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| Traveler Title | DN100 Braze Assembly |
| Traveler Abstract | Outlines the brazing assembly of the DN100 Flange |
| Traveler ID | AUP-ASSY-DAMP-FLGBRZ |
| Traveler Revision  | R2 |
| Traveler Author | Matthew Weaks |
| Traveler Date | 3-Apr-20 |
| NCR Informative Emails | jharris |
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| D3 Emails | Huque |
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| Approval Signatures |  |  |  |  |
| Approval Dates |  |  |  |  |
| Approval Title | Author | Reviewer | Project Manager |  |

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| References | List and Hyperlink all documents related to this traveler. This includes, but is not limited to: safety (THAs, SOPs, etc), drawings, procedures, and facility related documents. |
| [JL0086026](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-212525/JL0086026_-HHOM%20INNER%20TUBE.pdf) | [JL0088274](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-212516/JL0088274_-_DN100%20BRAZE%20ASSY.pdf) | [CERN EDMS No. 1389669](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-211730/EDMS%201389669%20-%20Engineering_specification_dressed_cavities.v2.5%281%29.pdf) | [CP-STP-CAV-CHEM-DEGR](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-211743/CP-STP-CAV-CHEM-DEGR-R3.pdf) | [JL0088272](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-246728/JL0088272_-_DN100%20MACHINING.pdf) |
| [JL0086025](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-212513/JL0086025_-_HHOM%20FLANGE%20DN100.pdf) | [JL0088274\_CMM](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-227561/JL0088274_-_DN100%20BRAZE%20ASSY_CMM.pdf) | [CP-STP-CAV-CHEM-ACID](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-211742/CP-STP-CAV-CHEM-ACID-R1.pdf) | [JL0088272\_CMM](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-227562/JL0088272_-_DN100%20MACHINING_CMM.pdf) |  |

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| Revision Note |  |
| R1 | Initial release of this Traveler. |
| R2 | Removed document check. Changed order of steps. Added machining and post-machining inspection steps |

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| Step No. | Instructions | Data Input |
| 1 | Serial Number of AssemblySerial Number of JL0086026Serial Number of JL0086025 | [[FLGBRZSN]] << FLGBRZSN>>[[ITUBESN]<<ITUBESN>>[[DN100SN]]<<DN100SN>> |
| CHEMISTRY |
| 2 | Degrease JL0086026 as per CP-STP-CAV-CHEM-ACID. Upload any relevant photos and/or comments. | [[DG1Tech]] <<SRF>>[[DG1Time]] <<TIMESTAMP>>[[DG1Comm]] <<COMMENT>>[[DG1File]] <<FILEUPLOAD>> |
| Degrease JL0086025 as per CP-STP-CAV-CHEM-ACID. Upload any relevant photos and/or comments. | [[DG2Tech]] <<SRF>>[[DG2Time]] <<TIMESTAMP>>[[DG2Comm]] <<COMMENT>>[[DG2File]] <<FILEUPLOAD>> |

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| Step No. | Instructions | Data Input |
| BRAZING |
| 3a | Visually inspect both JL0086026 and JL0086025 for any cracks, damage, or any other abnormalities that may affect brazing. Upload any relevant photos and/or comments. | [[Ins2Tech]] <<SRF>>[[Ins2Comm]] <<COMMENT>>[[Ins2File]] <<FILEUPLOAD>> |
| 3b | Braze components as per drawing JL0088274 and CERN EDMS No. 1389669 – Section 2.4.6.Upload BPS and BPQR | [[BrazTech]] <<SRF>>[[BrazTime]] <<TIMESTAMP>>[[BrazComm]] <<COMMENT>>[[BrazFile]] <<FILEUPLOAD>> |
| INSPECTION |
| 4 | Visually inspect the braze in accordance with EN 12799 & EN ISO 18279 as defined in CERN EDMS No. 1389669 - Section 4.2.7. Upload Inspection Report | [[Ins3Tech]] <<SRF>>[[Ins3Comm]] <<COMMENT>>[[Ins3File]] <<FILEUPLOAD>> |

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| Step No. | Instructions | Data Input |
| LEAK CHECK |
| 5a | Thermal shock the assembly by immersing it into LN2 five times, while allowing the assembly to reach room temperature between immersions.Upload any relevant photos and/or comments | [[LN2Tech]] <<SRF>>[[LN2Time]] <<TIMESTAMP>>[[LN2Comm]] <<COMMENT>>[[LN2File]] <<FILEUPLOAD>> |
| 5b | Leak check the assembly in accordance with EN 13185 as defined in CERN EDMS No. 1389669 – Section 4.5Upload leak check chart. | [[LC1Tech]] <<SRF>>[[LC1Time]] <<TIMESTAMP>>[[LC1Comm]] <<COMMENT>>[[LC1File]] <<FILEUPLOAD>> |
| ULTRASONIC TESTING |
| 6 | Inspect the assembly ultrasonically in accordance EN 12799 as per CERN EDMS No.1389669 – Section 4.2.6.4.Upload Inspection Report | [[US1Tech]] <<SRF>>[[US1Comm]] <<COMMENT>>[[US1File]] <<FILEUPLOAD>> |
| INSPECTION |
| 7 | Verify dimensions marked on drawing JL0088274\_CMM.Upload inspection report. | [[Ins4Tech]] <<SRF>>[[Ins4Time]] <<TIMESTAMP>>[[Ins4Comm]] <<COMMENT>>[[Ins4File]] <<FILEUPLOAD>> |
| MACHINING |
| 8 | Machine the knife edge as per JL0088272.Note the new serial number of the partUpload any relevant photos and files | [[FLMCHSN]] << FLMCHSN >>[[MachTech]] <<SRF>>[[MachTime]] <<TIMESTAMP>>[[MachComm]] <<COMMENT>>[[MachFile]] <<FILEUPLOAD>> |
| LEAK CHECK |
| 9 | Leak check the assembly (checking the knife edge in particular) in accordance with EN 13185 as defined in CERN EDMS No. 1389669 – Section 4.5Upload leak check chart. | [[LC2Tech]] <<SRF>>[[LC2Time]] <<TIMESTAMP>>[[LC2Comm]] <<COMMENT>>[[LC2File]] <<FILEUPLOAD>> |
| INSPECTION |
| 10 | Verify dimensions marked on drawing JL0088272\_CMM.Upload inspection report. | [[Ins5Tech]] <<SRF>>[[Ins5Time]] <<TIMESTAMP>>[[Ins5Comm]] <<COMMENT>>[[Ins5File]] <<FILEUPLOAD>> |