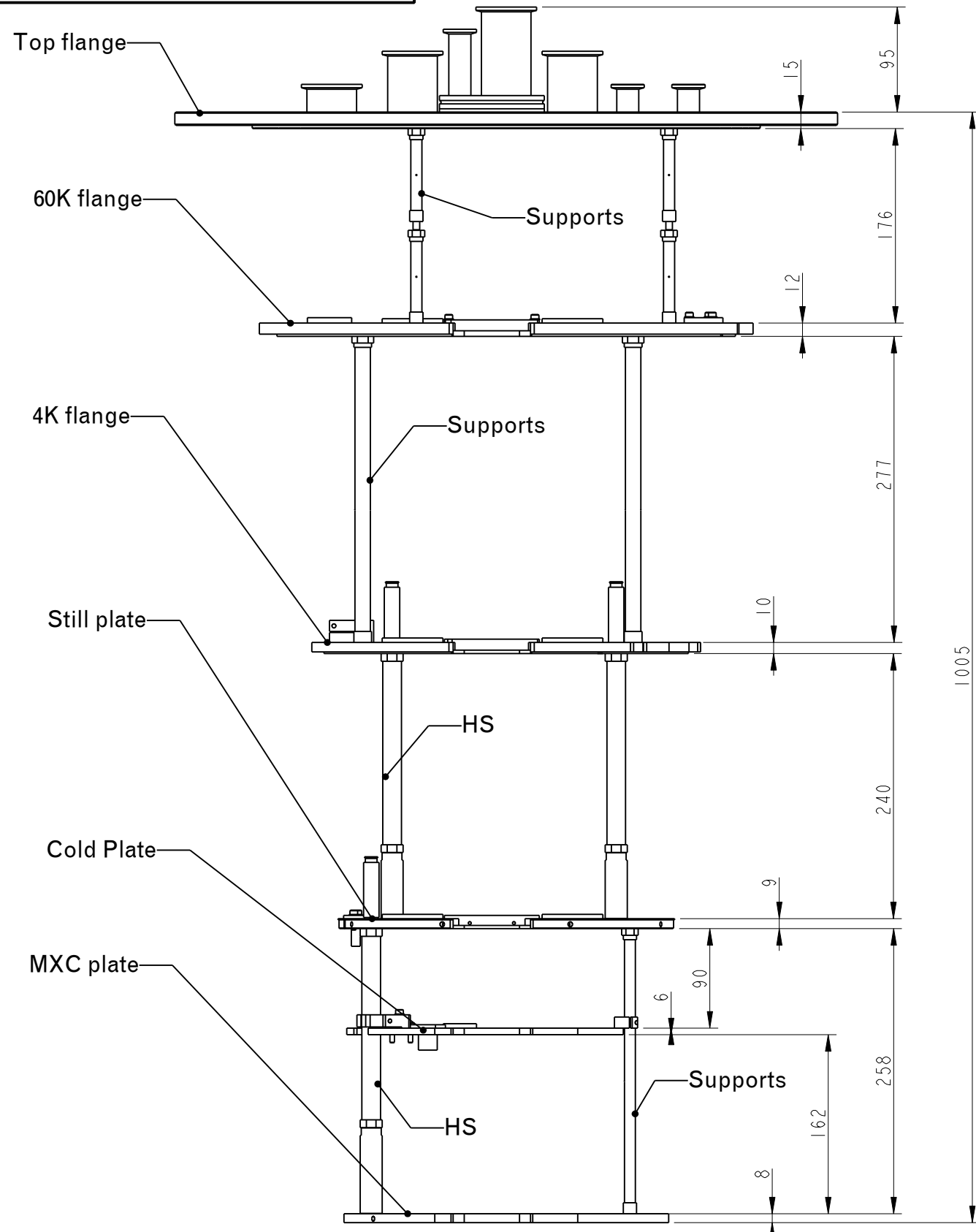
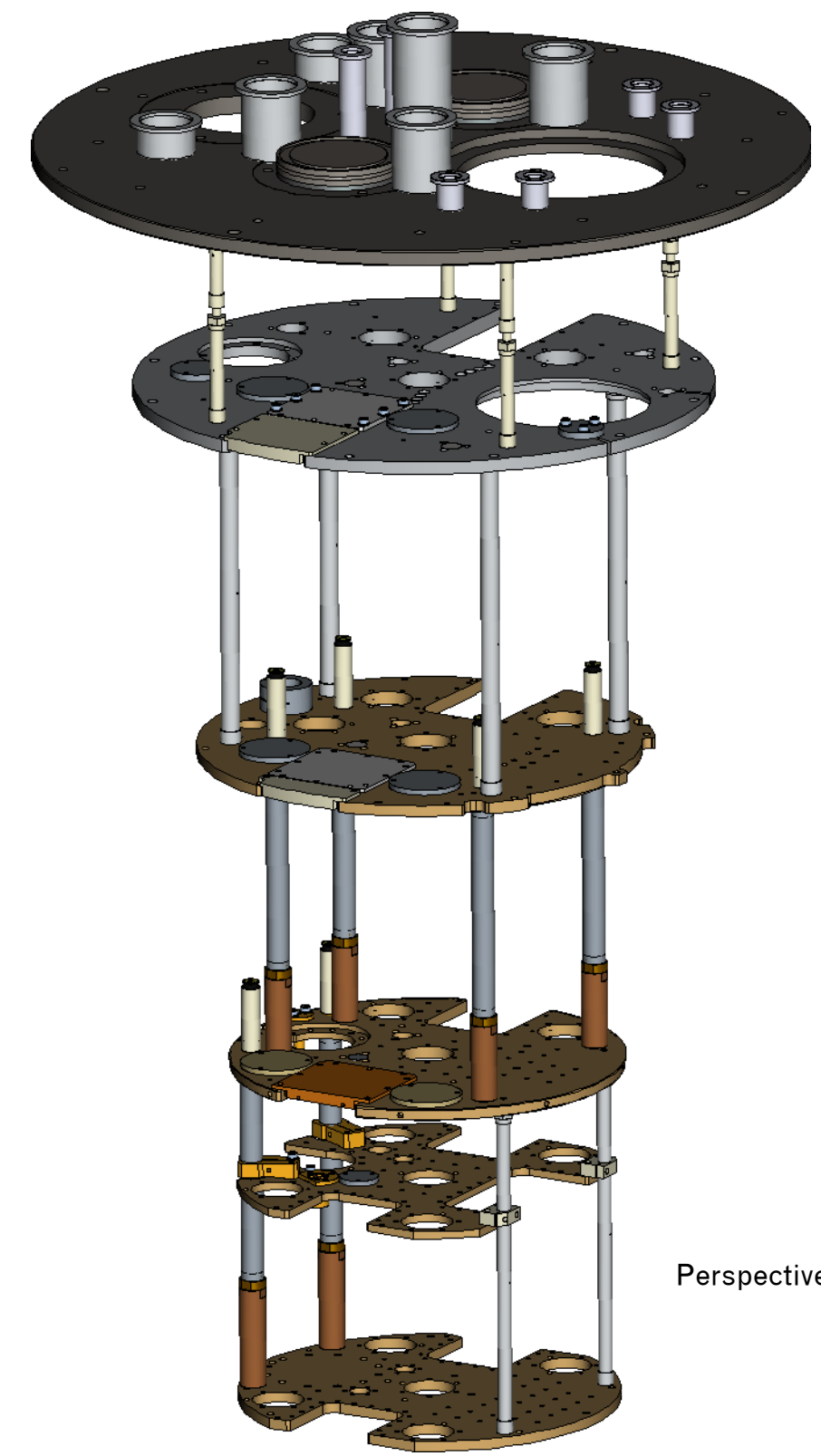


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 Approved (signature): _____
 Date: _____
 (This document contains 16 pages incl. cover page)



SCALE 0.200



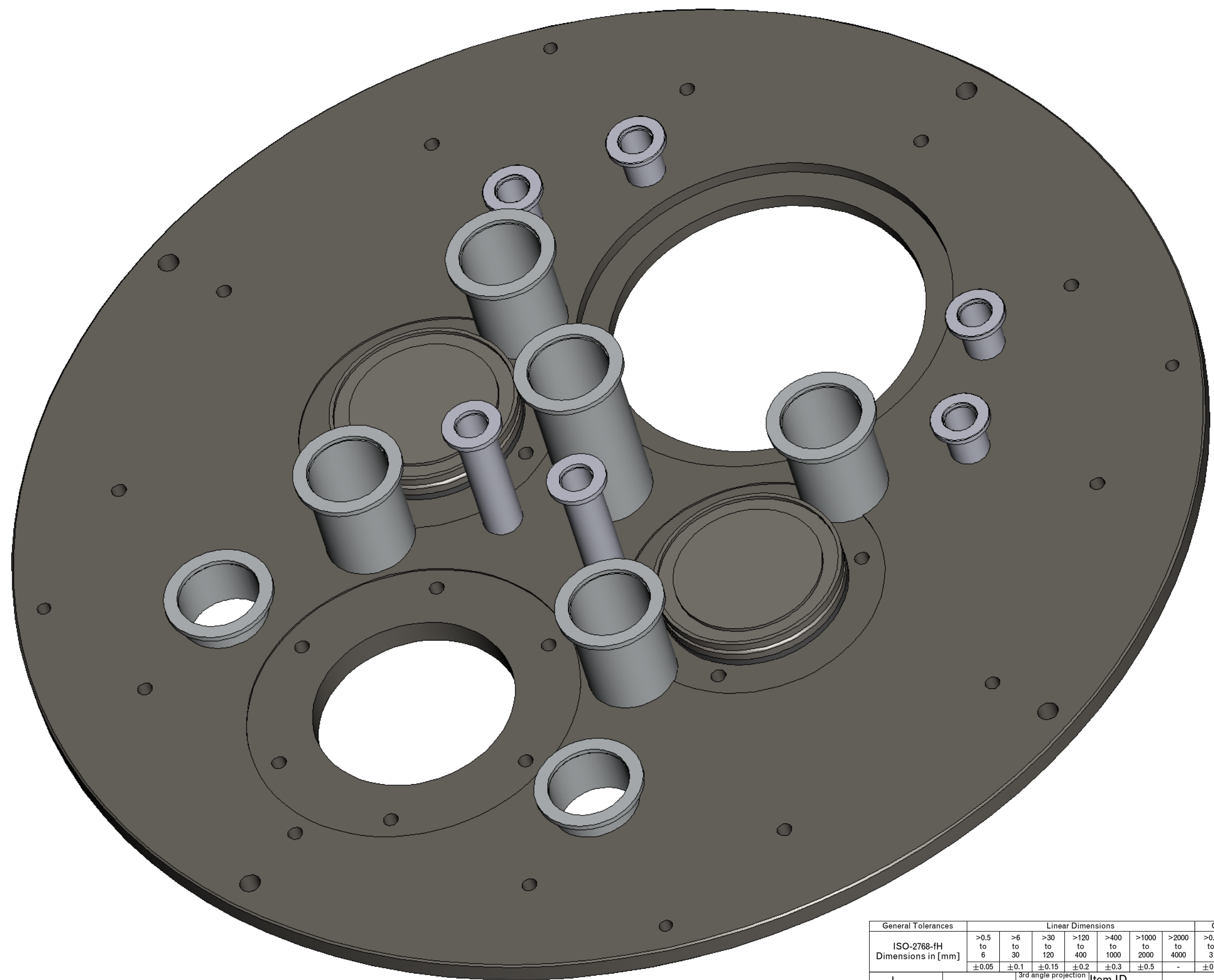
Perspective view

SCALE 0.190

For clarity pulse tube and DR are removed.

General Tolerances		Linear Dimensions					Chamfered edges			Angular Dimensions						
ISO-2768-FH		>0.5 to 6	>6 to 30	>30 to 120	>120 to 400	>400 to 1000	>1000 to 2000	>2000 to 4000	>0.5 to 3	>3 to 6	>6	to 10	>10 to 50	>50 to 120	>120 to 400	>400
±0.05		±0.1	±0.15	±0.2	±0.3	±0.5	-	±0.2	±0.5	±1	±1°	±0°30'	±0°20'	±0°10'	±0°5'	
							Item ID		Drawing Name LD400_HEIGTH_MAP							
Drawn Pieter Vorselman 14-Nov-2014		Material		Group Cryostat		Treatment										
Last revision		Sub-group Height map		Comments:												
Approved		Scale 0.200		BlueFors												
Project General		Sheet 1 of 1		CRYOGENICS												
Item Name																

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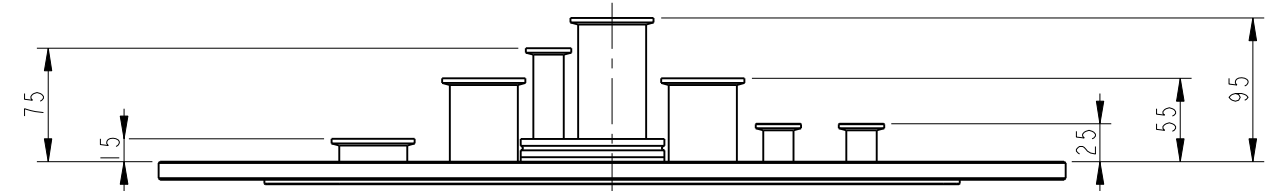
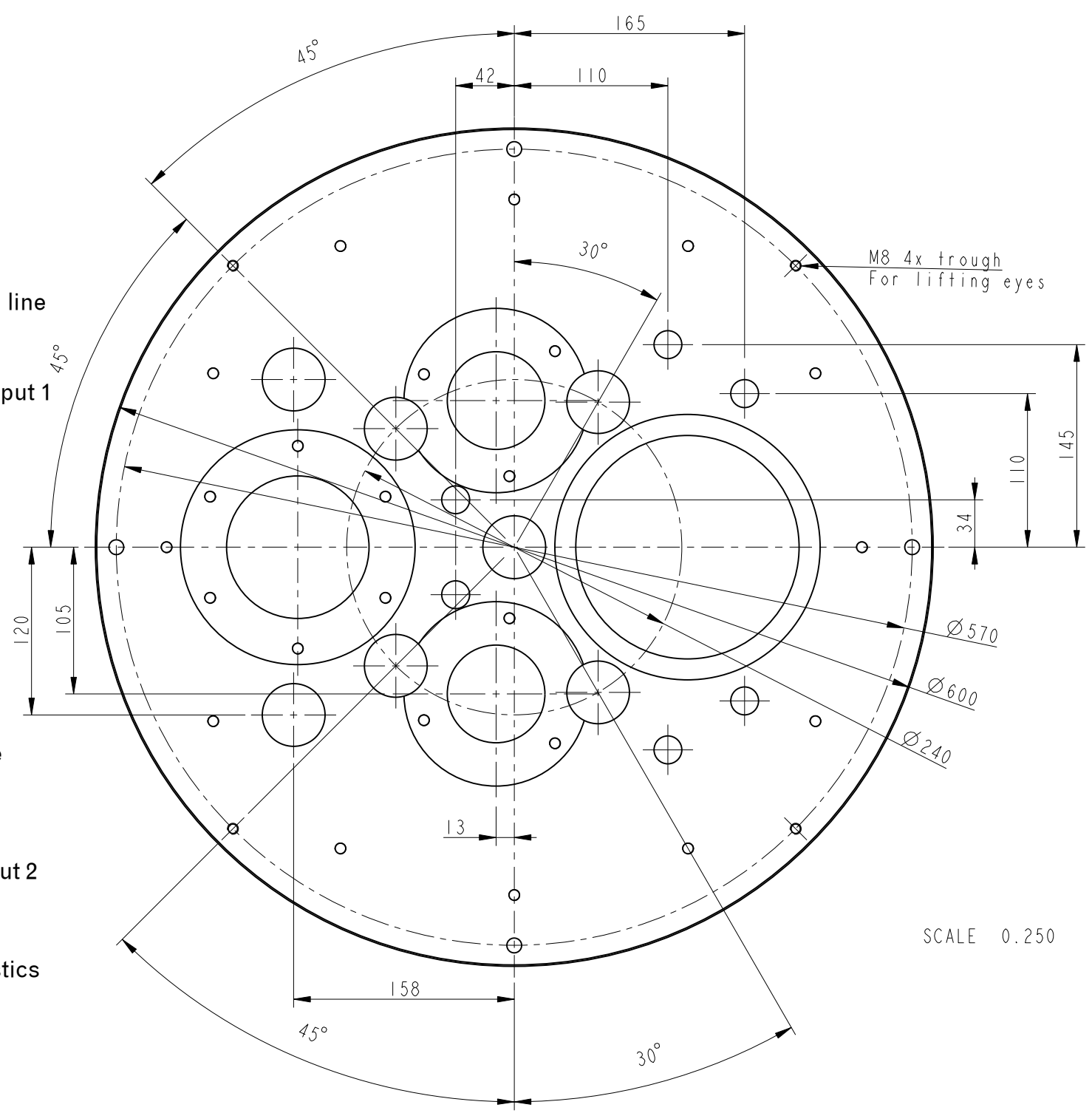
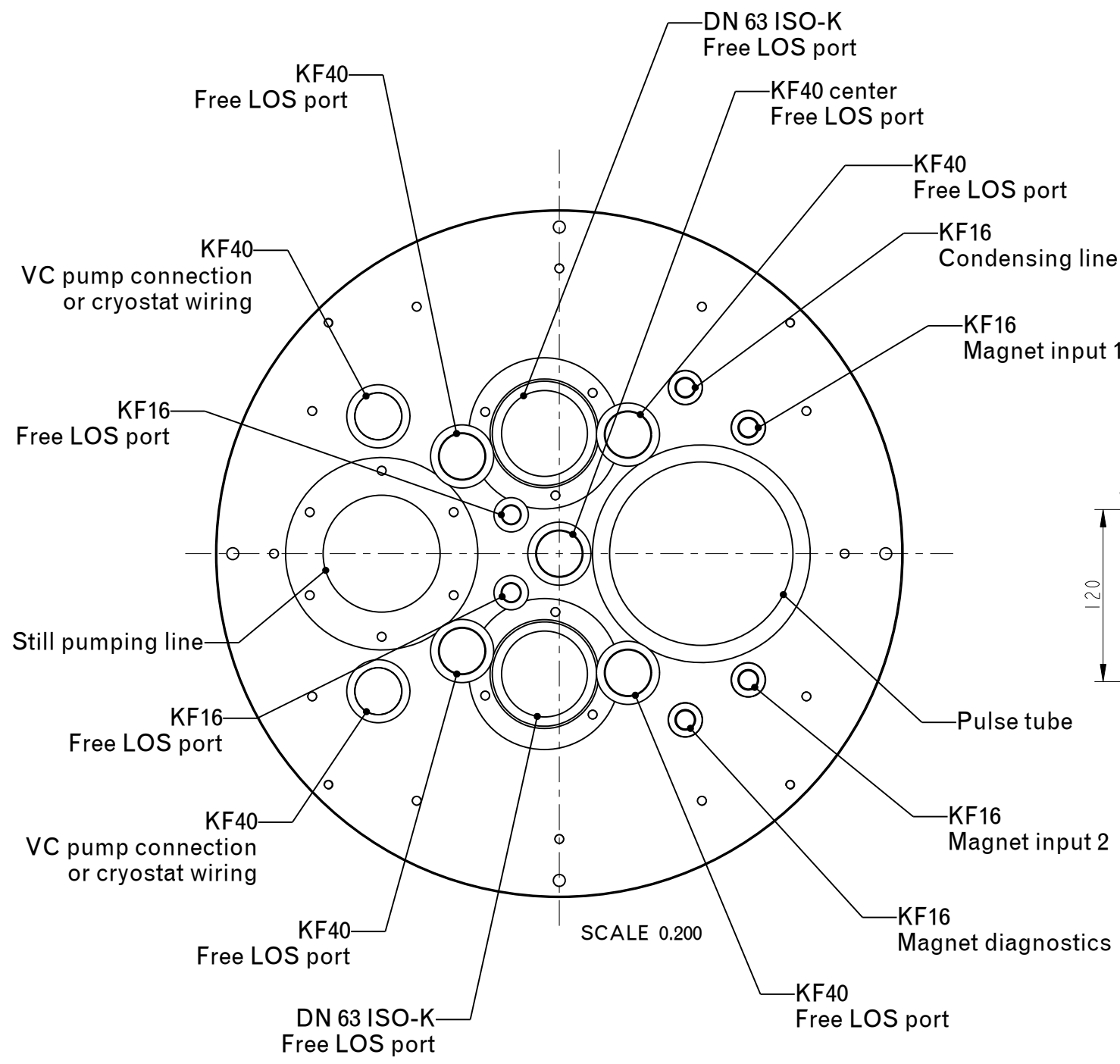
SCALE 0.500

General Tolerances		Linear Dimensions					Chamfered edges			Angular Dimensions						
ISO-2768-FH		>0.5 to 6	>6 to 30	>30 to 120	>120 to 400	>400 to 1000	>1000 to 2000	>2000 to 4000	>0.5 to 3	>3 to 6	>6	to 10	>10 to 50	>50 to 120	>120 to 400	>400
±0.05		±0.1	±0.15	±0.2	±0.3	±0.5	-	±0.2	±0.5	±1	±1°	±0°30'	±0°20'	±0°10'	±0°5'	
		3rd angle projection					Item ID	Drawing Name FT_LOCATIONS_LD								
							Old Item ID	Treatment								
Drawn Pieter Vorselman 17-Nov-2014							Material	Stainless Steel								
Last revision							Group									
Approved							Sub-group									
Project							Scale	0.250								
Item Name							Sheet	1 of 2								



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Feedthrough locations on top-plate



LOS = Line-Of-Sight port to mixing chamber
 4x KF40 BCD 240 at 30° & 45°
 1x KF40 Center
 2x KF16 at x=-42 y=34,-34
 2x DN 63 ISO-K at x=-13 y=105,-105

General Tolerances		Linear Dimensions					Chamfered edges			Angular Dimensions						
ISO-2768-FH Dimensions in [mm]		>0.5 to 6	>6 to 30	>30 to 120	>120 to 400	>400 to 1000	>1000 to 2000	>2000 to 4000	>0.5 to 3	>3 to 6	>6	to 10	>10 to 50	>50 to 120	>120 to 400	>400
		±0.05	±0.1	±0.15	±0.2	±0.3	±0.5	-	±0.2	±0.5	±1	±1°	±0° 30'	±0° 20'	±0° 10'	±0° 5'
	Ra 1.6															
	3rd angle projection															
Item ID		Drawing Name FT_LOCATIONS_LD														
Old Item ID		Treatment														
Material	Stainless Steel	Comments:														
Drawn	Pieter Vorselman	17-Nov-2014		Group												
Last revision				Sub-group												
Approved				Scale		0.250										
Project				Sheet		2 of 2										
Item Name																



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50K PLATE



SCALE 0.400



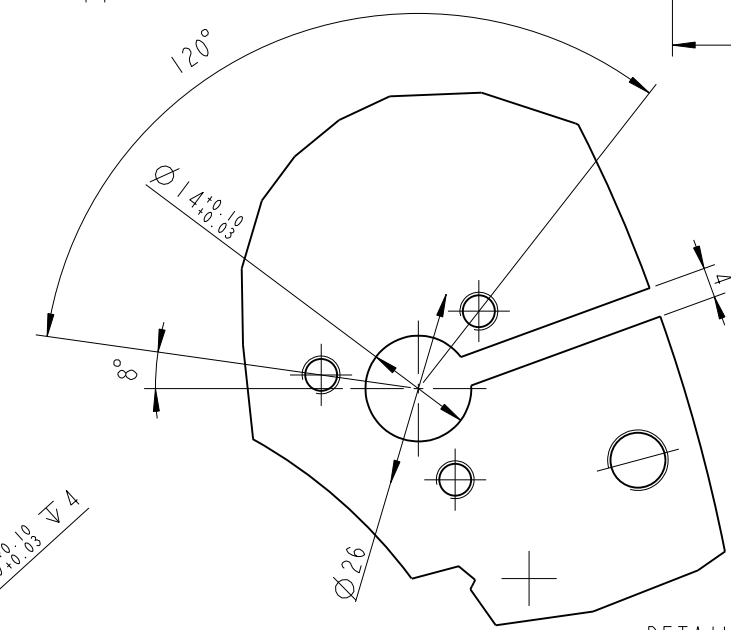
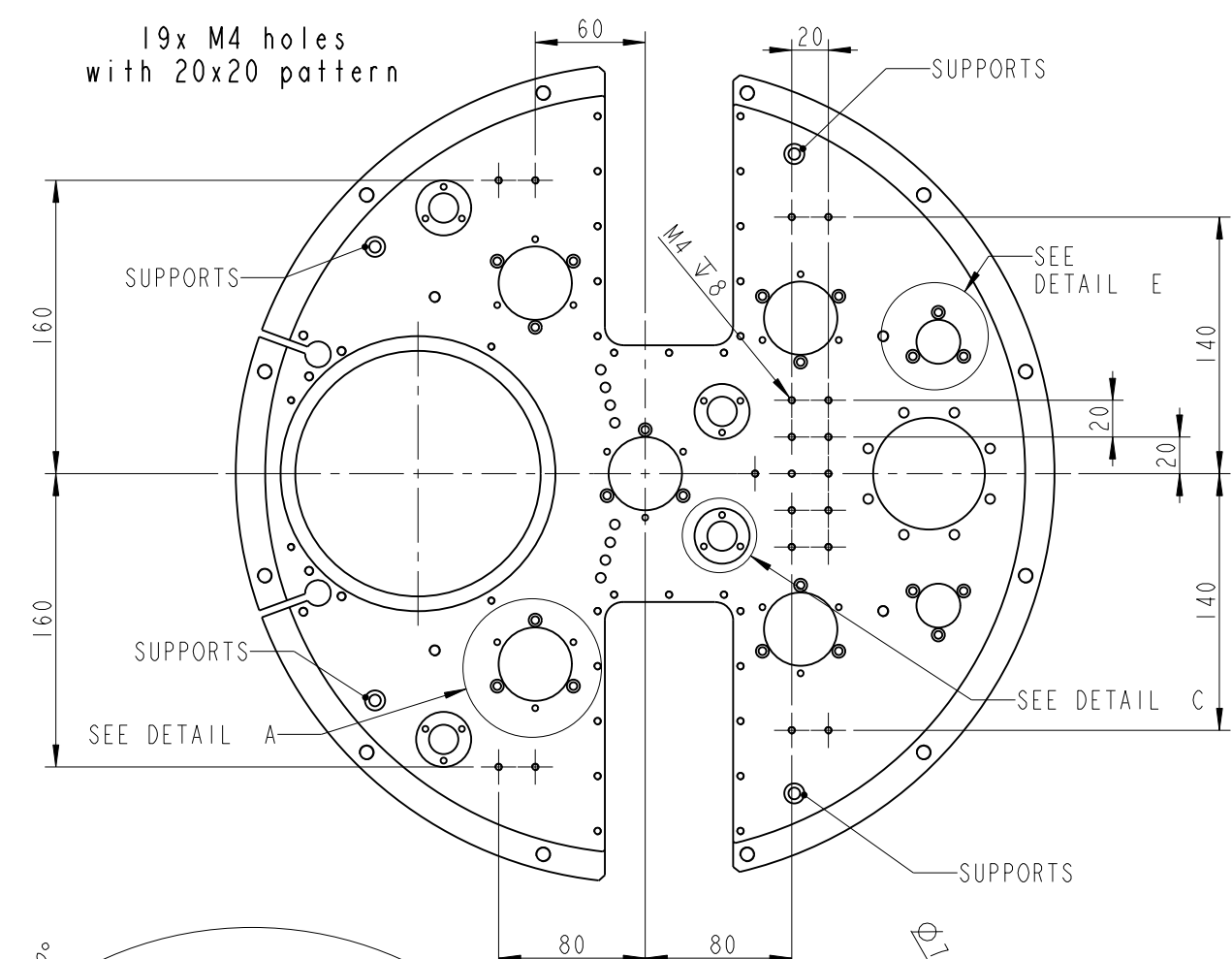
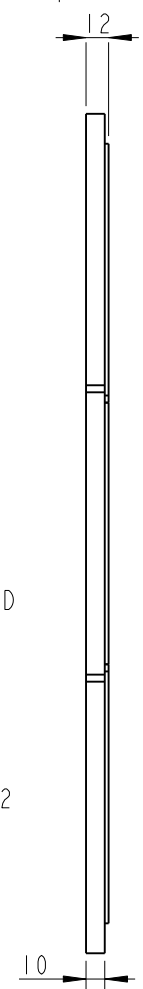
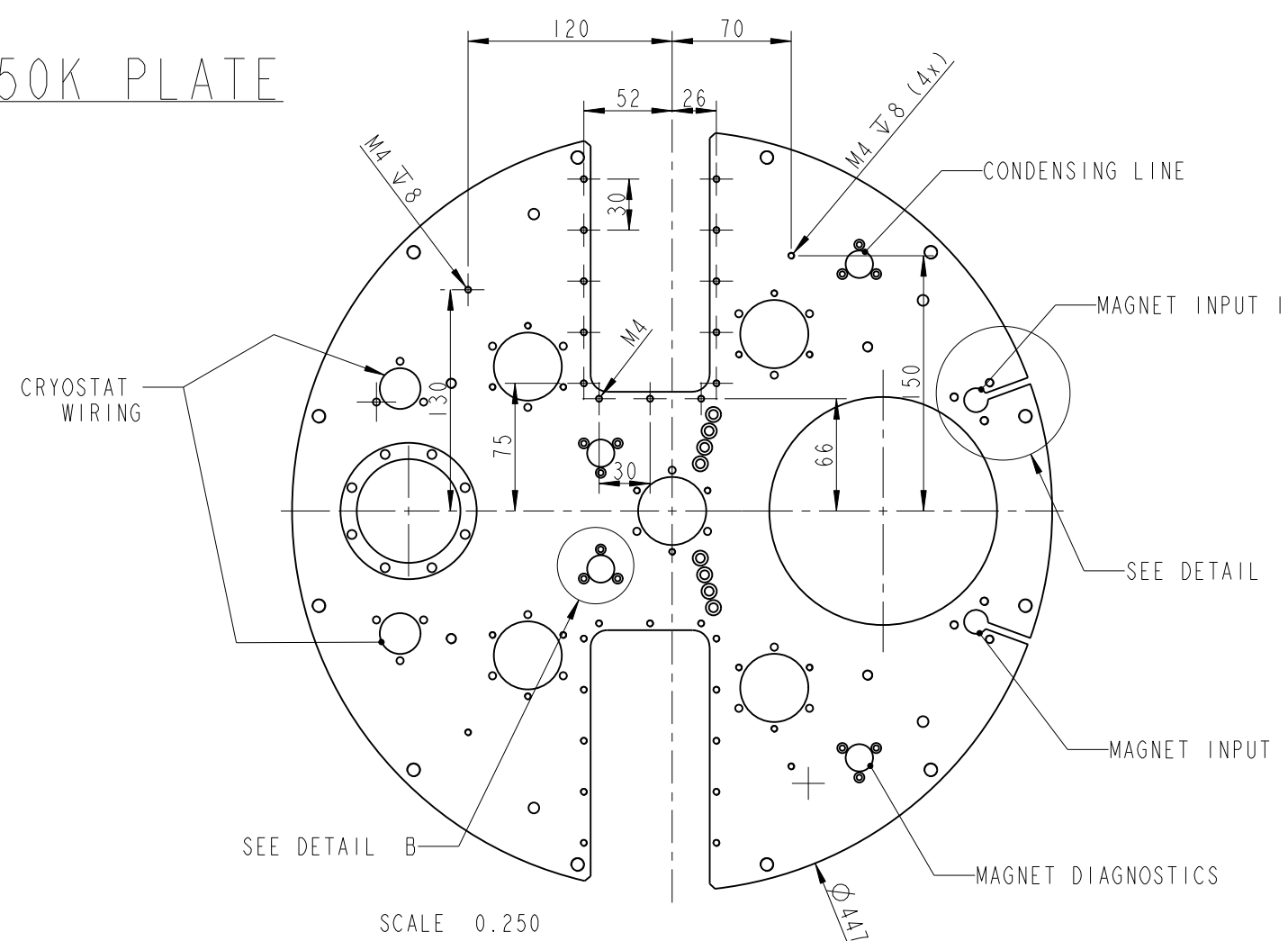
SCALE 0.400

General Tolerances		Linear Dimensions					Chamfered edges			Angular Dimensions						
ISO-2768-FH Dimensions in [mm]		>0.5 to 6	>6 to 30	>30 to 120	>120 to 400	>400 to 1000	>1000 to 2000	>2000 to 4000	>0.5 to 3	>3 to 6	>6	to 10	>10 to 50	>50 to 120	>120 to 400	>400
		±0.05	±0.1	±0.15	±0.2	±0.3	±0.5	-	±0.2	±0.5	±1	±1°	±0° 30'	±0° 20'	±0° 10'	±0° 5'
												Item ID M00141 Old Item ID Material Al Group Cryostat Sub-group Flanges Scale 0.250 Sheet 1 of 2	Drawing Name MT_PAT_50K_PLATE Treatment Comments:			
Drawn	Pieter Vorselman	14-Nov-2014														
Last revision																
Approved																
Project	General															
Item Name	50K Flange															

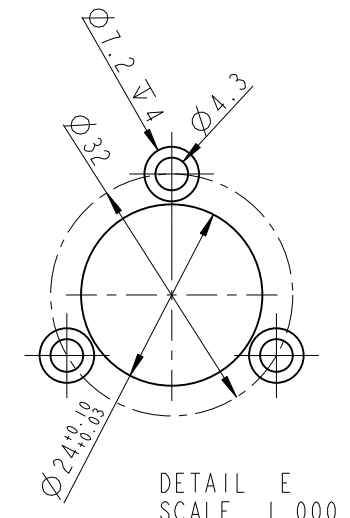


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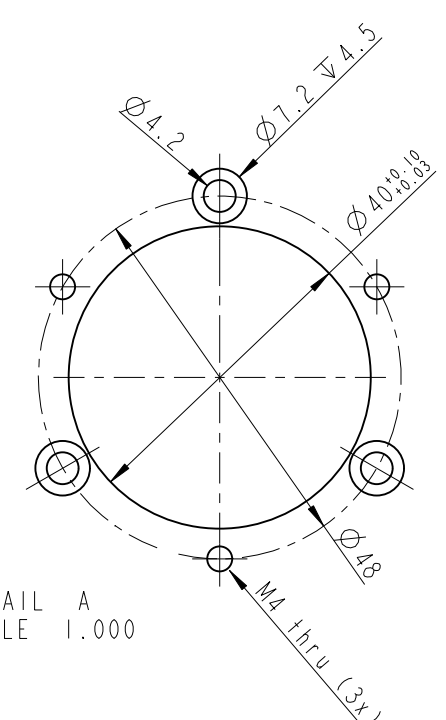
50K PLATE



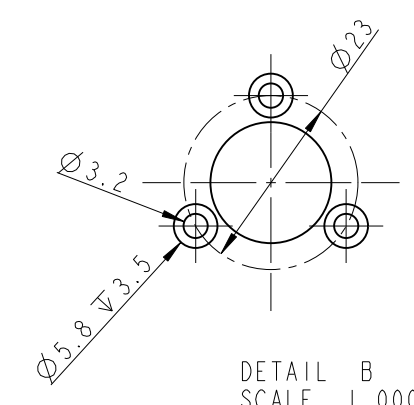
DETAIL D
SCALE 1.000



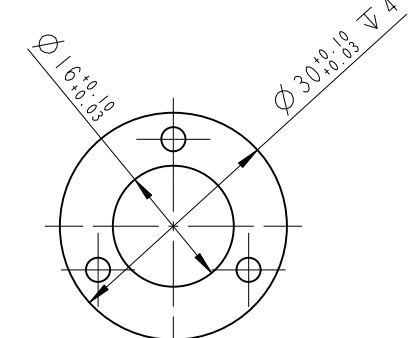
DETAIL E
SCALE 1.000



DETAIL A
SCALE 1.000



DETAIL B
SCALE 1.000

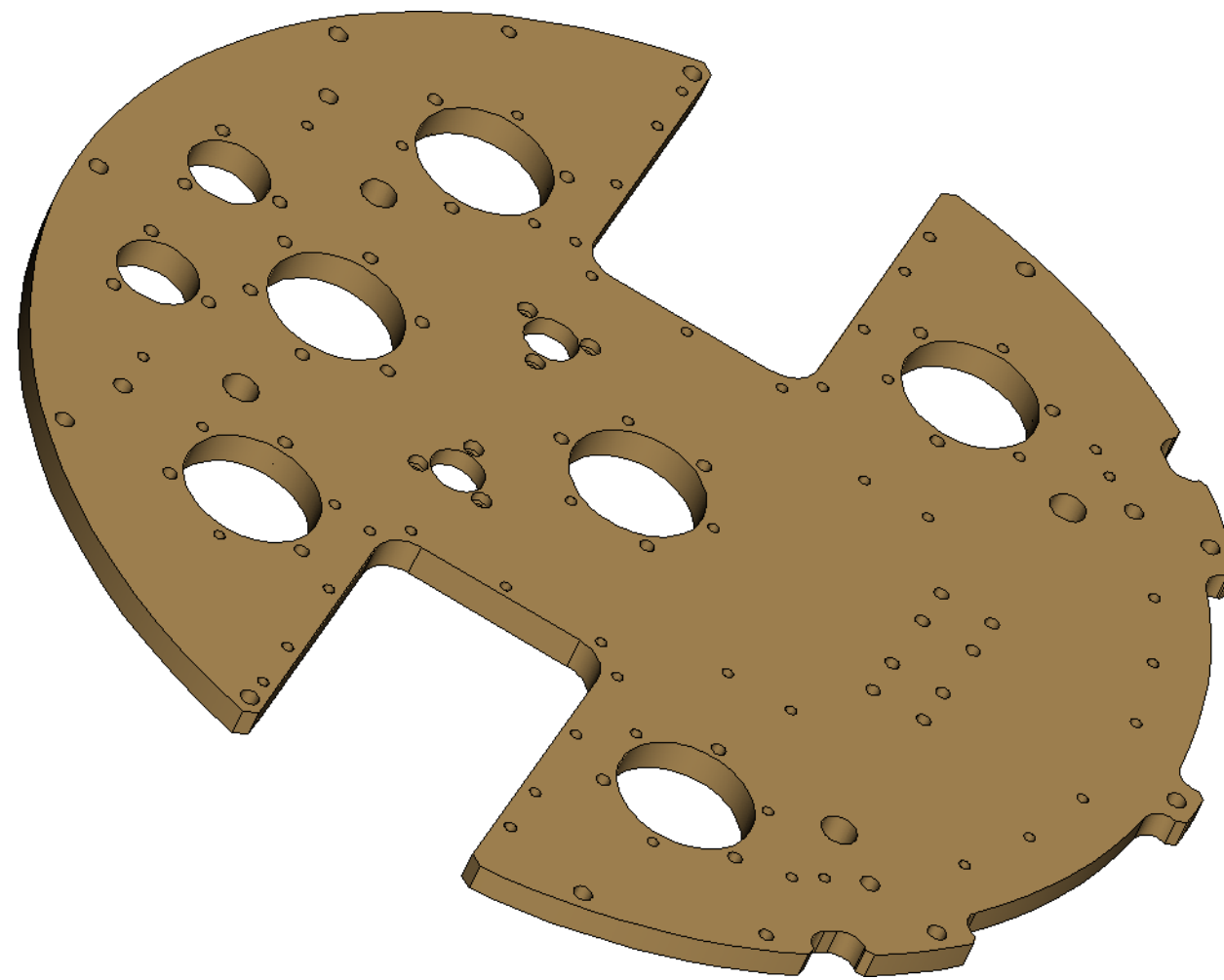
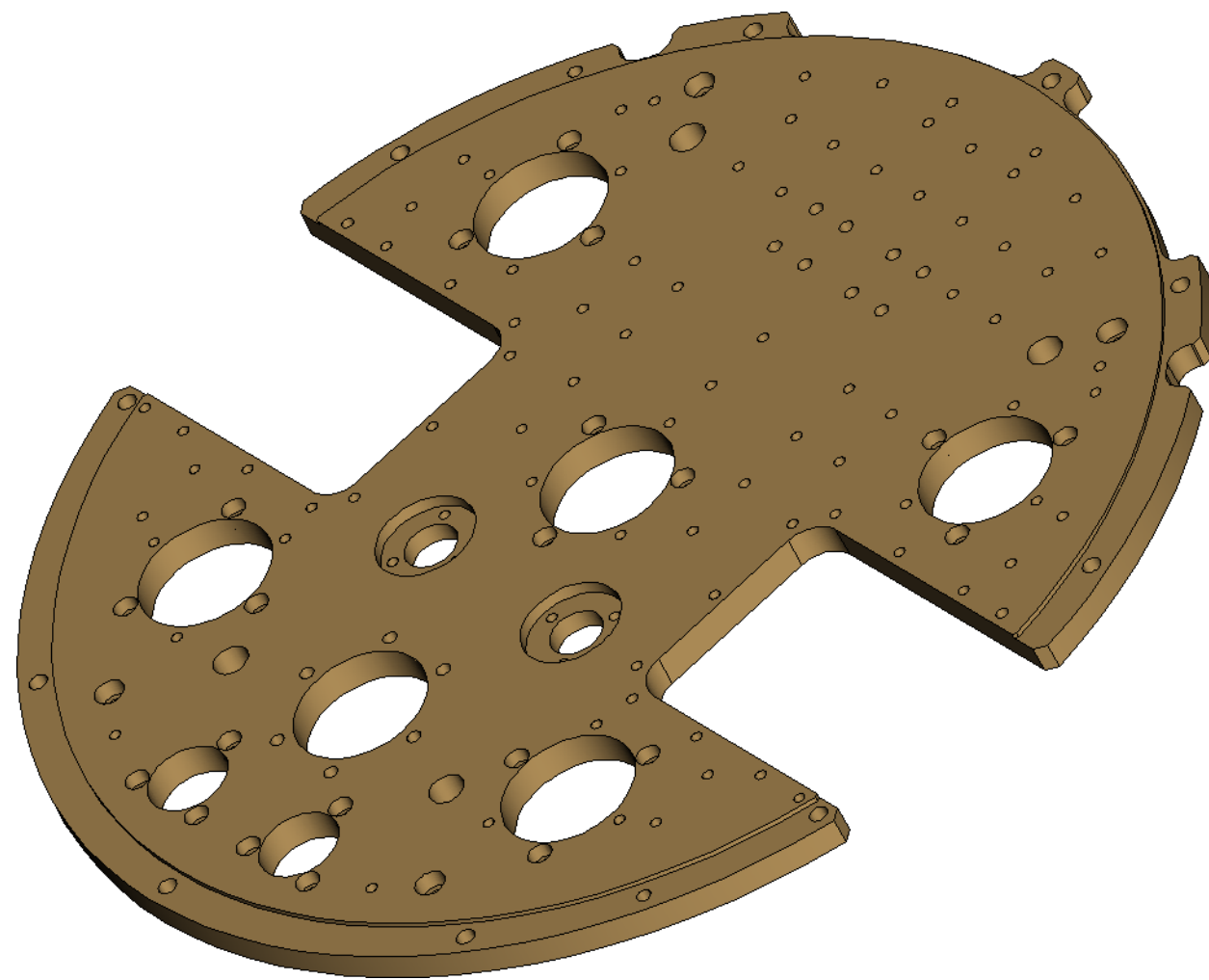


DETAIL C
SCALE 1.000

General Tolerances		Linear Dimensions					Chamfered edges			Angular Dimensions				
ISO-2768-FH Dimensions in [mm]		>0.5 to 6	>6 to 30	>30 to 120	>120 to 400	>400 to 1000	>10 to 3	>3 to 6	>6	to 10	>10 to 50	>50 to 120	>120 to 400	>400
		±0.05	±0.1	±0.15	±0.2	±0.3	±0.2	±0.5	±1	±1°	±0°30'	±0°20'	±0°10'	±0°5'
Item ID	M00141	Drawing Name MT_PAT_50K_PLATE												
Old Item ID		Treatment												
Material	Al	Comments:												
Drawn	Pieter Vorselman	Group Cryostat												
Last revision		Sub-group Flanges												
Approved		Scale 0.167												
Project	General	Sheet 2 of 2												
Item Name	50K Flange													

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4K PLATE

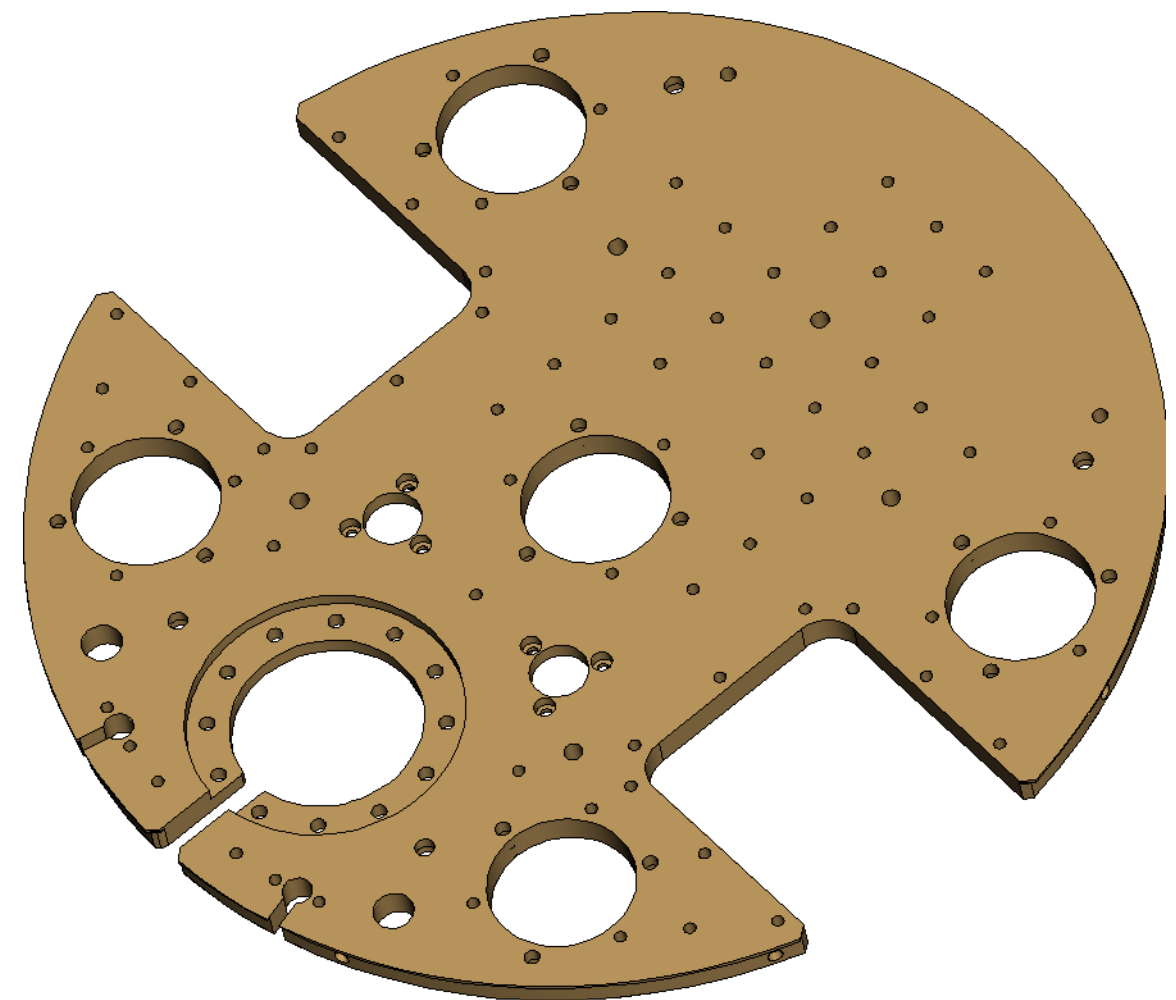


General Tolerances	Linear Dimensions					Chamfered edges			Angular Dimensions						
	>0.5 to 6	>6 to 30	>30 to 120	>120 to 400	>400 to 1000	>1000 to 2000	>2000 to 4000	>0.5 to 3	>3 to 6	>6	to 10	>10 to 50	>50 to 120	>120 to 400	>400
ISO-2768-FH Dimensions in [mm]	±0.05	±0.1	±0.15	±0.2	±0.3	±0.5	-	±0.2	±0.5	±1	±1°	±0° 30'	±0° 20'	±0° 10'	±0° 5'
	3rd angle projection														
Item ID	M00474					Drawing Name					MT_PAT_4K_PLATE				
Old Item ID						Treatment					Goldplated				
Material	Copper					Comments:									
Drawn	Pieter Vorselman		13-Nov-2014			Group					Cryostat				
Last revision						Sub-group					Flanges				
Approved						Scale					0.500				
Project	General					Sheet					1 of 2				
Item Name	4K Flange Cu Au														

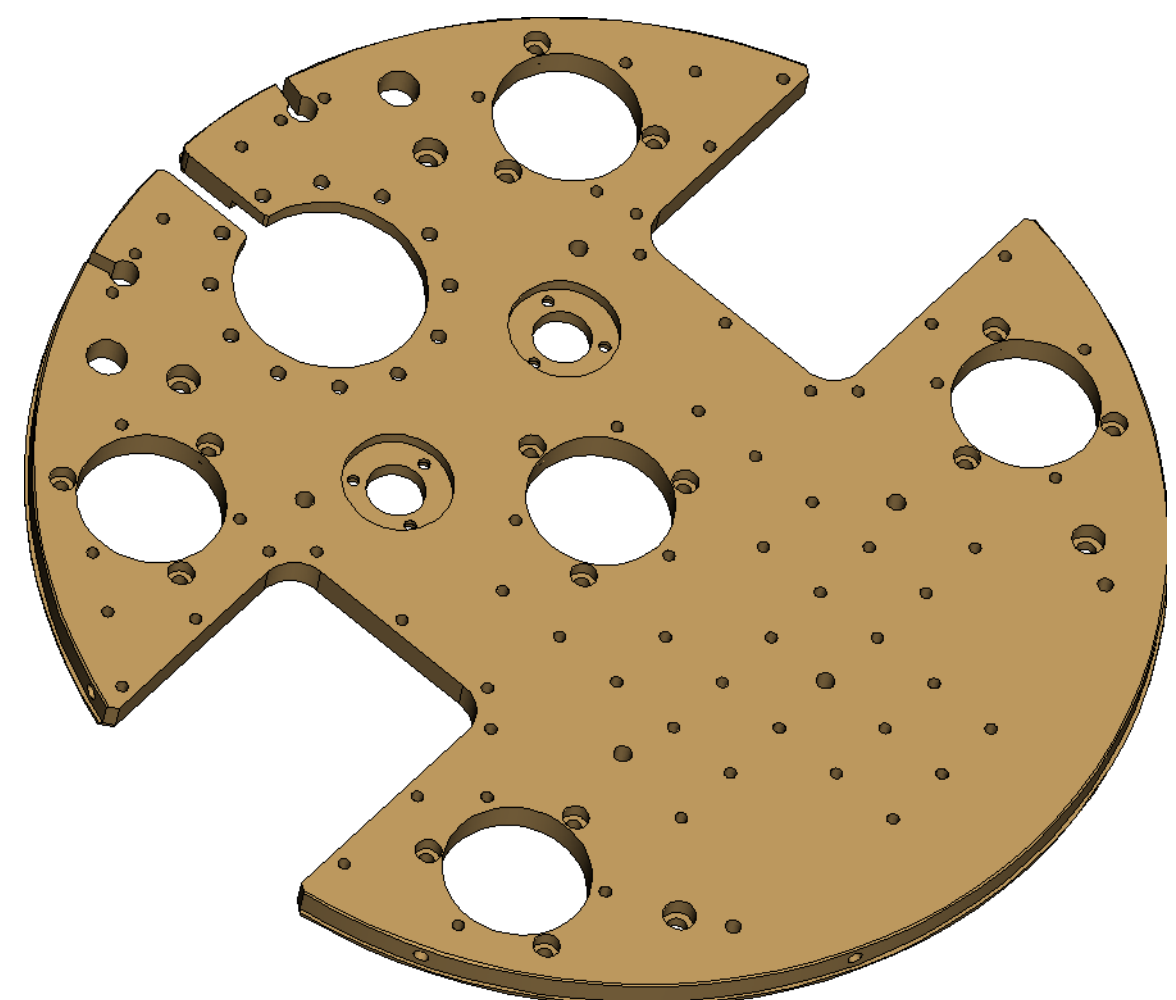


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STILL PLATE



SCALE 0.500

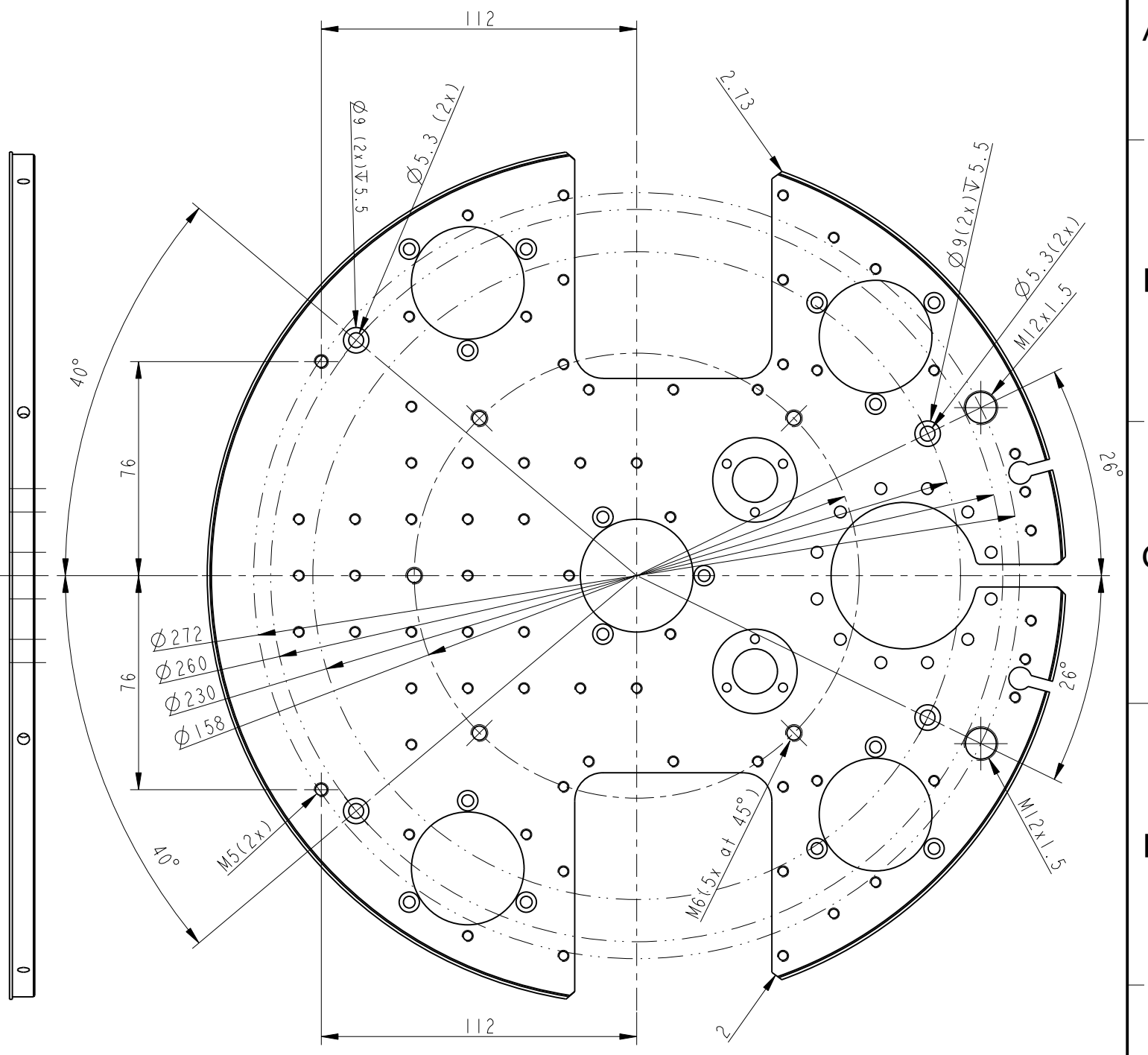
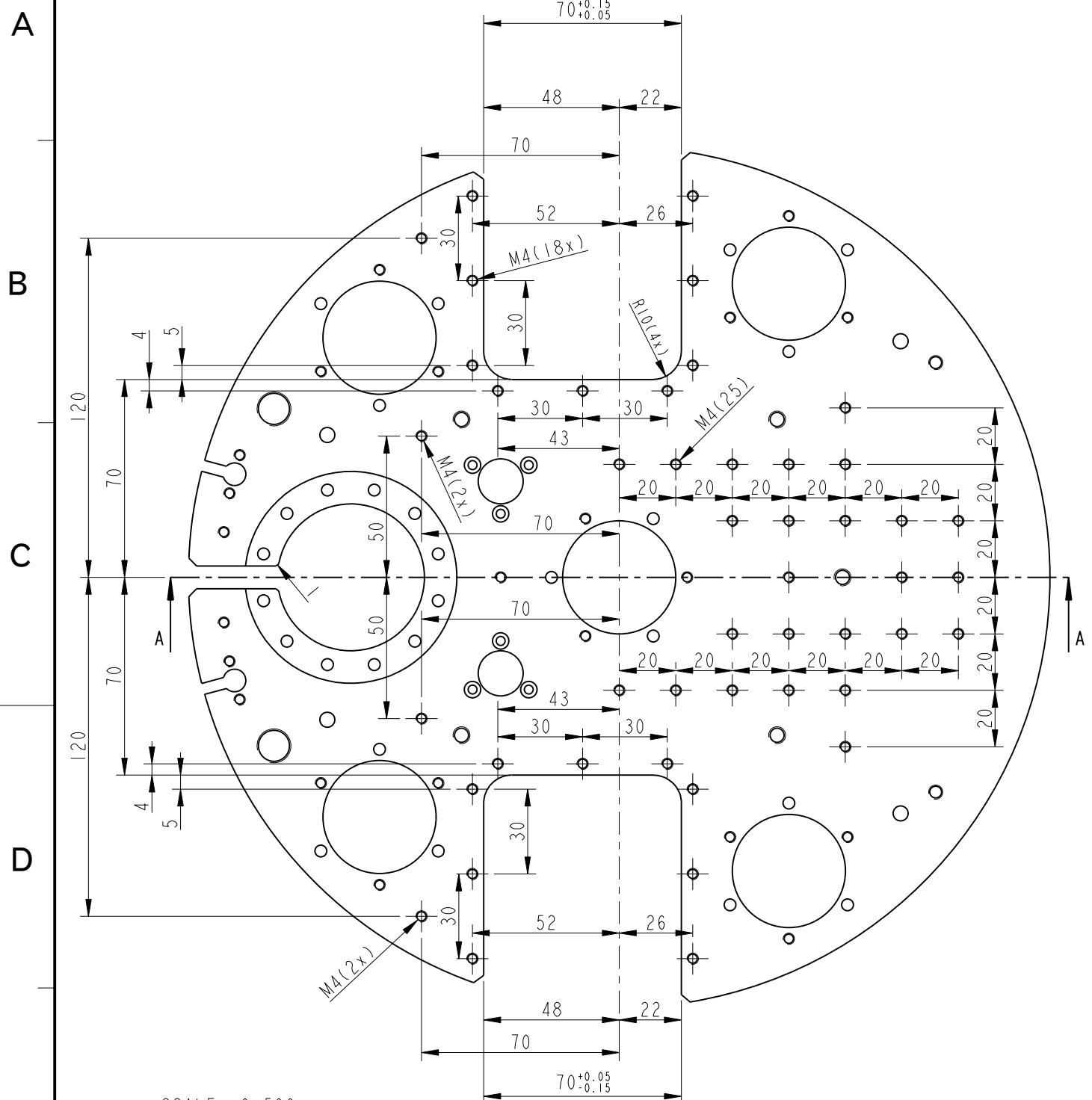


SCALE 0.500

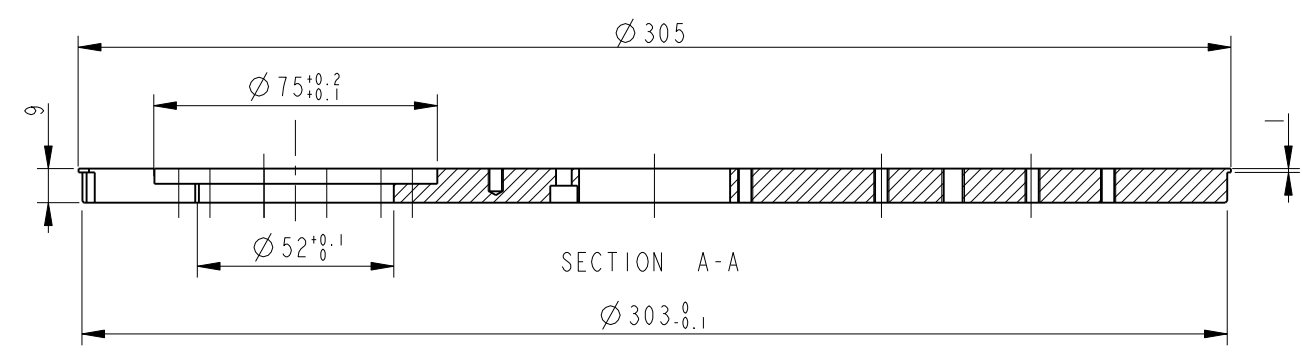
General Tolerances		Linear Dimensions					Chamfered edges			Angular Dimensions						
ISO-2768-FH Dimensions in [mm]		>0.5 to 6	>6 to 30	>30 to 120	>120 to 400	>400 to 1000	>1000 to 2000	>2000 to 4000	>0.5 to 3	>3 to 6	>6	to 10	>10 to 50	>50 to 120	>120 to 400	>400
±0.05		±0.1	±0.15	±0.2	±0.3	±0.5	-	±0.2	±0.5	±1	±1°	±0° 30'	±0° 20'	±0° 10'	±0° 5'	
	Item ID	M00344		Drawing Name	MT_PAT_STILL_FLANGE											
Old Item ID	Material	Copper		Treatment	Goldplated											
Drawn	Jeroen Muller	13-Nov-2014	Group	Cryostat												
Last revision			Sub-group	Flanges												
Approved			Scale	0.250												
Project	General		Sheet	1 of 3												
Item Name	Still Flange Au			 												

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STILL PLATE



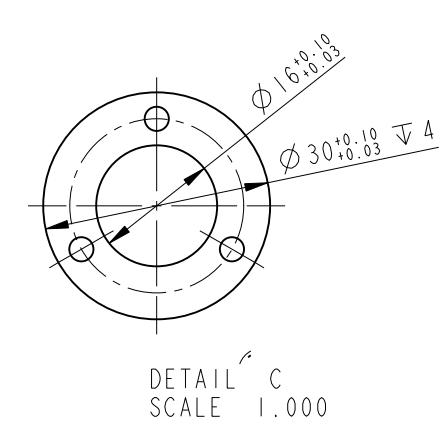
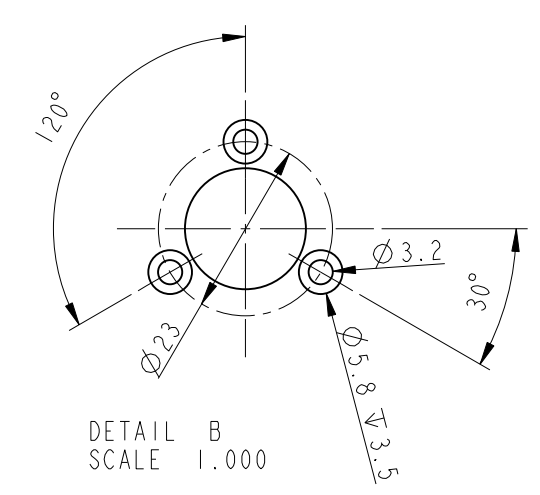
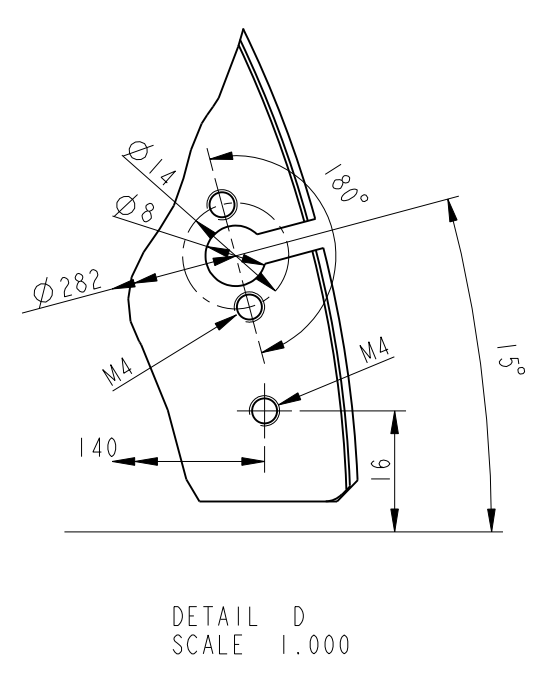
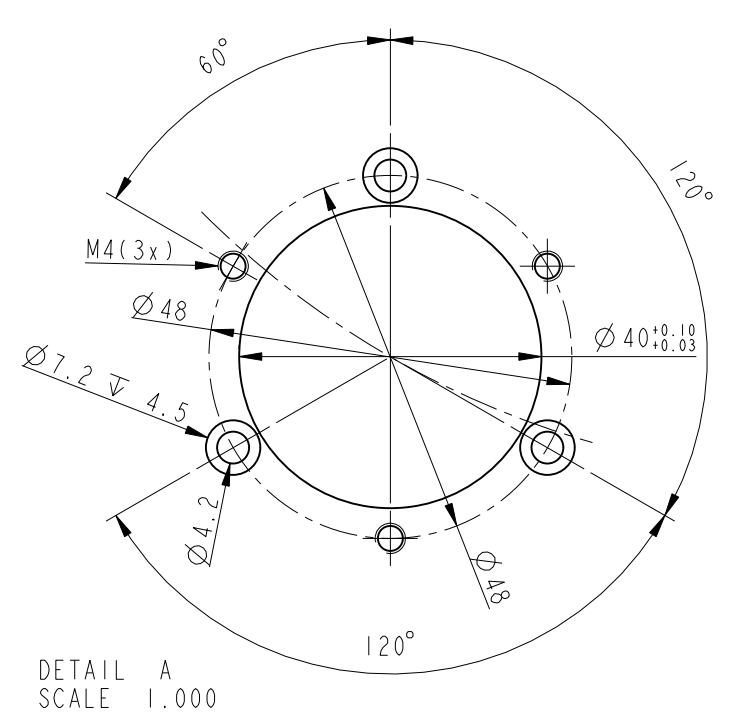
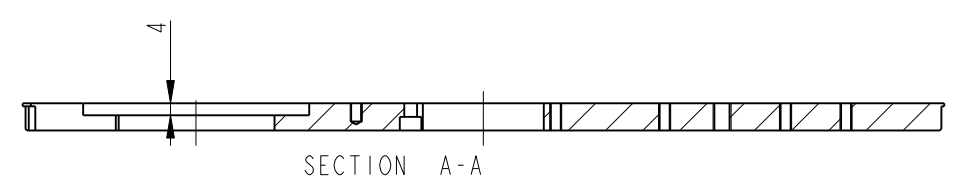
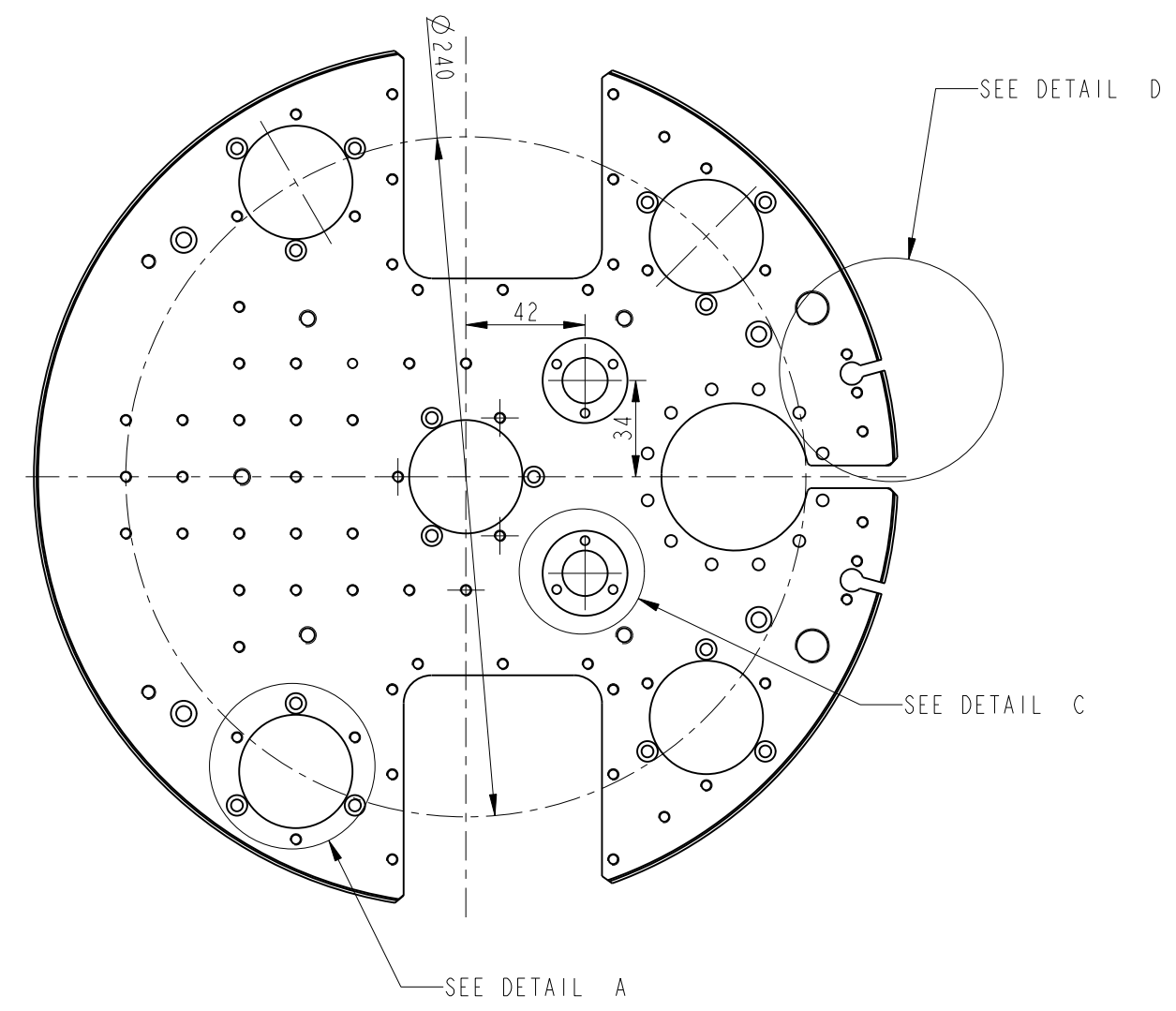
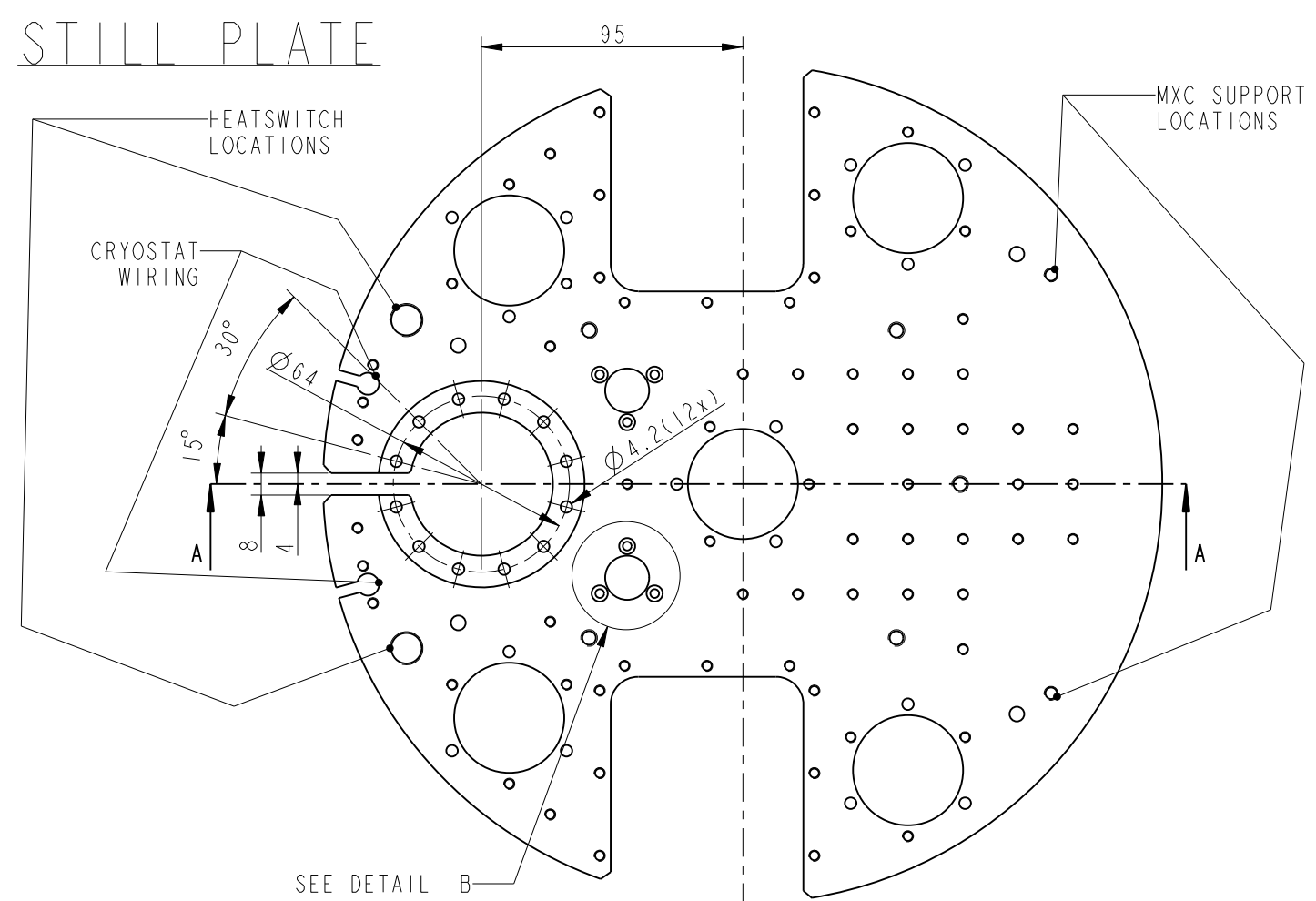
SCALE 0.500



General Tolerances		Linear Dimensions					Chamfered edges			Angular Dimensions					
ISO-2768-FH		>0.5	>6	>30	>120	>400	>2000	>0.5	>3	>6	to	>10	>50	>120	>400
Dimensions in [mm]		to	to	to	to	to	to	to	to	to	to	to	to	to	to
		±0.05	±0.1	±0.15	±0.2	±0.3	±0.5	±0.2	±0.5	±1	±1°	±0°30'	±0°20'	±0°10'	±0°5'
 		Item ID	M00344	Drawing Name	MT_PAT_STILL_FLANGE										
 		Old Item ID		Treatment	Goldplated										
 		Material	Copper	Comments:											
 		Group	Cryostat												
 		Sub-group	Flanges												
 		Scale	0.250												
 		Sheet	2 of 3												
 		Item Name	Still Flange Au												



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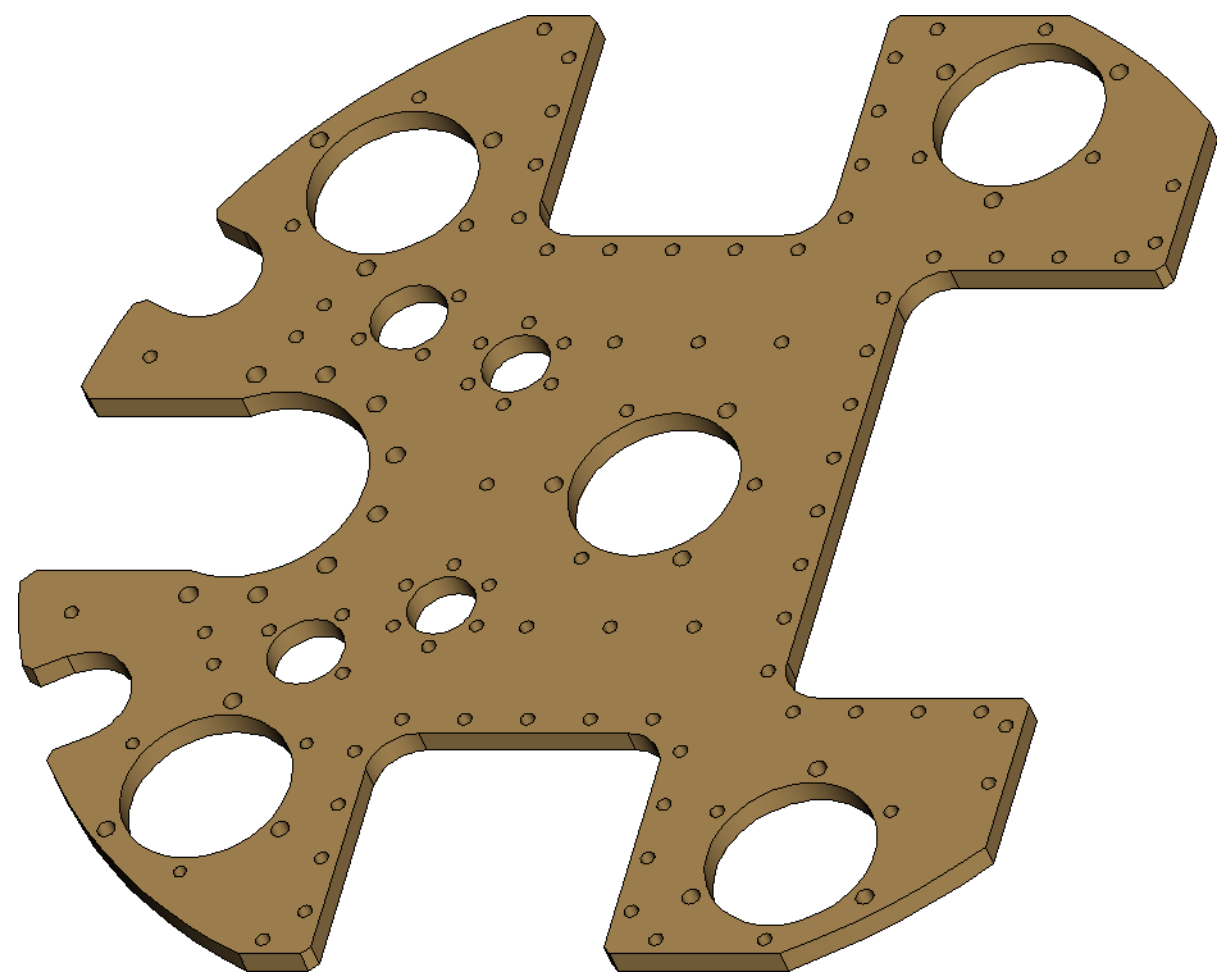


General Tolerances		Linear Dimensions					Chamfered edges			Angular Dimensions						
ISO-2768-FH Dimensions in [mm]		>0.5 to 6	>6 to 30	>30 to 120	>120 to 400	>400 to 1000	>1000 to 2000	>2000 to 4000	>0.5 to 3	>3 to 6	>6	to 10	>10 to 50	>50 to 120	>120 to 400	>400
±0.15	±0.3	±0.05	±0.1	±0.15	±0.2	±0.3	±0.5	±0.2	±0.5	±1	±1°	±0°30'	±0°20'	±0°10'	±0°5'	
 Ra 1.6 Ra 0.8	 3rd angle projection	Item ID	M00344	Drawing Name	MT PAT STILL FLANGE	Old Item ID		Treatment	Goldplated	Comments:						
Drawn	Jeroen Muller	13-Nov-2014	Material	Copper	Group	Cryostat										
Last revision			Sub-group	Flanges												
Approved			Scale	0.250												
Project	General		Sheet	3 of 3												
Item Name	Still Flange Au															

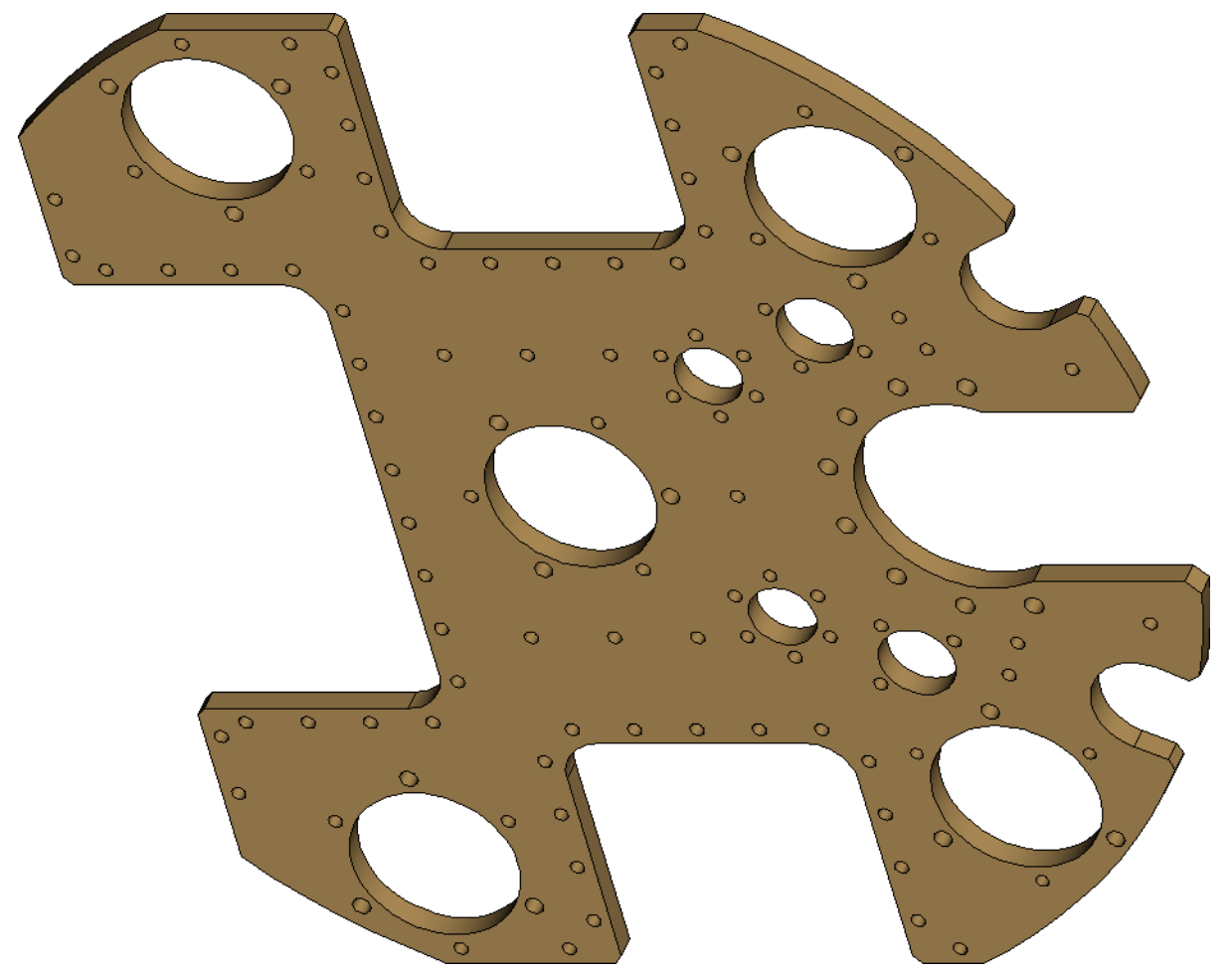


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COLD PLATE



SCALE 0.600



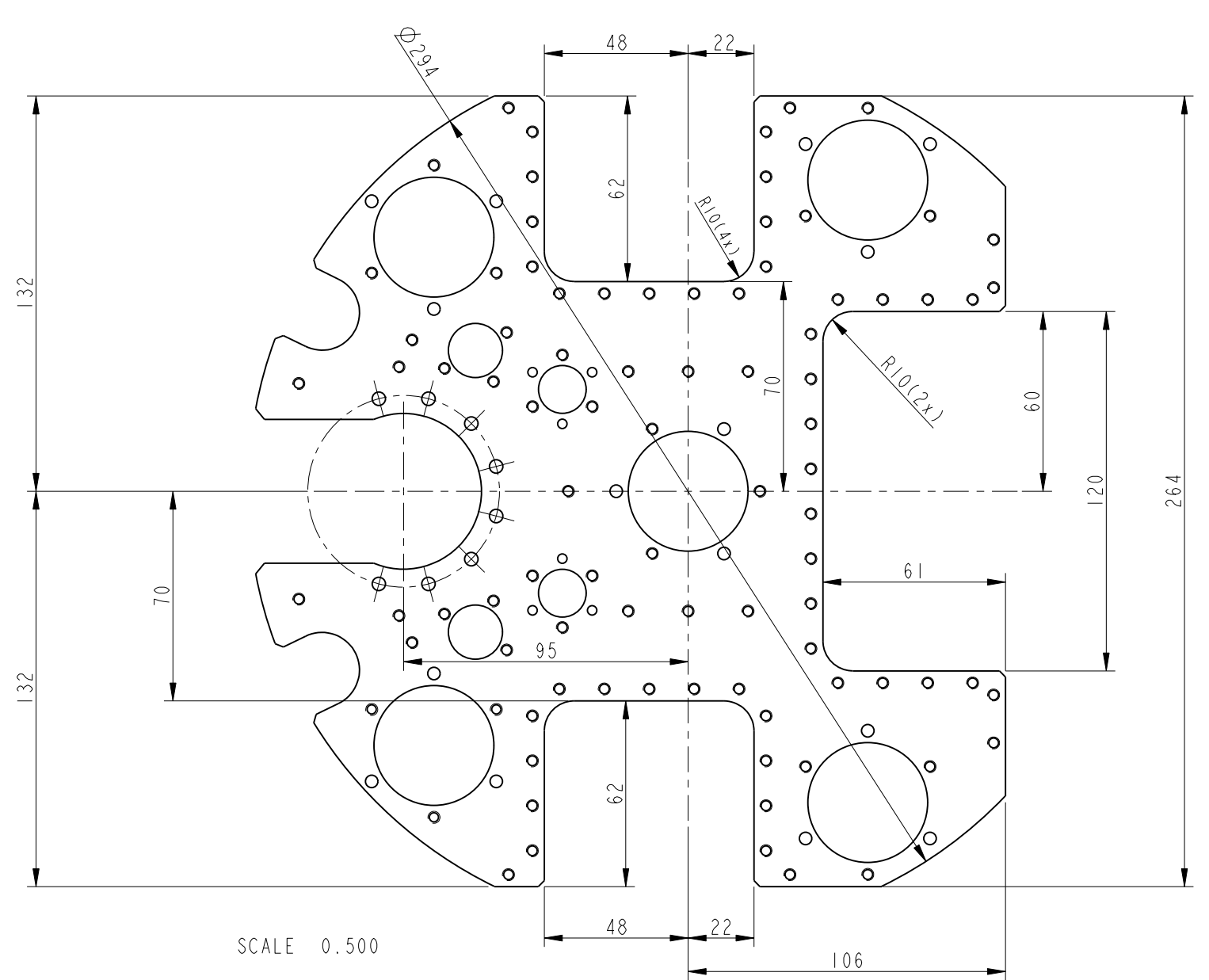
SCALE 0.600

General Tolerances		Linear Dimensions					Chamfered edges			Angular Dimensions						
ISO-2768-FH Dimensions in [mm]		>0.5 to 6	>6 to 30	>30 to 120	>120 to 400	>400 to 1000	>1000 to 2000	>2000 to 4000	>0.5 to 3	>3 to 6	>6	to 10	>10 to 50	>50 to 120	>120 to 400	>400
		±0.05	±0.1	±0.15	±0.2	±0.3	±0.5	-	±0.2	±0.5	±1	±1°	±0°30'	±0°20'	±0°10'	±0°5'
Item ID	M00345					Drawing Name		MT_PAT_CP								
Old Item ID						Treatment		Goldplated								
Material	Copper					Comments:										
Drawn	Jeroen Muller	13-Nov-2014		Group	Cryostat											
Last revision						Sub-group	Flanges									
Approved						Scale	0.333									
Project	General					Sheet	1 of 3									
Item Name	CP Flange Au															

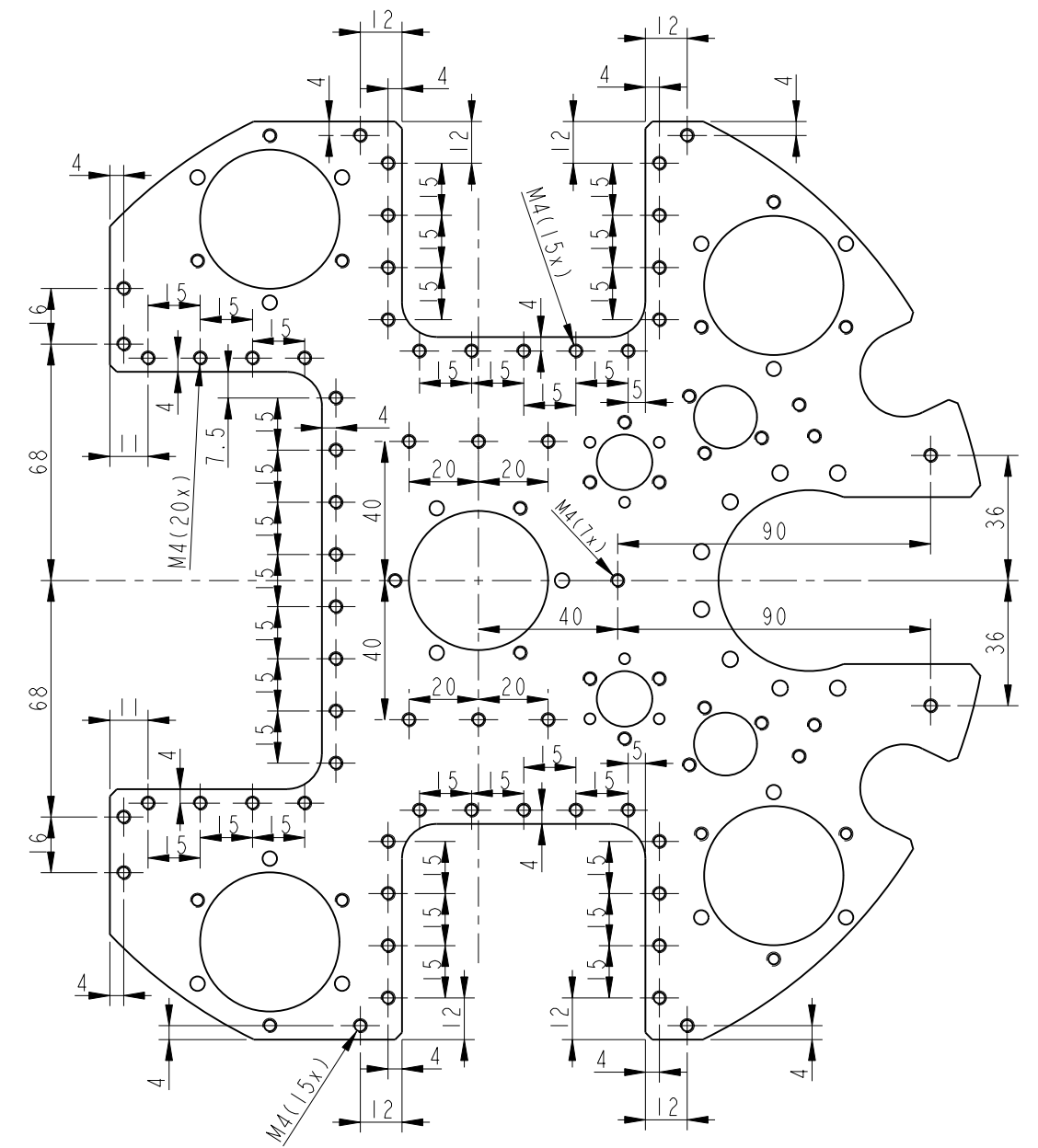
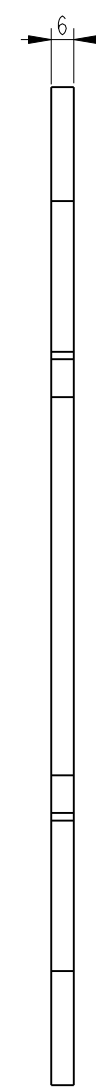


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COLD PLATE



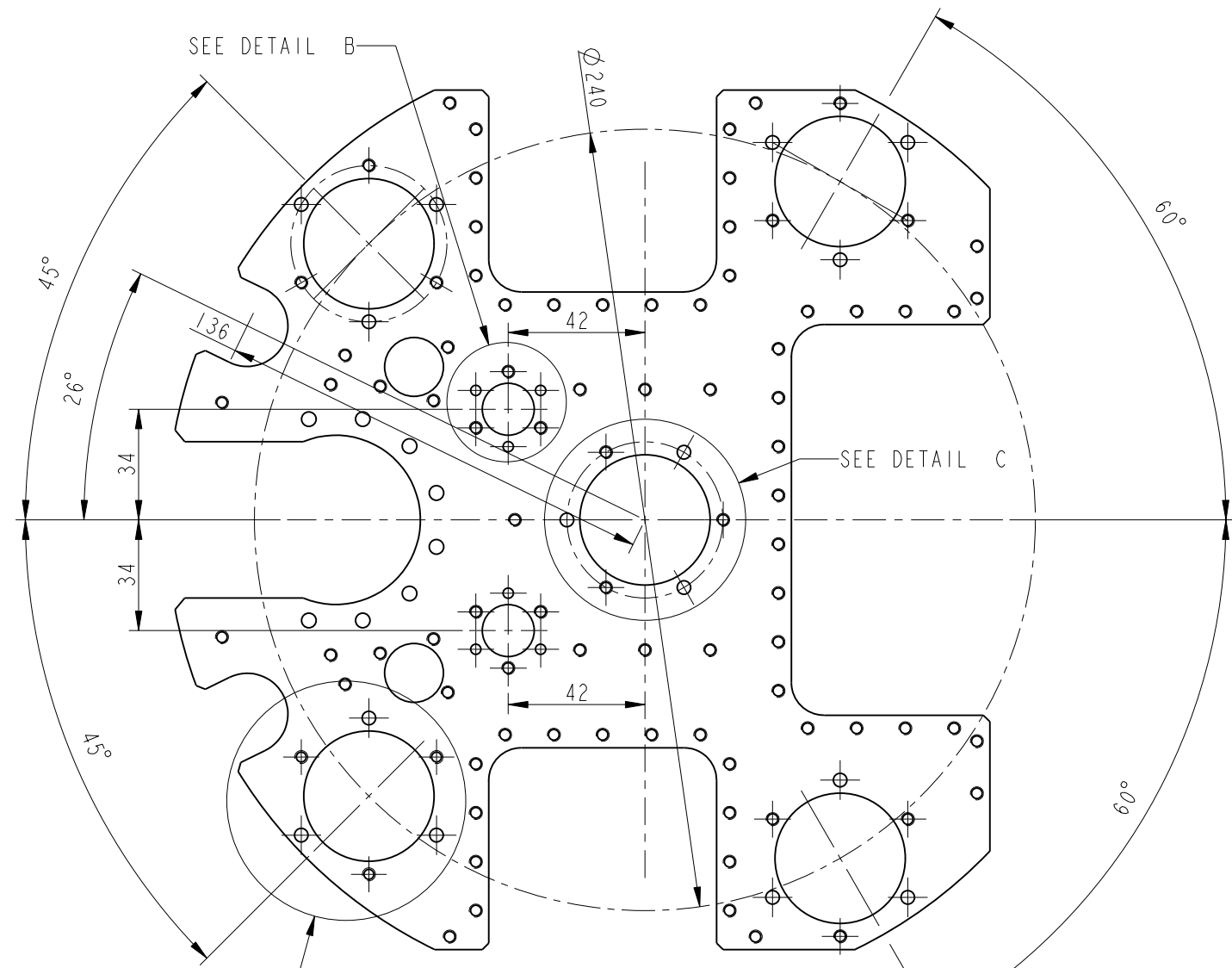
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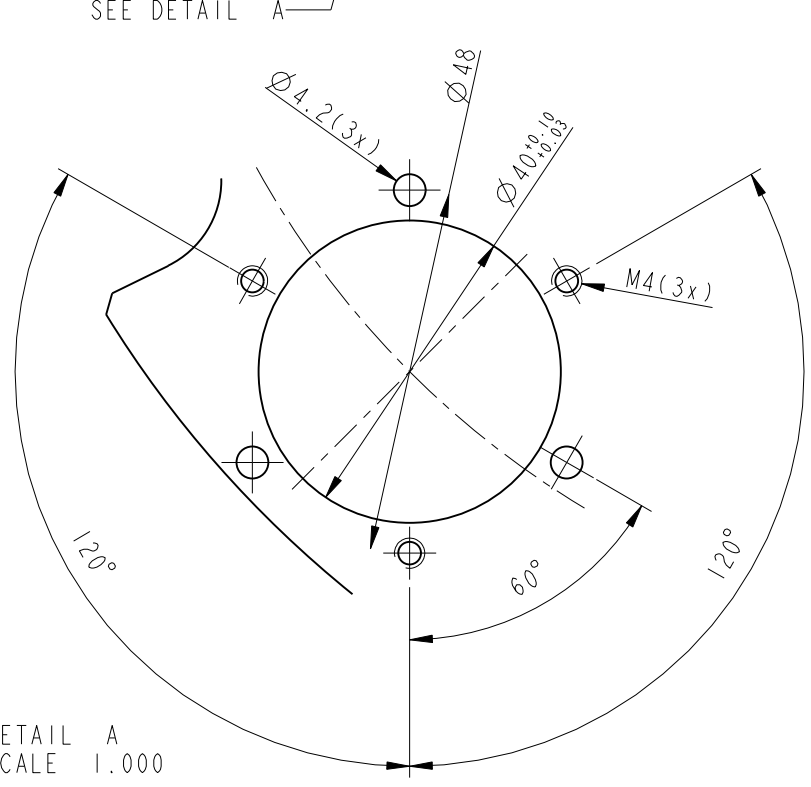
General Tolerances		Linear Dimensions					Chamfered edges			Angular Dimensions						
ISO-2768-FH Dimensions in [mm]		>0.5 to 6	>6 to 30	>30 to 120	>120 to 400	>400 to 1000	>1000 to 2000	>2000 to 4000	>0.5 to 3	>3 to 6	>6	to 10	>10 to 50	>50 to 120	>120 to 400	>400
		±0.05	±0.1	±0.15	±0.2	±0.3	±0.5	-	±0.2	±0.5	±1	±1°	±0°30'	±0°20'	±0°10'	±0°5'
 		Item ID		M00345		Drawing Name		MT_PAT_CP								
Drawn		Jeroen Muller		13-Nov-2014		Material		Copper								
Last revision						Group		Cryostat								
Approved						Sub-group		Flanges								
Project		General				Scale		0.333								
Item Name		CP Flange Au				Sheet		2 of 3								

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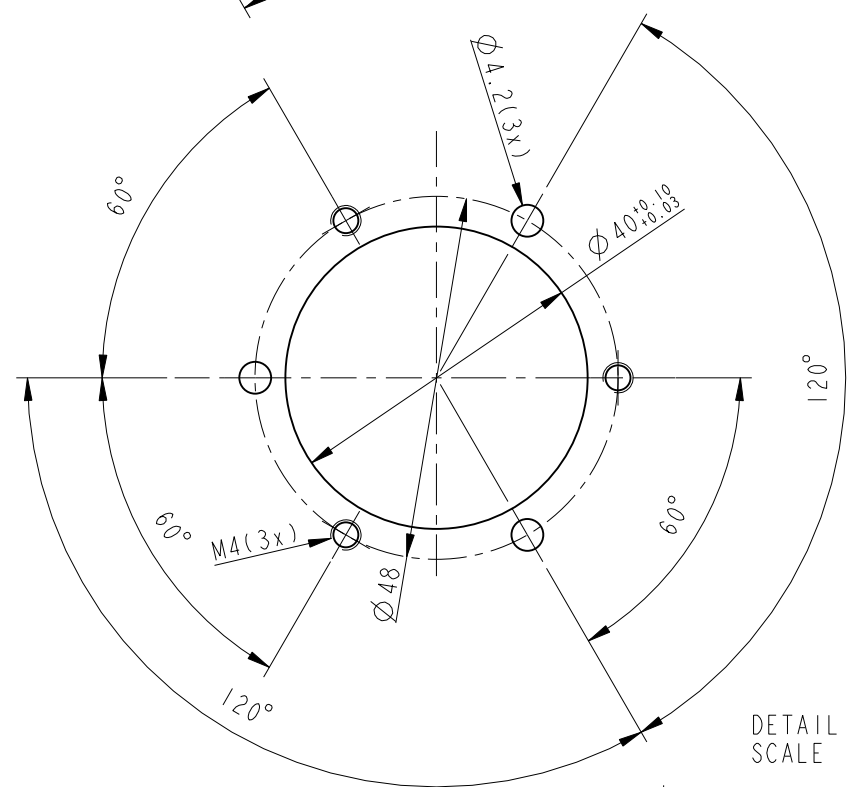
COLD PLATE



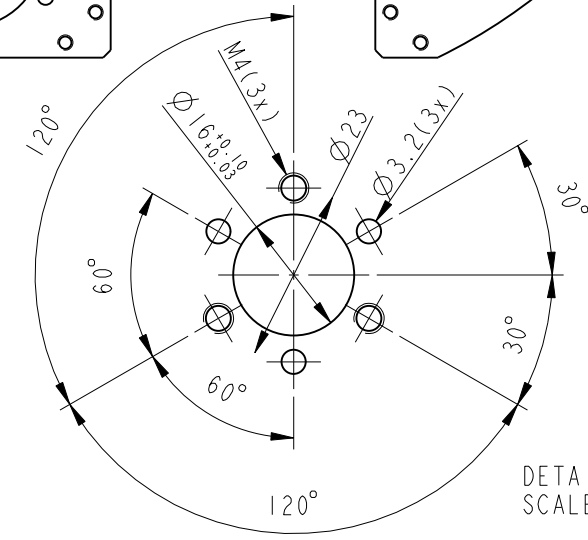
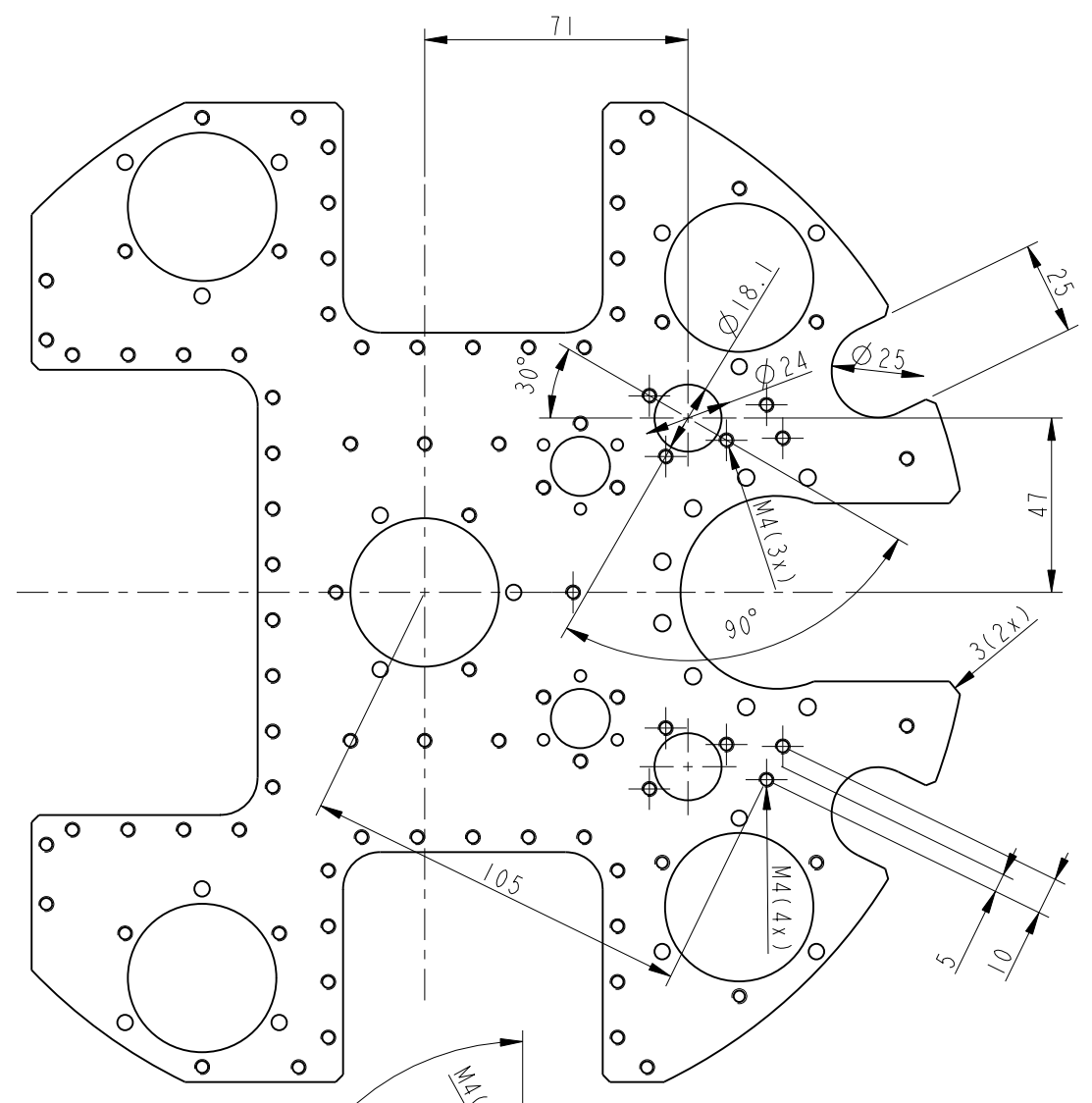
SCALE 0.500



DETAIL A
SCALE 1.000



DETAIL C
SCALE 1.000



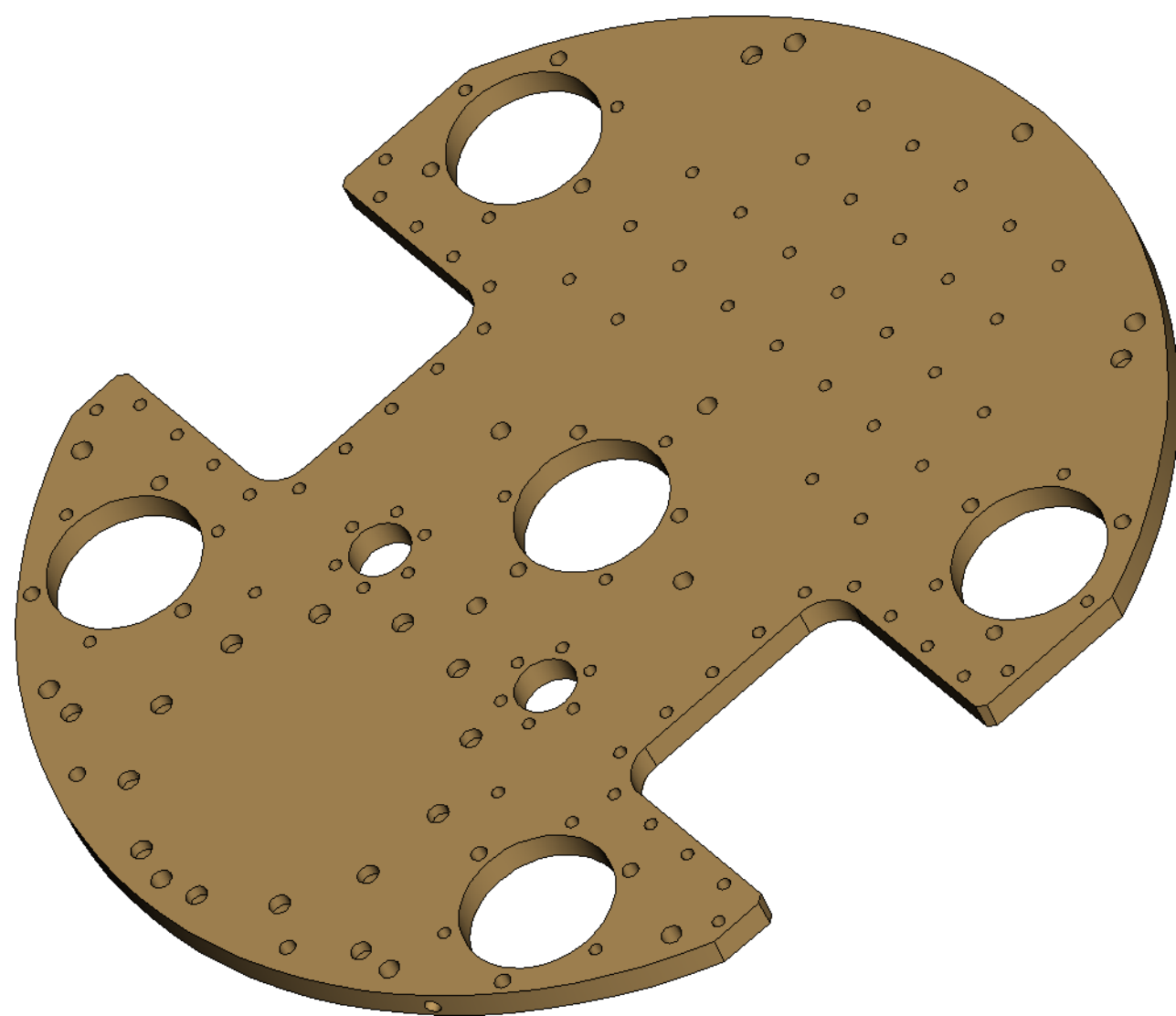
DETAIL B
SCALE 1.000

General Tolerances		Linear Dimensions					Chamfered edges			Angular Dimensions						
ISO-2768-FH		>0.5 to 6	>6 to 30	>30 to 120	>120 to 400	>400 to 1000	>1000 to 2000	>2000 to 4000	>0.5 to 3	>3 to 6	>6	to 10	>10 to 50	>50 to 120	>120 to 400	>400
		±0.05	±0.1	±0.15	±0.2	±0.3	±0.5	-	±0.2	±0.5	±1	±1°	±0°30'	±0°20'	±0°10'	±0°5'
 		Item ID		M00345		Drawing Name		MT_PAT_CP								
Old Item ID				Treatment		Goldplated										
Material		Copper		Comments:												
Drawn		Jeroen Muller		13-Nov-2014		Group		Cryostat								
Last revision						Sub-group		Flanges								
Approved						Scale		0.333								
Project		General				Sheet		3 of 3								
Item Name		CP Flange Au														

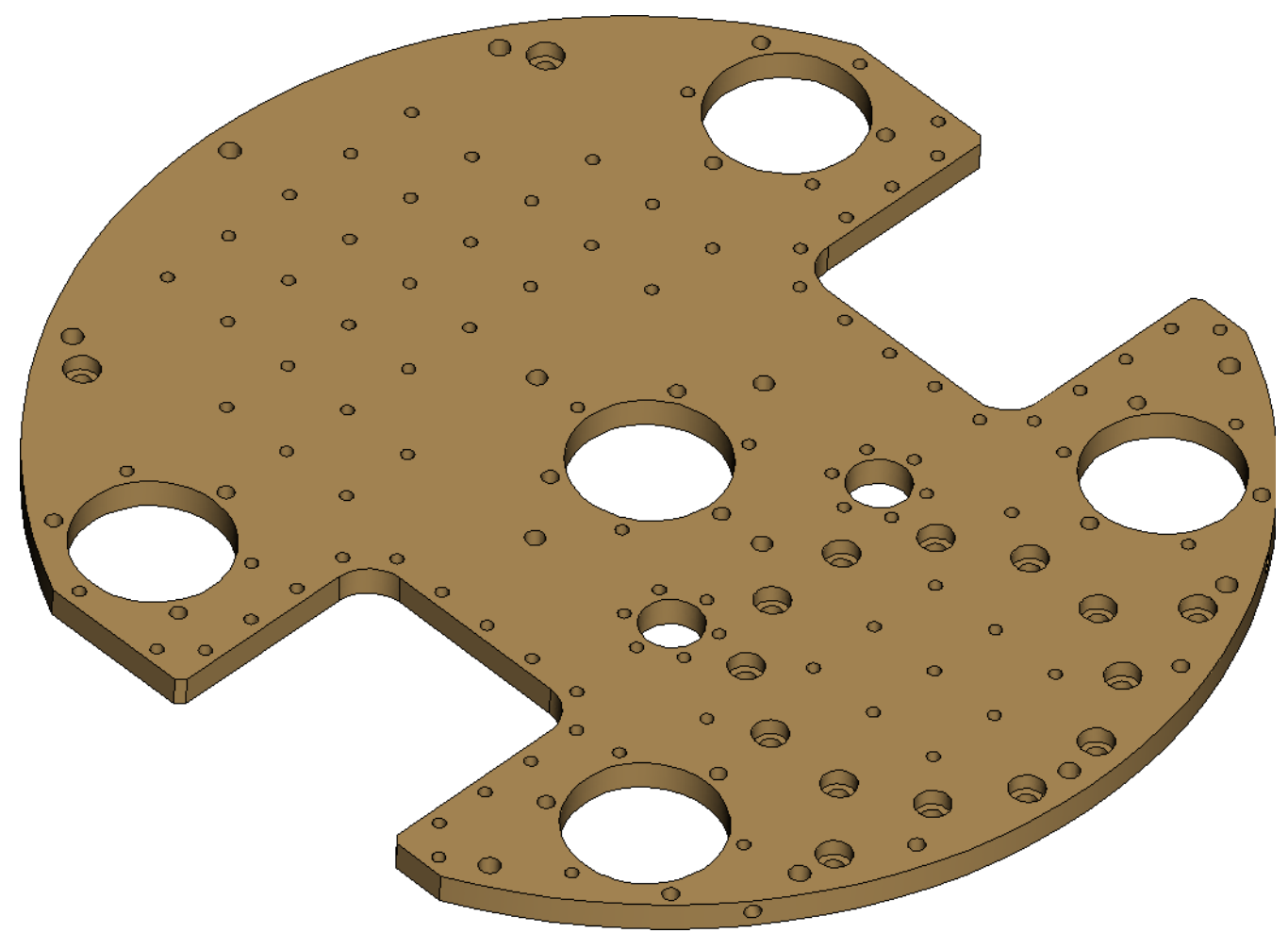


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MXC PLATE



SCALE 0.600



SCALE 0.600

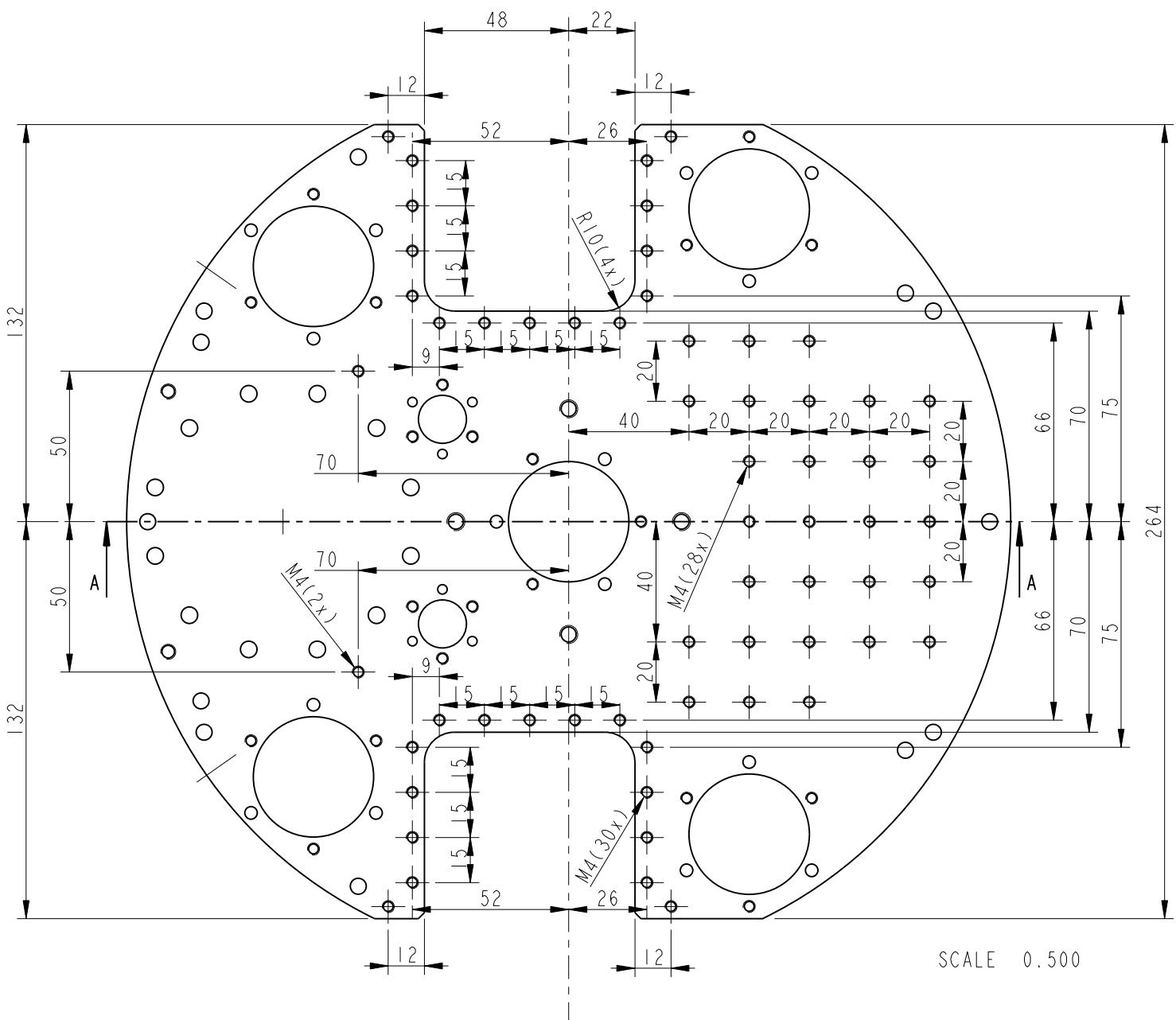
General Tolerances		Linear Dimensions					Chamfered edges			Angular Dimensions											
ISO-2768-FH Dimensions in [mm]		>0.5 to 6	>6 to 30	>30 to 120	>120 to 400	>400 to 1000	>1000 to 2000	>2000 to 4000	>0.5 to 3	>3 to 6	>6	to 10	>10 to 50	>50 to 120	>120 to 400	>400					
		±0.05	±0.1	±0.15	±0.2	±0.3	±0.5	-	±0.2	±0.5	±1	±1°	±0° 30'	±0° 20'	±0° 10'	±0° 5'					
		Item ID					M00346					Drawing Name					MT_PAT_MXC_PLATE				
Drawn		Jeroen Muller					13-Nov-2014					Material					Copper				
Last revision							Group					Cryostat									
Approved							Sub-group					Flanges									
Project		General					Scale					0.250									
Item Name		MXC Flange Au					Sheet					1 of 3									



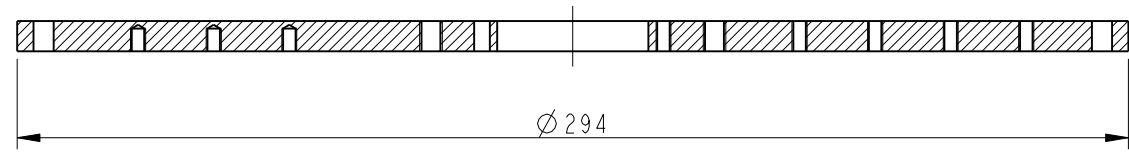
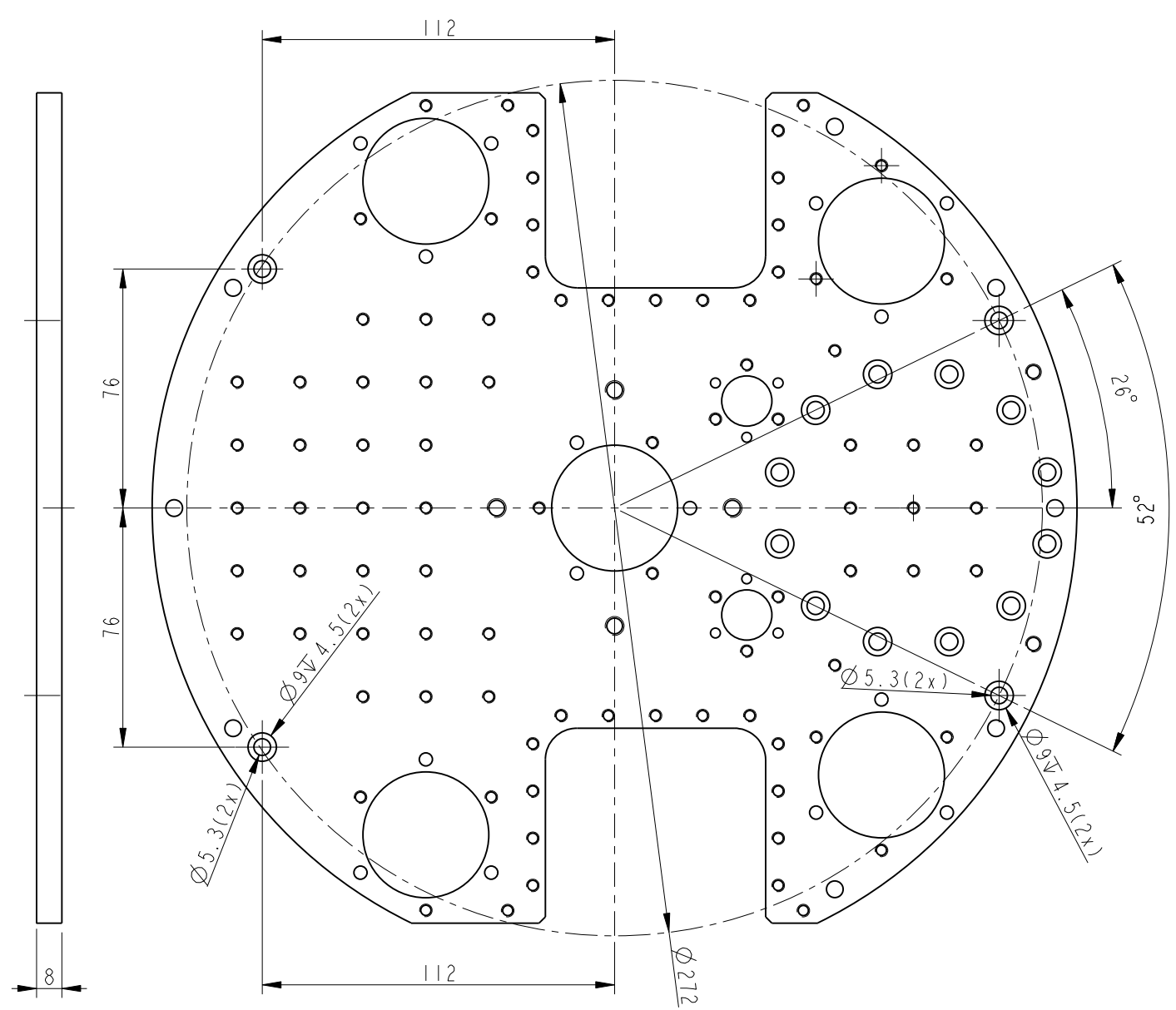
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MXC PLATE



SCALE 0.500



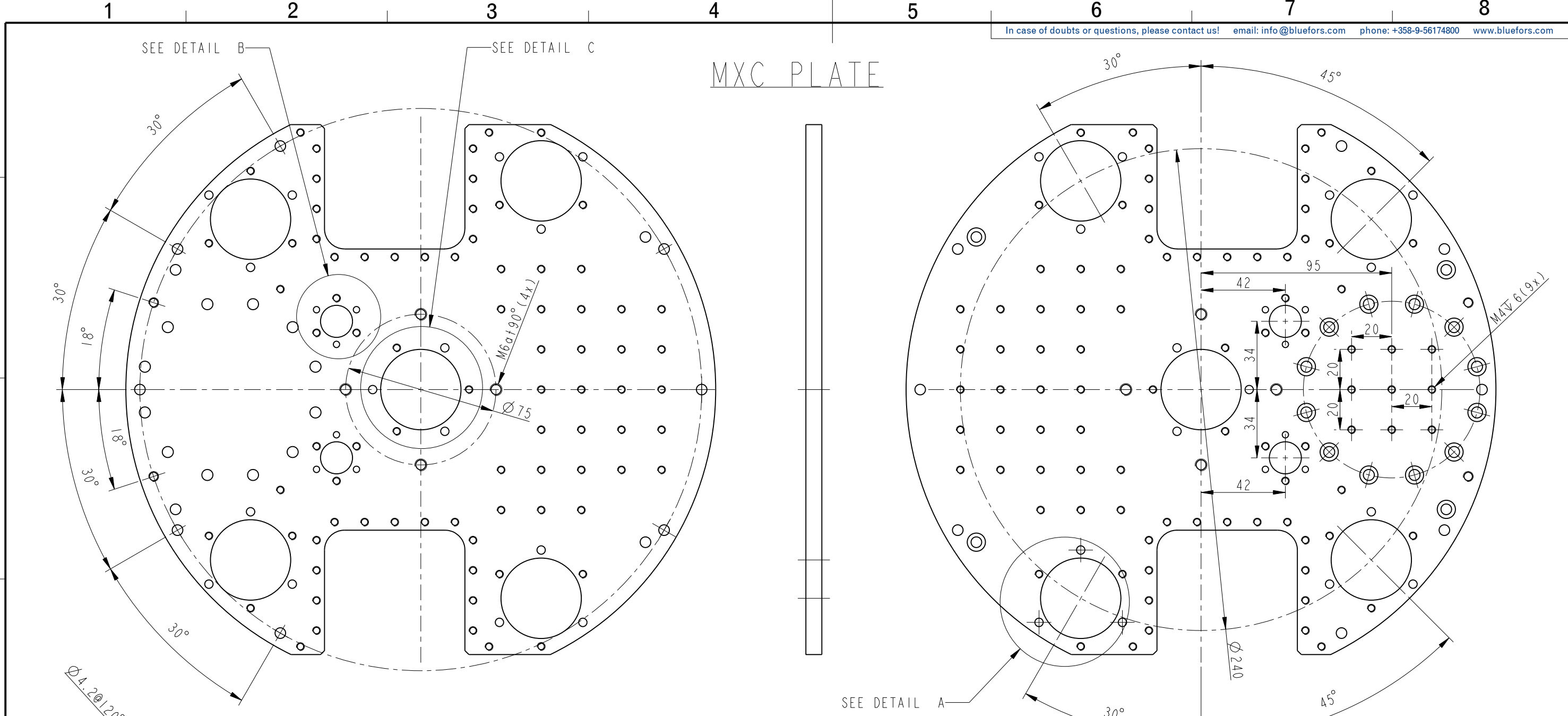
SECTION A-A

General Tolerances	Linear Dimensions					Chamfered edges			Angular Dimensions					
	>0.5 to 6	>6 to 30	>30 to 120	>120 to 400	>400 to 1000	>2000 to 4000	>0.5 to 3	>3 to 6	>6	to 10	>10 to 50	>50 to 120	>120 to 400	>400
ISO-2768-FH Dimensions in [mm]	±0.05	±0.1	±0.15	±0.2	±0.3	±0.5	±0.2	±0.5	±1	±1°	±0° 30'	±0° 20'	±0° 10'	±0° 5'
Ra 1.6 Ra 0.8 3rd angle projection	Item ID	M00346	Drawing Name	MT_PAT_MXC_PLATE										
Old Item ID		Treatment	Goldplated	Comments:										
Material	Copper	Group	Cryostat											
Sub-group	Flanges													
Scale	0.250													
Sheet	2 of 3													
Item Name	MXC Flange Au													

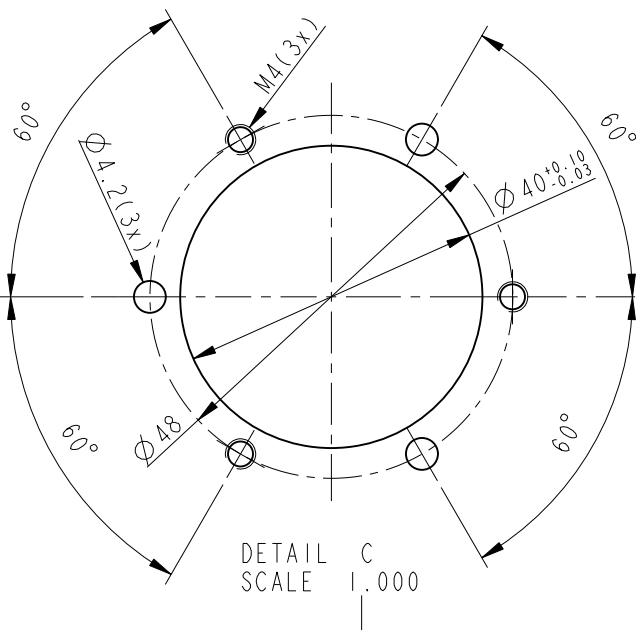
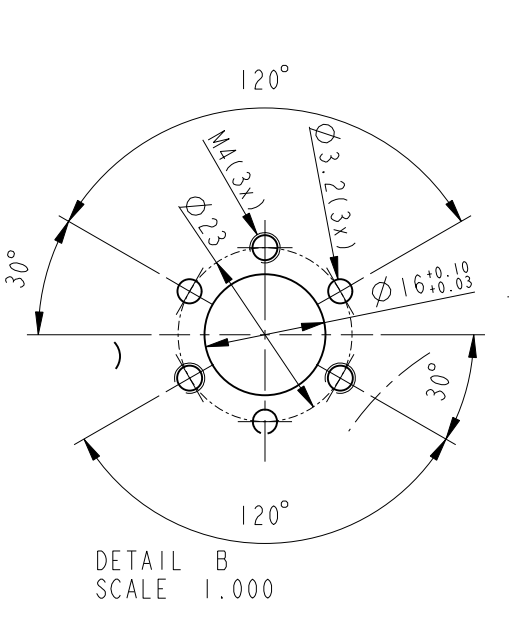
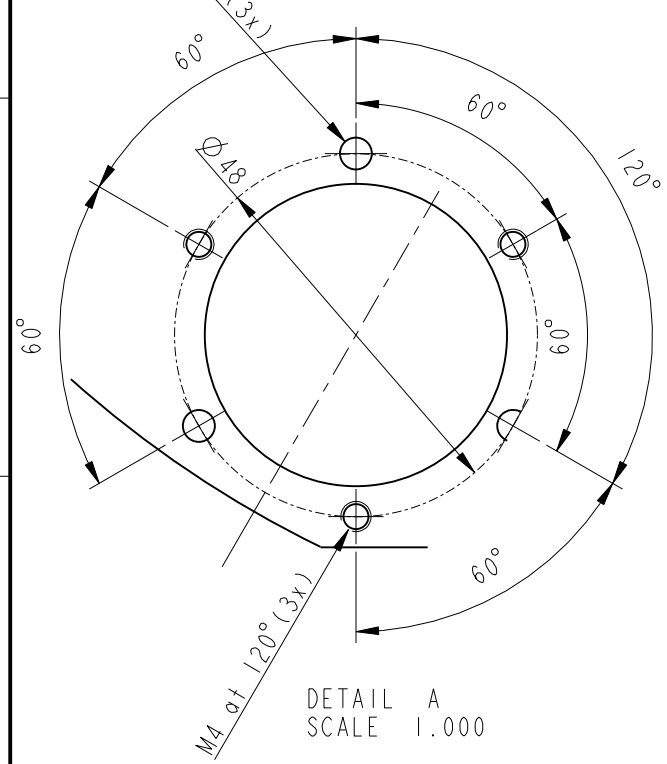


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MXC PLATE



SCALE 0.500



General Tolerances		Linear Dimensions					Chamfered edges			Angular Dimensions						
ISO-2768-FH		>0.5 to 6	>6 to 30	>30 to 120	>120 to 400	>400 to 1000	>1000 to 2000	>2000 to 4000	>0.5 to 3	>3 to 6	>6	to 10	>10 to 50	>50 to 120	>120 to 400	>400
		±0.05	±0.1	±0.15	±0.2	±0.3	±0.5	-	±0.2	±0.5	±1	±1°	±0° 30'	±0° 20'	±0° 10'	±0° 5'
		Item ID		M00346		Drawing Name		MT PAT_MXC_PLATE								
		Old Item ID				Treatment		Goldplated								
Drawn		Jeroen Muller		13-Nov-2014		Material		Copper								
Last revision						Group		Cryostat								
Approved						Sub-group		Flanges								
Project		General				Scale		0.250								
Item Name		MXC Flange Au				Sheet		3 of 3								

