LBSC1 - D0900442 - Coordinates Definition

DRAWING #	COORDINATES DEFINITION
	Systems defines the location of the BSC1-L1 0,0,0 Local CS at the origin of the Assy.
D0900443 AdvLIGO VE BSC1-L1, Vacuum Equipment Assembly	The position of the Vacuum Equipment is defined by: 1. Positioning the CS in the VE Assy at the intersection of the 2 Nozzles Centerlines of the BSC Lower Shell. (Ref. Point is the origin of the Assy) 2. The orientation of the Chamber with respect to the IFO Global CS is defined by DCC Doc G1000125-v8 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the VE Assy, to the BSC1-L1 0,0,0 Local CS at the origin of the Assy
D0900444 AdvLIGO SEI BSC1-L1, XYZ Local CS for ISO Table Assembly	The position of the ISO TABLE is defined by: 1. Positioning the CS in the ISO Table Assy at **1661.7 mm** below the Table Optical Surface as per DCC DocT010076-v1 Page 29 2. The orientation of the ISO Table with respect to the IFO Global CS is defined by DCC Doc G1000125-v8 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the ISO Table Assembly, to the BSC1-L1 0,0,0 Local CS at the origin of the Assy
D0900445 AdvLIGO SUS BSC1-L1, XYZ Local CS for **ITMY** Assembly	The position of the **ITMY** is defined by: 1. The Coordinates from DCC P/N D0902216-v8. **X = -200.0 mm; Y = 403.1 mm; Z = -80.0 mm; Yaw Angle = 0.0°** 2. With these coordinates systems creates the 3D Sketch to position **ITMY** on the BSC Table 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the **ITMY** Suspension, to the BSC1-L1 0,0,0 Local CS at the origin of the Assy
D1003374 AdvLIGO SUS BSC1-L1, XYZ Local **SLC Arm Cavity Baffle** Assembly	The position of the **SLC Arm Cavity Baffle** is defined by: 1. Following the "X" & "Y" coordinates from the ITMY 2. Then matching the Local "Z" coordinate value from the ITMY (Quad Structure). 3. From the SW Model, Systems find out the Local Coordinates of the **SLC Arm Cavity Baffle** **X = 0.0 mm; Y = 1109.0 mm; Z = 1292.1 mm; Yaw Angle = 9.0°** 4. With these coordinates systems creates the 3D Sketch to position SLC Arm Cavity Baffle on the BSC Table 5. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the SLC Arm Cavity Baffle Assembly, to the BSC1-L1 0,0,0 Local CS at the origin of the Assy
D1000513 HEPI, BSC, Chamber Level Assembly, aLIGO SEI	The position of the HEPI is defined by: 1. Positioning the CS in the HEPI Assy at **1847.0 mm** above the concrete floor as per DCC Doc E1000659-v2 2. The orientation of the HEPI with respect to the IFO Global CS is defined by DCC Doc G1000125-v8 3. Systems insert the assy mating the AdvLIGO 0,0,0 Local CS from the HEPI, to the BSC1-L1 0,0,0 Local CS at the origin of the Assy
D1002565 AdvLIGO BSC1-L1 ISI Table, XYZ Local CS for Balance Masses Assembly	The position of the Balance Masses Assembly is defined by: 1. Positioning the CS in the Balance Masses Assy at **1661.7** mm below the Table Optical Surface as per DCC DocT010076-v1 Page 29 2. Systems creates the 3D Sketch to position the Assy D1002565 on the BSC Table 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the Balance Masses Assy, to the BSC1-L1 0,0,0 Local CS at the origin of the Assy
D1200678 AdvLIGO SEI BSC1-L1, XYZ Local CS for TCS CO2P Steering Mirror Assembly	The position of the TCS CO2P Steering Mirror Assembly is defined by: 1. TCS provides the assembly (D1101013) with all components already defined on the BSC Table 2. Systems creates the AdvLIGO 0,0,0 Local CS to position the Assy D1200678 on the BSC Table. 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the TCS CO2P Steering Mirror Assy, to the BSC1-L1 0,0,0 Local CS at the origin of the Assy
D1200112 ALIGO, CABLE HARNESS ROUTING - BSC1	The position of the Cable Harness is defined by 1. Positioning the CS in the Cable Harness Assy at **1661.7** mm1661.7 mm below the Table Optical Surface as per DCC DocT010076-v1 Page 29 2. Systems creates the 3D Sketch to position the Assy D1200112 on the BSC Table 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the Cable Harness Assy, to the BSC1-L1 0,0,0 Local CS at the origin of the Assy