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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 | | | |
| NCR Dispositioners | Huque,scott | | | |
| D3 Emails | Huque | | | |
| Approval Names | Matthew Weaks | Scott Williams | Naeem Huque |  |
| 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(1).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 Assembly  Serial Number of JL0086026  Serial 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 4.5  Upload 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 part  Upload 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 4.5  Upload 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>> |