

Engineering Drawings

8/30/2014

<u>DWG #</u>	<u>PartName</u>	<u>Rev #</u>	<u>Description</u>	<u>Revision Description</u>
AZHF000	Concept Drawing	A	2D outline of heat flow	Initial Design
AZHF001	HECPlate	A	Copper absorber plates	Initial Design
AZHF002	TieBar	A	Copper bars connecting plates	Initial Design
AZHF003	TieBarHalf	A	Copper bars for end uniformity	Initial Design
AZHF004	SquareWasherPlate	A	Stainless Steel washers to protect tie bars	Initial Design
AZHF005_revB	TopBracketMain	B	Bracket to hold absorbers in place	Dimesion Changes
AZHF006_revB	TopBracketEnd	B	End bracket to hold absorbers in place	Dimesion Changes
AZHF007	EdgeSupportLeft	A	Left mockup wall - No longer in design	Initial Design
AZHF008	EdgeSupportRight	A	Right side mockup wall - No longer in design	Initial Design
AZHF007_revB	EdgeSupportSide	B	Replaces Left and Right side mockup wall	Dimesion Changes/Bolt Circle
AZHF009	EdgeSupportShort	A	Remaining 2 walls of mockup - No longer in design	Initial Design
AZHF009_revB	EdgeSupportEnd	B	Replaces EdgeSupportShort drawing	Dimension Changes/Bolt Circle
AZHF010_revB	AluminumPlate	B	8mm plate representing Fcal support tube	Dimesion Changes/Wire Channels added/Bolt holes added
AZHF011_revB	MiddleInsulator	B	Used to calculate heat flux	Dimesion Changes/Wire Channels removed/Bolt holes added
AZHF012_revB	BottomInsulator	B	Reduces heat leak to main LAr volume	Dimesion Changes/Wire Channels removed/Bolt holes added
AZHF013_revC	HangerLeft	C	Left side for hanging mockup from top plate	Dimension Changes
AZHF014_revC	HangerRight	C	Right side for hanging mockup from top plate	Dimension Changes
AZHF015_revC	SuspensionBar	C	Attaches to top plate to keep hangers spaced correctly	Redesign to fit CERN cryostat
AZHF016_revC	HangerBracket	C	Connects suspension bar to hangers	Holes changed to slots
AZHF017_revC	HangerAssembly	C	Machining layout for suspension bar and brackets	Redesign to fit CERN cryostat, Quantity change
AZHF018_revB	RotationRod	B	Rod connecting rack gear through top plate for rotation of mockup	Dimension Changes
AZHF019	RackGear		Cut rack gear to length and provide thread for rod- Ordered with needed specs	
AZHF020	TieBarHalfKapton	A	Threaded hole added to 10 TieBarHalf pieces to fix Kapton Foil in place	Initial Design
AZHF021	TieBarKapton	A	Threaded hole added to 5 TieBar pieces to fix Kapton Foil in place	Initial Design
AZHF022_revB	MiddleConductorPlate	A	Copper conductor plate to smooth out heating	Changed material and added wire channels
AZHF023	HeatBedThreadedRod	A	G-10 threaded rod to connect heating assembly	Initial Design
AZHF024	Clamp_SideA	A	Side A to liquid level clamp	Initial Design
AZHF025	Clamp_SideB	A	Side B to liquid level clamp	Initial Design
AZHF026	InsulatorPlate	A	Insulator plate to mount liquid level and clamp	Initial Design
AZHF027	StopperBlock	A	Lower stop for rotation	Initial Design
AZHF028	PullRodOffset	A	Offsets pull rod 24mm and converts from 5mm to 10mm rod	Initial Design
AZHF029	PushRodHandle	A	Handle for push/pull rod	Initial Design
AZHF030	5mmPullRod	A	5mm section of pull rod w/threads for attaching to rack gear	Initial Design
AZHF031	10mmPullRodBottom	A	Lower section of 10mm rod, attaches to Offset	Initial Design
AZHF032	10mmPullRodTop	A	Upper section of 10mm rod, reaches out of cryostat	Initial Design
AZHF033	PushRodLock	A	Lock to hold push rod in place and keep module from rotating	Initial Design
AZHF034	WireCover	B	Wire cover to protect HEC plate temperature probe wires	Added Dimensions
HeatFlow001			3D concept drawings of mockup assembly	Initial Design
HeatFlow001_revB			3D concept drawings of mockup assembly	Updated components/added views