyer.
2. The Seller shall not sub-contract the Contract in whole or part to any entity without obtaining the prior written consent of buyer.
3. The Seller shall, notwithstanding the consent and assignment/sub-contract, remain jointly and severally liable and responsible to buyer together with the assignee/ sub-contractor, for and in respect of the due performance of the Contract and the Sellers obligations there under.

21. **Certificates**

To be eligible for award of contract, Bidder / OEM must possess following Certificates / Test Reports on the date of bid opening (to be uploaded with bid):

As per ATC

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22. **Generic**

Without prejudice to Buyer's right to price adjustment by way of discount or any other right or remedy available to Buyer, Buyer may terminate the Contract or any part thereof by a written notice to the Seller, if:

- i) The Seller fails to comply with any material term of the Contract.
- ii) The Seller informs Buyer of its inability to deliver the Material(s) or any part thereof within the stipulated Delivery Period or such inability otherwise becomes apparent.
- iii) The Seller fails to deliver the Material(s) or any part thereof within the stipulated Delivery Period and/or to replace/rectify any rejected or defective Material(s) promptly.
- iv) The Seller becomes bankrupt or goes into liquidation.
- v) The Seller makes a general assignment for the benefit of creditors.
- vi) A receiver is appointed for any substantial property owned by the Seller.
- vii) The Seller has misrepresented to Buyer, acting on which misrepresentation Buyer has placed the Purchase Order on the Seller.

अस्वीकरण/**Disclaimer**

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization, whereby Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specifications and / or terms and conditions governing the bid. If any clause(s) is / are incorporated by the Buyer regarding following, the bid and

resultant contracts shall be treated as null and void and such bids may be cancelled by GeM at any stage of bidding process without any notice:-

1. Definition of Class I and Class II suppliers in the bid not in line with the extant Order / Office Memorandum issued by DPIIT in this regard.
2. Seeking EMD submission from bidder(s), including via Additional Terms & Conditions, in contravention to exemption provided to such sellers under GeM GTC.
3. Publishing Custom / BOQ bids for items for which regular GeM categories are available without any Category item bunched with it.
4. Creating BoQ bid for single item.
5. Mentioning specific Brand or Make or Model or Manufacturer or Dealer name.
6. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
7. Floating / creation of work contracts as Custom Bids in Services.
8. Seeking sample with bid or approval of samples during bid evaluation process. (However, in bids for [attached categories](#), trials are allowed as per approved procurement policy of the buyer nodal Ministries)
9. Mandating foreign / international certifications even in case of existence of Indian Standards without specifying equivalent Indian Certification / standards.
10. Seeking experience from specific organization / department / institute only or from foreign / export experience.
11. Creating bid for items from irrelevant categories.
12. Incorporating any clause against the MSME policy and Preference to Make in India Policy.
13. Reference of conditions published on any external site or reference to external documents/clauses.
14. Asking for any Tender fee / Bid Participation fee / Auction fee in case of Bids / Forward Auction, as the case may be.
15. Buyer added ATC Clauses which are in contravention of clauses defined by buyer in system generated bid template as indicated above in the Bid Details section, EMD Detail, ePBG Detail and MII and MSE Purchase Preference sections of the bid, unless otherwise allowed by GeM GTC.
16. In a category based bid, adding additional items, through buyer added additional scope of work/ additional terms and conditions/or any other document. If buyer needs more items along with the main item, the same must be added through bunching category based items or by bunching custom catalogs or bunching a BoQ with the main category based item, the same must not be done through ATC or Scope of Work.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

All GeM Sellers/Service Providers shall ensure full compliance with all applicable labour laws, including the provisions, rules, schemes and guidelines under the four Labour Codes i.e. the Code on Wages, 2019; the Industrial Relations Code, 2020; the Occupational Safety, Health and Working Conditions Code, 2020; and the Code on Social Security, 2020 as and when notified and brought into force by the Government of India.

For all provisions of the Labour Codes that are pending operationalisation through rules, schemes or notifications, the corresponding provisions of the pre-existing labour enactments (such as The Minimum Wages Act, 1948, The Payment of Wages Act, 1936, The Payment of Bonus Act, 1965, The Equal Remuneration Act, 1976, The Payment of Gratuity Act, 1972, etc. and relevant State Rules) shall continue to remain applicable.

The Seller/ Service Providers shall, therefore, be responsible for ensuring compliance under:

- **All notified and enforceable provisions of the new Labour Codes as mentioned hereinabove; and**
- **All operative provisions of the erstwhile Labour Laws until their complete substitution.**

All obligations relating to wages, social security, safety, working conditions, industrial relations etc. and any other statutory requirements shall be strictly met by the Seller/ Service Provider. Any non-

compliance shall constitute a breach of the contract and shall entitle the Buyer to take appropriate action in accordance with the contract and applicable law.

[यह बिड सामान्य शर्तों के अंतर्गत भी शासित है /This Bid is also governed by the General Terms and Conditions](#)

जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो। बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समाप्त करने और कानून के अनुसार आगे की कानूनी कार्यवाई का आधार होगा।/In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws.

---धन्यवाद/Thank You---



वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्
Council of Scientific & Industrial Research
राष्ट्रीय वांतरिक्ष प्रयोगशालाएं
National Aerospace Laboratories

Invitation for e-Bids / Notice Inviting e-Tender

Tender No. NAL/PUR/ACD/175/25

Date: 31/12/2025

CSIR - National Aerospace Laboratories (NAL), Bengaluru, Republic of India, is one of the premier research laboratories under aegis of Council of Scientific and Industrial Research (CSIR), an autonomous body under the Department of Scientific and Industrial Research, Government of India, New Delhi. CSIR-NAL is a Science and Knowledge based Research, Development and Consulting Organization. It is internationally known for its excellence in Scientific Research in Aerospace Engineering.

The Director, CSIR-NAL invites e-bids from the Manufacturers, their distributors and Indian Agent of Foreign Principals, if any, for the procurement of the following Goods/Services for its day-to-day research

Sr. No.	Brief Description of material (s)	Unit	Quantity
1	Manufacturing & Supply of Metal Tools for Nose Ribs.	Set	1
Note: Please refer Annexure- I for detailed specification and drawings.			

Type of Bid	Two Bid
Performance Security	3% of the order value.
Bid Security (EMD) (in INR)	Bid Security Declaration should be enclosed with the quotation

1. The Schedule for Submission of e-Bids and Opening of e-Bids is as follows:

Date & Time of Submission of e-Bid	23/01/2026 - 11.00 Hrs
Date and Time of Opening of e-Bid	23/01/2026 - 11.30 Hrs

2. E-Bids are invited through the electronic tendering process and the Tender Document can be downloaded from the Government e-Marketplace Portal i.e., <https://gem.gov.in>. **The submission of e-Bids will be only through the GeM portal <https://gem.gov.in>. Bids will not be accepted in any other form.**
3. Interested bidders' may obtain further information from the office of the:
Stores & Purchase Officer
Purchase Section
CSIR- National Aerospace Laboratories
PB No.1779, HAL Airport Road, Kodihalli, Bengaluru – 560017
Karnataka-India
Tel #: 080 25086040/6041, Fax #: 080 25269611
Email : purchasek@nal.res.in
4. The prospective bidders' should adhere to deadlines specified in Tender details corresponding to this Tender on GeM portal <https://gem.gov.in>.
5. **Bid Security (BS) / Earnest Money Deposit (EMD):**
The bidders has to furnish/submit BID SECURING DECLARATION as per the FORMAT, in the name of "The Director, National Aerospace Laboratories, Bengaluru", without which the bid is liable to be rejected.

पी वी संख्या : 1779, एचएएल एयरपोर्ट रोड, बेंगलूरु-560 017, भारत / P.B.No. 1779, HAL Airport Road, Kodihalli, Bengaluru-560 017, INDIA

फोन / Phone (का/ Off.): +91-80-2508 6040-45, फैक्स/ Fax: +91-80-2526 9611



6. **Open Tender enquiry:**

Only Local suppliers with prescribed local content as detailed in DPIIT Order No. P-45021/2/2017-PP (BE-II) dated 16th Sep, 2020 and subsequent orders issued by Ministry of Finance, Government of India from time to time, are eligible for bidding. bidders' must enclose the certificate declaring the local content of supplies as per the format.

7. **Global Tender Enquiry:**

Either the Indian Agent on behalf of the Foreign Principal or the Foreign Principal can bid directly in a tender but **not** both. However, the offer of the Indian Agent should also accompany the authorisation letter from their principal. To maintain sanctity of tendering system, one Indian Agent **cannot** represent **two** different foreign principals in one tender.

- (a) In case of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry.

One manufacturer can also authorize only one agent/ dealer. There can be only one bid from the following:

i)	The Principal manufacturer directly or through one Indian agent on his behalf; and
ii)	Indian/foreign agent on behalf of only one principal.

- (b) Foreign bidders' must disclose the name and address of agent and representative in India and Indian bidders' must disclose their foreign principal or associates.

- (c) If bidders' is Indian Agent of Foreign Principal, the following instruction shall be complied and as amended from time to time as on the date of issue of Tender.

i)	Bidders' must necessarily comply with conditions of "Make in India" Order No.F-45021/2/2017-PP (BE-II) dated 16-Sep-2020 of Ministry of Commerce and Industry, Government of India, as amended from time to time on the date of issue of Tender.
ii)	The bidders' shall comply with restrictions under Rule 144(xi) of the GFR 2017 related to restrictions on participation of Foreign bidders' and their Authorised Indian Agent/Dealer in terms of Order No.P-45021/112/2020-PP(BE-II) (E-43780) dated 24-Aug-2020 of the Ministry of Commerce and Industry, Department for Promotion of Industry and Internal Trade, as amended from time to time as on the date of issue of Order.

Note: Kindly refer to the first page of Notice Inviting Tender for tender type/mode of procurement and submit the bid accordingly

9. The bids of those bidders' failing to comply the following clauses will be summarily rejected.

- (a) The bidders' proposing to supply finished products directly/indirectly from bidders' of Countries sharing the land border with India should submit copy of registration done with the Ministry of Home Affairs and Ministry of External Affairs
- (b) If the products supplied are not from bidders' of Countries sharing Land border with India, the bidders' should enclose a declaration
- (c) The debarment of a bidders' in this tender, if any, is reciprocal of that Principal's Country, if it is Import.

Note: Kindly refer to the first page (NIT) for tender type (i.e. Open Tender Enquiry / Global Tender Enquiry) and submit your bid accordingly.

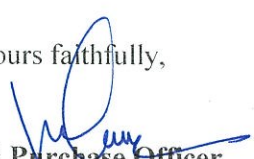
10. As per Govt. of India procurement policies,
- The purchaser intends to give purchase/service preference to local supplies (Preference to Make in India) in case the cost of procurement is up to Rs.50.00 (fifty) lakhs.
 - The procuring entity intends to give purchase/service preference to products/goods manufactured by micro, small and medium enterprises.
11. Bidders' are requested to refer to the instructions regarding Procurement Policies for "Make in India", issued by Ministry of Commerce and Industry, Department of Industrial Policy and Promotion dated. 28-May-2018, and 4-Jun-2020 and guidelines as and when issued.
12. Printed conditions, if any, submitted along with the quotation shall not be binding on us.
13. Bidders' to certify the quoted price is not higher than the price quoted with other Government Institution for similar specifications and quantity during the current financial year.
14. Payments shall be made promptly by the Purchaser but in no case later than thirty (30) days after submission of the invoice or claim by the Supplier. While claiming the payment, the supplier should certify in the bill/invoice that the payment being claimed strictly in terms of the contract and all obligations on the part of the supplier for claiming the payment have been fulfilled as required under the contract.

Mandatory fields in Tax Invoice and Receipt Vouchers	
Invoice Number and Date	Name, address and GSTIN of the supplier
Shipping and billing Address	Customer Name & GSTIN [CSIR-NAL] Bank Details
HSN Code/SAC Code	Place of Supply
Taxable value and discounts	Item details i.e. description, quantity (number), unit, the total value
Signature of the Supplier	Rate and amount of taxes i.e. CGST/SGST/IGST

15. Kindly, note CSIR-NAL GST No.29AAATC2716R1ZB. The bidders are requested to furnish their GST no. in their invoice, failing which NAL will not be able to make the timely payment.
16. Unsolicited / conditional / unsigned Quotations/Quotations received after the due date and time shall be summarily rejected. The bidders' shall comply the terms and conditions of the tender, failing which, the offer shall be liable for rejection.
17. The prospective bidders' are requested to refer to the Standard Terms and Conditions available on NAL Internet (www.nal.res.in) under the icon Tender-Purchase before formulating and submitting their bids'.
18. The Director, CSIR-National Aerospace Laboratories (NAL), Bengaluru, India reserves the right to accept or reject any bids or accept all tenders either in part or in full or to split the order, or to annul the bidding process without assigning any reasons there for.

Thanking you,

Yours faithfully,


Stores & Purchase Officer
For and on behalf of CSIR-NAL

File No.	NAL/PUR/ACD/175/25
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Specifications and Allied Technical Details for Metal Tools: Aileron and Elevator Nose Ribs

- 1 **End Use:**
metal tools will be used to manufacture composite Aileron & Elevator Nose Ribs components for SARAS Mk-II aircraft under autoclave moulding conditions of 190°C with external pressure of 7bar and under full vacuum.
- 2 **Detailed Specifications**
Fabrication & supply of metal tools as per the following supplied drawings and CAD models listed below in Table 1 Module 'A' for Aileron Nose Rib Tools & Module 'B' for Elevator Nose Rib Tools. CAD 3D models in STP/IGS format will be provided to the vendor awarded with PO.
Bidder must quote for each Module separately (mentioned in Table-1) and the L1 bidder for each module will be selected. However, Bidder has to quote for all the tools for a given module mandatorily. Bidder is free to quote for either Module-A or Module-B or Both. NAL Reserves the right to either place PO for Module A or Module B or Both.

Table 1: Tools details for fabrication and supply

Module A: Aileron Nose Rib Tools

Sl. No.	Tool Description	Drawing Number	Qty (Nos)	Remarks
1	TOOL FOR NOSE RIB STA#2A-LH	25-A-T-57-60-105-025-100	1	
2	TOOL FOR NOSE RIB STA#2A-RH	25-A-T-57-60-105-025-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
3	TOOL FOR NOSE RIB STA#2B-LH	25-A-T-57-60-105-026-100	1	
4	TOOL FOR NOSE RIB STA#2B-RH	25-A-T-57-60-105-026-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
5	TOOL FOR NOSE RIB STA#3-LH	25-A-T-57-60-105-027-100	1	
6	TOOL FOR NOSE RIB STA#3-RH	25-A-T-57-60-105-027-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
7	TOOL FOR NOSE RIB STA#4-LH	25-A-T-57-60-105-028-100	1	
8	TOOL FOR NOSE RIB STA#4-RH	25-A-T-57-60-105-028-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
9	TOOL FOR NOSE RIB STA#5-LH	25-A-T-57-60-105-029-100	1	
10	TOOL FOR NOSE RIB STA#5-RH	25-A-T-57-60-105-029-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
11	TOOL FOR NOSE RIB STA#6-LH	25-A-T-57-60-105-030-100	1	
12	TOOL FOR NOSE RIB STA#6-RH	25-A-T-57-60-105-030-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only

13	TOOL FOR NOSE RIB STA#7A-LH	25-A-T-57-60-105-031-100	1	
14	TOOL FOR NOSE RIB STA#7A-RH	25-A-T-57-60-105-031-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
15	TOOL FOR NOSE RIB STA#7B-LH	25-A-T-57-60-105-032-100	1	
16	TOOL FOR NOSE RIB STA#7B-RH	25-A-T-57-60-105-032-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
17	TOOL FOR NOSE RIB STA#8-LH	25-A-T-57-60-105-033-100	1	
18	TOOL FOR NOSE RIB STA#8-RH	25-A-T-57-60-105-033-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
19	TOOL FOR NOSE RIB STA#9-LH	25-A-T-57-60-105-034-100	1	
20	TOOL FOR NOSE RIB STA#9-RH	25-A-T-57-60-105-034-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
21	TOOL FOR NOSE RIB STA#10-LH	25-A-T-57-60-105-035-100	1	
22	TOOL FOR NOSE RIB STA#10-RH	25-A-T-57-60-105-035-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
23	TOOL FOR NOSE RIB STA#11-LH	25-A-T-57-60-105-036-100	1	
24	TOOL FOR NOSE RIB STA#11-RH	25-A-T-57-60-105-036-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
25	TOOL FOR NOSE RIB STA#12A-LH	25-A-T-57-60-105-037-100	1	
26	TOOL FOR NOSE RIB STA#12A-RH	25-A-T-57-60-105-037-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
27	TOOL FOR NOSE RIB STA#12B-LH	25-A-T-57-60-105-038-100	1	
28	TOOL FOR NOSE RIB STA#12B-RH	25-A-T-57-60-105-038-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
29	TOOL FOR NOSE RIB STA#13-LH	25-A-T-57-60-105-039-100	1	
30	TOOL FOR NOSE RIB STA#13-RH	25-A-T-57-60-105-039-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only

Module B: Elevator Nose Rib Tools

Sl. No.	Tool Description	Drawing Number	Qty (Nos)	Remarks
1	Tool For Nose Rib LH - STA #3A	25-A-T-55-20-110-021-000	1	
2	Tool For Nose Rib RH - STA #3A	25-A-T-55-20-210-021-000	1	
3	Tool For Nose Rib LH - STA #4	25-A-T-55-20-110-022-000	1	
4	Tool For Nose Rib RH -STA #4	25-A-T-55-20-210-022-000	1	



5	Tool For Nose Rib LH -STA #5	25-A-T-55-20-110-023-000	1	
6	Tool For Nose Rib RH -STA #5	25-A-T-55-20-210-023-000	1	
7	Tool For Nose Rib LH -STA #6	25-A-T-55-20-110-024-100	1	
8	Tool For Nose Rib RH -STA #6	25-A-T-55-20-110-024-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
9	Tool For Nose Rib LH - STA #7	25-A-T-55-20-110-025-100	1	
10	Tool For Nose Rib RH -STA #7	25-A-T-55-20-110-025-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
11	Tool For Nose Rib LH -STA #8A	25-A-T-55-20-110-026-100	1	
12	Tool For Nose Rib RH -STA #8A	25-A-T-55-20-110-026-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
13	Tool For Nose Rib LH -STA #8B	25-A-T-55-20-110-027-100	1	
14	Tool For Nose Rib RH -STA #8B	25-A-T-55-20-110-027-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
15	Tool For Nose Rib LH -STA #9	25-A-T-55-20-110-028-100	1	
16	Tool For Nose Rib RH -STA #9	25-A-T-55-20-110-028-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
17	Tool For Nose Rib LH - STA #10	25-A-T-55-20-110-029-100	1	
18	Tool For Nose Rib RH -STA #10	25-A-T-55-20-110-029-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
19	Tool For Nose Rib LH -STA #11	25-A-T-55-20-110-030-100	1	
20	Tool For Nose Rib RH -STA #11	25-A-T-55-20-110-030-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
21	Tool For Nose Rib LH -STA #12	25-A-T-55-20-110-031-100	1	
22	Tool For Nose Rib RH -STA #12	25-A-T-55-20-110-031-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only
23	Tool For Nose Rib LH - STA #13A	25-A-T-55-20-110-032-100	1	
24	Tool For Nose Rib RH -STA #13A	25-A-T-55-20-110-032-200	1	RH tool is a mirror image (opposite) of LH tool. Hence Tool will be inspected with LH drawing only

2.1. General instructions

- i. Drawings and Catia V5 CAD models listed above will be supplied by CSIR-NAL for tool fabrication.
- ii. Tool Material and build quality should meet the drawings requirements.
- iii. Layup & Curing Tool Material (Item No:2 in Dwg. BOM): SA 516 Gr.70 & Tool for Caulplate Tool Material (Item No:1 in Dwg. BOM): AL 6082/HE30. For detailed item specification, refer drawings.
- iv. Tolerance on the tool thickness should be as per respective drawing.
- v. All machined surfaces/ planes of Aluminium tools should be anodized & Allot steel tools should be electroless nickel finish. (The thickness of the finish coating may be 20 to 30 microns.)
- vi. Contour and reference planes should be machined to 2 triangle ($\nabla\nabla$) surface finish standard.
- vii. Contour tolerance for the individual tool surface should be within ± 0.3 mm with respect to the tooling holes as per drawing.
- viii. The tool contour inspection should be carried out w.r.t tooling holes at every 50mm grid location (minimum) along length and width. Closer readings to be taken on need basis / Laser scanning report for the tool surface.
- ix. Part boundary marking-grooves should be done as called in the Model/drawings. The tolerance on the tool groove boundary is ± 1.0 mm

2.2 List of Deliverables (BoQ):

Sr. No.	Item Description	Quantity (Nos)
Module A. Aileron Nose Rib Tools and Accessories:		
1	TOOL FOR NOSE RIB STA#2A-LH	One
2	TOOL FOR NOSE RIB STA#2A-RH	One
3	TOOL FOR NOSE RIB STA#2B-LH	One
4	TOOL FOR NOSE RIB STA#2B-RH	One
5	TOOL FOR NOSE RIB STA#3-LH	One
6	TOOL FOR NOSE RIB STA#3-RH	One
7	TOOL FOR NOSE RIB STA#4-LH	One
8	TOOL FOR NOSE RIB STA#4-RH	One
9	TOOL FOR NOSE RIB STA#5-LH	One
10	TOOL FOR NOSE RIB STA#5-RH	One
11	TOOL FOR NOSE RIB STA#6-LH	One
12	TOOL FOR NOSE RIB STA#6-RH	One
13	TOOL FOR NOSE RIB STA#7A-LH	One
14	TOOL FOR NOSE RIB STA#7A-RH	One
15	TOOL FOR NOSE RIB STA#7B-LH	One
16	TOOL FOR NOSE RIB STA#7B-RH	One
17	TOOL FOR NOSE RIB STA#8-LH	One
18	TOOL FOR NOSE RIB STA#8-RH	One
19	TOOL FOR NOSE RIB STA#9-LH	One
20	TOOL FOR NOSE RIB STA#9-RH	One
21	TOOL FOR NOSE RIB STA#10-LH	One
22	TOOL FOR NOSE RIB STA#10-RH	One
23	TOOL FOR NOSE RIB STA#11-LH	One
24	TOOL FOR NOSE RIB STA#11-RH	One
25	TOOL FOR NOSE RIB STA#12A-LH	One
26	TOOL FOR NOSE RIB STA#12A-RH	One
27	TOOL FOR NOSE RIB STA#12B-LH	One
28	TOOL FOR NOSE RIB STA#12B-RH	One
29	TOOL FOR NOSE RIB STA#13-LH	One
30	TOOL FOR NOSE RIB STA#13-RH	One



Module B. Elevator Nose Rib Tools and Accessories:		
1	Tool For Nose Rib LH - STA #3A	One
2	Tool For Nose Rib RH - STA #3A	One
3	Tool For Nose Rib LH - STA #4	One
4	Tool For Nose Rib RH -STA #4	One
5	Tool For Nose Rib LH -STA #5	One
6	Tool For Nose Rib RH -STA #5	One
7	Tool For Nose Rib LH -STA #6	One
8	Tool For Nose Rib RH -STA #6	One
9	Tool For Nose Rib LH - STA #7	One
10	Tool For Nose Rib RH -STA #7	One
11	Tool For Nose Rib LH -STA #8A	One
12	Tool For Nose Rib RH -STA #8A	One
13	Tool For Nose Rib LH -STA #8B	One
14	Tool For Nose Rib RH -STA #8B	One
15	Tool For Nose Rib LH -STA #9	One
16	Tool For Nose Rib RH -STA #9	One
17	Tool For Nose Rib LH - STA #10	One
18	Tool For Nose Rib RH -STA #10	One
19	Tool For Nose Rib LH -STA #11	One
20	Tool For Nose Rib RH -STA #11	One
21	Tool For Nose Rib LH -STA #12	One
22	Tool For Nose Rib RH -STA #12	One
23	Tool For Nose Rib LH - STA #13A	One
24	Tool For Nose Rib RH -STA #13A	One
Documents/CAD data/Reports:		
1.	CMM/ Laser Tracker Report	
3.	Raw Material CoC & Heat treatment /Stress relieve Report	
4.	Surface Finish/Treatment Report	
5.	NDT reports of welding ensuring defect free joints.	
6.	Any updated tool 3D CAD model and drawings released by vendor. One set of released drawings should be given in print.	
7.	Updated CAD model of Tool if any	

3 **Scope of Supply and incidental works:**

Scope of Supply includes the following:

- Supply of the Tools / system along with the accessories as per detailed specifications mentioned in section 2 above.
- Acceptance as per section 4.5.
- On site comprehensive warranty as per section 6
- Delivery schedule as per section 8.

4 **Inspection & Tests**

4.1 **General**

- The Supplier shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods and Related Services as are specified here.
- The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at the point of delivery and/or at the Goods final destination.
- Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Purchaser. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.
- Should any inspected or tested Goods fail to conform to the specifications, the Purchaser may reject the goods and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Purchaser.

5. The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at final destination shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the Goods shipment.
6. The Supplier shall provide the Purchaser with a report of the results of any such test and/or inspection.
7. With a view to ensure that claims on insurance companies, if any, are lodged in time, the bidders and /or the Indian agent, if any, shall be responsible for follow up with their principals for ascertaining the dispatch details and informing the same to the Purchaser and he shall also liaise with the Purchaser to ascertain the arrival of the consignment after customs clearance so that immediately thereafter in his presence the consignment could be opened and the insurance claim be lodged, if required, without any loss of time. Any delay on the part of the bidder/ Indian Agent would be viewed seriously and he shall be directly responsible for any loss sustained by the purchaser on the event of the delay.
8. Before the goods and Tools are taken over by the Purchaser, the Supplier shall supply operation and maintenance Manuals together with Drawings of the goods and Tools built. These shall be in such details as will enable the Purchase to operate, maintain, adjust and repair all parts of the works as stated in the specifications.
9. The Manuals and Drawings shall be in the ruling language (English) and in such form and numbers as stated in the Contract.
10. Unless and otherwise agreed, the goods and Tools shall not be considered to be completed for the purposes of taking over until such Manuals and Drawing have been supplied to the Purchaser.
11. On successful completion of acceptability test, receipt of deliverables, etc. and after the Purchaser is satisfied with the working of the Tools, the acceptance certificate signed by the Supplier and the representative of the Purchaser will be issued. The date on which such certificate is signed shall be deemed to be the date of successful commissioning of the Tools.

4.2 **Manufacturer's Inspection Certificate**

After the goods are manufactured and assembled, inspection and testing of the goods shall be carried out at the supplier's plant by the supplier, prior to shipment to check whether the goods are in conformity with the technical specifications. Manufacturer's test certificate with data sheet shall be issued to this effect and submitted along with the delivery documents. The purchaser reserves the options to be present at the supplier's premises during such inspection and testing.

4.3 **Pre-Dispatch Inspection**

NAL personnel may visit at different stages of manufacturing (mentioned below) of tools, at supplier's place or at other place where work is in progress.

- i. After welding of face sheet and substructures
- ii. During stress relieving
- iii. During contour machining
- iv. During contour inspection

1)	Location	At vender location
2)	Number of persons	02 to 03
3)	Period of pre-dispatch Inspection	3-5 days depending on the requirement
4)	Nature of pre-dispatch Inspection	a) Tool contour and dimensional inspection b) Verification of assembly/disassembly of tool

Note:

i) *Pre- Dispatch inspection of tool will have to be done at vendor place like Tool Contour, Dimensional Inspection, Vacuum Integrity and leak test at room temperature. The vendor should inspect final machined contour of tool by using Coordinate Measuring Machine (CMM)/Laser tracker (LT) with valid calibration in the presence of CSIR-NAL team. Vendor should meet all specifications as per tool drawing.*

ii) *Travel expenses of CSIR-NAL personnel for pre-dispatch will be borne by CSIR-NAL.*

iii) *Vendor to share complete inspection reports prior to pre-dispatch inspection including raw material, CoC, ensuring no cracks and stress relieving/ heat treatment*



4.4 Third Party Inspection
NOT APPLICABLE

4.5 Acceptance Test

The acceptance test will be conducted by the Purchaser, their consultant or other such person nominated by the Purchaser at its option after the Tools is installed at Purchaser's site in the presence of supplier's representatives. The acceptance will involve trouble free operation. There shall not be any additional charges for carrying out acceptance test. No malfunction, partial or complete failure of any part of the Tools is expected to occur. The Supplier shall maintain necessary log in respect of the result of the test to establish to the entire satisfaction of the Purchaser, the successful completion of the test specified.

On the event of the ordered item failing to pass the acceptance test, a period not exceeding two weeks will be given to rectify the defects and clear the acceptance test, failing which, the Purchaser reserve the right to get the Tools replaced by the Supplier at no extra cost to the Purchaser.

Successful conduct and conclusion of the acceptance test for the installed goods and Tools shall also be the responsibility and at the cost of the Supplier.

The Acceptance Tests Plan (ATP) at the final destination (NAL) include the following:

- 4.5.1 Tool should meet all the requirements mentioned in the drawing/s and the requirements mentioned in this document.

The acceptance tests at the final destination (NAL) include the following:

a)	Vacuum Integrity and leak test: Tool will be subjected for autoclave cure cycle (180°C for 2 hours under full vacuum and 7bar pressure) Autoclave is used to check for vacuum integrity & vacuum leaks test at CSIR-NAL at no cost to vendor. Note: Maximum allowed vacuum leakage rate is 0.01bar/min and should not exceed after a retention time of minimum of 5 minutes after disconnecting the vacuum source. In case of leaks (if any), vendor should carry out repair work without any additional cost to NAL.
b)	After conducting autoclave cure cycle. Tool NMG/surface Contour and Dimensional measurement, checks and Inspection as per the supplied drawings. Deviations if any, to be corrected by vendor without any additional costs to NAL.

- 4.5.2 After subjecting the tools to cure cycle, Laser tracker inspection of all the tools will be carried out by CSIR-NAL as per the drawing at no cost to vendor. Also, the visual and dimensional inspection of the tool will be carried out at per drawing by CSIR-NAL at no cost to vendor.

- 4.5.3 After cure cycle if any deviation is found in tool NMG/surface contour and dimensional measurements, checks as per the supplied drawings after inspection, these deviations have to be corrected by supplier without any additional costs to NAL.

- 4.5.4 After the cure, the tool should not have any peeling of paint and any other visible deterioration. If found, vendor should rectify the tools without any additional cost to CSIR-NAL.

5 Training

NOT APPLICABLE

6 Incidental Services

- On site Comprehensive Warranty: 1 year from the date of acceptance

7 Annual Maintenance Contract
NOT APPLICABLE

8 Delivery Schedule (including supply, installation, commissioning, training & acceptance)

Delivery of the item		Installation & commissioning		Training at CSIR-NAL, if any	Acceptance of the item
Days/ Weeks/ Months	Location	Days/ Weeks/Months from the date of receipt of Tools	Location	Days/ Weeks/Months from the date of Installation & Commissioning	Days/ Weeks/Months from the date of Installation, Commissioning & Training
4 months	CSIR-NAL, Bengaluru	Not Applicable		Not Applicable	10 Days

9 Commercial evaluation of bid

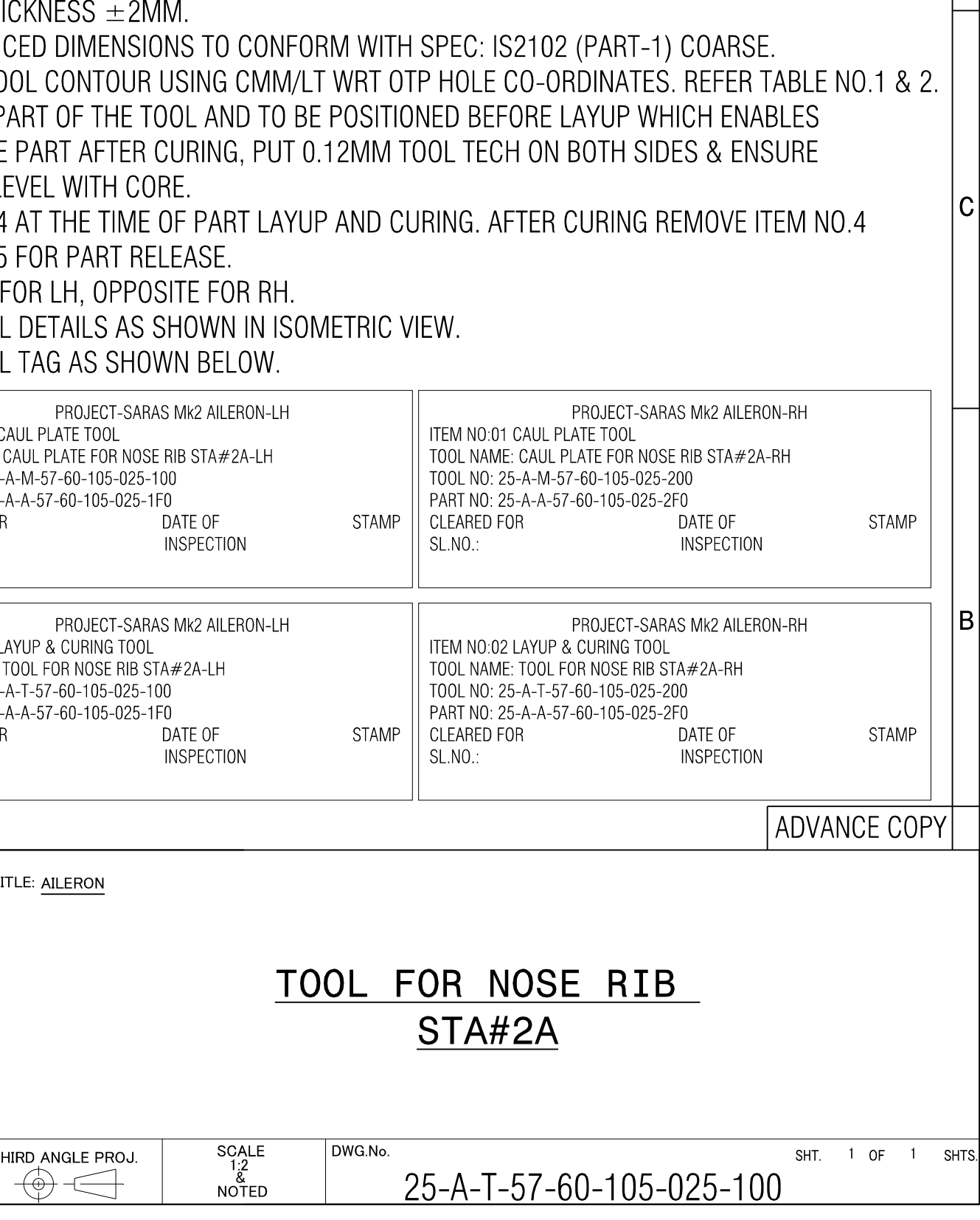
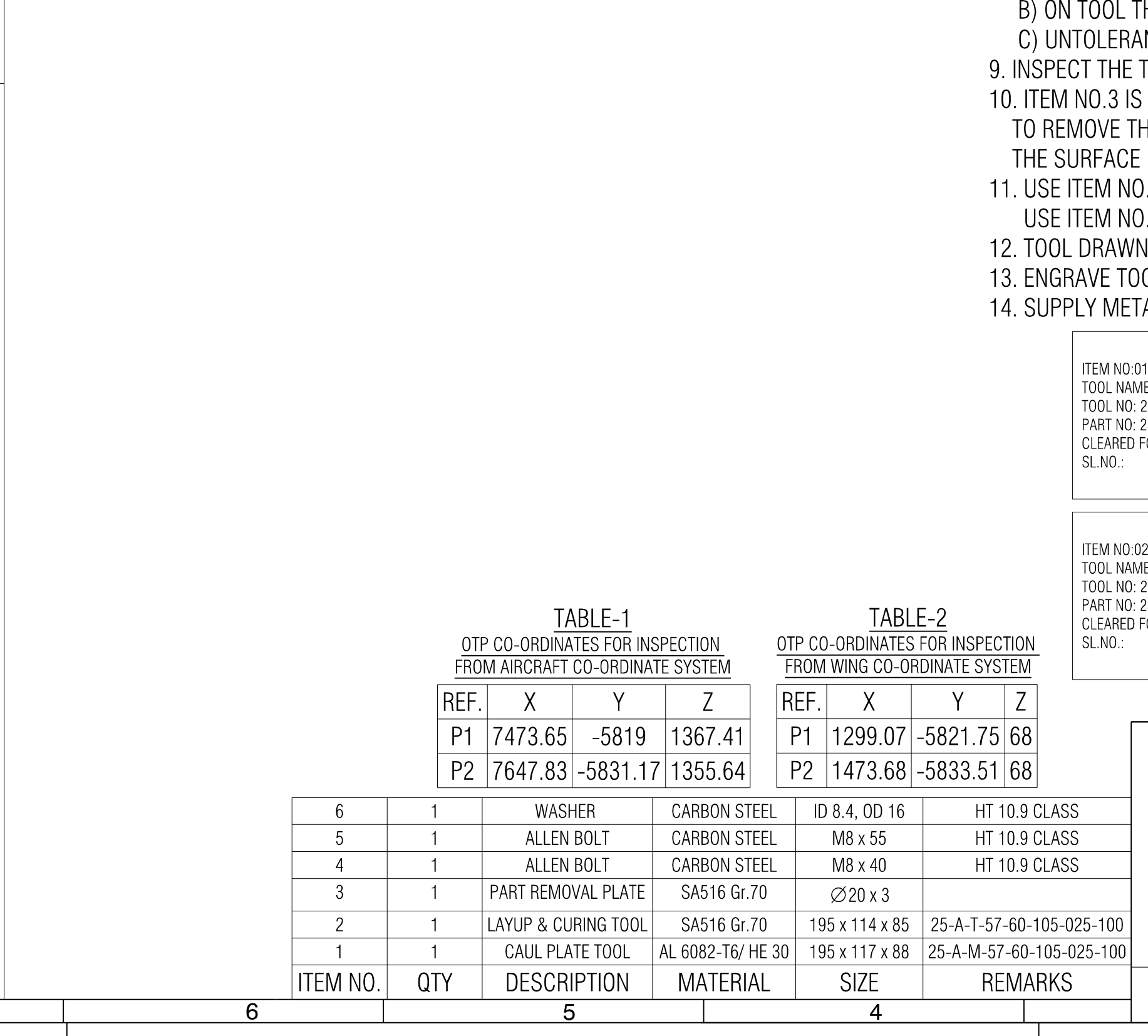
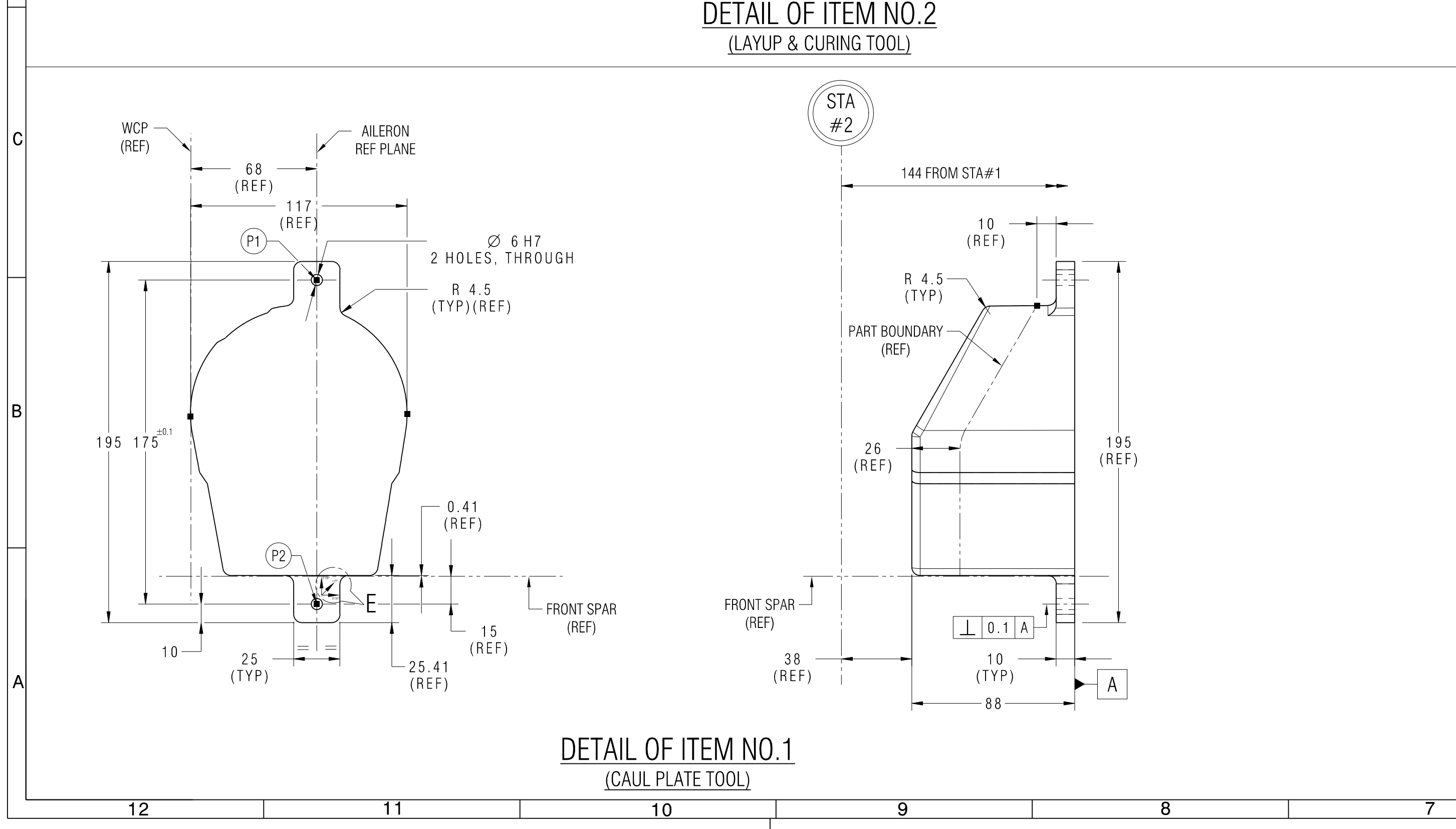
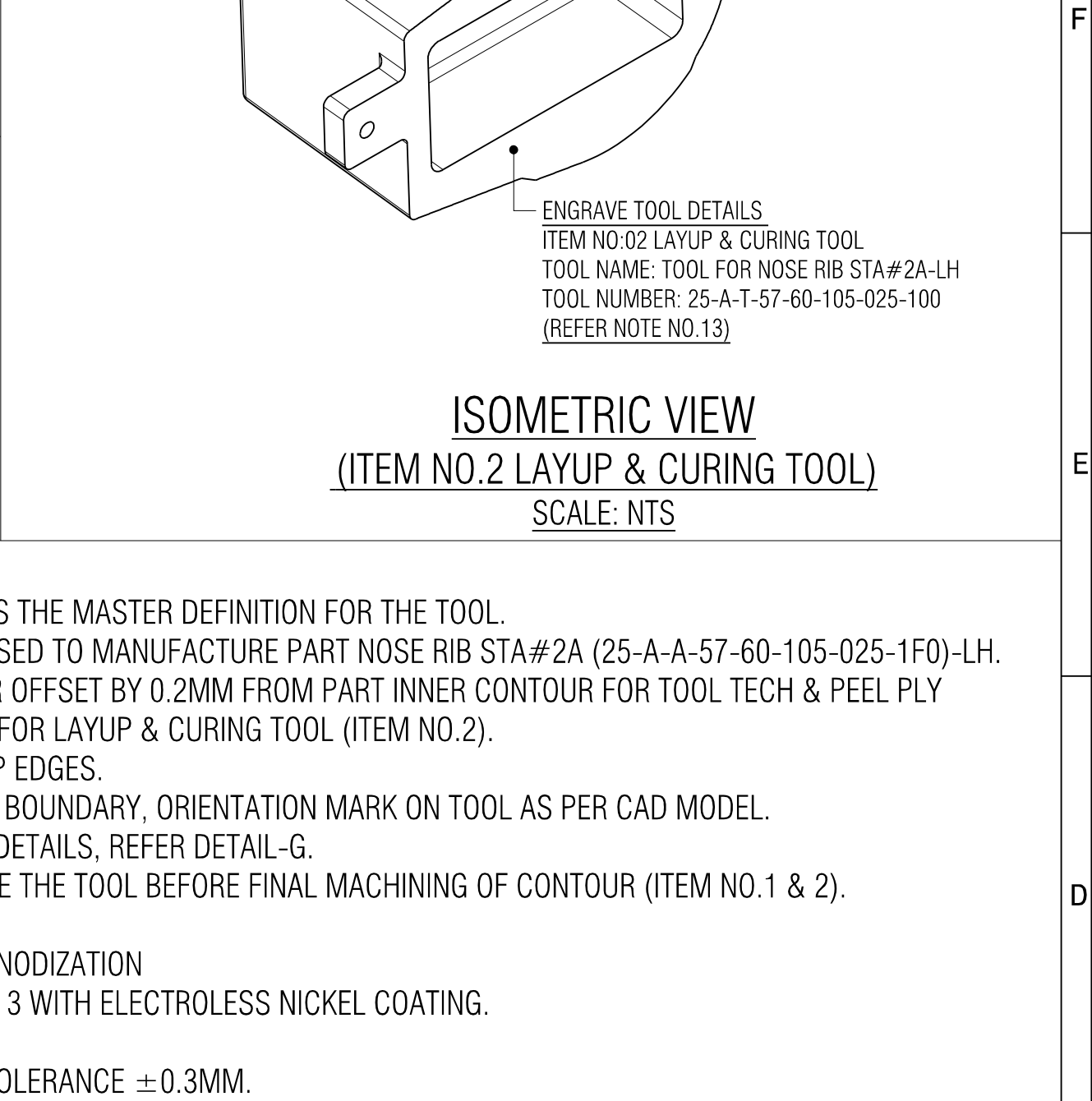
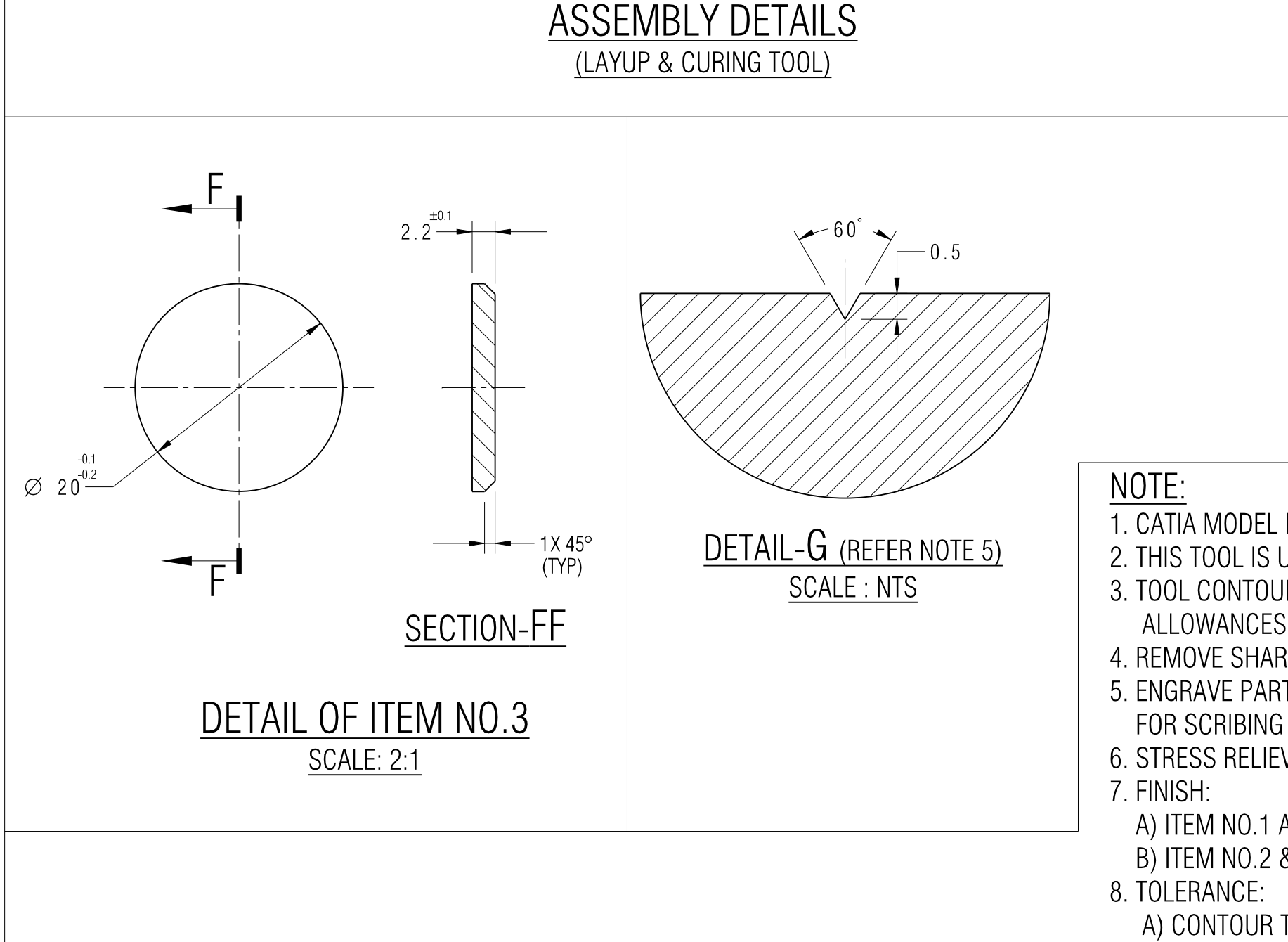
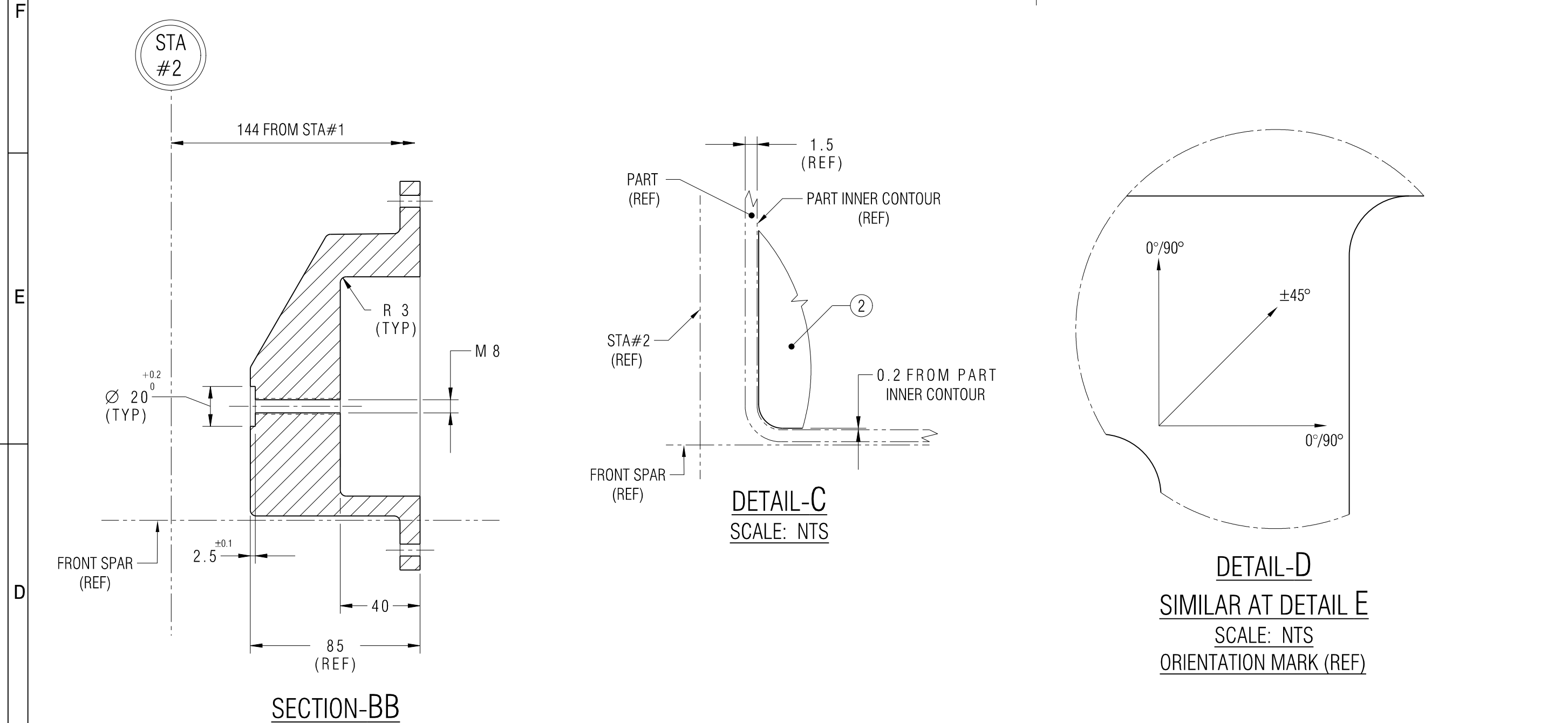
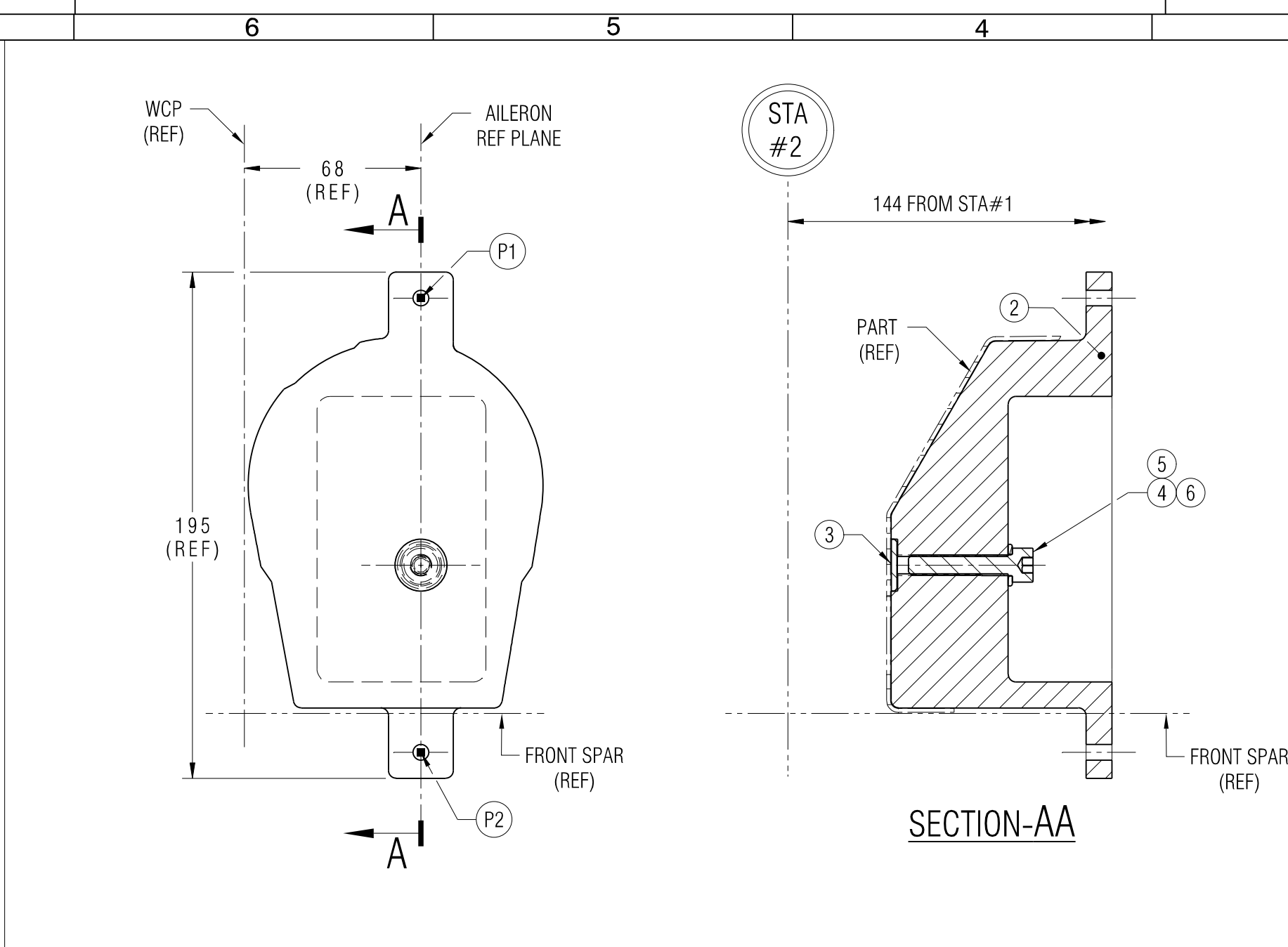
The bid will be treated as incomplete if bidder has not quoted for all the components given inscope of supply (clause 2) and the incomplete bid will be rejected. The bidder should also include all incidental services in their quote. The bid will be commercially evaluated for the components in the scope of supply.

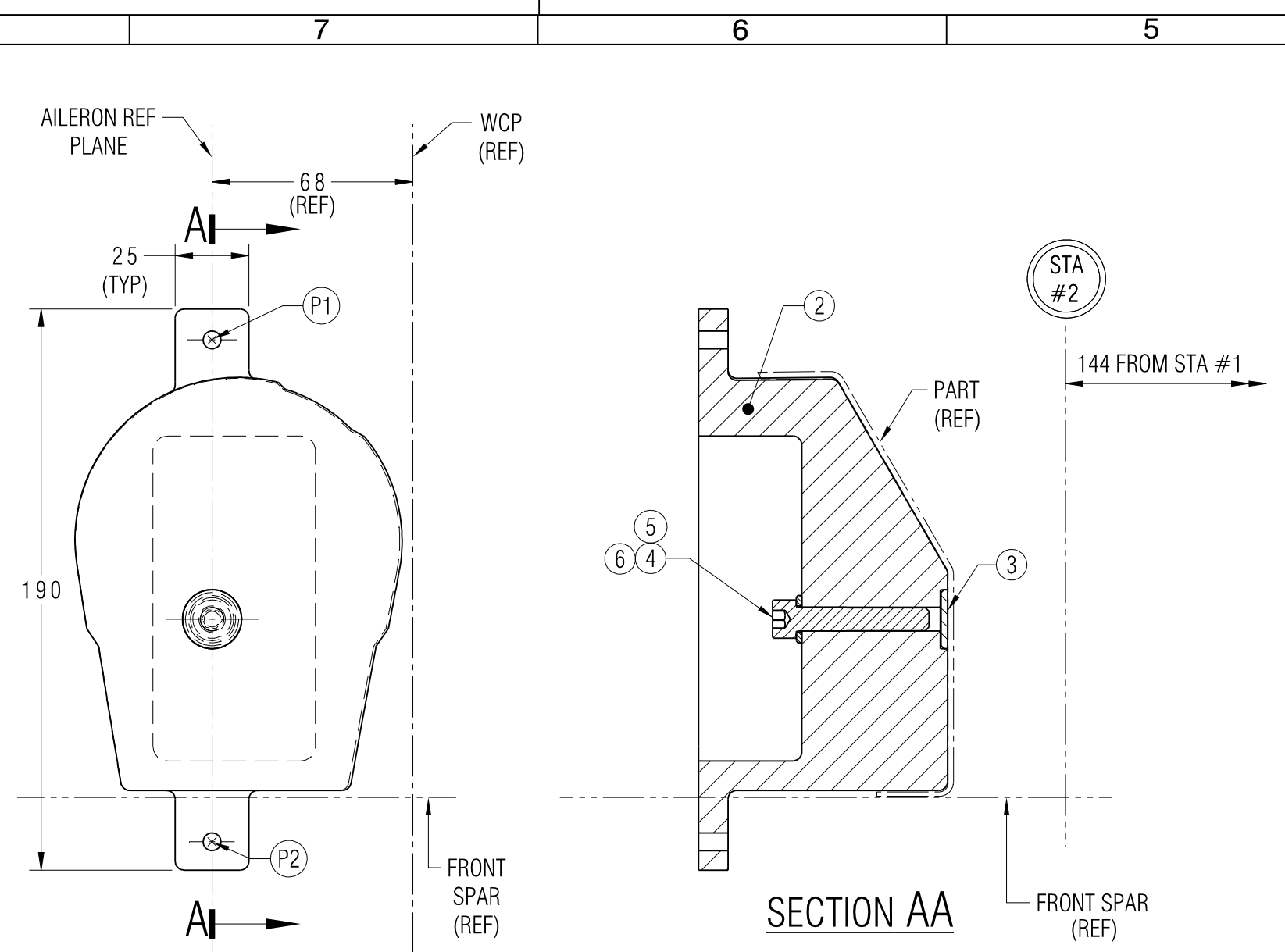
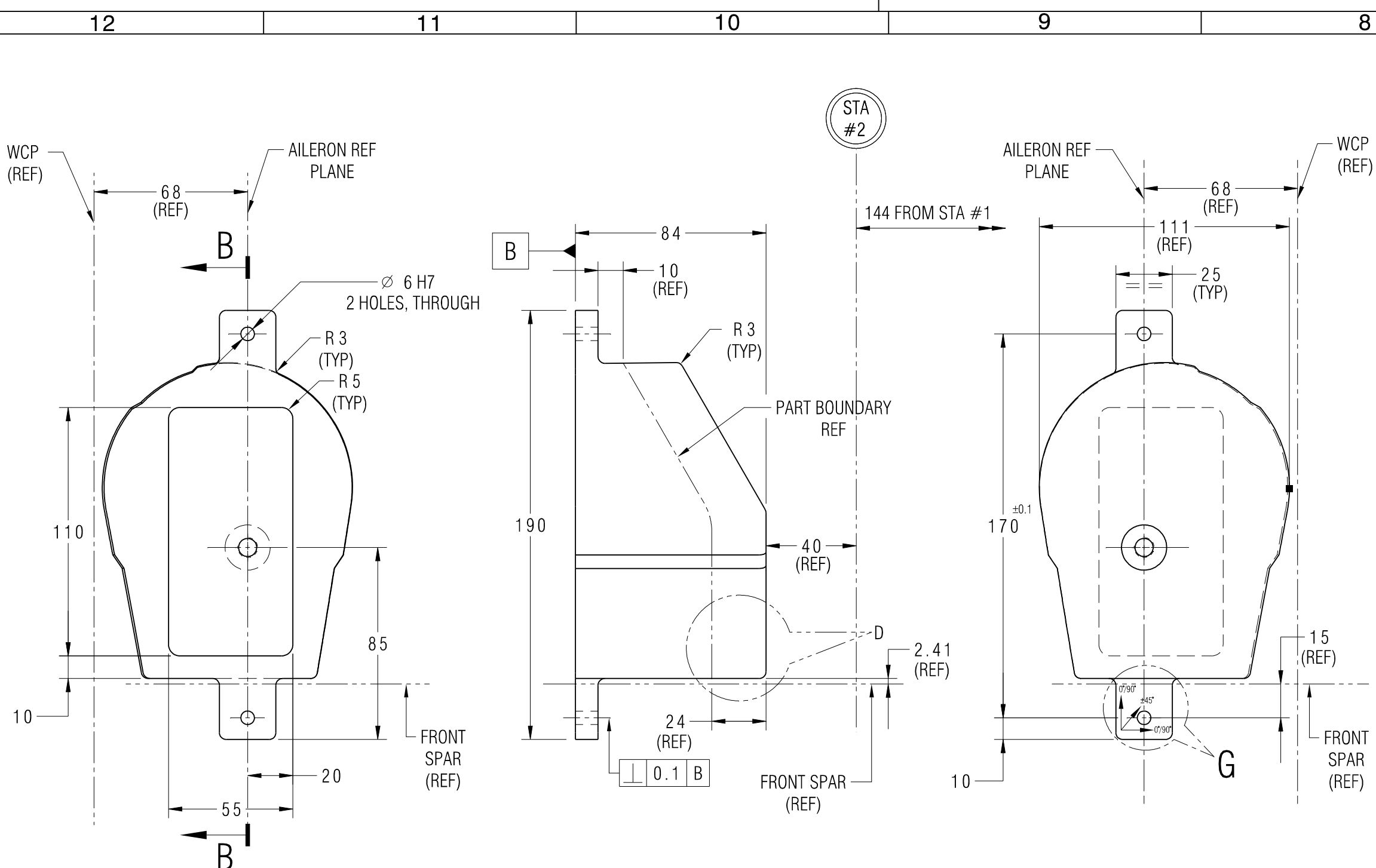
MODULE-A

AILERON NOSE

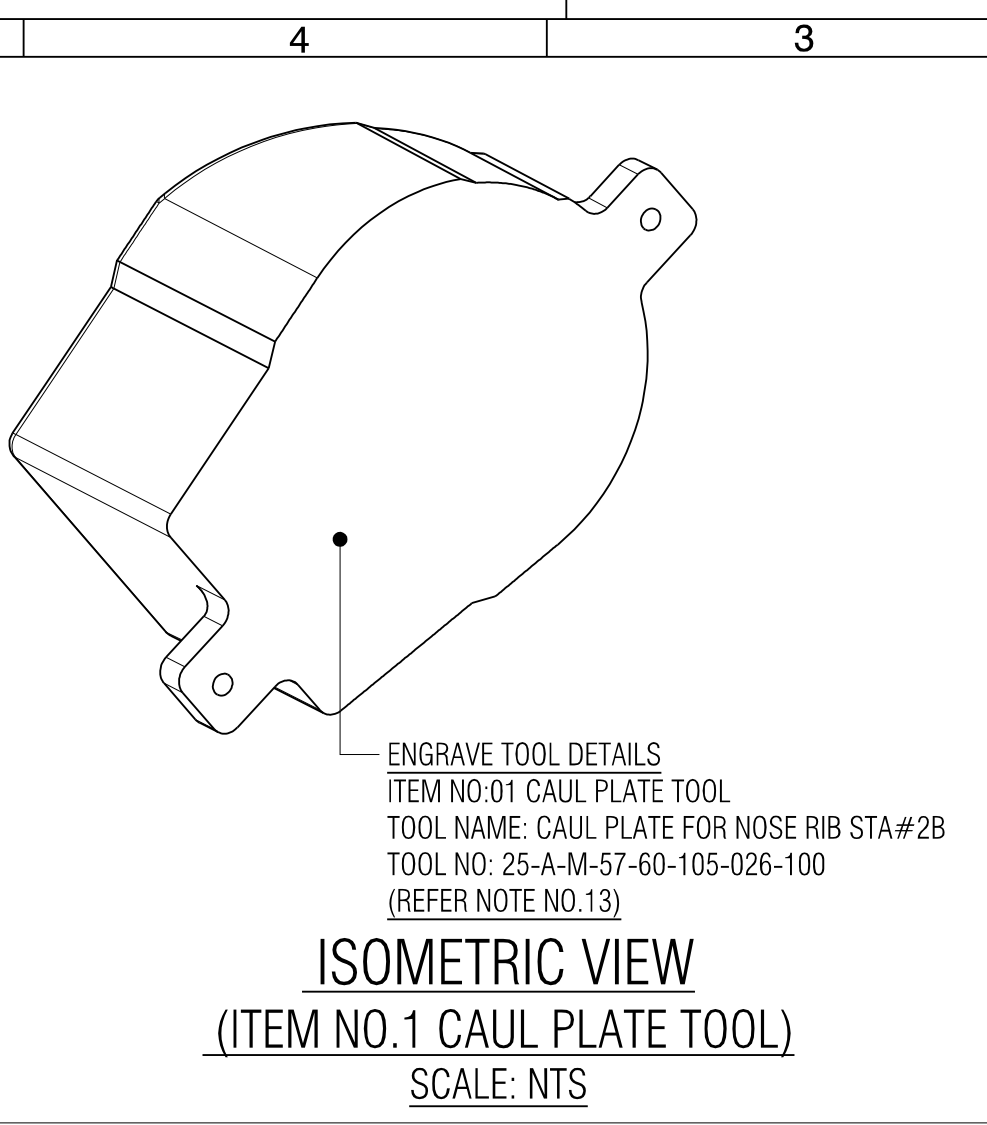
RIB TOOL

DRAWINGS

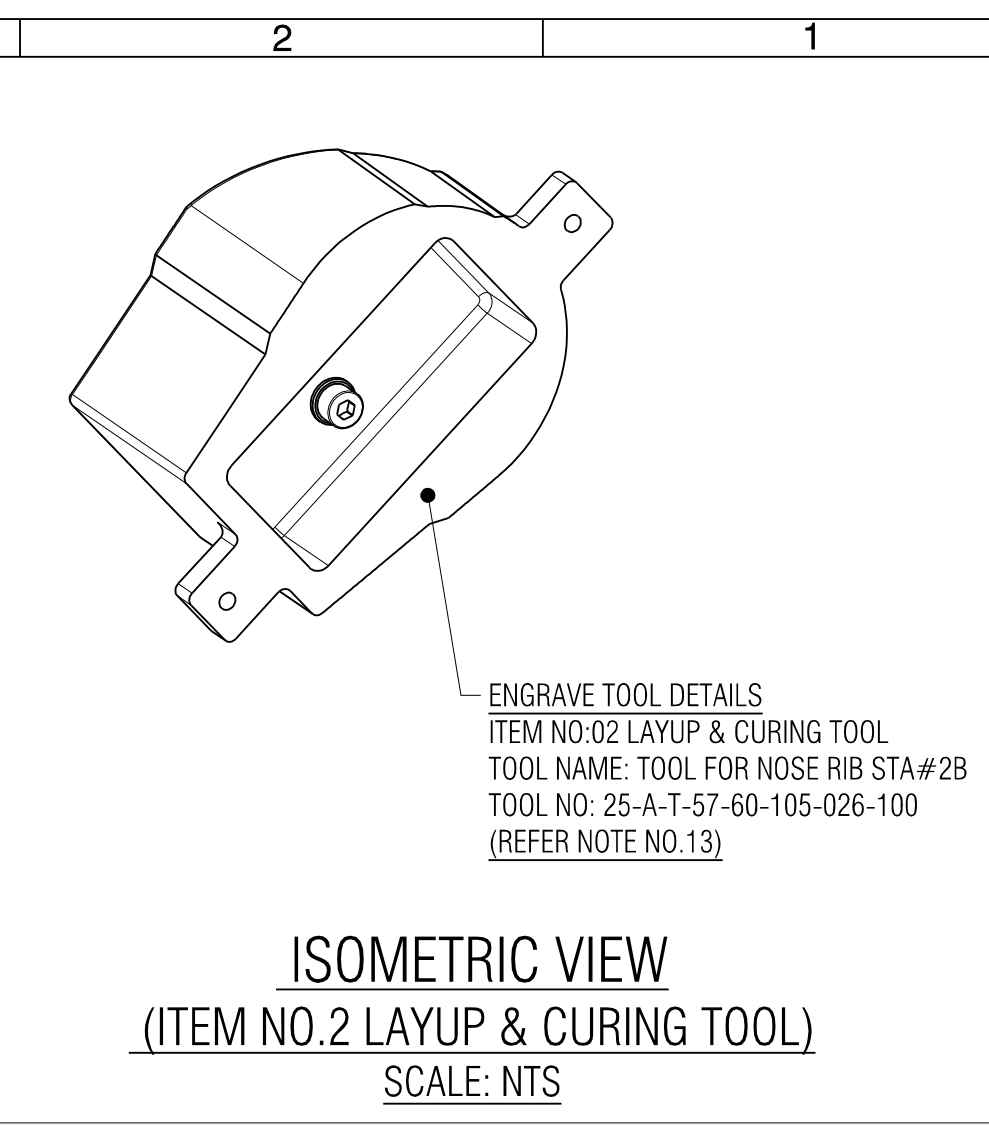




ASSEMBLY DETAILS
(LAYUP & CURING TOOL)



ISOMETRIC VIEW
(ITEM NO.1 CAUL PLATE TOOL)
SCALE: NTS



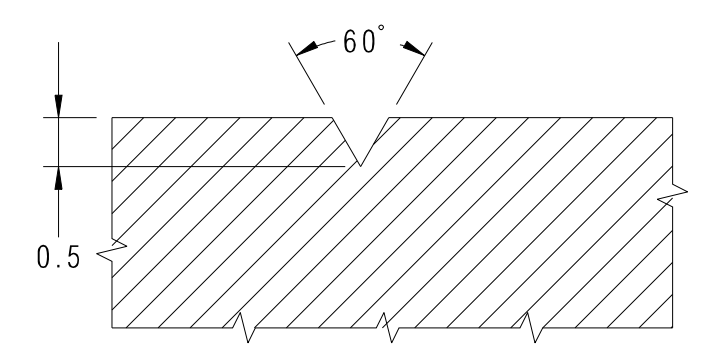
ISOMETRIC VIEW
(ITEM NO.2 LAYUP & CURING TOOL)
SCALE: NTS

TABLE-1
OTP CO-ORDINATE FOR INSPECTION
FROM AIRCRAFT CO-ORDINATE SYSTEM

REF.	X	Y	Z
P1	7463.19	-6049.01	1376.17
P2	7632.4	-6060.83	1364.74

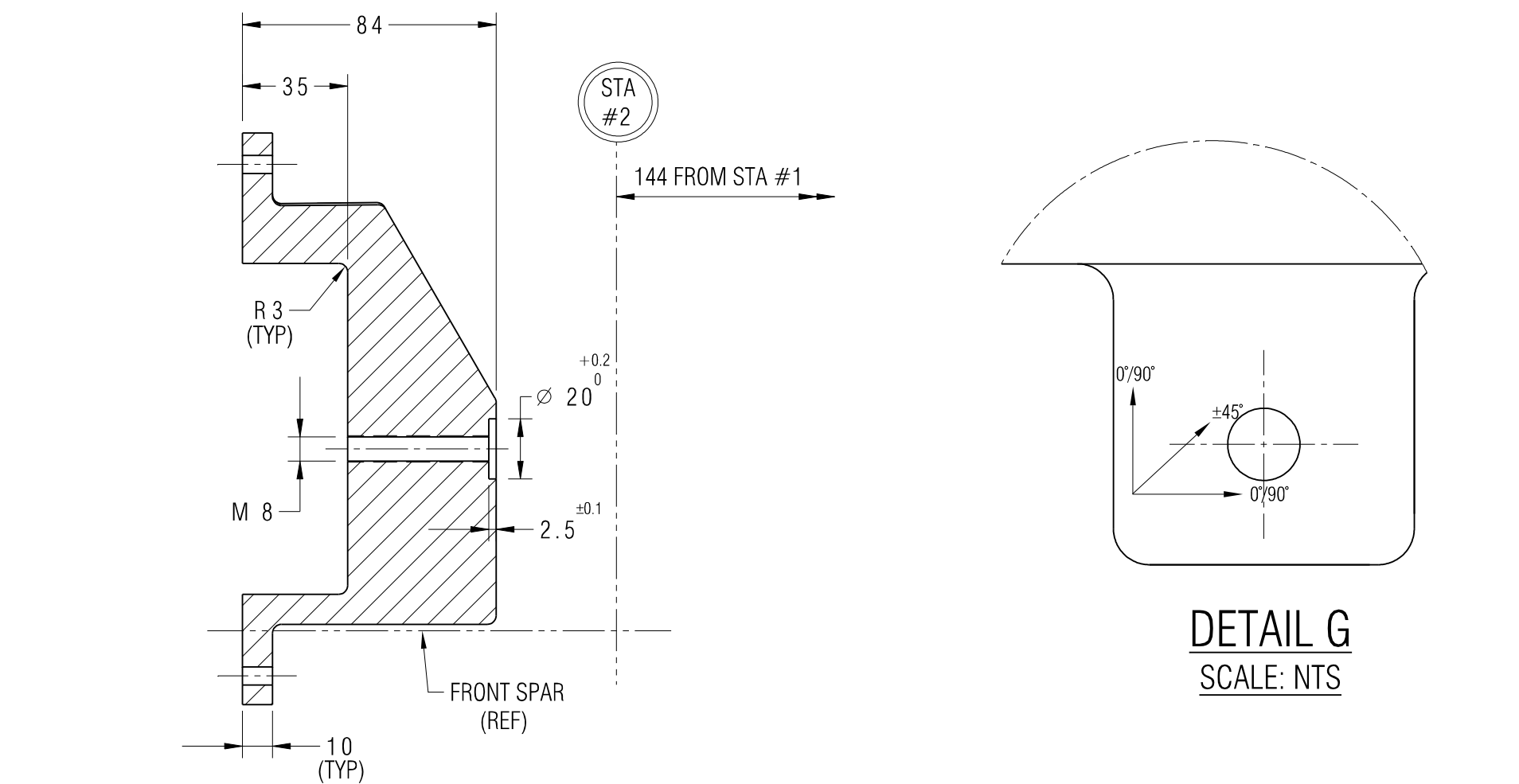
TABLE-2
OTP CO-ORDINATE FOR INSPECTION
FROM WING CO-ORDINATE SYSTEM

REF.	X	Y	Z
P1	1288.59	-6051.93	68
P2	1458.21	-6063.35	68

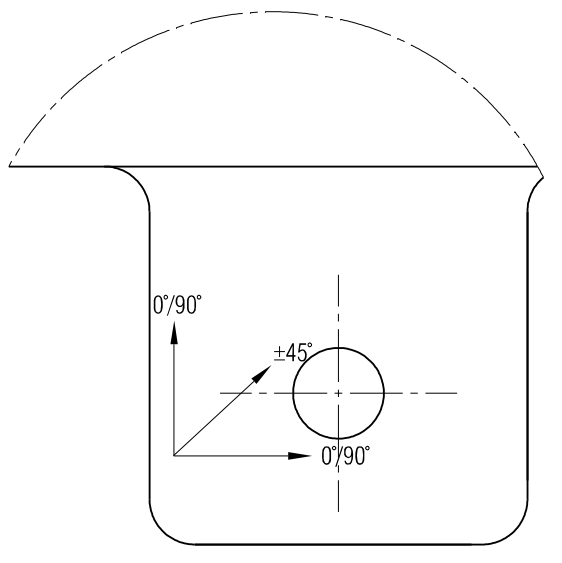


DETAIL- E
(REF NOTE 5)
SCALE: NTS

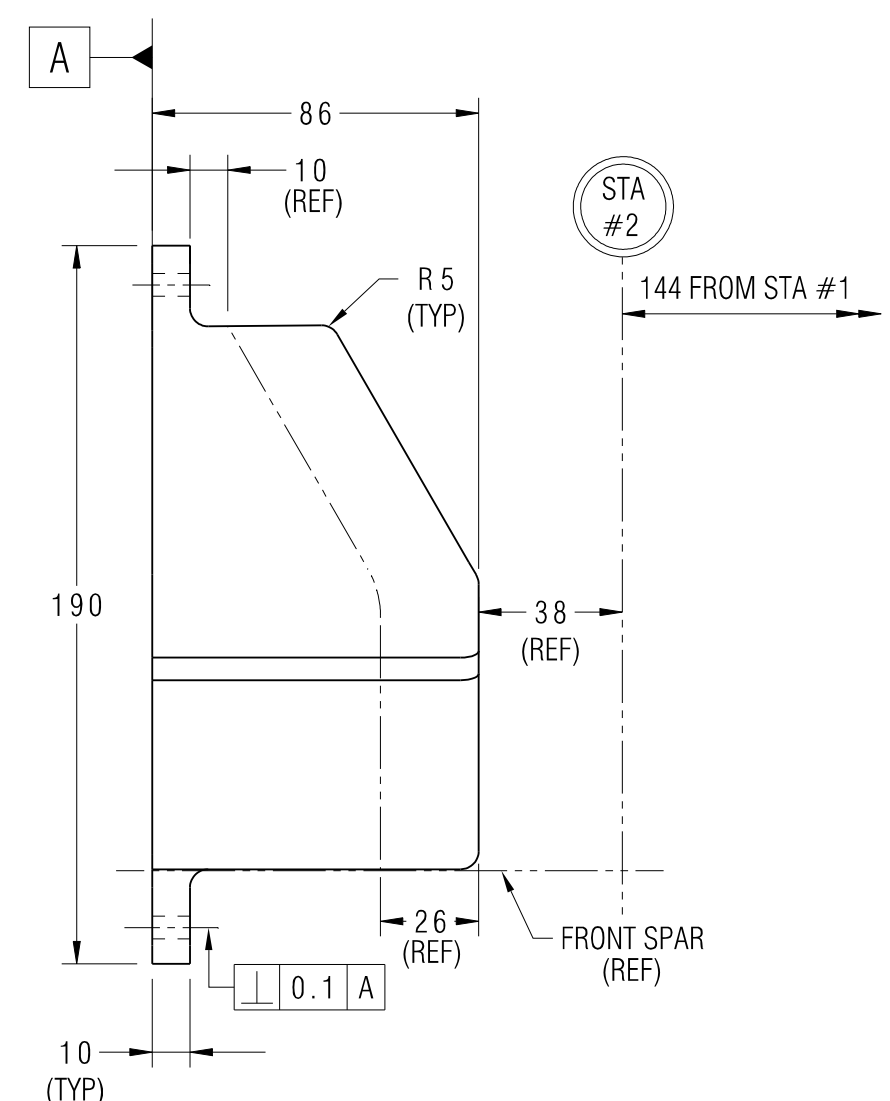
- NOTE:
- CATIA MODEL IS THE MASTER DEFINITION FOR THE TOOL.
 - THIS TOOL IS USED TO MANUFACTURE PART NOSE RIB STA#2B (25-A-A-57-60-105-026-1F0)-LH.
 - TOOL CONTOUR OFFSET BY 0.2MM FROM PART INNER CONTOUR FOR TOOL TECH & PEEL PLY ALLOWANCES FOR LAYUP & CURING TOOL (ITEM NO.2).
 - REMOVE SHARP EDGES.
 - ENGRAVE PART BOUNDARY, ORIENTATION MARK ON TOOL AS PER CAD MODEL. FOR SCRIBING DETAILS, REFER DETAIL-E
 - STRESS RELIEVE THE TOOL BEFORE FINAL MACHINING OF CONTOUR (ITEM NO.1 & 2).
 - FINISH:
A) ITEM NO.1 ANODIZATION
B) ITEM NO.2 & 3 WITH ELECTROLESS NICKEL COATING.
 - TOLERANCE:
A) CONTOUR TOLERANCE ± 0.3 MM.
B) ON TOOL THICKNESS ± 2 MM.
C) UNTOLERANCED DIMENSIONS TO CONFORM WITH SPEC: IS2102 (PART-1) COARSE.
 - INSPECT THE TOOL CONTOUR USING CMM/LT WRT OTP HOLE CO-ORDINATES. REFER TABLE NO.1 & 2.
 - ITEM NO.3 IS PART OF THE TOOL AND TO BE POSITIONED BEFORE LAYUP WHICH ENABLES TO REMOVE THE PART AFTER CURING, PUT 0.12MM TOOL TECH ON BOTH SIDES & ENSURE THE SURFACE LEVEL WITH CORE.
 - USE ITEM NO.4 AT THE TIME OF PART LAYUP AND CURING. AFTER CURING REMOVE ITEM NO.4 USE ITEM NO.5 FOR PART RELEASE.
 - TOOL DRAWN FOR LH, OPPOSITE FOR RH.
 - ENGRAVE TOOL DETAILS AS SHOWN IN ISOMETRIC VIEW
 - SUPPLY METAL TAG AS SHOWN BELOW.



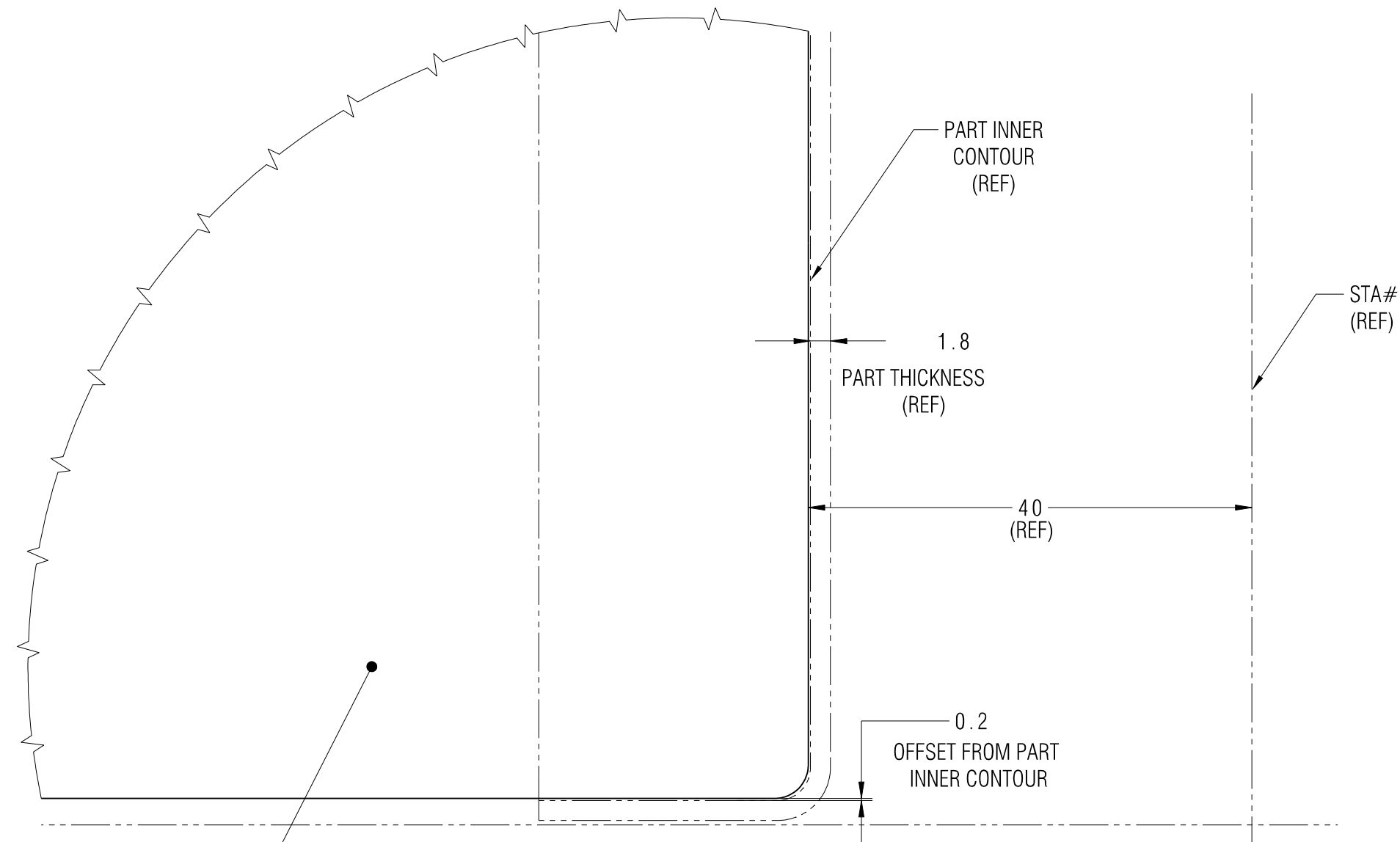
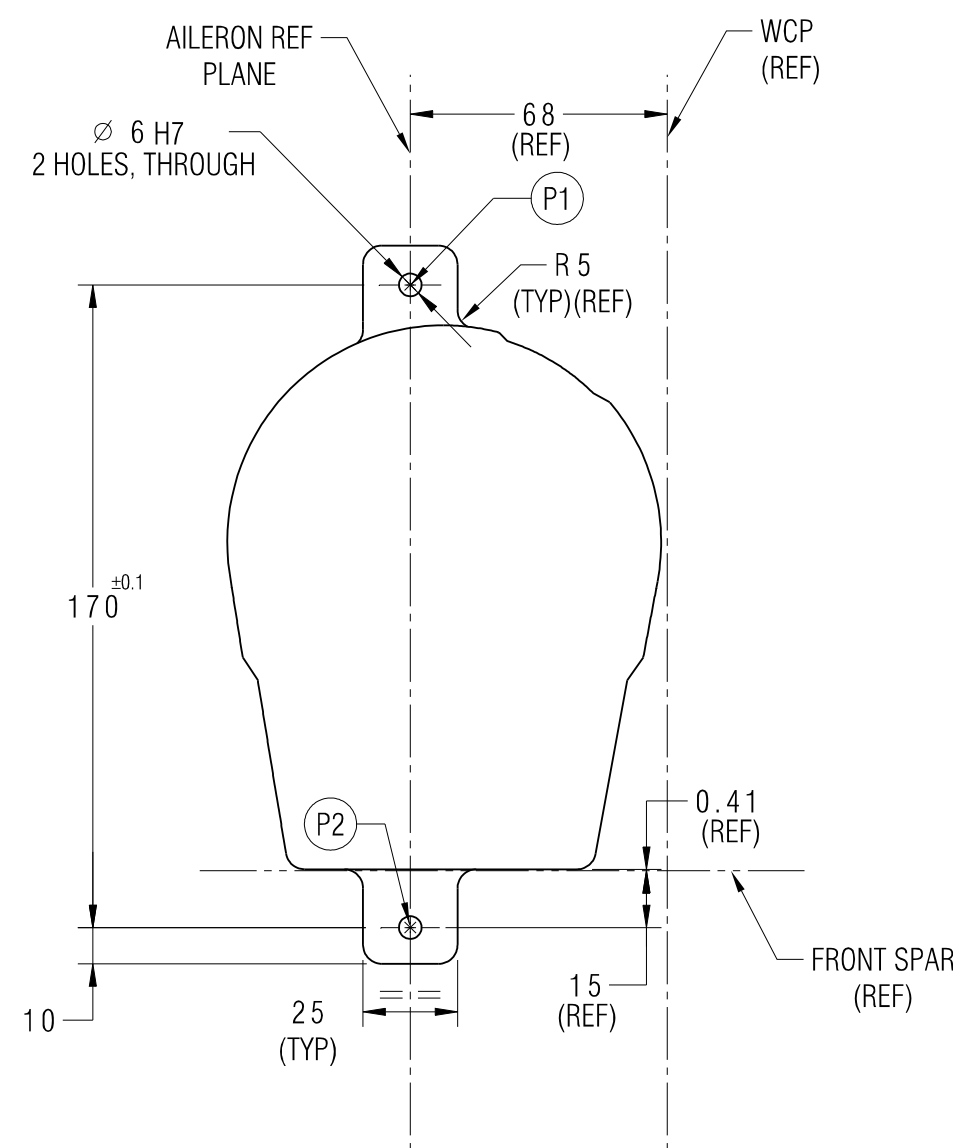
SECTION BB



DETAIL G
SCALE: NTS

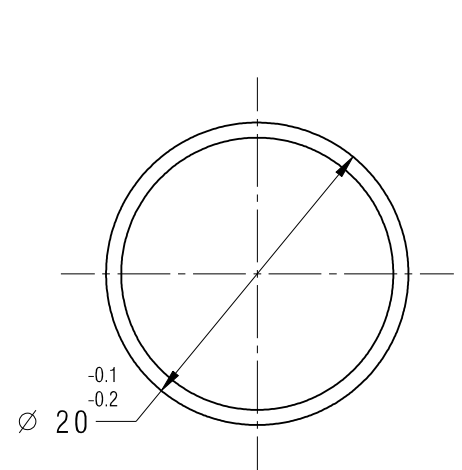


DETAIL FOR ITEM NO.1
(CAUL PLATE TOOL)

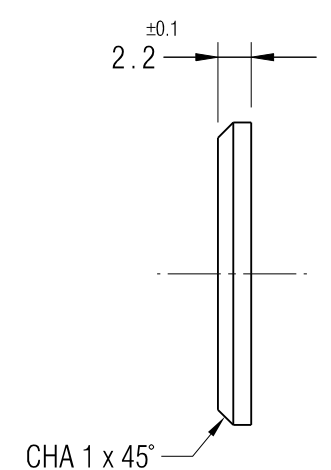


DETAIL-D
SCALE : 1:1

DETAIL FOR ITEM NO.2
(LAYUP & CURING TOOL)



DETAIL OF ITEM No.03
SCALE: 2:1



CHA 1 x 45°

ITEM.NO	QTY	DESCRIPTION	MATERIAL	SIZE	REMARKS
6	1	WASHER	CARBON STEEL	ID 8.4, OD 16	HT 10.9 CLASS
5	1	ALLEN BOLT	CARBON STEEL	M8 x 55	HT 10.9 CLASS
4	1	ALLEN BOLT	CARBON STEEL	M8 x 45	HT 10.9 CLASS
3	1	PART REMOVAL PLATE	SA516 Gr.70	Ø 20 x 2.2	
2	1	LAYUP & CURING TOOL	SA516 Gr.70	190 x 111 x 84	25-A-T-57-60-105-026-100
1	1	CAUL PLATE TOOL	AL 6082-T6 / HE 30	190 x 113 x 86	25-A-M-57-60-105-026-100

PROJECT-SARAS MK2 AILERON-LH ITEM NO:01 CAUL PLATE TOOL TOOL NAME: CAUL PLATE FOR NOSE RIB STA#2B-LH TOOL NO: 25-A-M-57-60-105-026-100 PART NO: 25-A-A-57-60-105-026-1F0 CLEARED FOR SL NO.: DATE OF INSPECTION STAMP	PROJECT-SARAS MK2 AILERON-RH ITEM NO:01 CAUL PLATE TOOL TOOL NAME: CAUL PLATE FOR NOSE RIB STA#2B-RH TOOL NO: 25-A-T-57-60-105-026-200 PART NO: 25-A-A-57-60-105-026-2F0 CLEARED FOR SL NO.: DATE OF INSPECTION STAMP
PROJECT-SARAS MK2 AILERON-LH ITEM NO:02 LAYUP & CURING TOOL TOOL NAME: TOOL FOR NOSE RIB STA#2B-LH TOOL NO: 25-A-T-57-60-105-026-100 PART NO: 25-A-A-57-60-105-026-1F0 CLEARED FOR SL NO.: DATE OF INSPECTION STAMP	PROJECT-SARAS MK2 AILERON-RH ITEM NO:02 LAYUP & CURING TOOL TOOL NAME: TOOL FOR NOSE RIB STA#2B-RH TOOL NO: 25-A-T-57-60-105-026-200 PART NO: 25-A-A-57-60-105-026-2F0 CLEARED FOR SL NO.: DATE OF INSPECTION STAMP

TITLE: AILERON

TOOL FOR NOSE RIB STA#2B

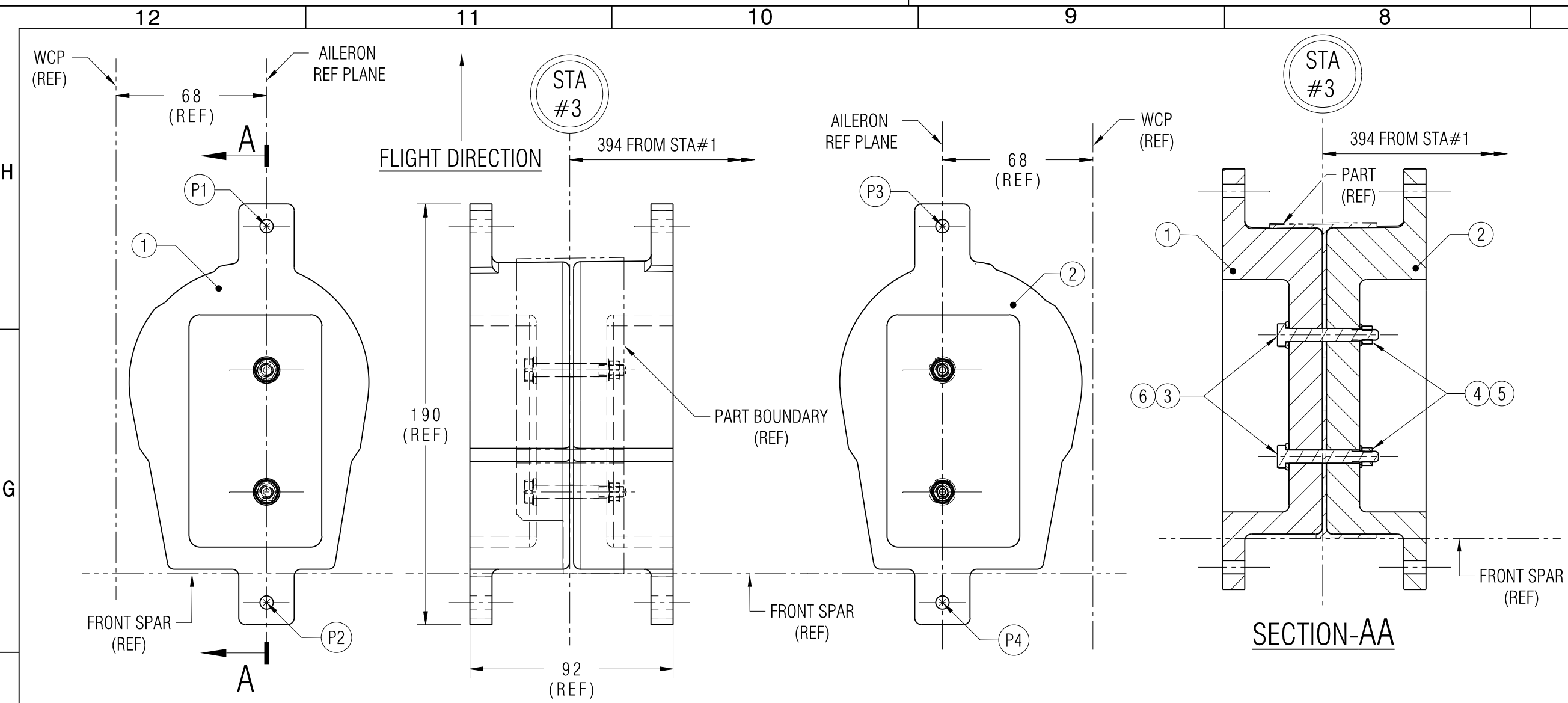
25-A-T-57-60-105-026-100

THIRD ANGLE PROJ.

SCALE 1/2 NOTED

DWG.No.

SHT. 1 OF 1



ASSEMBLY DETAILS

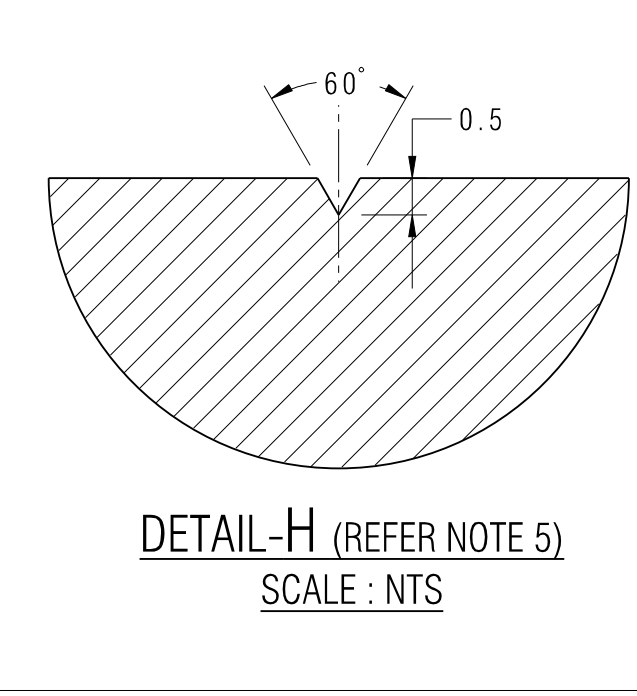
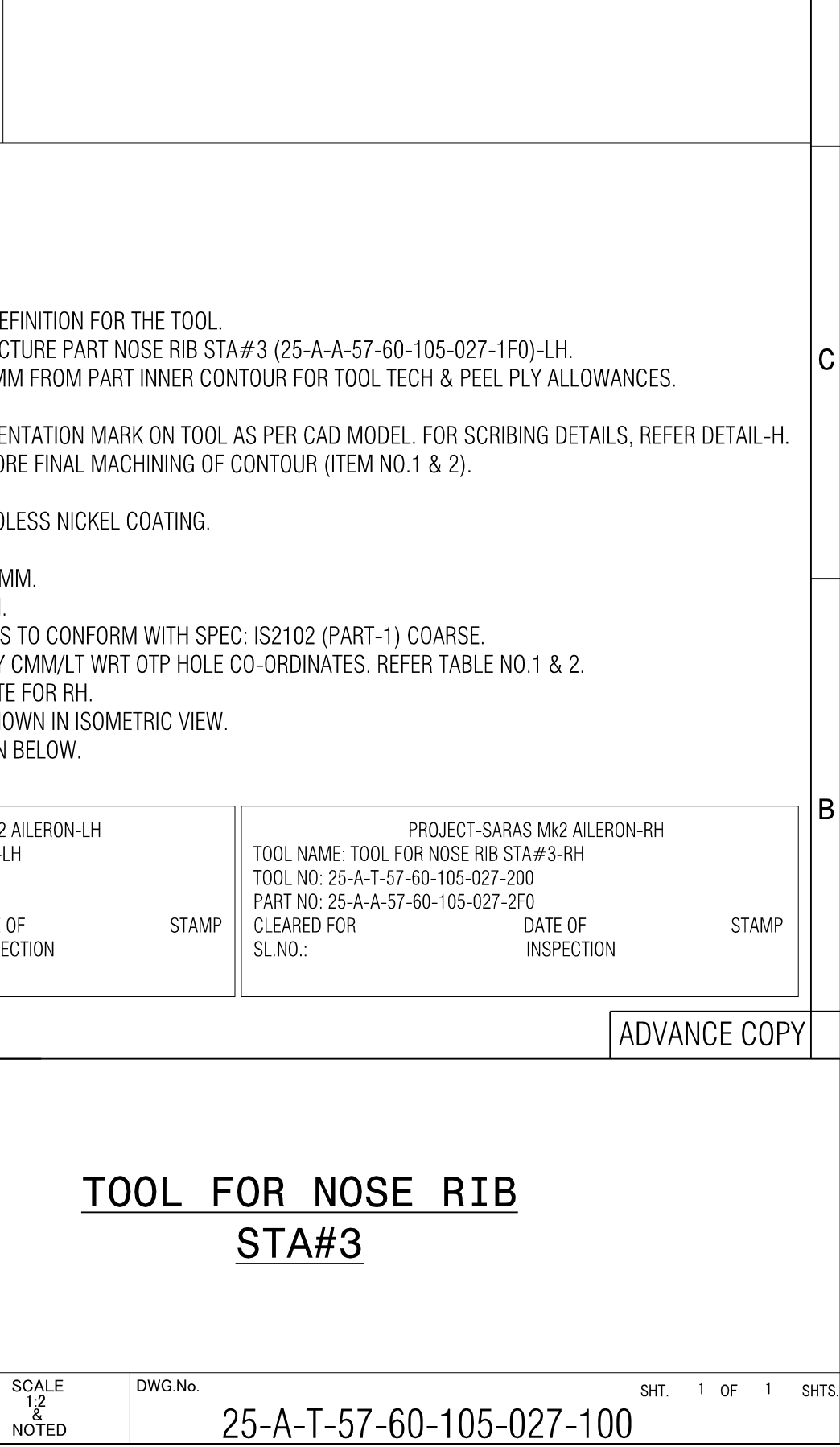
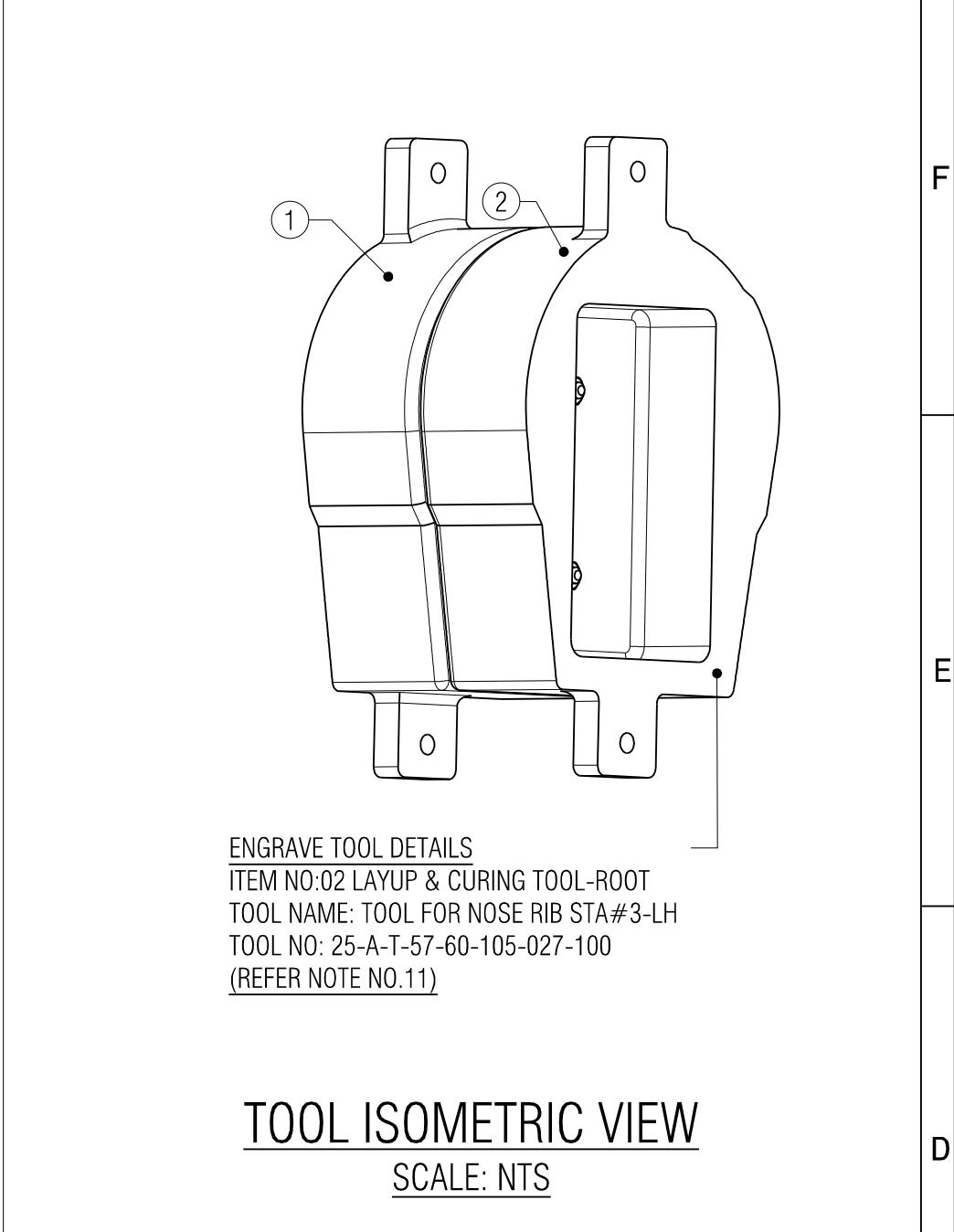
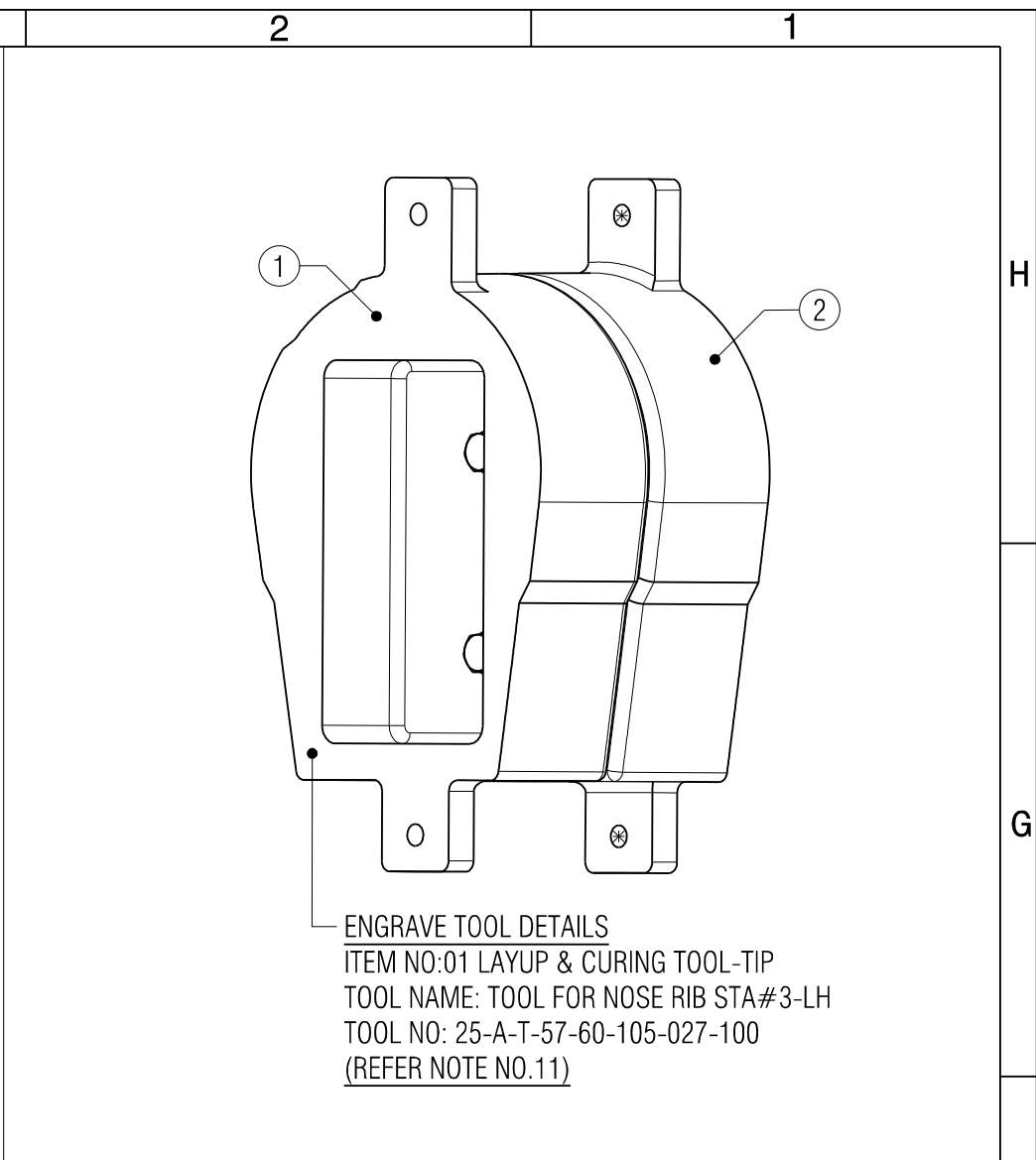
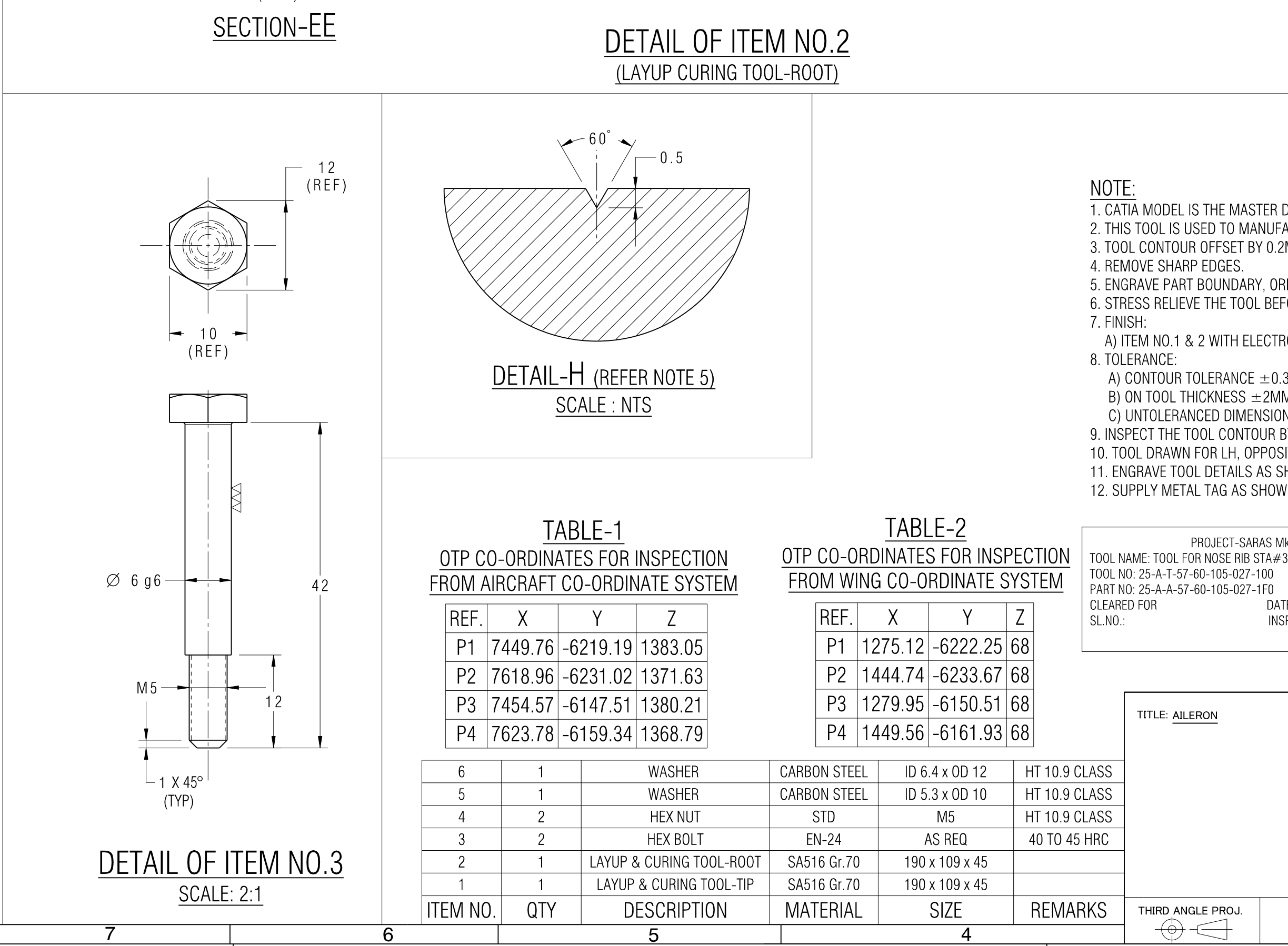
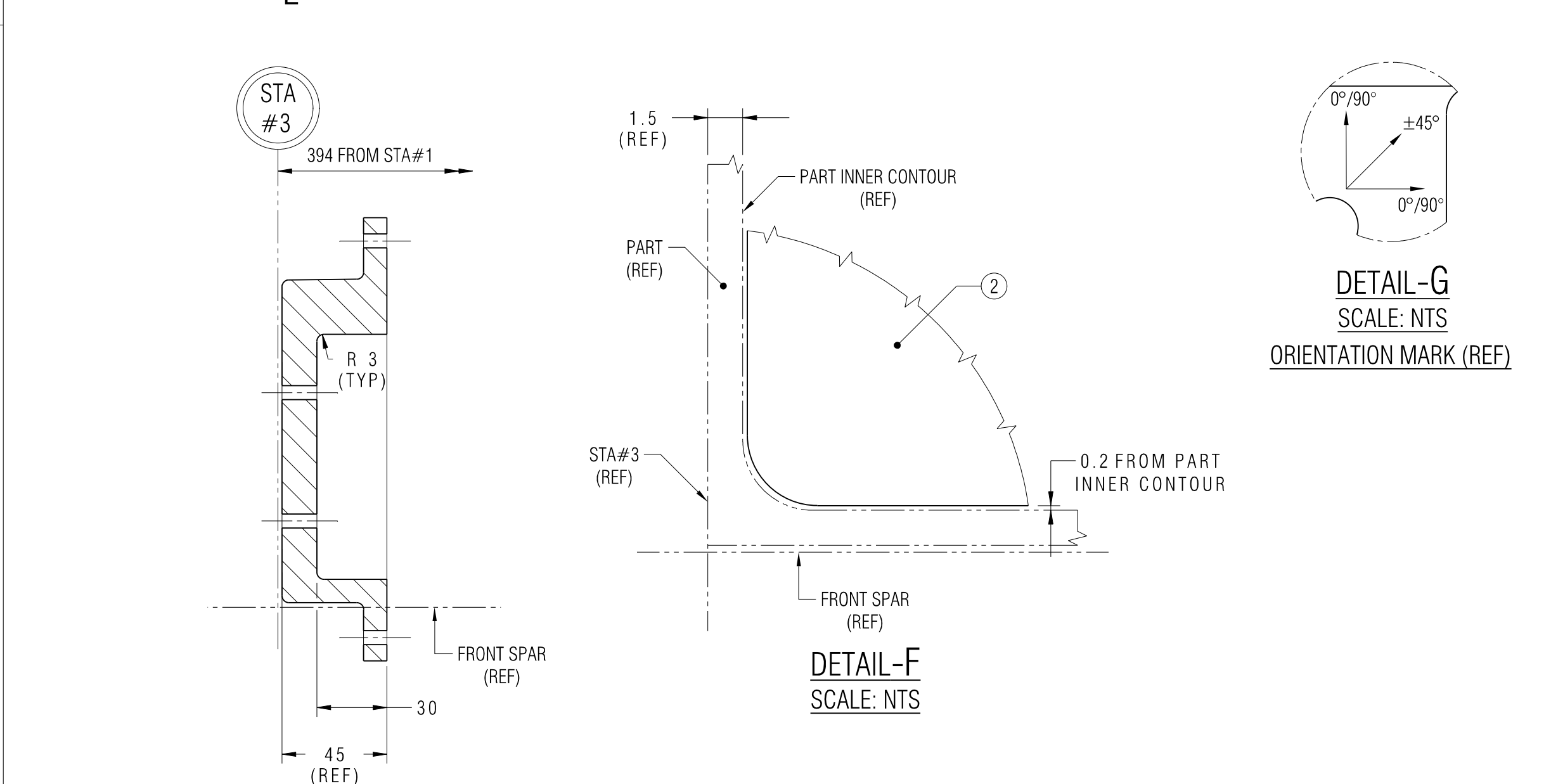
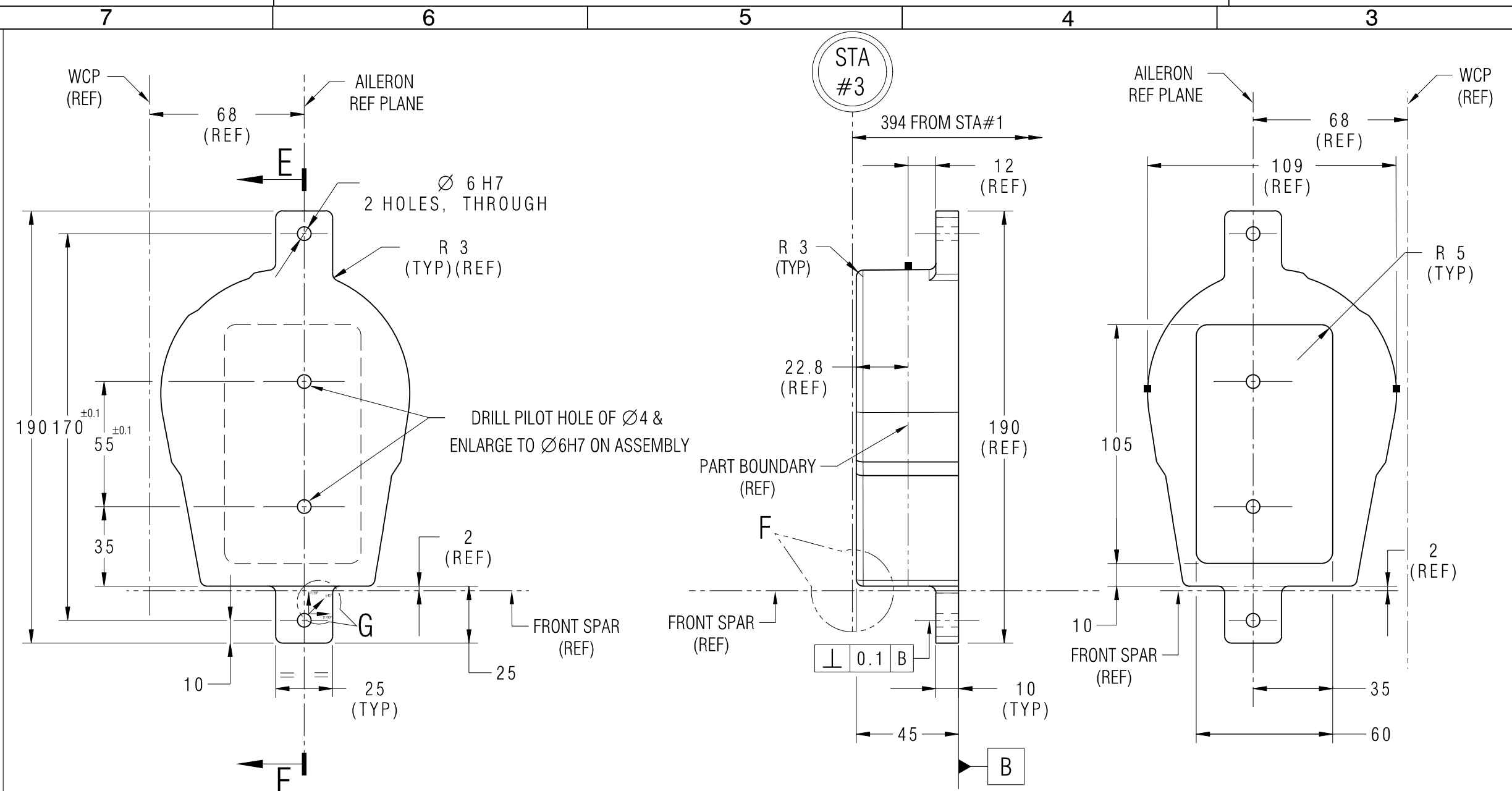
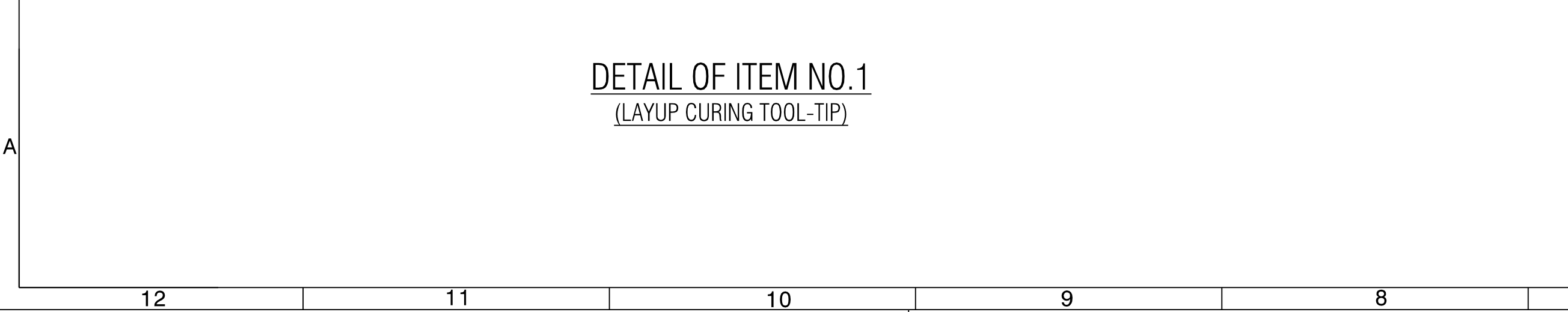
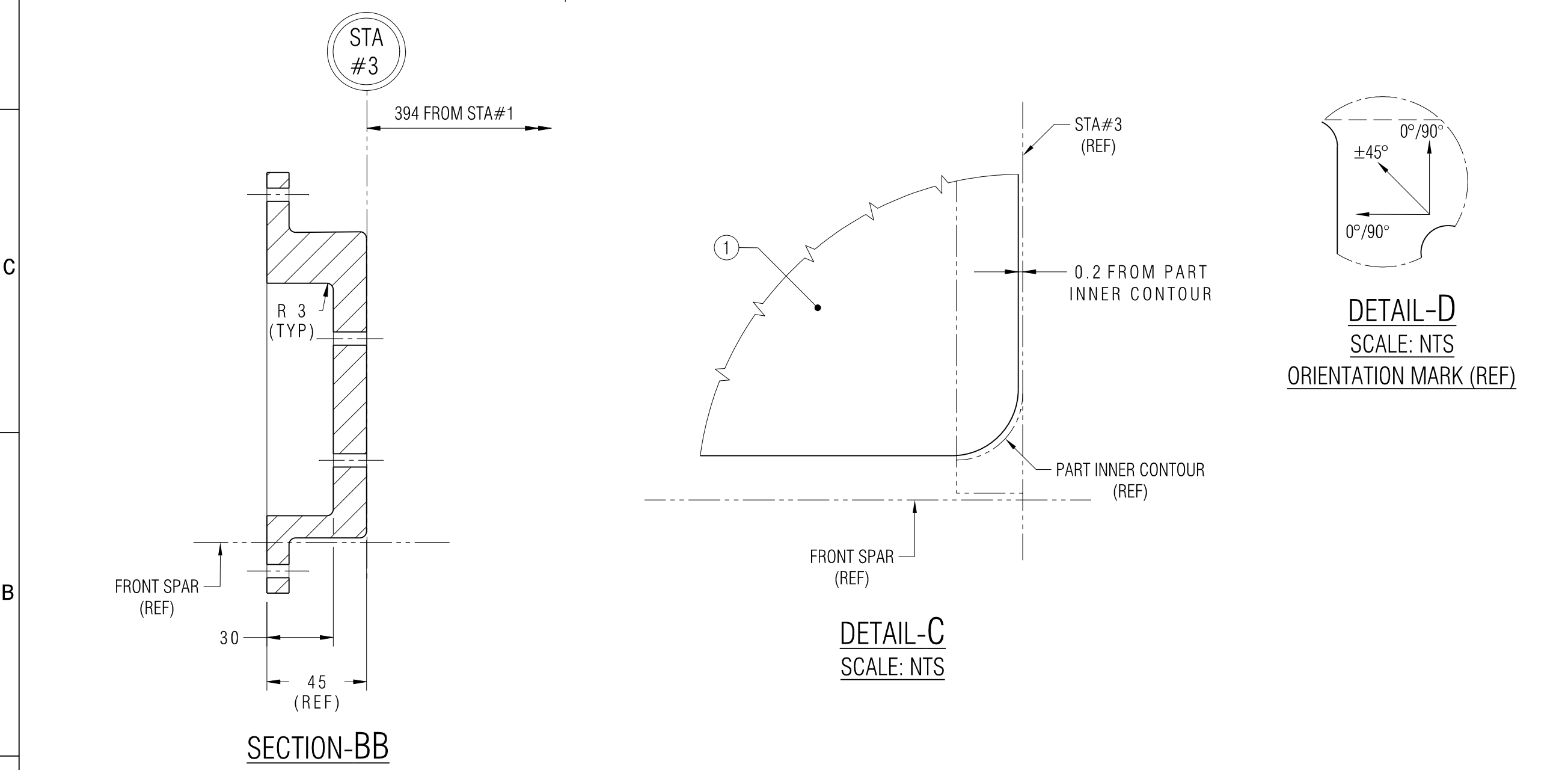
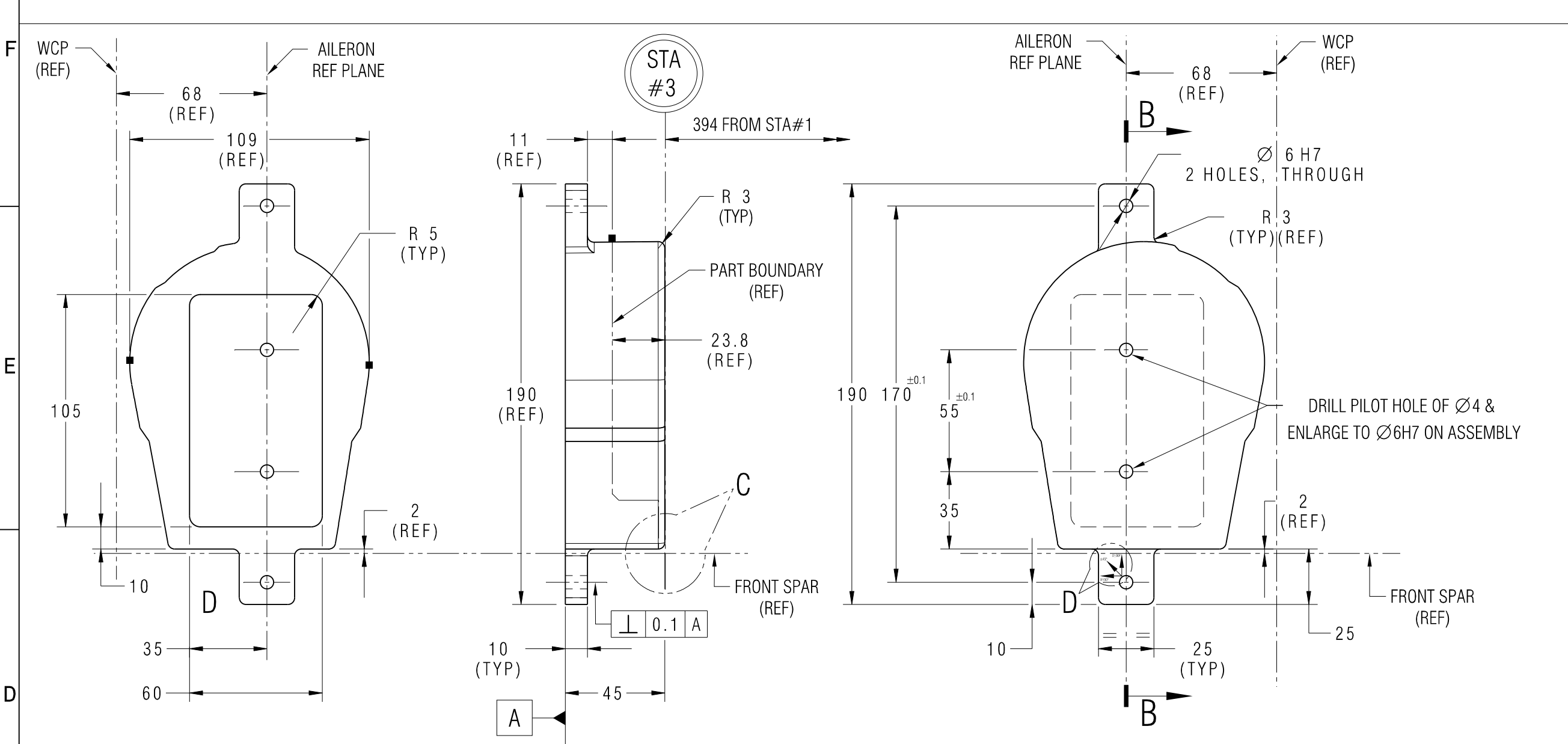


TABLE-1
OTP CO-ORDINATES FOR INSPECTION
FROM AIRCRAFT CO-ORDINATE SYSTEM

REF.	X	Y	Z
P1	7449.76	-6219.19	1383.05
P2	7618.96	-6231.02	1371.63
P3	7454.57	-6147.51	1380.21
P4	7623.78	-6159.34	1368.79

TABLE-2
OTP CO-ORDINATES FOR INSPECTION
FROM WING CO-ORDINATE SYSTEM

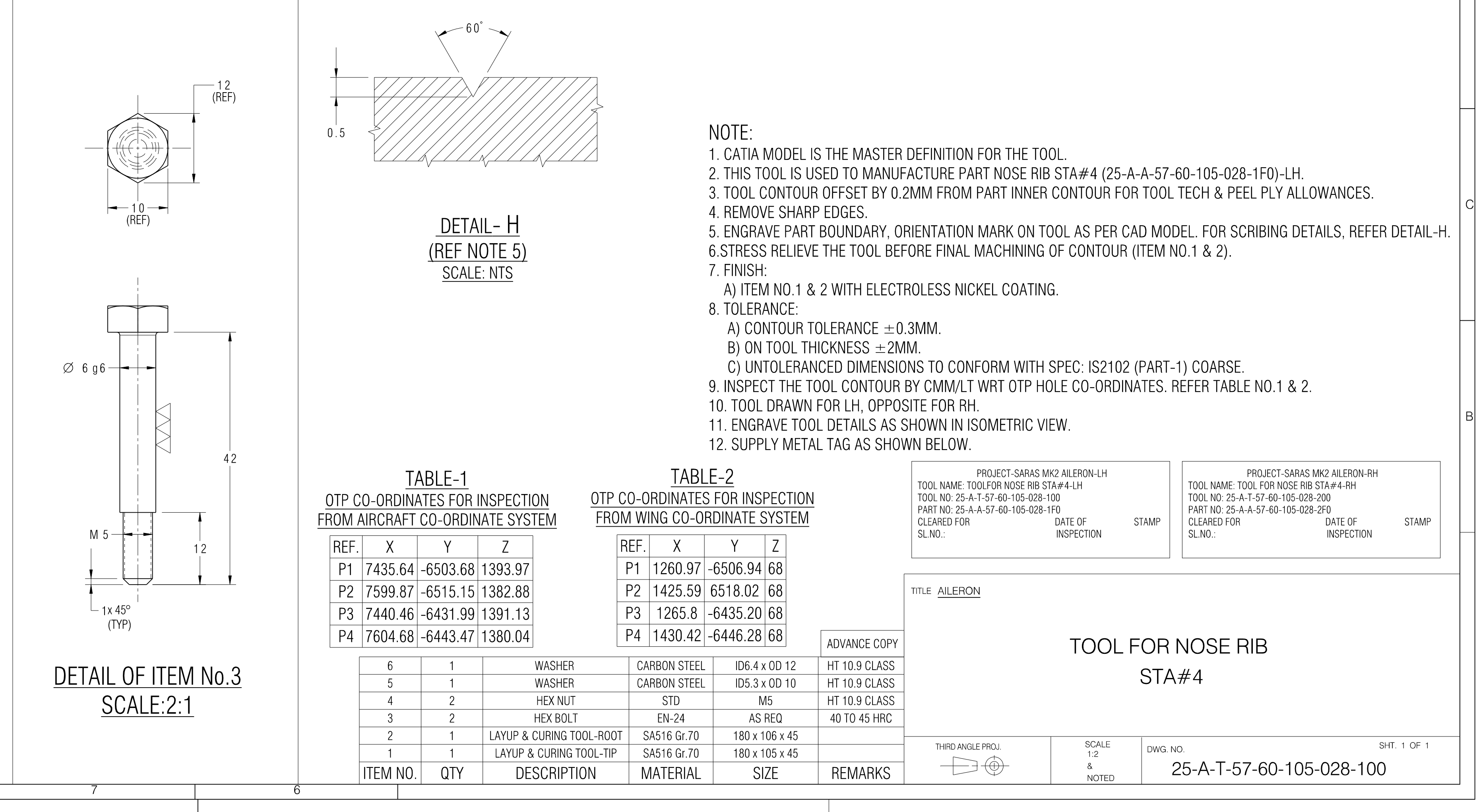
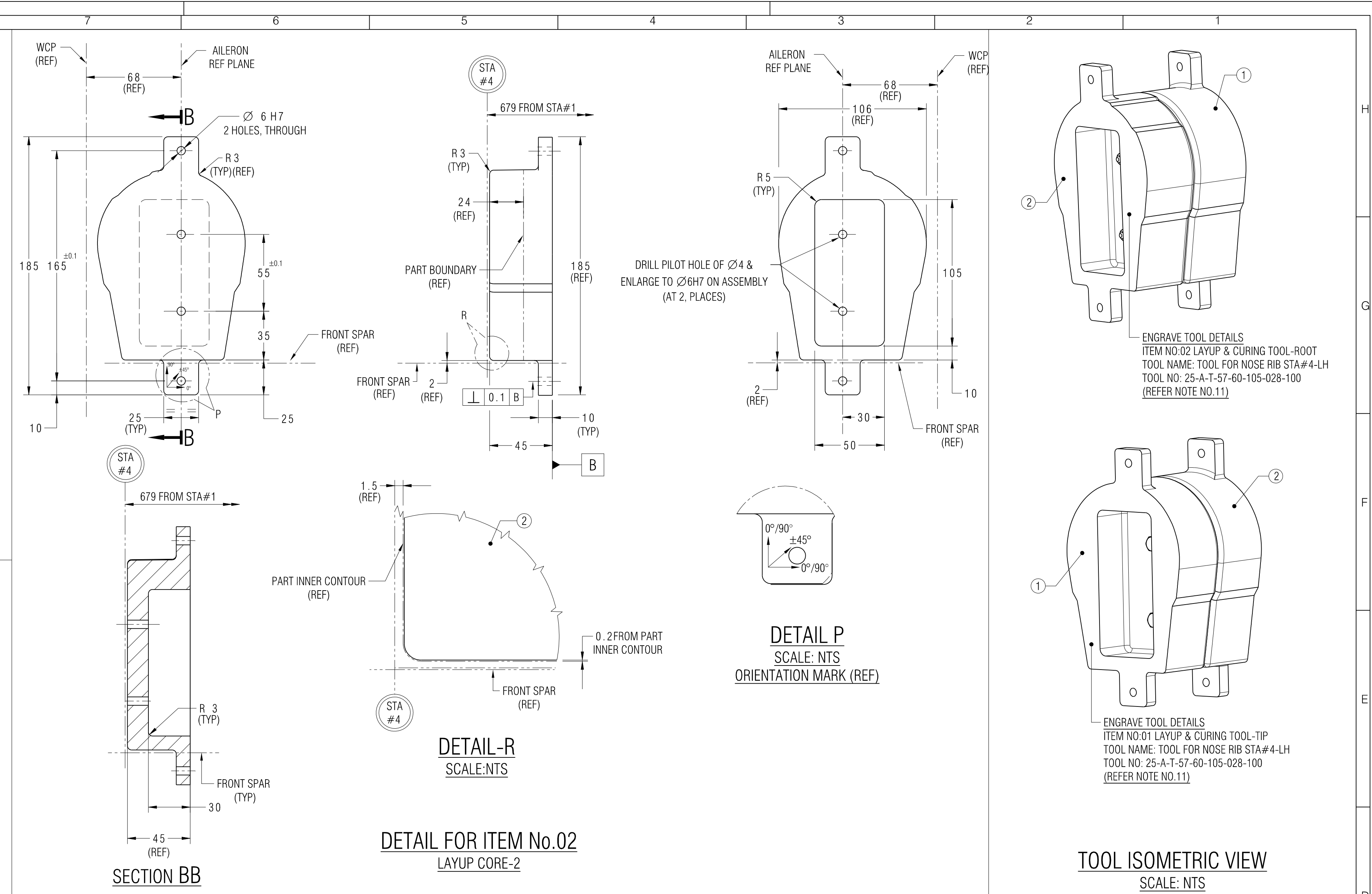
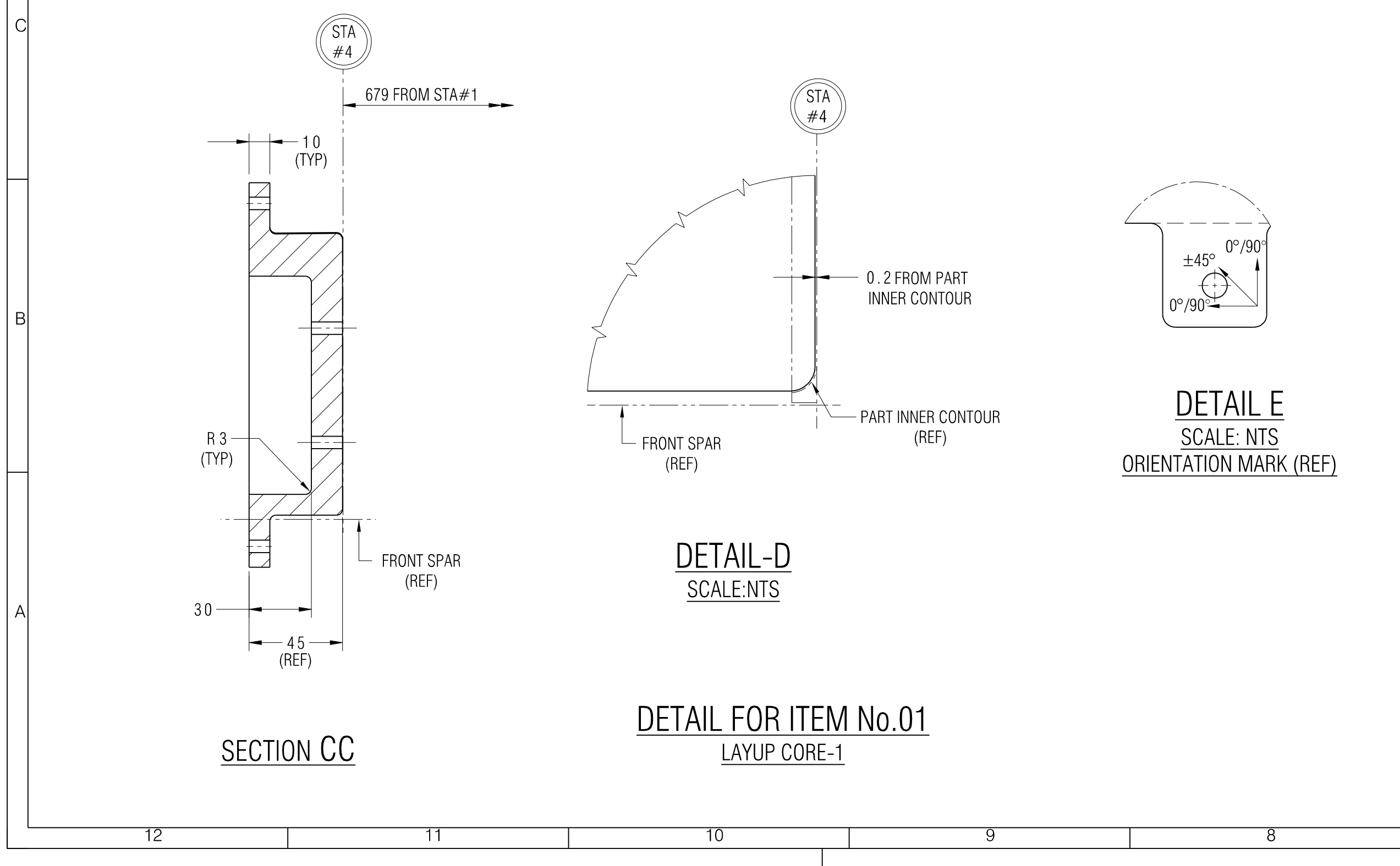
REF.	X	Y	Z
P1	1275.12	-6222.25	68
P2	1444.74	-6233.67	68
P3	1279.95	-6150.51	68
P4	1449.56	-6161.93	68

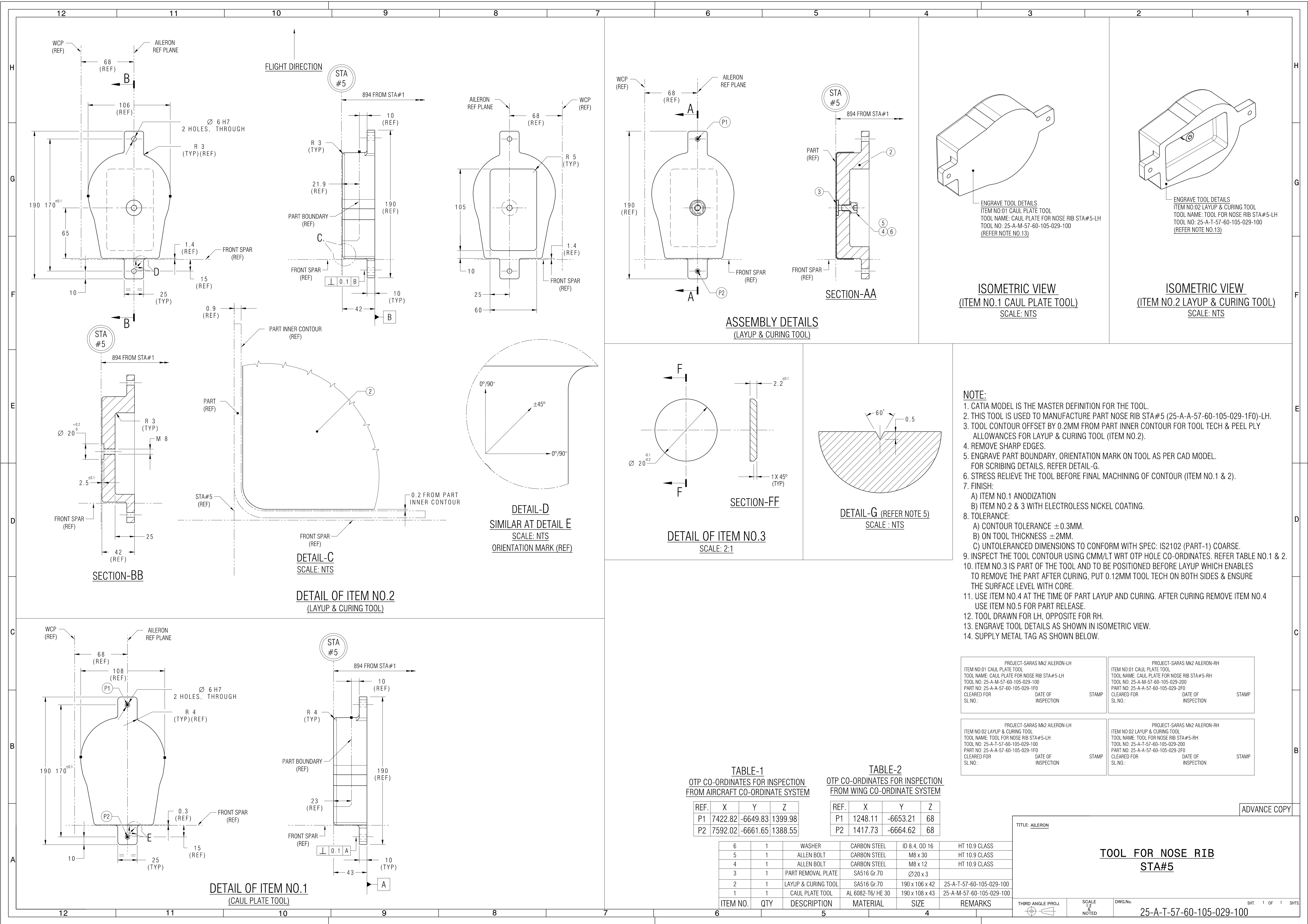
NOTE:
1. CATIA MODEL IS THE MASTER DEFINITION FOR THE TOOL.
2. THIS TOOL IS USED TO MANUFACTURE PART NOSE RIB STA#3 (25-A-A-57-60-105-027-1F0)-LH.
3. TOOL CONTOUR OFFSET BY 0.2MM FROM PART INNER CONTOUR FOR TOOL TECH & PEEL PLY ALLOWANCES.
4. REMOVE SHARP EDGES.
5. ENGRAVE PART BOUNDARY, ORIENTATION MARK ON TOOL AS PER CAD MODEL. FOR SCRIBING DETAILS, REFER DETAIL-H.
6. STRESS RELIEVE THE TOOL BEFORE FINAL MACHINING OF CONTOUR (ITEM NO.1 & 2).
7. FINISH:
A) ITEM NO.1 & 2 WITH ELECTROLESS NICKEL COATING.
8. TOLERANCE:
A) CONTOUR TOLERANCE $\pm 0.3\text{MM}$.
B) ON TOOL THICKNESS $\pm 2\text{MM}$.
C) UNTOLERANCED DIMENSIONS TO CONFORM WITH SPEC: IS2102 (PART-1) COARSE.
9. INSPECT THE TOOL CONTOUR BY CMM/LT WRT OTP HOLE CO-ORDINATES. REFER TABLE NO.1 & 2.
10. TOOL DRAWN FOR LH, OPPOSITE FOR RH.
11. ENGRAVE TOOL DETAILS AS SHOWN IN ISOMETRIC VIEW.
12. SUPPLY METAL TAG AS SHOWN BELOW.

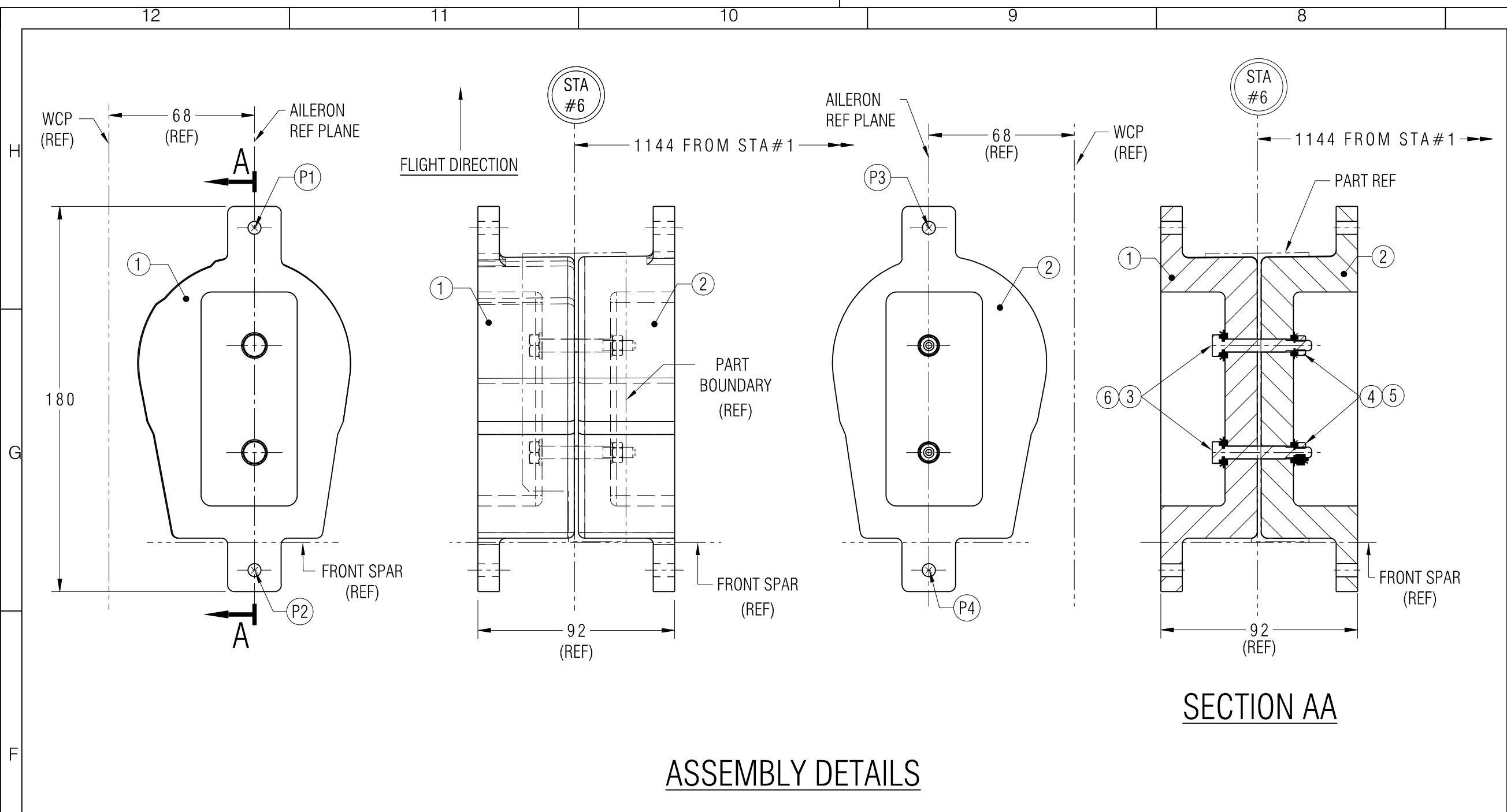
PROJECT-SARAS Mk2 AILERON-LH				PROJECT-SARAS Mk2 AILERON-RH			
TOOL NAME: TOOL FOR NOSE RIB STA#3-LH				TOOL NAME: TOOL FOR NOSE RIB STA#3-RH			
TOOL NO: 25-A-T-57-60-105-027-100				TOOL NO: 25-A-T-57-60-105-027-200			
PART NO: 25-A-A-57-60-105-027-1F0				PART NO: 25-A-A-57-60-105-027-2F0			
Cleared for SL NO.:				Cleared for SL NO.:			
DATE OF INSPECTION				DATE OF INSPECTION			
STAMP				STAMP			

ITEM NO.	QTY	DESCRIPTION	MATERIAL	SIZE	REMARKS
6	1	WASHER	CARBON STEEL	ID 6.4 x OD 12	HT 10.9 CLASS
5	1	WASHER	CARBON STEEL	ID 5.3 x OD 10	HT 10.9 CLASS
4	2	HEX NUT	STD	M5	HT 10.9 CLASS
3	2	HEX BOLT	EN-24	AS REQ	40 TO 45 HRC
2	1	LAYUP & CURING TOOL-ROOT	SA516 Gr.70	190 x 109 x 45	
1	1	LAYUP & CURING TOOL-TIP	SA516 Gr.70	190 x 109 x 45	

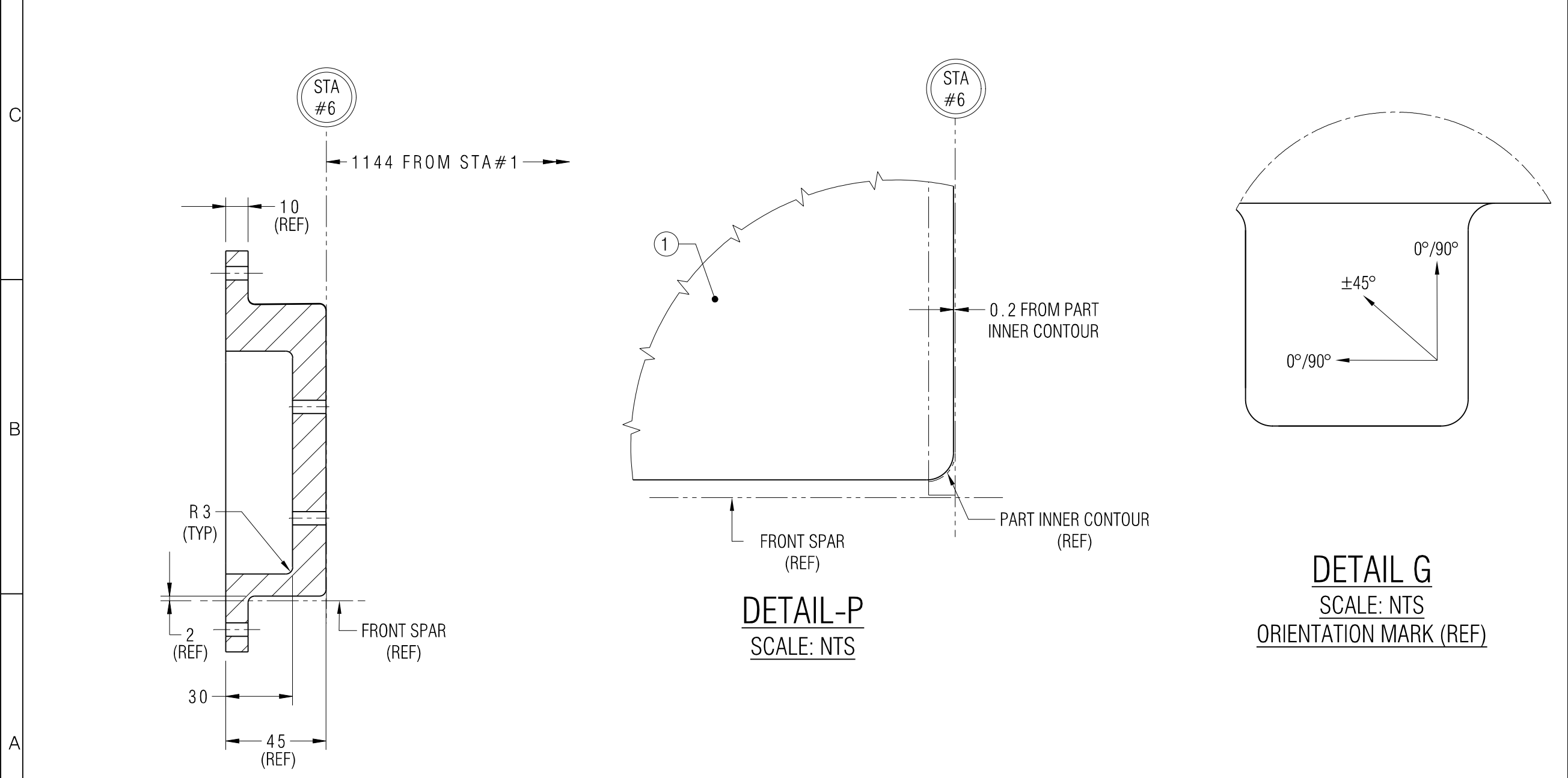
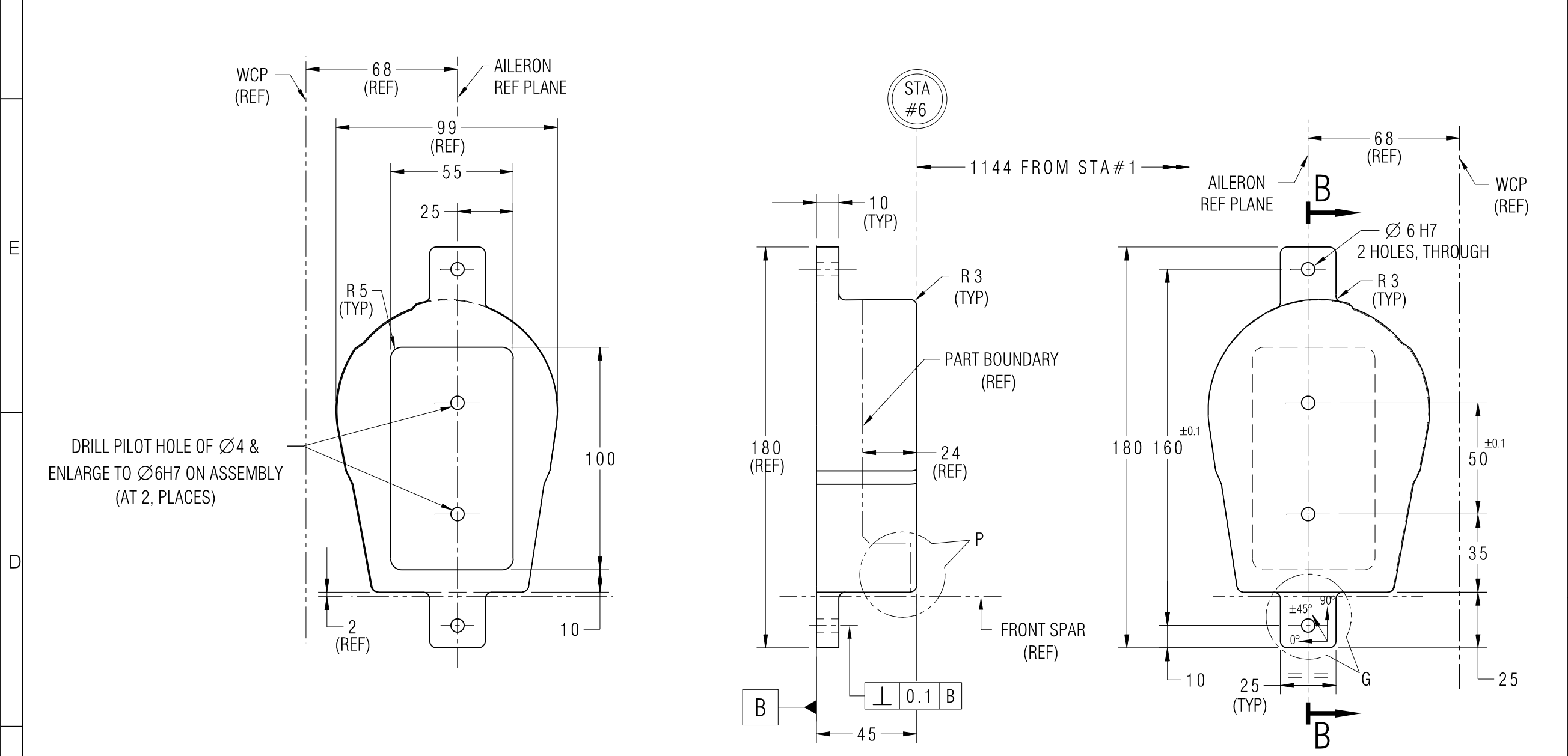
THIRD ANGLE PROJ. SCALE 1:2 NOTED DWG.No. 25-A-T-57-60-105-027-100 SHT. 1 OF 1 SHTS.





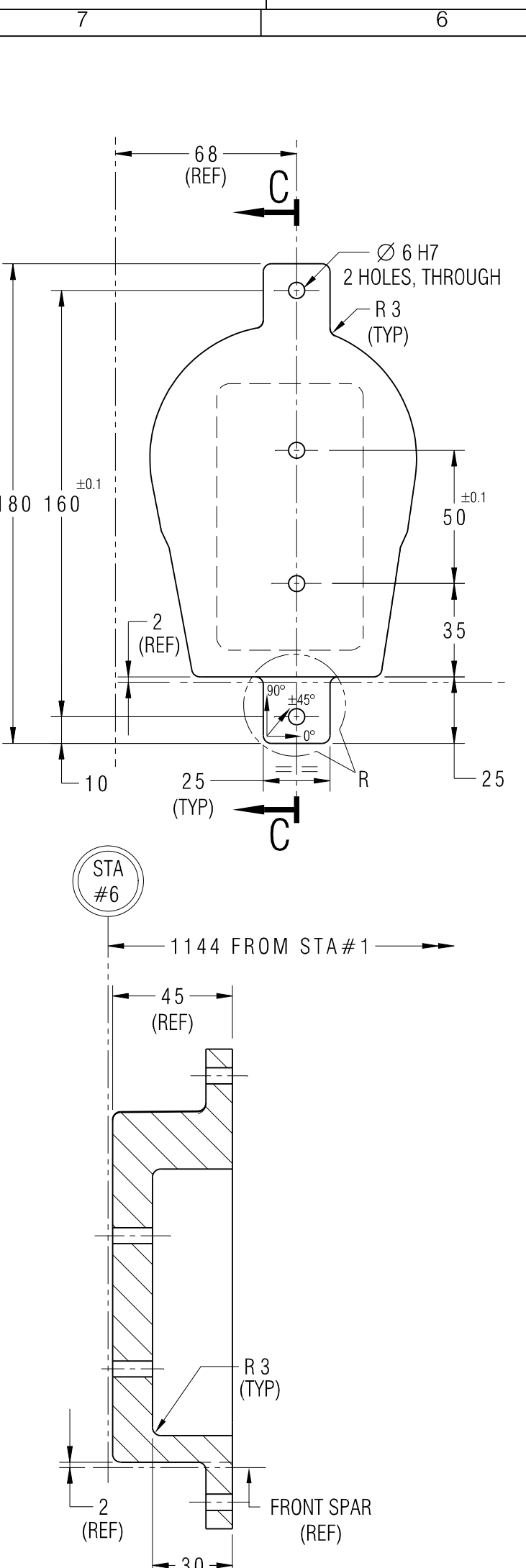


ASSEMBLY DETAILS

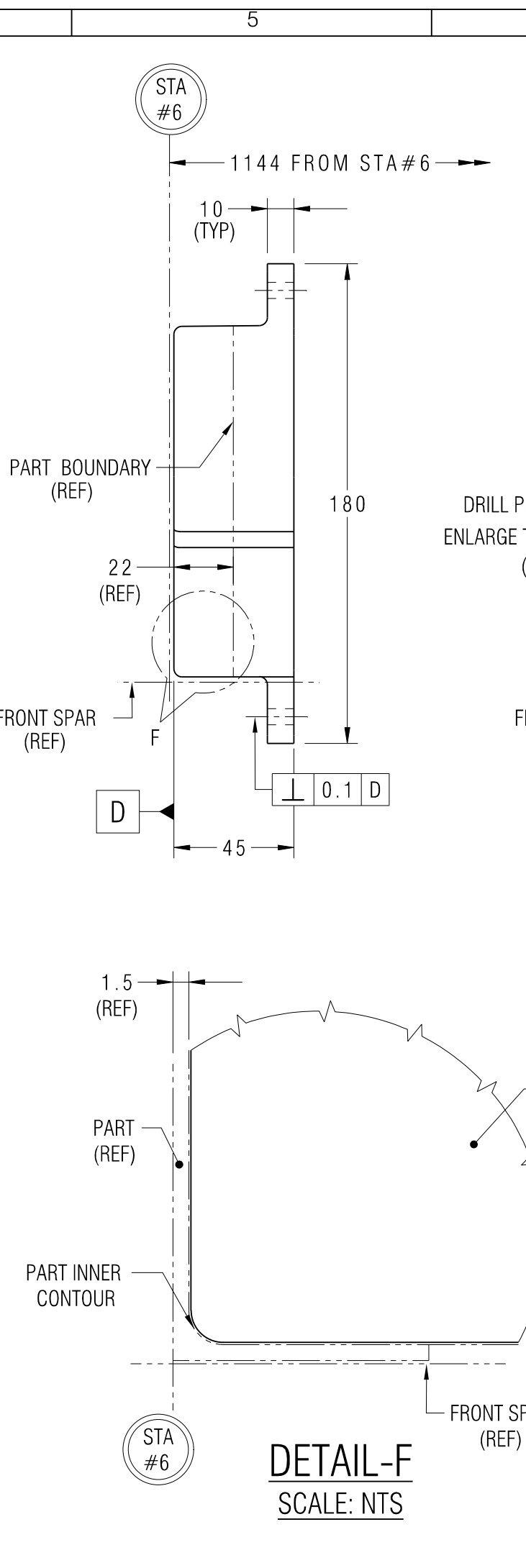


DETAIL FOR ITEM No.01
LAYOUT CURING TOOL-TIP
SCALE: NTS

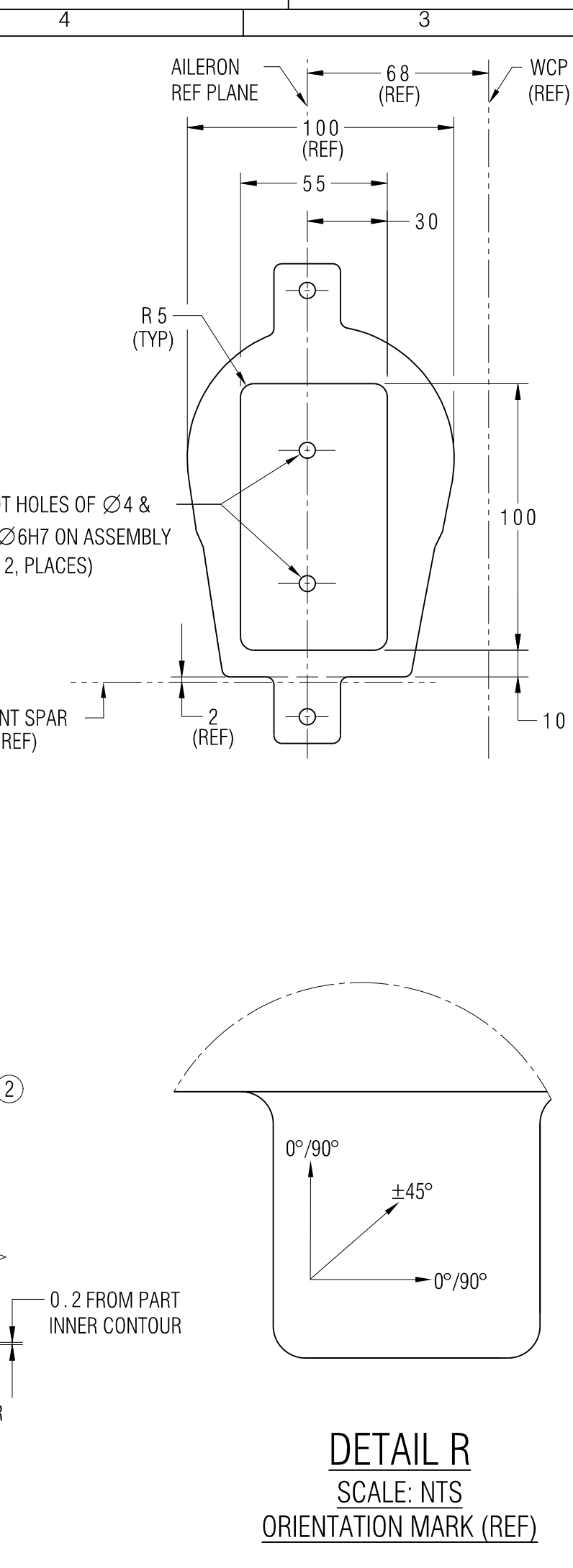
DETAIL G
SCALE: NTS
ORIENTATION MARK (REF)



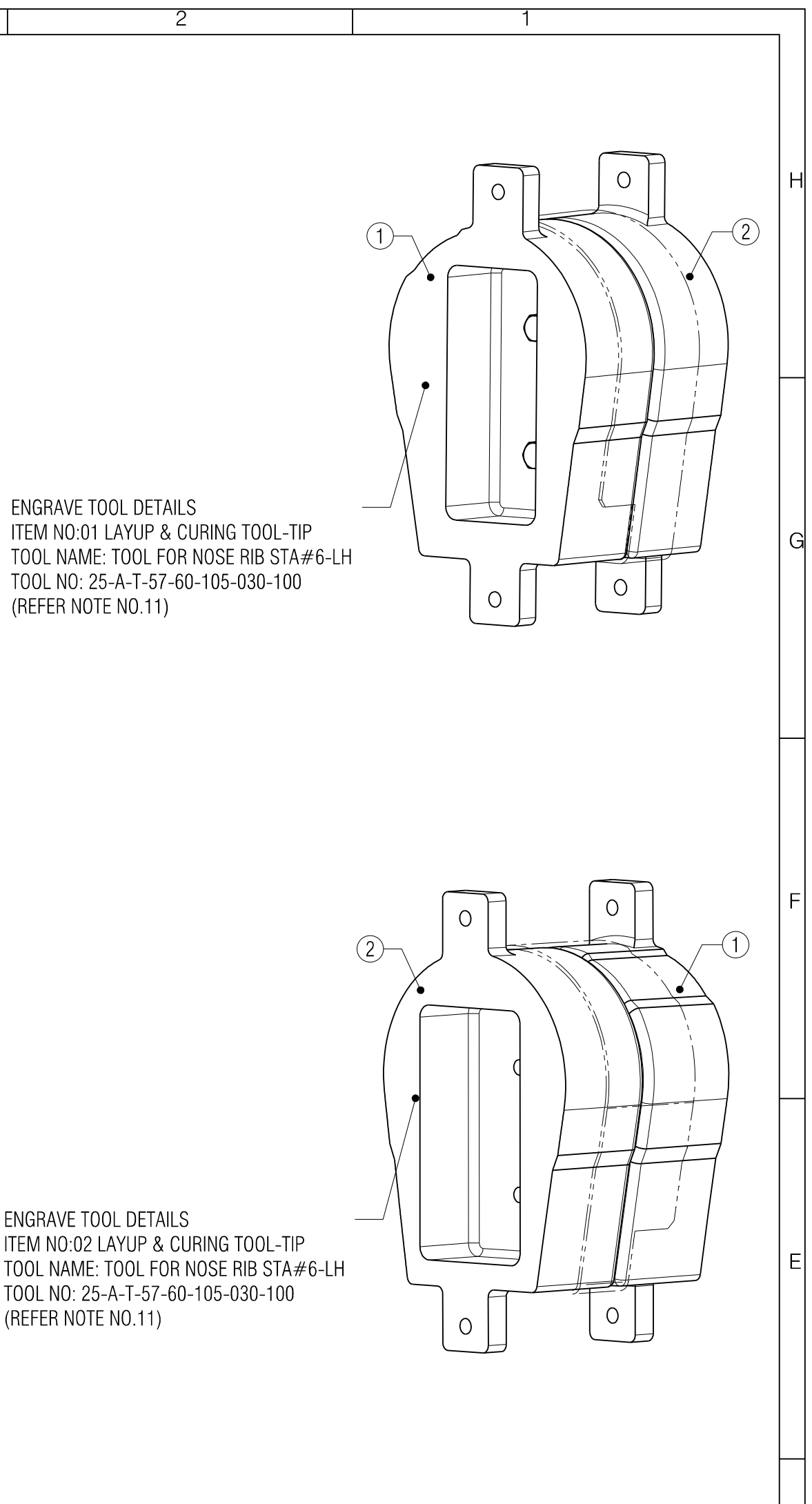
SECTION CC



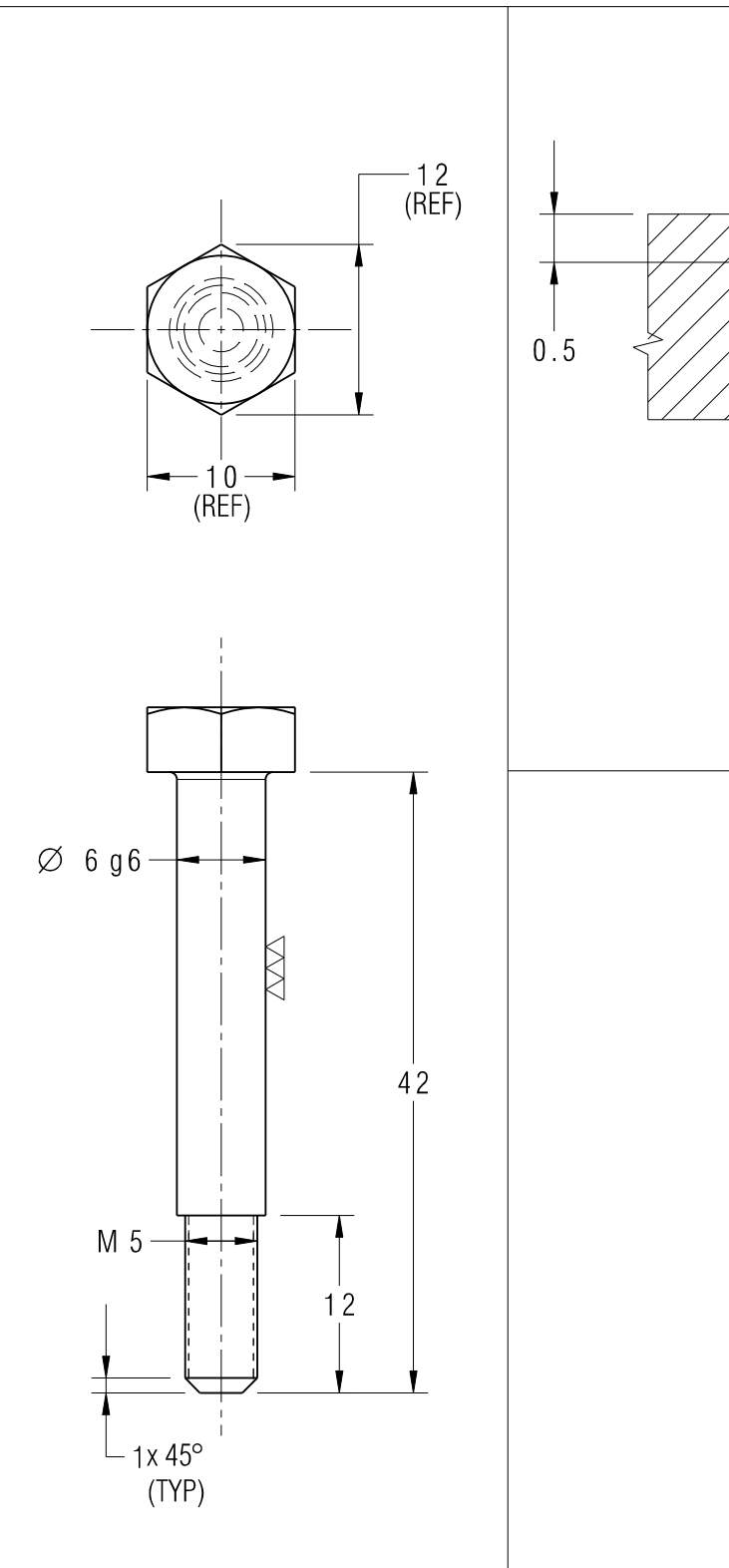
DETAIL FOR ITEM No.02
LAYOUT CURING TOOL-ROOT
SCALE: NTS



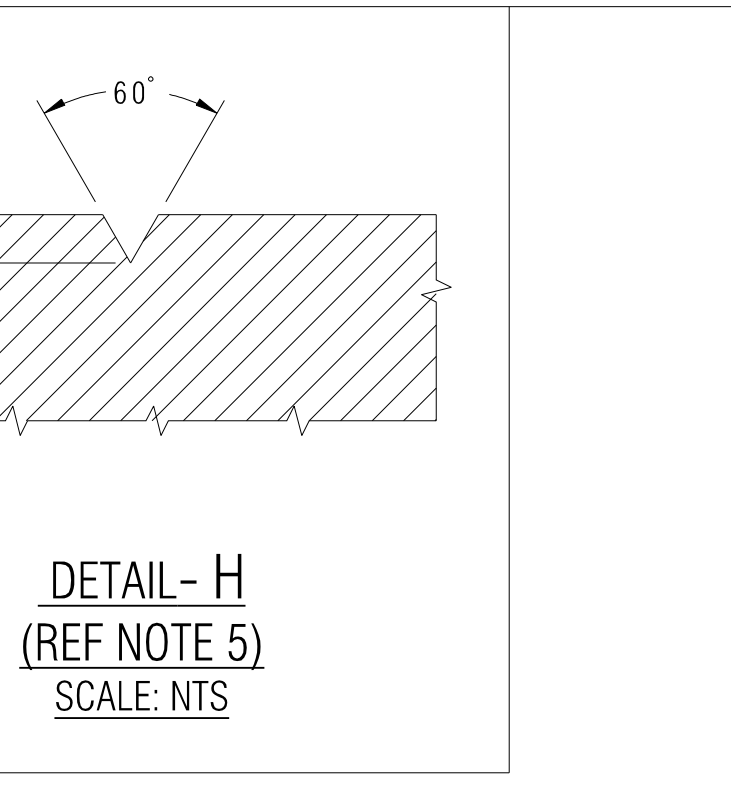
DETAIL R
SCALE: NTS
ORIENTATION MARK (REF)



TOOL ISOMETRIC VIEW
SCALE: NTS



DETAIL OF ITEM No.3
SCALE:2:1



DETAIL- H
(REF NOTE 5)
SCALE: NTS

NOTE:

- CATIA MODEL IS THE MASTER DEFINITION FOR THE TOOL.
- THIS TOOL IS USED TO MANUFACTURE PART NOSE RIB STA#3 (25-A-A-57-60-105-030-1F0)-LH.
- TOOL CONTOUR OFFSET BY 0.2MM FROM PART INNER CONTOUR FOR TOOL TECH & PEEL PLY ALLOWANCES.
- REMOVE SHARP EDGES.
- ENGRAVE PART BOUNDARY, ORIENTATION MARK ON TOOL AS PER CAD MODEL. FOR SCRIBING DETAILS, REFER DETAIL-H.
- STRESS RELIEVE THE TOOL BEFORE FINAL MACHINING OF CONTOUR (ITEM NO.1 & 2).
- FINISH:
 - A) ITEM NO.1 & 2 WITH ELECTROLESS NICKEL COATING.
- TOLERANCE:
 - A) CONTOUR TOLERANCE $\pm 0.3\text{MM}$.
 - B) ON TOOL THICKNESS $\pm 2\text{MM}$.
 - C) UNTOLERANCED DIMENSIONS TO CONFORM WITH SPEC: IS2102 (PART-1) COARSE.
- INSPECT THE TOOL CONTOUR BY CMM/LT WRT OTP HOLE CO-ORDINATES. REFER TABLE NO.1 & 2
- TOOL DRAWN FOR LH, OPPOSITE FOR RH.
- ENGRAVE TOOL DETAILS AS SHOWN IN ISOMETRIC VIEW.
- SUPPLY METAL TAG AS SHOWN BELOW.

TABLE-1
OTP CO-ORDINATES FOR INSPECTION
FROM AIRCRAFT CO-ORDINATE SYSTEM

REF.	X	Y	Z
P1	7414.28	-6895.94	1409.17
P2	7573.53	-6907.06	1398.41
P3	7414.28	-6895.94	1409.17
P4	7573.53	-6907.06	1398.41

TABLE-2
OTP CO-ORDINATES FOR INSPECTION
FROM WING CO-ORDINATE SYSTEM

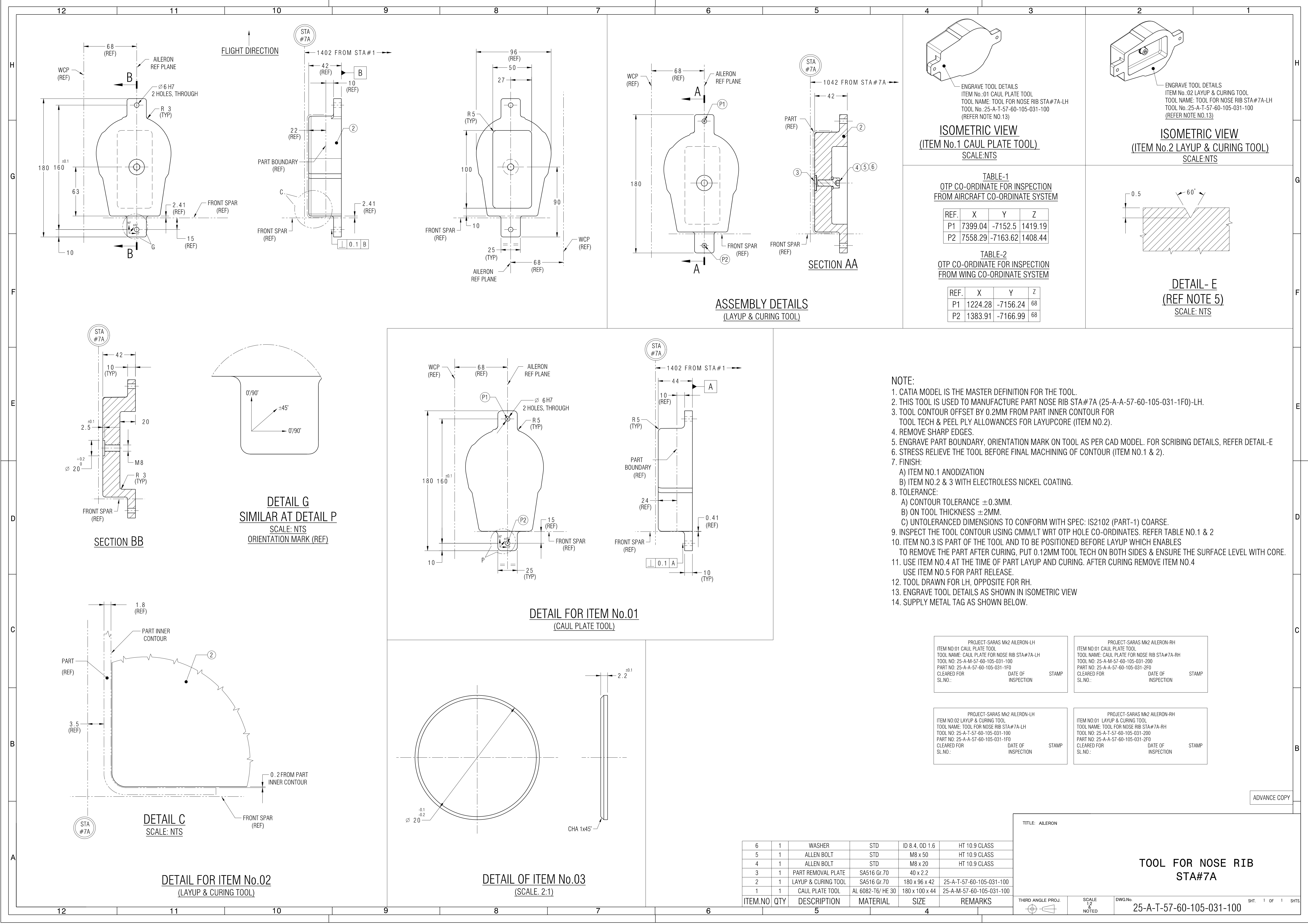
REF.	X	Y	Z
P1	1234.73	-6971.23	68
P2	1394.36	-6981.97	68
P3	1239.55	-6899.49	68
P4	1399.19	-6910.23	68

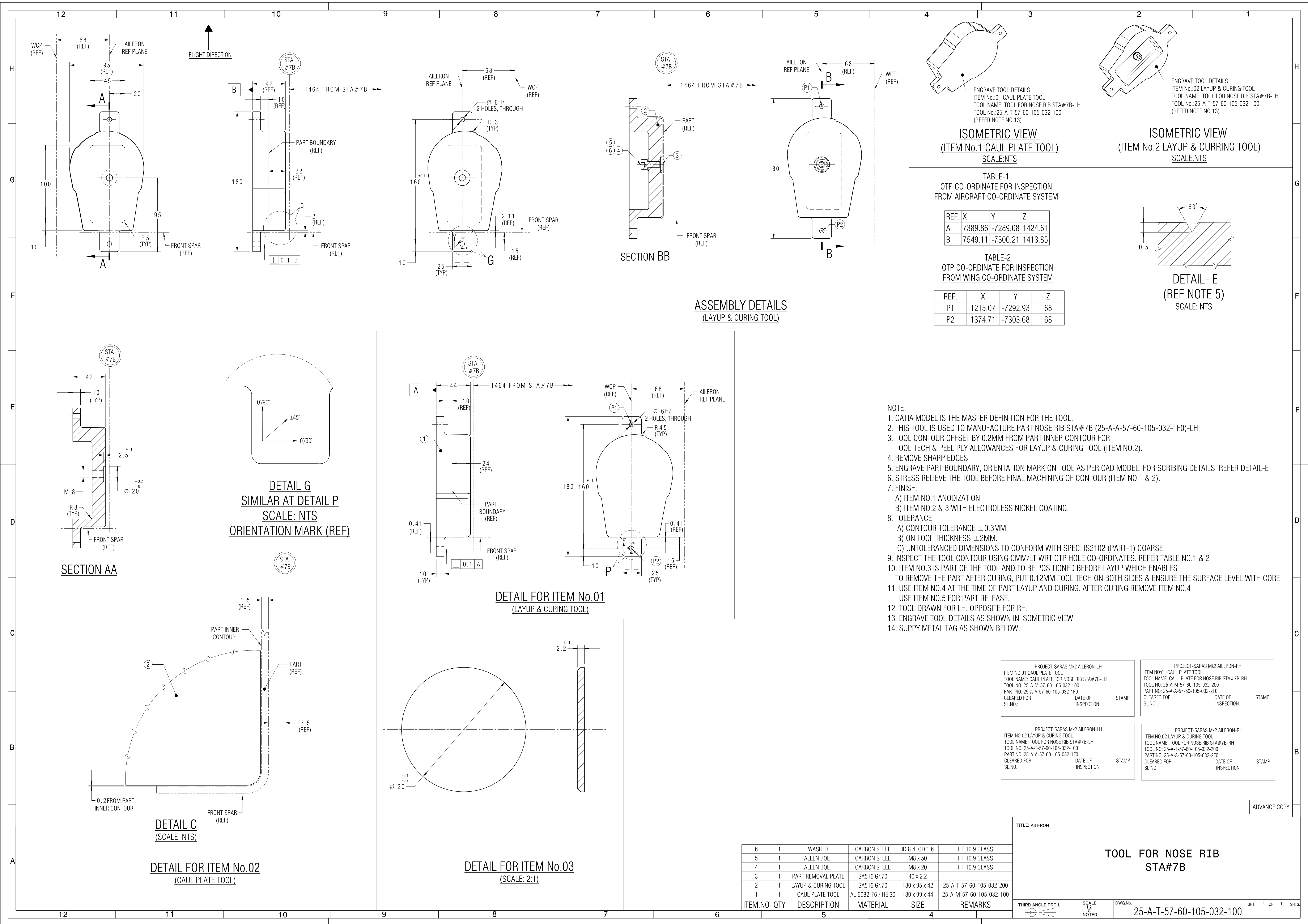
ITEM.NO	QTY	DESCRIPTION	MATERIAL	SIZE	REMARKS
6	1	WASHER	CARBON STEEL	ID6.4 x OD 12	HT 10.9 CLASS
5	1	WASHER	CARBON STEEL	ID5.3 x OD 10	HT 10.9 CLASS
4	2	HEX NUT	STD	M5	HT 10.9 CLASS
3	2	HEX BOLT	EN24	AS REQ	40 TO 45 HRC
2	1	LAYOUT & CURING TOOL-ROOT	SA516 Gr.70	180 x 100 x 45	
1	1	LAYOUT & CURING TOOL-TIP	SA516 Gr.70	180 x 99 x 45	

PROJECT: SARAS Mk2 AILERON-LH TOOL NAME: TOOL FOR NOSE RIB STA#6 TOOL NO: 25-A-T-57-60-105-030-100 PART NO: 25-A-A-57-60-105-030-1F0 Cleared for SL.NO.:	DATE OF INSPECTION	STAMP
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PROJECT: SARAS Mk2 AILERON-RH TOOL NAME: TOOL FOR NOSE RIB STA#6 TOOL NO: 25-A-T-57-60-105-030-200 PART NO: 25-A-A-57-60-105-030-2F0 Cleared for SL.NO.:	DATE OF INSPECTION	STAMP
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TITLE: AILERON		TOOL FOR NOSE RIB STA#6	
THIRD ANGLE PROJ.	SCALE 1:2 & NOTED	DWG. NO. 25-A-T-57-60-105-030-100	SHT. 1 OF 1





ISOMETRIC VIEW
(ITEM No.1 CAUL PLATE TOOL)
SCALE:NTS

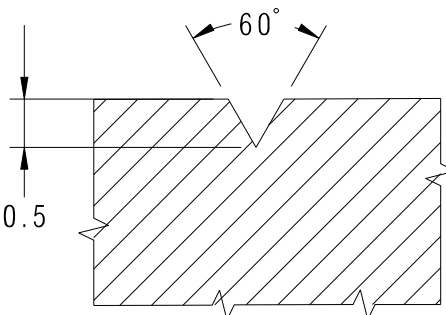
ISOMETRIC VIEW
(ITEM No.2 LAYUP & CURRING TOOL)
SCALE:NTS

TABLE-1
OTP CO-ORDINATE FOR INSPECTION
FROM AIRCRAFT CO-ORDINATE SYSTEM

REF.	X	Y	Z
A	7389.86	-7289.08	1424.61
B	7549.11	-7300.21	1413.85

TABLE-2
OTP CO-ORDINATE FOR INSPECTION
FROM WING CO-ORDINATE SYSTEM

REF.	X	Y	Z
P1	1215.07	-7292.93	68
P2	1374.71	-7303.68	68



DETAIL- E
(REF NOTE 5)
SCALE: NTS

- NOTE:
- CATIA MODEL IS THE MASTER DEFINITION FOR THE TOOL.
 - THIS TOOL IS USED TO MANUFACTURE PART NOSE RIB STA#7B (25-A-A-57-60-105-032-1F0)-LH.
 - TOOL CONTOUR OFFSET BY 0.2MM FROM PART INNER CONTOUR FOR TOOL TECH & PEEL PLY ALLOWANCES FOR LAYUP & CURRING TOOL (ITEM NO.2).
 - REMOVE SHARP EDGES.
 - ENGRAVE PART BOUNDARY, ORIENTATION MARK ON TOOL AS PER CAD MODEL. FOR SCRIBING DETAILS, REFER DETAIL-E
 - STRESS RELIEVE THE TOOL BEFORE FINAL MACHINING OF CONTOUR (ITEM NO.1 & 2).
 - FINISH:
 - ITEM NO.1 ANODIZATION
 - ITEM NO.2 & 3 WITH ELECTROLESS NICKEL COATING.
 - TOLERANCE:
 - CONTOUR TOLERANCE $\pm 0.3\text{MM}$.
 - ON TOOL THICKNESS $\pm 2\text{MM}$.
 - UNTOLERANCED DIMENSIONS TO CONFORM WITH SPEC: IS2102 (PART-1) COARSE.
 - INSPECT THE TOOL CONTOUR USING CMM/LT WRT OTP HOLE CO-ORDINATES. REFER TABLE NO.1 & 2
 - ITEM NO.3 IS PART OF THE TOOL AND TO BE POSITIONED BEFORE LAYUP WHICH ENABLES TO REMOVE THE PART AFTER CURRING. PUT 0.12MM TOOL TECH ON BOTH SIDES & ENSURE THE SURFACE LEVEL WITH CORE.
 - USE ITEM NO.4 AT THE TIME OF PART LAYUP AND CURRING. AFTER CURRING REMOVE ITEM NO.4 USE ITEM NO.5 FOR PART RELEASE.
 - TOOL DRAWN FOR LH, OPPOSITE FOR RH.
 - ENGRAVE TOOL DETAILS AS SHOWN IN ISOMETRIC VIEW
 - SUPPLY METAL TAG AS SHOWN BELOW.

PROJECT-SARAS Mk2 AILERON-LH			
ITEM NO:01 CAUL PLATE TOOL			
TOOL NAME: CAUL PLATE FOR NOSE RIB STA#7B-LH			
TOOL NO: 25-A-M-57-60-105-032-100			
PART NO: 25-A-A-57-60-105-032-1F0			
CLEARED FOR	DATE OF INSPECTION	STAMP	
SL NO.:			

PROJECT-SARAS Mk2 AILERON-RH			
ITEM NO:01 CAUL PLATE TOOL			
TOOL NAME: CAUL PLATE FOR NOSE RIB STA#7B-RH			
TOOL NO: 25-A-M-57-60-105-032-200			
PART NO: 25-A-A-57-60-105-032-2F0			
CLEARED FOR	DATE OF INSPECTION	STAMP	
SL NO.:			

PROJECT-SARAS Mk2 AILERON-LH			
ITEM NO:02 LAYUP & CURRING TOOL			
TOOL NAME: TOOL FOR NOSE RIB STA#7B-LH			
TOOL NO: 25-A-T-57-60-105-032-100			
PART NO: 25-A-A-57-60-105-032-1F0			
CLEARED FOR	DATE OF INSPECTION	STAMP	
SL NO.:			

PROJECT-SARAS Mk2 AILERON-RH			
ITEM NO:02 LAYUP & CURRING TOOL			
TOOL NAME: TOOL FOR NOSE RIB STA#7B-RH			
TOOL NO: 25-A-T-57-60-105-032-200			
PART NO: 25-A-A-57-60-105-032-2F0			
CLEARED FOR	DATE OF INSPECTION	STAMP	
SL NO.:			

ITEM.NO	QTY	DESCRIPTION	MATERIAL	SIZE	REMARKS
6	1	WASHER	CARBON STEEL	ID 8.4, OD 1.6	HT 10.9 CLASS
5	1	ALLEN BOLT	CARBON STEEL	M8 x 50	HT 10.9 CLASS
4	1	ALLEN BOLT	CARBON STEEL	M8 x 20	HT 10.9 CLASS
3	1	PART REMOVAL PLATE	SA516 Gr.70	40 x 2.2	
2	1	LAYUP & CURRING TOOL	SA516 Gr.70	180 x 95 x 42	25-A-T-57-60-105-032-200
1	1	CAUL PLATE TOOL	AL 6082-T6 / HE 30	180 x 99 x 44	25-A-M-57-60-105-032-100

TITLE: AILERON

THIRD ANGLE PROJ.

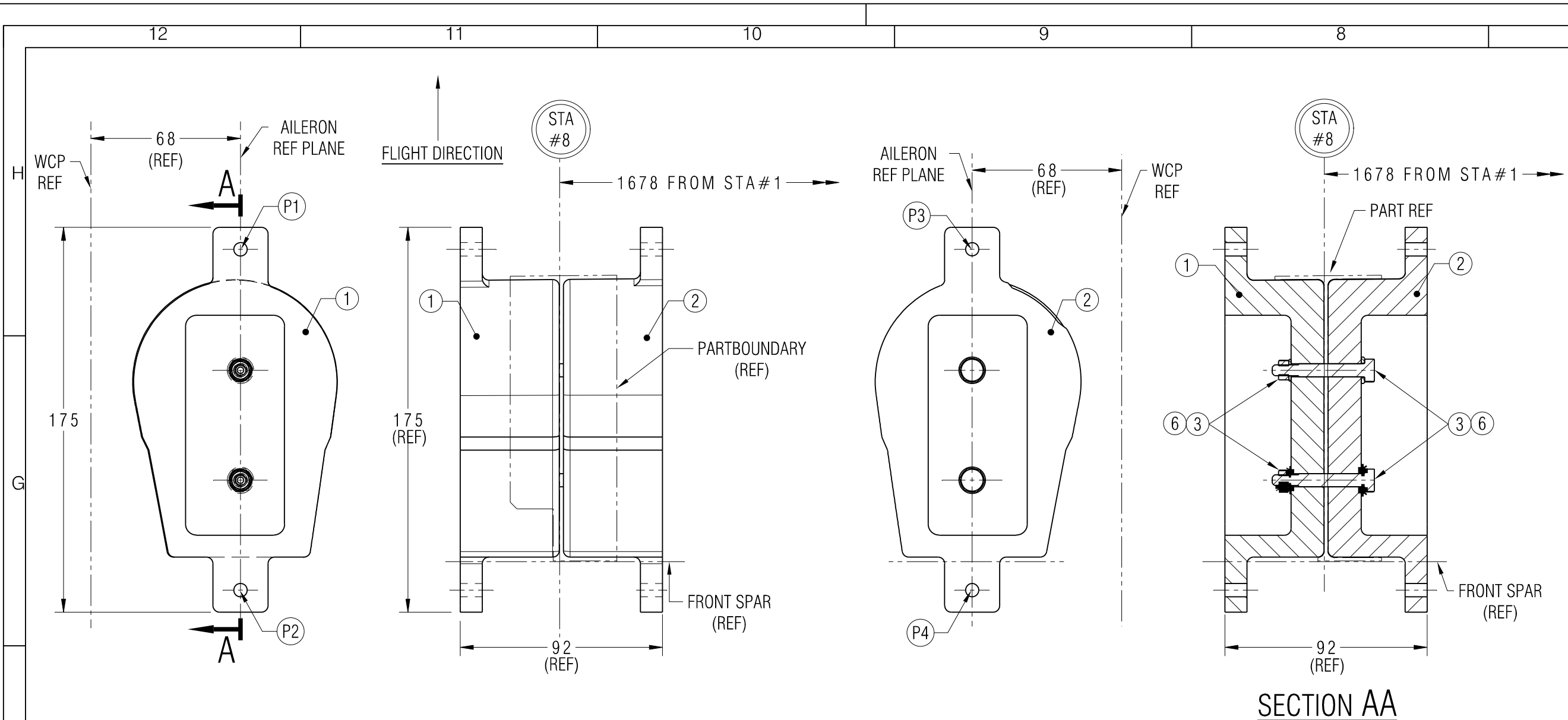
SCALE 1/2 NOTED

DWG.No. 25-A-T-57-60-105-032-100

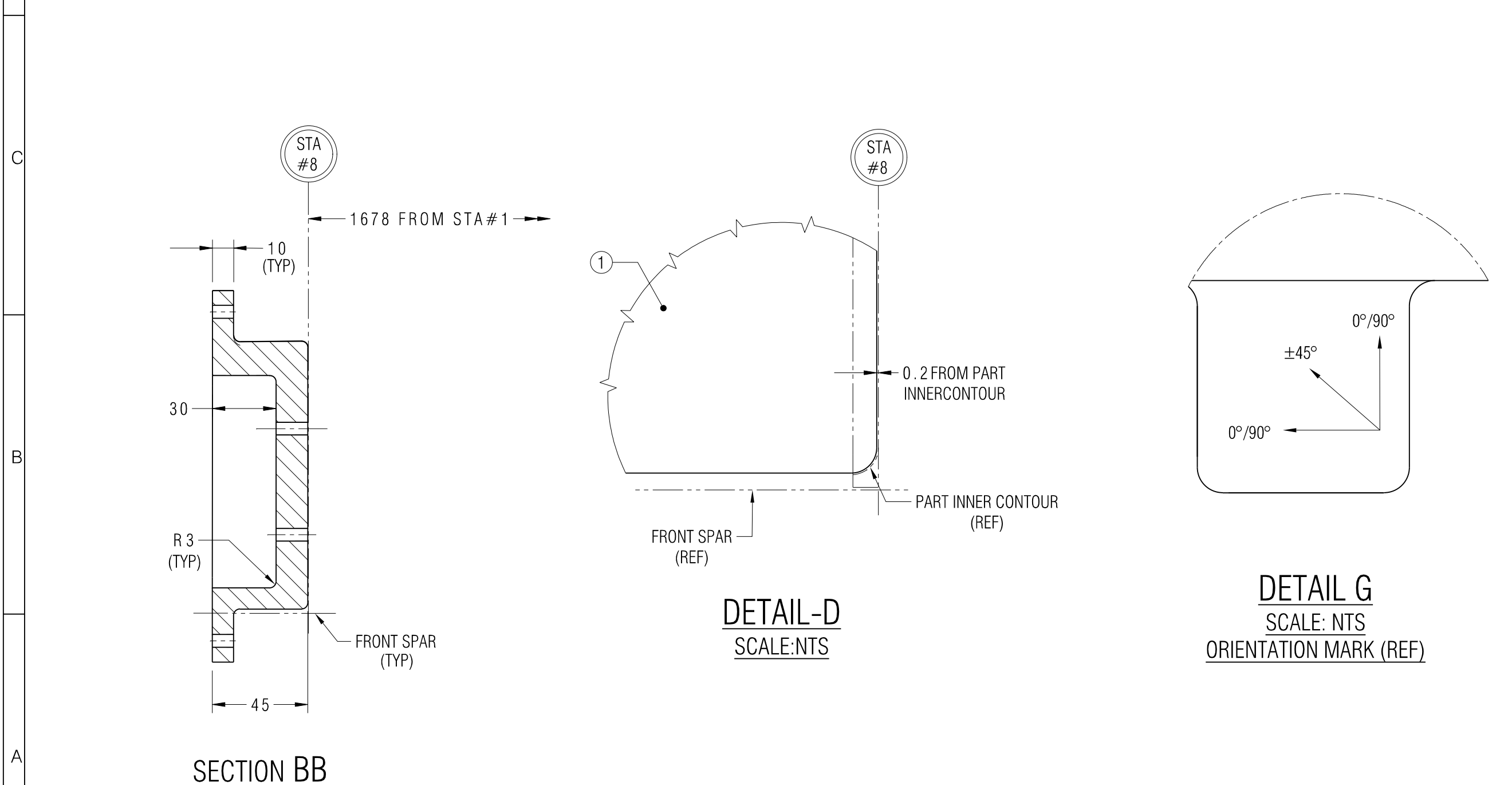
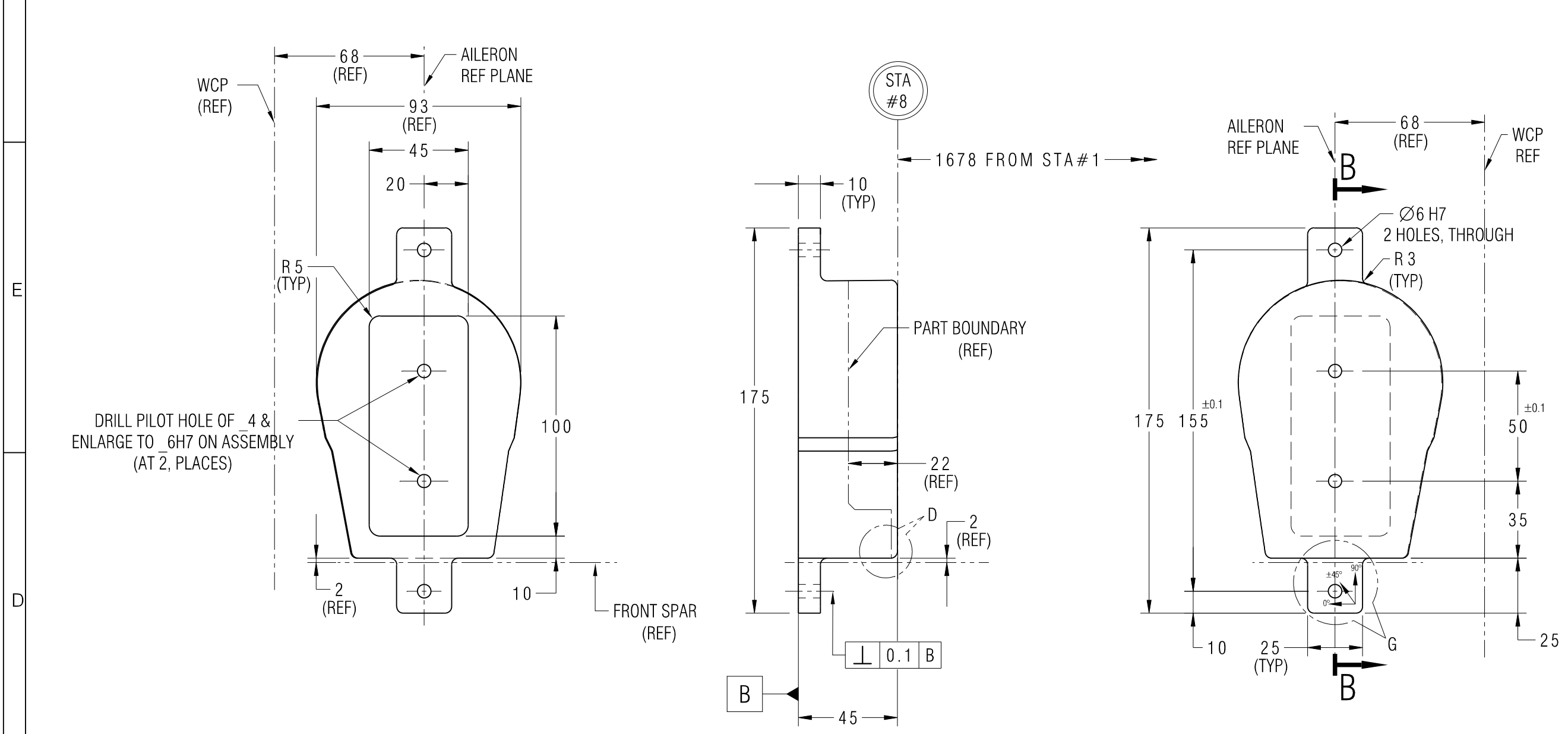
SHT. 1 OF 1 SHTS

ADVANCE COPY

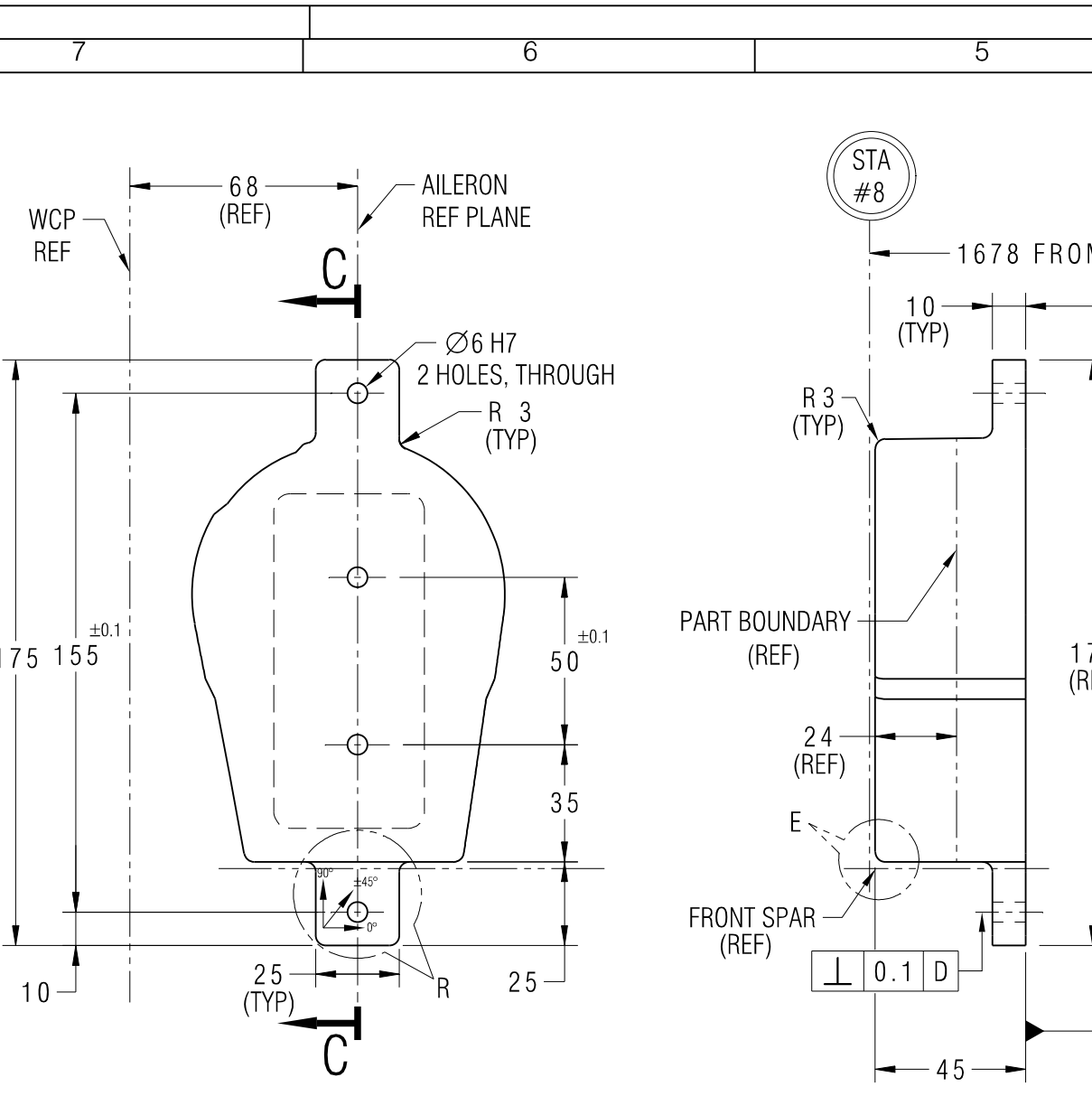
TOOL FOR NOSE RIB STA#7B



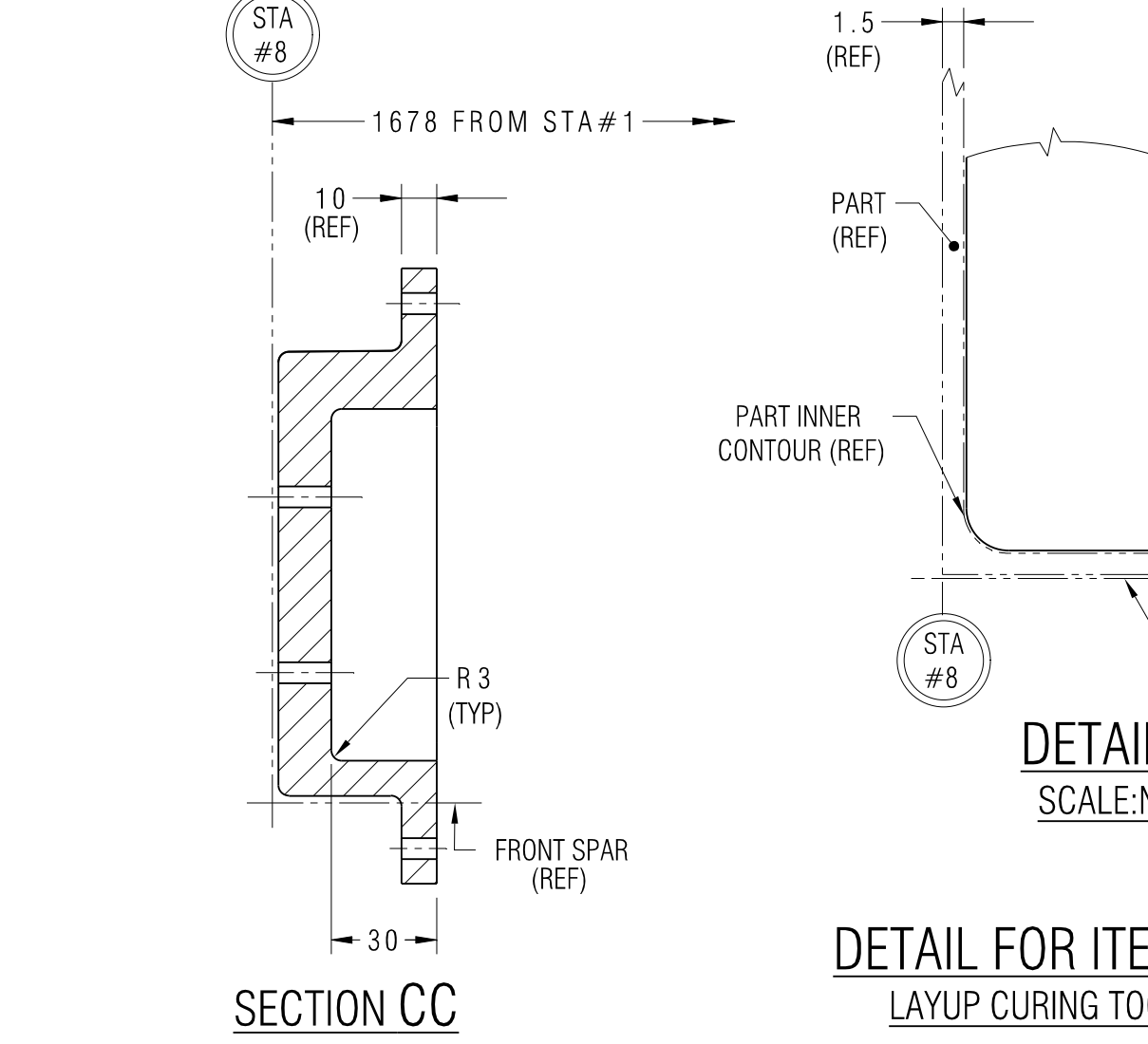
ASSEMBLY DETAILS



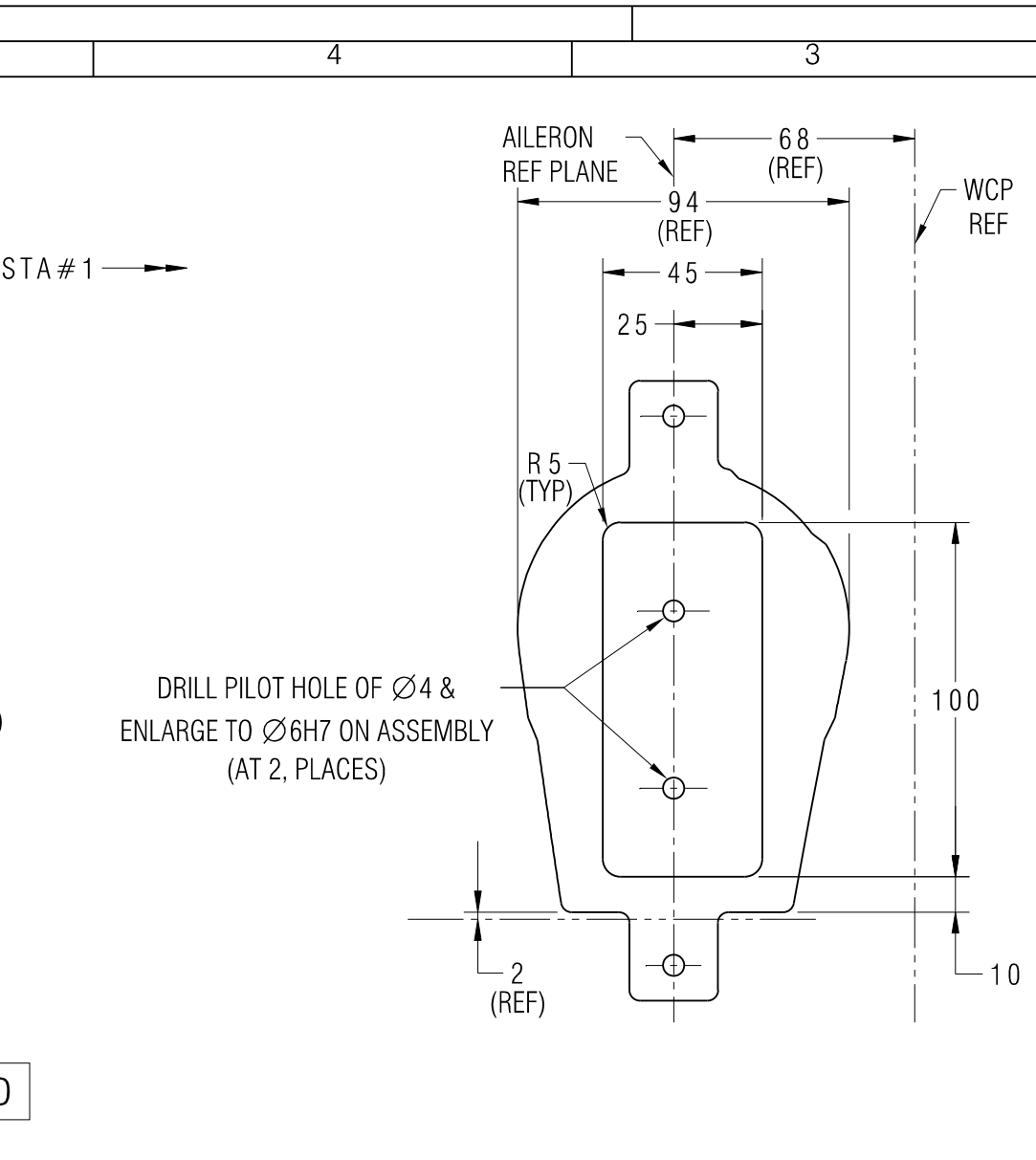
DETAIL FOR ITEM No.01
LAYOUT CURING TOOL-TIP



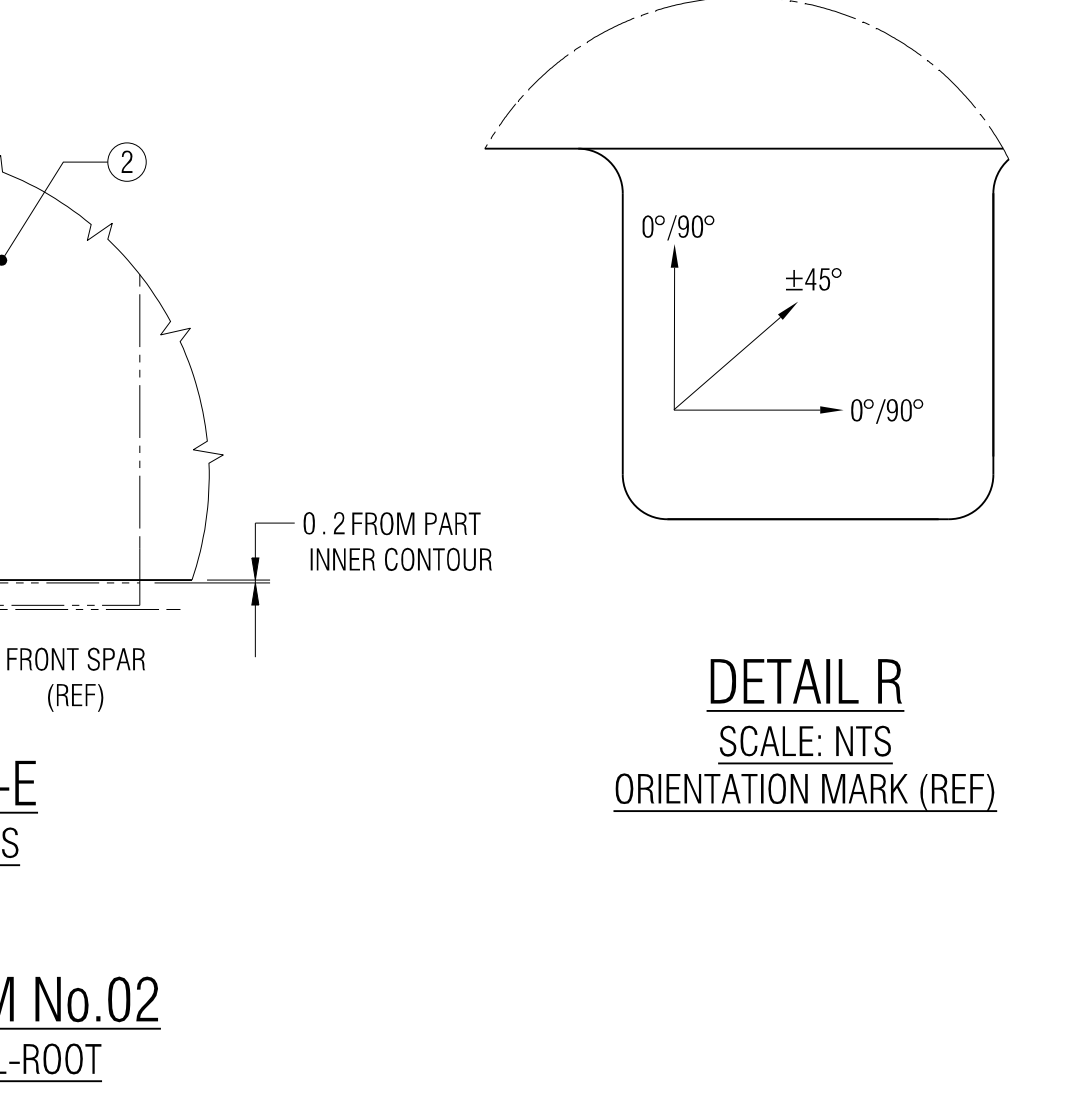
SECTION AA



SECTION CC

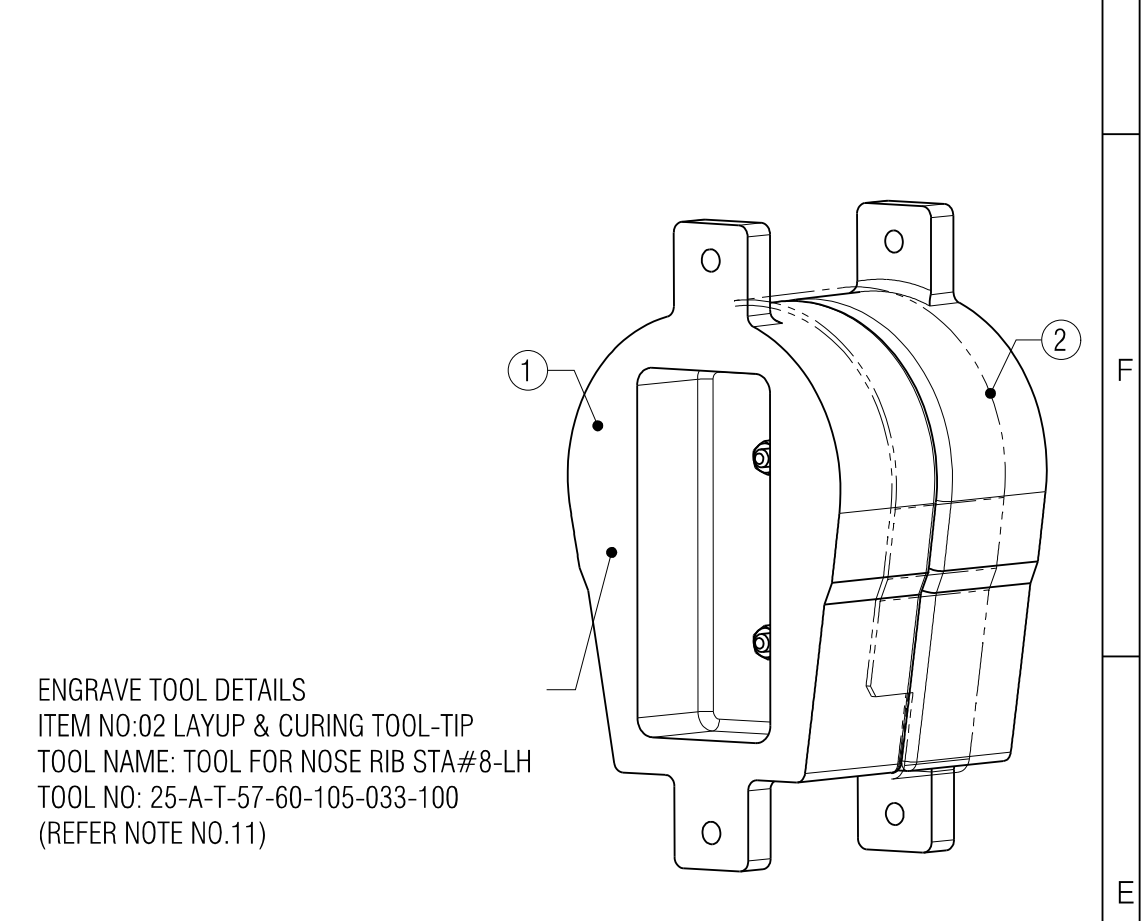
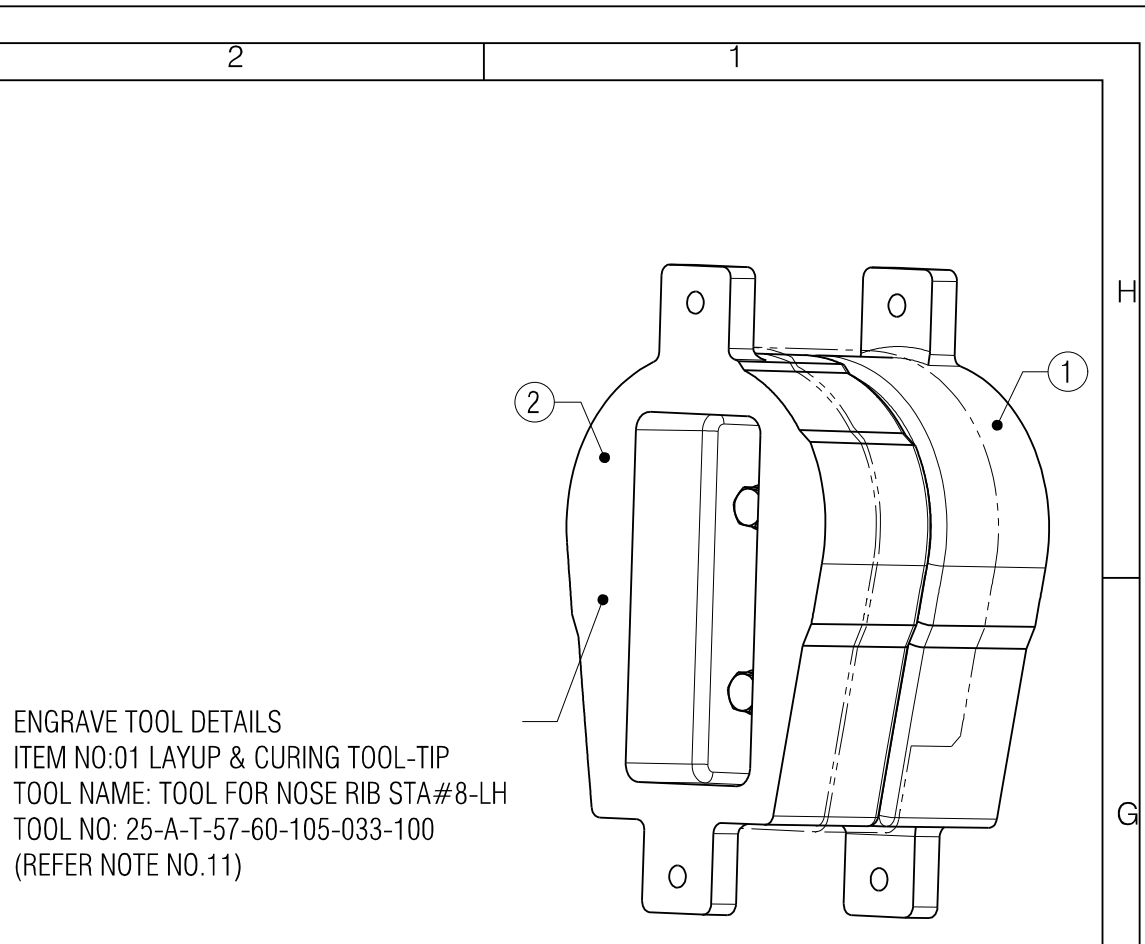


DETAIL R
SCALE: NTS
ORIENTATION MARK (REF)

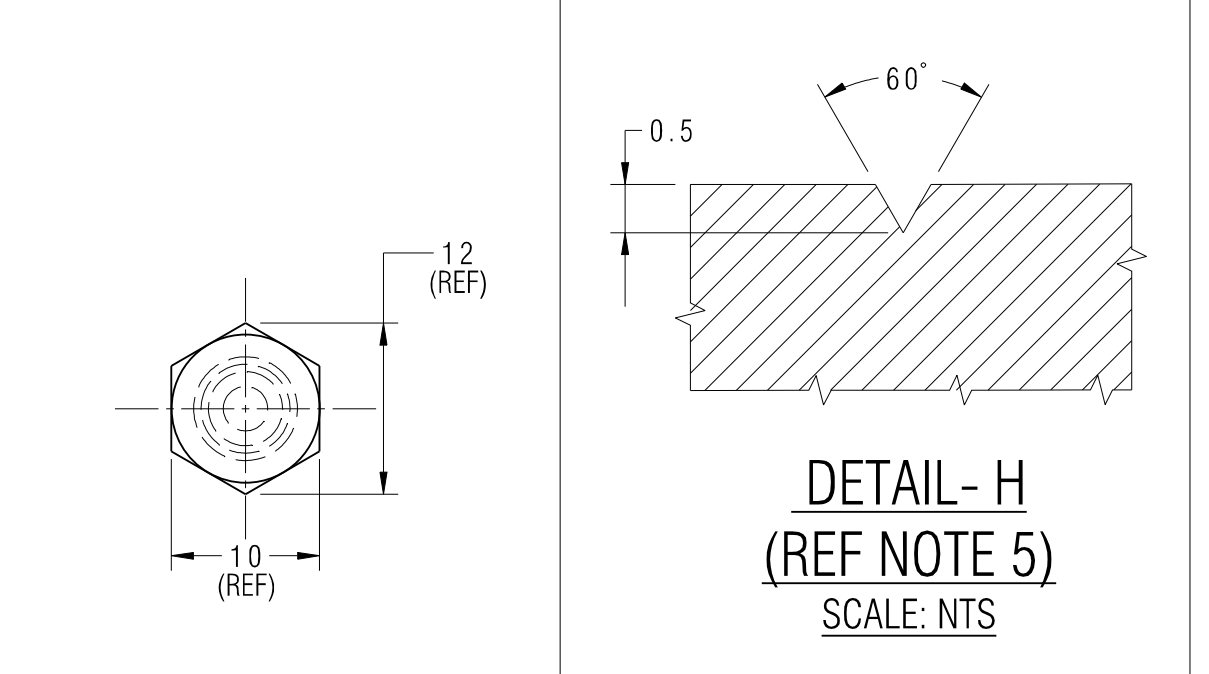


DETAIL-E
SCALE:NTS

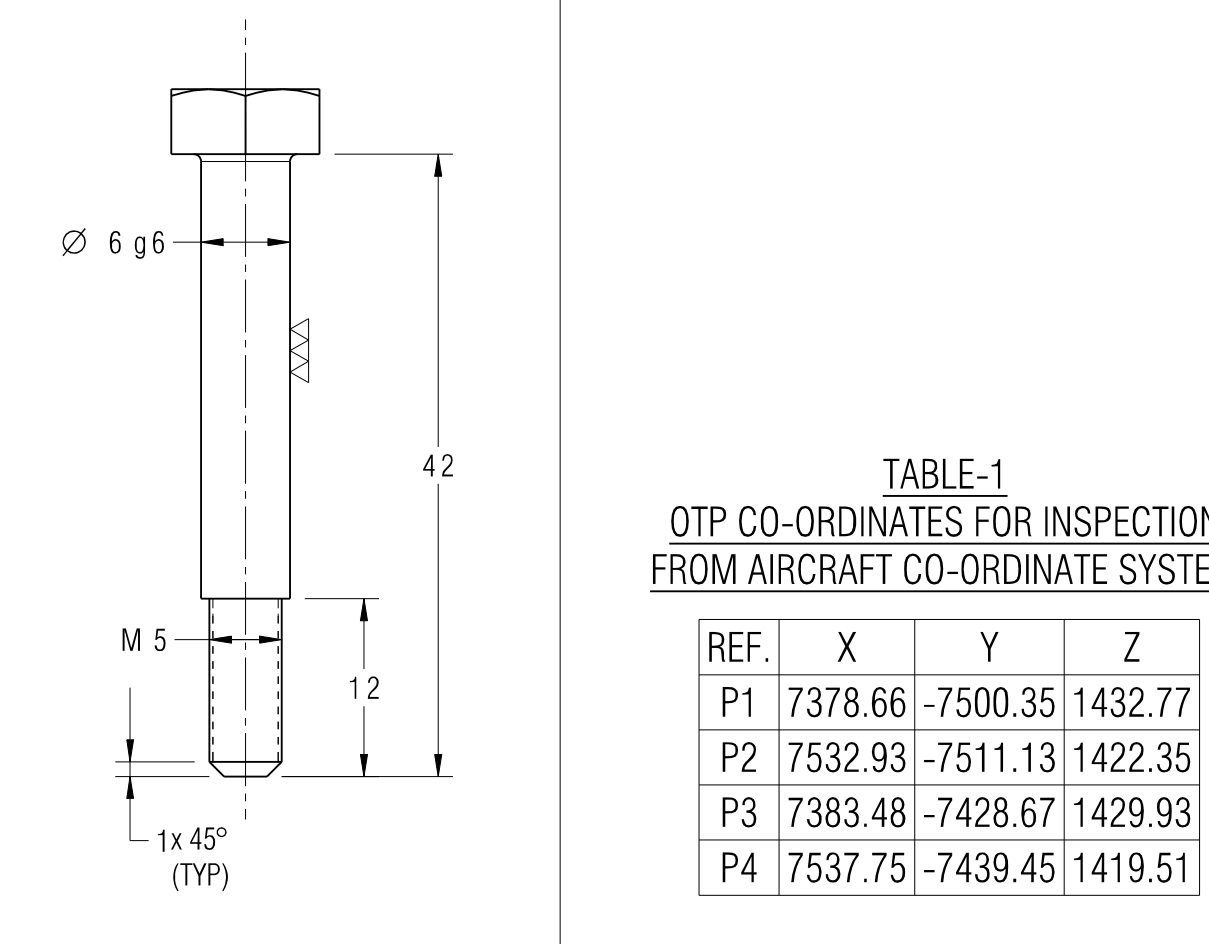
DETAIL FOR ITEM No.02
LAYOUT CURING TOOL-ROOT



TOOL ISOMETRIC VIEW
SCALE:NTS



DETAIL- H
(REF NOTE 5)
SCALE: NTS



DETAIL OD ITEM No.3
SCALE:2:1

- NOTE:
1. CATIA MODEL IS THE MASTER DEFINITION FOR THE TOOL.
 2. THIS TOOL IS USED TO MANUFACTURE PART NOSE RIB STA#3 (25-A-A-57-60-105-033-1F0)-LH.
 3. TOOL CONTOUR OFFSET BY 0.2MM FROM PART INNER CONTOUR FOR TOOL TECH & PEEL PLY ALLOWANCES.
 4. REMOVE SHARP EDGES.
 5. ENGRAVE PART BOUNDARY, ORIENTATION MARK ON TOOL AS PER CAD MODEL. FOR SCRIBING DETAILS, REFER DETAIL-H.
 6. STRESS RELIEVE THE TOOL BEFORE FINAL MACHINING OF CONTOUR (ITEM NO.1 & 2).
 7. FINISH:
 - A) ITEM NO.1 & 2 WITH ELECTROLESS NICKEL COATING.
 8. TOLERANCE:
 - A) CONTOUR TOLERANCE $\pm 0.3\text{MM}$.
 - B) ON TOOL THICKNESS $\pm 2\text{MM}$.
 - C) UNTOLERANCED DIMENSIONS TO CONFORM WITH SPEC: IS2102 (PART-1) COARSE.
 9. INSPECT THE TOOL CONTOUR BY CMM/LT WRT OTP HOLE C0-ORDINATES. REFER TABLE NO.1 & 2
 10. TOOL DRAWN FOR LH, OPPOSITE FOR RH.
 11. ENGRAVE TOOL DETAILS AS SHOWN IN ISOMETRIC VIEW.
 12. SUPPLY METAL TAG AS SHOWN BELOW.

TABLE-1
OTP CO-ORDINATES FOR INSPECTION
FROM AIRCRAFT CO-ORDINATE SYSTEM

REF.	X	Y	Z
P1	7378.66	-7500.35	1432.77
P2	7532.93	-7511.13	1422.35
P3	7383.48	-7428.67	1429.93
P4	7537.75	-7439.45	1419.51

TABLE-2
OTP CO-ORDINATES FOR INSPECTION
FROM WING CO-ORDINATE SYSTEM

REF.	X	Y	Z
P1	1203.85	-7504.36	68
P2	1358.5	-7514.77	68
P3	1208.68	-7432.62	68
P4	1363.33	-7443.03	68

PROJECT-SARAS Mk2 AILERON-LH
TOOL NAME: TOOL FOR NOSE RIB STA#8-LH
TOOL NO: 25-A-T-57-60-105-033-100
PART NO: 25-A-A-57-60-105-033-2F0
CLEARED FOR
SL.NO.:

DATE OF INSPECTION

STAMP

PROJECT-SARAS Mk2 AILERON-RH
TOOL NAME: TOOL FOR NOSE RIB STA#8-RH
TOOL NO: 25-A-T-57-60-105-033-200
PART NO: 25-A-A-57-60-105-033-2F0
CLEARED FOR
SL.NO.:

DATE OF INSPECTION

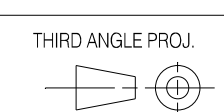
STAMP

TITLE AILERON

ADVANCE COPY

TOOL FOR NOSE RIB
STA#8

ITEM.NO	QTY	DESCRIPTION	MATERIAL	SIZE	REMARKS
6	1	WASHER	CARBON STEEL	ID6.4 x OD 12	HT 10.9 CLASS
5	1	WASHER	CARBON STEEL	ID5.3 x OD 10	HT 10.9 CLASS
4	2	HEX NUT	STD	M5	HT 10.9 CLASS
3	2	HEX BOLT	EN24	AS REQ	40 TO 45 HRC
2	1	LAYUP & CURING TOOL-ROOT	SA516 Gr.70	175 x 94 x 45	
1	1	LAYUP & CURING TOOL-TIP	SA516 Gr.70	175 x 93 x 45	

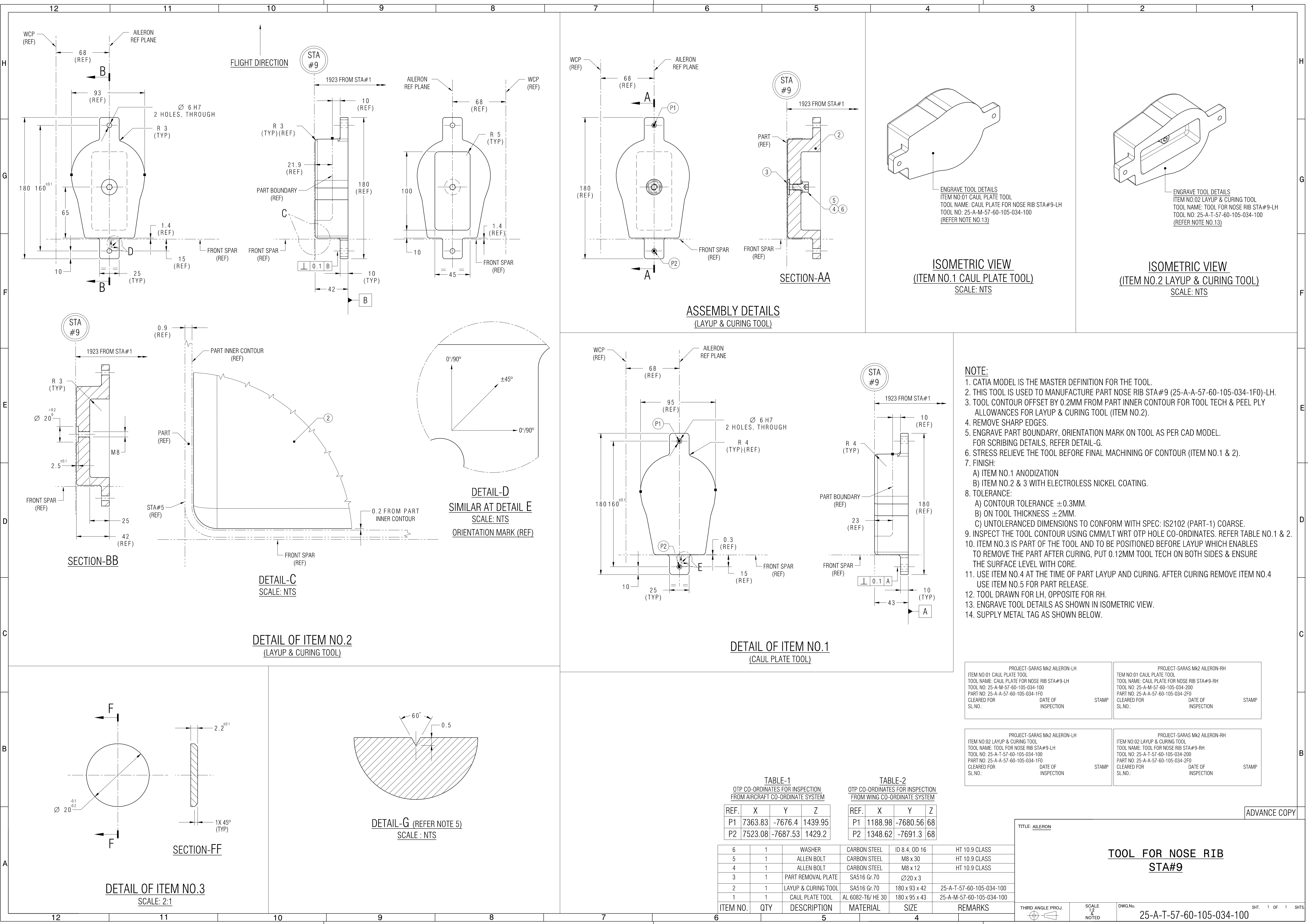


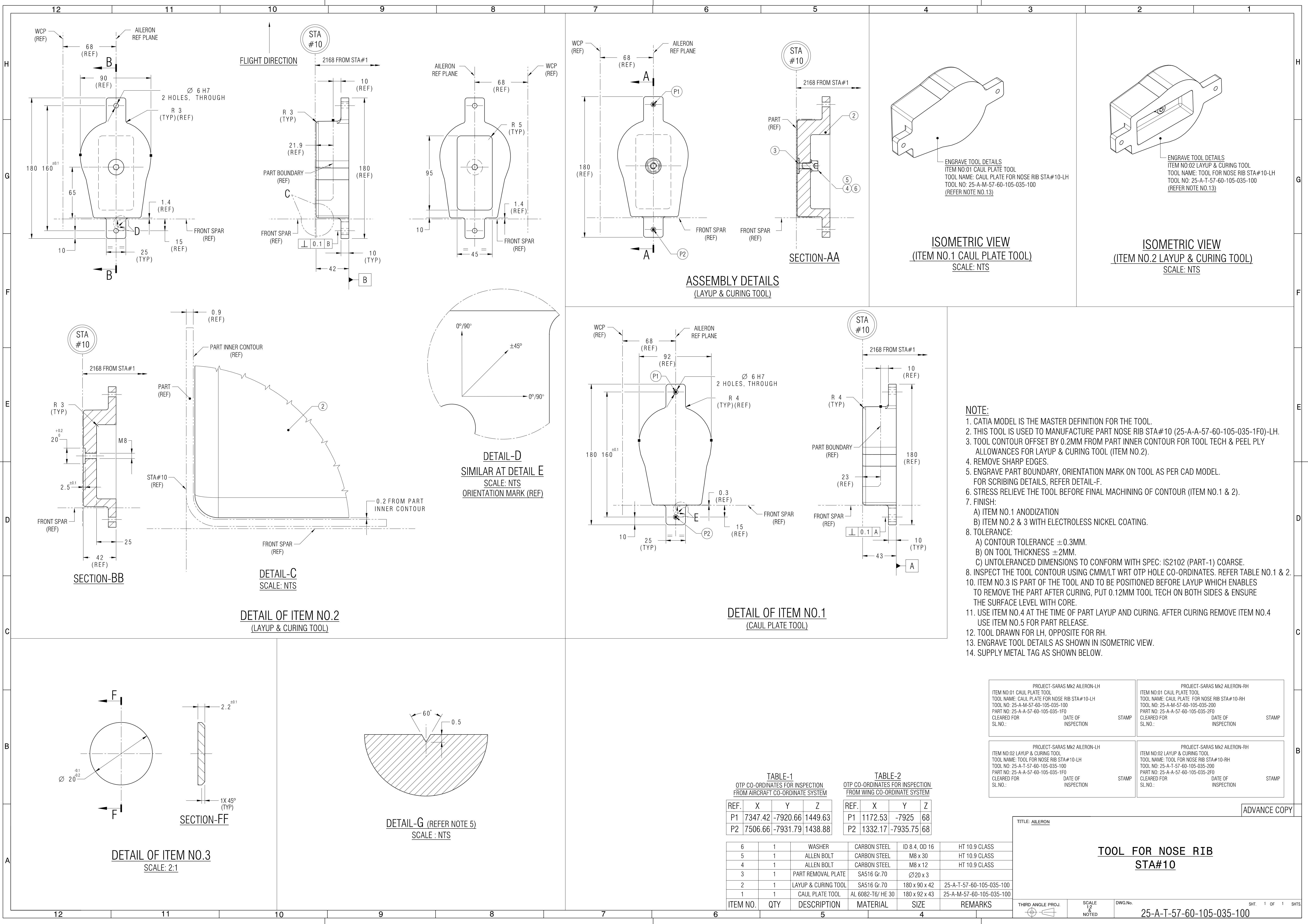
SCALE
1:2
&
NOTED

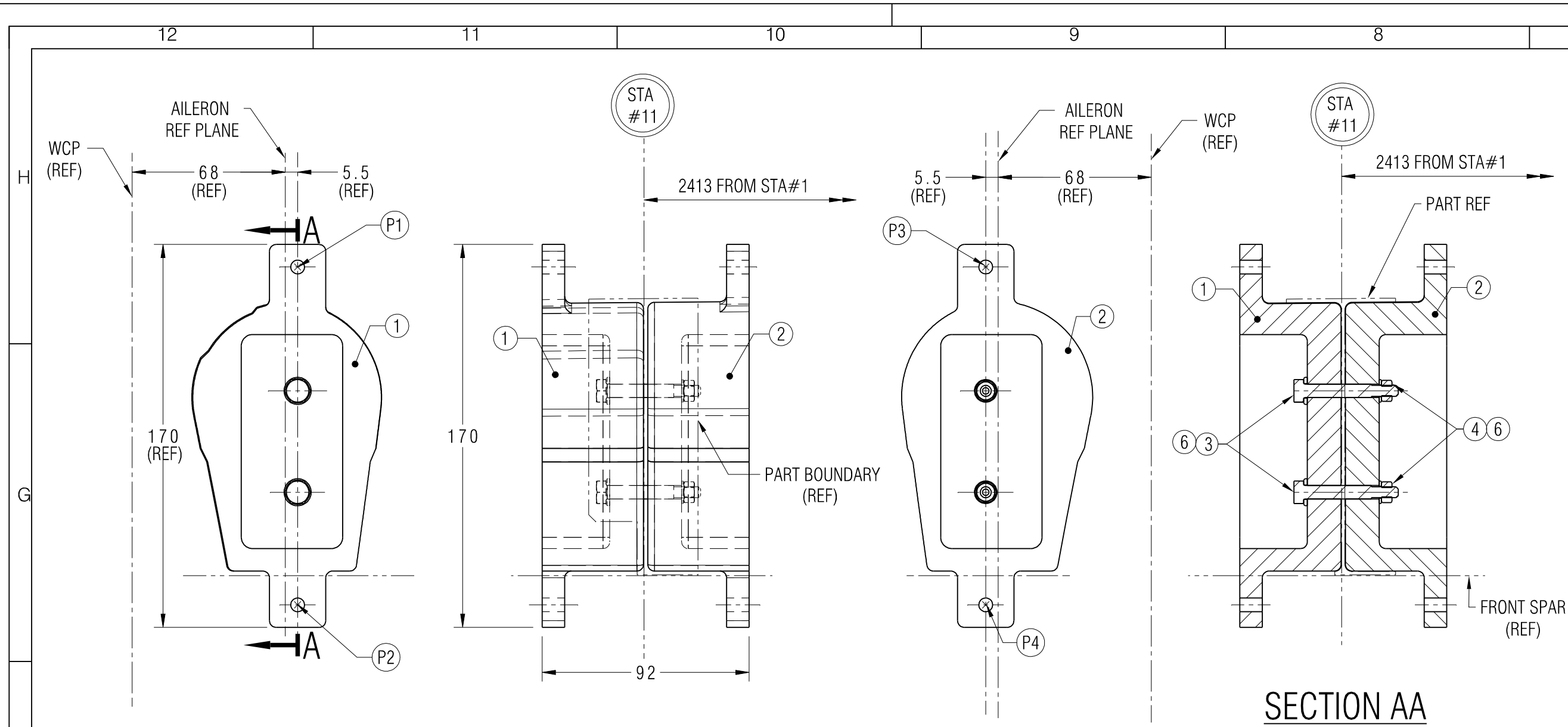
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25-A-T-57-60-105-033-100

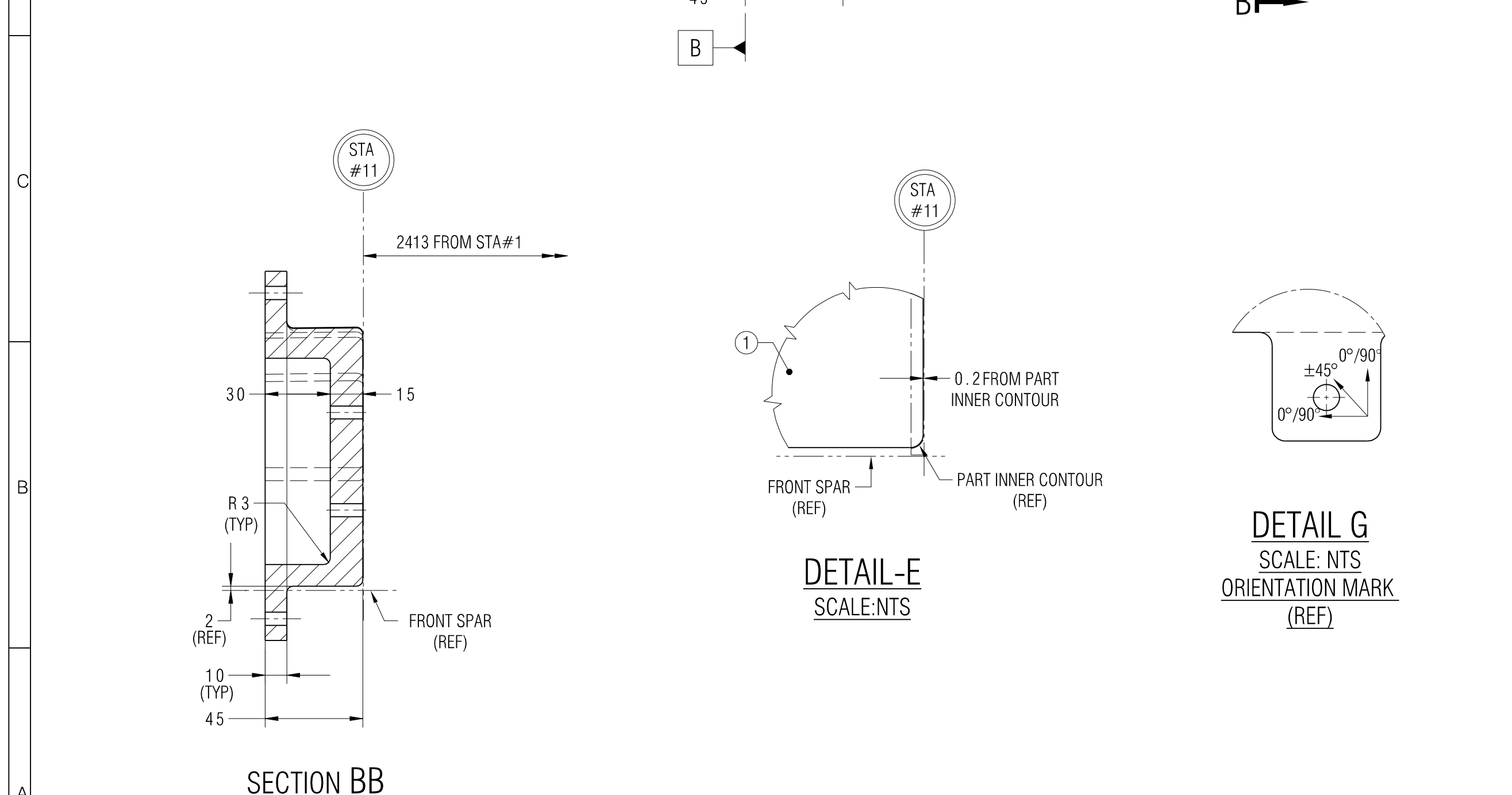
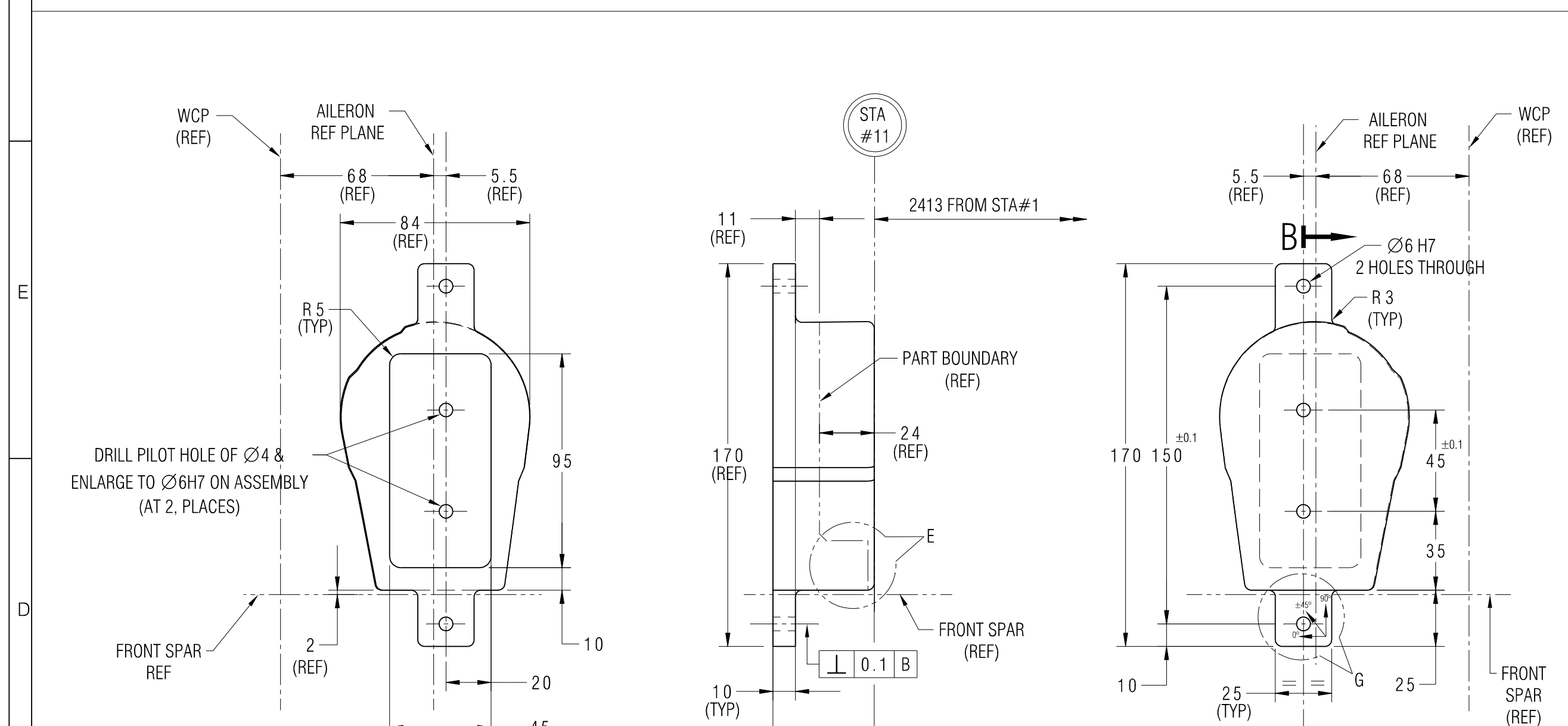
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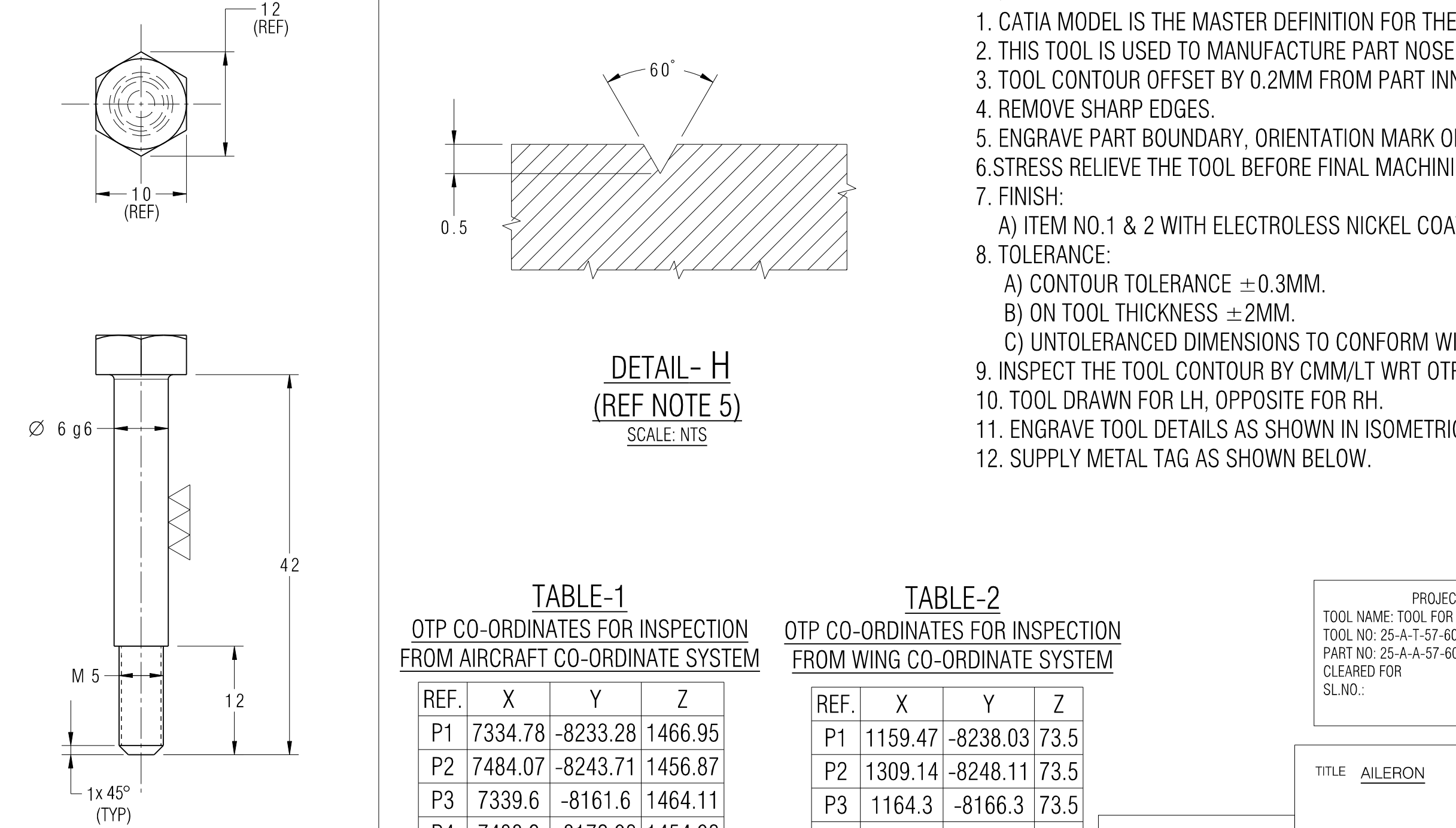
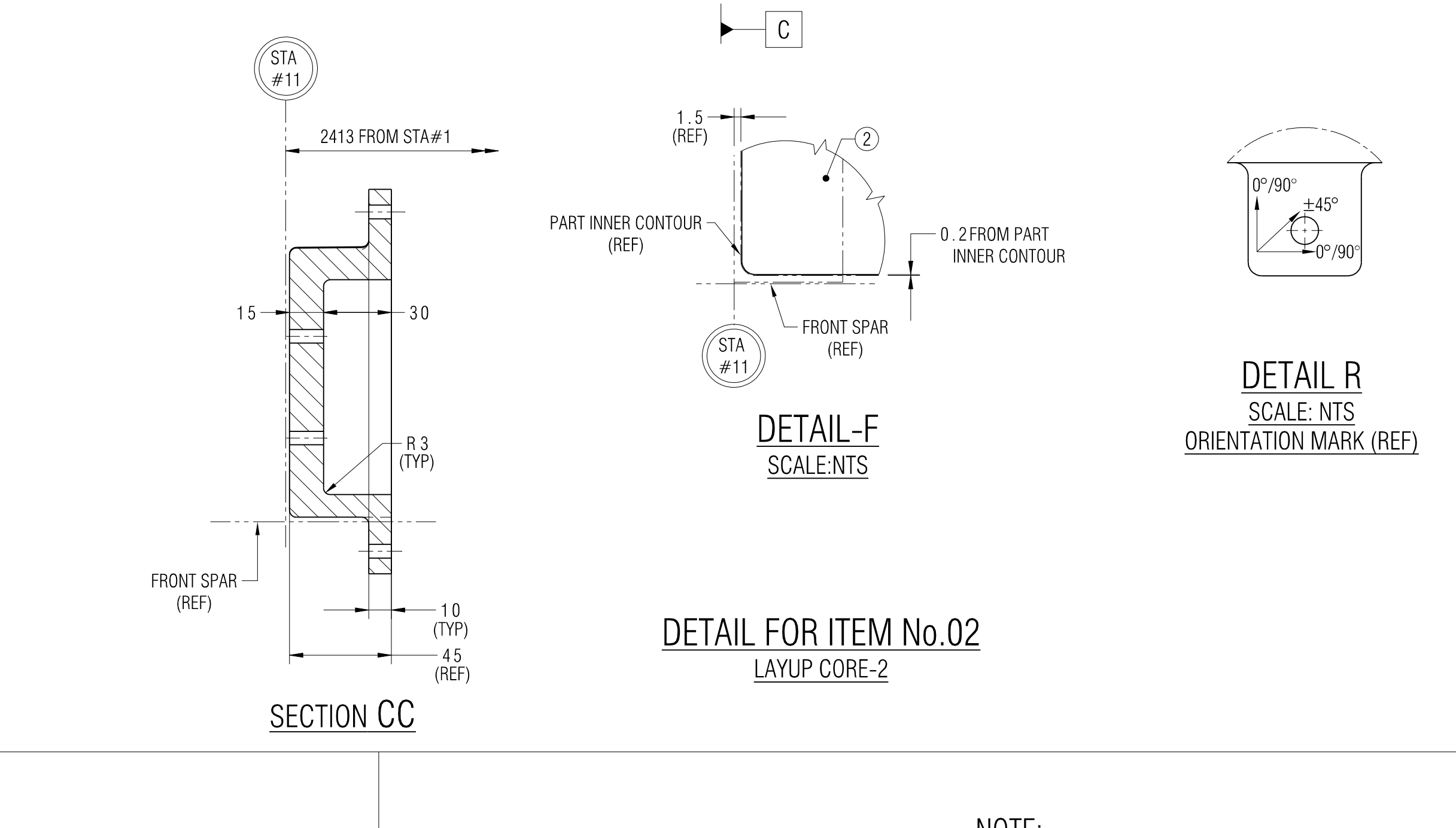
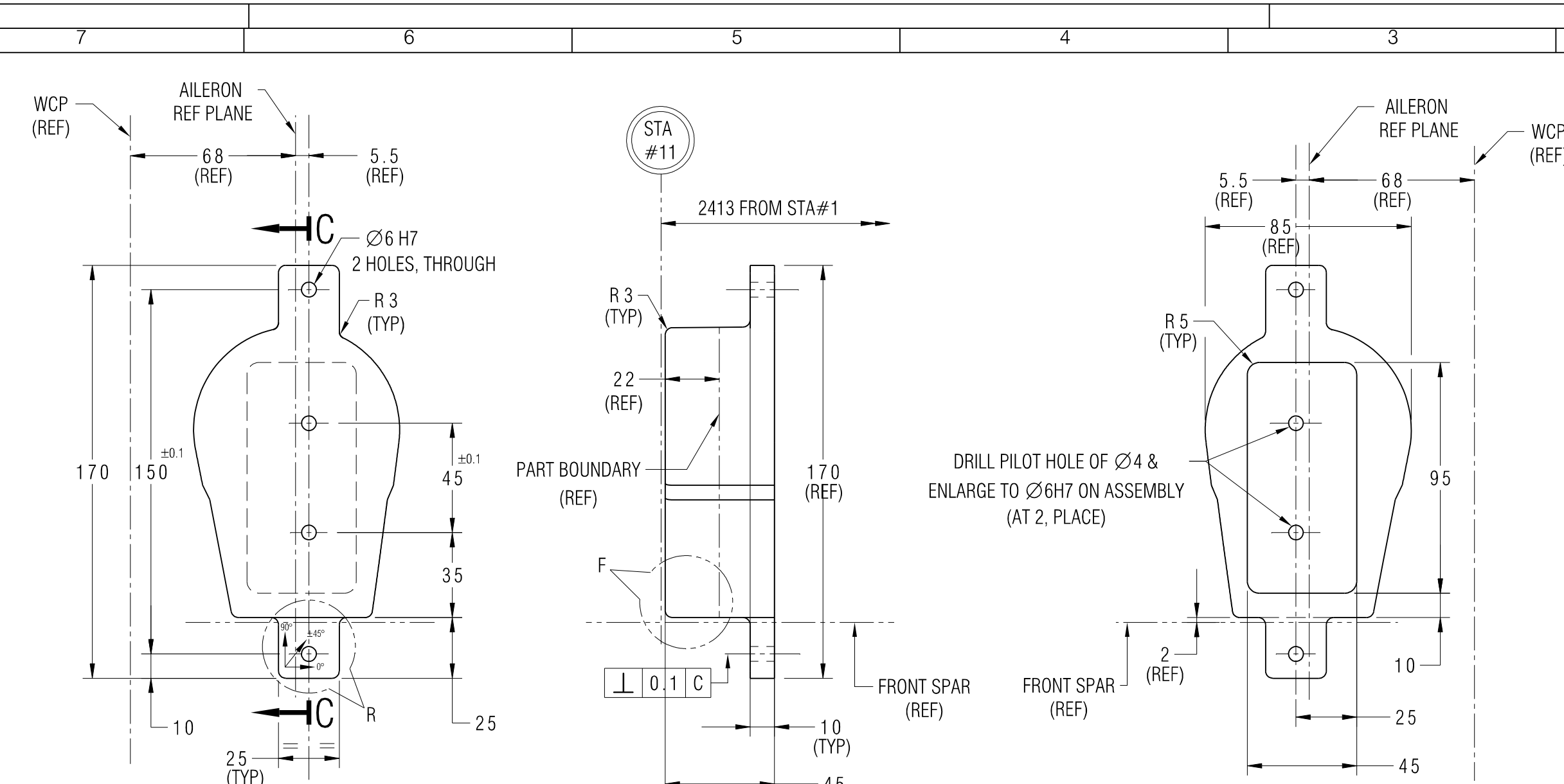




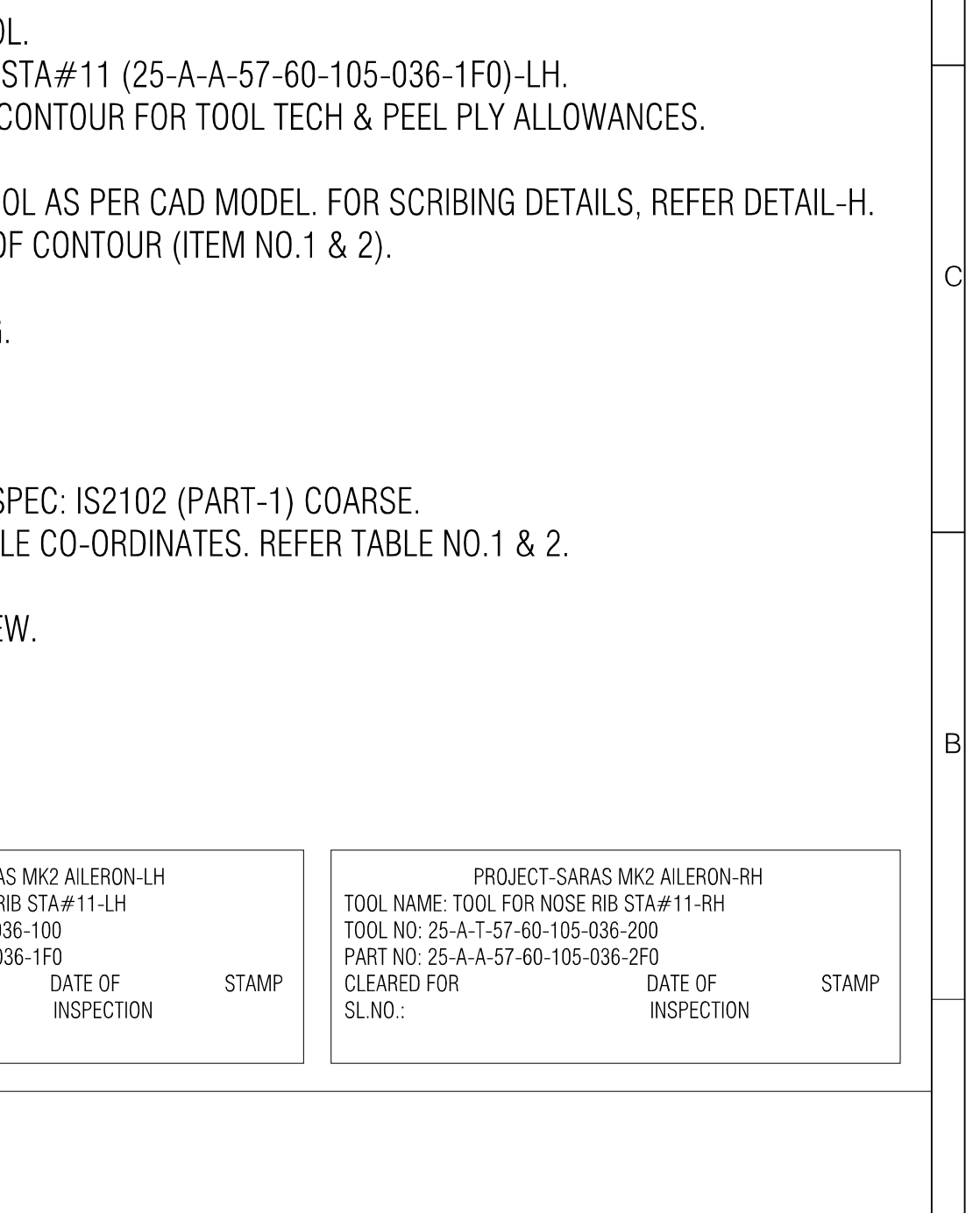
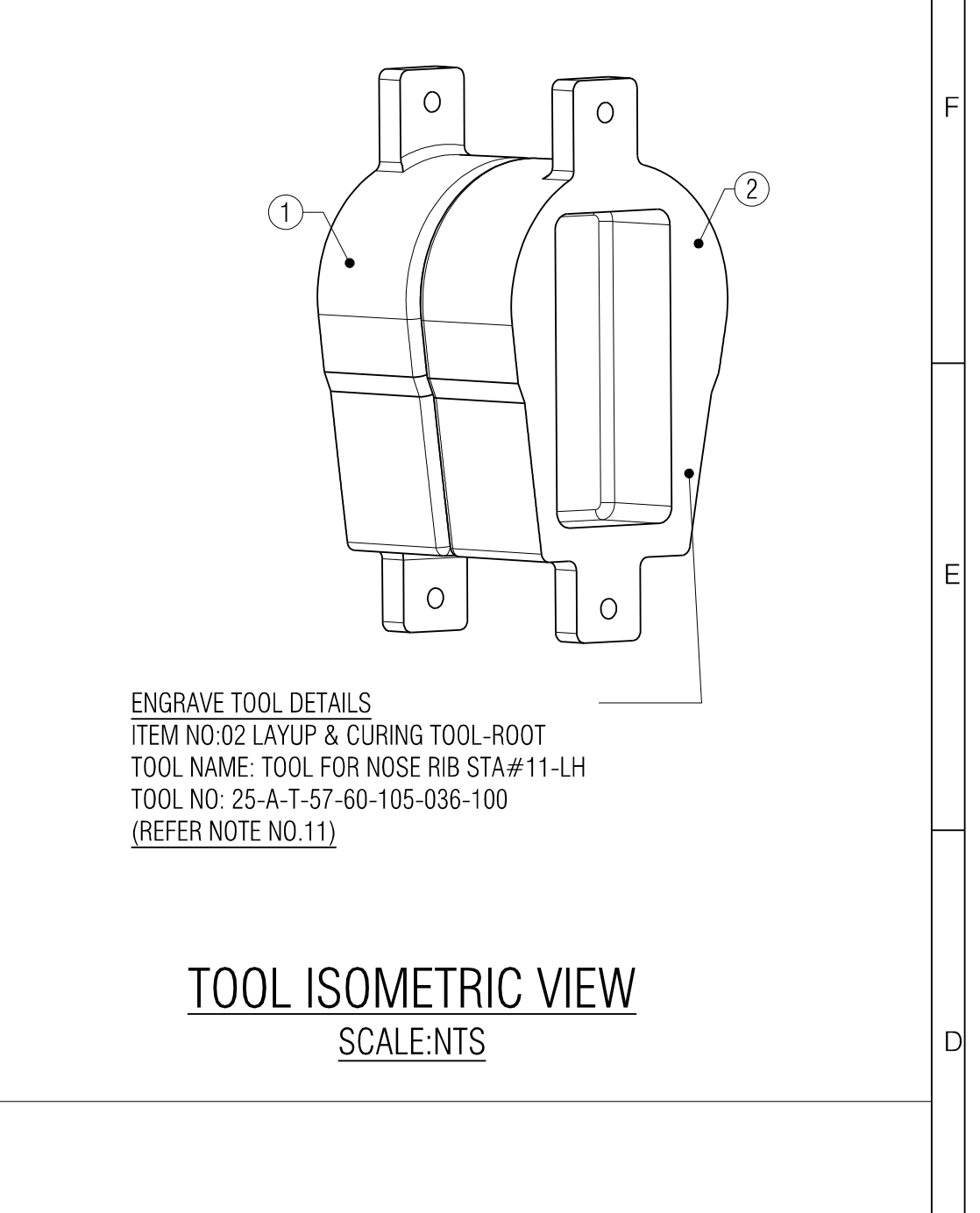
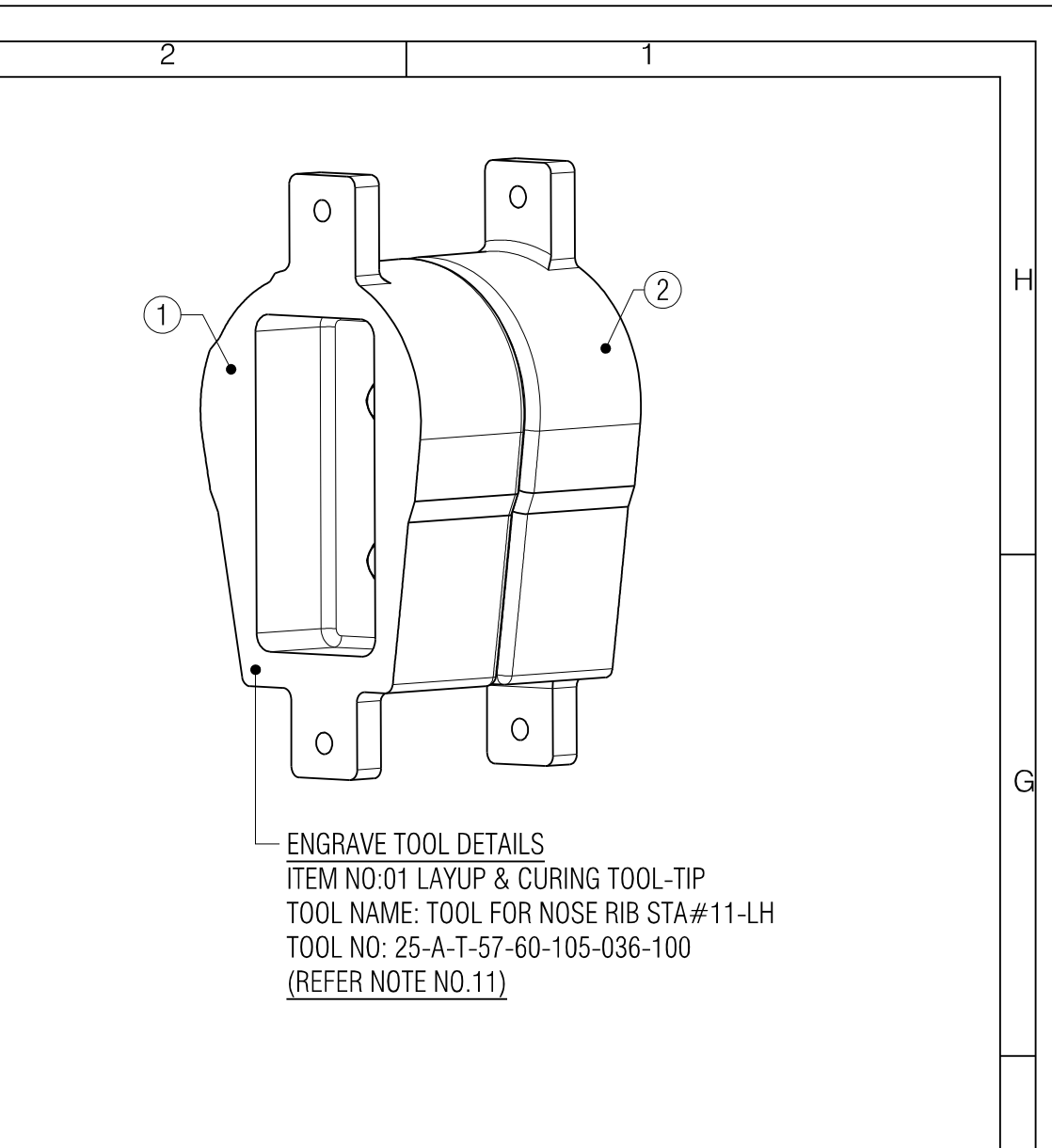
ASSEMBLY DETAIL
(LAYUP CORE-1 & 2)



DETAIL FOR ITEM No.01
LAYUP CORE-1



DETAIL OF ITEM No.3
SCALE:2:1



TOOL ISOMETRIC VIEW
SCALE:NTS

- NOTE:
- CATIA MODEL IS THE MASTER DEFINITION FOR THE TOOL.
 - THIS TOOL IS USED TO MANUFACTURE PART NOSE RIB STA#11 (25-A-A-57-60-105-036-1F0)-LH.
 - TOOL CONTOUR OFFSET BY 0.2MM FROM PART INNER CONTOUR FOR TOOL TECH & PEEL PLY ALLOWANCES.
 - REMOVE SHARP EDGES.
 - ENGRAVE PART BOUNDARY, ORIENTATION MARK ON TOOL AS PER CAD MODEL. FOR SCRIBING DETAILS, REFER DETAIL-H.
 - STRESS RELIEVE THE TOOL BEFORE FINAL MACHINING OF CONTOUR (ITEM NO.1 & 2).
 - FINISH:
 - ITEM NO.1 & 2 WITH ELECTROLESS NICKEL COATING.
 - TOLERANCE:
 - CONTOUR TOLERANCE ± 0.3 MM.
 - ON TOOL THICKNESS ± 2 MM.
 - UNTOLERANCED DIMENSIONS TO CONFORM WITH SPEC: IS2102 (PART-1) COARSE.
 - INSPECT THE TOOL CONTOUR BY CMM/LT WRT OTP HOLE CO-ORDINATES. REFER TABLE NO.1 & 2.
 - TOOL DRAWN FOR LH, OPPOSITE FOR RH.
 - ENGRAVE TOOL DETAILS AS SHOWN IN ISOMETRIC VIEW.
 - SUPPLY METAL TAG AS SHOWN BELOW.

TABLE-1
OTP CO-ORDINATES FOR INSPECTION
FROM AIRCRAFT CO-ORDINATE SYSTEM

REF.	X	Y	Z
P1	7334.78	-8233.28	1466.95
P2	7484.07	-8243.71	1456.87
P3	7339.6	-8161.6	1464.11
P4	7488.9	-8172.03	1454.03

TABLE-2
OTP CO-ORDINATES FOR INSPECTION
FROM WING CO-ORDINATE SYSTEM

REF.	X	Y	Z
P1	1159.47	-8238.03	73.5
P2	1309.14	-8248.11	73.5
P3	1164.3	-8166.3	73.5
P4	1313.96	-8176.37	73.5

ITEM NO.	QTY	DESCRIPTION	MATERIAL	SIZE	REMARKS
6	1	WASHER	CARBON STEEL	ID6.4 x OD 12	HT 10.9 CLASS
5	1	WASHER	CARBON STEEL	ID5.3 x OD 10	HT 10.9 CLASS
4	2	HEX NUT	STD	M5	HT 10.9 CLASS
3	2	HEX BOLT	EN-24	AS REQ	40 TO 45 HRC
2	1	LAYUP & CURING TOOL-ROOT	SA516 Gr.70	170 x 85 x 45	
1	1	LAYUP & CURING TOOL-TIP	SA516 Gr.70	170 x 84 x 45	

ADVANCE COPY

PROJECT-SARAS MK2 AILERON-LH
TOOL NAME: TOOL FOR NOSE RIB STA#11-LH
TOOL NO: 25-A-T-57-60-105-036-100
PART NO: 25-A-A-57-60-105-036-1F0
CLEARED FOR
SL.NO.:

PROJECT-SARAS MK2 AILERON-RH
TOOL NAME: TOOL FOR NOSE RIB STA#11-RH
TOOL NO: 25-A-T-57-60-105-036-200
PART NO: 25-A-A-57-60-105-036-2F0
CLEARED FOR
SL.NO.:

TITLE: AILERON

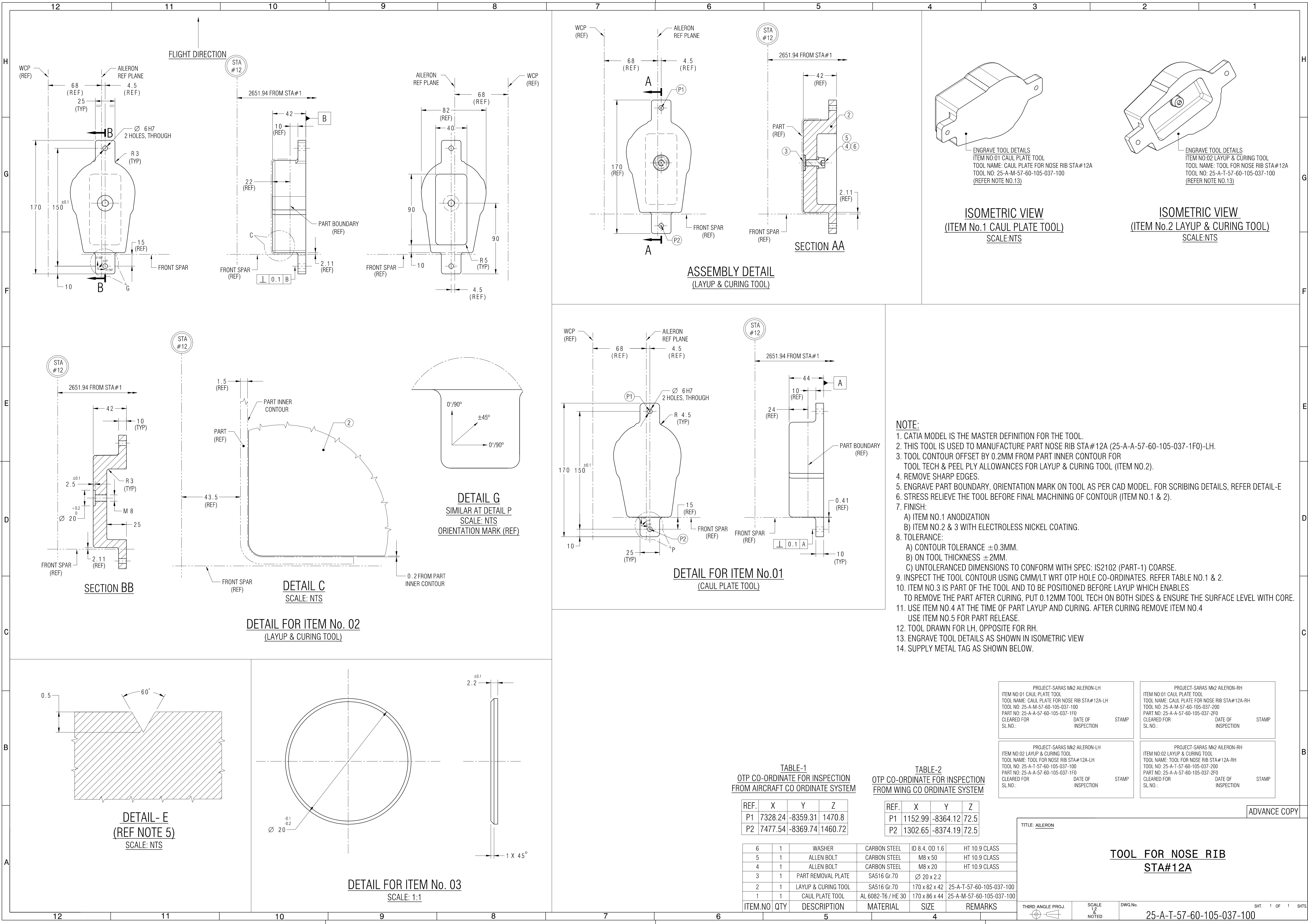
TOOL FOR NOSE RIB
STA#11

THIRD ANGLE PROJ.

SCALE
1:2
&
NOTED

DWG. NO.
25-A-T-60-105-036-100

SHT. 1 OF 1



PROJECT-SARAS Mk2 AILERON-LH ITEM NO:01 CAUL PLATE TOOL TOOL NAME: CAUL PLATE FOR NOSE RIB STA#12A-LH TOOL NO: 25-A-M-57-60-105-037-100 PART NO: 25-A-A-57-60-105-037-1F0 CLEARED FOR SL.NO.:			PROJECT-SARAS Mk2 AILERON-RH ITEM NO:01 CAUL PLATE TOOL TOOL NAME: CAUL PLATE FOR NOSE RIB STA#12A-RH TOOL NO: 25-A-M-57-60-105-037-200 PART NO: 25-A-A-57-60-105-037-2F0 CLEARED FOR SL.NO.:		
DATE OF INSPECTION	STAMP		DATE OF INSPECTION	STAMP	

PROJECT-SARAS Mk2 AILERON-LH ITEM NO:02 LAYUP & CURING TOOL TOOL NAME: TOOL FOR NOSE RIB STA#12A-LH TOOL NO: 25-A-T-57-60-105-037-100 PART NO: 25-A-A-57-60-105-037-1F0 CLEARED FOR SL.NO.:			PROJECT-SARAS Mk2 AILERON-RH ITEM NO:02 LAYUP & CURING TOOL TOOL NAME: TOOL FOR NOSE RIB STA#12A-RH TOOL NO: 25-A-T-57-60-105-037-200 PART NO: 25-A-A-57-60-105-037-2F0 CLEARED FOR SL.NO.:		
DATE OF INSPECTION	STAMP		DATE OF INSPECTION	STAMP	

TABLE-1
OTP CO-ORDINATE FOR INSPECTION
FROM AIRCRAFT CO ORDINATE SYSTEM

TABLE-2
OTP CO-ORDINATE FOR INSPECTION
FROM WING CO ORDINATE SYSTEM

REF.	X	Y	Z
P1	7328.24	-8359.31	1470.8
P2	7477.54	-8369.74	1460.72

REF.	X	Y	Z
P1	1152.99	-8364.12	72.5
P2	1302.65	-8374.19	72.5

6	1	WASHER	CARBON STEEL	ID 8.4, OD 1.6	HT 10.9 CLASS
5	1	ALLEN BOLT	CARBON STEEL	M8 x 50	HT 10.9 CLASS
4	1	ALLEN BOLT	CARBON STEEL	M8 x 20	HT 10.9 CLASS
3	1	PART REMOVAL PLATE	SA516 Gr.70	Ø 20 x 2.2	
2	1	LAYUP & CURING TOOL	SA516 Gr.70	170 x 82 x 42	25-A-T-57-60-105-037-100
1	1	CAUL PLATE TOOL	AL 6082-T6 / HE 30	170 x 86 x 44	25-A-M-57-60-105-037-100
ITEM.NO	QTY	DESCRIPTION	MATERIAL	SIZE	REMARKS

TITLE: AILERON

THIRD ANGLE PROJ.

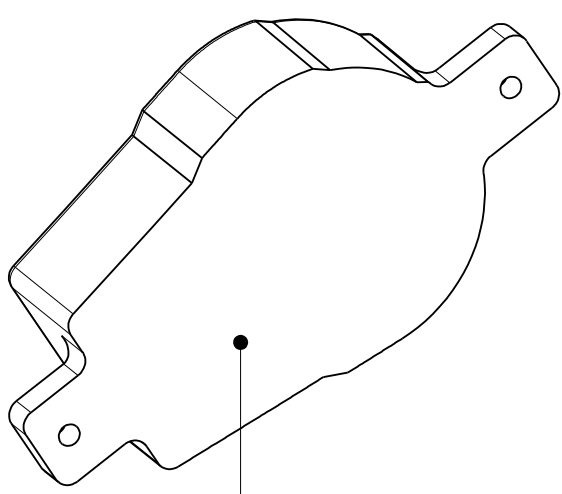
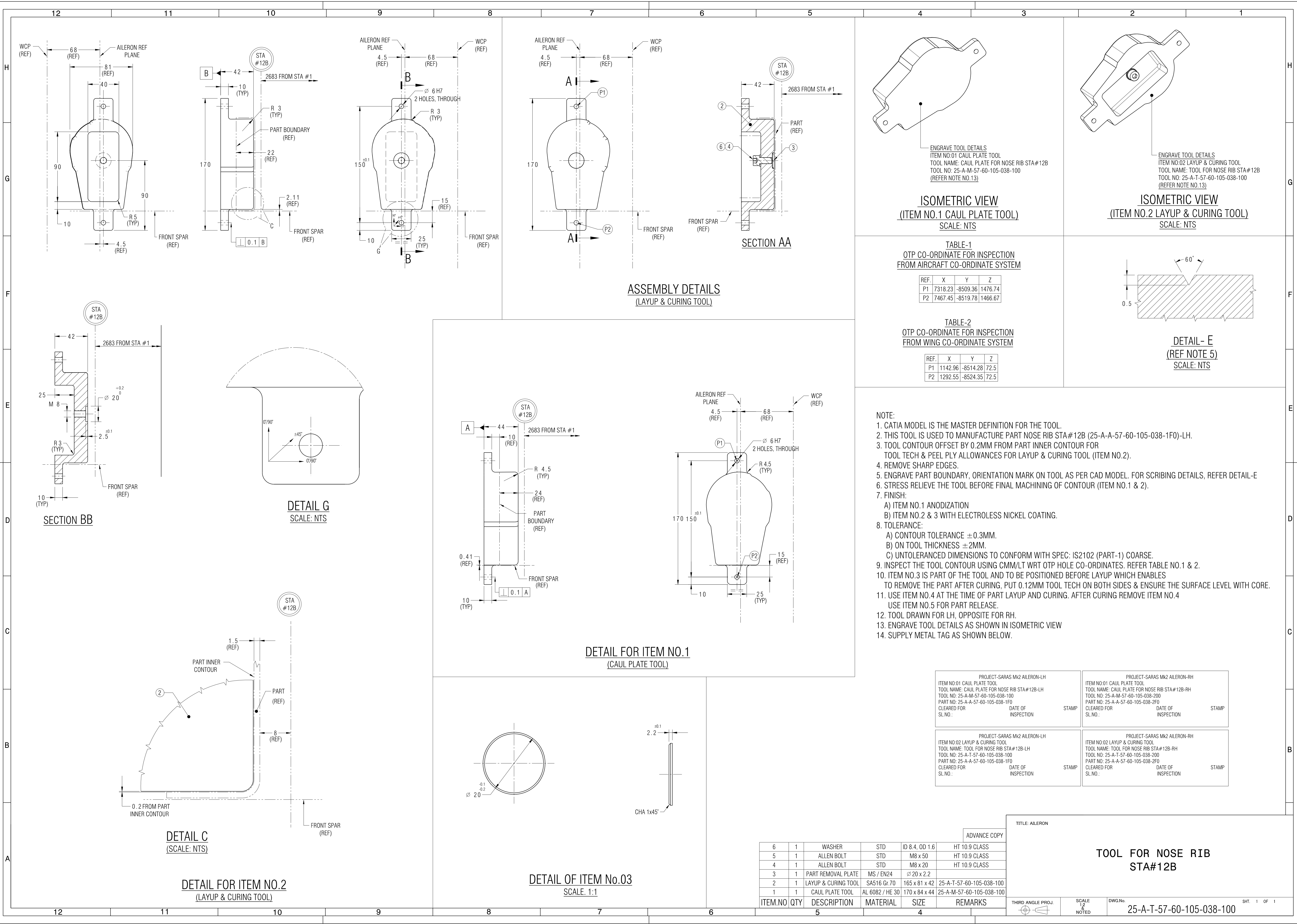
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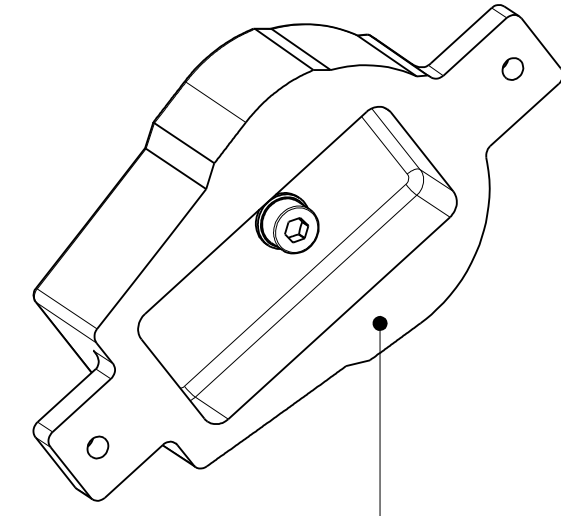
SHT. 1 OF 1 SHTS

25-A-T-57-60-105-037-100

TOOL FOR NOSE RIB STA#12A



ISOMETRIC VIEW
(ITEM NO.1 CAUL PLATE TOOL)
SCALE: NTS



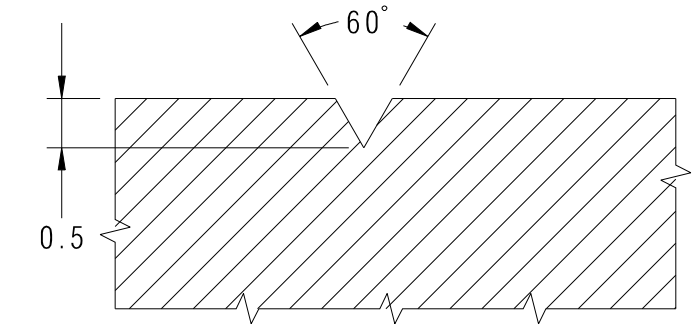
ISOMETRIC VIEW
(ITEM NO.2 LAYUP & CURING TOOL)
SCALE: NTS

TABLE-1
OTP CO-ORDINATE FOR INSPECTION
FROM AIRCRAFT CO-ORDINATE SYSTEM

REF.	X	Y	Z
P1	7318.23	-8509.36	1476.74
P2	7467.45	-8519.78	1466.67

TABLE-2
OTP CO-ORDINATE FOR INSPECTION
FROM WING CO-ORDINATE SYSTEM

REF.	X	Y	Z
P1	1142.96	-8514.28	72.5
P2	1292.55	-8524.35	72.5



DETAIL- E
(REF NOTE 5)
SCALE: NTS

- NOTE:
- CATIA MODEL IS THE MASTER DEFINITION FOR THE TOOL.
 - THIS TOOL IS USED TO MANUFACTURE PART NOSE RIB STA#12B (25-A-A-57-60-105-038-1F0)-LH.
 - TOOL CONTOUR OFFSET BY 0.2MM FROM PART INNER CONTOUR FOR TOOL TECH & PEEL PLY ALLOWANCES FOR LAYUP & CURING TOOL (ITEM NO.2).
 - REMOVE SHARP EDGES.
 - ENGRAVE PART BOUNDARY, ORIENTATION MARK ON TOOL AS PER CAD MODEL, FOR SCRIBING DETAILS, REFER DETAIL-E
 - STRESS RELIEVE THE TOOL BEFORE FINAL MACHINING OF CONTOUR (ITEM NO.1 & 2).
 - FINISH:
 - A) ITEM NO.1 ANODIZATION
 - B) ITEM NO.2 & 3 WITH ELECTROLESS NICKEL COATING.
 - TOLERANCE:
 - A) CONTOUR TOLERANCE ± 0.3 MM.
 - B) ON TOOL THICKNESS ± 2 MM.
 - C) UNTOLERANCED DIMENSIONS TO CONFORM WITH SPEC: IS2102 (PART-1) COARSE.
 - INSPECT THE TOOL CONTOUR USING CMM/LT WRT OTP HOLE CO-ORDINATES. REFER TABLE NO.1 & 2.
 - ITEM NO.3 IS PART OF THE TOOL AND TO BE POSITIONED BEFORE LAYUP WHICH ENABLES TO REMOVE THE PART AFTER CURING, PUT 0.12MM TOOL TECH ON BOTH SIDES & ENSURE THE SURFACE LEVEL WITH CORE.
 - USE ITEM NO.4 AT THE TIME OF PART LAYUP AND CURING. AFTER CURING REMOVE ITEM NO.4 USE ITEM NO.5 FOR PART RELEASE.
 - TOOL DRAWN FOR LH, OPPOSITE FOR RH.
 - ENGRAVE TOOL DETAILS AS SHOWN IN ISOMETRIC VIEW
 - SUPPLY METAL TAG AS SHOWN BELOW.

PROJECT-SARAS Mk2 AILERON-LH ITEM NO:01 CAUL PLATE TOOL TOOL NAME: CAUL PLATE FOR NOSE RIB STA#12B-LH TOOL NO: 25-A-M-57-60-105-038-100 PART NO: 25-A-A-57-60-105-038-1F0 CLEARED FOR SL.NO.:	DATE OF INSPECTION	STAMP	PROJECT-SARAS Mk2 AILERON-RH ITEM NO:01 CAUL PLATE TOOL TOOL NAME: CAUL PLATE FOR NOSE RIB STA#12B-RH TOOL NO: 25-A-M-57-60-105-038-200 PART NO: 25-A-A-57-60-105-038-2F0 CLEARED FOR SL.NO.:	DATE OF INSPECTION	STAMP
PROJECT-SARAS Mk2 AILERON-LH ITEM NO:02 LAYUP & CURING TOOL TOOL NAME: TOOL FOR NOSE RIB STA#12B-LH TOOL NO: 25-A-T-57-60-105-038-100 PART NO: 25-A-A-57-60-105-038-1F0 CLEARED FOR SL.NO.:	DATE OF INSPECTION	STAMP	PROJECT-SARAS Mk2 AILERON-RH ITEM NO:02 LAYUP & CURING TOOL TOOL NAME: TOOL FOR NOSE RIB STA#12B-RH TOOL NO: 25-A-T-57-60-105-038-200 PART NO: 25-A-A-57-60-105-038-2F0 CLEARED FOR SL.NO.:	DATE OF INSPECTION	STAMP

ITEM.NO	QTY	DESCRIPTION	MATERIAL	SIZE	REMARKS
6	1	WASHER	STD	ID 8.4, OD 1.6	HT 10.9 CLASS
5	1	ALLEN BOLT	STD	M8 x 50	HT 10.9 CLASS
4	1	ALLEN BOLT	STD	M8 x 20	HT 10.9 CLASS
3	1	PART REMOVAL PLATE	MS / EN24	$\varnothing 20$ x 2.2	
2	1	LAYUP & CURING TOOL	SA516 Gr.70	165 x 81 x 42	25-A-T-57-60-105-038-100
1	1	CAUL PLATE TOOL	AL 6082 / HE 30	170 x 84 x 44	25-A-M-57-60-105-038-100

TITLE: AILERON

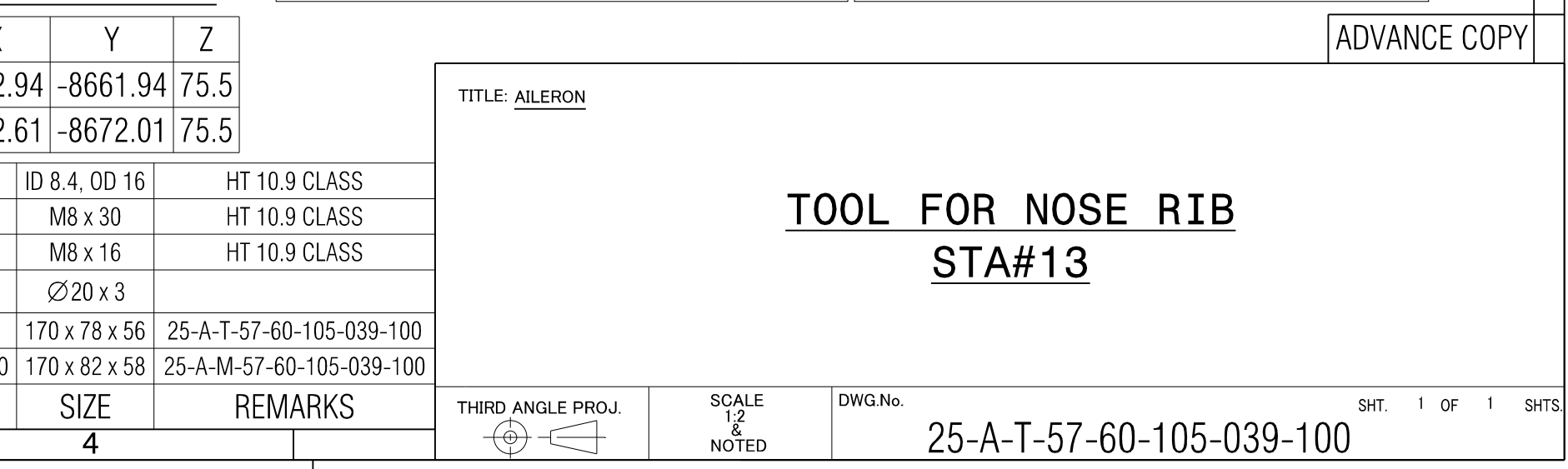
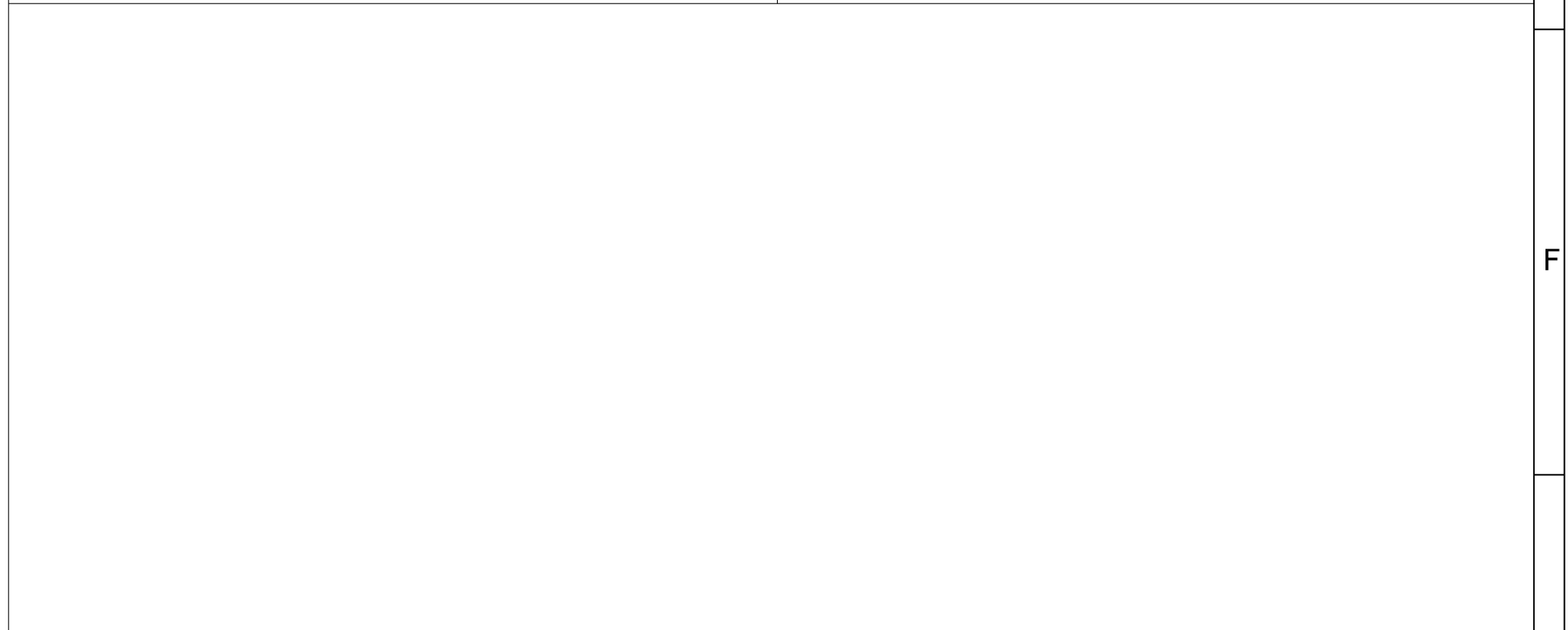
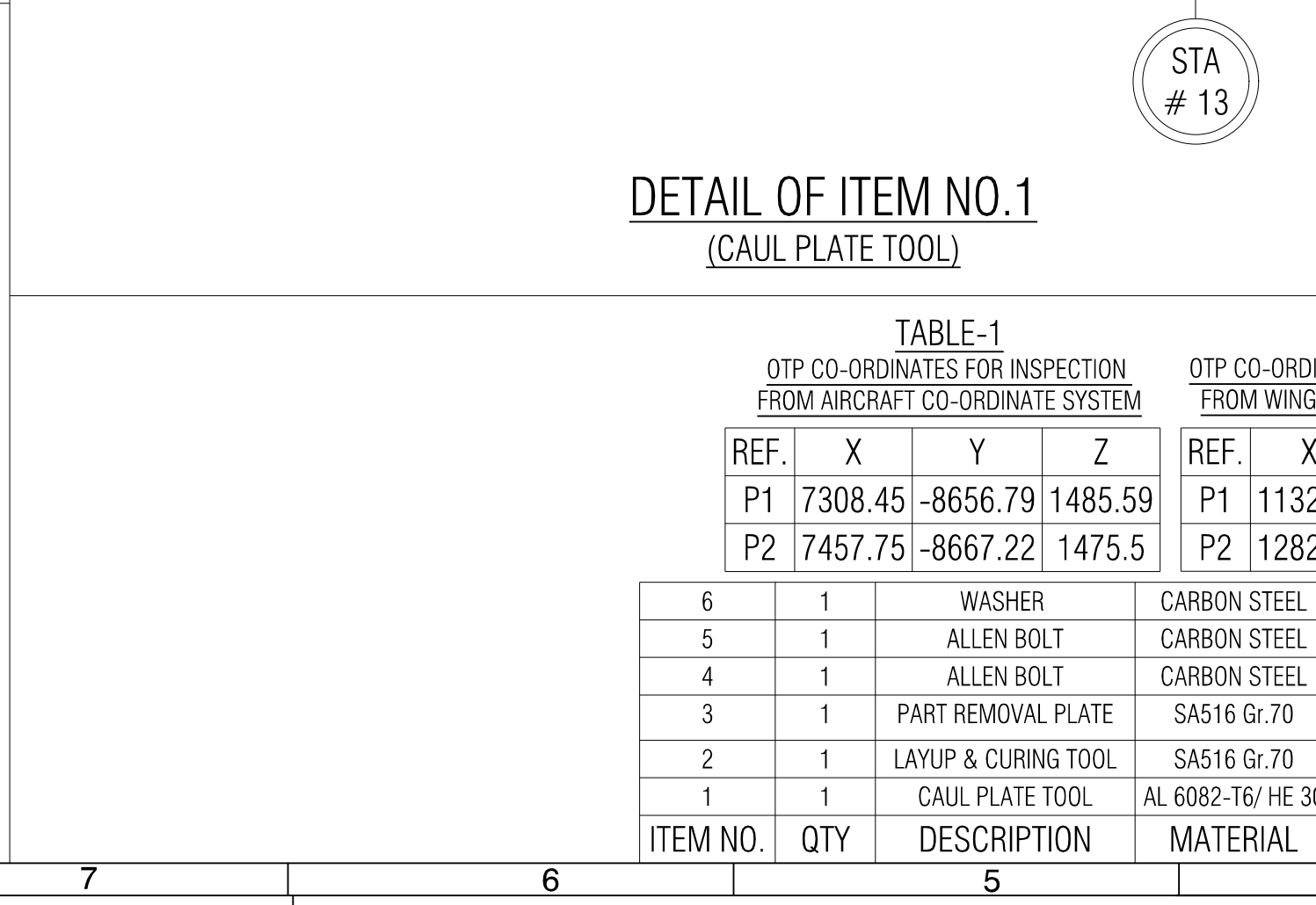
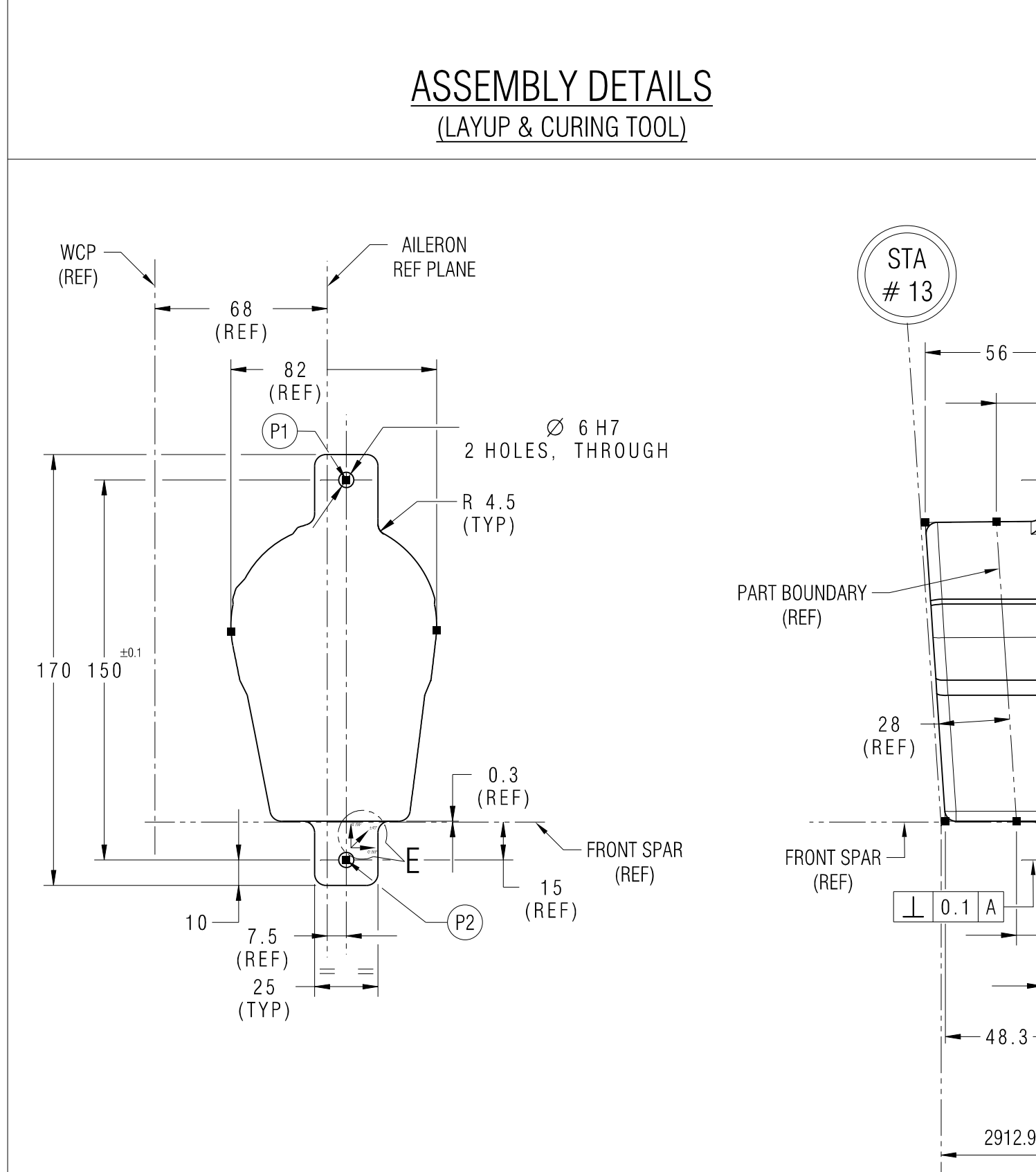
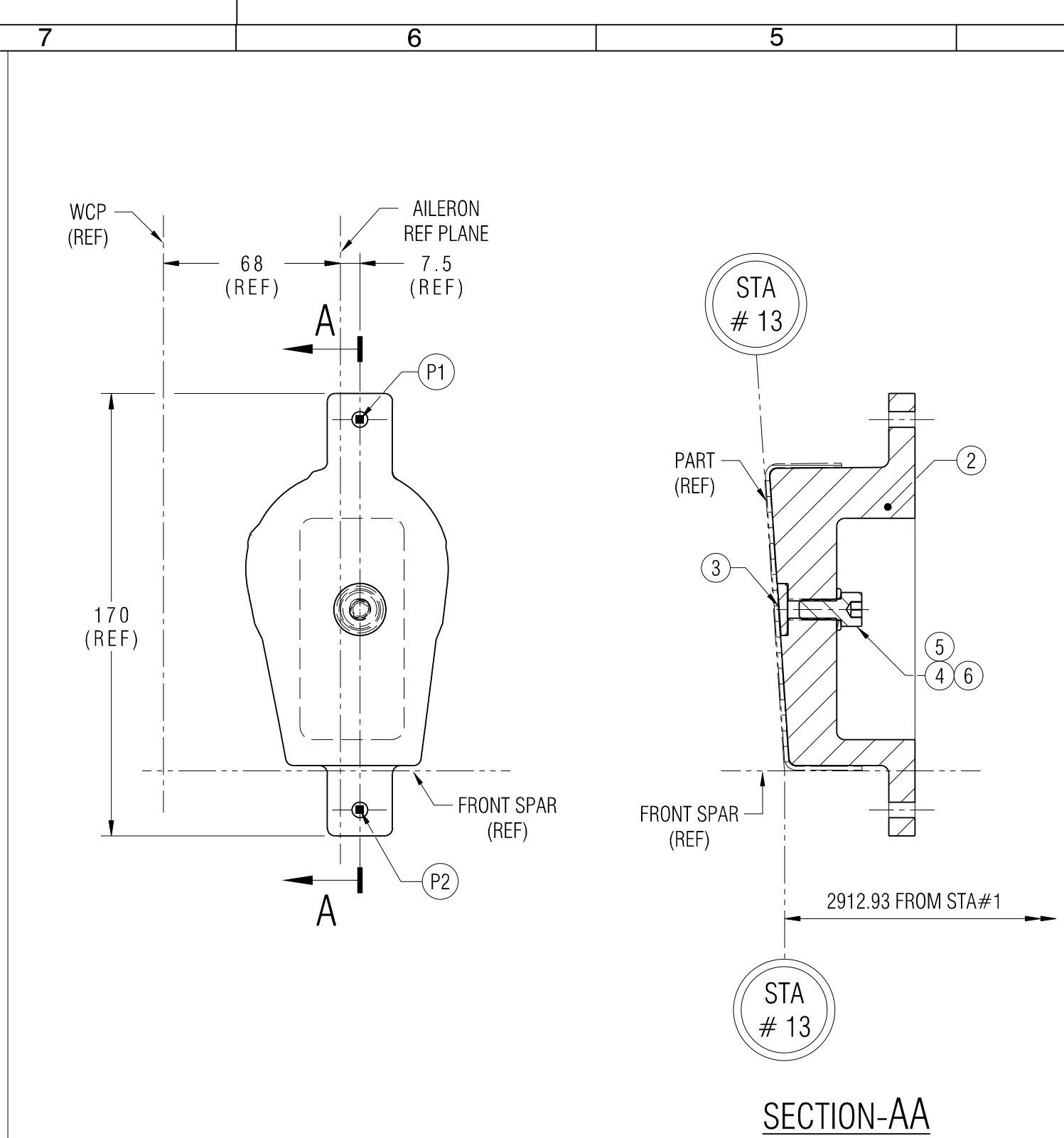
TOOL FOR NOSE RIB STA#12B

THIRD ANGLE PROJ.

SCALE 1/2 NOTED

DWG.No. 25-A-T-57-60-105-038-100

SHT. 1 OF 1



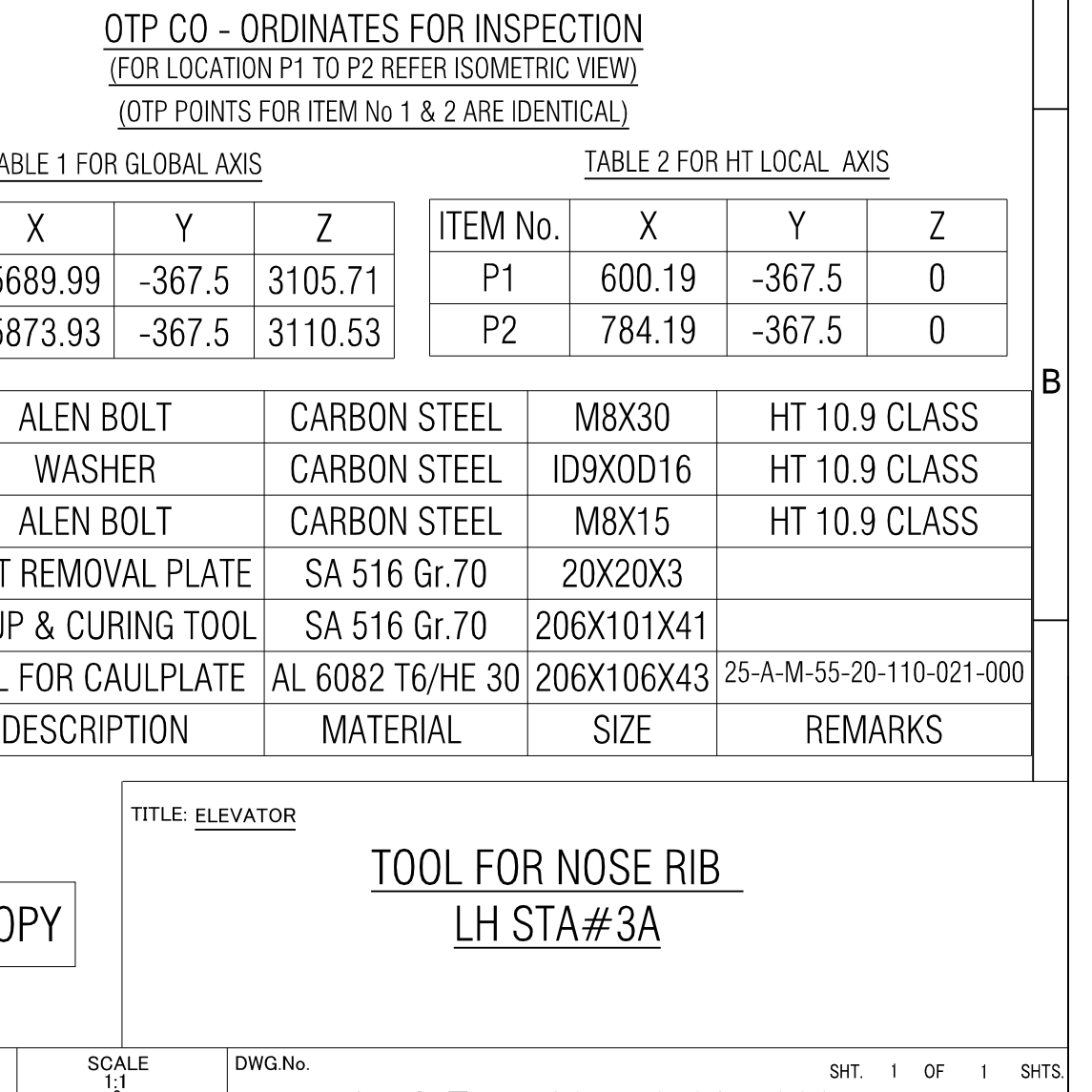
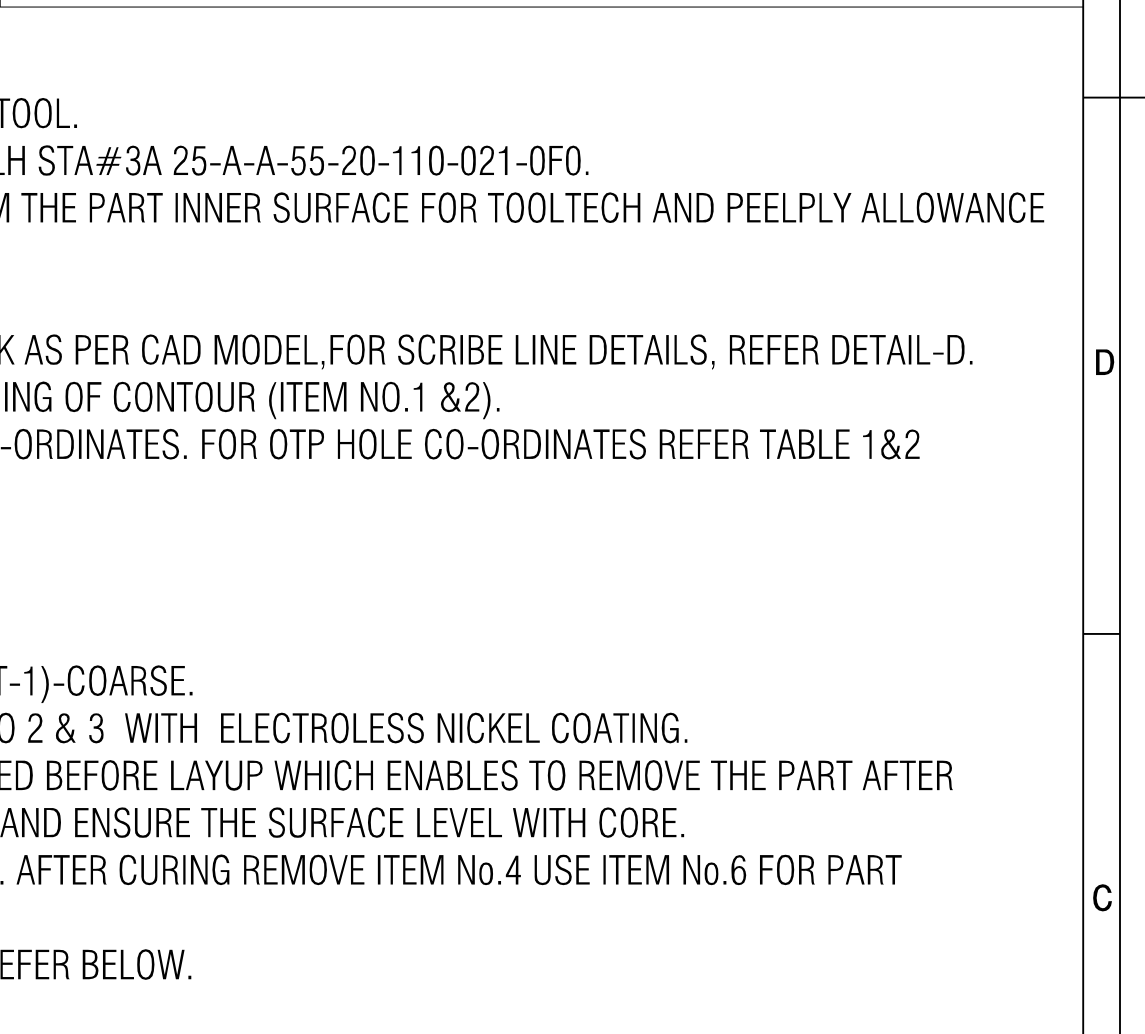
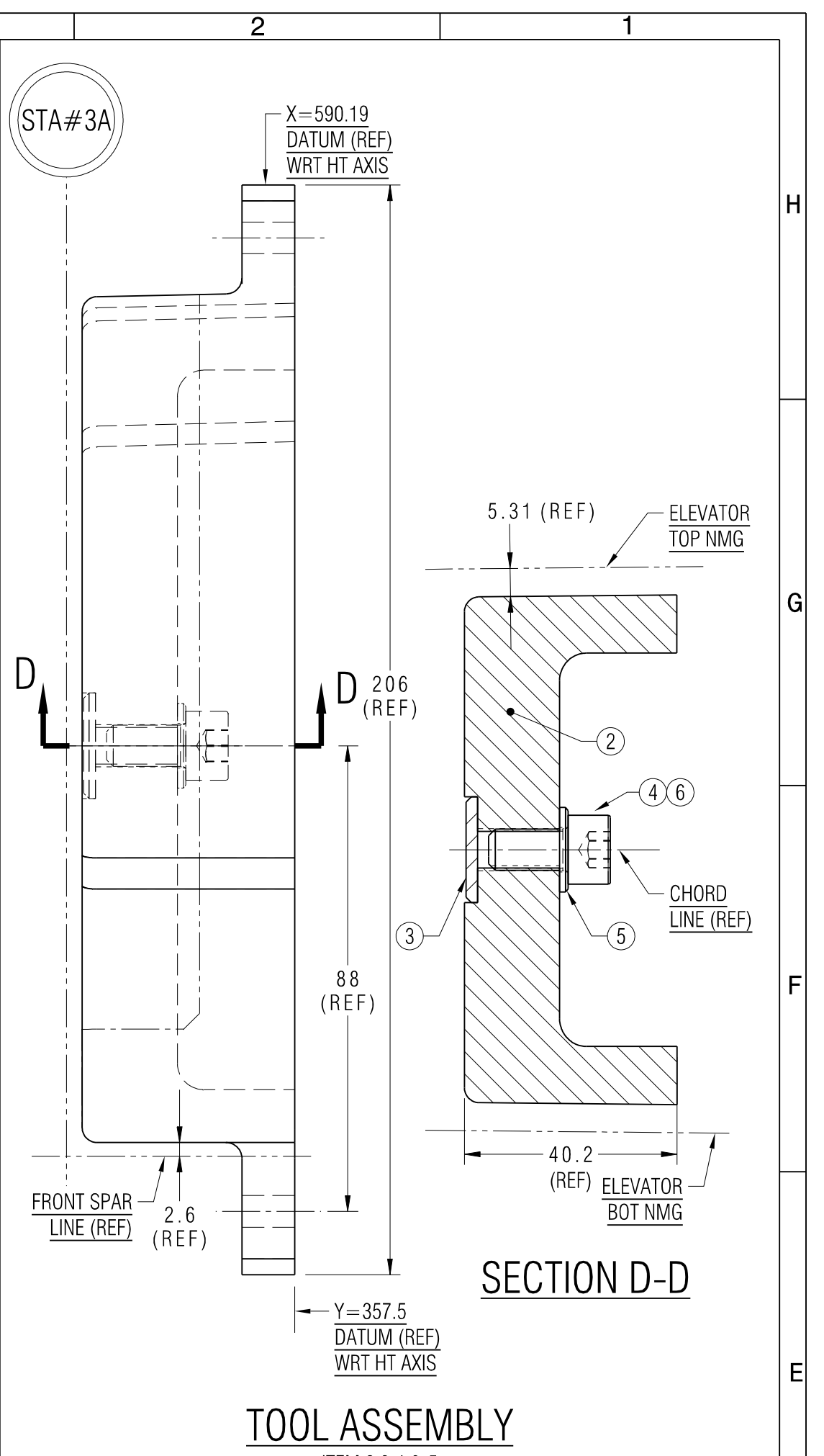
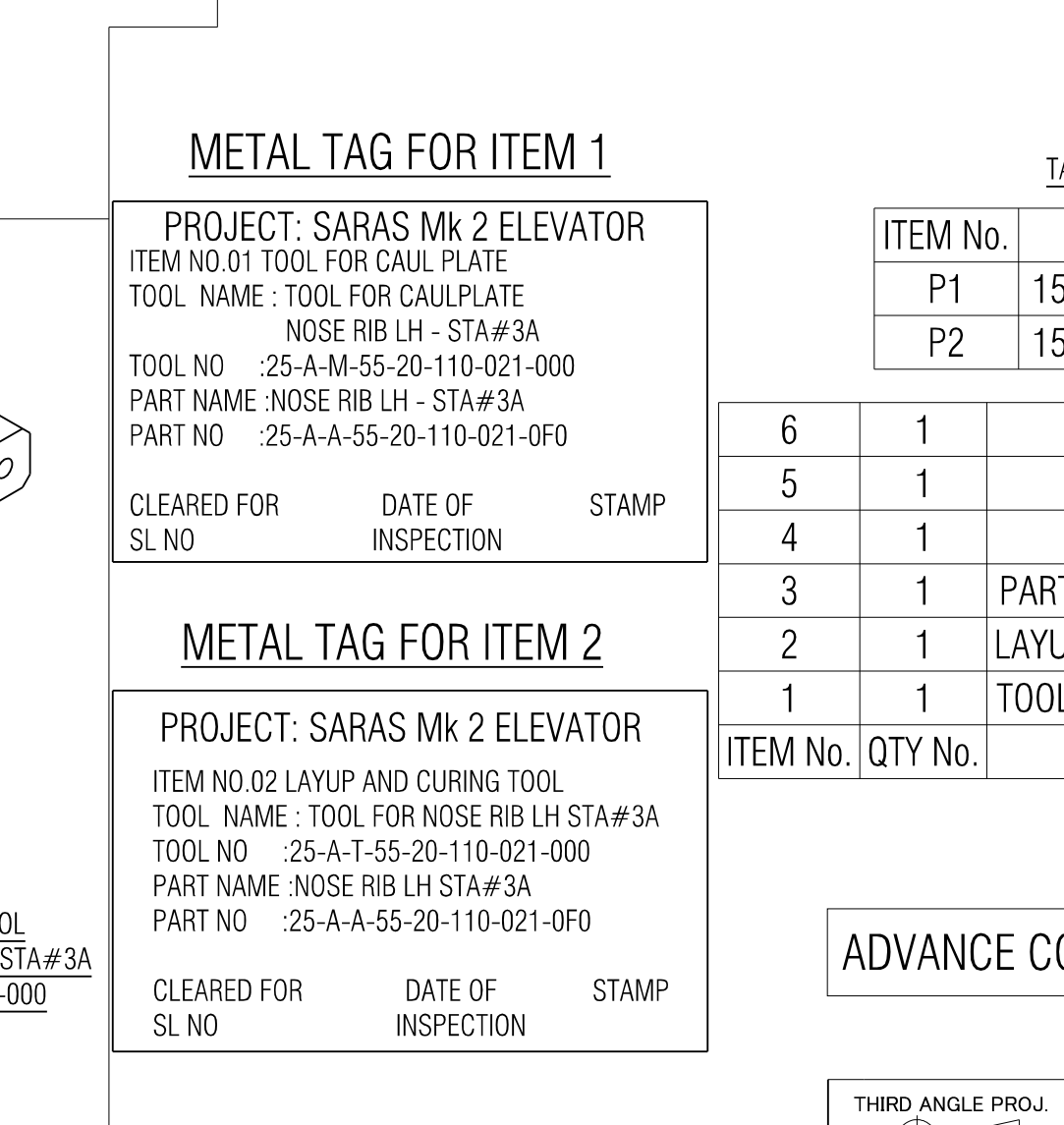
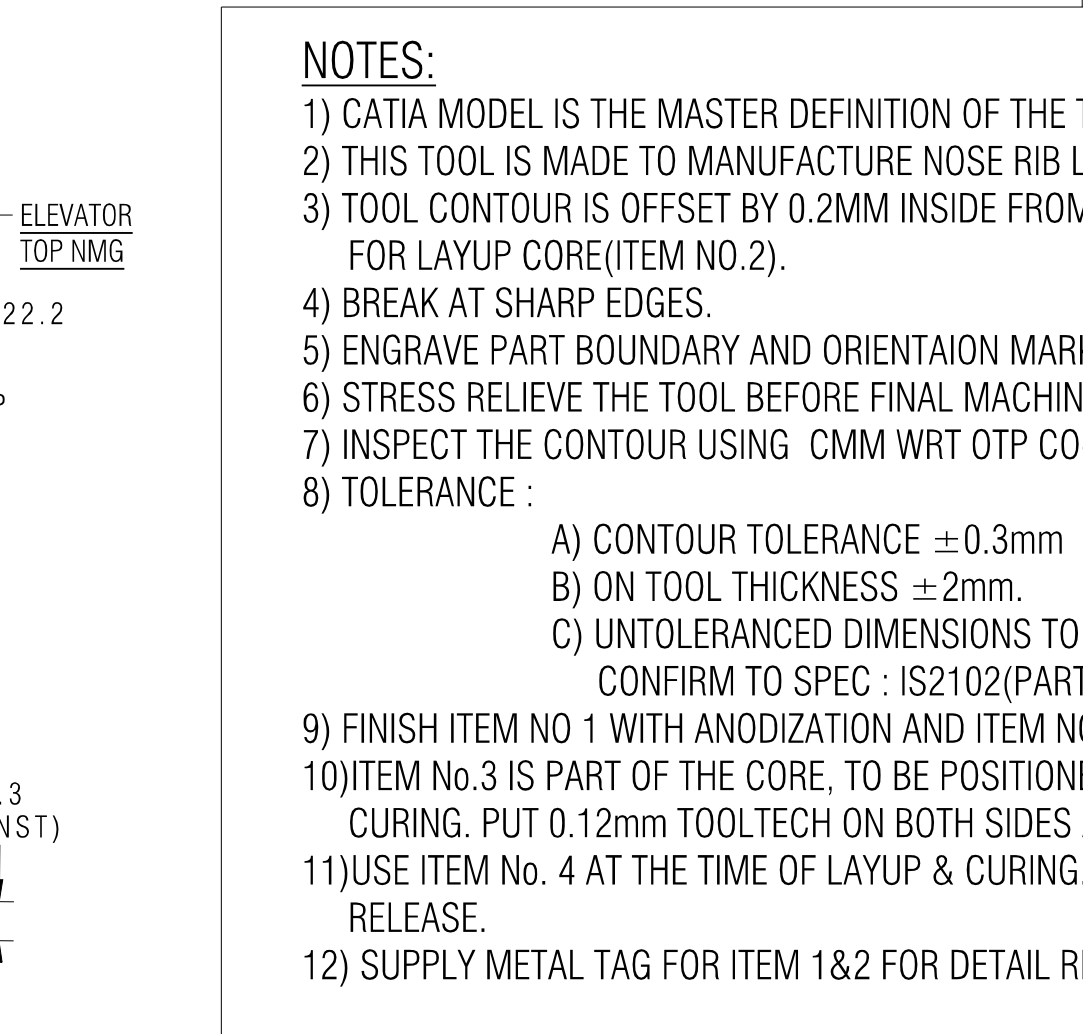
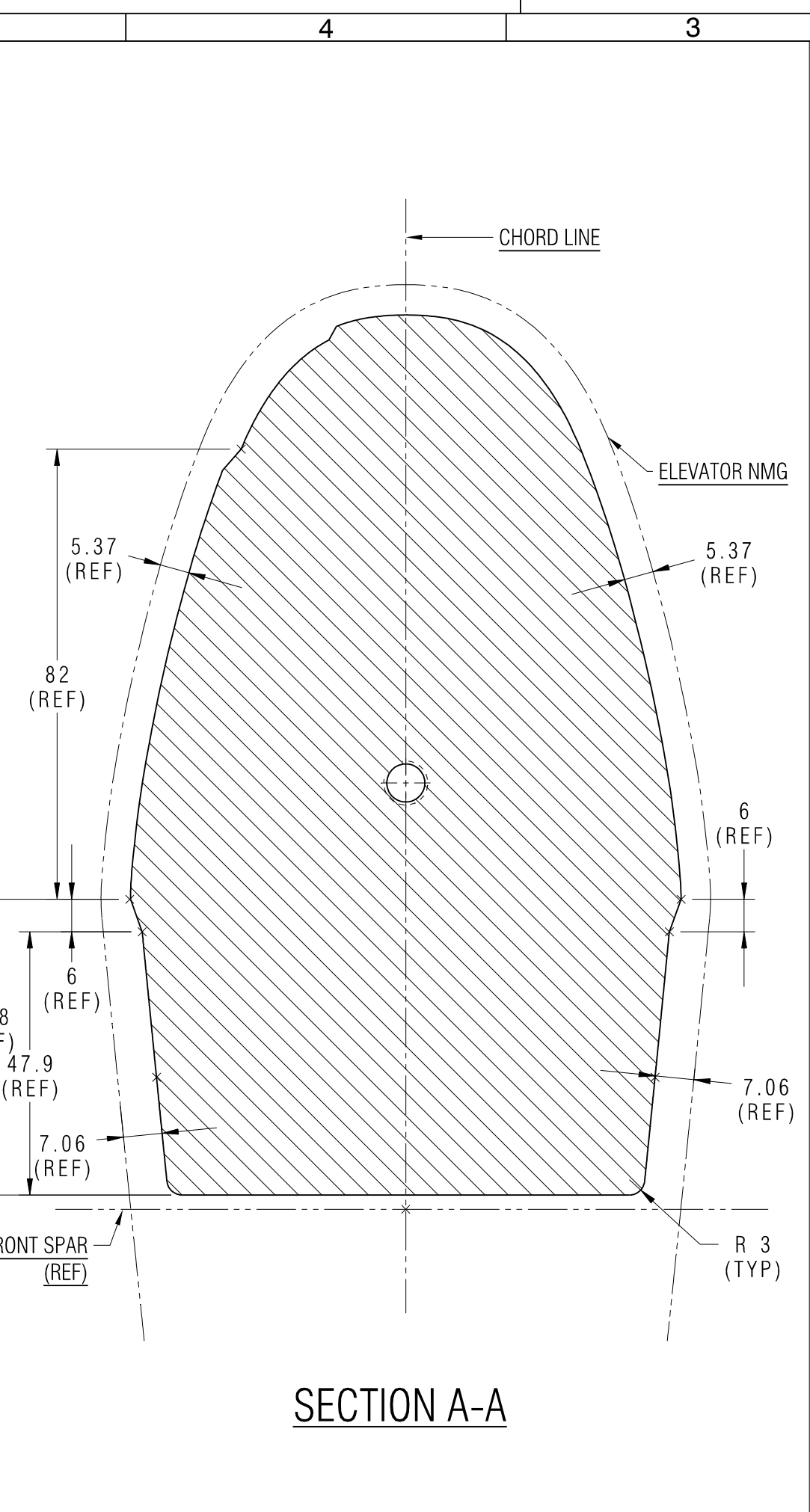
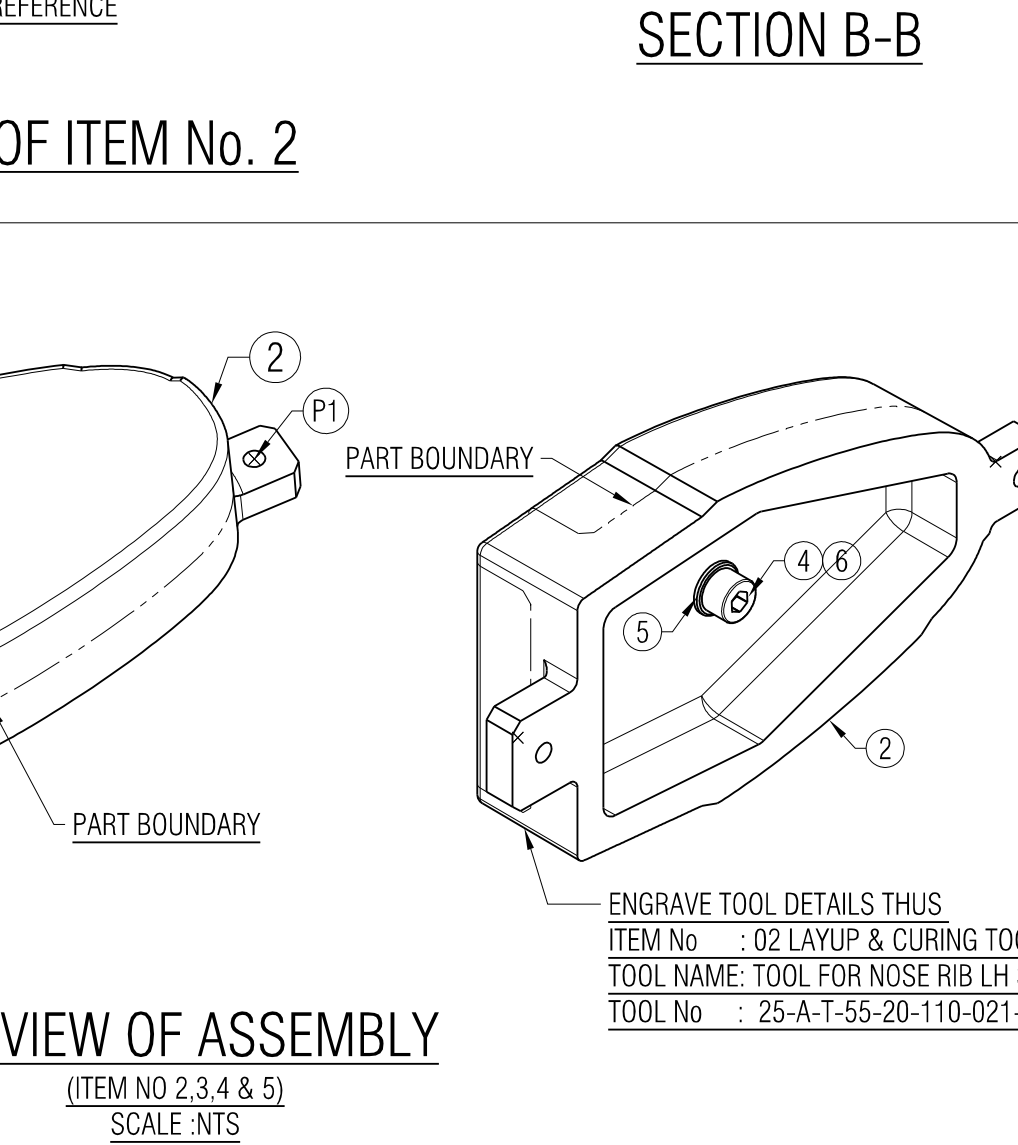
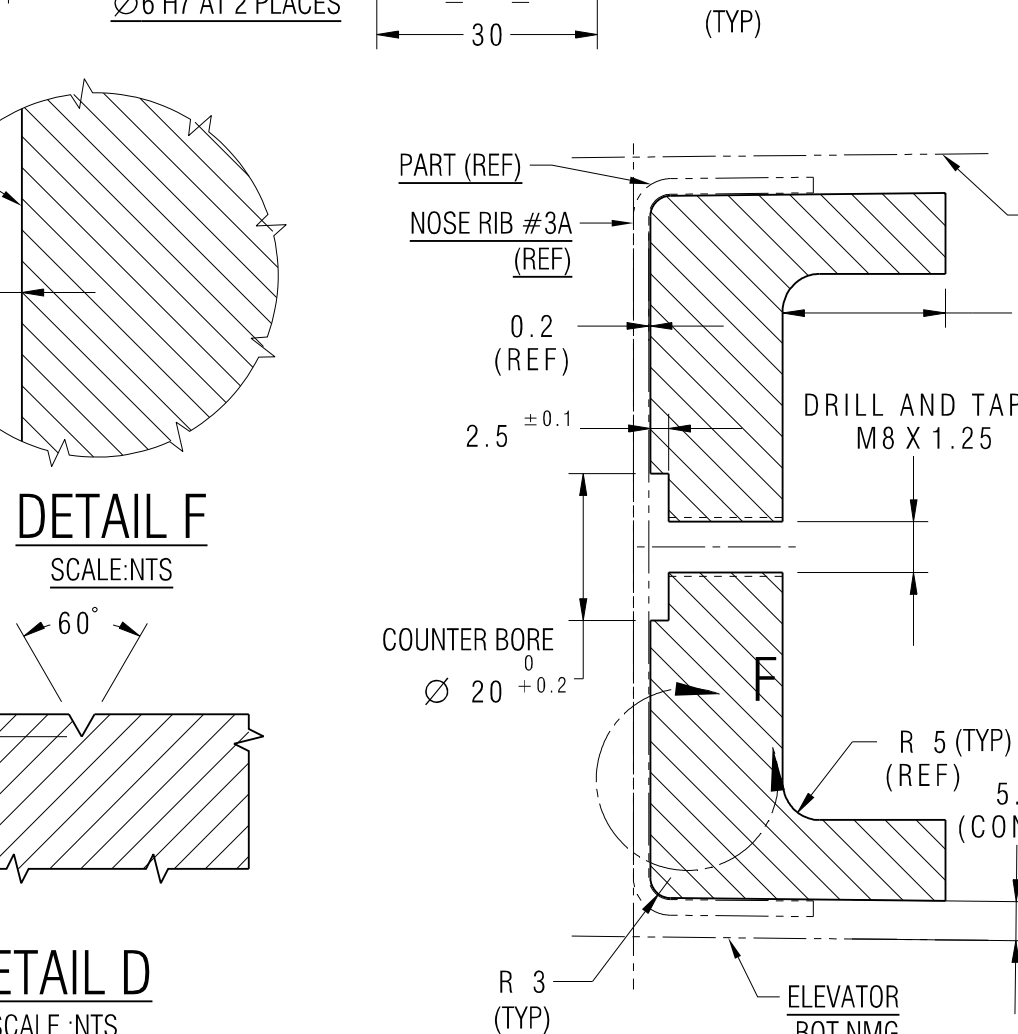
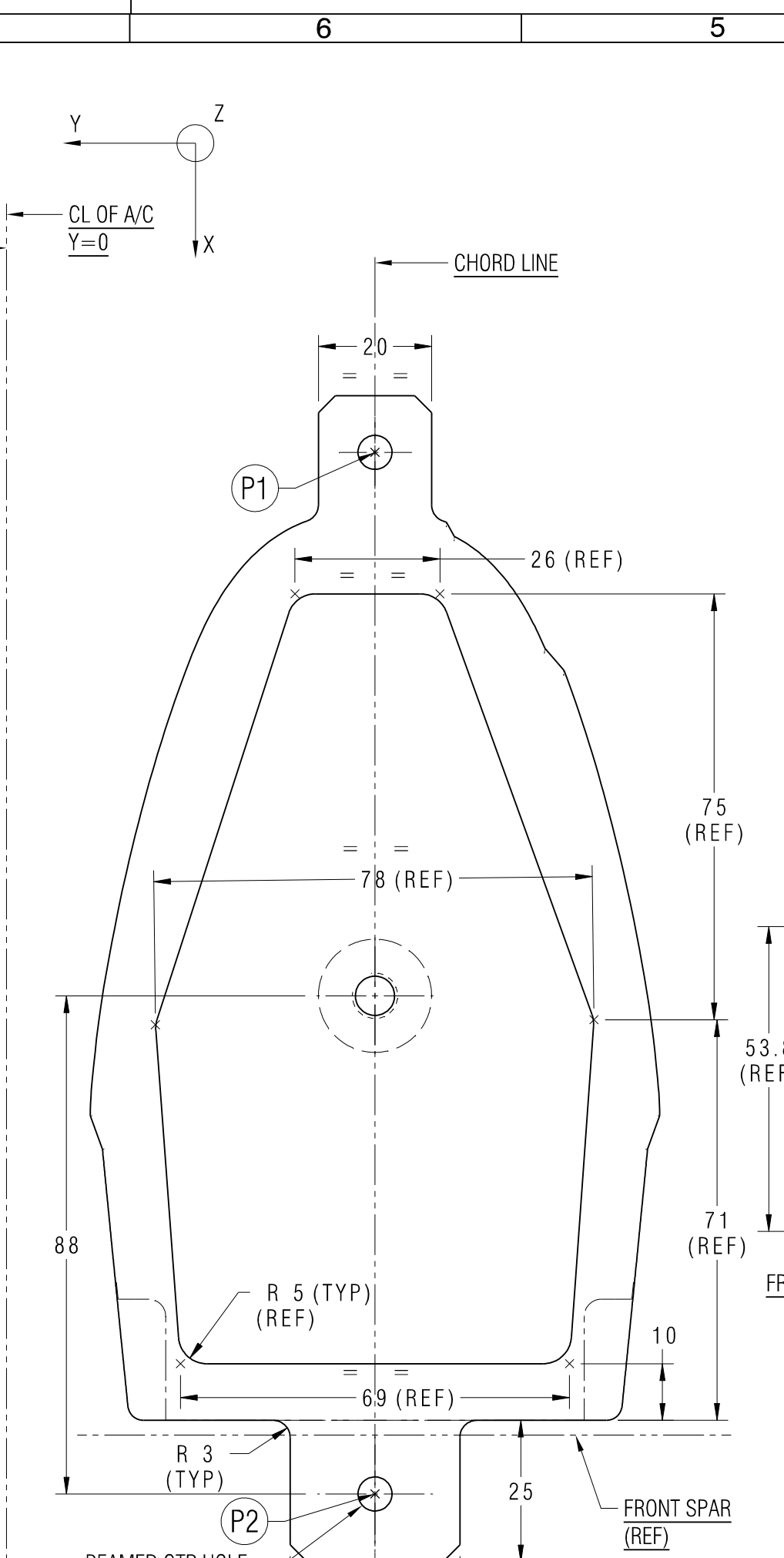
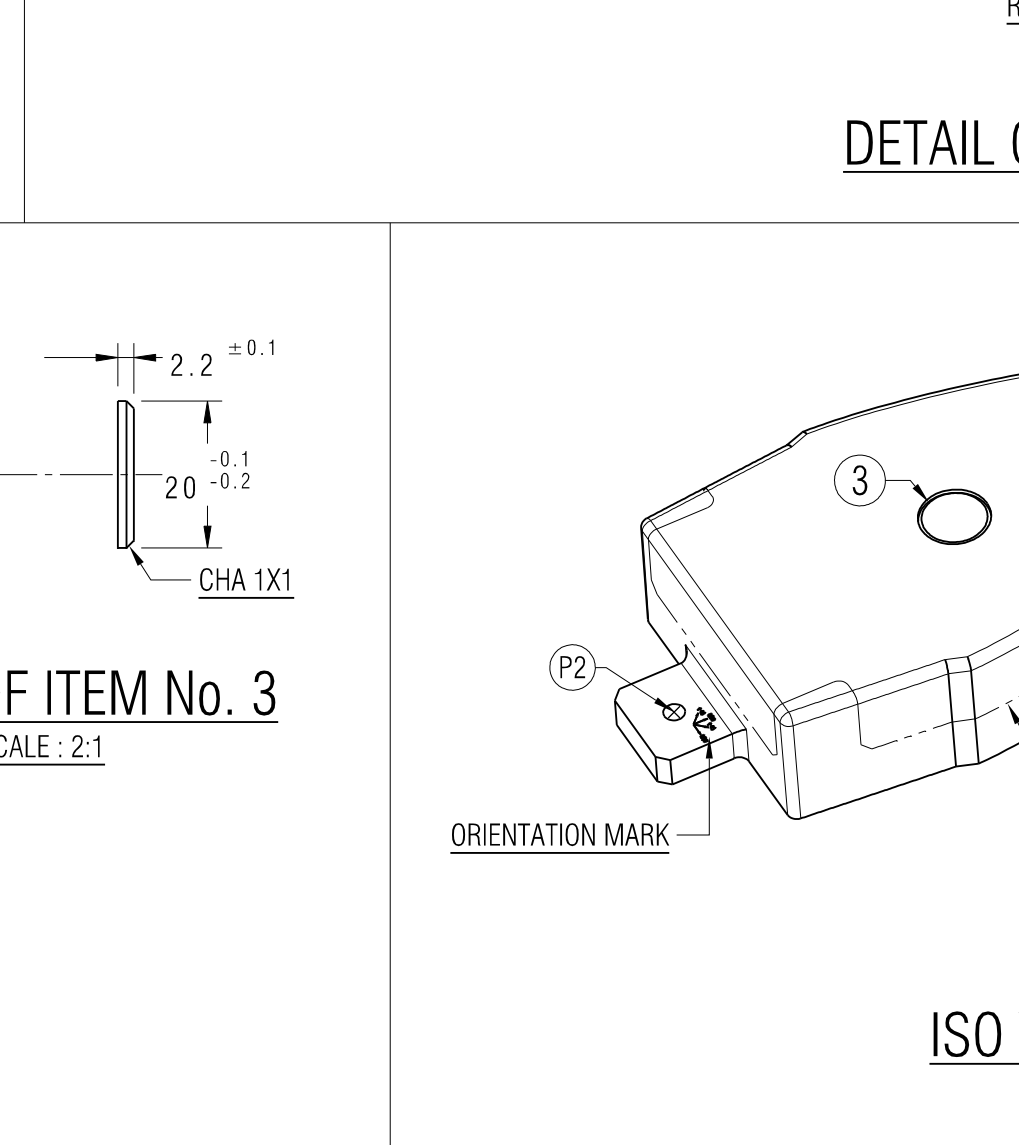
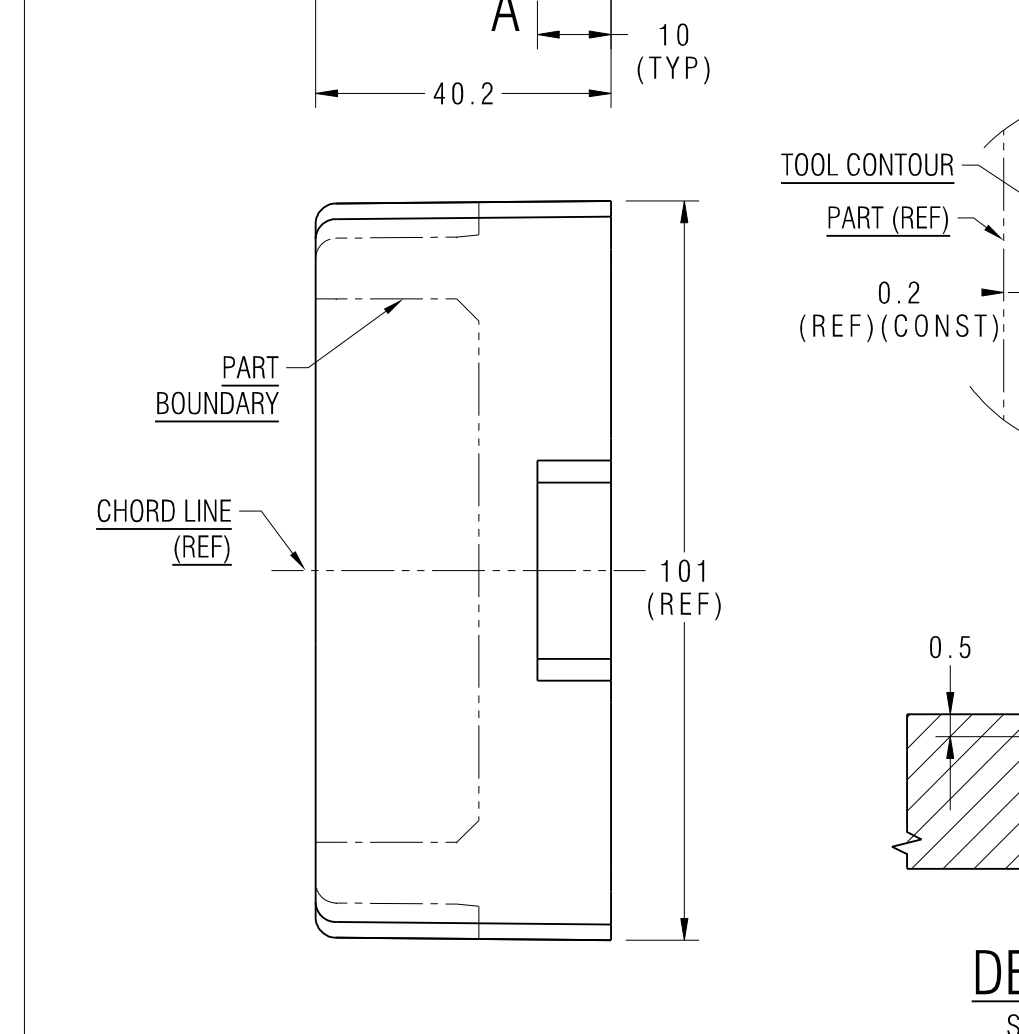
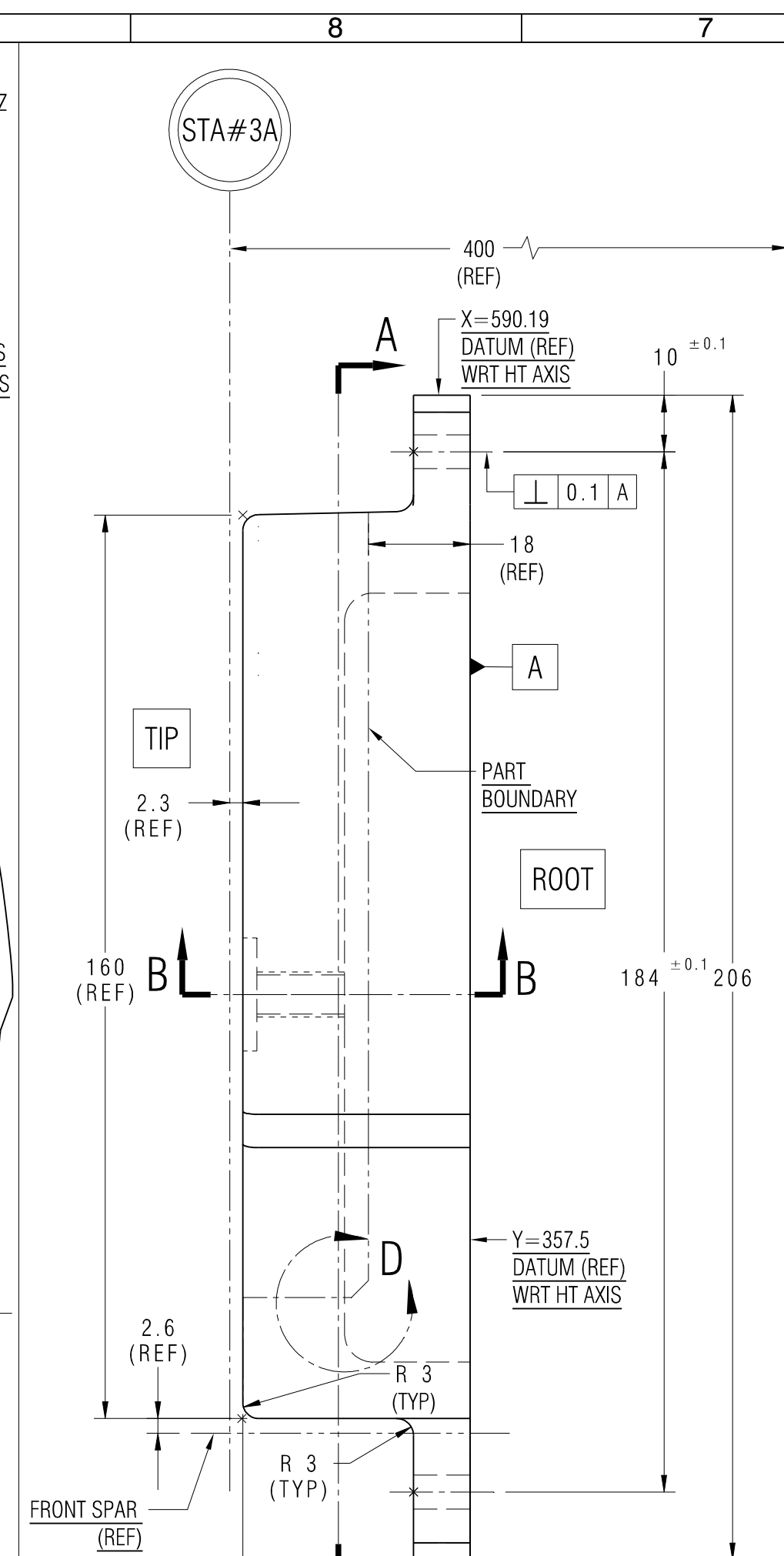
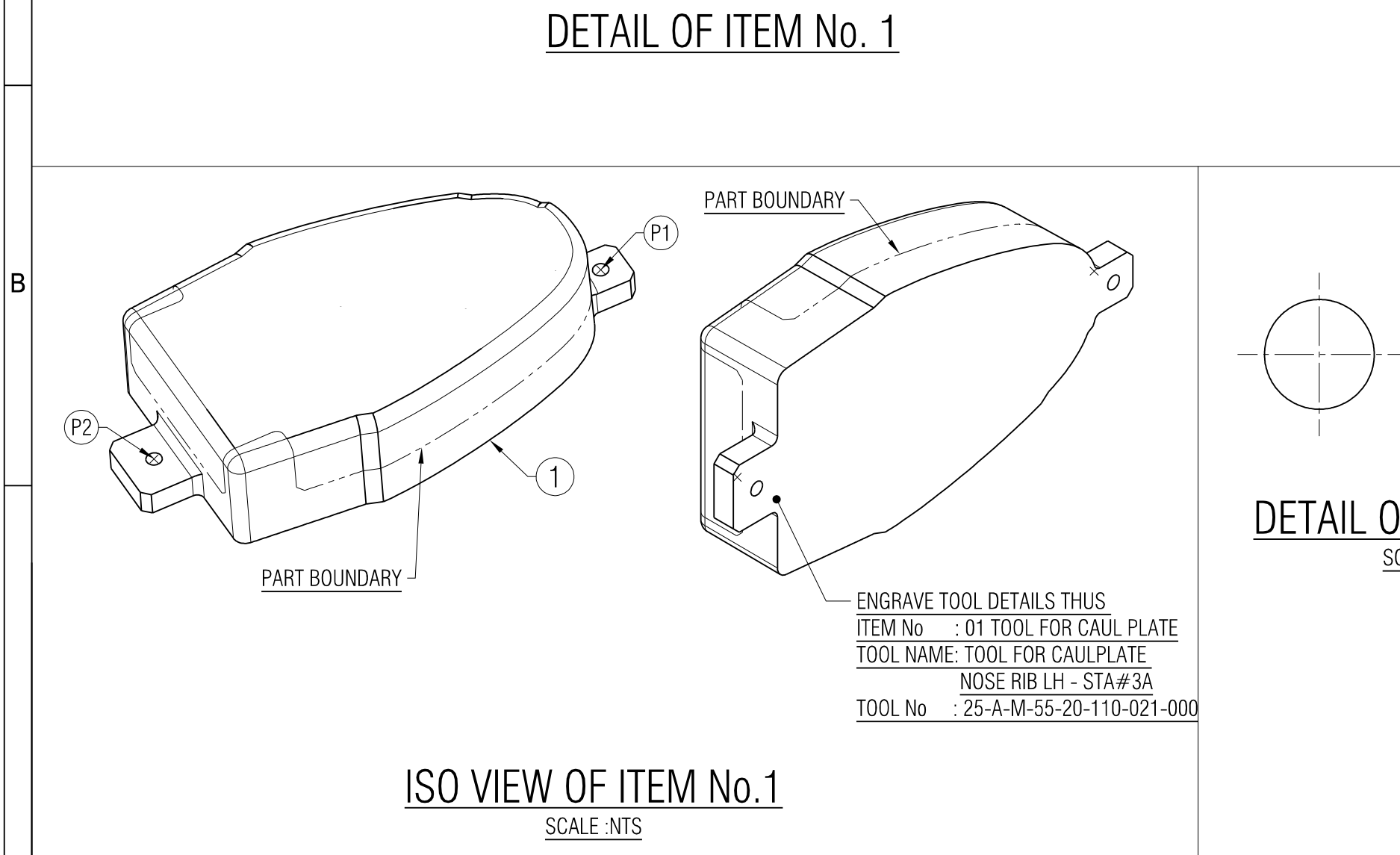
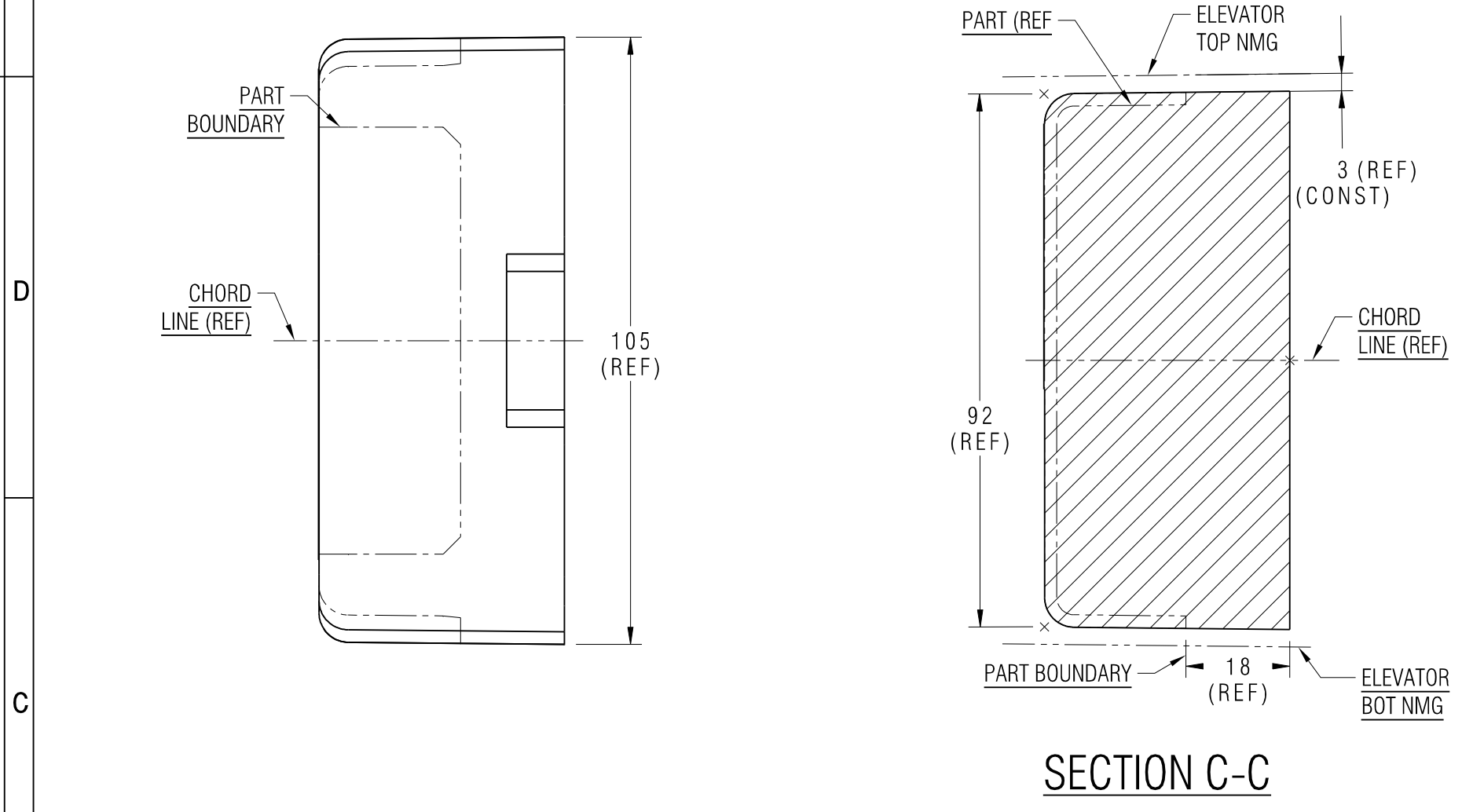
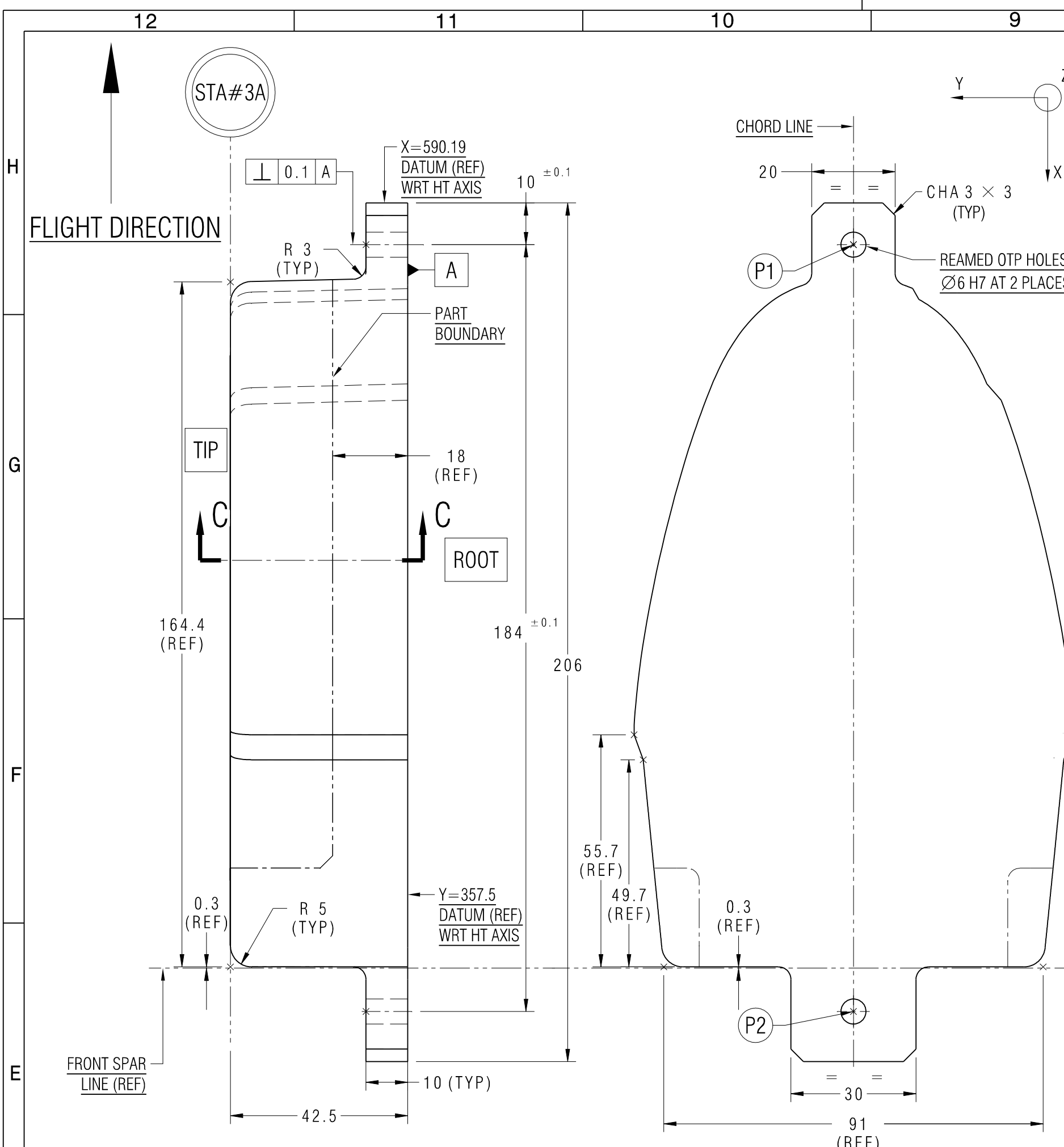
MODULE-B

ELEVATOR

NOSE RIB

TOOL

DRAWINGS



- NOTES:
- CATIA MODEL IS THE MASTER DEFINITION OF THE TOOL.
 - THIS TOOL IS MADE TO MANUFACTURE NOSE RIB LH STA#3A 25-A-A-55-20-110-021-0F0.
 - TOOL CONTOUR IS OFFSET BY 0.2MM INSIDE FROM THE PART INNER SURFACE FOR TOOLTECH AND PEELPLY ALLOWANCE FOR LAYUP CORE(ITEM NO.2).
 - BREAK AT SHARP EDGES.
 - ENGRAVE PART BOUNDARY AND ORIENTAION MARK AS PER CAD MODEL, FOR SCRIBE LINE DETAILS, REFER DETAIL-D.
 - STRESS RELIEVE THE TOOL BEFORE FINAL MACHINING OF CONTOUR (ITEM NO.1 &2).
 - INSPECT THE CONTOUR USING CMM WRT OTP CO-ORDINATES. FOR OTP HOLE CO-ORDINATES REFER TABLE 1&2
 - TOLERANCE :
A) CONTOUR TOLERANCE $\pm 0.3\text{mm}$
B) ON TOOL THICKNESS $\pm 2\text{mm}$.
C) UNTOLERANCED DIMENSIONS TO CONFIRM TO SPEC : IS2102(PART-1)-COARSE.
 - FINISH ITEM NO 1 WITH ANODIZATION AND ITEM NO 2 & 3 WITH ELECTROLESS NICKEL COATING.
 - ITEM No.3 IS PART OF THE CORE, TO BE POSITIONED BEFORE LAYUP WHICH ENABLES TO REMOVE THE PART AFTER CURING. PUT 0.12mm TOOLTECH ON BOTH SIDES AND ENSURE THE SURFACE LEVEL WITH CORE.
 - USE ITEM No. 4 AT THE TIME OF LAYUP & CURING. AFTER CURING REMOVE ITEM No.4 USE ITEM No.6 FOR PART RELEASE.
 - SUPPLY METAL TAG FOR ITEM 1&2 FOR DETAIL REFER BELOW.

METAL TAG FOR ITEM 1

PROJECT: SARAS Mk 2 ELEVATOR
ITEM NO.01 TOOL FOR CAUL PLATE
TOOL NAME : TOOL FOR CAULPLATE
NOSE RIB LH - STA#3A
TOOL NO : 25-A-M-55-20-110-021-000
PART NAME : NOSE RIB LH - STA#3A
PART NO : 25-A-A-55-20-110-021-0F0
CLEARED FOR SL NO DATE OF INSPECTION STAMP

METAL TAG FOR ITEM 2

PROJECT: SARAS Mk 2 ELEVATOR
ITEM NO.02 LAYUP AND CURING TOOL
TOOL NAME : TOOL FOR NOSE RIB LH STA#3A
TOOL NO : 25-A-T-55-20-110-021-000
PART NAME : NOSE RIB LH STA#3A
PART NO : 25-A-A-55-20-110-021-0F0
CLEARED FOR SL NO DATE OF INSPECTION STAMP

OTP CO - ORDINATES FOR INSPECTION
(FOR LOCATION P1 TO P2 REFER ISOMETRIC VIEW)
(OTP POINTS FOR ITEM No 1 & 2 ARE IDENTICAL)

TABLE 1 FOR GLOBAL AXIS

ITEM No.	X	Y	Z
P1	15689.99	-367.5	3105.71
P2	15873.93	-367.5	3110.53

TABLE 2 FOR HT LOCAL AXIS

ITEM No.	X	Y	Z
P1	600.19	-367.5	0
P2	784.19	-367.5	0

ITEM No.	QTY No.	DESCRIPTION	MATERIAL	SIZE	REMARKS
6	1	ALLEN BOLT	CARBON STEEL	M8X30	HT 10.9 CLASS
5	1	WASHER	CARBON STEEL	ID9XOD16	HT 10.9 CLASS
4	1	ALLEN BOLT	CARBON STEEL	M8X15	HT 10.9 CLASS
3	1	PART REMOVAL PLATE	SA 516 Gr.70	20X20X3	
2	1	LAYUP & CURING TOOL	SA 516 Gr.70	206X101X41	
1	1	TOOL FOR CAULPLATE	AL 6082 T6/HE 30	206X106X43	25-A-M-55-20-110-021-000

TITLE: ELEVATOR

TOOL FOR NOSE RIB
LH STA#3A

ADVANCE COPY

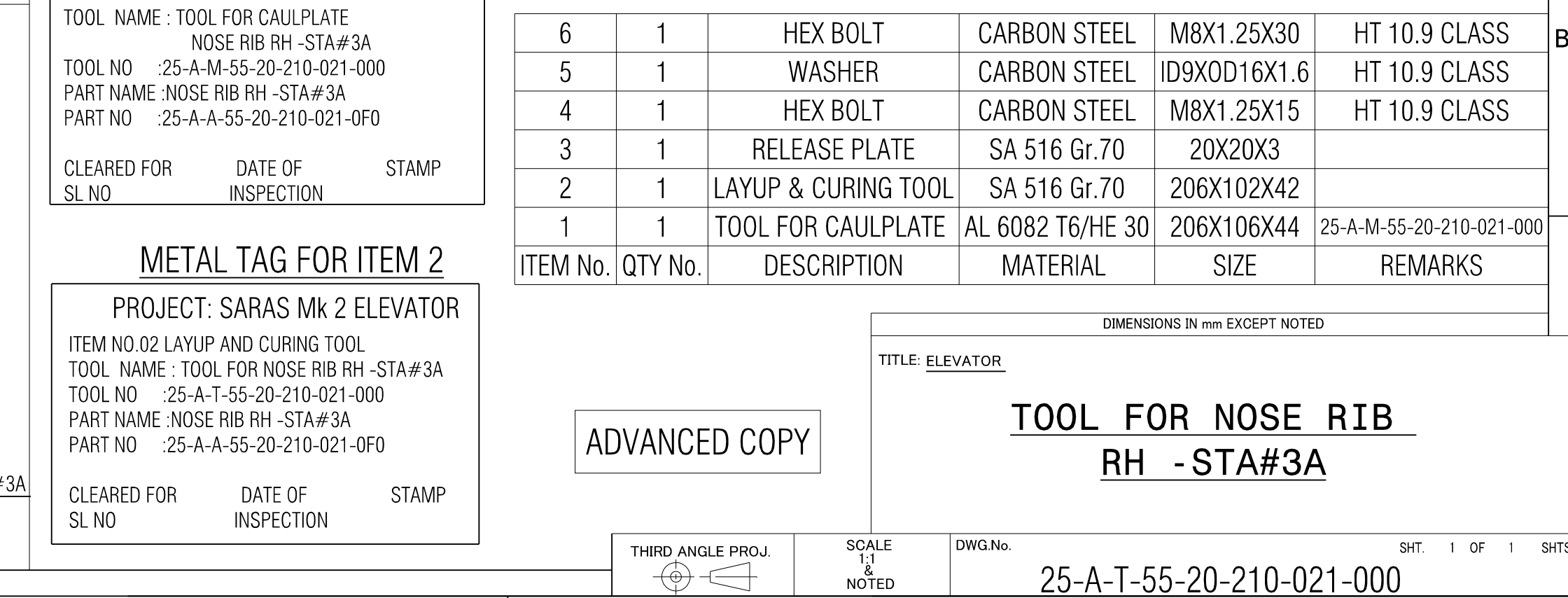
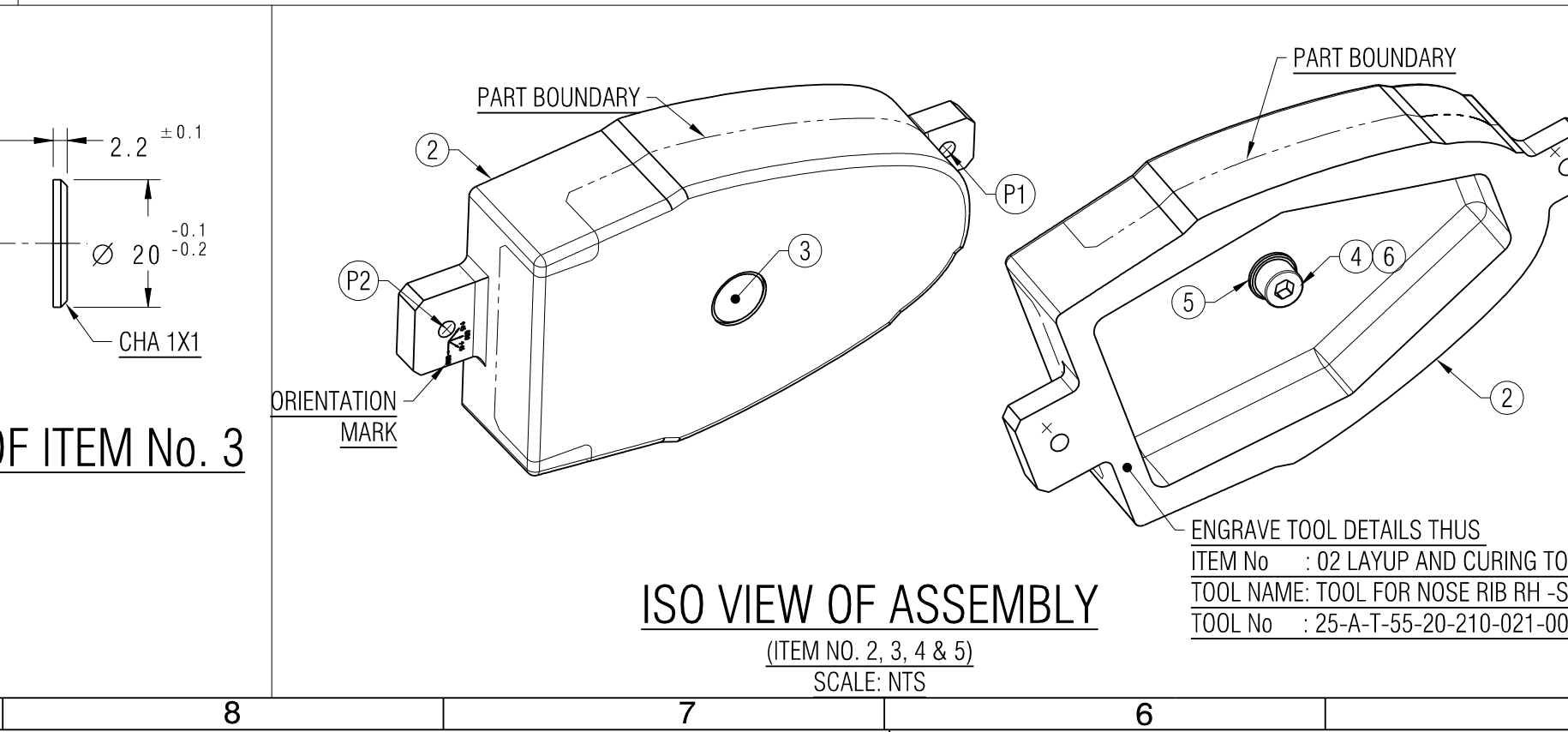
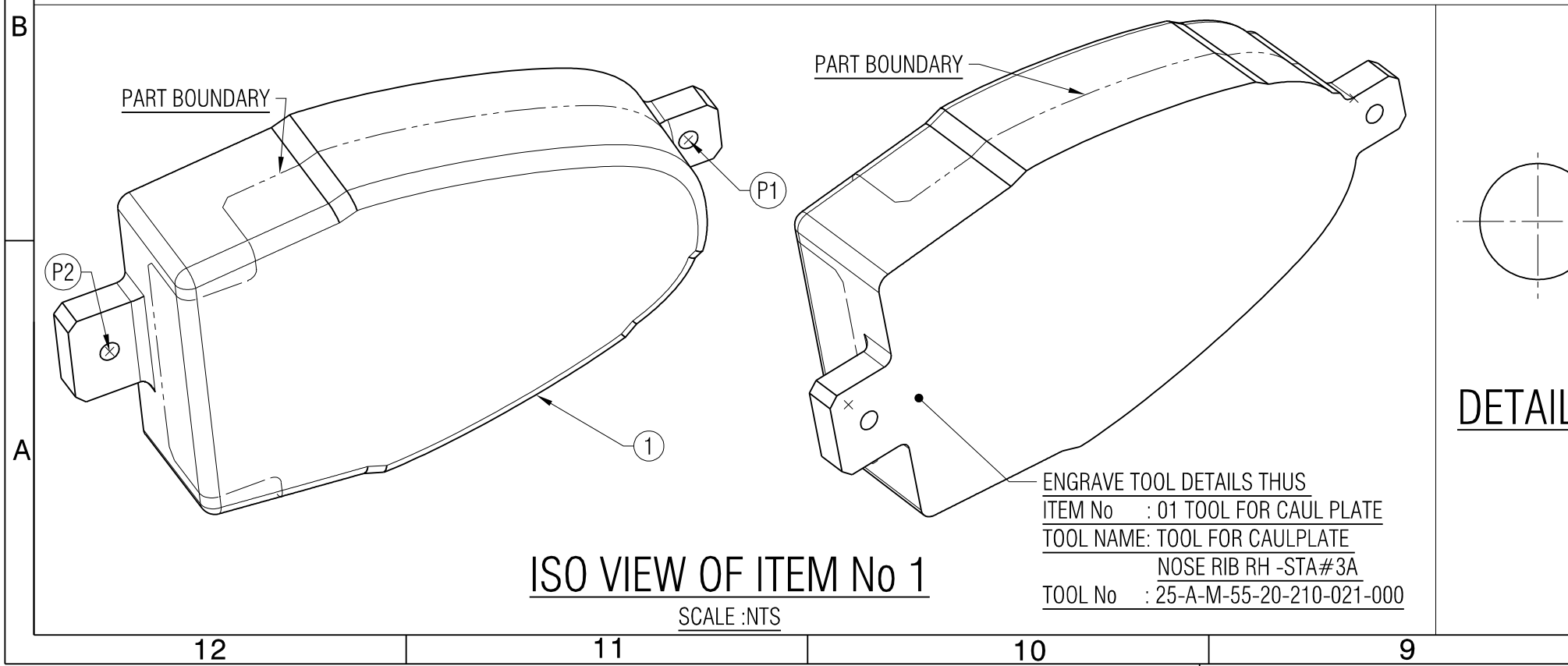
THIRD ANGLE PROJ.

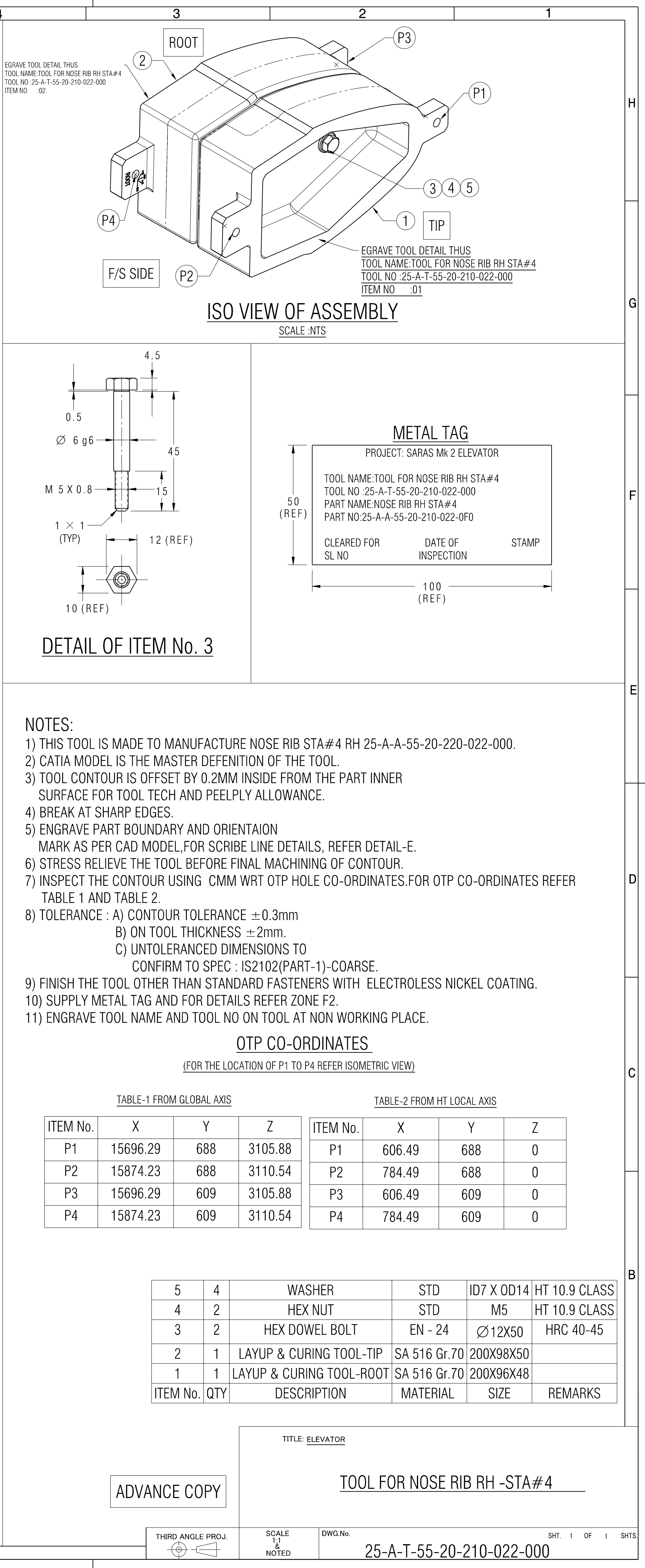
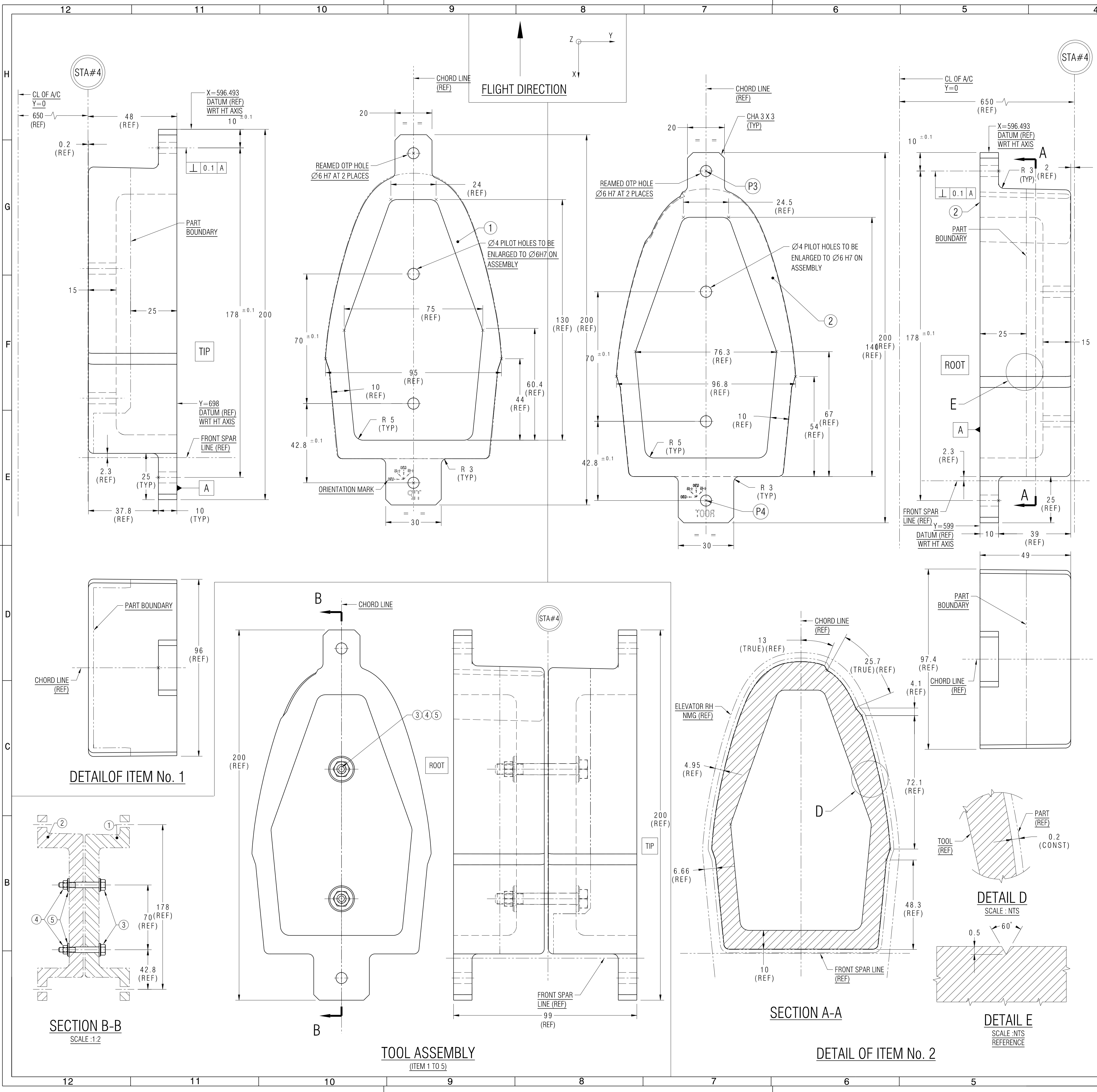
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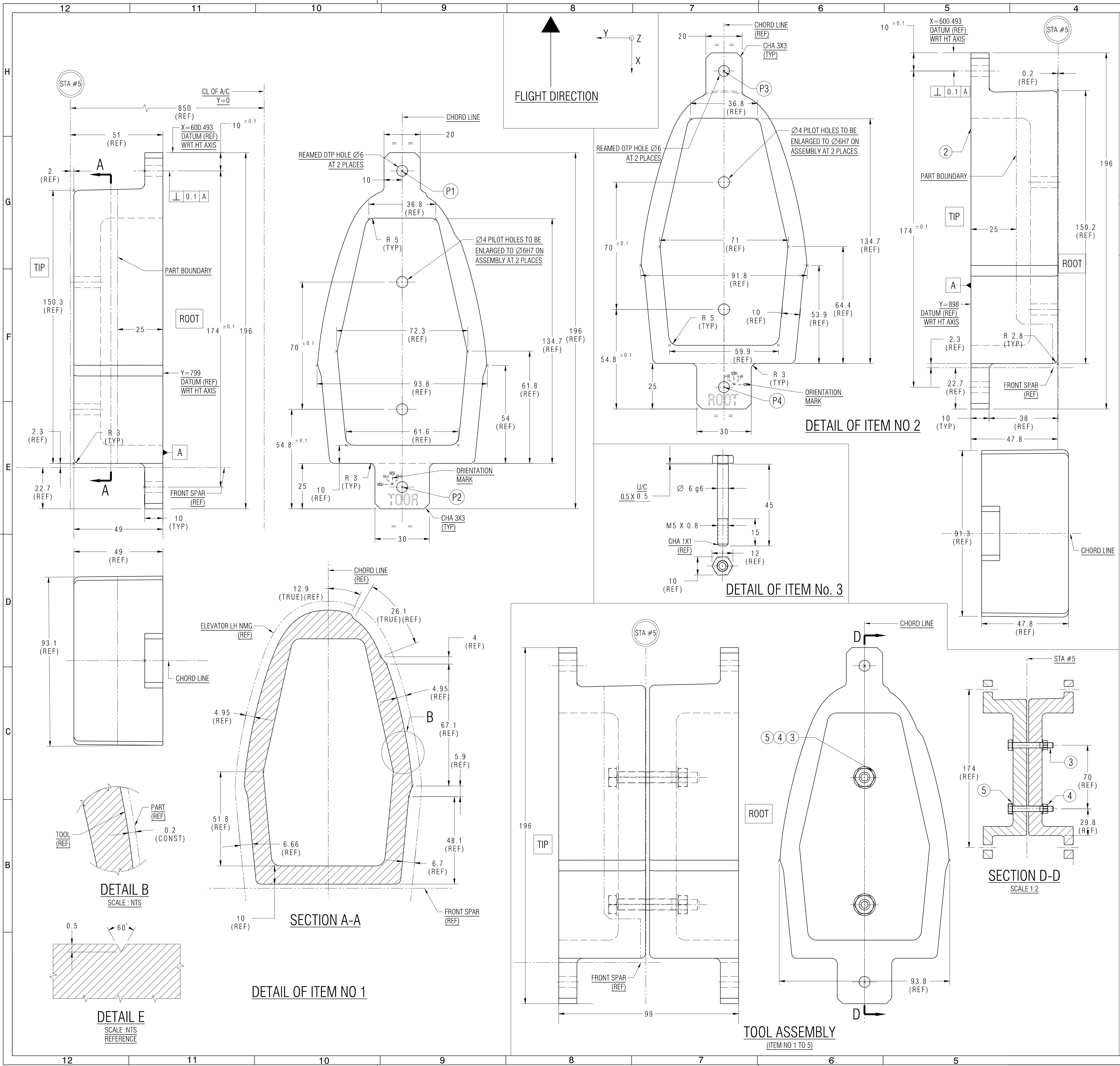
DWG No.

25-A-T-55-20-110-021-000

SHT. 1 OF 1 SHTS







ISO VIEW
SCALE : NTS

EGRAVE TOOL DETAIL THUS
TOOL NAME: TOOL FOR NOSE RIB LH - STA#5
TOOL NO : 25-A-T-55-20-110-023-000
ITEM NO : 1

EGRAVE TOOL DETAIL THUS
TOOL NAME: TOOL FOR NOSE RIB LH - STA#5
TOOL NO : 25-A-T-55-20-110-023-000
ITEM NO : 2

NOTES:

- 1) CATIA MODEL IS THE MASTER DEFINITION OF THE TOOL.
- 2) THIS TOOL IS MADE TO MANUFACTURE NOSE RIB STA#5 LH 25-A-A-55-20-220-023-000.
- 3) TOOL CONTOUR IS OFFSET BY 0.2MM INSIDE FROM THE PART INNER SURFACE FOR TOOLTECH AND PEELPLY ALLOWANCE.
- 4) BREAK AT SHARP EDGES.
- 5) ENGRAVE PART BOUNDARY AND ORIENTAION MARK AS PER CAD MODEL. FOR SCRIBE LINE DETAILS, REFER DETAIL-E.
- 6) STRESS RELIEVE THE TOOL BEFORE FINAL MACHINING OF CONTOUR.
- 7) INSPECT THE CONTOUR USING CMM WRT OTP HOLE CO-ORDINATES. FOR OTP CO-ORDINATES REFER TABLE 1 AND TABLE 2.
- 8) TOLERANCE : A) CONTOUR TOLERANCE ± 0.3 mm
B) ON TOOL THICKNESS ± 2 mm.
C) UNTOLERANCED DIMENSIONS TO CONFIRM TO SPEC : IS2102(PART-1)-COARSE.
- 9) FINISH THE TOOL OTHER THAN STANDARD FASTENERS WITH ELECTROLESS NICKEL COATING.
- 10) SUPPLY METAL TAG AND FOR DETAILS FEFER ZONE [D2].
- 11) ENGRAVE TOOL NAME AND TOOL NO ON TOOL AT NON WORKING PLACE.

METAL TAG

PROJECT: SARAS Mk 2 ELEVATOR

TOOL NAME:TOOL FOR NOSE RIB LH - STA#5
TOOL NO :25-A-T-55-20-110-023-000
PART NAME:NOSE RIB LH - STA#5
PART NO:25-A-A-55-20-110-023-0FO

CLEARED FOR SL NO DATE OF INSPECTION STAMP

OTP CO-ORDINATES
(FOR THE LOCATION OF P1 TO P4 REFER ISOMETRIC VIEW)

TABLE-1 FROM GLOBAL AXIS			TABLE-2 FROM HT LOCAL AXIS				
	X	Y	Z	X	Y	Z	
P1	15700.28	-809	3105.98	P1	610.49	-809	0
P2	15874.23	-809	3110.54	P2	784.49	-809	0
P3	15700.28	-888	3105.98	P3	610.49	-888	0
P4	15874.23	-888	3110.54	P4	784.49	-888	0

	5	4	WASHER	CARBON STEEL	ID7 X OD14	HT 10.9 CLASS
	4	2	HEX NUT	CARBON STEEL	M5	HT 10.9 CLASS
	3	2	HEX DOWEL BOLT	EN - 24	Ø12X50	HRC 40-45
	2	1	LAYUP & CURING TOOL-TIP	SA 516 Gr.70	196X92X48	
	1	1	LAYUP & CURING TOOL-ROOT	SA 516 Gr.70	196X94X50	
ITEM No.	QTY		DESCRIPTION	MATERIAL	SIZE	REMARKS

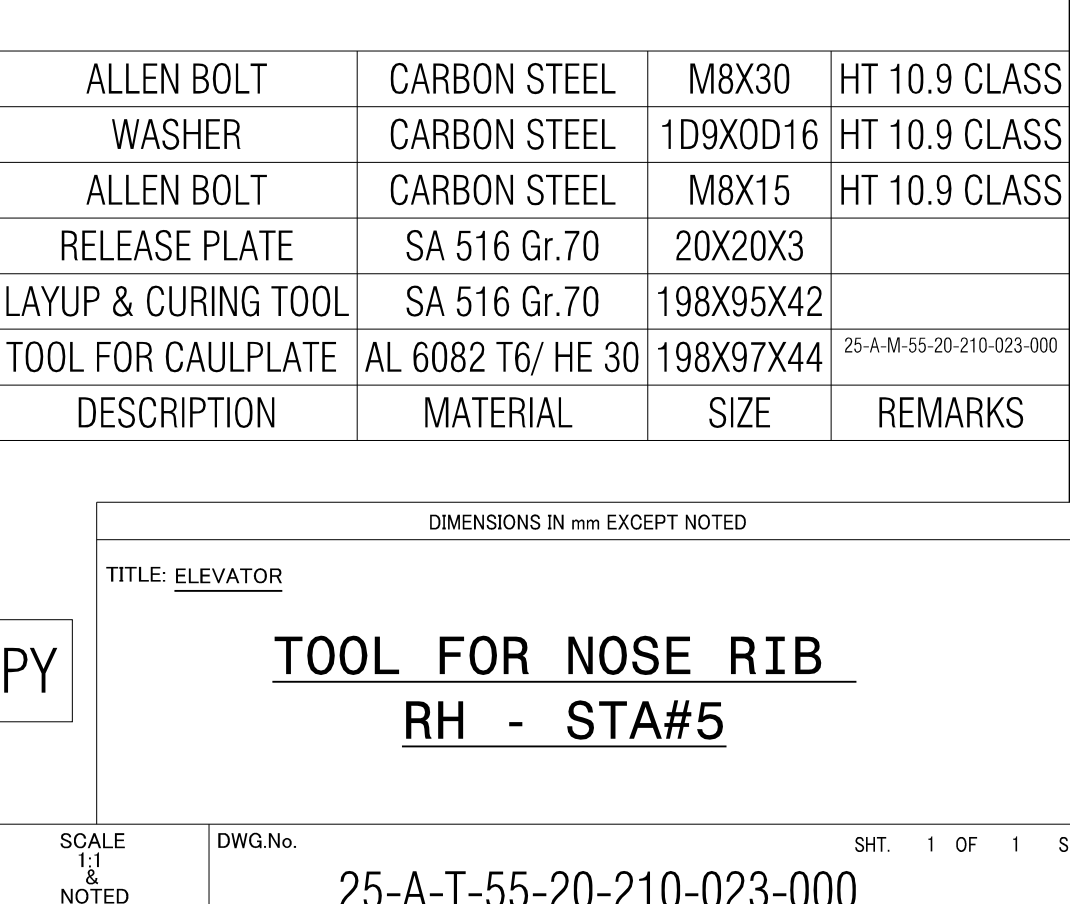
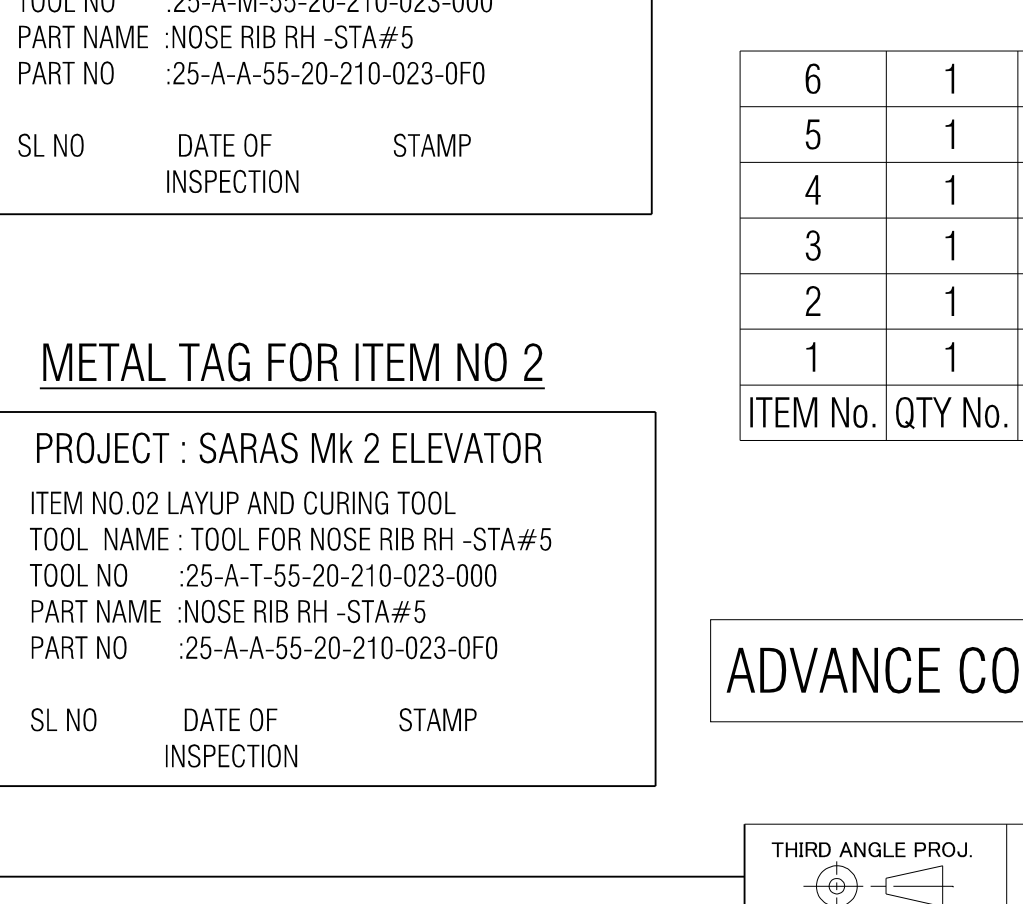
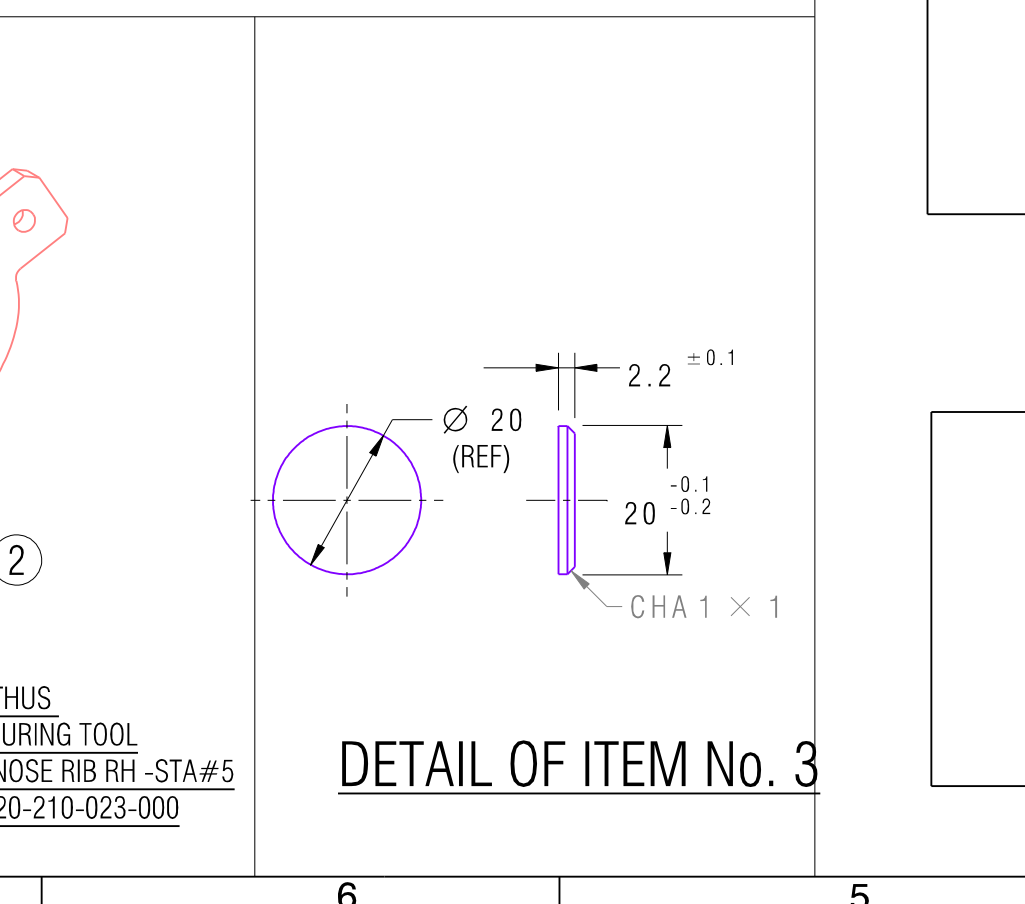
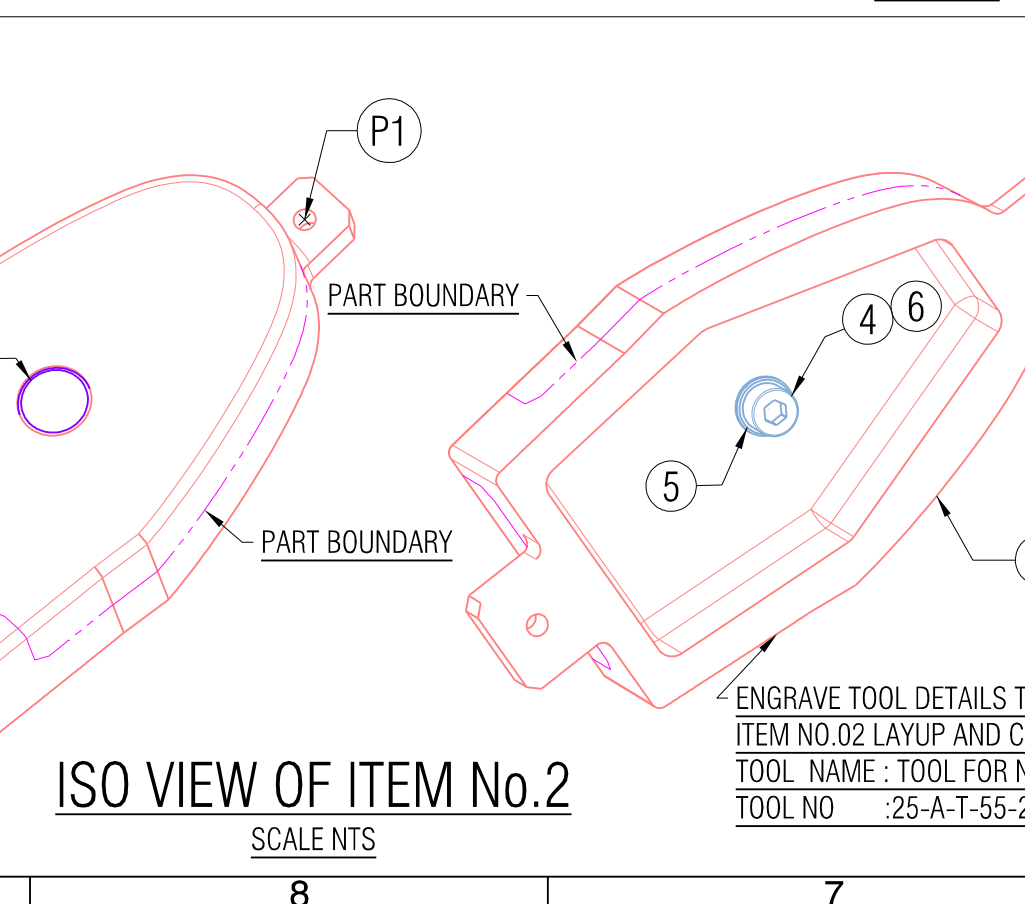
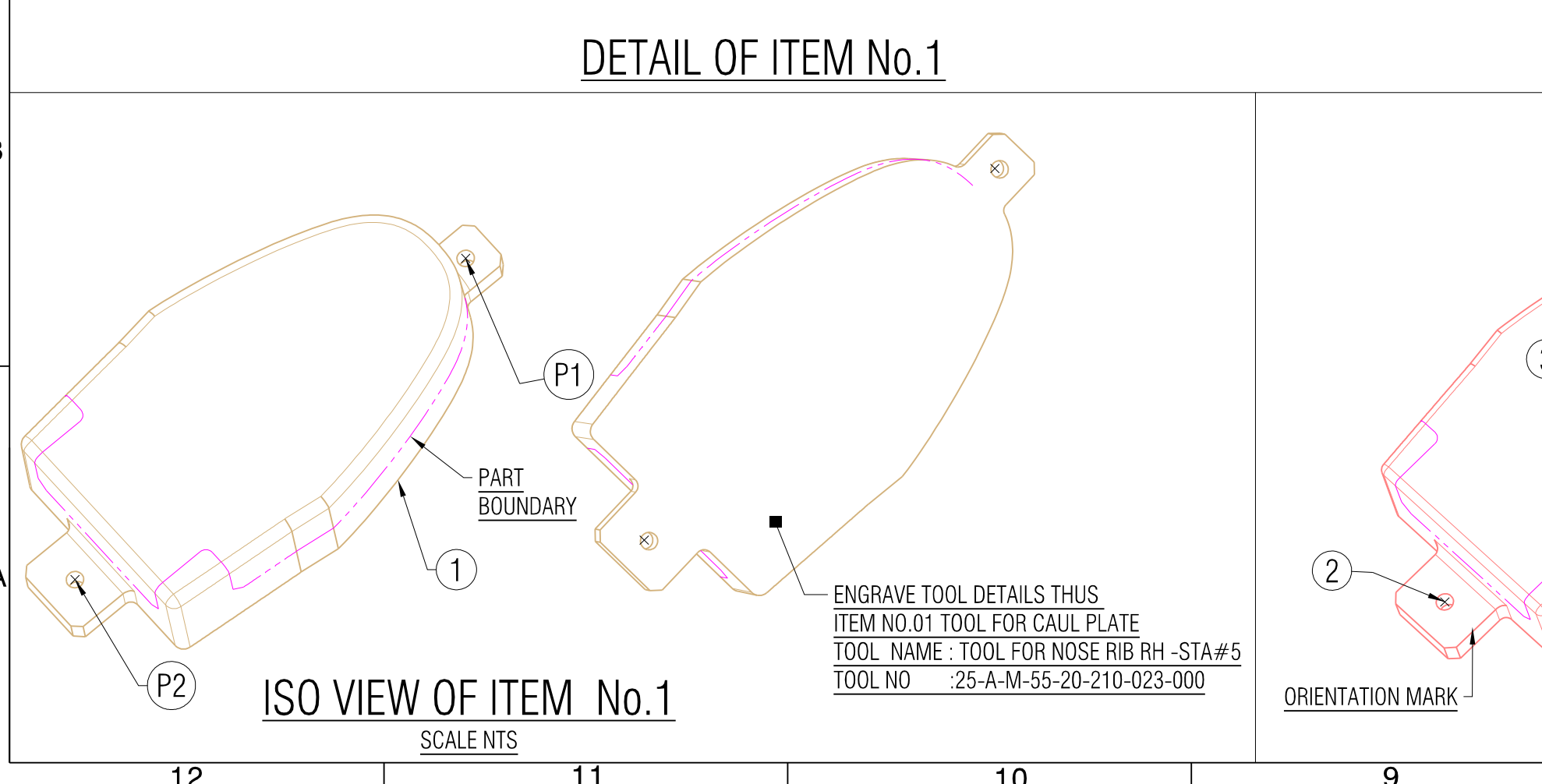
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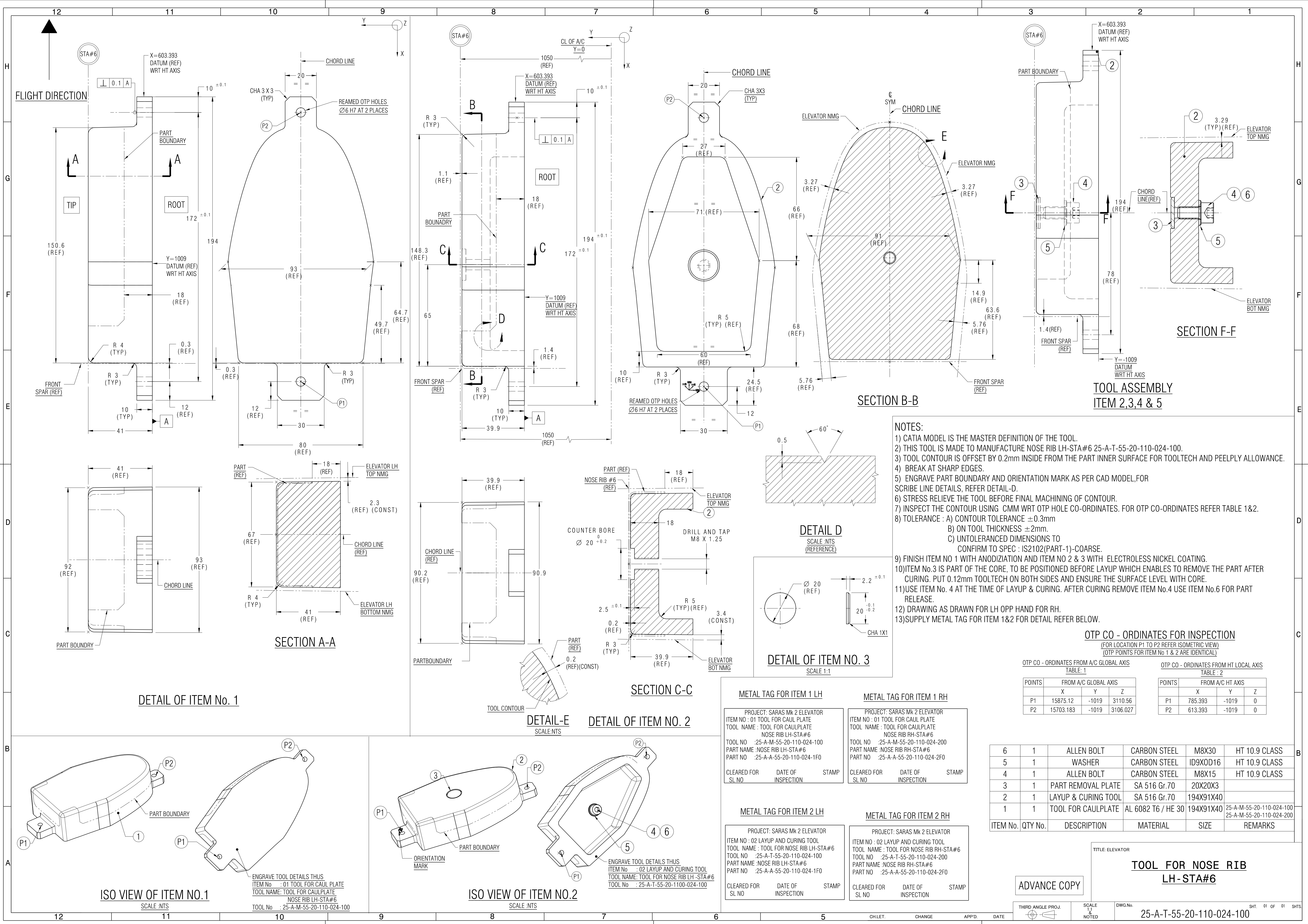
TOOL FOR NOSE RIB
LH STA#5

DIMENSIONS IN mm EXCEPT NOTED

TITLE: ELEVATOR

THIRD ANGLE PROJ. SCALE 1:1 NOTED DWG.No. 25-A-T-55-20-110-023-000 SHT. 1 OF 1 SHTS.





- NOTES:
- CATIA MODEL IS THE MASTER DEFINITION OF THE TOOL.
 - THIS TOOL IS MADE TO MANUFACTURE NOSE RIB LH-STA#6 25-A-T-55-20-110-024-100.
 - TOOL CONTOUR IS OFFSET BY 0.2mm INSIDE FROM THE PART INNER SURFACE FOR TOOLTECH AND PEELPLY ALLOWANCE.
 - BREAK AT SHARP EDGES.
 - ENGRAVE PART BOUNDARY AND ORIENTATION MARK AS PER CAD MODEL, FOR SCRIBE LINE DETAILS, REFER DETAIL-D.
 - STRESS RELIEVE THE TOOL BEFORE FINAL MACHINING OF CONTOUR.
 - INSPECT THE CONTOUR USING CMM WRT OTP HOLE CO-ORDINATES. FOR OTP CO-ORDINATES REFER TABLE 1&2.
 - TOLERANCE : A) CONTOUR TOLERANCE ± 0.3 mm
B) ON TOOL THICKNESS ± 2 mm.
C) UNTOLERANCED DIMENSIONS TO CONFIRM TO SPEC : IS2102(PART-1)-COARSE.
 - FINISH ITEM NO 1 WITH ANODIZATION AND ITEM NO 2 & 3 WITH ELECTROLESS NICKEL COATING.
 - ITEM No.3 IS PART OF THE CORE, TO BE POSITIONED BEFORE LAYUP WHICH ENABLES TO REMOVE THE PART AFTER CURING. PUT 0.12mm TOOLTECH ON BOTH SIDES AND ENSURE THE SURFACE LEVEL WITH CORE.
 - USE ITEM No. 4 AT THE TIME OF LAYUP & CURING. AFTER CURING REMOVE ITEM No.4 USE ITEM No.6 FOR PART RELEASE.
 - DRAWING AS DRAWN FOR LH OPP HAND FOR RH.
 - SUPPLY METAL TAG FOR ITEM 1&2 FOR DETAIL REFER BELOW.

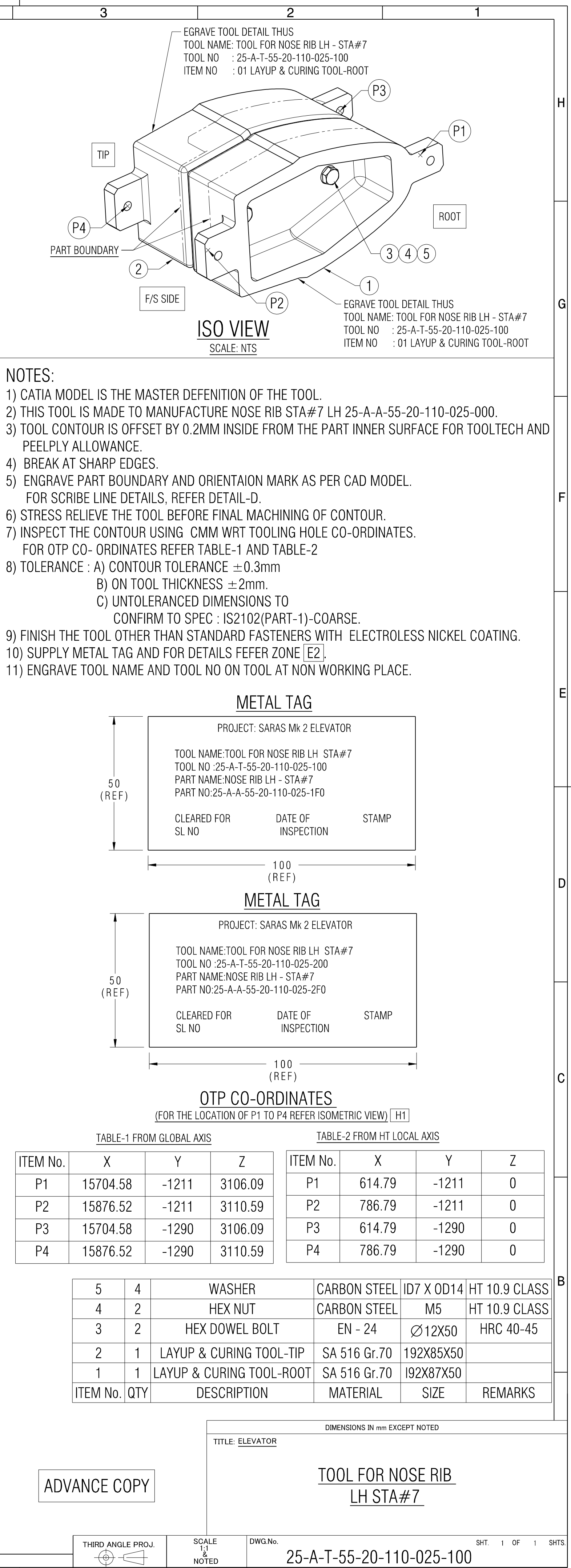
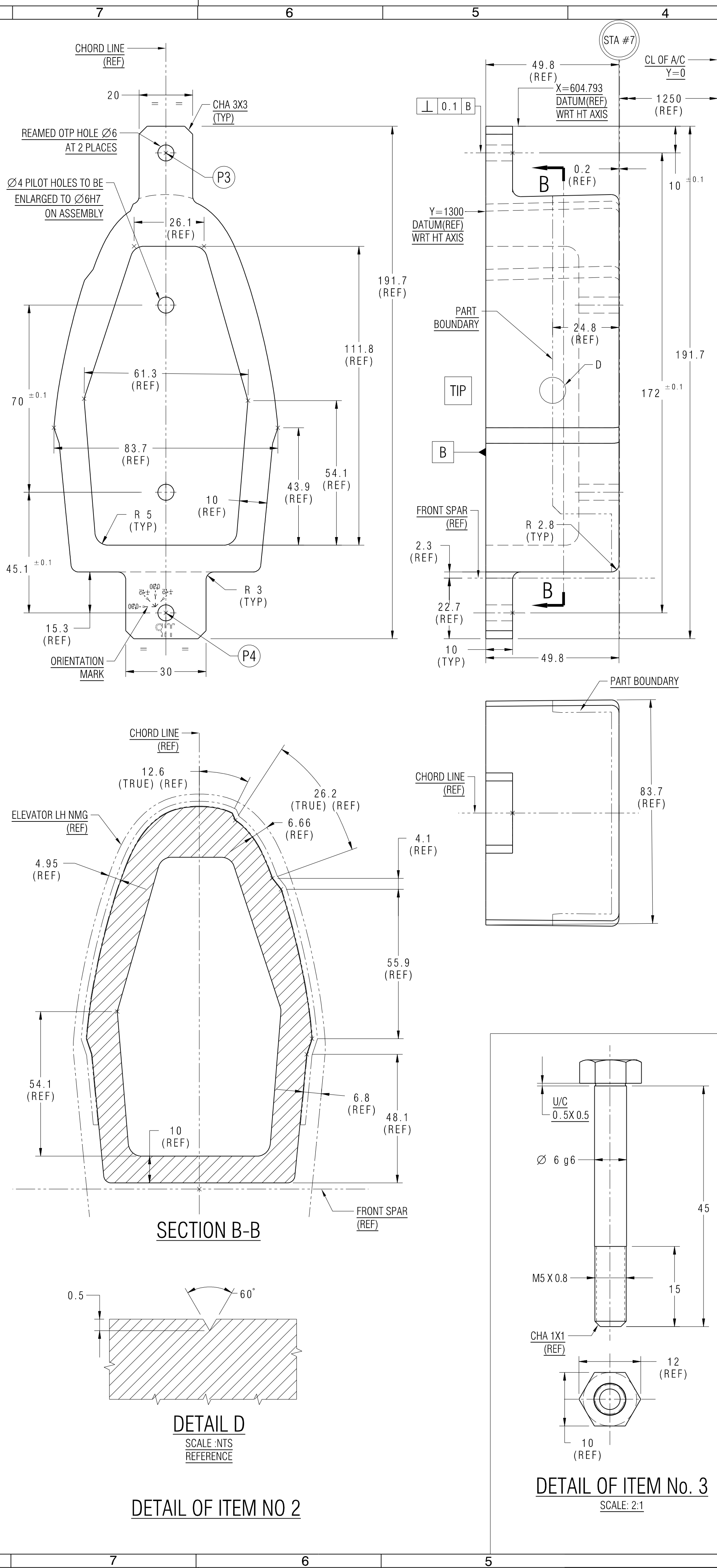
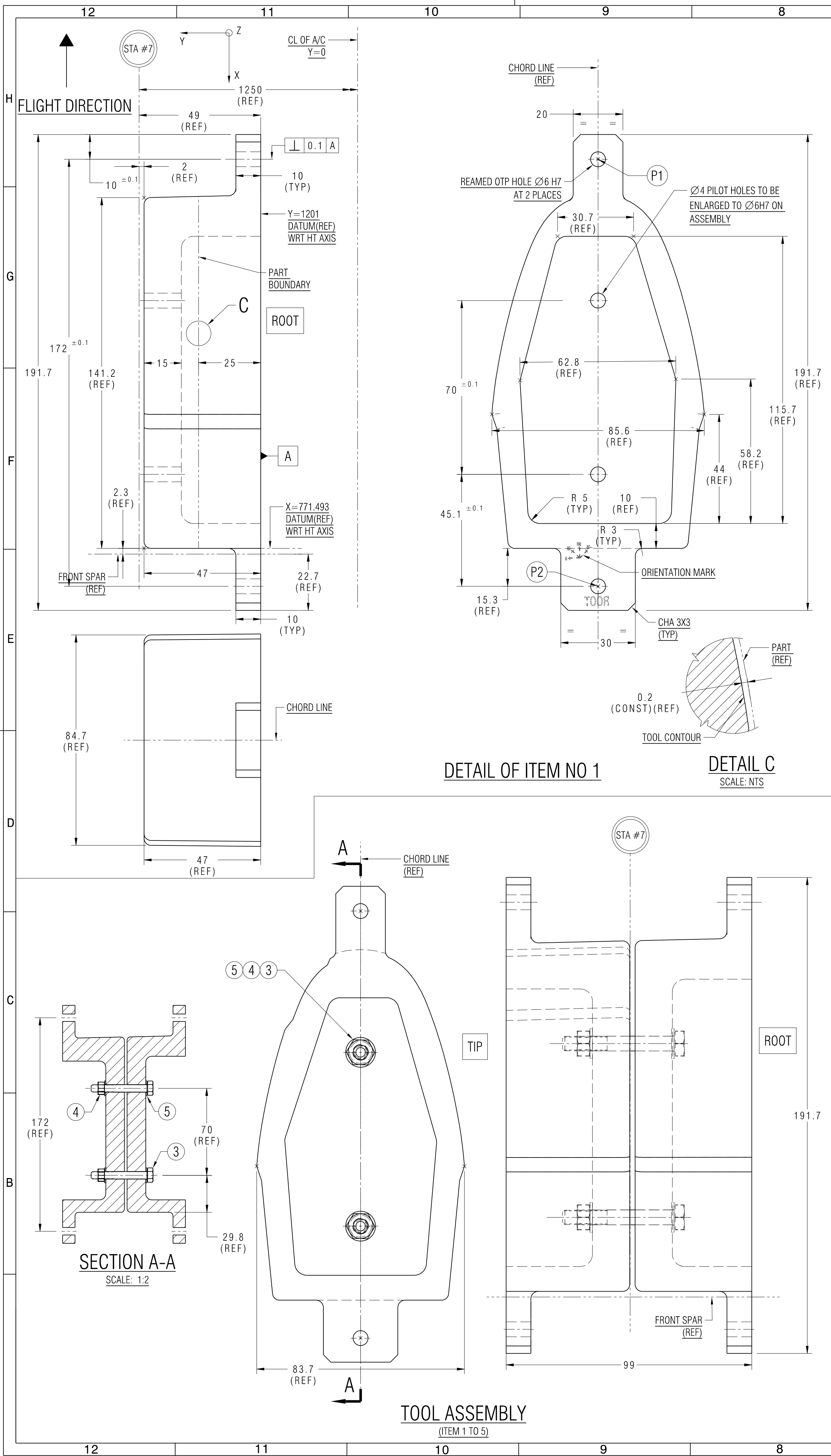
OTP CO - ORDINATES FOR INSPECTION
(FOR LOCATION P1 TO P2 REFER ISOMETRIC VIEW)
(OTP POINTS FOR ITEM No 1 & 2 ARE IDENTICAL)

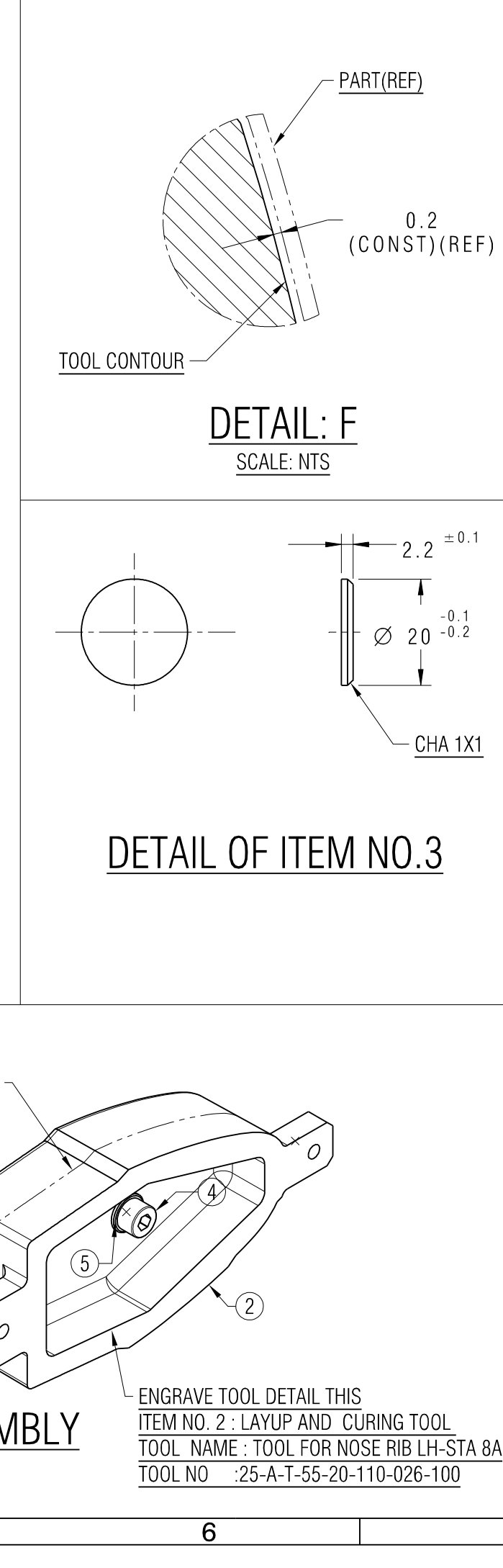
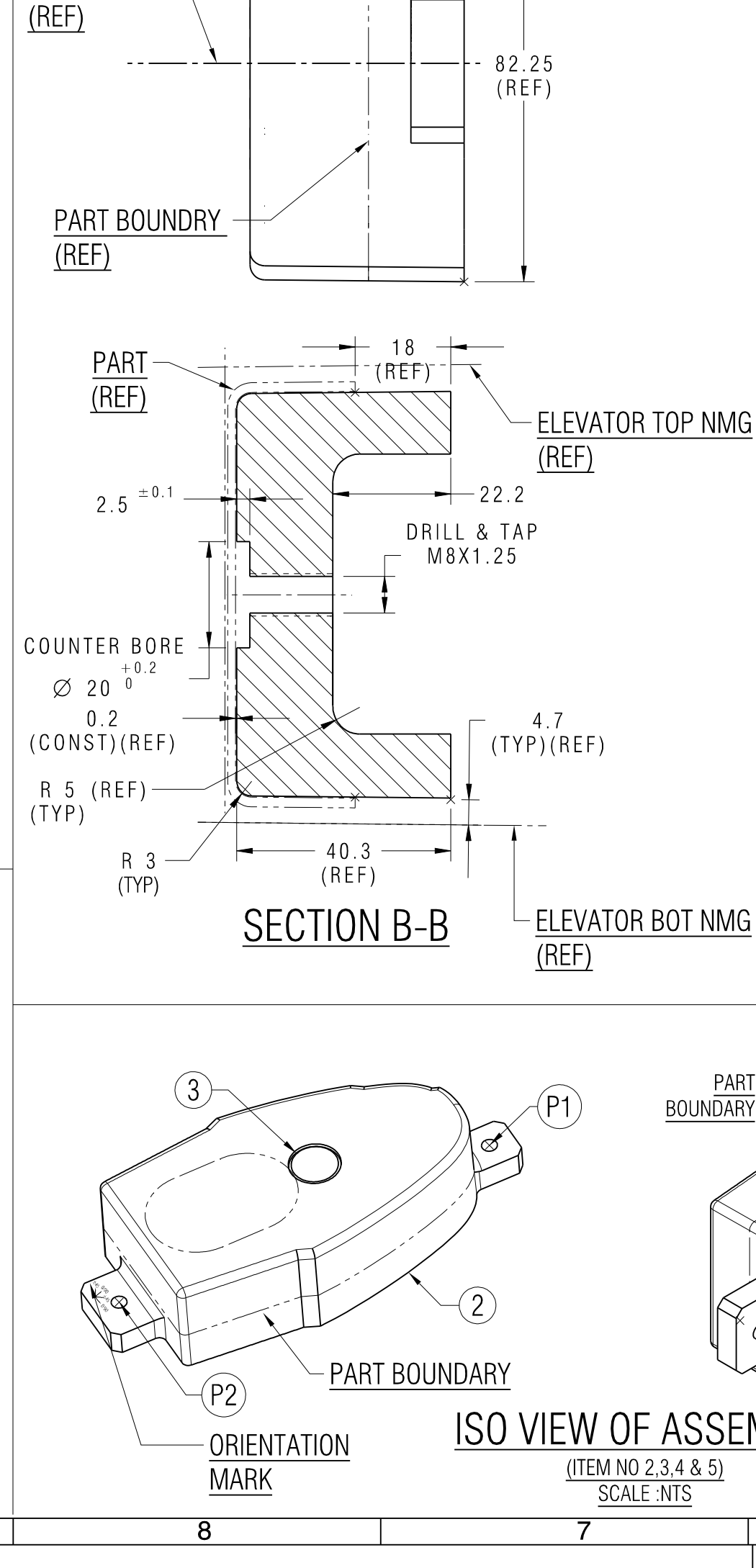
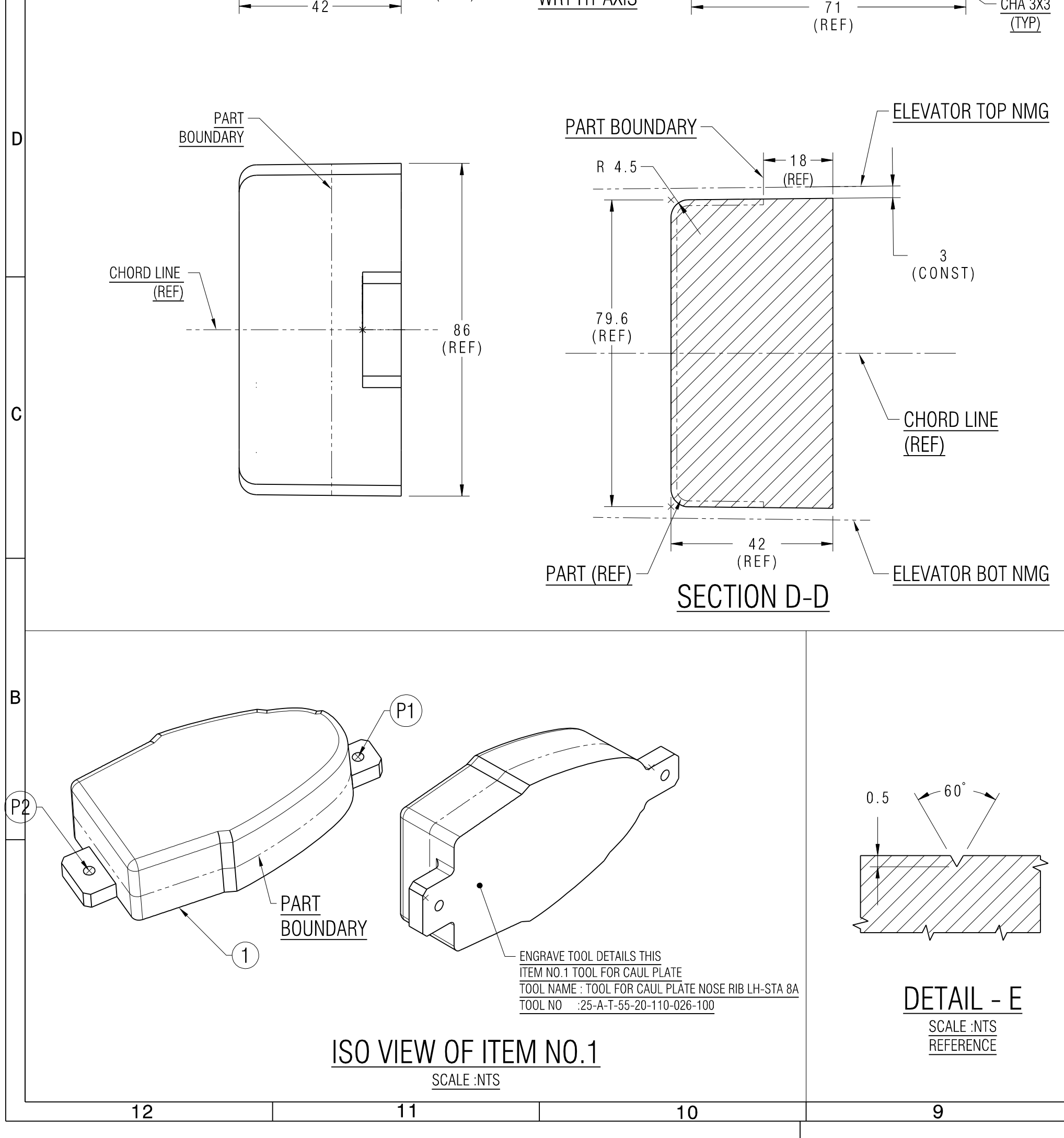
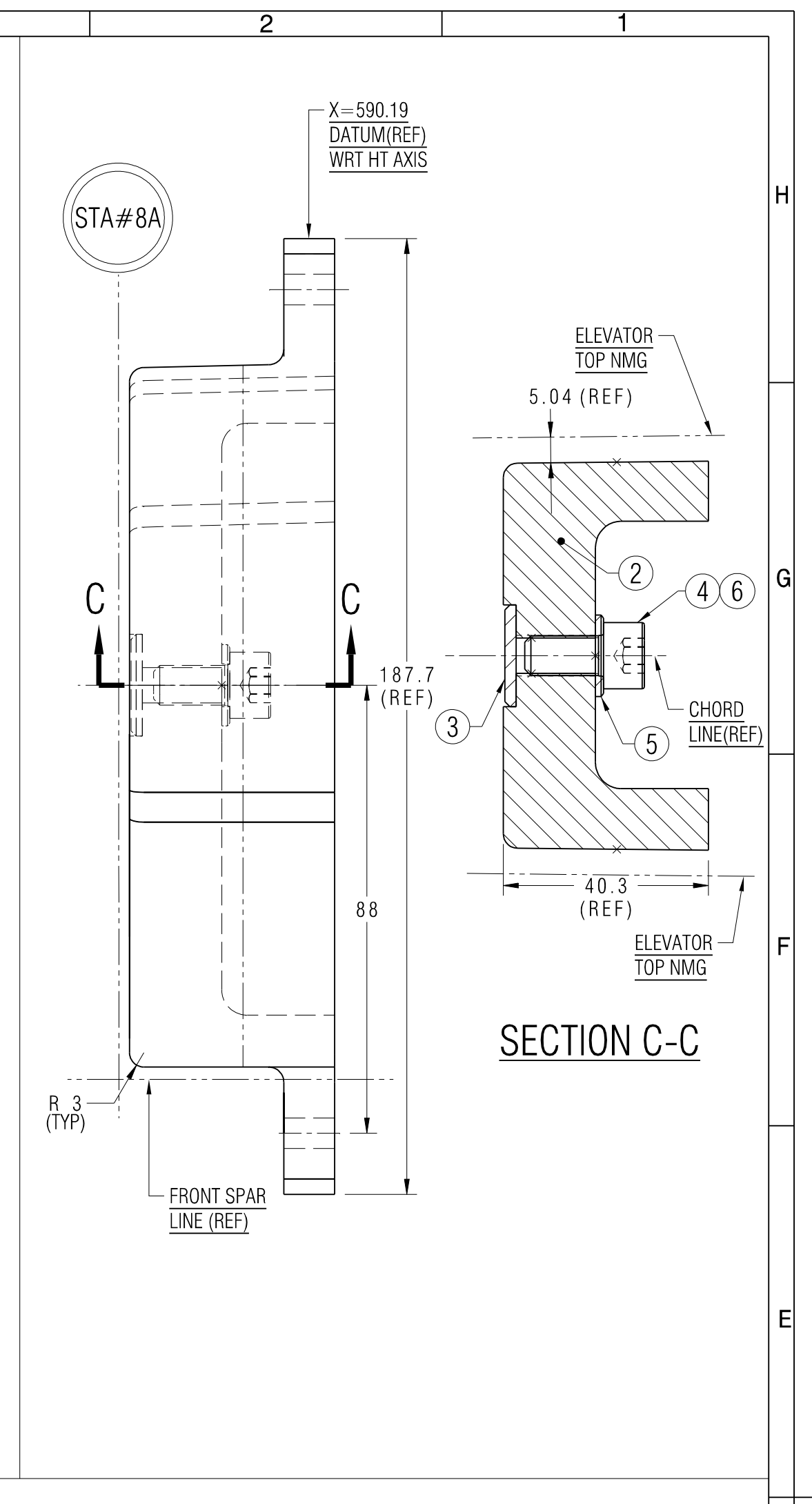
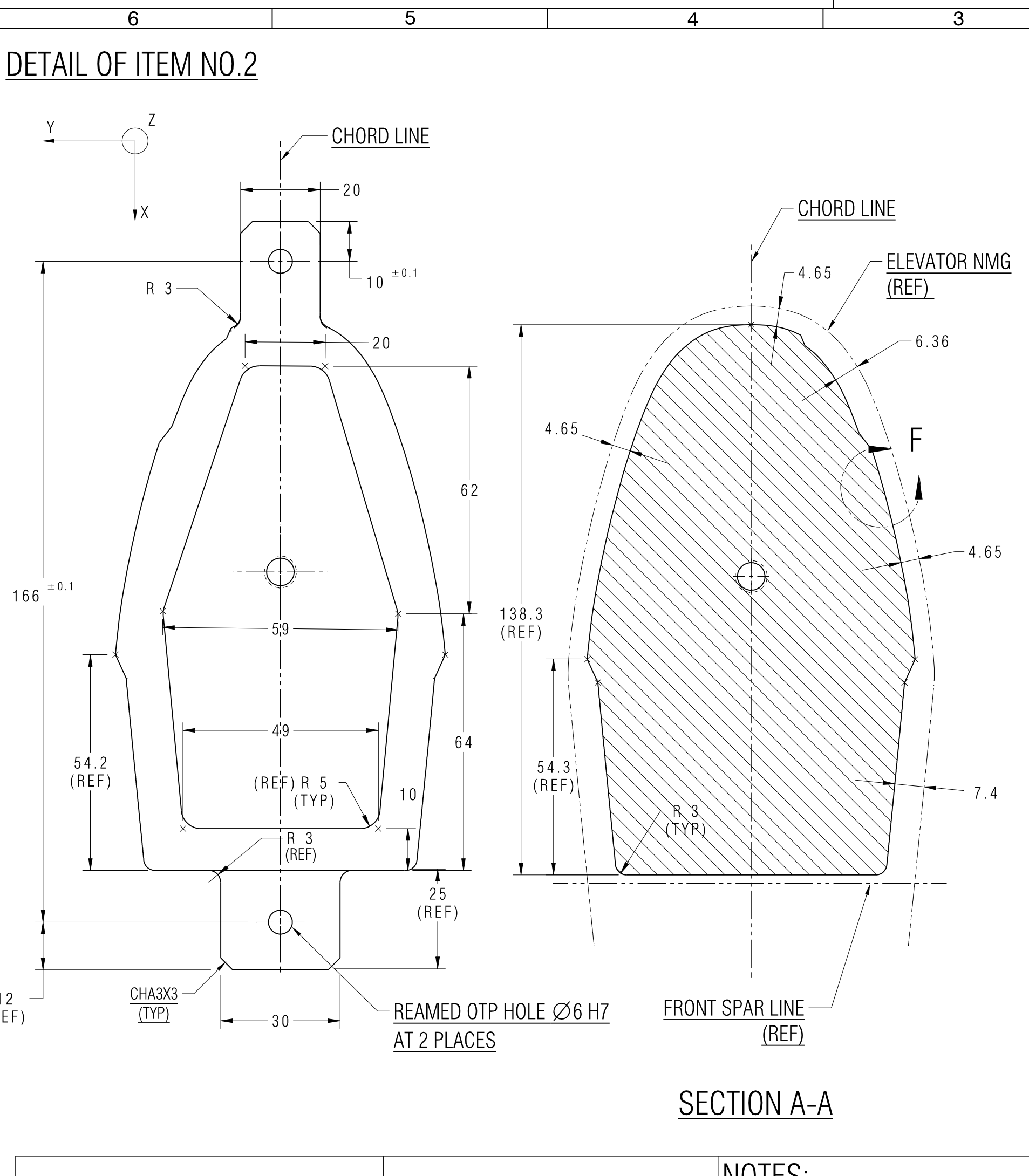
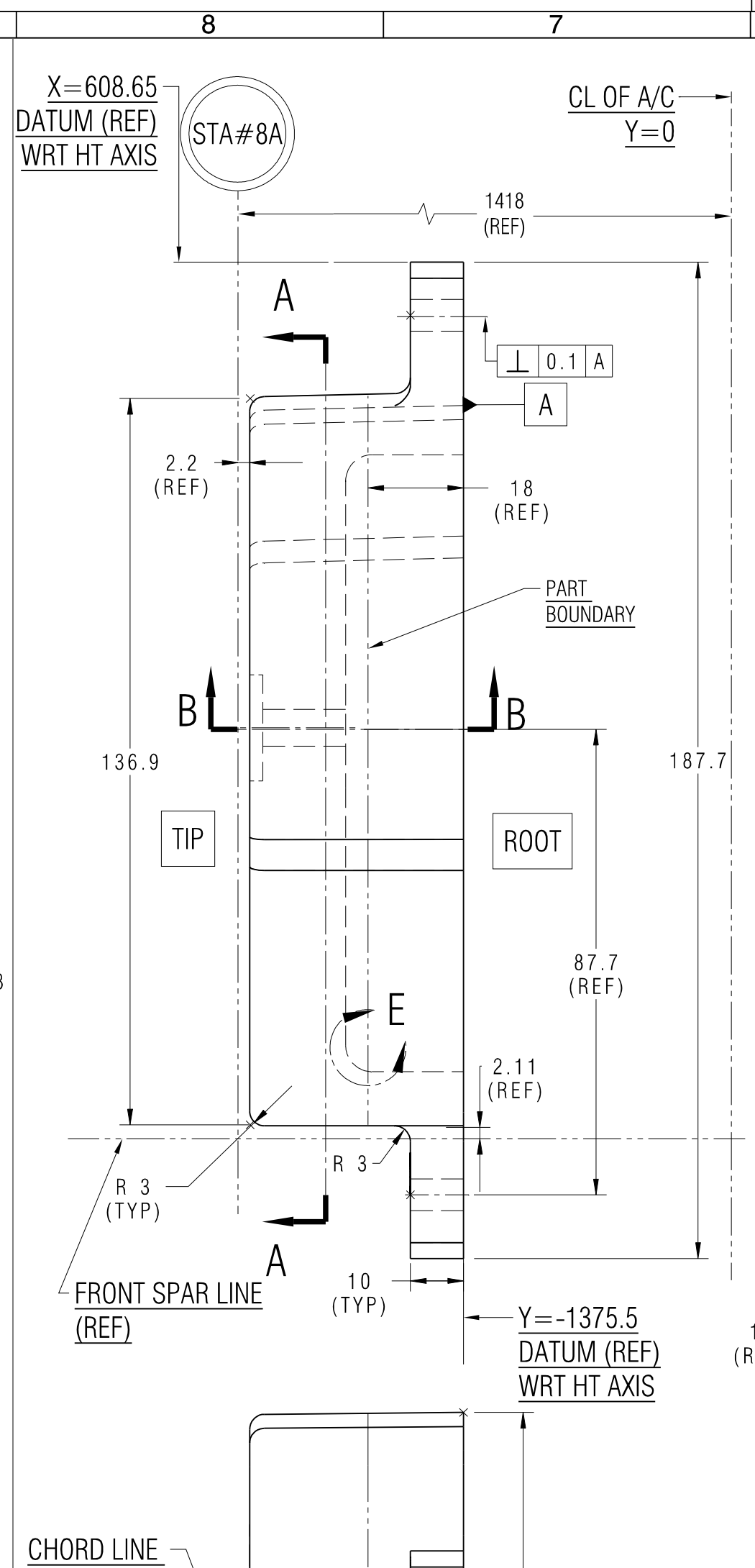
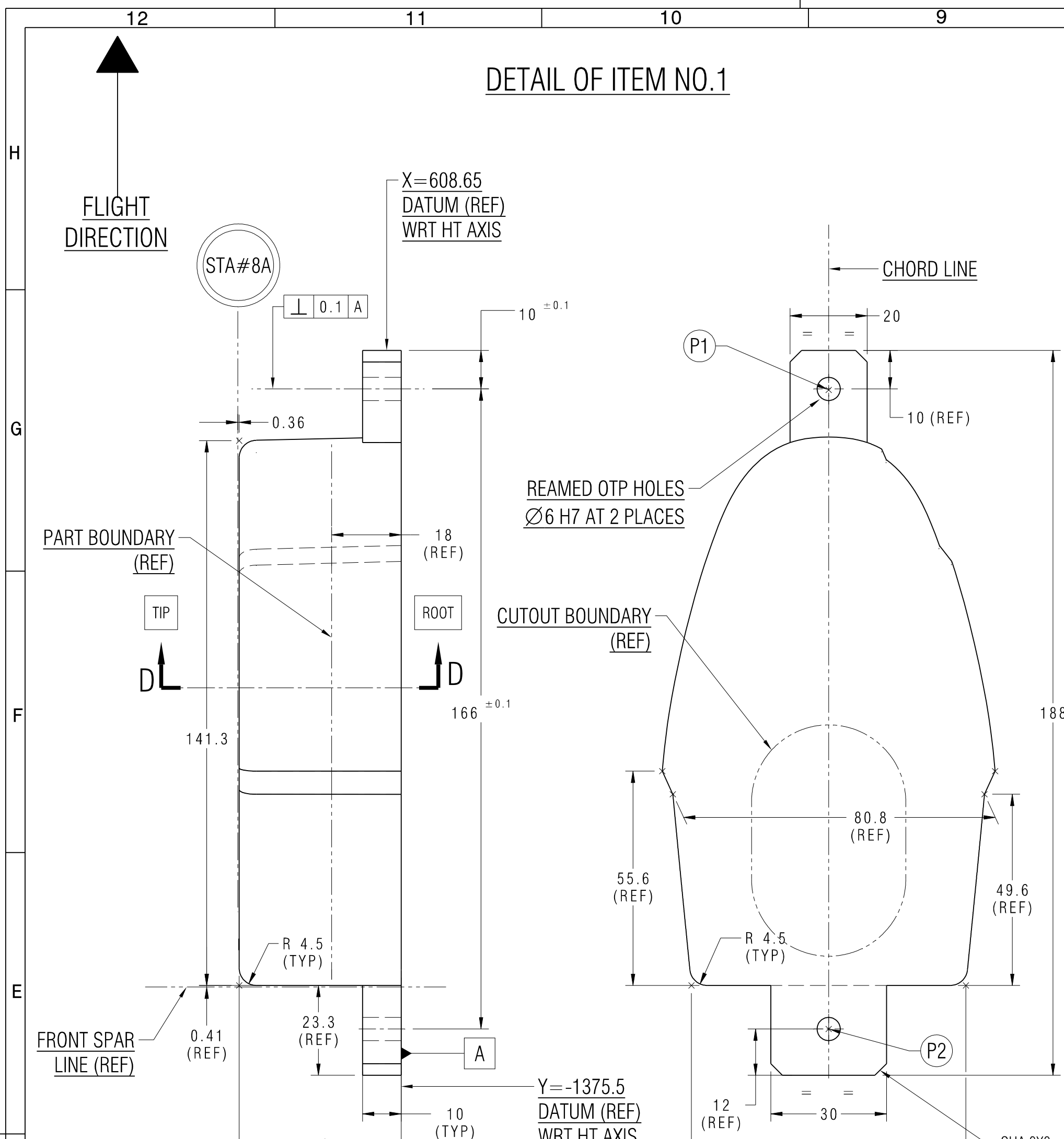
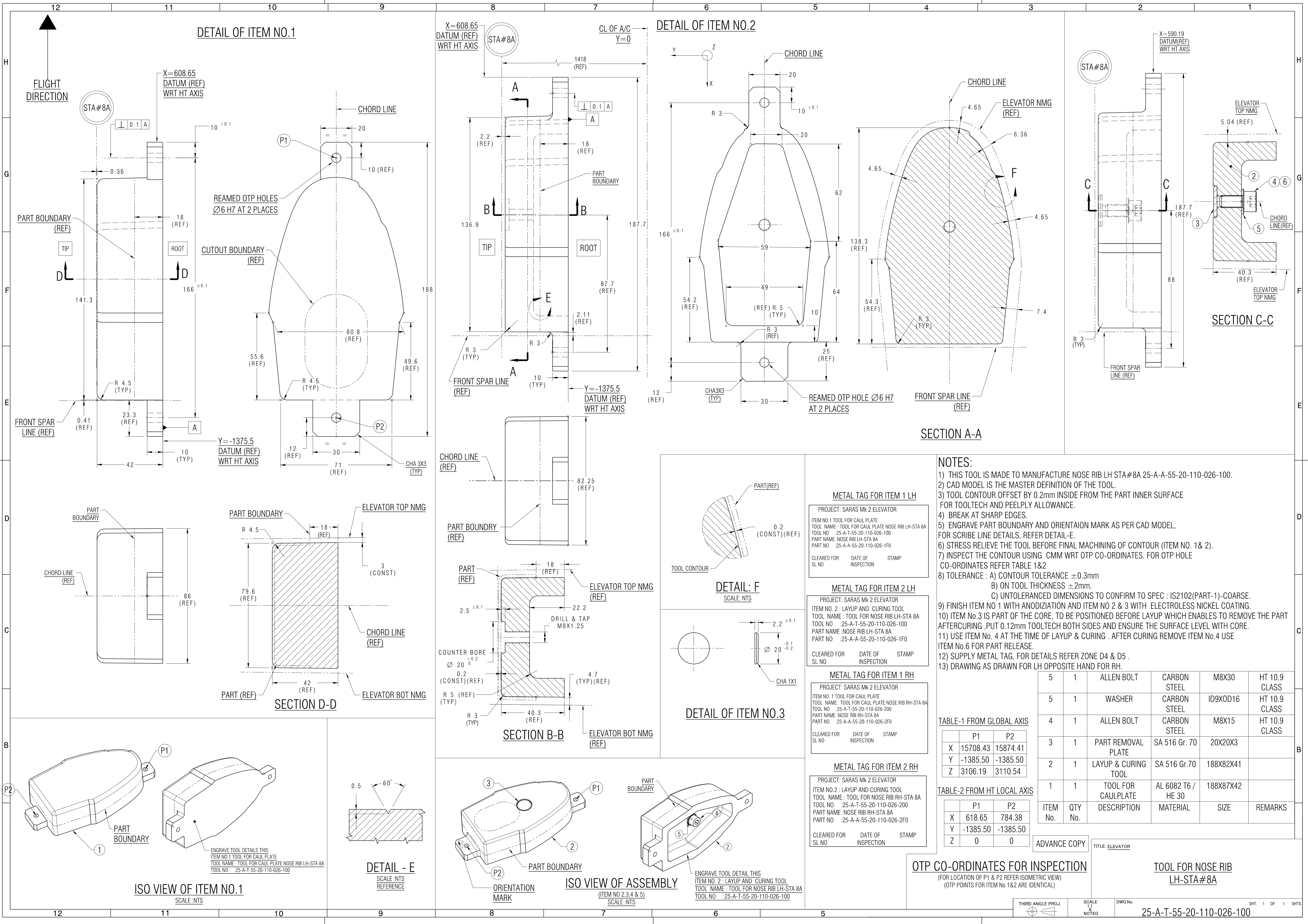
OTP CO - ORDINATES FROM A/C GLOBAL AXIS				OTP CO - ORDINATES FROM HT LOCAL AXIS			
TABLE : 1				TABLE : 2			
POINTS	FROM A/C GLOBAL AXIS			POINTS	FROM A/C HT AXIS		
	X	Y	Z		X	Y	Z
P1	15875.12	-1019	3110.56	P1	785.393	-1019	0
P2	15703.183	-1019	3106.027	P2	613.393	-1019	0

6	1	ALLEN BOLT	CARBON STEEL	M8X30	HT 10.9 CLASS
5	1	WASHER	CARBON STEEL	ID9XOD16	HT 10.9 CLASS
4	1	ALLEN BOLT	CARBON STEEL	M8X15	HT 10.9 CLASS
3	1	PART REMOVAL PLATE	SA 516 Gr.70	20X20X3	
2	1	LAYUP & CURING TOOL	SA 516 Gr.70	194X91X40	
1	1	TOOL FOR CAULPLATE	AL 6082 T6 / HE 30	194X91X40	25-A-M-55-20-110-024-100 25-A-M-55-20-110-024-200
ITEM No.	QTY No.	DESCRIPTION	MATERIAL	SIZE	REMARKS

TOOL FOR NOSE RIB
LH-STA#6

ADVANCE COPY





METAL TAG FOR ITEM 1 LH		
PROJECT: SARAS Mk 2 ELEVATOR		
ITEM NO. 1 TOOL FOR CAUL PLATE		
TOOL NAME: TOOL FOR CAUL PLATE NOSE RIB LH-STA 8A		
TOOL NO.: 25-A-T-55-20-110-026-100		
PART NAME: NOSE RIB LH-STA 8A		
PART NO.: 25-A-A-55-20-110-026-1F0		
CLEARED FOR	DATE OF	STAMP
SL NO	INSPECTION	

METAL TAG FOR ITEM 2 LH		
PROJECT: SARAS Mk 2 ELEVATOR		
ITEM NO. 2: LAYUP AND CURING TOOL		
TOOL NAME: TOOL FOR NOSE RIB LH-STA 8A		
TOOL NO.: 25-A-T-55-20-110-026-100		
PART NAME: NOSE RIB LH-STA 8A		
PART NO.: 25-A-A-55-20-110-026-1F0		
CLEARED FOR	DATE OF	STAMP
SL NO	INSPECTION	

METAL TAG FOR ITEM 1 RH		
PROJECT: SARAS Mk 2 ELEVATOR		
ITEM NO. 1 TOOL FOR CAUL PLATE		
TOOL NAME: TOOL FOR CAUL PLATE NOSE RIB RH-STA 8A		
TOOL NO.: 25-A-T-55-20-110-026-200		
PART NAME: NOSE RIB RH-STA 8A		
PART NO.: 25-A-A-55-20-110-026-2F0		
CLEARED FOR	DATE OF	STAMP
SL NO	INSPECTION	

METAL TAG FOR ITEM 2 RH		
PROJECT: SARAS Mk 2 ELEVATOR		
ITEM NO. 2: LAYUP AND CURING TOOL		
TOOL NAME: TOOL FOR NOSE RIB RH-STA 8A		
TOOL NO.: 25-A-T-55-20-110-026-200		
PART NAME: NOSE RIB RH-STA 8A		
PART NO.: 25-A-A-55-20-110-026-2F0		
CLEARED FOR	DATE OF	STAMP
SL NO	INSPECTION	

NOTES:

- THIS TOOL IS MADE TO MANUFACTURE NOSE RIB LH STA#8A 25-A-A-55-20-110-026-100.
- CAD MODEL IS THE MASTER DEFINITION OF THE TOOL.
- TOOL CONTOUR OFFSET BY 0.2mm INSIDE FROM THE PART INNER SURFACE FOR TOOLTECH AND PEELPY ALLOWANCE.
- BREAK AT SHARP EDGES.
- ENGRAVE PART BOUNDARY AND ORIENTAION MARK AS PER CAD MODEL, FOR SCRIBE LINE DETAILS, REFER DETAIL-E.
- STRESS RELIEVE THE TOOL BEFORE FINAL MACHINING OF CONTOUR (ITEM NO. 1 & 2).
- INSPECT THE CONTOUR USING CMM WRT OTP CO-ORDINATES. FOR OTP HOLE CO-ORDINATES REFER TABLE 1&2
- TOLERANCE : A) CONTOUR TOLERANCE ±0.3mm
B) ON TOOL THICKNESS ±2mm.
C) UNTOLERANCED DIMENSIONS TO CONFIRM TO SPEC : IS2102(PART-1)-COARSE.
- FINISH ITEM NO 1 WITH ANODIZATION AND ITEM NO 2 & 3 WITH ELECTROLESS NICKEL COATING.
- ITEM No.3 IS PART OF THE CORE, TO BE POSITIONED BEFORE LAYUP WHICH ENABLES TO REMOVE THE PART AFTERCURING, PUT 0.12mm TOOLTECH BOTH SIDES AND ENSURE THE SURFACE LEVEL WITH CORE.
- USE ITEM No. 4 AT THE TIME OF LAYUP & CURING . AFTER CURING REMOVE ITEM No.4 USE ITEM No.6 FOR PART RELEASE.
- SUPPLY METAL TAG, FOR DETAILS REFER ZONE D4 & D5 .
- DRAWING AS DRAWN FOR LH OPPOSITE HAND FOR RH.

TABLE-1 FROM GLOBAL AXIS

	P1	P2
X	15708.43	15874.41
Y	-1385.50	-1385.50
Z	3106.19	3110.54

TABLE-2 FROM HT LOCAL AXIS

	P1	P2
X	618.65	784.38
Y	-1385.50	-1385.50
Z	0	0

ADVANCE COPY

TITLE: ELEVATOR

ITEM NO. QTY

5	1	ALLEN BOLT	CARBON STEEL	M8X30	HT 10.9 CLASS
5	1	WASHER	CARBON STEEL	ID9XOD16	HT 10.9 CLASS
4	1	ALLEN BOLT	CARBON STEEL	M8X15	HT 10.9 CLASS
3	1	PART REMOVAL PLATE	SA 516 Gr. 70	20X20X3	
2	1	LAYUP & CURING TOOL	SA 516 Gr.70	188X82X41	
1	1	TOOL FOR CAULPLATE	AL 6082 T6 / HE 30	188X87X42	

ITEM No. DESCRIPTION MATERIAL SIZE REMARKS

ISO CO-ORDINATES FOR INSPECTION
(FOR LOCATION OF P1 & P2 REFER ISOMETRIC VIEW)
(OTP POINTS FOR ITEM No 1&2 ARE IDENTICAL)

TOOL FOR NOSE RIB LH-STA#8A

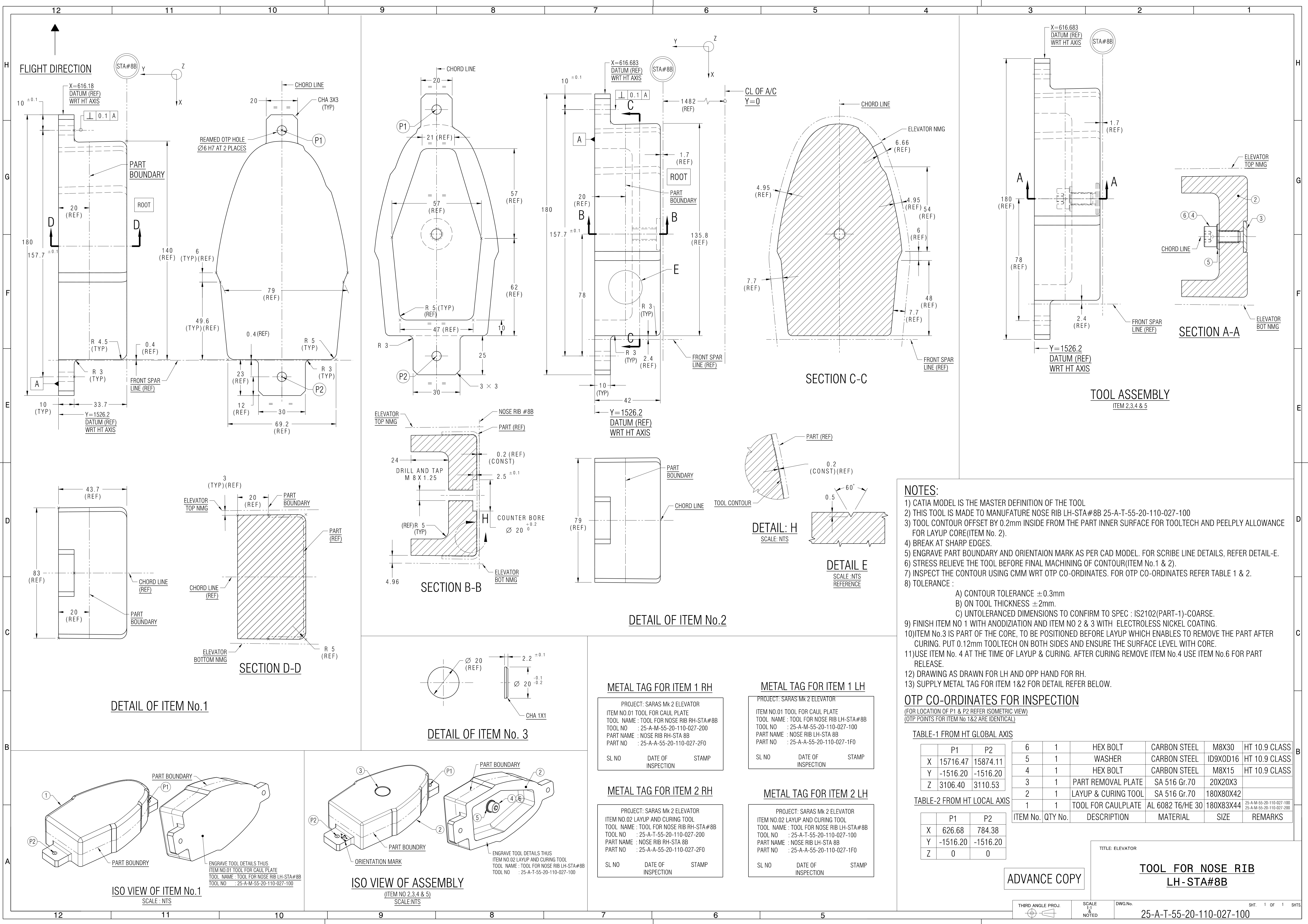
THIRD ANGLE PROJ.

SCALE: 1:1 NOTED

DWG No.

25-A-T-55-20-110-026-100

SHT. 1 OF 1 SHTS



- NOTES:**
- CATIA MODEL IS THE MASTER DEFINITION OF THE TOOL
 - THIS TOOL IS MADE TO MANUFACTURE NOSE RIB LH-STA#8B 25-A-T-55-20-110-027-100
 - TOOL CONTOUR OFFSET BY 0.2mm INSIDE FROM THE PART INNER SURFACE FOR TOOLTECH AND PEELPLY ALLOWANCE FOR LAYUP CORE (ITEM No. 2).
 - BREAK AT SHARP EDGES.
 - ENGRAVE PART BOUNDARY AND ORIENTAION MARK AS PER CAD MODEL. FOR SCRIBE LINE DETAILS, REFER DETAIL-E.
 - STRESS RELIEVE THE TOOL BEFORE FINAL MACHINING OF CONTOUR (ITEM No.1 & 2).
 - INSPECT THE CONTOUR USING CMM WRT OTP CO-ORDINATES. FOR OTP CO-ORDINATES REFER TABLE 1 & 2.
 - TOLERANCE :
 - CONTOUR TOLERANCE $\pm 0.3\text{mm}$
 - ON TOOL THICKNESS $\pm 2\text{mm}$.
 - UNTOLERANCED DIMENSIONS TO CONFIRM TO SPEC : IS2102(PART-1)-COARSE.
 - FINISH ITEM NO 1 WITH ANODIZATION AND ITEM NO 2 & 3 WITH ELECTROLESS NICKEL COATING.
 - ITEM No.3 IS PART OF THE CORE, TO BE POSITIONED BEFORE LAYUP WHICH ENABLES TO REMOVE THE PART AFTER CURING. PUT 0.12mm TOOLTECH ON BOTH SIDES AND ENSURE THE SURFACE LEVEL WITH CORE.
 - USE ITEM No. 4 AT THE TIME OF LAYUP & CURING. AFTER CURING REMOVE ITEM No.4 USE ITEM No.6 FOR PART RELEASE.
 - DRAWING AS DRAWN FOR LH AND OPP HAND FOR RH.
 - SUPPLY METAL TAG FOR ITEM 1&2 FOR DETAIL REFER BELOW.

OTP CO-ORDINATES FOR INSPECTION

(FOR LOCATION OF P1 & P2 REFER ISOMETRIC VIEW)
(OTP POINTS FOR ITEM No 1&2 ARE IDENTICAL)

TABLE-1 FROM HT GLOBAL AXIS

	P1	P2
X	15716.47	15874.11
Y	-1516.20	-1516.20
Z	3106.40	3110.53

TABLE-2 FROM HT LOCAL AXIS

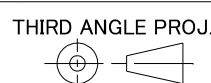
	P1	P2
X	626.68	784.38
Y	-1516.20	-1516.20
Z	0	0

6	1	HEX BOLT	CARBON STEEL	M8X30	HT 10.9 CLASS
5	1	WASHER	CARBON STEEL	ID9XOD16	HT 10.9 CLASS
4	1	HEX BOLT	CARBON STEEL	M8X15	HT 10.9 CLASS
3	1	PART REMOVAL PLATE	SA 516 Gr.70	20X20X3	
2	1	LAYUP & CURING TOOL	SA 516 Gr.70	180X80X42	
1	1	TOOL FOR CAULPLATE	AL 6082 T6/HE 30	180X83X44	25-A-M-55-20-110-027-100 25-A-M-55-20-110-027-100
ITEM No.	QTY No.	DESCRIPTION	MATERIAL	SIZE	REMARKS

TITLE: ELEVATOR

ADVANCE COPY

**TOOL FOR NOSE RIB
LH-STA#8B**

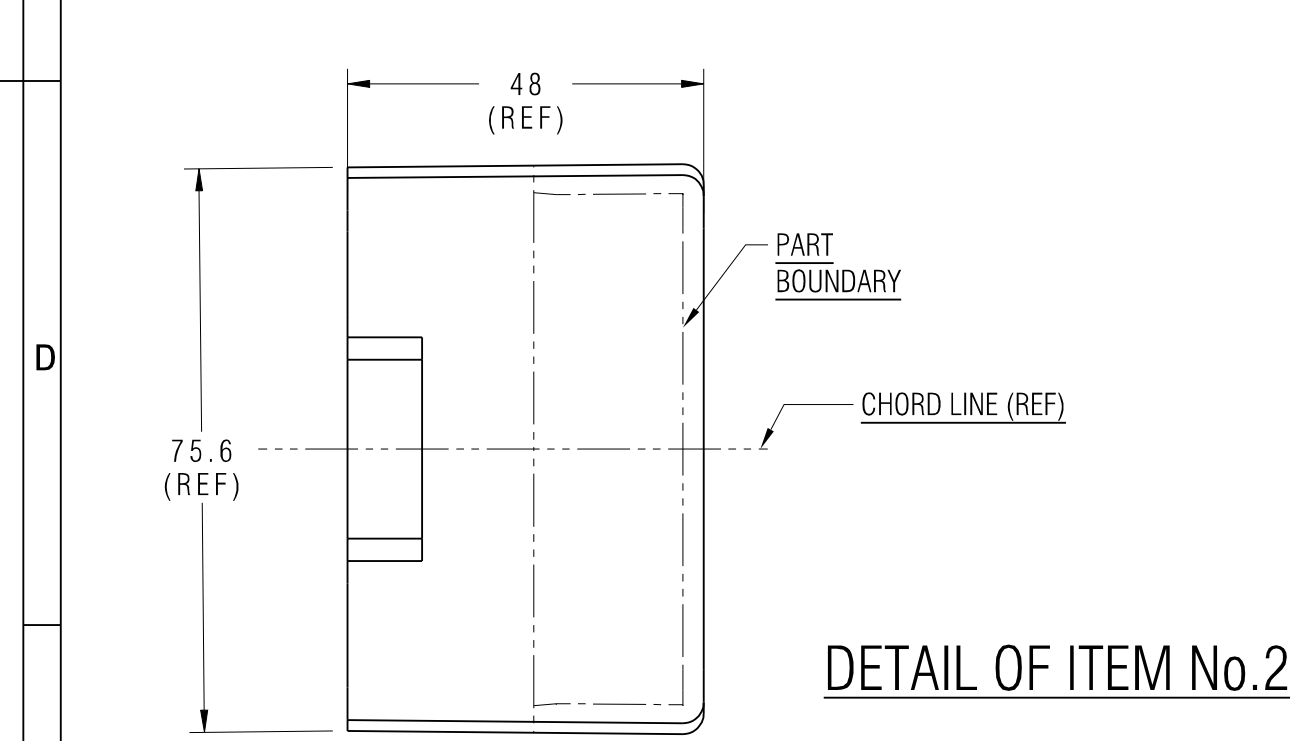
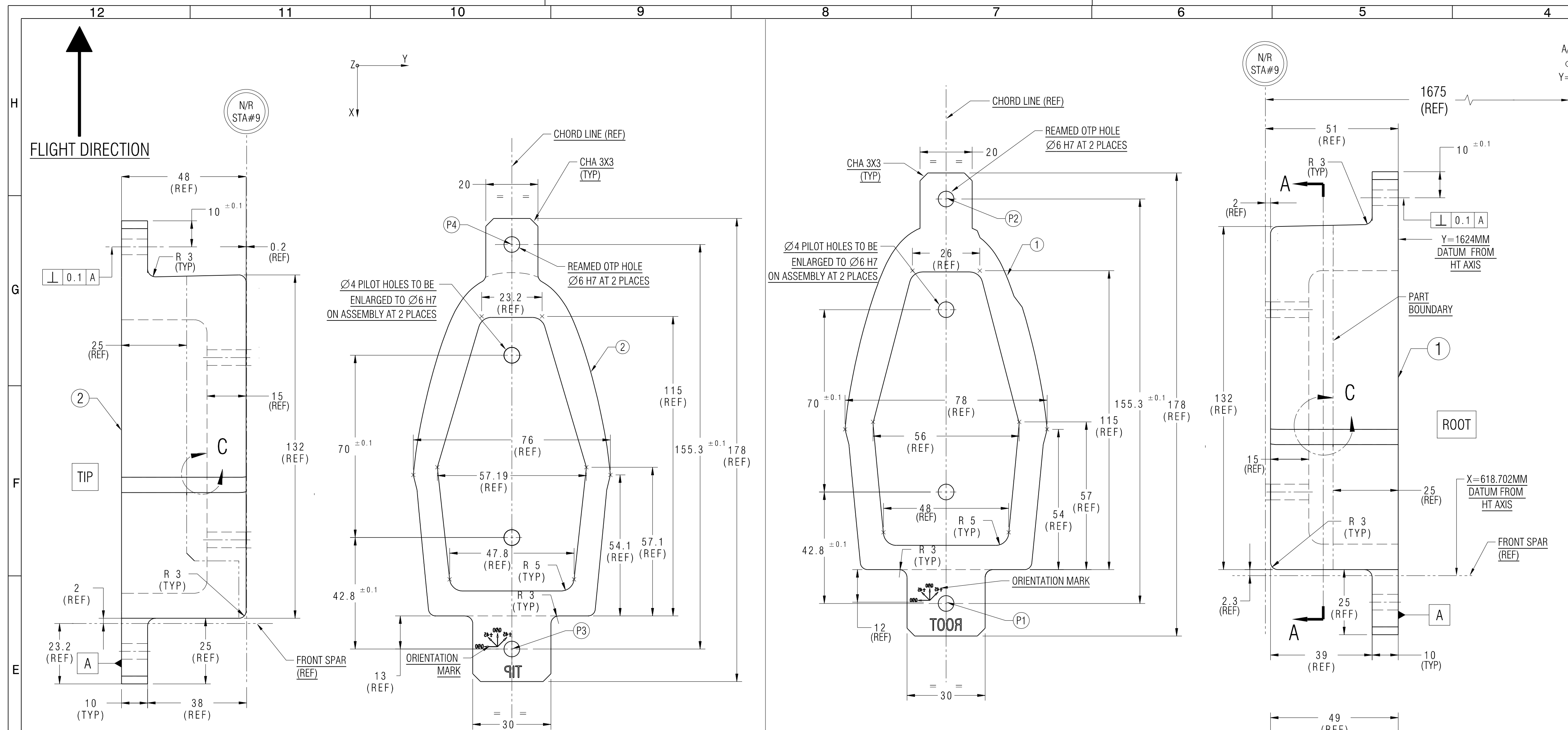


SCALE
1:1
&
NOTED

DWG.No.

25-A-T-55-20-110-027-100

SHT. 1 OF 1 SHTS

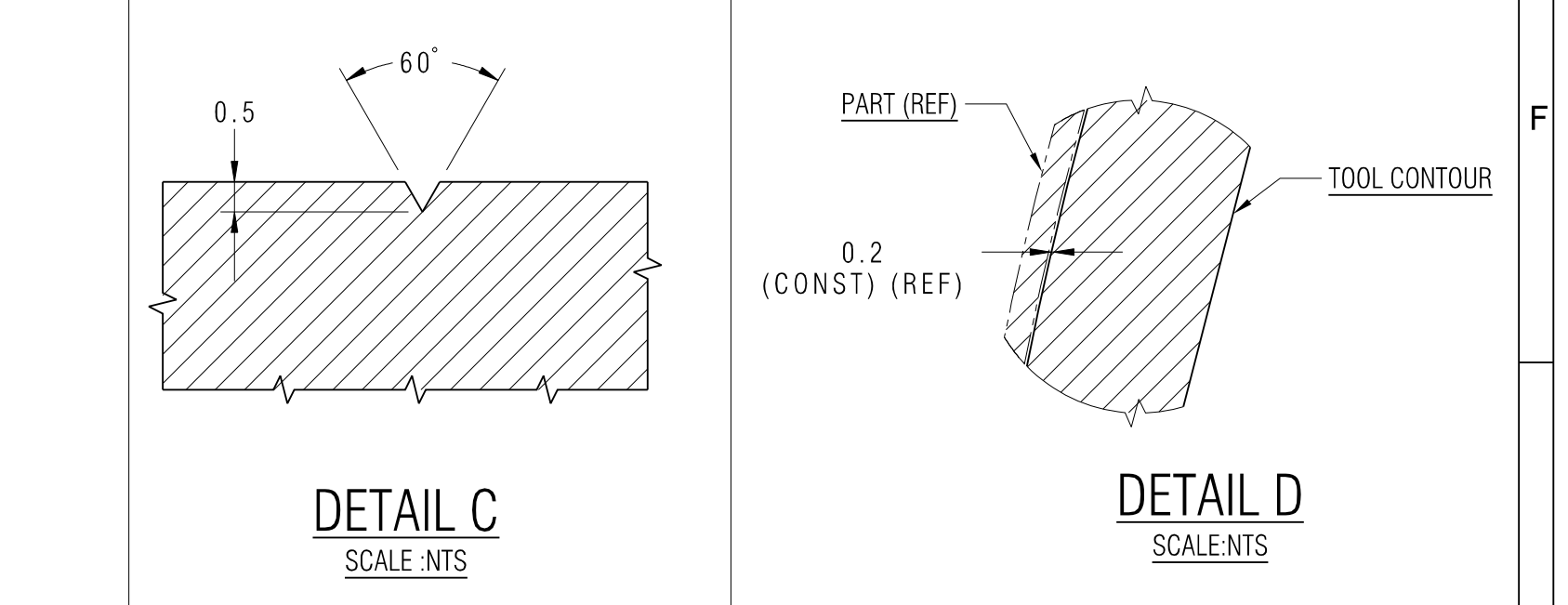
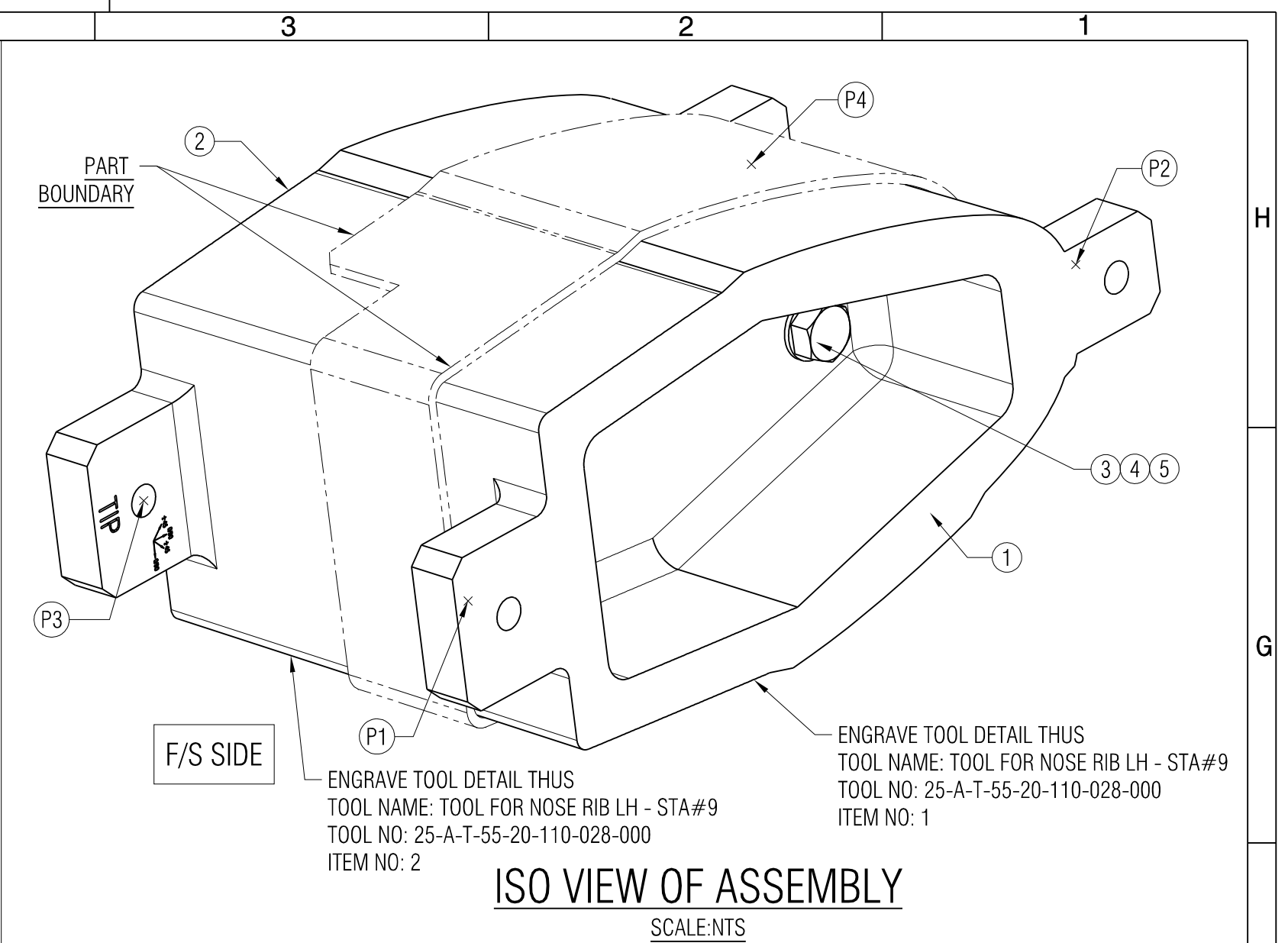
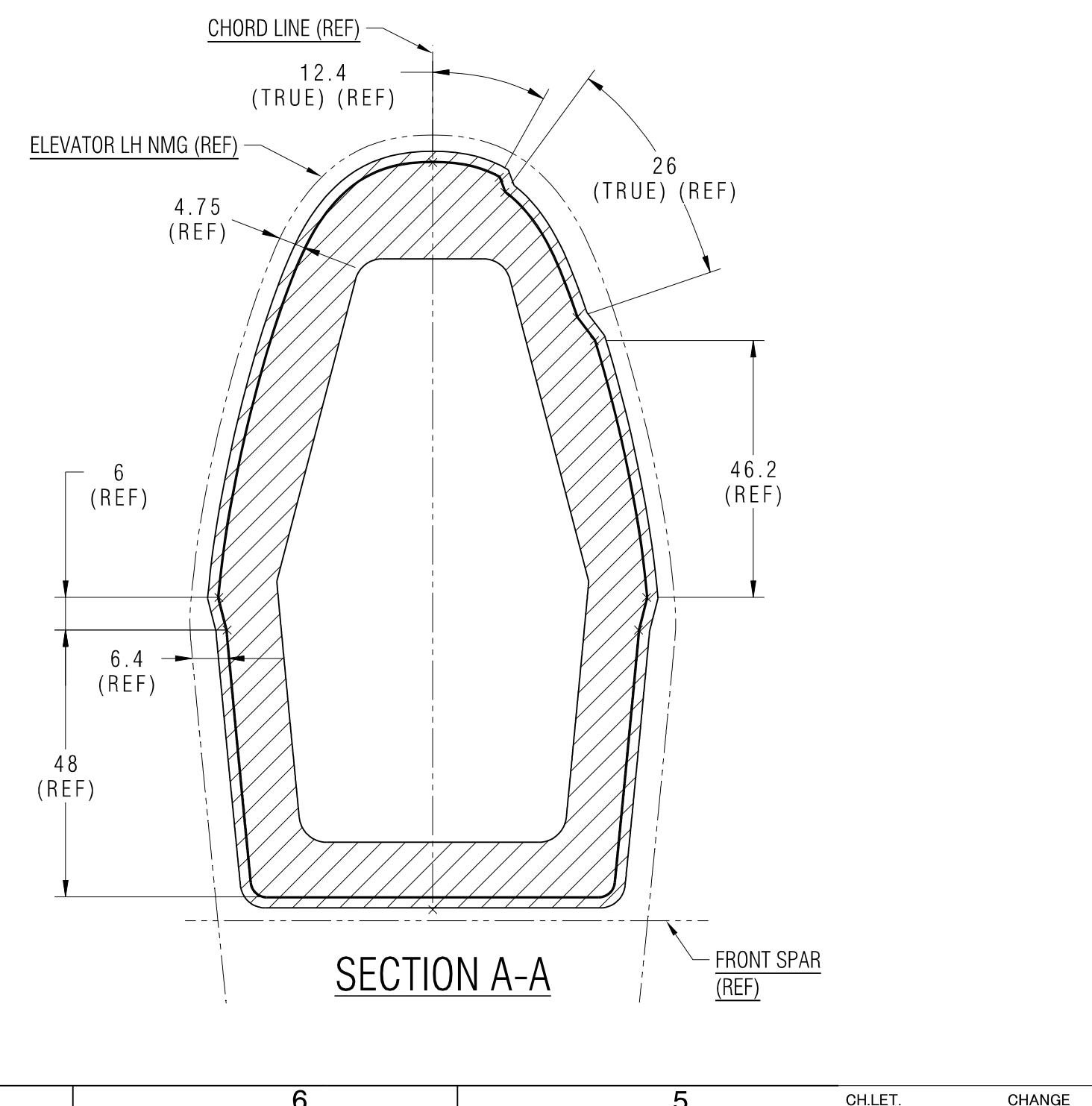
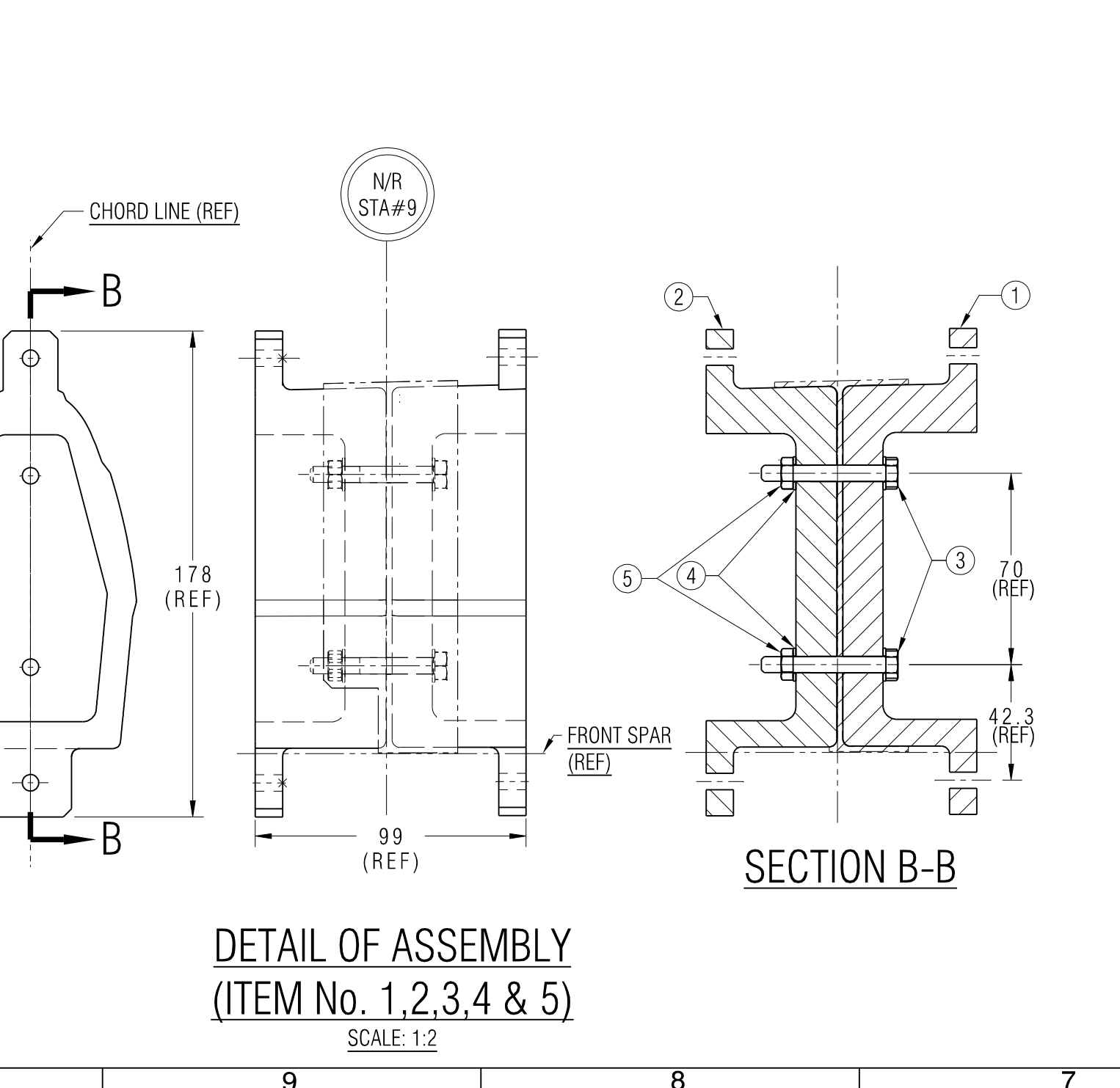
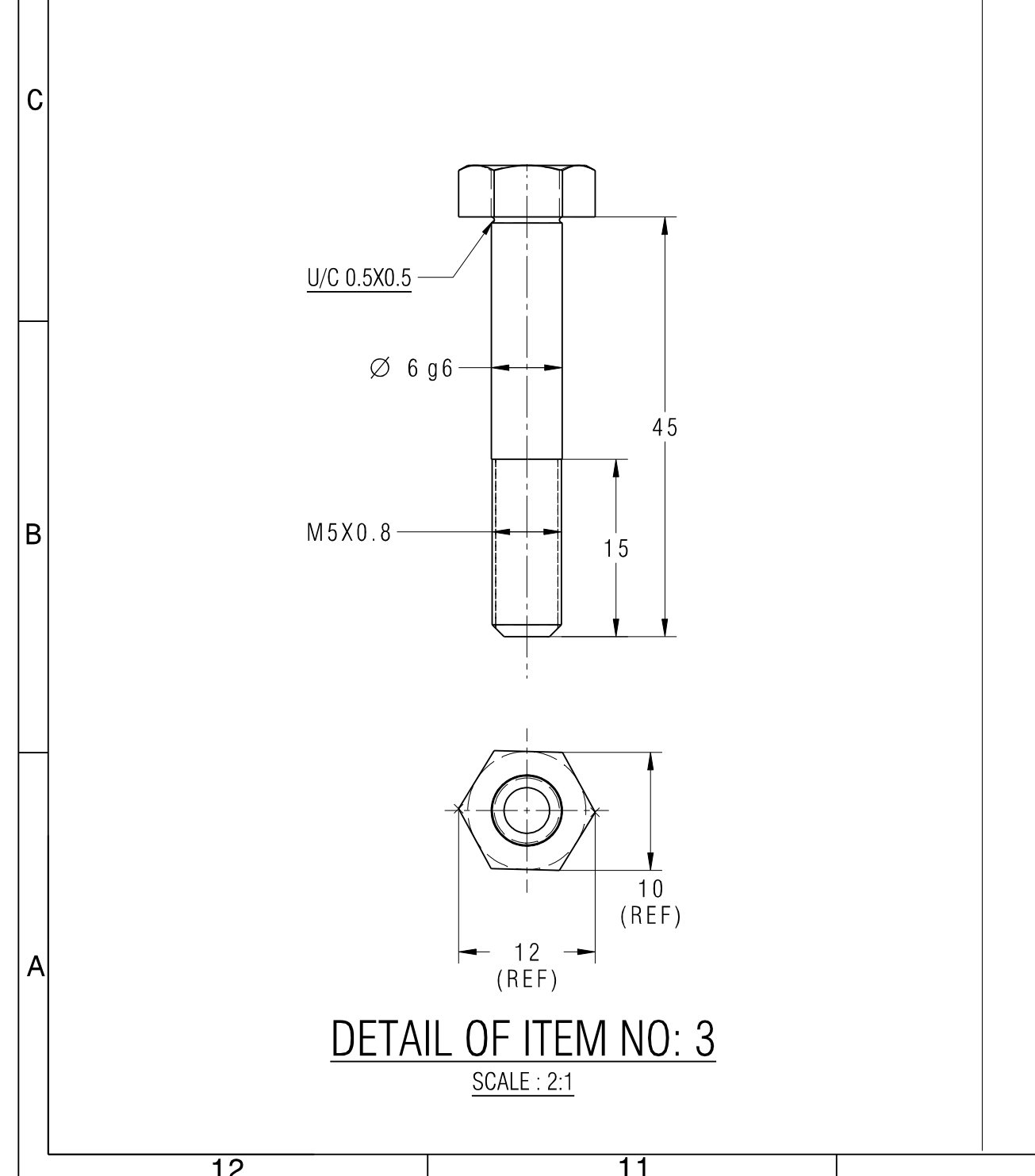
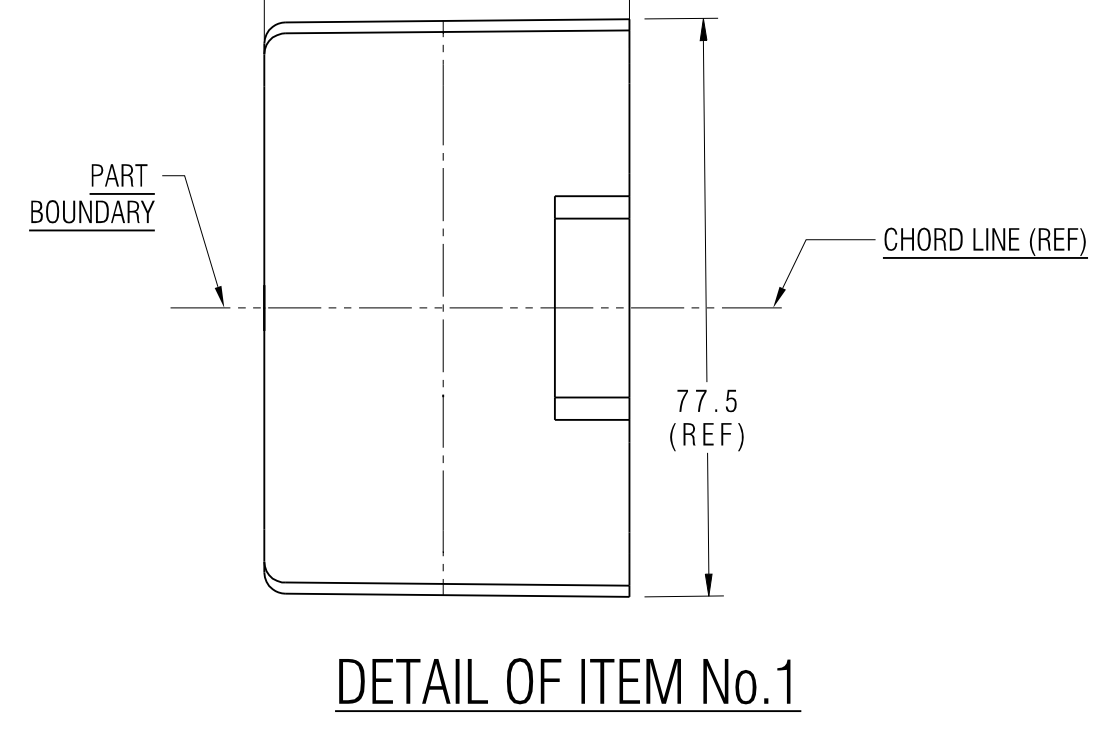


METAL TAG

50 (REF)	PROJECT: SARAS Mk2 ELEVATOR		
	TOOL NAME: TOOL FOR NOSE RIB LH STA#9		
	TOOL NO: 25-A-T-55-20-110-028-100		
	PART NAME: NOSE RIB LH STA#9		
	PART NO: 25-A-A-55-20-110-028-1F0		
	CLEARED FOR SL NO	DATE OF INSPECTION	STAMP
	100 (REF)		

METAL TAG

50 (REF)	PROJECT: SARAS Mk2 ELEVATOR		
	TOOL NAME: TOOL FOR NOSE RIB RH STA#9		
	TOOL NO: 25-A-T-55-20-110-028-200		
	PART NAME: NOSE RIB RH STA#9		
	PART NO: 25-A-A-55-20-110-028-2F0		
	CLEARED FOR SL NO	DATE OF INSPECTION	STAMP
	100 (REF)		



OTP CO - ORDINATES			
(FOR THE LOCATION P1 TO P4 REFER ISOMETRIC VIEW)			
TABLE - 1 FROM GLOBAL AXIS			
ITEM No.	X	Y	Z
P1	15873.72	-1634	3110.52
P2	15718.48	-1634	3106.45
P3	15874.22	-1713	3110.52
P4	15718.94	-1713	3106.47

TABLE - 2 FROM HT LOCAL AXIS			
ITEM No.	X	Y	Z
P1	783.99	-1634	0
P2	628.70	-1634	0
P3	784.49	-1713	0
P4	629.15	-1713	0

- NOTES :
- THIS TOOL IS MADE TO MANUFACTURE NOSE RIB STA#9 LH(25-A-A-55-20-110-028-000).
 - CAD MODEL IS THE MASTER DEFINITION OF THE TOOL.
 - TOOL CONTOUR OFFSET BY 0.2MM INSIDE FROM THE PART INNER SURFACE FOR TOOLTECH AND PEELPLY ALLOWNACE.
 - BREAK AT SHARP EDGES.
 - ENGRAVE PART BOUNDARY AND ORIENTATION MARK AS PER CAD MODEL, FOR SCRIBE LINER DETAILS, REFER DETAIL - C.
 - STREES RELIEVE THE TOOL BEFORE FINAL MACHINING OF CONTOUR.
 - INSPECT THE CONTOUR USING CMM WRT OTP HOLE CO-ORDINATES. FOR OTP CO - ORDINATES REFER TABLE - 1 & 2.
 - TOLERANCE : A) CONTOUR TOLERANCE ± 0.3 mm
B) ON TOOL THICKNESS ± 2 mm.
C) UNTOLERANCED DIMENSIONS TO CONFIRM TO SPEC : IS2102(PART - 1) - COARSE.
 - FINISH THE TOOL OTHER THAN STANDARD FASTNERS WITH ELECTROLESS NICKEL COATING.
 - SUPPLY METAL TAG. FOR DETAILS REFER ZONE D8.
 - ENGRAVE TOOL NAME AND TOOL NO ON TOOL AT NON WORKING PLACE.

5	2	HEX NUT	CARBON STEEL	M6X1	10.9 CLASS
4	4	WASHER	CARBON STEEL	ID6 X OD12 X 1	10.9 CLASS
3	2	HEX DOWEL BOLT	EN 24	$\varnothing 12$ X50	HRC 40-45
2	1	LAYUP & CURING TOOL	SA 516 Gr.70	192X92X53	
1	1	LAYUP & CURING TOOL	SA 516 Gr.70	192X79X50	
ITEM No.	QTY	DESCRIPTION	MATERIAL	SIZE	REMARKS

ADVANCE COPY

TITLE: ELEVATOR

TOOL FOR NOSE RIB
LH STA#9

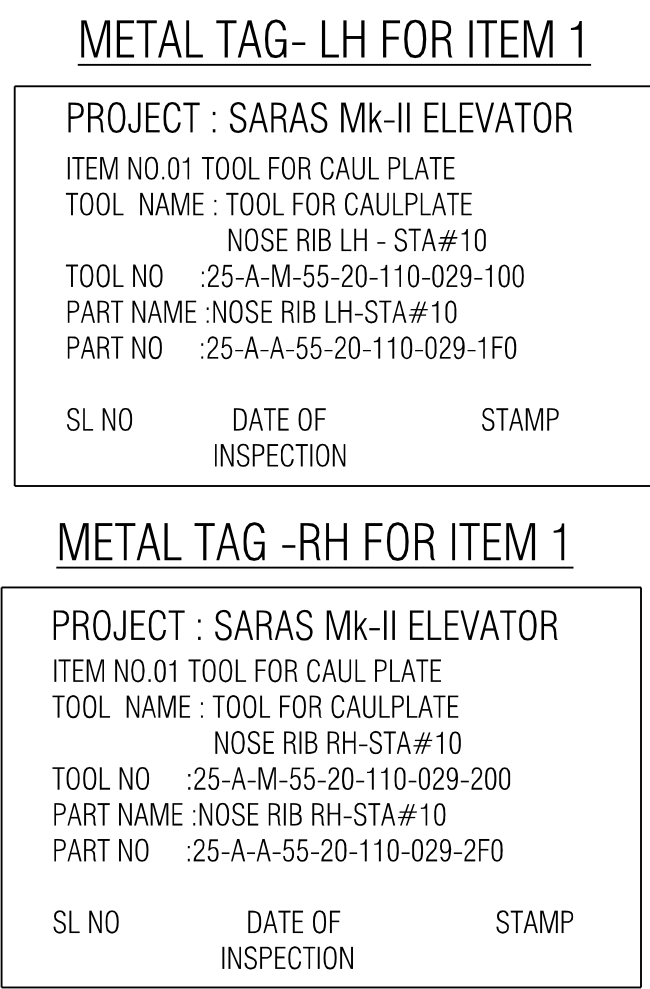
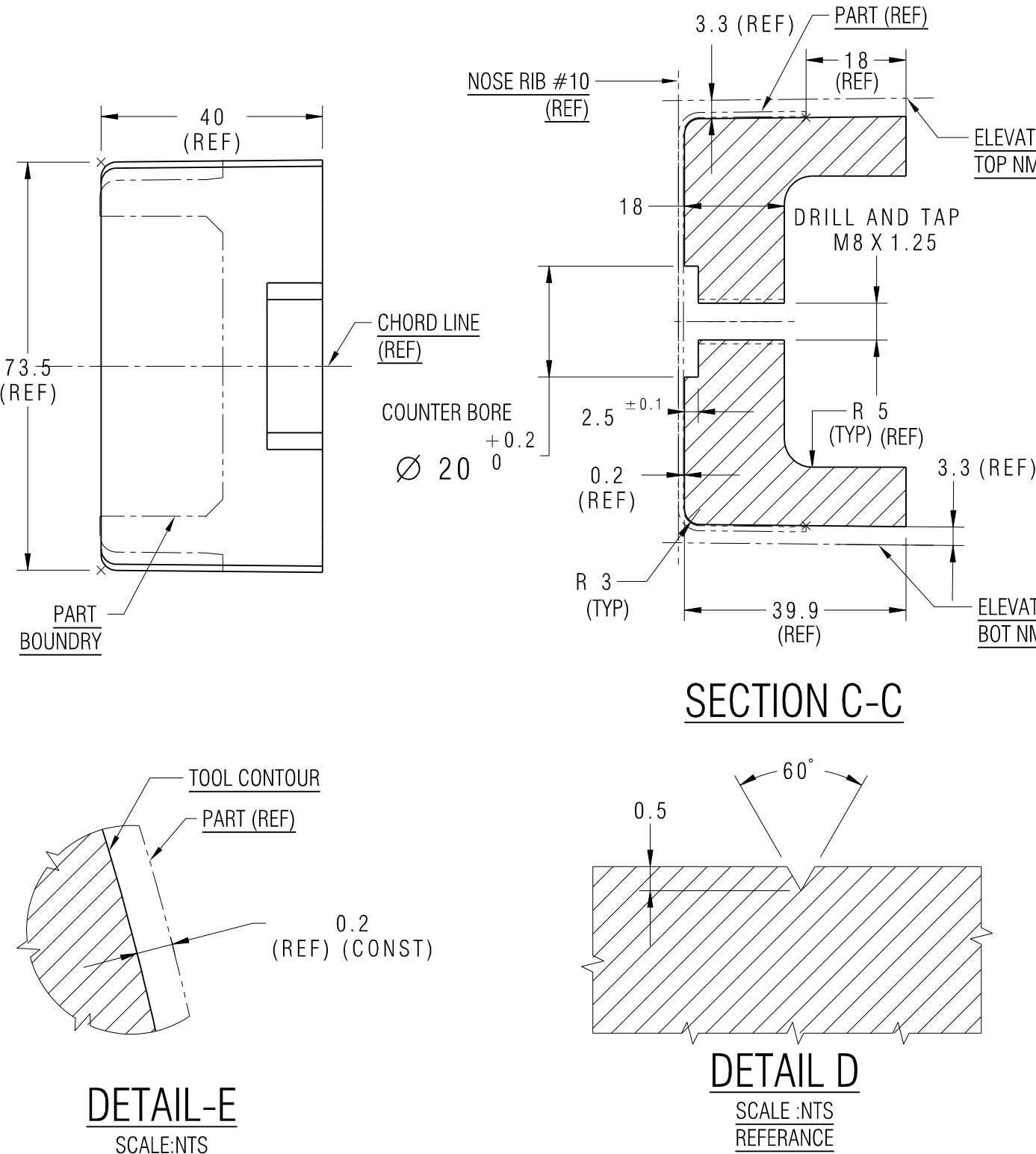
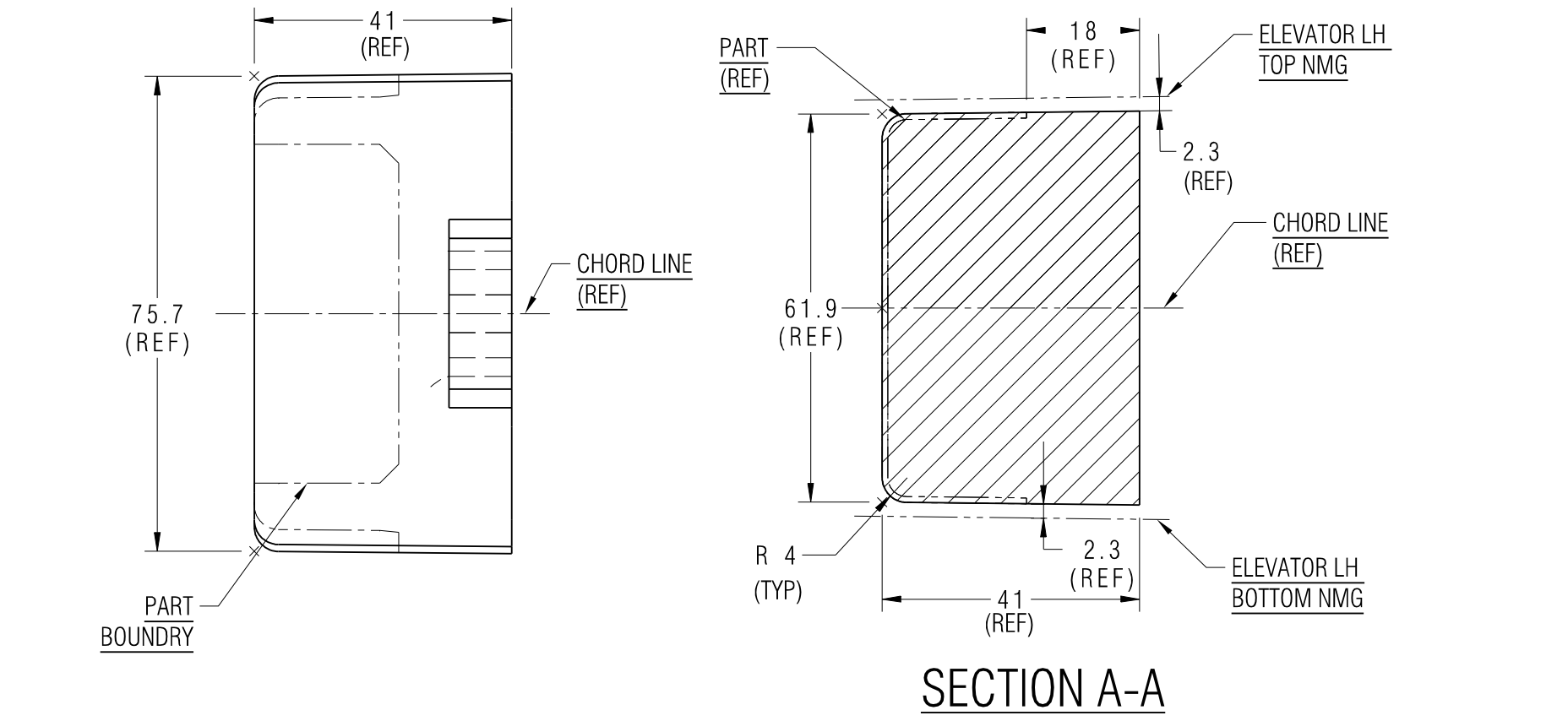
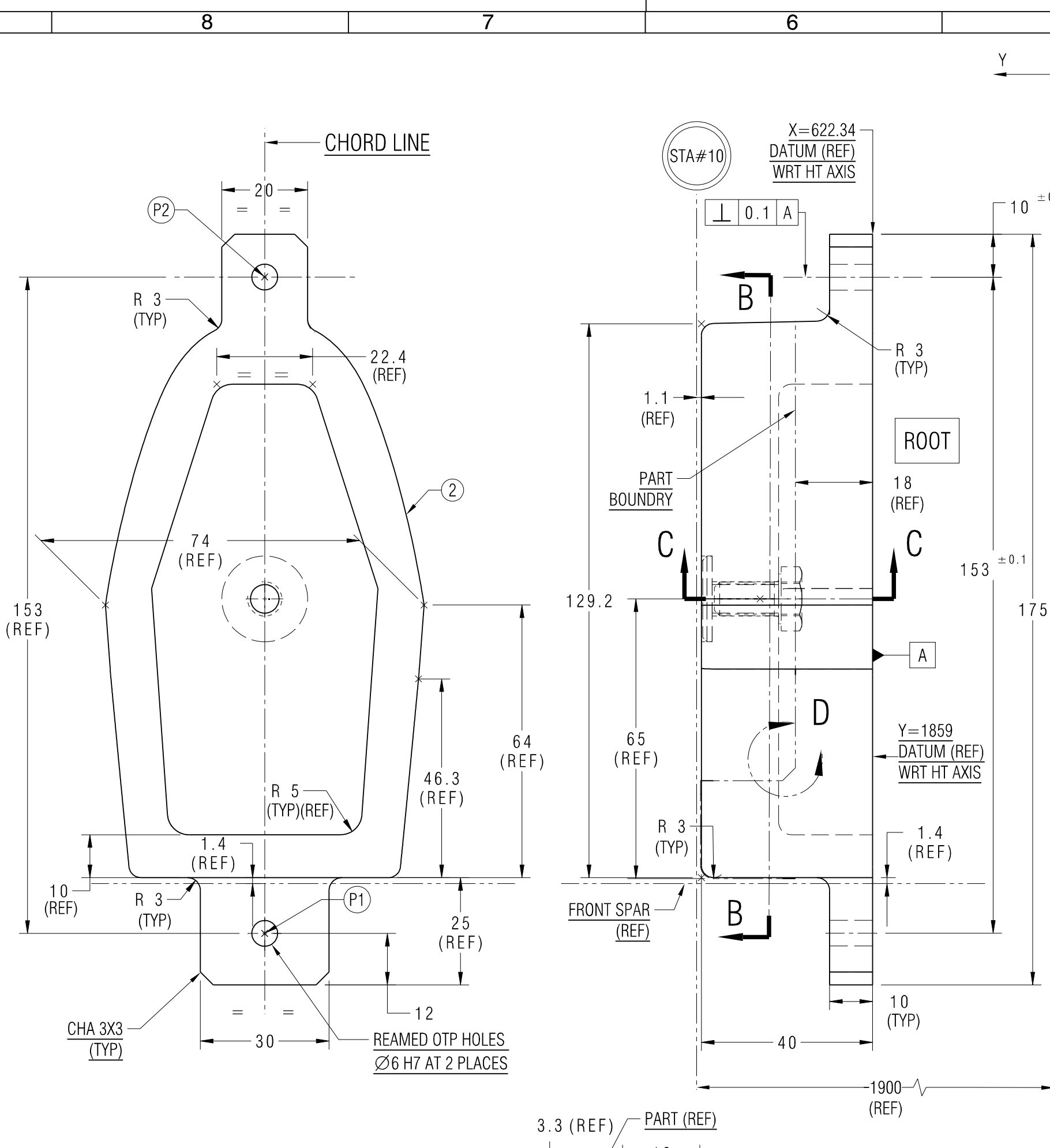
THIRD ANGLE PROJ.

SCALE 1:1 NOTED

DWG.No.

SHT. 1 OF 1 SHTS

25-A-T-55-20-110-028-100

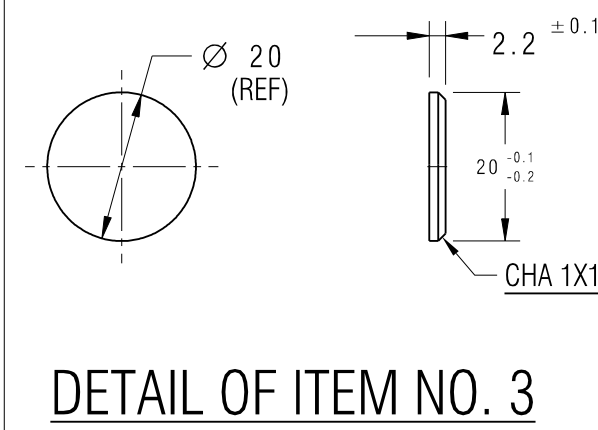
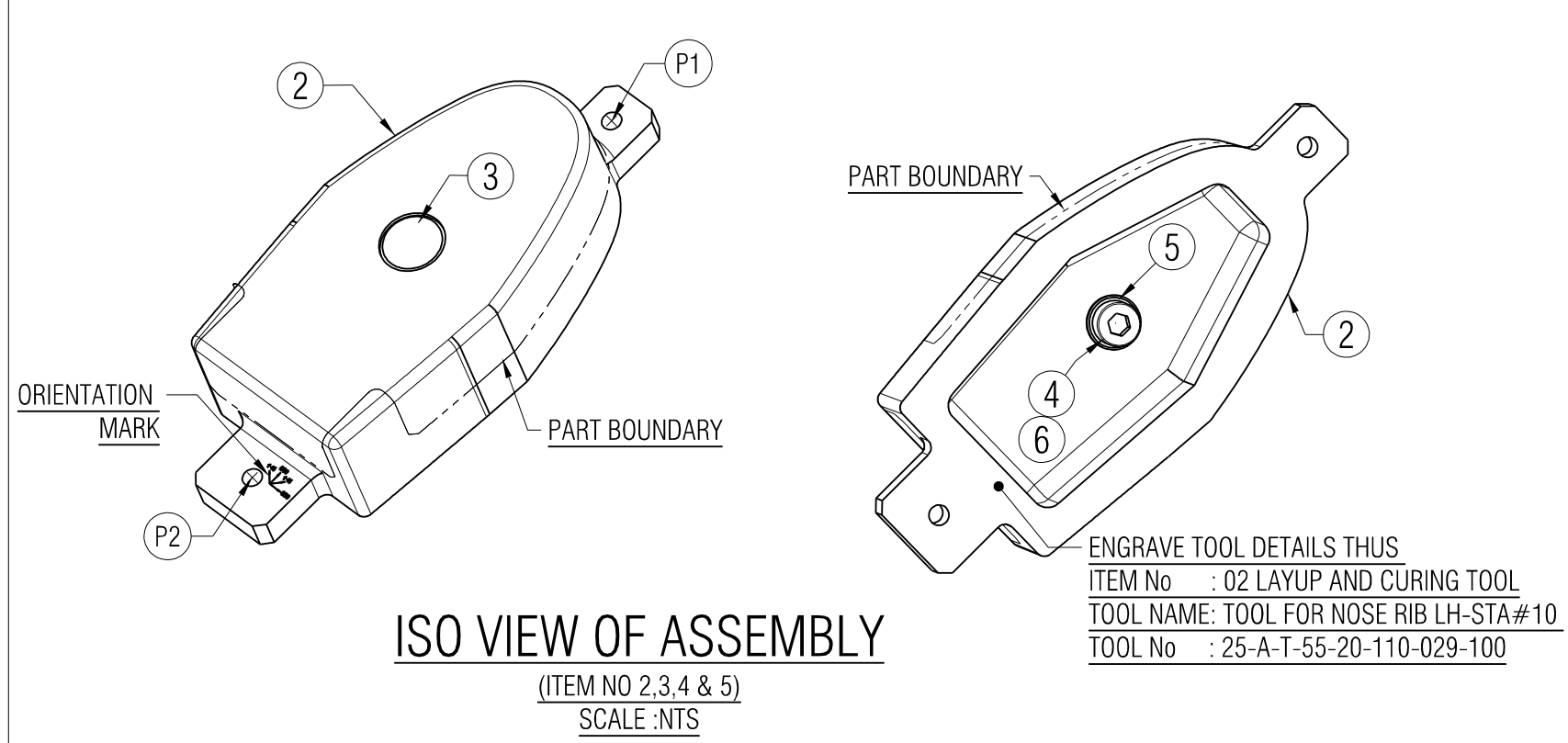
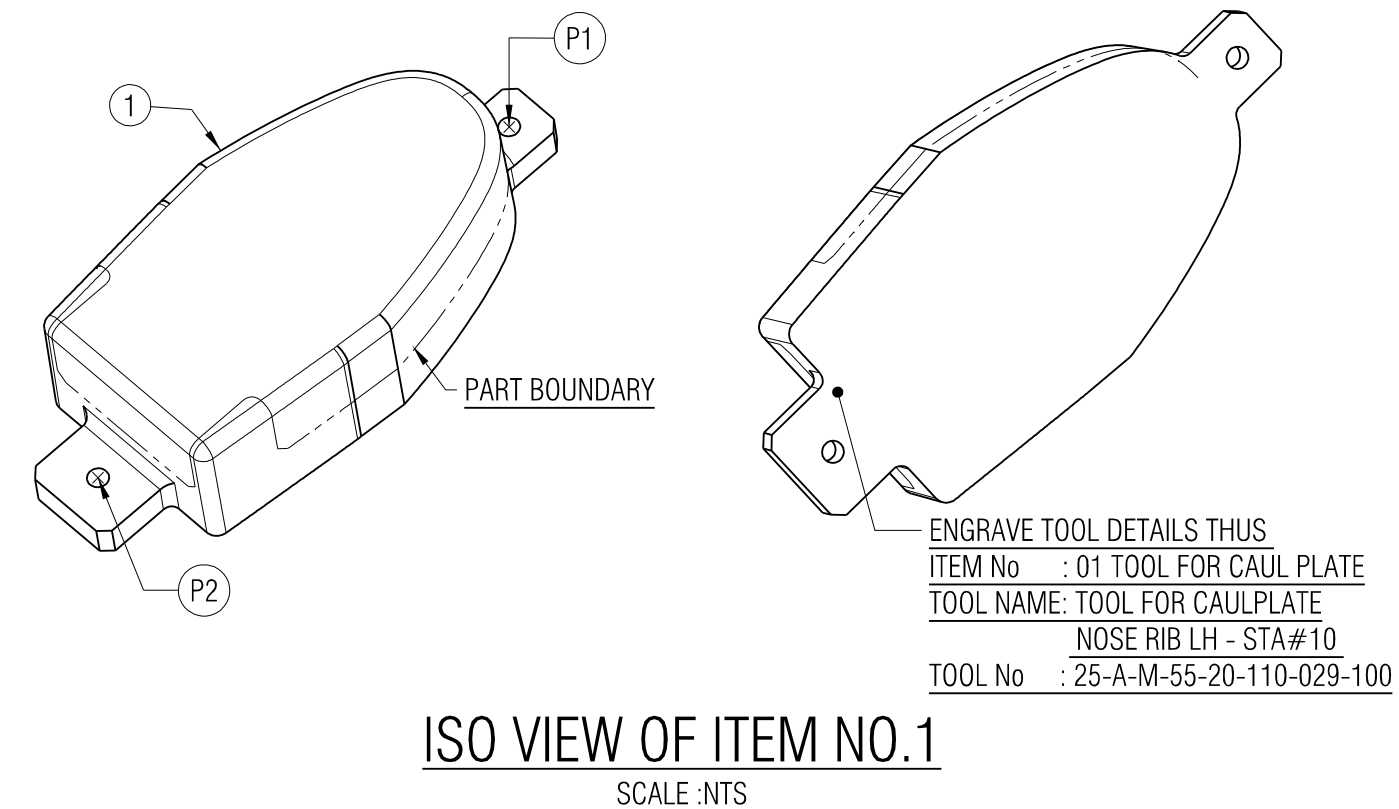


NOTES:

- 1) THIS TOOL IS MADE TO MANUFACTURE NOSE RIB LH STA#10 25-A-T-55-20-110-029-100.
- 2) CATIA MODEL IS THE MASTER DEFINITION OF THE TOOL.
- 3) TOOL CONTOUR IS OFFSET BY 0.2mm INSIDE FROM THE PART INNER SURFACE FOR TOOLTECH AND PEELPLY ALLOWANCE.
- 4) BREAK AT SHARP EDGES.
- 5) ENGRAVE PART BOUNDARY AND ORIENTATION MARK AS PER CAD MODEL, FOR
SCRIBE LINE DETAILS, REFER DETAIL-D.
- 6) STRESS RELIEVE THE TOOL BEFORE FINAL MACHINING OF CONTOUR (ITEM N. 1 & 2).
- 7) INSPECT THE CONTOUR USING CMM WRT OTP HOLE CO-ORDINATES. FOR OTP CO-ORDINATES REFER TABLE 1&2
- 8) TOLERANCE : A) CONTOUR TOLERANCE $\pm 0.3\text{mm}$
B) ON TOOL THICKNESS $\pm 2\text{mm}$.
C) UNTOLERANCED DIMENSIONS TO
CONFIRM TO SPEC : IS2102(PART-1)-COARSE.
- 9) FINISH ITEM NO 1 WITH ANODIZATION AND ITEM NO 2 & 3 WITH ELECTROLESS NICKEL COATING.
- 10) ITEM No.3 IS PART OF THE CORE, TO BE POSITIONED BEFORE LAYUP WHICH ENABLES TO REMOVE THE PART AFTER CURING. PUT 0.12mm TOOLTECH ON BOTH SIDES AND ENSURE THE SURFACE LEVEL WITH CORE.
- 11) USE ITEM No. 4 AT THE TIME OF LAYUP & CURING. AFTER CURING REMOVE ITEM No.4 USE ITEM No.6 FOR PART RELEASE.
- 12) DRAWING AS DRAWN FOR LH AND OPP HAND FOR RH.
- 13) SUPPLY METAL TAG FOR ITEM 1 & 2 ARE SHOWN BELOW.

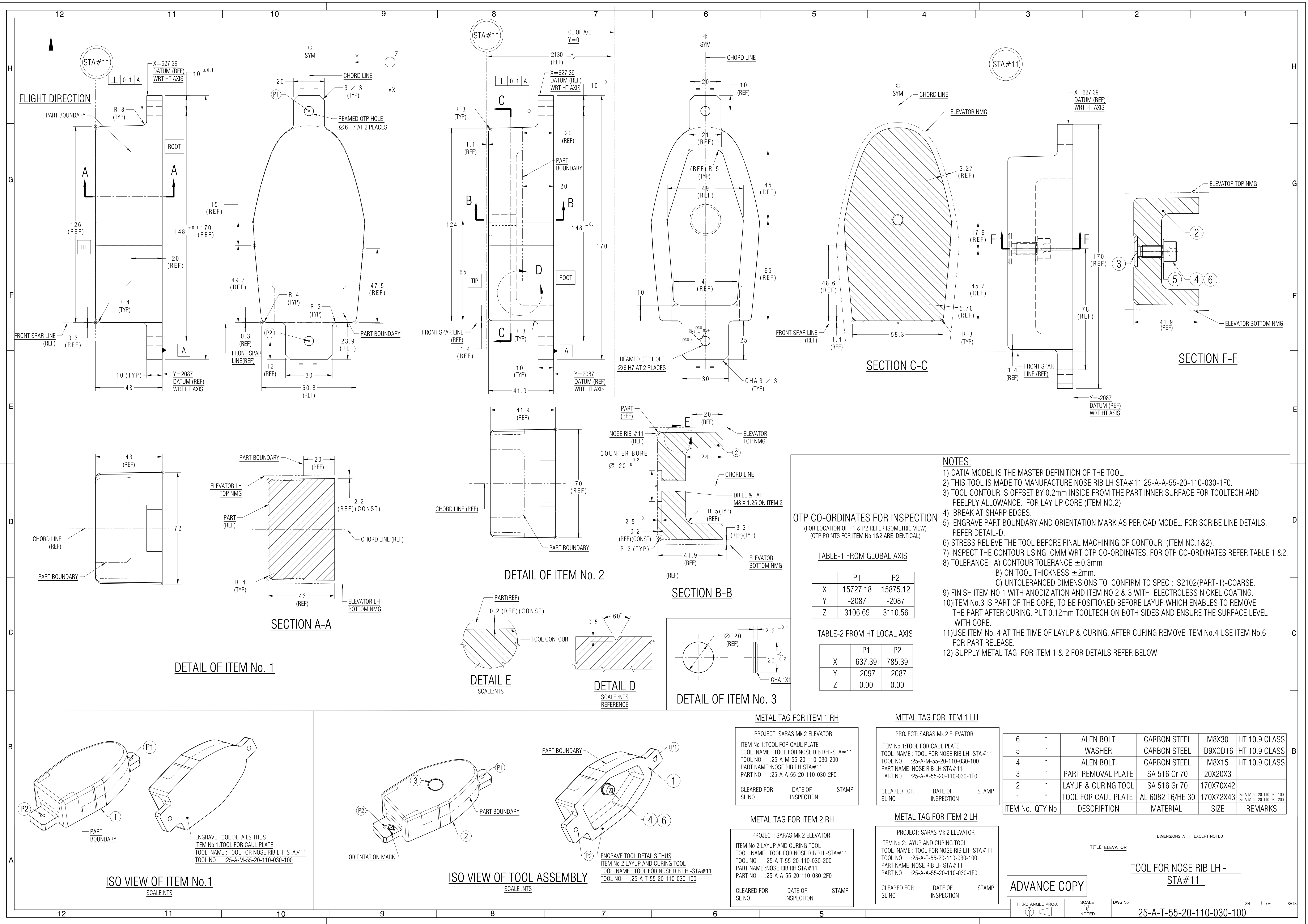
TABLE 1 FOR GLOBAL AXIS				TABLE 2 FOR HT LOCAL AXIS			
POINTS	FROM A/C GLOBAL AXIS			POINTS	FROM A/C HT AXIS		
	X	Y	Z		X	Y	Z
P1	15875.12	-1869	3110.56	P1	785.39	-1869	0
P2	15722.12	-1869	3106.55	P2	632.34	-1869	0

6	1	ALLEN BOLT	CARBON STEEL	M8X15	HT 10.9 CLASS
5	1	WASHER	CARBON STEEL	M8X1.25X30	HT 10.9 CLASS
4	1	ALLEN BOLT	CARBON STEEL	M8X15	HT 10.9 CLASS
3	1	PART REMOVAL PLATE	SA 516 Gr.70	20X20X3	
2	1	LAYUP & CURING TOOL	SA 516 Gr.70	175X74X40	
1	1	TOOL FOR CAULPLATE	AL 6082 T6/HE 30	175X77X41	25-A-M-55-20-110-029-100 25-A-M-55-20-110-029-200
ITEM No.	QTY No.	DESCRIPTION	MATERIAL	SIZE	REMARKS



PROJECT : SARAS Mk-II ELEVATOR		
ITEM NO.02 LAYUP AND CURING TOOL		
TOOL NAME : TOOL FOR NOSE RIB LH - STA#10		
TOOL NO : 25-A-T-55-20-110-029-100		
PART NAME : NOSE RIB LH-STA#10		
PART NO : 25-A-A-55-20-110-029-1F0		
SL NO	DATE OF	STAMP
	INSPECTION	

 THIRD ANGLE PROJ.		SCALE 1" = 1'-0" NOTED	DWG.No. 25-A-T-55-20-110-029-100	SHT. 01 OF 01 SHTS
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- NOTES:**
- CATIA MODEL IS THE MASTER DEFINITION OF THE TOOL.
 - THIS TOOL IS MADE TO MANUFACTURE NOSE RIB LH STA#11 25-A-A-55-20-110-030-1F0.
 - TOOL CONTOUR IS OFFSET BY 0.2mm INSIDE FROM THE PART INNER SURFACE FOR TOOLTECH AND PEELPLY ALLOWANCE. FOR LAY UP CORE (ITEM NO.2)
 - BREAK AT SHARP EDGES.
 - ENGRAVE PART BOUNDARY AND ORIENTATION MARK AS PER CAD MODEL. FOR SCRIBE LINE DETAILS, REFER DETAIL-D.
 - STRESS RELIEVE THE TOOL BEFORE FINAL MACHINING OF CONTOUR. (ITEM NO.1&2).
 - INSPECT THE CONTOUR USING CMM WRT OTP CO-ORDINATES. FOR OTP CO-ORDINATES REFER TABLE 1 &2.
 - TOLERANCE : A) CONTOUR TOLERANCE ± 0.3 mm
B) ON TOOL THICKNESS ± 2 mm.
C) UNTOLERANCED DIMENSIONS TO CONFIRM TO SPEC : IS2102(PART-1)-COARSE.
 - FINISH ITEM NO 1 WITH ANODIZATION AND ITEM NO 2 & 3 WITH ELECTROLESS NICKEL COATING.
 - ITEM NO.3 IS PART OF THE CORE. TO BE POSITIONED BEFORE LAYUP WHICH ENABLES TO REMOVE THE PART AFTER CURING. PUT 0.12mm TOOLTECH ON BOTH SIDES AND ENSURE THE SURFACE LEVEL WITH CORE.
 - USE ITEM No. 4 AT THE TIME OF LAYUP & CURING. AFTER CURING REMOVE ITEM No.4 USE ITEM No.6 FOR PART RELEASE.
 - SUPPLY METAL TAG FOR ITEM 1 & 2 FOR DETAILS REFER BELOW.

OTP CO-ORDINATES FOR INSPECTION

(FOR LOCATION OF P1 & P2 REFER ISOMETRIC VIEW)
(OTP POINTS FOR ITEM NO 1&2 ARE IDENTICAL)

TABLE-1 FROM GLOBAL AXIS

	P1	P2
X	15727.18	15875.12
Y	-2087	-2087
Z	3106.69	3110.56

TABLE-2 FROM HT LOCAL AXIS

	P1	P2
X	637.39	785.39
Y	-2097	-2087
Z	0.00	0.00

6	1	ALLEN BOLT	CARBON STEEL	M8X30	HT 10.9 CLASS
5	1	WASHER	CARBON STEEL	ID9XOD16	HT 10.9 CLASS
4	1	ALLEN BOLT	CARBON STEEL	M8X15	HT 10.9 CLASS
3	1	PART REMOVAL PLATE	SA 516 Gr.70	20X20X3	
2	1	LAYUP & CURING TOOL	SA 516 Gr.70	170X70X42	
1	1	TOOL FOR CAUL PLATE	AL 6082 T6/HE 30	170X72X43	25-A-M-55-20-110-030-100 25-A-M-55-20-110-030-200
ITEM No.	QTY No.	DESCRIPTION	MATERIAL	SIZE	REMARKS

METAL TAG FOR ITEM 1 RH

PROJECT: SARAS Mk 2 ELEVATOR
ITEM No 1:TOOL FOR CAUL PLATE
TOOL NAME : TOOL FOR NOSE RIB RH -STA#11
TOOL NO : 25-A-M-55-20-110-030-200
PART NAME :NOSE RIB RH STA#11
PART NO : 25-A-A-55-20-110-030-2F0
CLEARED FOR SL NO DATE OF INSPECTION STAMP

METAL TAG FOR ITEM 1 LH

PROJECT: SARAS Mk 2 ELEVATOR
ITEM No 1:TOOL FOR CAUL PLATE
TOOL NAME : TOOL FOR NOSE RIB LH -STA#11
TOOL NO : 25-A-M-55-20-110-030-100
PART NAME :NOSE RIB LH STA#11
PART NO : 25-A-A-55-20-110-030-1F0
CLEARED FOR SL NO DATE OF INSPECTION STAMP

METAL TAG FOR ITEM 2 RH

PROJECT: SARAS Mk 2 ELEVATOR
ITEM No 2:LAYUP AND CURING TOOL
TOOL NAME : TOOL FOR NOSE RIB RH -STA#11
TOOL NO : 25-A-T-55-20-110-030-200
PART NAME :NOSE RIB RH STA#11
PART NO : 25-A-A-55-20-110-030-2F0
CLEARED FOR SL NO DATE OF INSPECTION STAMP

METAL TAG FOR ITEM 2 LH

PROJECT: SARAS Mk 2 ELEVATOR
ITEM No 2:LAYUP AND CURING TOOL
TOOL NAME : TOOL FOR NOSE RIB LH -STA#11
TOOL NO : 25-A-T-55-20-110-030-100
PART NAME :NOSE RIB LH STA#11
PART NO : 25-A-A-55-20-110-030-1F0
CLEARED FOR SL NO DATE OF INSPECTION STAMP

DIMENSIONS IN mm EXCEPT NOTED

TITLE: ELEVATOR

TOOL FOR NOSE RIB LH -
STA#11

ADVANCE COPY

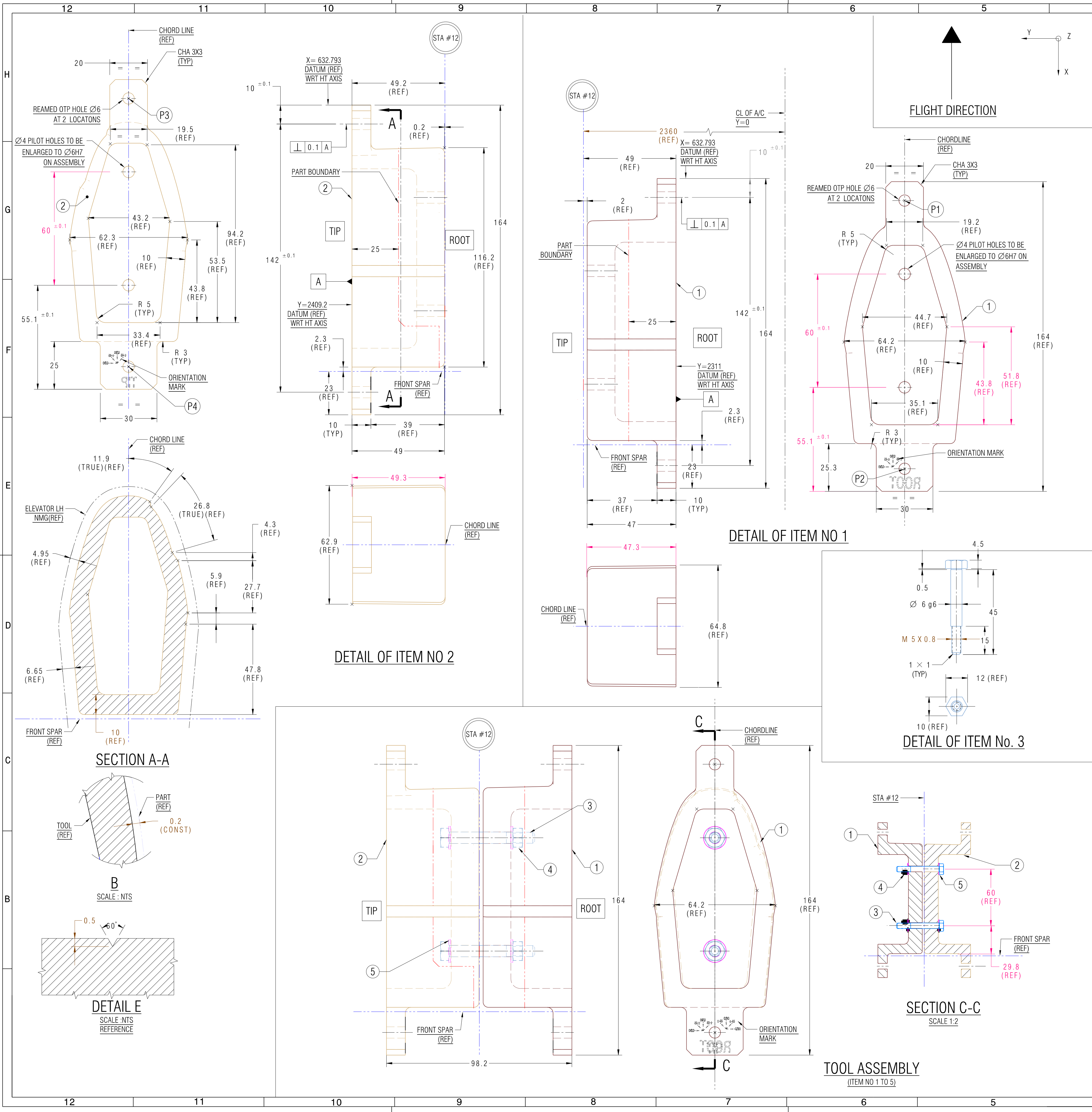


SCALE
1:1
NOTED

DWG.No.

25-A-T-55-20-110-030-100

SHT. 1 OF 1 SHTS



EGRAVE TOOL DETAIL THUS
TOOL NAME:TOOL FOR NOSE RIB LH STA#12
TOOL NO :25-A-T-55-20-110-031-100
ITEM NO :01

ISO VIEW
SCALE: NTS

EGRAVE TOOL DETAIL THUS
TOOL NAME:TOOL FOR NOSE RIB LH STA#12
TOOL NO :25-A-T-55-20-110-031-100
ITEM NO :01

NOTES:

- THIS TOOL IS MADE TO MANUFACTURE NOSE RIB LH STA#12 LH 25-A-A-55-20-110-031-100.
- CAD MODEL IS THE MASTER DEFENITION OF THE TOOL.
- TOOL CONTOUR IS OFFSET BY 0.2MM INSIDE FROM THE PART INNER SURFACE FOR TOOL TECH AND PEELLY ALLOWANCE.
- BREAK AT SHARP EDGES BY 0.5R.
- ENGRAVE PART BOUNDARY AND ORIENTAION MARK AS PER CAD MODEL.FOR SCRIBE LINE DETAILS, REFER DETAIL-E.
- STRESS RELIEVE THE TOOL BEFORE FINAL MACHINING OF CONTOUR.
- INSPECT THE CONTOUR USING CMM WRT TOOLING HOLE CO-ORDINATES.
- FOR OTP CO- ORDINATES REFER TABLE-1 AND TABLE-2
- TOLERANCE : A) CONTOUR TOLERANCE ±0.3mm
B) ON TOOL THICKNESS ±2mm.
C) UNTOLERANCED DIMENSIONS TO CONFIRM TO SPEC : IS2102(PART-1)-COARSE.
- FINISH THE TOOL OTHER THAN STANDARD FASTENERS WITH ELECTROLESS NICKEL COATING.
- SUPPLY METAL TAG AND FOR DETAILS FEFER ZONE [D2].
- ENGRAVE TOOL NAME AND TOOL NO ON TOOL AT NON WORKING PLACE.

METAL TAG

PROJECT-SARAS Mk-II ELEVATOR

TOOL NAME:TOOL FOR NOSE RIB LH STA#12
TOOL NO :25-A-T-55-20-110-031-100
PART NAME:NOSE RIB LH STA#12
PART NO:25-A-A-55-20-110-031-1F0
CLEARED FOR SL NO

DATE OF INSPECTION

STAMP

100 (REF)

METAL TAG

PROJECT-SARAS Mk-II ELEVATOR

TOOL NAME:TOOL FOR NOSE RIB LH STA#12
TOOL NO :25-A-T-55-20-110-031-200
PART NAME:NOSE RIB LH STA#12
PART NO:25-A-A-55-20-110-031-2F0
CLEARED FOR SL NO

DATE OF INSPECTION

STAMP

100 (REF)

OTP CO-ORDINATES
(FOR THE LOCATION OF P1 TO P4 REFER ISOMETRIC VIEW)

TABLE-1 FROM GLOBAL AXIS				TABLE-2 FROM HT LOCAL AXIS			
ITEM No.	X	Y	Z	ITEM No.	X	Y	Z
P1	15732.57	-2321	3106.83	P1	642.79	-2311	0
P2	15874.53	-2321	3110.54	P2	784.79	-2311	0
P3	15732.57	-2399.2	3106.82	P3	642.79	-2399.2	0
P4	15874.53	-2399.2	3110.54	P4	784.79	-2399.2	0

	5	4	WASHER	CARBON STEEL	ID7 X OD14 X 1	HT 10.9 CLASS
	4	2	HEX NUT	CARBON STEEL	M6X1	HT 10.9 CLASS
	3	2	HEX DOWEL BOLT	EN - 24	M6X1X45	HRC 40-45
	2	1	LAYUP & CURING TOOL-TIP	SA 516 Gr.70	164X63X50	
	1	1	LAYUP & CURING TOOL-ROOT	SA 516 Gr.70	164X65X48	
ITEM No.	QTY	DESCRIPTION	MATERIAL	SIZE	REMARKS	

ADVANCE COPY

TITLE: ELEVATOR

TOOL FOR NOSE RIB LH STA#12

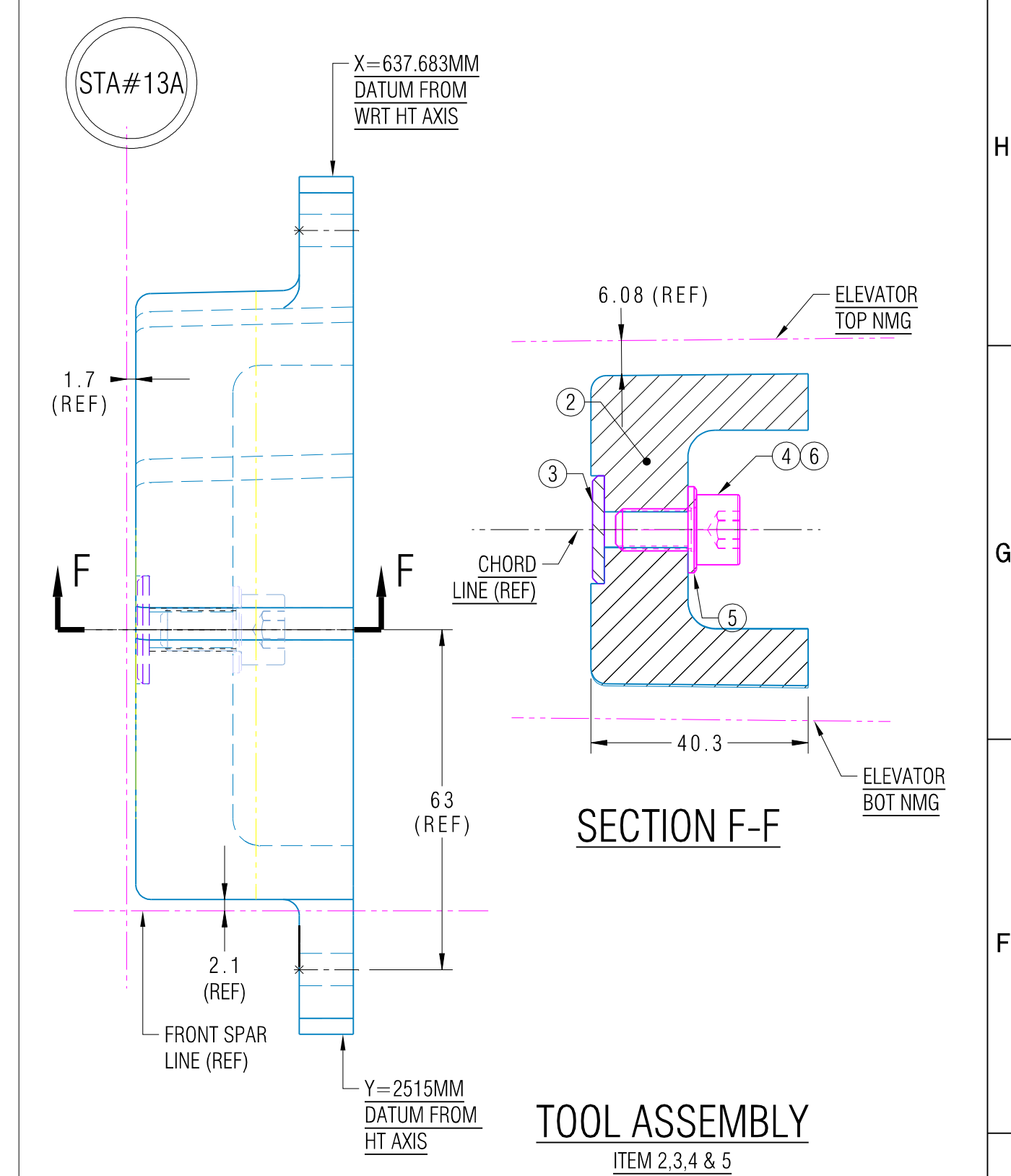
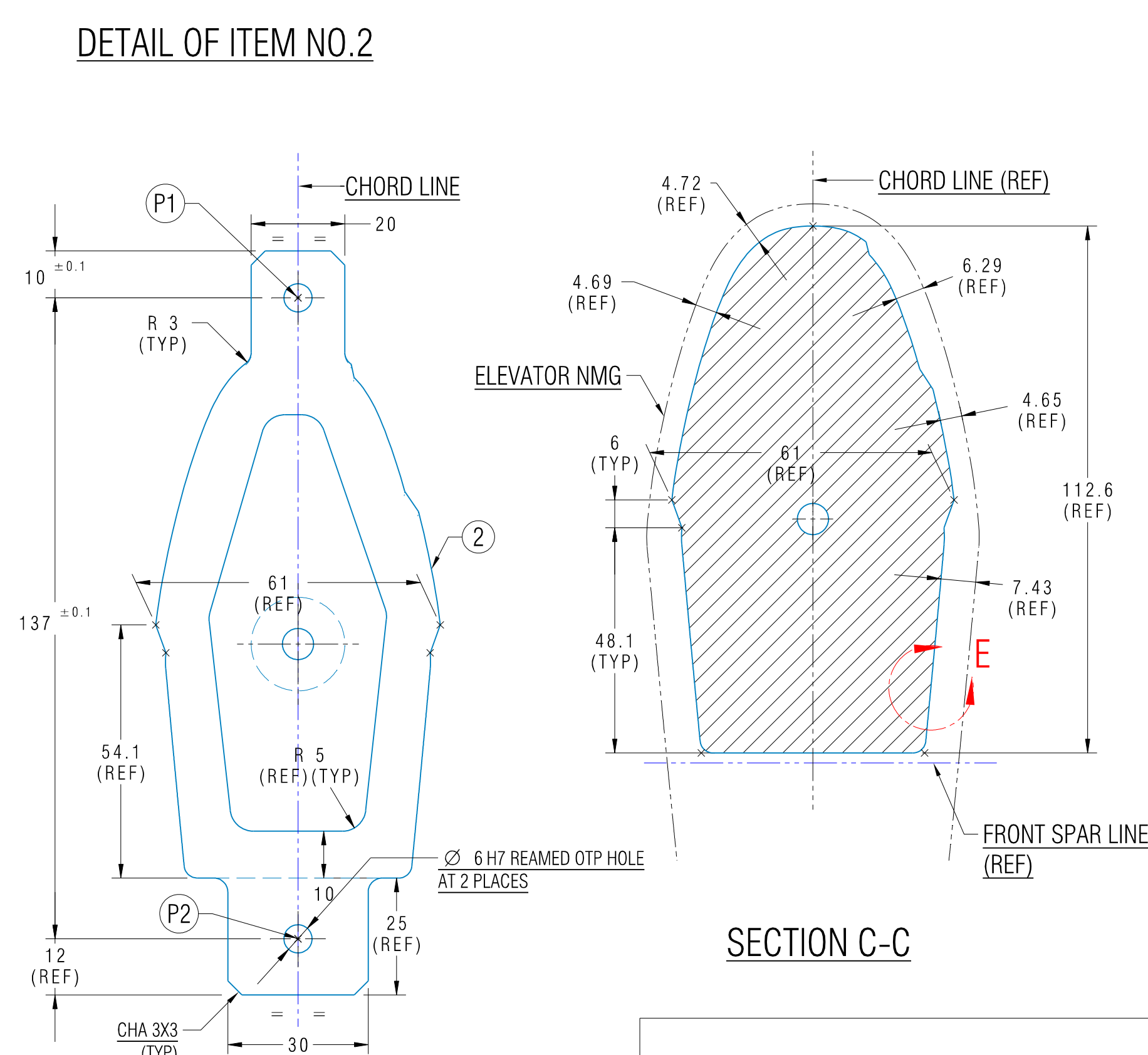
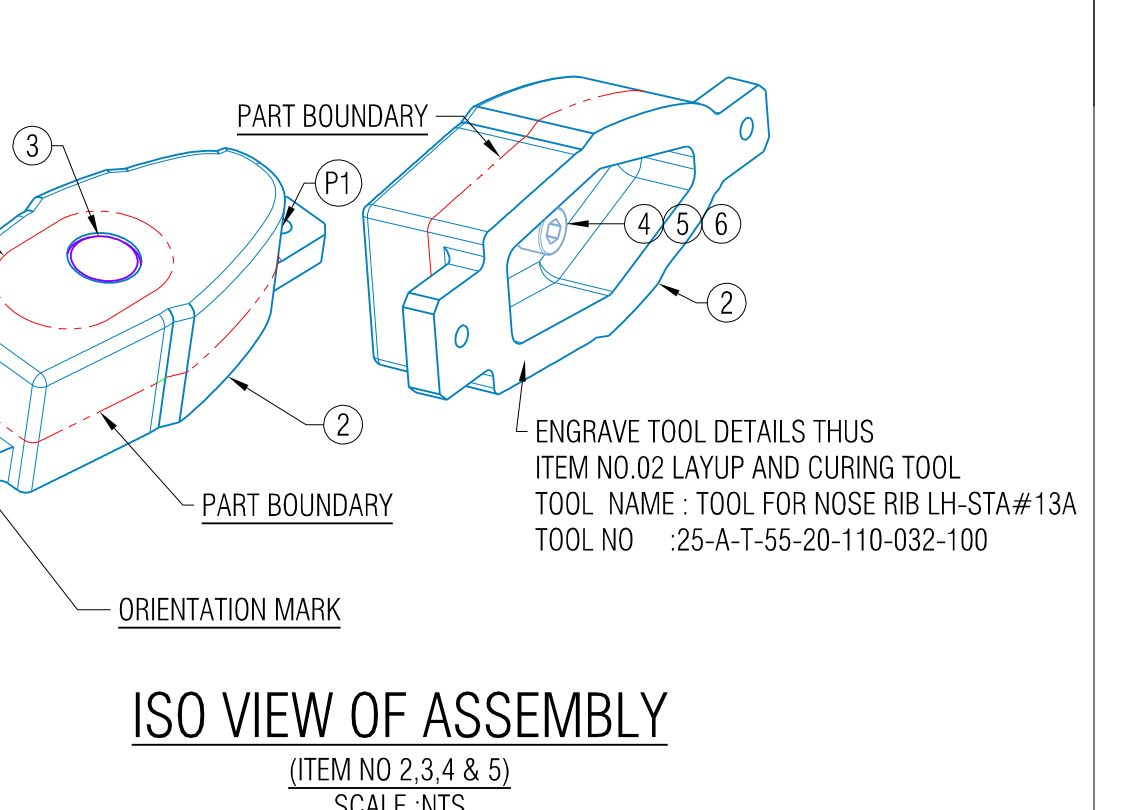
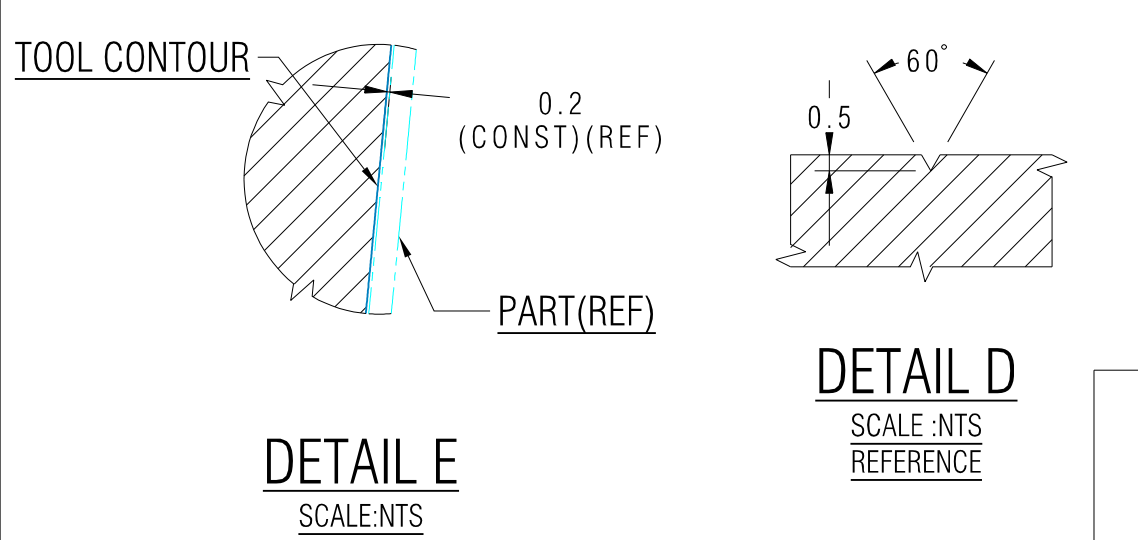
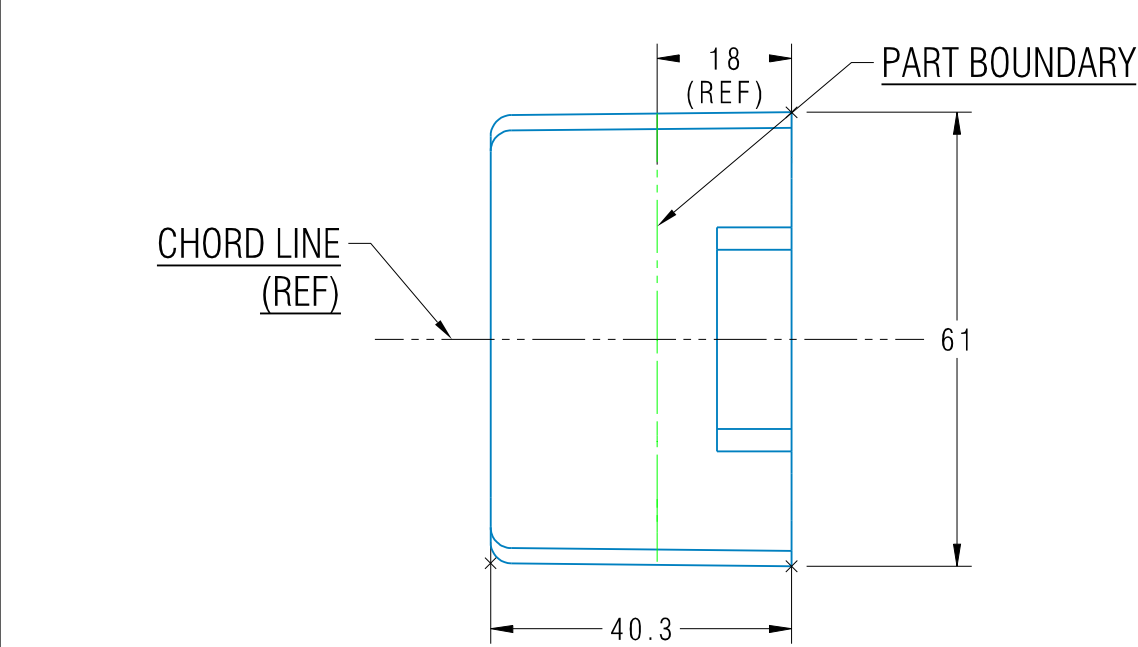
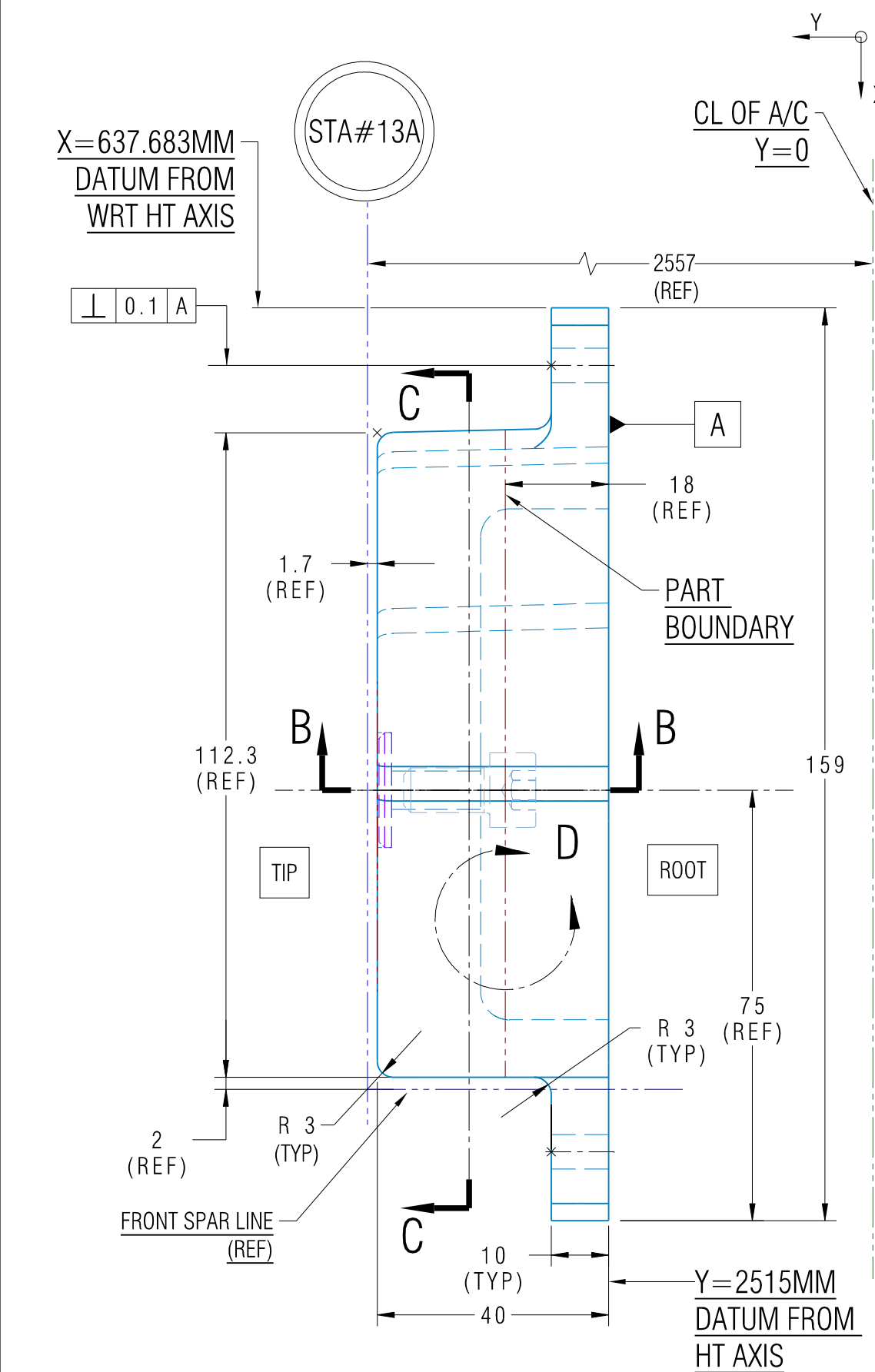
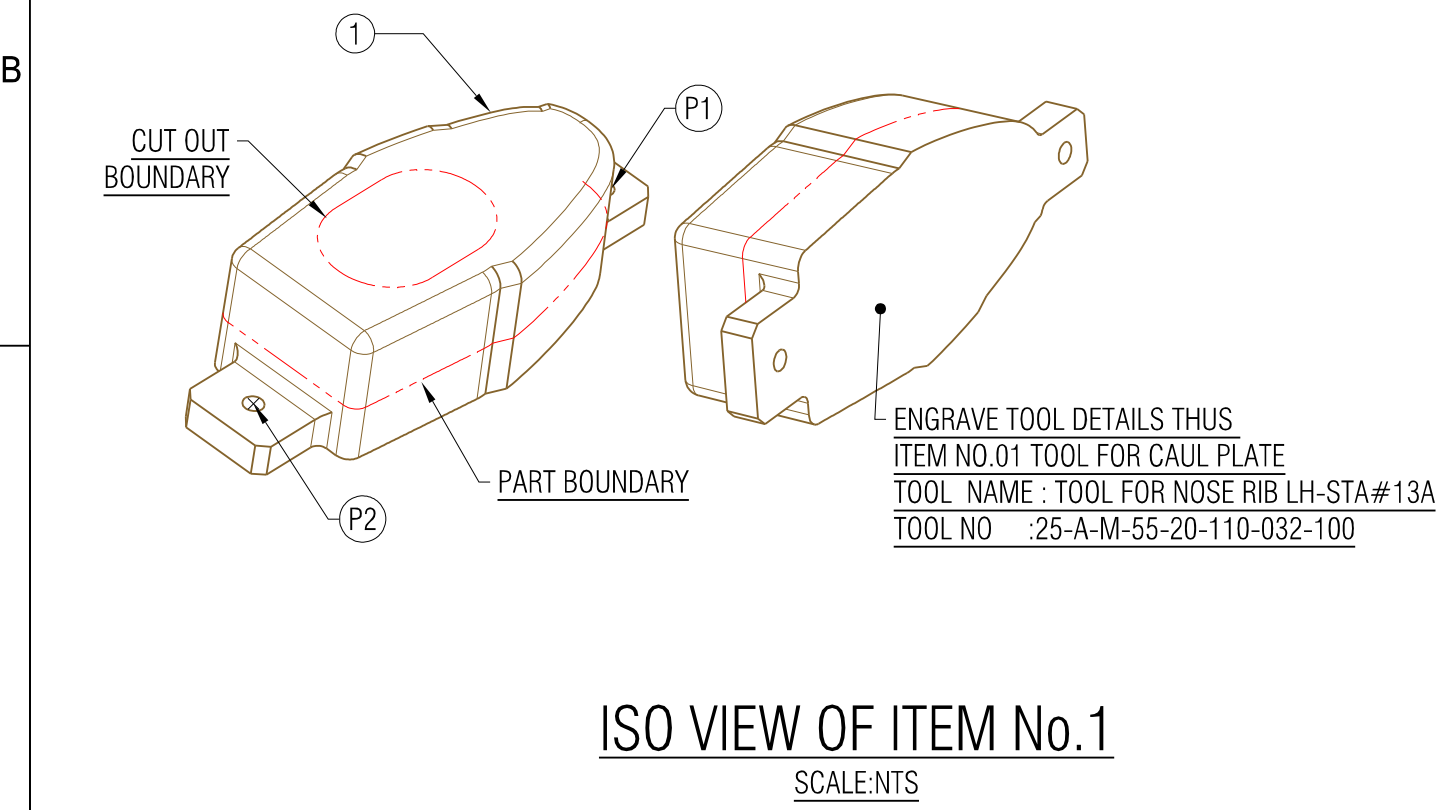
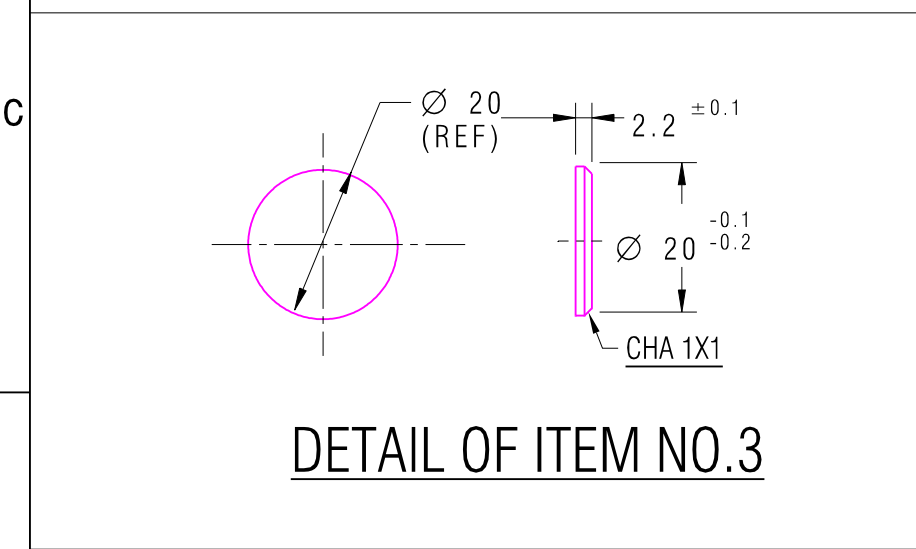
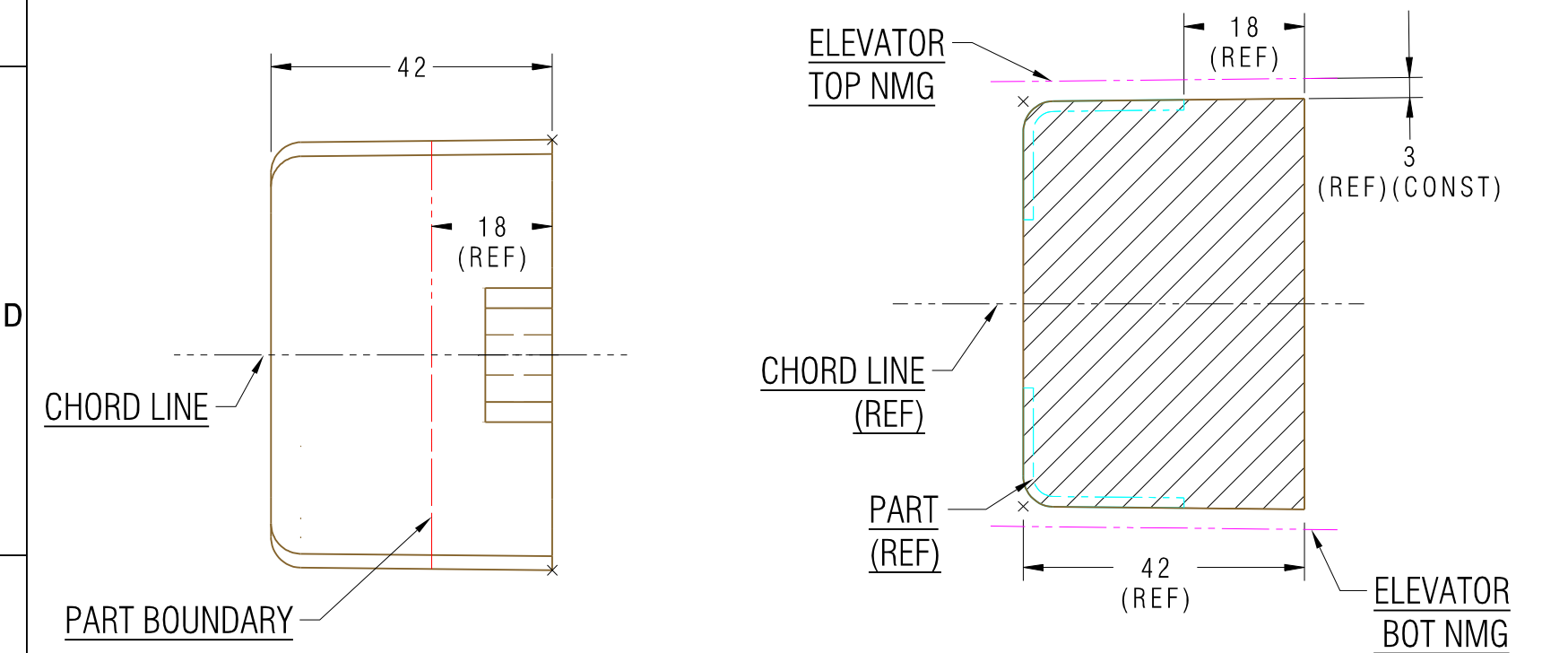
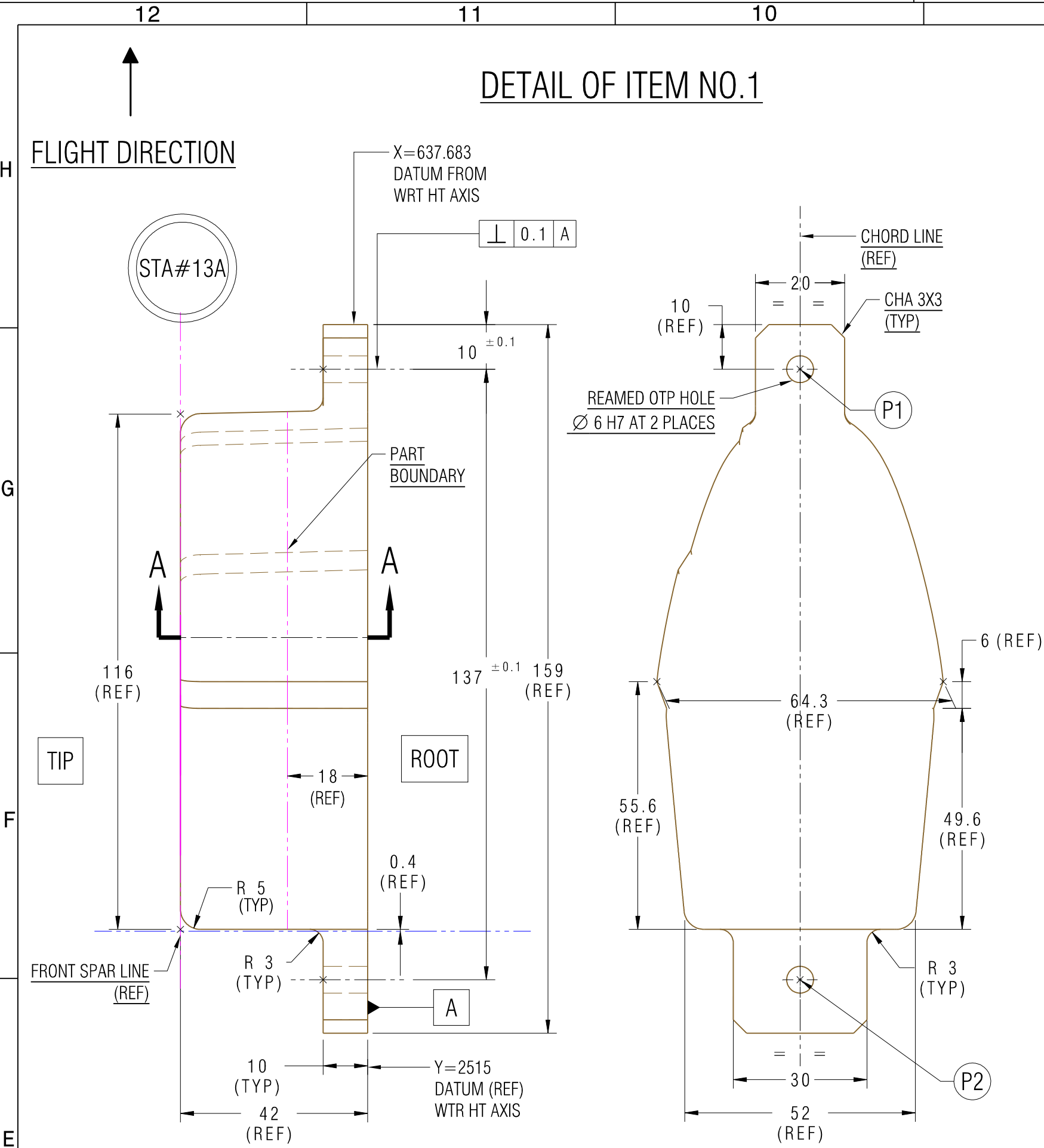
DIMENSIONS IN mm EXCEPT NOTED

SCALE: 1:1 NOTED

DWG.No.

SHT. 1 OF 1 SHTS

25-A-A-55-20-110-031-100



OTP CO - ORDINATES
(FOR THE LOCATION P1 TO P2 REFER ISOMETRIC VIEW)

TABLE - 1 FROM GLOBAL AXIS

ITEM No.	X	Y	Z
P1	15737.46	-2525	3106.95
P2	15874.41	-2525	3110.54

TABLE - 2 FROM HT LOCAL AXIS

ITEM No.	X	Y	Z
P1	647.68	-2525	0
P2	784.68	-2525	0

- NOTES:
- CATIA MODEL IS THE MASTER DEFINITION OF THE TOOL.
 - THIS TOOL IS MADE TO MANUFACTURE NOSE RIB LH-STA#13A 25-A-A-55-20-110-032-1F0.
 - TOOL CONTOUR IS OFFSET BY 0.2MM INSIDE FROM THE PART INNER SURFACE FOR TOOLTECH AND PEELPLY ALLOWANCE FOR LAYUP CORE(ITEM NO.2).
 - BREAK AT SHARP EDGES.
 - ENGRAVE PART BOUNDARY AND ORIENTAION MARK AS PER CAD MODEL. FOR SCRIBE LINE DETAILS, REFER DETAIL-D.
 - STRESS RELIEVE THE TOOL BEFORE FINAL MACHINING OF CONTOUR(ITEM NO.1 &2).
 - INSPECT THE CONTOUR USING CMM WRT OTP CO-ORDINATES. FOR OTP HOLE CO-ORDINATES REFER TABLE 1&2
 - TOLERANCE :
 - CONTOUR TOLERANCE ±0.3mm
 - ON TOOL THICKNESS ±2mm.
 - UNTOLERANCED DIMENSIONS TO CONFIRM TO SPEC : IS2102(PART-1)-COARSE.
 - FINISH ITEM NO 1 WITH ANODIZATION AND ITEM NO 2 & 3 WITH ELECTROLESS NICKEL COATING.
 - ITEM No.3 IS PART OF THE CORE, TO BE POSITIONED BEFORE LAYUP WHICH ENABLES TO REMOVE THE PART AFTER CURING. PUT 0.12mm TOOLTECH ON BOTH SIDES AND ENSURE THE SURFACE LEVEL WITH CORE.
 - USE ITEM No. 4 AT THE TIME OF LAYUP & CURING. AFTER CURING REMOVE ITEM No.4 USE ITEM No.6 FOR PART RELEASE.
 - SUPPLY METAL TAG FOR ITEM 1&2, FOR DETAIL REFER BELOW..

METAL TAG LH FOR ITEM 1	METAL TAG RH FOR ITEM 1
PROJECT: SARAS Mk 2 ELEVATOR ITEM NO.01 TOOL FOR CAUL PLATE TOOL NAME : TOOL FOR NOSE RIB LH-STA#13A TOOL NO : 25-A-M-55-20-110-032-100 PART NAME :NOSE RIB LH-STA 13A PART NO : 25-A-A-55-20-110-032-1F0 CLEARED FOR SL NO DATE OF INSPECTION STAMP	PROJECT: SARAS Mk 2 ELEVATOR ITEM NO.01 TOOL FOR CAUL PLATE TOOL NAME : TOOL FOR NOSE RIB RH-STA#13A TOOL NO : 25-A-M-55-20-110-032-200 PART NAME :NOSE RIB RH-STA 13A PART NO : 25-A-A-55-20-110-032-2F0 CLEARED FOR SL NO DATE OF INSPECTION STAMP
METAL TAG LH FOR ITEM 2	METAL TAG RH FOR ITEM 2
PROJECT: SARAS Mk 2 ELEVATOR ITEM NO.02 LAYUP AND CURING TOOL TOOL NAME : TOOL FOR NOSE RIB LH-STA#13A TOOL NO : 25-A-T-55-20-110-032-100 PART NAME :NOSE RIB LH-STA 13A PART NO : 25-A-A-55-20-110-032-1F0 CLEARED FOR SL NO DATE OF INSPECTION STAMP	PROJECT: SARAS Mk 2 ELEVATOR ITEM NO.02 LAYUP AND CURING TOOL TOOL NAME : TOOL FOR NOSE RIB RH-STA#13A TOOL NO : 25-A-T-55-20-110-032-200 PART NAME :NOSE RIB RH-STA 13A PART NO : 25-A-A-55-20-110-032-2F0 CLEARED FOR SL NO DATE OF INSPECTION STAMP

6	1	ALLEN BOLT	CARBON STEEL	M8X30	HT 10.9 CLASS
5	1	WASHER	CARBON STEEL	ID9XOD16	HT 10.9 CLASS
4	1	ALLEN BOLT	CARBON STEEL	M8X15	HT 10.9 CLASS
3	1	PART REMOVAL PLATE	SA 516 Gr.70	20X20X3	
2	1	LAYUP & CURING TOOL	SA 516 Gr.70	160X61X41	
1	1	TOOL FOR CAULPLATE	AL 6082 T6/HE 30	160X65X42	25-A-M-55-20-110-032-100 25-A-M-55-20-110-032-200
ITEM No.	QTY No.	DESCRIPTION	MATERIAL	SIZE	REMARKS

Tender No.: NAL/PUR/

BID-SECURING DECLARATION FORM

Date: _____

Bid No. _____

To (insert complete name and address of the purchaser)

I/We, The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

(a)	have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or
(b)	having been notified of the acceptance of our Bid by the purchaser during the period of bid validity
	(i) fail or reuse to execute the contract, if required, or
	(ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown)
in the capacity of (insert legal capacity of person signing the Bid Securing Declaration).

Name: (insert complete name of person signing the Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of: (insert complete name of Bidder)

Dated on _____ day of _____ (insert date of signing)

Corporate Seal (where appropriate)

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid)

Tender No.: NAL/PUR/

SELF DECLARATION CERTIFICATE FOR LOCAL CONTENT

In Respect of NIT/RFQ No.
issued by CSIR-National Aerospace Laboratories, Bengaluru

I, the undersigned, (full names),
do hereby declare, in my capacity asof
..... (name of bidder / OEM), the
following:

- a) The facts contained herein are within my own personal knowledge.
- b) I have read and understood the requirement of Local Content and same is specified as percentage calculated in accordance with the definition provided at clause 2 of revised **Public Procurement (Preference to Make in India) Order 2017.**
"Local content" as per above order means the amount of value added in India which shall be the total value of items procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value in percent."
- c) I have satisfied myself that the goods/services/works to be delivered in terms of the above-specified NIT comply with the local content requirements and I hereby confirm in respect of quoted item(s) that:
- (i) Local Content is equal to ----- (in percentage) and come under 'Class-I Local Supplier Category' (The local content requirement to categorize a supplier as Class I Local Supplier is minimum 50%)
- Or
- (i) Local Content is equal to ----- (in percentage) and come under 'Class-II Local Supplier Category' (The local content requirement to categorize a supplier as Class II Local Supplier is minimum 20%)
(Tick appropriate Category of Local Supplier).
- (d) The local content calculated using the definition given above are as under:

Sl. No	Name of Item / Equipment	Local content calculated as above (%)	Location of local value addition (Location shall be the specified as name of city or district, etc.)	Imported content including all Customs duties (%)

Note: Attach separate sheet duly signed if space is not sufficient.

- (e) I understand that if we are offering products with local content less than the minimum requirement prescribed under Clause 5 of the above order, we will fall under the category of Non-Local Suppliers. We can't claim ourselves as Class-I local suppliers/ Class-II local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training and after sales service support like AMC/CMC etc. as local value addition.
- (f) I also understand; false declarations will be in breach of the code of integrity under rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.

SIGNATURE:

DATE:

Seal / Stamp

NB:

- (i) Before completing this declaration, bidders must study the General Conditions, Definitions, Government Directives applicable in respect of Local Content & prescribed tender conditions.
- (ii) In case the bidder is supplier and not OEM, then the above mentioned MII certificate should be given by the OEM in their letter head.
- (iii) Local content percentage shall be declared item wise or tender wise strictly as per the terms of the tender.
- (iv) Local Content Declaration to be signed by Chief Financial Officer or other Legally Responsible Person Nominated in Writing by The Chief Executive or Senior Member/Person with Management Responsibility (Corporation, Partnership or Individual).
- (v) The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.

Tender No.: NAL/PUR/

Format for declaration by the Bidder for Code of Integrity & Conflict of Interest (This declaration should be furnished on the Bidders Letter Head

Ref. No: _____

Date _____

To,

(Name & address of the Purchaser)

Sir/Madam,

With reference to your Tender No. _____ dated _____ I/We hereby declare that we shall abide by the Code of Integrity for Public Procurement as mentioned under Para 1.3.0 of ITB of your Tender document and have no Conflict of Interest.

The details of any previous transgressions of the Code of Integrity with any entity in any country during the last three years or of being debarred by any other Procuring Entity are as under:

- a)
- b)
- c)

We undertake that we shall be liable for any punitive action in case of transgression / contravention of this code.

Thanking you,

Yours Sincerely,

Signature
(Name of the Authorised Signatory)
Company Seal

Tender No.: NAL/PUR/

SELF CERTIFICATION

With reference to Clause No. 1.1.3, of this tender and Gol, Ministry of Finance Order No.: F. No. 6/18/2019-PPD, dated 23rd July, 2020, on "Restrictions under Rule 144 (xi), of the General Financial Rules (GFRs)", & OM No. F. No. 18/37/2020-PPD, dated 8th February, 2021, and as amended from time to time on the date of issue of Tender:

It is certified that

- ☐ We are not a bidder of a country which shares a land border with India.

OR

- ☐ We are a bidder of a country which shares a land border with India, however, we are eligible to bid in any procurement whether of goods or services as we are registered with the Competent Authority as specified in Ministry of Finance (Gol) Order No. 6/18/2019 – PPD, dated 23rd July 2020. Copy of valid registration is attached.
- ☐ Tick as applicable

Place:

Date:

Authorised Signatory Name:
Company Seal

TERMS & CONDITIONS

Tender No.		
Sl. No.	Approximate weight of the Consignment	Approximate dimensions of the consignment
1		
2	Indian Customs Tariff No. and HSN No. (ICT & HSN No.)	
3	Country of Origin	
4	Percentage of Local Content	
5	Annual Turnover	
6	Type of Supplier	
7	Mode of Shipment By Air/SEA/Road/e-download	
8	Port of Destination	Final Destination
9	Delivery Term (INCO Term), as the case may be	
10	Delivery Schedule including Supply, Installation, Commissioning, Training & Acceptance	
a)	Delivery of the Item BoQ/NIT [In weeks/Days/Months] from the date of PO/LC/ILC/ Advance [Mention the appropriate term]	
b)	Installation & Commissioning from the date of Delivery of item [In weeks/Days/Months]	
c)	Training from the date of Installation & Commissioning of item [In weeks/Days/Months]	
d)	Acceptance from the date of Training [In weeks/Days/Months]	

11	Installation & Commissioning (if any) Quoted Price inclusive or exclusive	
12	Training (if any) Quoted Price inclusive or exclusive	
13	Partial Shipment [If partial shipment required, the charges incurred towards partial shipment to be borne by Bidder]	
14	Payment Term	
15	Currency of Bid/Quotation	
16	Statutory Levies [GST/IGST or any other taxes, duties] % of tax to be mentioned.	
17	Bidder GST No.	
18	Bidder Bank Details along with Cancelled cheque	
19	Insurance Coverage	
20	Warranty	
21	Agree to submit Performance Security, if any	

23	Validity of offer	
24	Order to be placed [Full address, Tel #, Fax #, Email Id, Contact Person]	
25	Nature of the item [to be specified] Hazardous/Radio Active/ Perishable/ Dangerous/ Shelf-life or any other	
26	Bidder to mention in the quote, any special carrier requirement is necessary for transport viz Special License, ODC etc.,	
27	Any other	
28	Total Price quoted as per BoQ/Price Schedule/List of Deliverables exclusive of tax	
29	Total Price quoted as per BoQ/Price Schedule/List of Deliverables inclusive of tax	
Note:	Unit Price indicating currency FOB (named port of shipment or FCA (named place of delivery)	