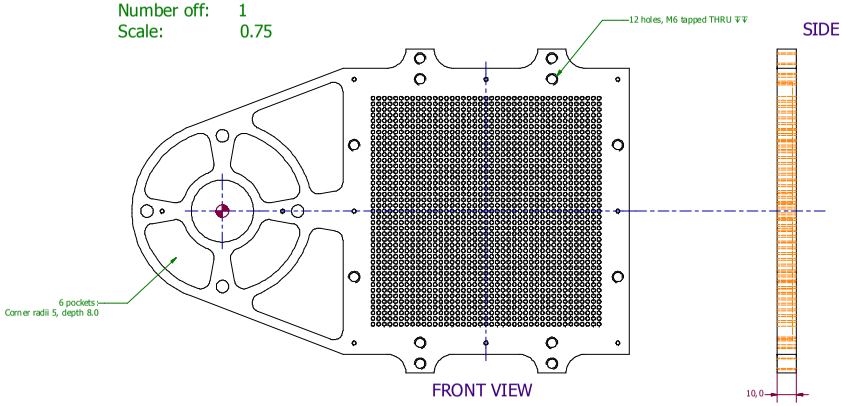
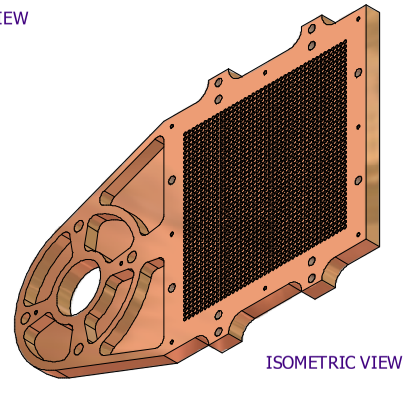
#0021 GRID ASSEMBLY

(1) GRID **

Material: Copper
Number off: 1
Scale: 0.75





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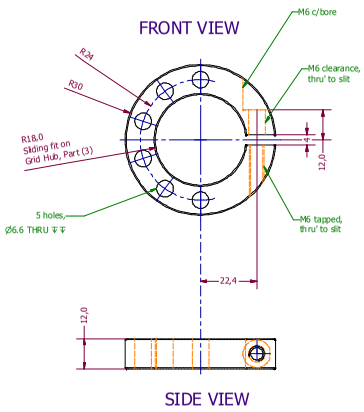
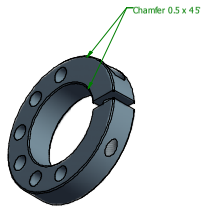
(4) GRID HUB CLAMP

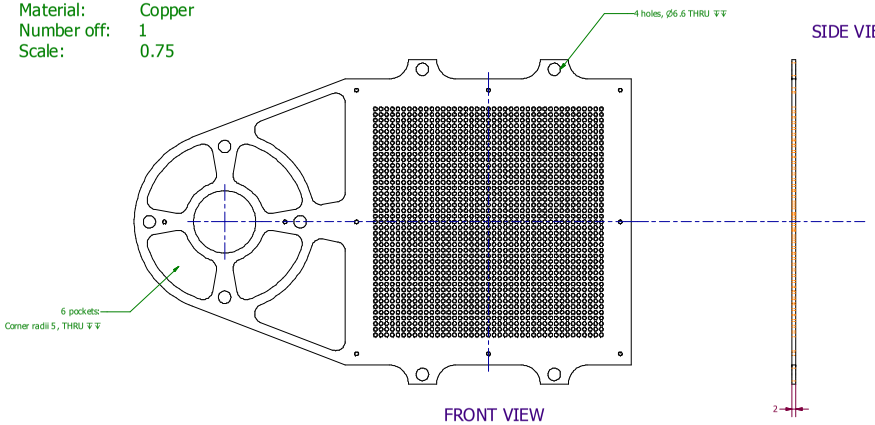
Material: Stainless Steel
Number off: 2
Scale: 1

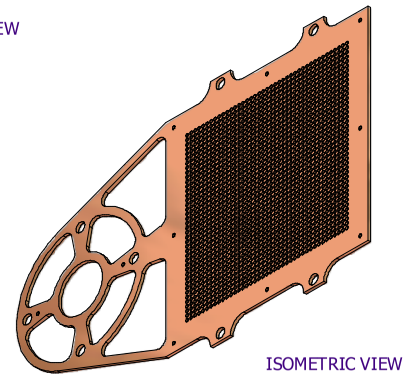




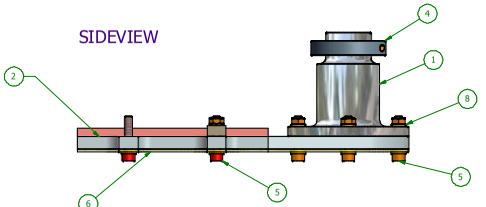
(2) GRID COVER **

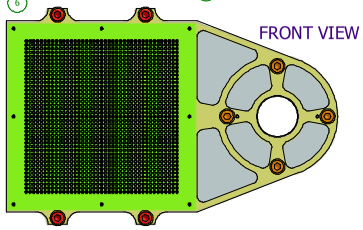
Material: Copper
Number off: 1
Scale: 0.75

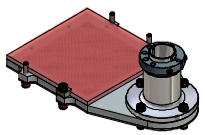




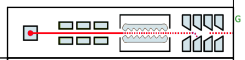
Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	(3) Grid Hub	
2	1	(1) Grid	
3	1	Tungsten Grid	
4	1	(4) Grid Hub Clamp	
5	9	ISO 4762 - M6 x 30	Hexagon Socket Head Cap Screw
6	1	(2) Grid Cover	
8	13	ISO 7089 - 6 - 140 HV	Washer
9	5	ISO 4032 - M6	Hex Nut
10	1	Quartz	
11	1	QuartzClamp	

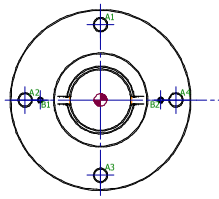




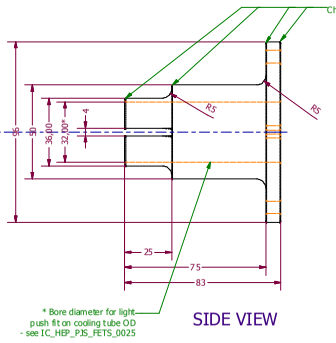


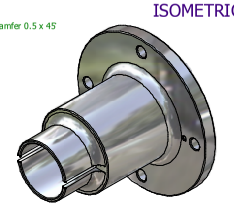
(5) GRID ASSEMBLY





Hole Table			
HOLE	XDIM	YDIM	DESCRIPTION
A1	0,00	40,00	Ø6,6 THRU
A2	-40,00	0,00	Ø6,6 THRU
A3	0,00	-40,00	Ø6,6 THRU
A4	40,00	0,00	Ø6,6 THRU
B1	-32,00	0,00	Ø2,0 THRU
B2	32,00	0,00	Ø2,0 THRU





(3) GRID HUB

Material: Dural
Number off: 1
Scale: 0.75

**DETAILS COMMON TO THE GRID AND GRID COVER, PARTS (1) & (2) ARE SHOWN ON DRAWING # IC_HEP_PJS_FETS_0022

Title:	MkII Emittance Measurement Device		
Drawn by:	P. Savage	Projection:	Third angle
Designed by:		Model file:	GridCopper.ipt
Checked by:		Drawing file:	Emittance.idw
Date:	26/3/07	Version number:	3
Manufactured by:		Project:	Front End Test Stand
Material:	Defined per part	Sheet number:	1 / 21
Remove all burrs		Number off:	Defined per part
Scale:	Defined per part	Drawing number:	IC_HEP_PJS_FETS_0021
Notes:			
	Tolerance for slot position and		

Unless otherwise stated:
Dimensional tolerance: X ± 0.5 mm; X.X ± 0.2 mm; X.XX ± 0.1 mm
Angular tolerance: ± 0.5°
Hole centres: ± 0.05 mm
Suiface finish: 1.6 microns
Dimensions in mm □

Contact: p.savage@imperial.ac.uk (Work) 0207 594 7817 (Mobile) 07884 268058

#0022

GRID POCKET & HOLE POSITIONS

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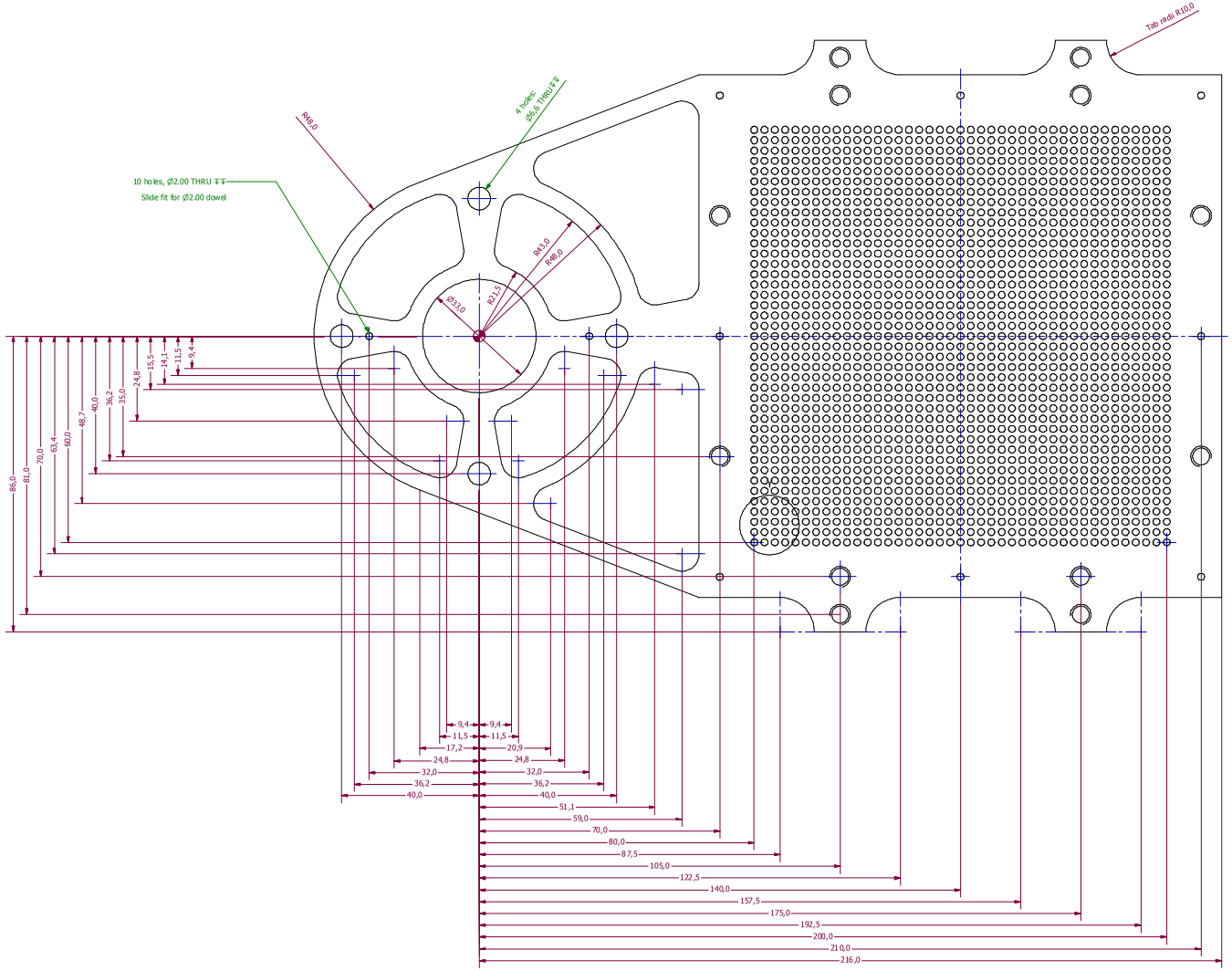
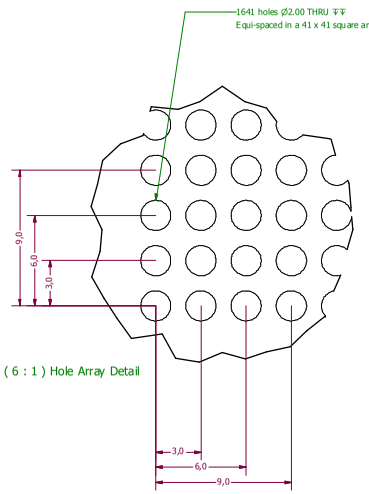
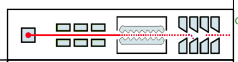




Y (6 : 1) Hole Array Detail



Title:	MkII Emittance Measurement Device		
Drawn by:	P. Savage	Projection:	Third angle
Designed by:	P. Savage	Model file:	GridCopper.ipt
Checked by:	N/A	Drawing file:	Emittance.idw
Date:	26/3/07	Version number:	3
Manufactured by:	N/A	Project:	Front End Test Stand
Material:	N/A	Sheet number:	2 / 21
Remove all burrs		Number off:	N/A
Scale:	1.5	Drawing number:	IC_HEP_PJS_FETS_0022
Notes:	N/A		

Unless otherwise stated:		
Dimensional tolerance:	X	± 0.5 mm
	X.X	± 0.2 mm
	X.XX	± 0.1 mm
Angular tolerance:		± 0.5'
Hole centres:		± 0.05 mm
Suiface finish:		1.6 microns
Dimensions in mm		□

Contact: p.savage@imperial.ac.uk (Work) 0207 594 7817 (Mobile) 07884 268058

#0023

MAIN FLANGE

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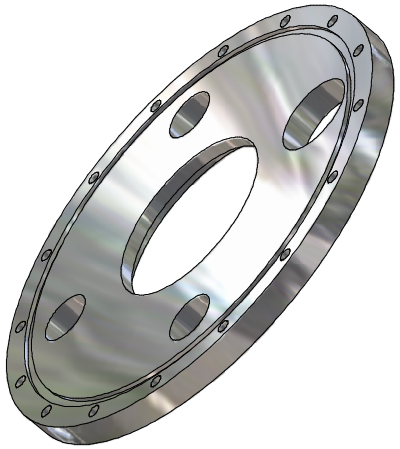
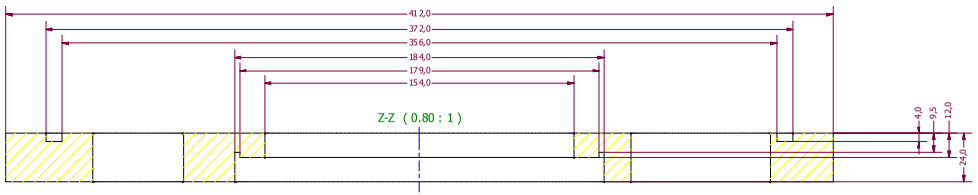
MAIN FLANGE

Material: Stainless Steel
Number off: 1
Scale: 0.8

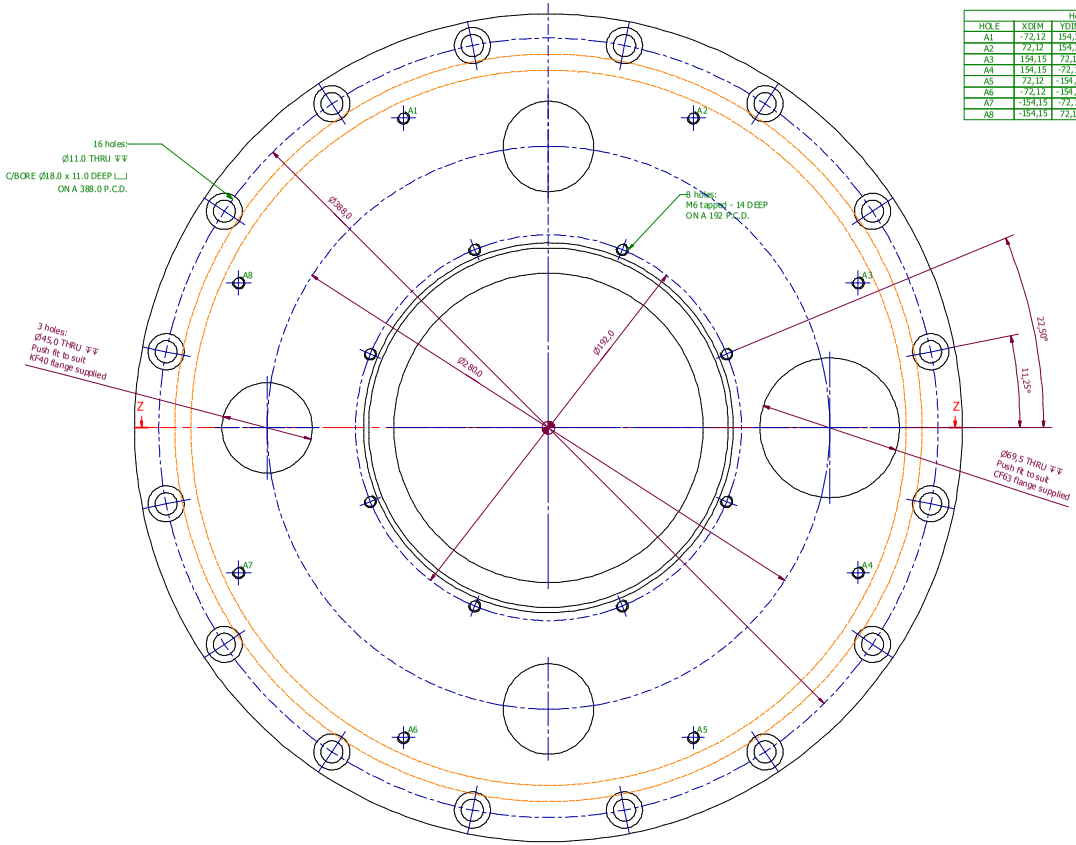


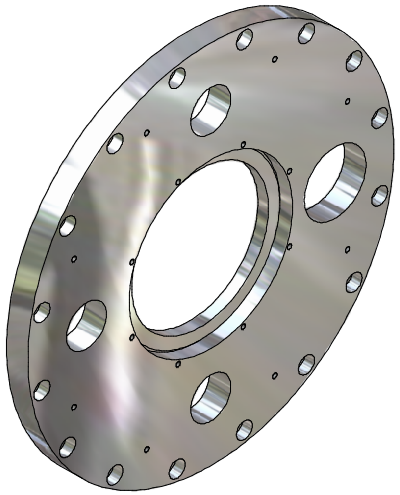
ISOMETRIC REAR VIEW



SIDE VIEW

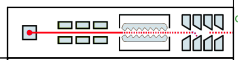
Hole Table			
HOLE	XDIM	YDIM	DESCRIPTION
A1	-72,12	154,15	M6x1 - 14,0
A2	72,12	154,15	M6x1 - 14,0
A3	154,15	72,12	M6x1 - 14,0
A4	154,15	-72,12	M6x1 - 14,0
A5	72,12	-154,15	M6x1 - 14,0
A6	-72,12	-154,15	M6x1 - 14,0
A7	-154,15	-72,12	M6x1 - 14,0
A8	-154,15	72,12	M6x1 - 14,0





ISOMETRIC FRONT VIEW

FRONT VIEW



Title:	MkII Emittance Measurement Device		
Drawn by:	P. Savage	Projection:	Third angle
Designed by:	P. Savage	Model file:	Flange.ipt
Checked by:		Drawing file:	Emittance.idw
Date:	26/3/07	Version number:	2
Manufactured by:		Project:	Front End test Stand
Material:	Stainless Steel	Sheet number:	3 / 21
Remove all burrs		Number off:	1
Scale:	0.8	Drawing number:	IC_HEP_PJS_FETS_0023
Notes:			

Unless otherwise stated:		
Dimensional tolerance:	X	± 0.5 mm
	X.X	± 0.2 mm
	X.XX	± 0.1 mm
Angular tolerance:		± 0.5°
Hole centres:		± 0.05 mm
Suiface finish:		1.6 microns
Dimensions in mm		□

Contact: p.savage@imperial.ac.uk (Work) 0207 594 7817 (Mobile) 07884 268058

#0024

MAIN FLANGE COMPONENTS

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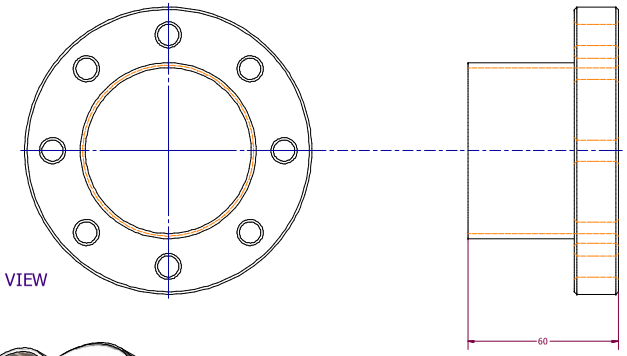
TO BE CUT TO LENGTH



FRONT VIEW

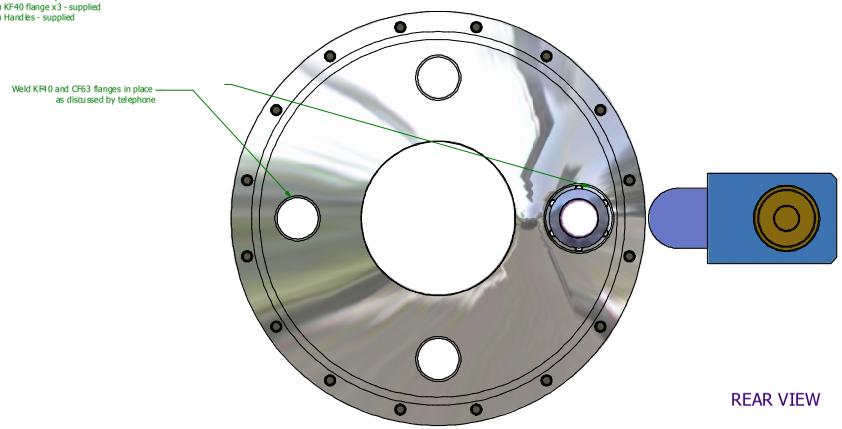
SIDE VIEW

ISOMETRIC VIEW

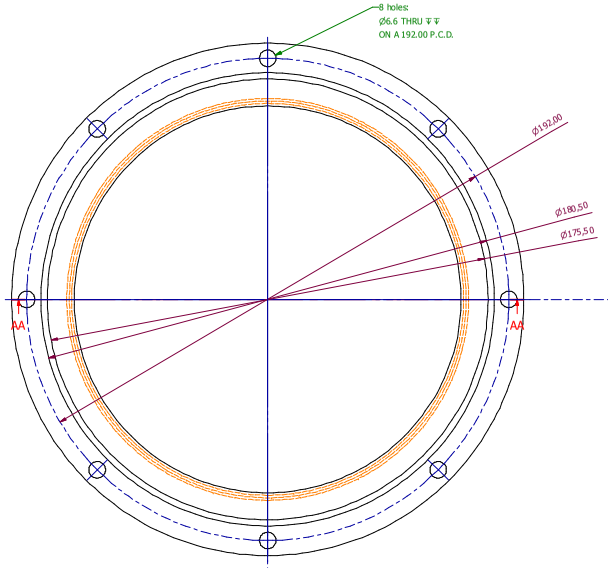
CF63 ROTATABLE FLANGE - SUPPLIED

Material: Stainless Steel
Number off: 1
Scale: 1.0

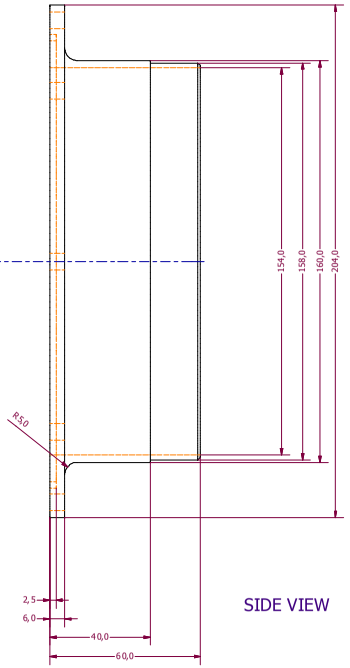
(1) Main flange
(2) CF63 rotatable flange - supplied, to be cut to length
(3) Window clamp - to be manufactured
(4) KF40 flange x3 - supplied
(5) Handles - supplied



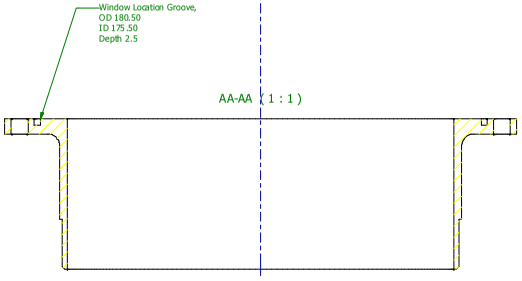
REAR VIEW



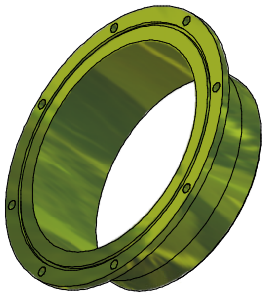
REAR VIEW



SIDE VIEW



SECTION VIEW



ISOMETRIC VIEW

WINDOW CLAMP

Material: Dural, Black Anodised
Number off: 1
Scale: 0.8

Title:	MkII Emittance Measurement Device		
Drawn by:	P. Savage	Projection:	Third angle
Designed by:	P. Savage	Model file:	WindowClamp.ipt
Checked by:		Drawing file:	Emittance.idw
Date:	26/3/07	Version number:	2
Manufactured by:		Project:	Front End Test Stand
Material:	Defined per part	Sheet number:	4 / 21
Remove all burrs		Number off:	Defined per part
Scale:	Defined per part	Drawing number:	IC_HEP_PJS_FETS_0024
Notes:			

Unless otherwise stated:
Dimensional tolerance: X ± 0.5 mm, X.X ± 0.2 mm, X.XX ± 0.1 mm
Angular tolerance: ± 0.5'
Hole centres: ± 0.05 mm
Suiface finish: 1.6 microns
Dimensions in mm

Contact: p.savage@imperial.ac.uk (Work) 0207 594 7817 (Mobile) 07884 268058

#0025

COOLED ROD

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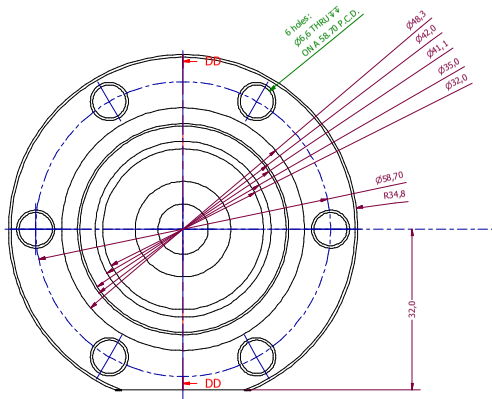
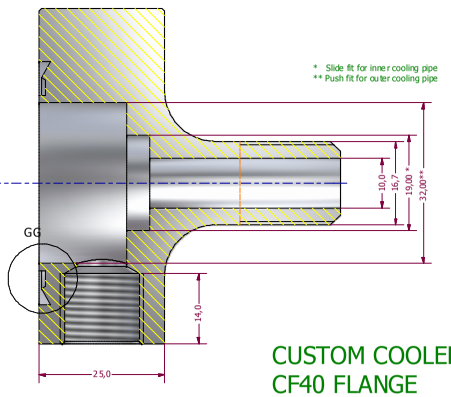
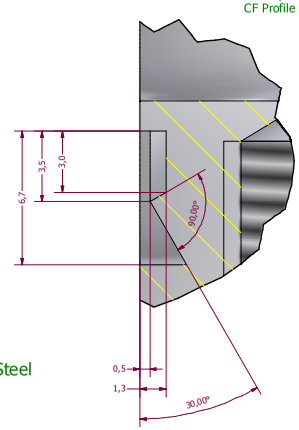


FRONT VIEW

SECTION DD-DD (2 : 1)

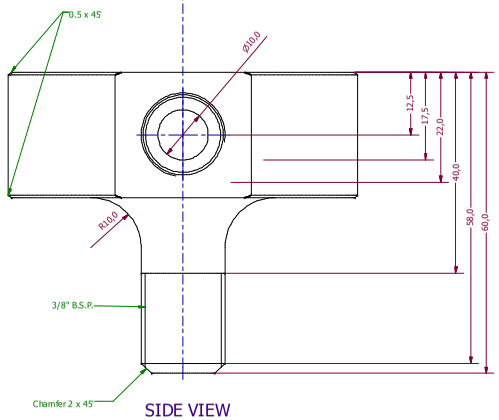


GG (8 : 1)
CF Profile detail

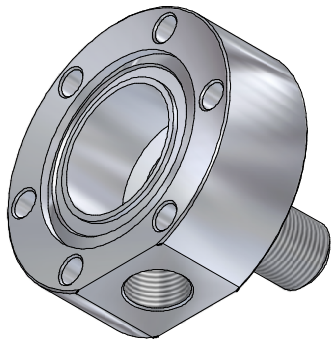


CUSTOM COOLED CF40 FLANGE

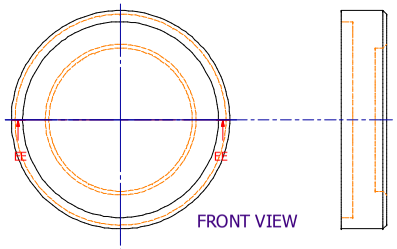
Material: Stainless Steel
Number off: 1
Scale: 2.0



SIDE VIEW



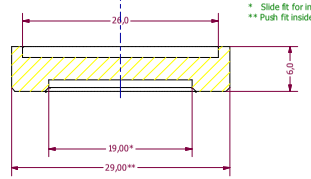
ISOMETRIC VIEW

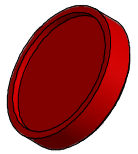


FRONT VIEW

SIDE VIEW

EE-EE (3 : 1)



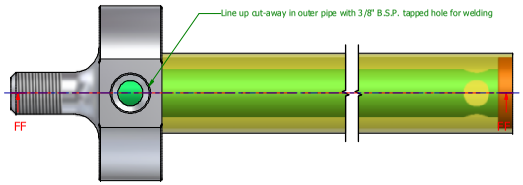


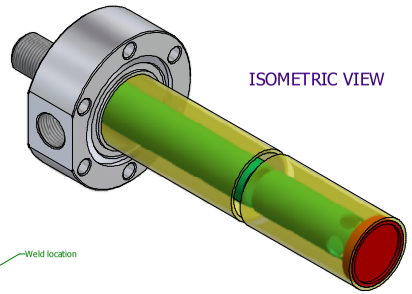
ISOMETRIC VIEW

COOLED ROD END CAP

Material: Stainless Steel
Number off: 1
Scale: 3.0

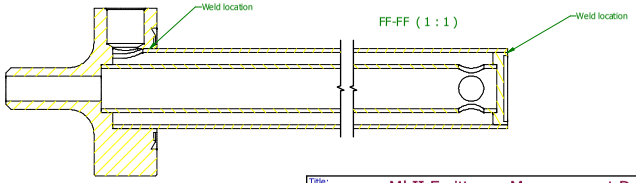
SIDE VIEW



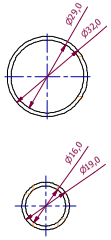


ISOMETRIC VIEW

SIDE SECTION VIEW

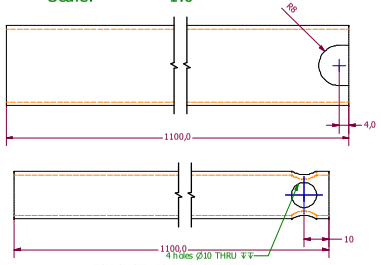


FRONT VIEWS

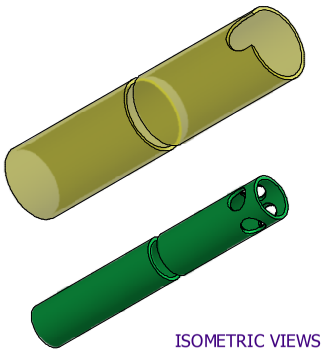


INNER & OUTER PIPES

Material: Stainless Steel
Number off: 1 each
Scale: 1.0



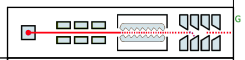
SIDE VIEWS



ISOMETRIC VIEWS

COOLED ROD ASSEMBLY

Material: Stainless Steel
Number off: 1
Scale: 1.0 but shown greatly reduced in length for clarity



Title:	MkII Emittance Measurement Device		
Drawn by:	P. Savage	Projection:	Third angle
Designed by:	P. Savage	Model file:	CF40_Cooling.ipt
Checked by:		Drawing file:	Emittance.idw
Date:	26/3/07	Version number:	2
Manufactured by:		Project:	Front End Test Stand
Material:	Defined per part	Sheet number:	5 / 21
Remove all burrs		Number of:	Defined per part
Scale:	Defined per part	Drawing number:	IC_HEP_PJS_FETS_0025
Notes:			

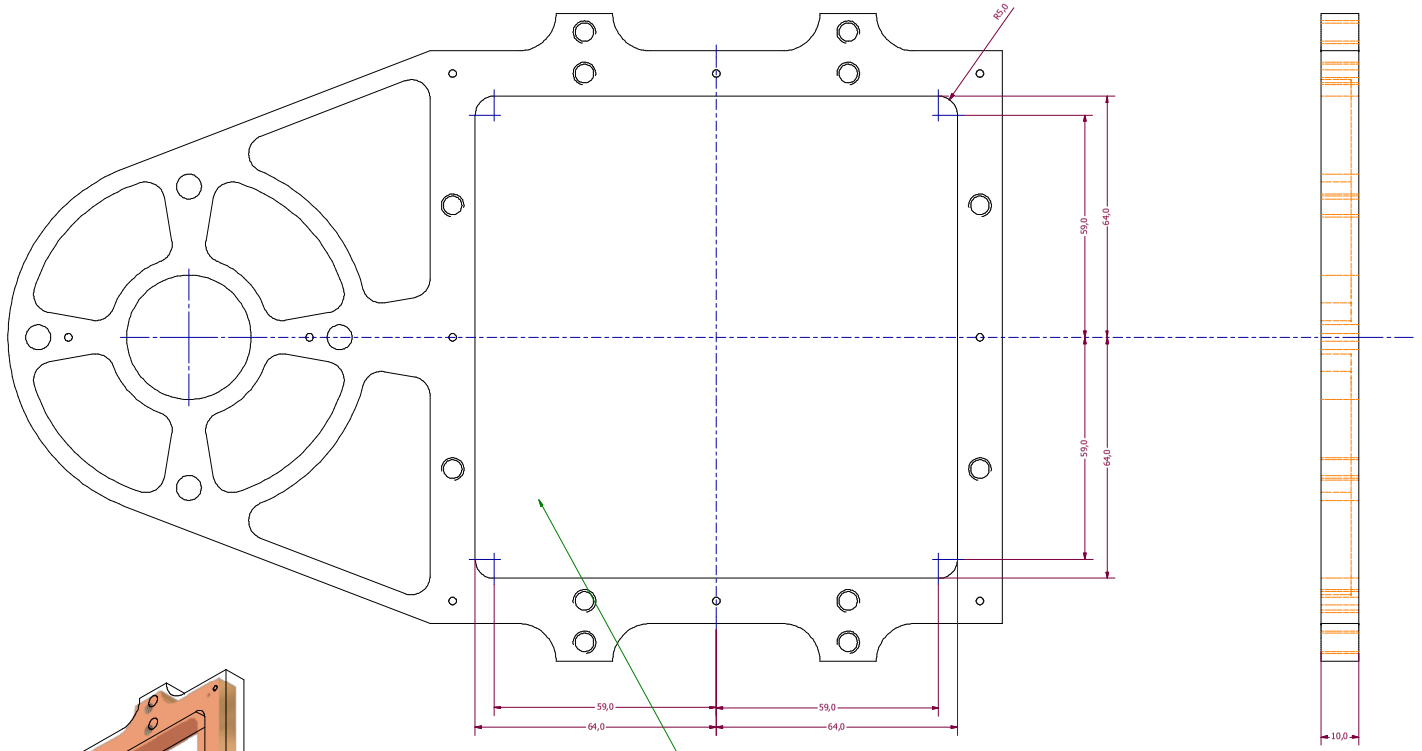
Unless otherwise stated:		
Dimensional tolerance:	X	± 0.5 mm
	X.X	± 0.2 mm
	X.XX	± 0.1 mm
Angular tolerance:		± 0.5°
Hole centres:		± 0.05 mm
Suiface finish:		1.6 microns
Dimensions in mm		□

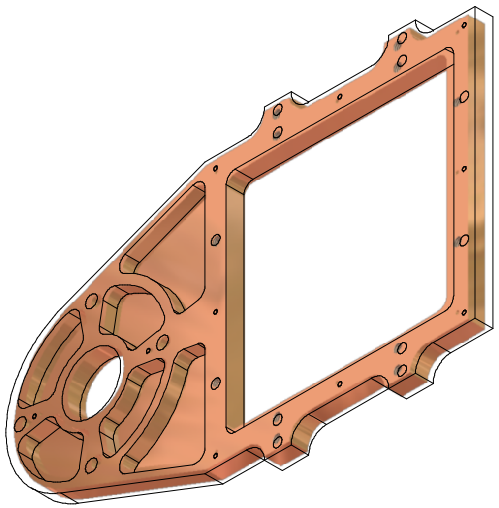
Contact: p.savage@imperial.ac.uk (Work) 0207 594 7817 (Mobile) 07884 268058

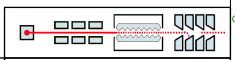
#0026

SCINTILLATOR MOUNT - NO GRID

Imperial College London







Title:	MkII Emittance Measurement Device		
Drawn by:	P. Savage	Projection:	Third angle
Designed by:		Model file:	NoGridCopper.ipt
Checked by:		Drawing file:	Emittance.idw
Date:	26/3/07	Version number:	1
Manufactured by:	AC Precision	Project:	F.E.T.S.
Material:	Copper	Sheet number:	6 / 21
Remove all burrs		Number off:	1
Scale:	1.5	Drawing number:	IC_HEP_PJS_FETS_0026
Notes:			

Unless otherwise stated:		
Dimensional tolerance:	X	± 0.5 mm
	X.X	± 0.2 mm
	X.XX	± 0.1 mm
Angular tolerance:		± 0.5'
Hole centres:		± 0.05 mm
Suiface finish:		1.6 microns
Dimensions in mm		□

Contact: p.savage@imperial.ac.uk (Work) 0207 594 7817 (Mobile) 07884 268058

#0027

BEAM SHUTTER

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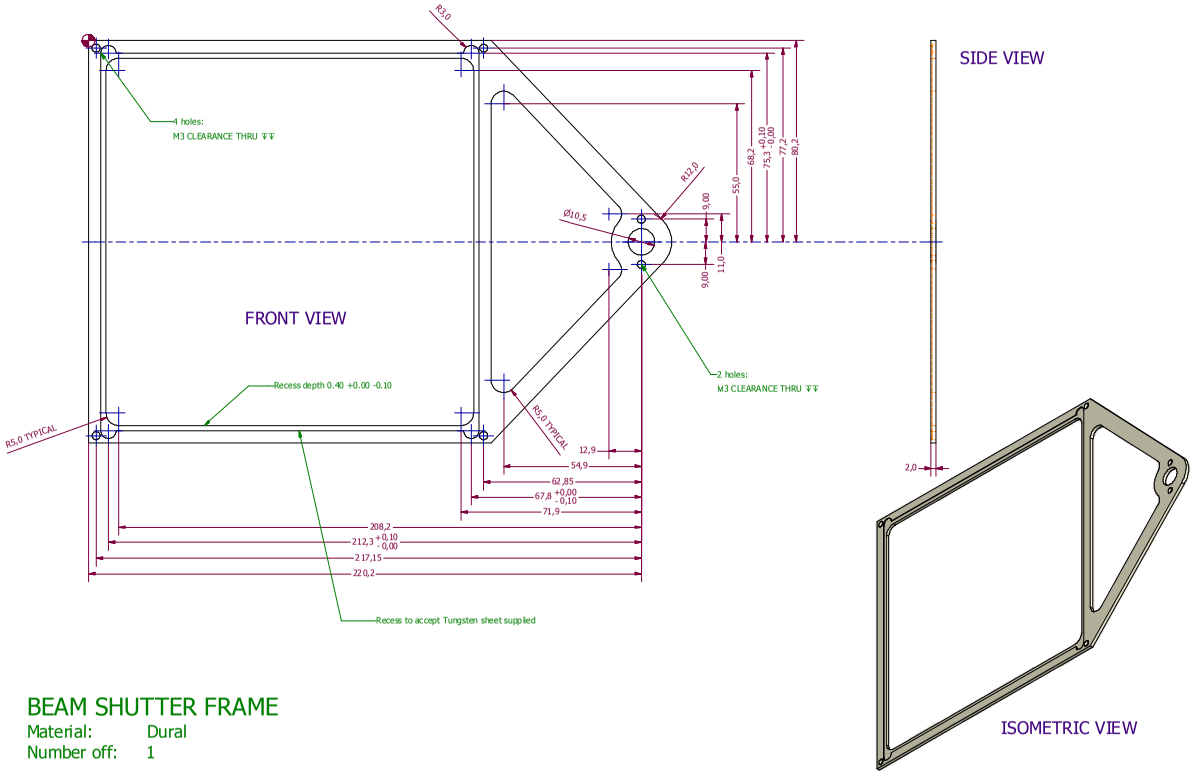
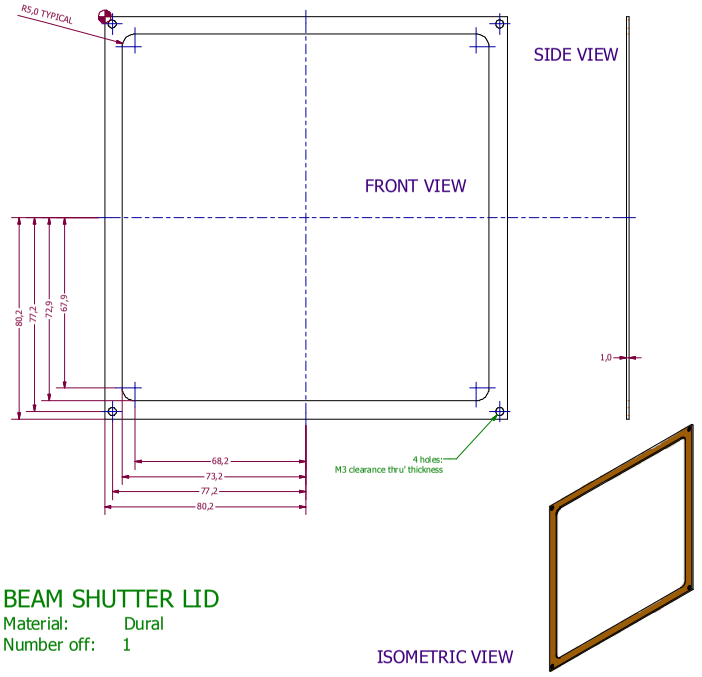


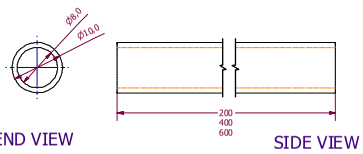
BEAM SHUTTER FRAME

Material: Dural
Number off: 1



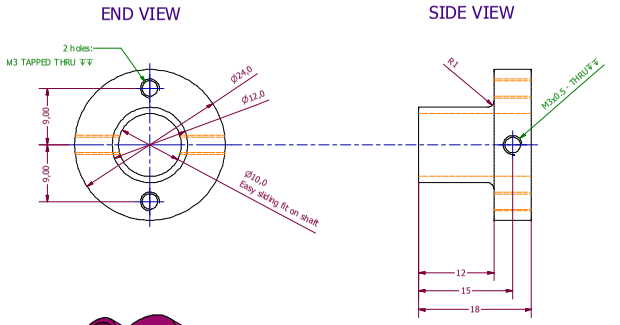
BEAM SHUTTER LID

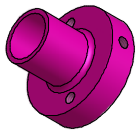
Material: Dural
Number off: 1



BEAM SHUTTER SHAFTS

Material: Stainless Steel
Number off: 3 shafts @ length 200, 400, 600





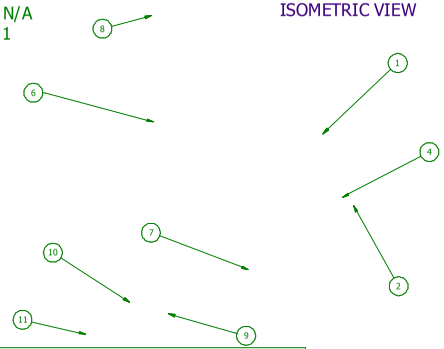
ISOMETRIC VIEW

BEAM SHUTTER HUB

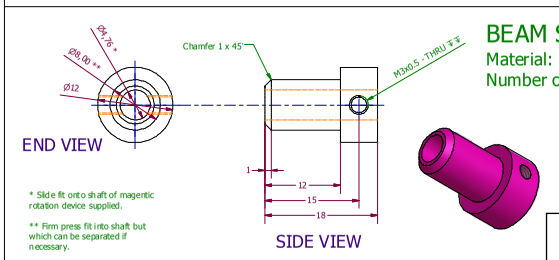
Material: Dural
Number off: 1

BEAM SHUTTER ASSEMBLY

Material: N/A
Number off: 1



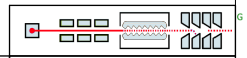
Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	BeamShutter	
2	1	BeamShutterHub	
4	2	ISO 4762 - M3 x 10	Hexagon Socket Head Cap Screw
5	1	Tungsten_0.5 x 150 x 150	Supplied by Goodfellow
6	1	BeamShutterLid	
7	1	BeamShutterRod_200	
8	4	ISO 4762 - M3 x 6	Hexagon Socket Head Cap Screw
9	1	BeamShutterSpigot	
10	1	KF40-CF16	
11	1	MagRot	Supplied by UHVDesign



BEAM SHUTTER SPIGOT

Material: Stainless Steel
Number off: 3

ISOMETRIC VIEW



Title:	MkII Emittance Measurement Device		
Drawn by:	P. Savage	Projection:	Third angle
Designed by:	P. Savage	Model file:	BeamShutter.ipt
Checked by:		Drawing file:	Emittance.idw
Date:	26/3/07	Version number:	1
Manufactured by:		Project:	F.E.T.S.
Material:	Defined per part	Sheet number:	7 / 21
Remove all burrs		Number off:	Defined per part
Scale:	Defined per part	Drawing number:	IC_HEP_PJS_FETS_0027
Notes:	Target delivery date 6/3/07		

Unless otherwise stated:
Dimensional tolerance: X ± 0.5 mm; X.X ± 0.2 mm; X.XX ± 0.1 mm
Angular tolerance: ± 0.5°
Hole centres: ± 0.05 mm
Suiface finish: 1.6 microns
Dimensions in mm □

Contact: p.savage@imperial.ac.uk (Work) 0207 594 7817 (Mobile) 07884 268058

#0028

BEAM SHUTTER FLANGE + CAMERA BELLOWS ROD BRACKET

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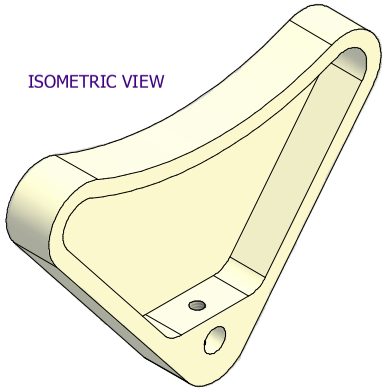
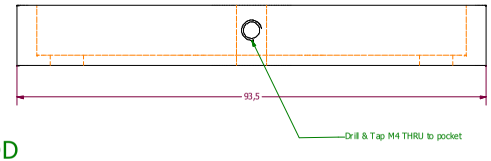
ISOMETRIC VIEW



FRONT VIEW

SECTION VIEW

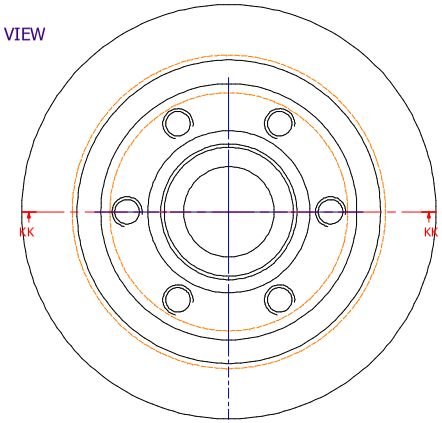
END VIEW

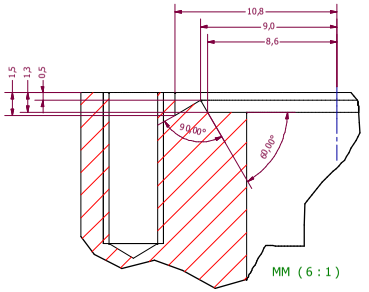


CAMERA BELLOWS ROD BRACKET

Material: Dural
Number off: 1

FRONT VIEW

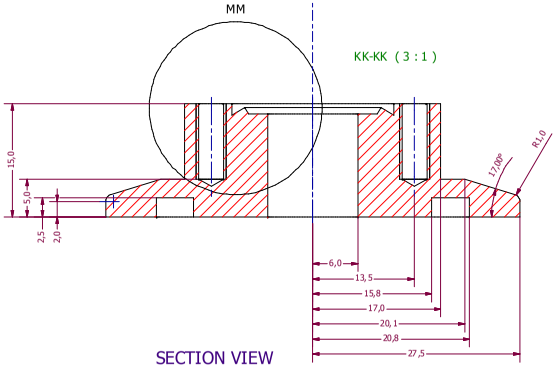




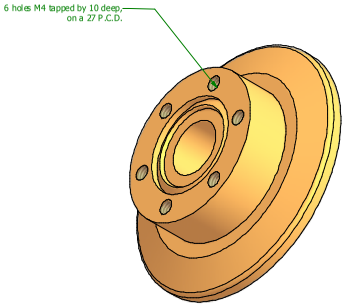
DETAILED SECTION VIEW

MM

KK-KK (3 : 1)



SECTION VIEW

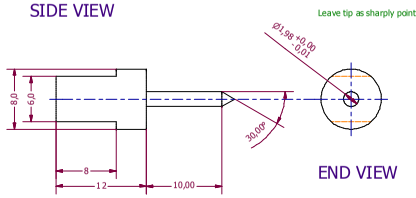


ISOMETRIC VIEW

CF16 to KF40 CONVERTER FLANGE

Material: Stainless Steel
Number off: 1

SIDE VIEW



END VIEW

ISOMETRIC VIEW

GRID PIN

Material: Stainless Steel
Number off: 6

Title:	MkII Emittance Measurement Device		
Drawn by:	P. Savage	Projection:	Third angle
Designed by:	P. Savage	Model file:	KF40-CF16.ipt
Checked by:		Drawing file:	Emittance.idw
Date:	26/3/07	Version number:	1
Manufactured by:		Project:	F.E.T.S.
Material:	Defined per part	Sheet number:	8 / 21
Remove all burrs		Number off:	Defined per part
Scale:	Defined per part	Drawing number:	IC_HEP_PJS_FETS_0028
Notes:	Target delivery date 6/3/07		

Unless otherwise stated:

Dimensional tolerance:	X	± 0.5 mm
	X.X	± 0.2 mm
	X.XX	± 0.1 mm
Angular tolerance:		± 0.5°
Hole centres:		± 0.05 mm
Suiface finish:		1.6 microns
Dimensions in mm		□

Contact: p.savage@imperial.ac.uk (Work) 0207 594 7817 (Mobile) 07884 268058

#0029

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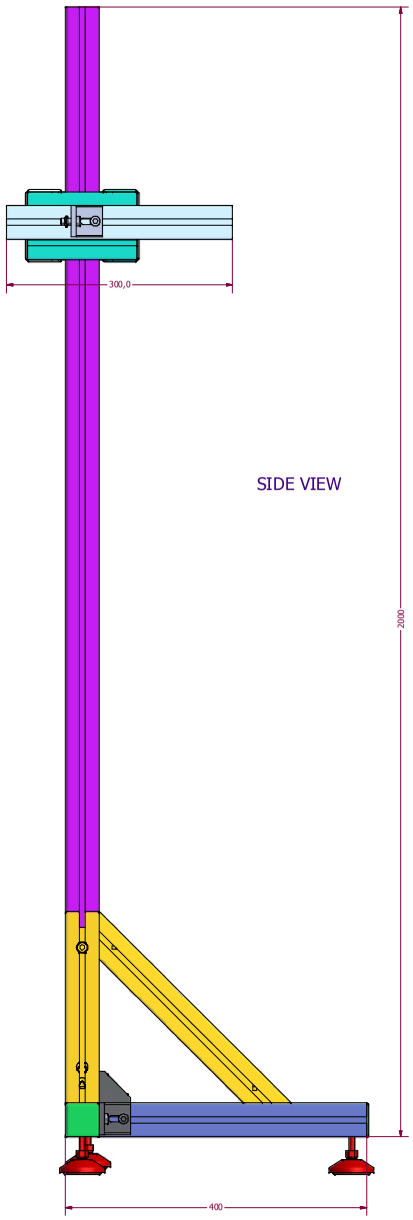
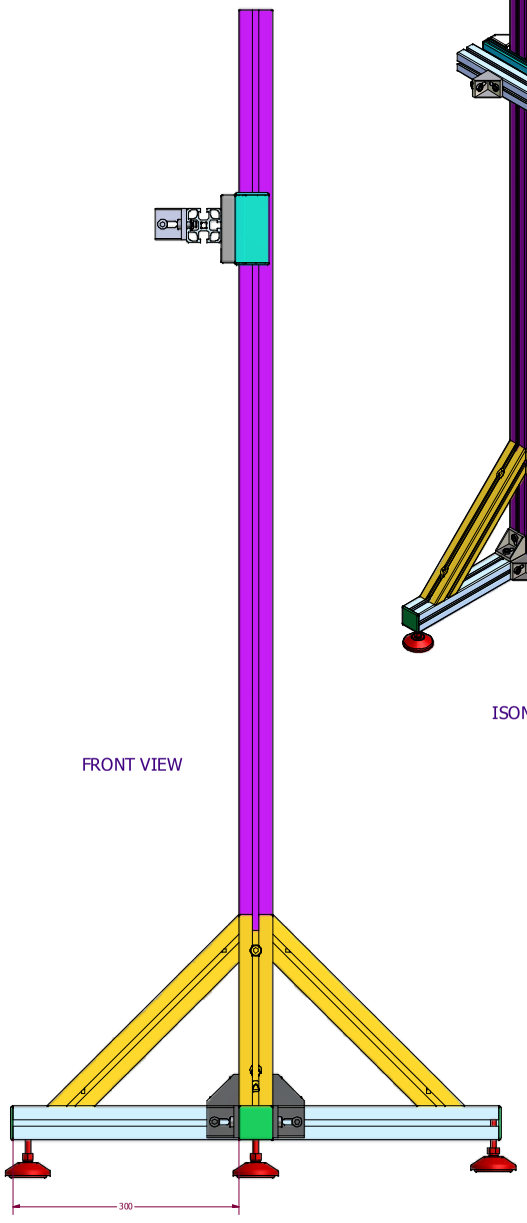
LSML cantilever support

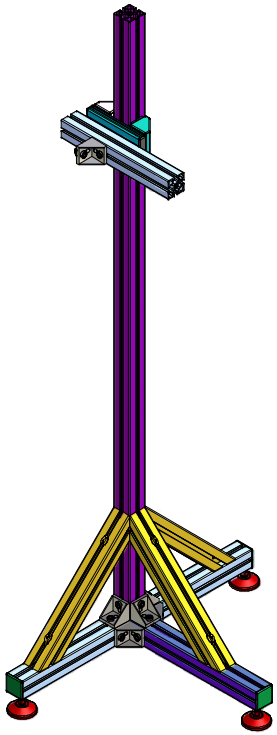
Material: MiniTec Profile System
Number off: 1
Scale: 0.30
General Tolerance: ± 2mm



SIDE VIEW



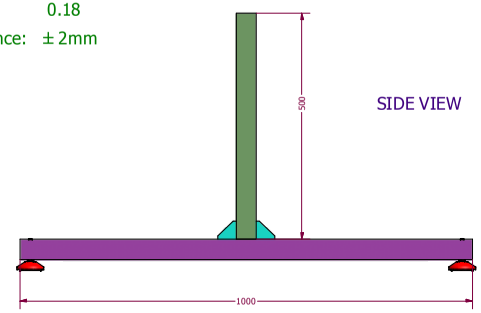
FRONT VIEW



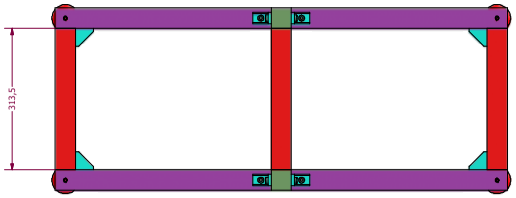
ISOMETRIC VIEW

Flange setup frame

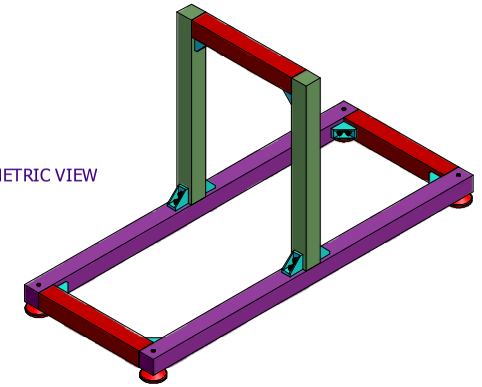
Material: MiniTec Profile System
Number off: 1
Scale: 0.18
General Tolerance: ± 2mm



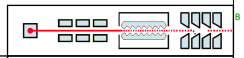
SIDE VIEW



TOP VIEW



ISOMETRIC VIEW



Title:	MkII Emittance Measurement Device		
Drawn by:	P. Savage	Projection:	Third angle
Designed by:	P. Savage	Model file:	SupportStand.iam
Checked by:		Drawing file:	Emittance.idw
Date:	26/3/07	Version number:	2
Manufactured by:		Project:	F.E.T.S.
Material:	MiniTec Profile System	Sheet number:	9 / 21
Remove all burrs		Number off:	1 assembly of each
Scale:	Defined per assembly	Drawing number:	IC_HEP_P3S_FETS_0029
Notes:			

Unless otherwise stated:

Dimensional tolerance:	X	± 0.5 mm
	X.X	± 0.2 mm
	X.XX	± 0.1 mm
Angular tolerance:		± 0.5°
Hole centres:		± 0.05 mm
Suiface finish:		1.6 microns
Dimensions in mm		□

Contact: p.savage@imperial.ac.uk (Work) 0207 594 7817 (Mobile) 07884 268058

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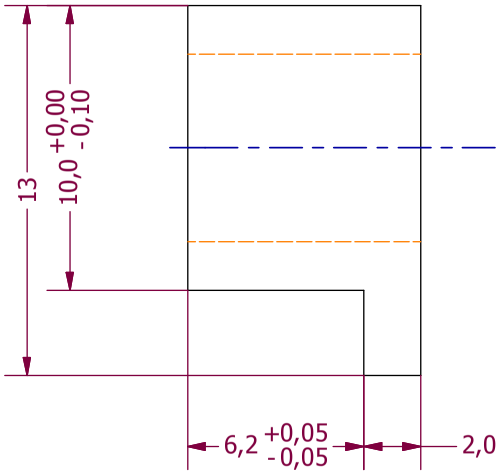
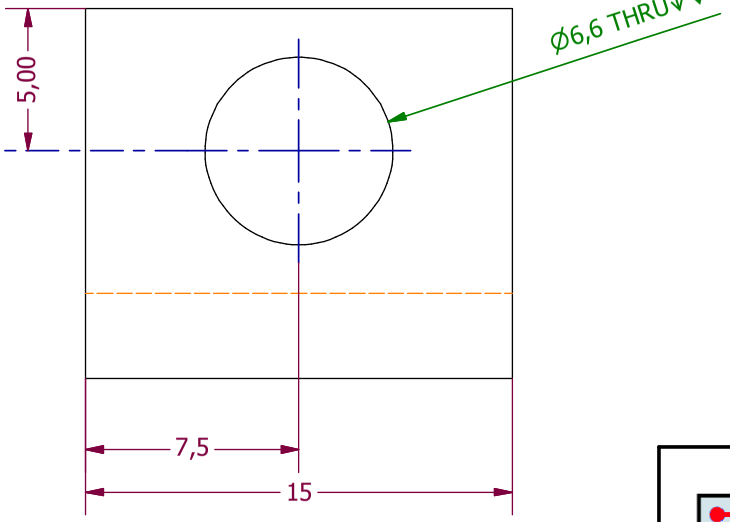
QUARTZ CLAMP

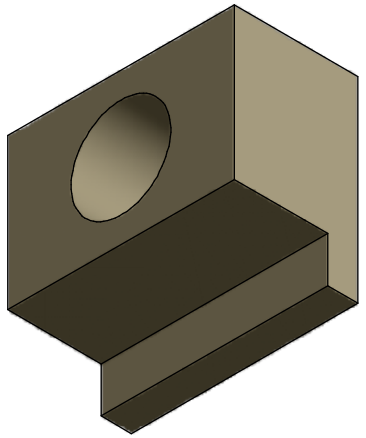
#0030

SIDE VIEW

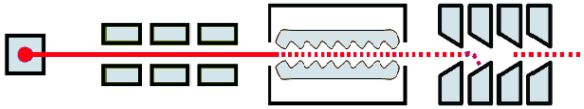


TOP VIEW





ISOMETRIC VIEW



Title:	MkII Emittance Measurement Device		
Drawn by:	P. Savage	Projection:	Third angle
Designed by:	P. Savage	Model file:	QuartzClamp.ipt
Checked by:		Drawing file:	Emittance.idw
Date:	26/3/07	Version number:	1
Manufactured by:	H.E.P. Workshop	Project:	F.E.T.S.
Material:	Dural	Sheet number:	10 / 21
Remove all burrs		Number off:	8
Scale:	Do not scale	Drawing number:	IC_HEP_PJS_FETS_0030
Notes:	Remove all burrs		

Unless otherwise stated:

Dimensional tolerance:	X	± 0.5 mm
	X.X	± 0.2 mm
	X.XX	± 0.1 mm
Angular tolerance:		± 0.5˚
Hole centres:		± 0.05 mm
Surface finish:		1.6 microns
Dimensions in mm		☐

Contact: p.savage@imperial.ac.uk (Work) 0207 594 7817 (Mobile) 07884 268058

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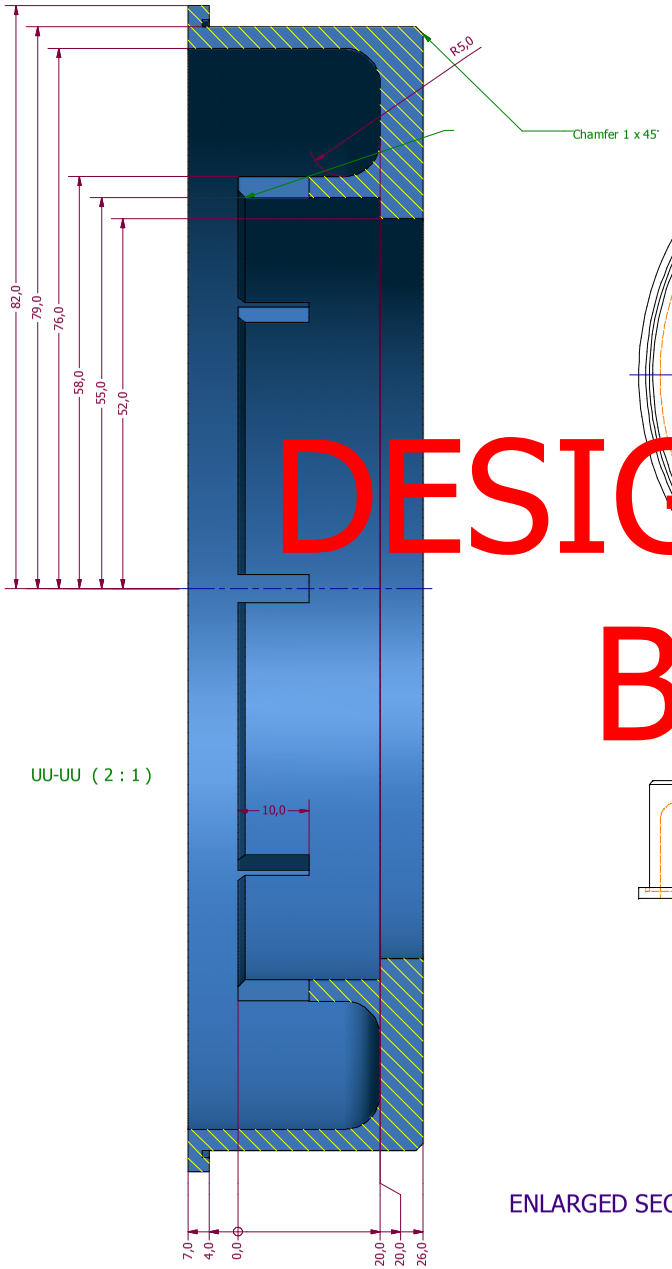
#0031

Camera to camera bellows interface ring



UU-UU (2 : 1)

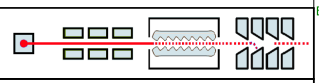
ENLARGED SECTION VIEW

INSIDE FACE VIEW

SIDE VIEW

ISOMETRIC VIEW

DESIGN REPLACED BY #0032

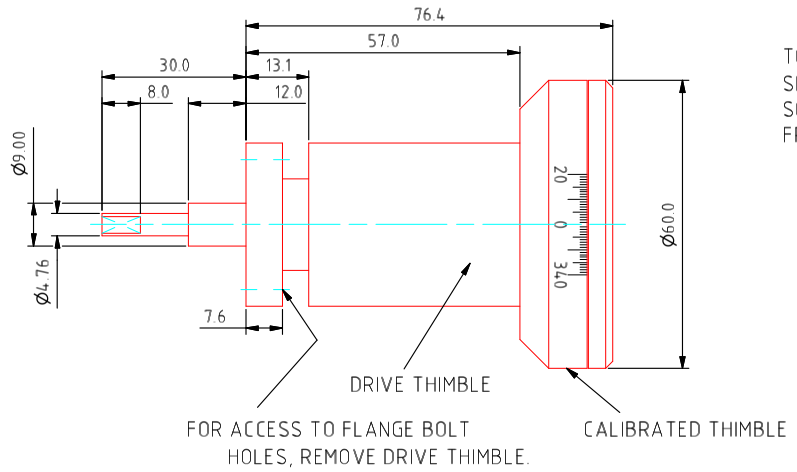


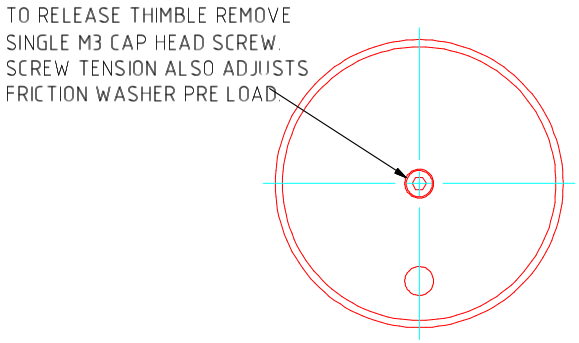
Title:	MkII Emittance Measurement Device		
Drawn by:	P. Savage	Projection:	Third angle
Designed by:	P. Savage	Model file:	CameraBellowsIFaceRing.ipt
Checked by:		Drawing file:	Emittance.idw
Date:	26/3/07	Version number:	1
Manufactured by:		Project:	F.E.T.S.
Material:	Nylon 66 *	Sheet number:	11 / 21
Remove all burrs		Number off:	1
Scale:	Do not scale	Drawing number:	IC_HEP_PJS_FETS_0031
Notes:			

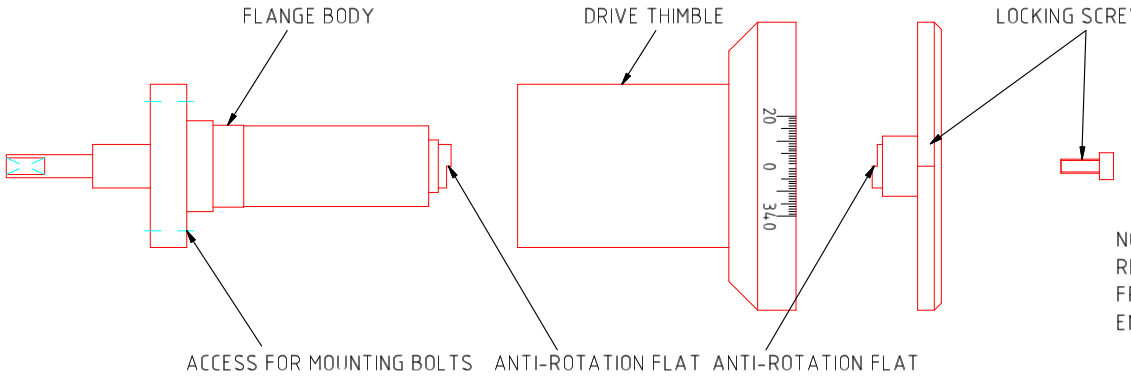
Unless otherwise stated:

Dimensional tolerance: X	± 0.5 mm
X.X	± 0.2 mm
X.XX	± 0.1 mm
Angular tolerance:	± 0.5°
Hole centres:	± 0.05 mm
Surface finish:	1.6 microns
Dimensions in mm	☐

Contact: p.savage@imperial.ac.uk (Work) 0207 594 7817 (Mobile) 07884 268058







NOTE: CARE SHOULD BE EXERCISED WHEN REFITTING THE THIMBLE TO ENSURE THE FRICTION WASHER IS CENTRAL INSIDE. ENSURE THE ANTI-ROTATION FLATS ARE ALIGNED

DO NOT SCALE DRAWING	REMOVE ALL BURRS	FOR EXPLANATION OF DIMENSIONS, TOLERANCES, NOTES ETC. SEE BS. 308 (MECHANICAL) OR BS. 3939 (ELECTRONICS).

MODIFICATION	DATE	ISSUE	MODIFICATION	DATE	ISSUE
			ORIGINAL	24-1-03	1

ENG.	
DRAWN	PRS
CHK'D	
APP'D	

UNLESS OTHERWISE STATED:
DIMENSIONAL TOLERANCE 0 ± 0.5mm
0.0 ± 0.2mm
0.00 ± 0.1mm
ANGULAR TOLERANCE ± 0.50'
DRILLED HOLES ± 0.05mm
SURFACE FINISH 1.6 MICRONS
DIMENSIONS IN MILLIMETRES

PROJECTION

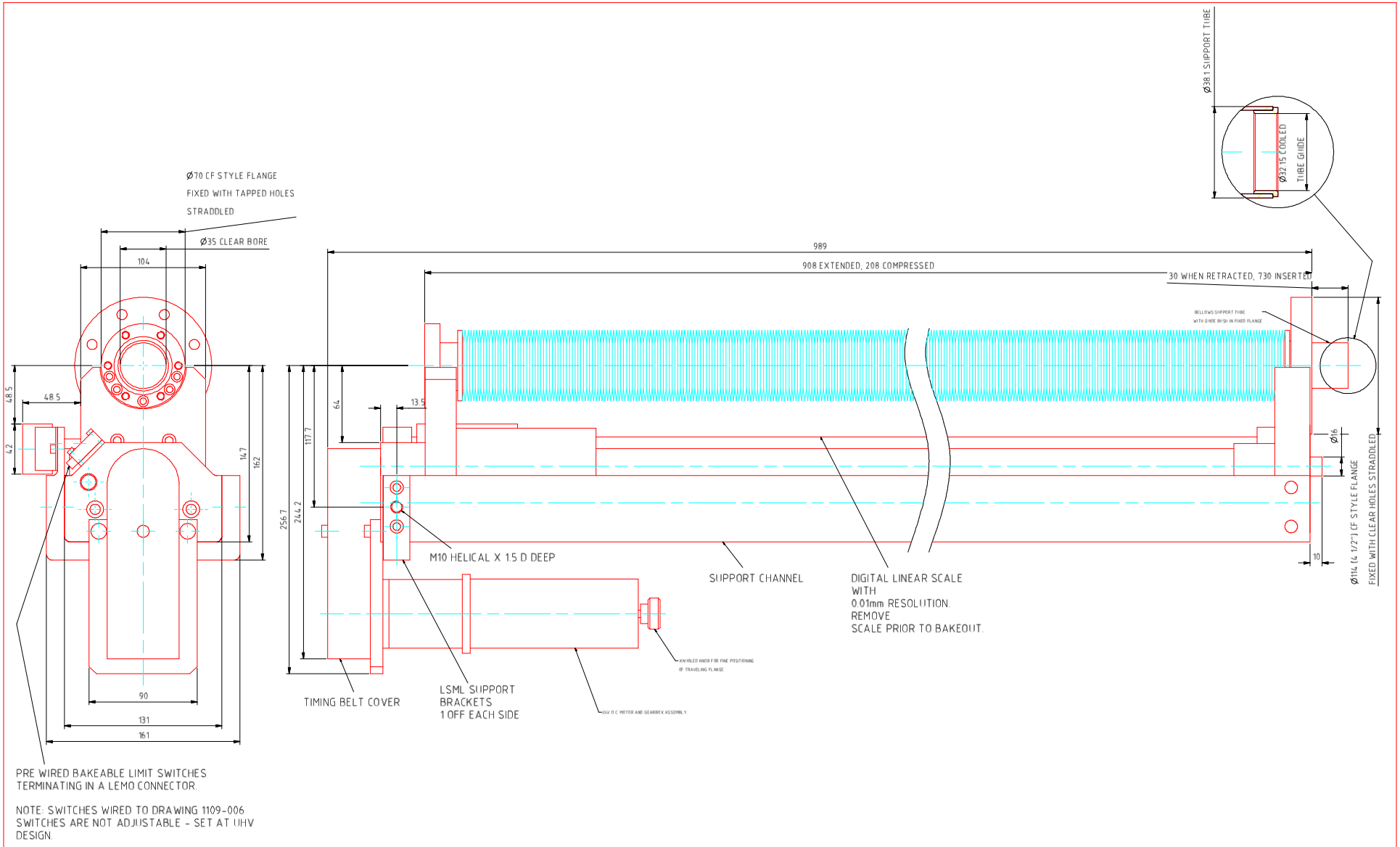
IF IN DOUBT - ASK

MATERIAL

FINISH
CLEAN

UHV Design. TEL: +44 (0) 1825 760090.

SCALE	TITLE	DRAWING No.
FULL SIZE	MD16CFX030Z INSTALLATION	03-63-02



PRE WIRED BAKEABLE LIMIT SWITCHES
TERMINATING IN A LEMO CONNECTOR.

NOTE: SWITCHES WIRED TO DRAWING 1109-006
SWITCHES ARE NOT ADJUSTABLE - SET AT UHV
DESIGN.

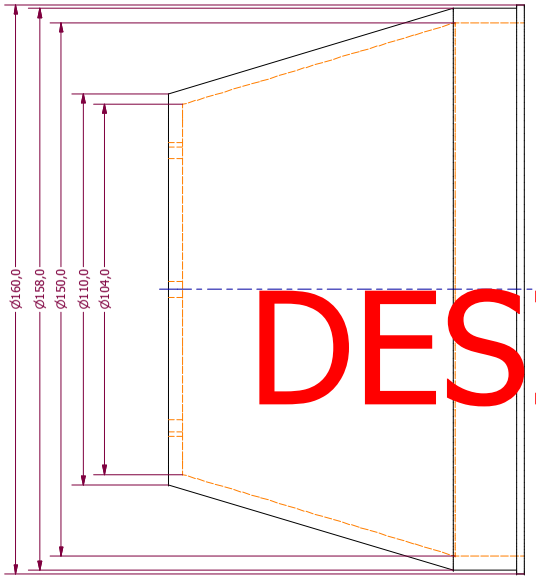
DO NOT SCALE DRAWING		REMOVE ALL BURRS		FOR EXPLANATION OF DIMENSIONS, TOLERANCES, NOTES, ETC. SEE BS 308 (MECHANICAL DRGS), 3939 (ELECTRICAL)				UNLESS OTHERWISE STATED: DIMENSIONAL TOLERANCE 0 - 6 0.1mm; 6.0 - 4.0 2mm; 10.00 + 0.1m		PROJECTION	IF IN DOUBT - ASK
MODIFICATION	DATE	ISSUE	MODIFICATION	DATE	ISSUE	ENG		ANGULAR TOLERANCE ± 0.50° UNLESS STATED. ± 0.05mm SURFACE FINISH 1.6 READING DIMENSIONS IN MILLIMETRES		MATERIAL	FINISH
						DRAWN	JRE			UHV Design. TEL: +44 (0) 1323 811188	
			SCALE ON OPP. SIDE	24-11-06	3	CHKD					
			SCALE ADDED TO LENGTH INCREASED	31-10-06	2						
			ORIGINAL	25-10-06	1	APP'D					
								SCALE FULL SIZE	TITLE LSML64/35-700-SD	DRAWING No. 3044-002	

Imperial College London

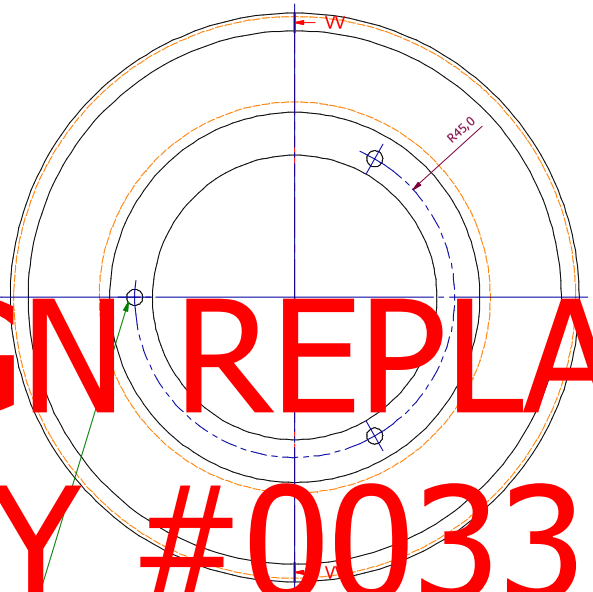
#0032

Camera to bellows interface ring

DESIGN REPLACED BY #0033



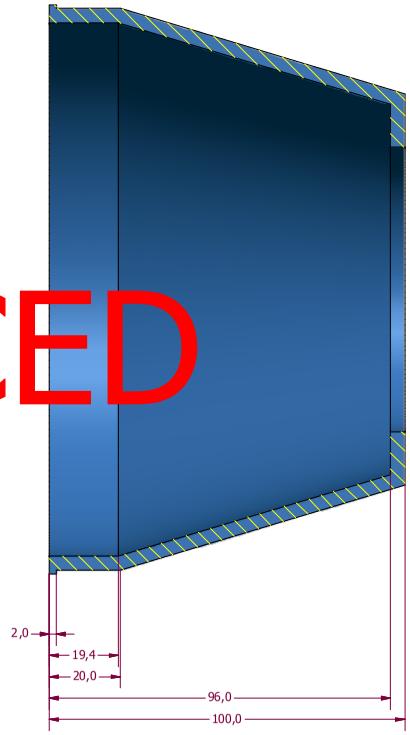
SIDE VIEW

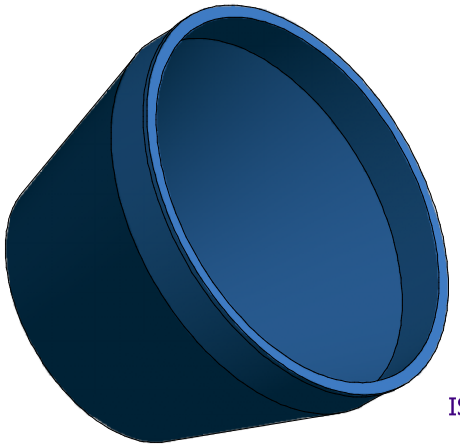


FACE VIEW

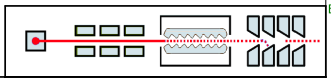
SECTION VIEW

VV-VV (1 : 1)





ISOMETRIC VIEW



Title:	MkII Emittance Measurement Device		
Drawn by:	P. Savage	Projection:	First angle
Designed by:	P. Savage	Model file:	CameraBellowsIFaceRingII.ipt
Checked by:		Drawing file:	Emittance.idw
Date:	26/3/07	Version number:	2
Manufactured by:		Project:	F.E.T.S.
Material:	Nylon 6	Sheet number:	14 / 21
Remove all burrs		Number off:	1
Scale:	Do not scale	Drawing number:	IC_HEP_PJS_FETS_0032
Notes:			

Unless otherwise stated:

Dimensional tolerance:	X	± 0.5 mm
	X.X	± 0.2 mm
	X.XX	± 0.1 mm
Angular tolerance:		± 0.5˚
Hole centres:		± 0.05 mm
Surface finish:		1.6 microns
Dimensions in mm		□

Contact: p.savage@imperial.ac.uk (Work) 0207 594 7817 (Mobile) 07884 268058

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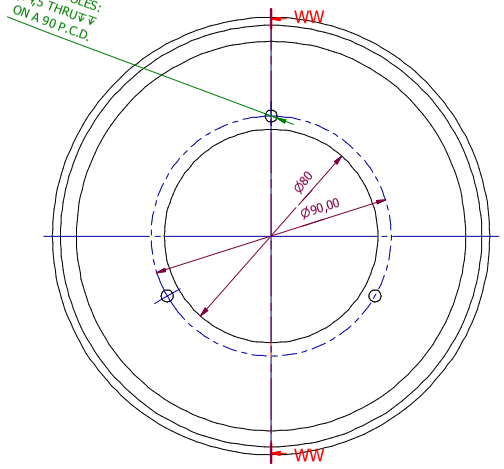
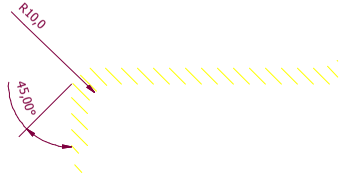
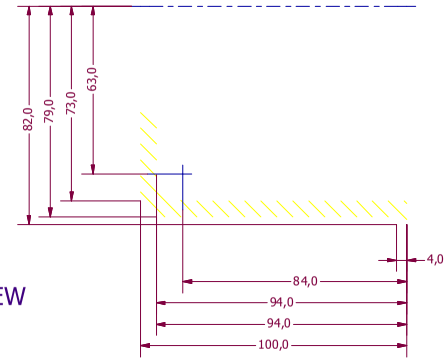
#0033 CAMERA MOUNTS

BASE VIEW





SCALE ISOMETRIC VIEW



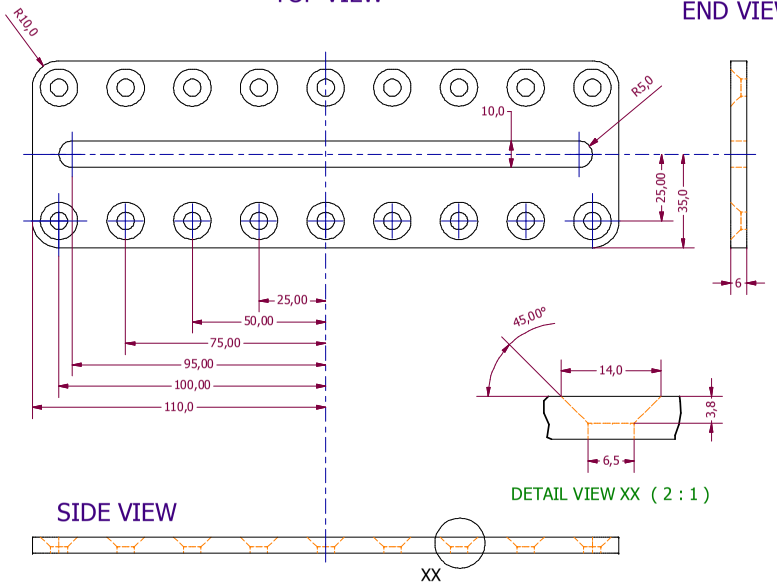
SIDE SECTION VIEW

CAMERA BELLOWS INTERFACE RING

Material: PA6 (supplied)
Number off: 1

TOP VIEW

END VIEW



DETAIL VIEW XX (2 : 1)

SIDE VIEW

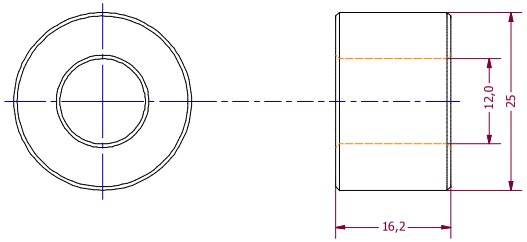
CAMERA PLATE

Material: Dural
Number off: 1

TOP VIEW

SIDE VIEW

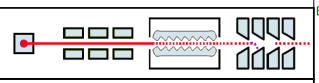
ISOMETRIC VIEW



CAMERA LEG

Material: Engineering Plastic, e.g. Nylon 66, Tufnol, PET
Number off: 2

ISOMETRIC TOP VIEW



Title:	MkII Emittance Measurement Device		
Drawn by:	P. Savage	Projection:	Third angle
Designed by:	P. Savage	Model file:	CameraBellowsIFaceRingIII.ipt
Checked by:		Drawing file:	Emittance.idw
Date:	26/3/07	Version number:	3
Manufactured by:		Project:	F.E.T.S.
Material:	Stated per part	Sheet number:	15 / 21
Remove all burrs		Number off:	Stated per part
Scale:	Do not scale	Drawing number:	IC_HEP_PJS_FETS_0033
Notes:			

Unless otherwise stated:
Dimensional tolerance: X ± 0.5 mm
X.X ± 0.2 mm
X.XX ± 0.1 mm
Angular tolerance: ± 0.5°
Hole centres: ± 0.05 mm
Surface finish: 1.6 microns
Dimensions in mm □

Contact: p.savage@imperial.ac.uk (Work) 0207 594 7817 (Mobile) 07884 268058

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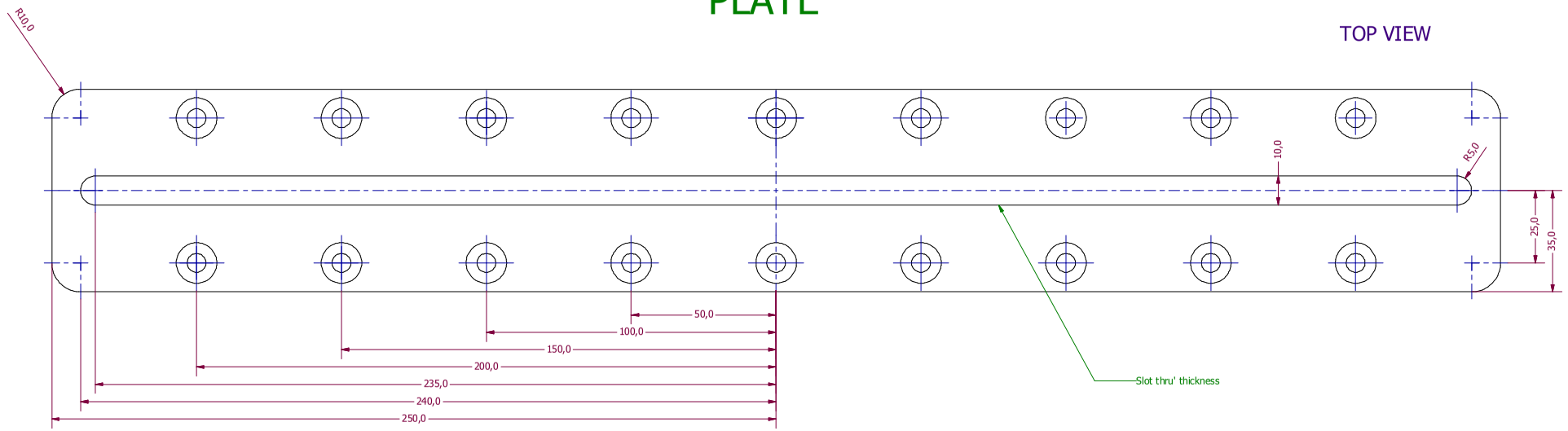
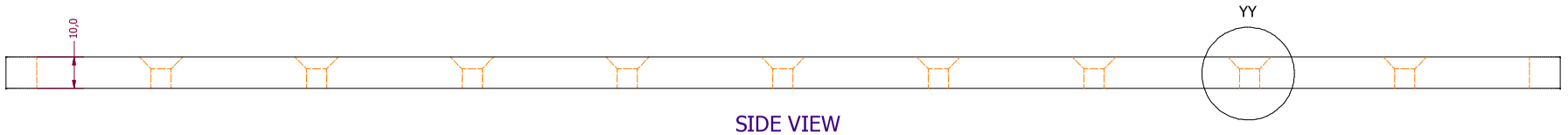
#0034

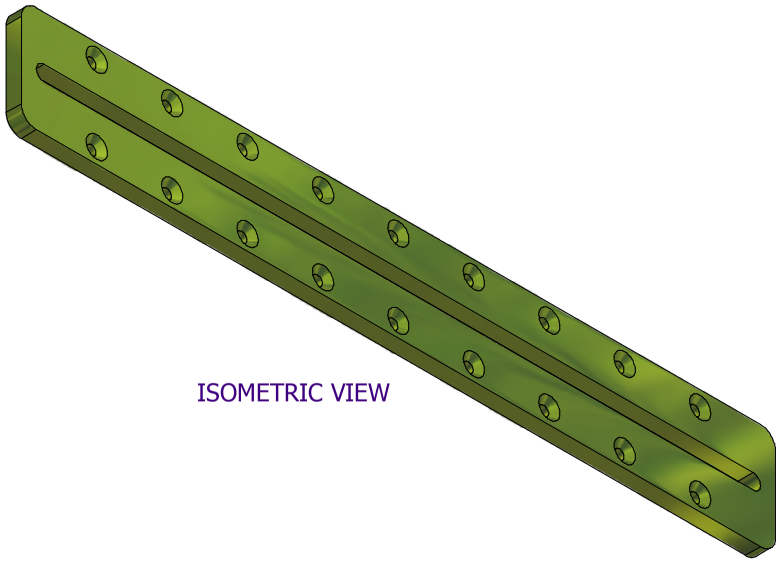
EXTENDED CAMERA PLATE

TOP VIEW

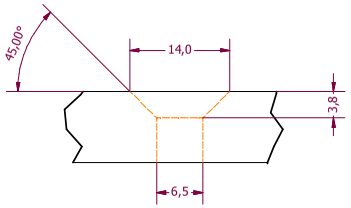




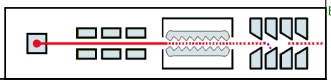
SIDE VIEW



ISOMETRIC VIEW



DETAIL VIEW YY (2 : 1)



Title:	MkII Emittance Measurement Device		
Drawn by:	P. Savage	Projection:	Third angle
Designed by:	P. Savage	Model file:	CameraPlateIII.ipt
Checked by:		Drawing file:	Emittance.idw
Date:	26/3/07	Version number:	2
Manufactured by:		Project:	F.E.T.S.
Material:	Dural	Sheet number:	16 / 21
Remove all burrs		Number off:	1
Scale:	Not to scale	Drawing number:	IC_HEP_PJS_FETS_0034
Notes:			

Unless otherwise stated:

Dimensional tolerance:	X	± 0.5 mm
	X.X	± 0.2 mm
	X.XX	± 0.1 mm
Angular tolerance:		± 0.5˚
Hole centres:		± 0.05 mm
Surface finish:		1.6 microns
Dimensions in mm		☐

Contact: p.savage@imperial.ac.uk (Work) 0207 594 7817 (Mobile) 07884 268058

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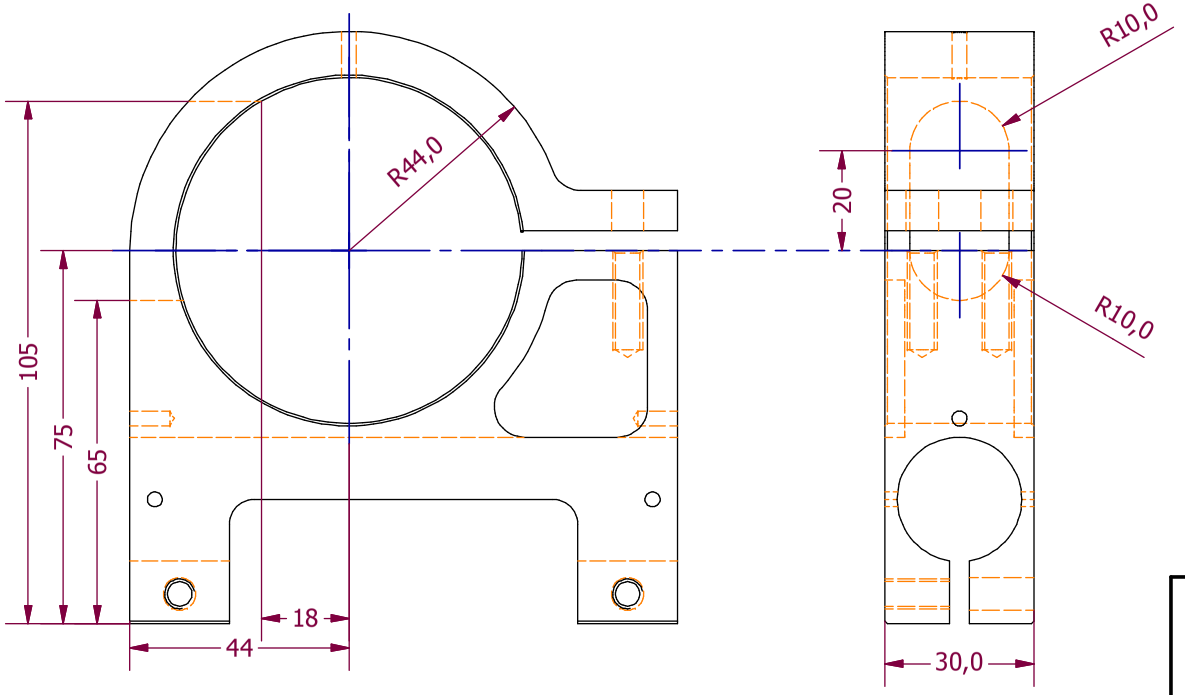
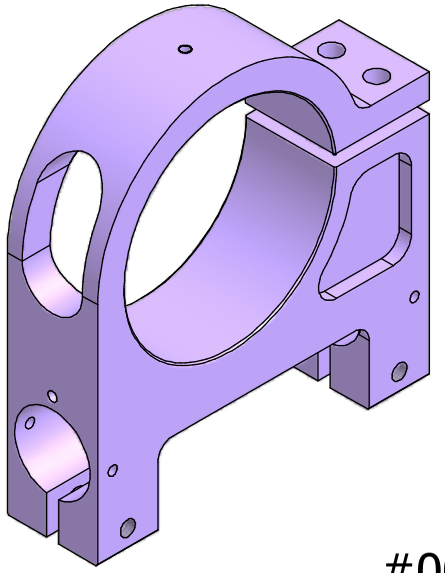
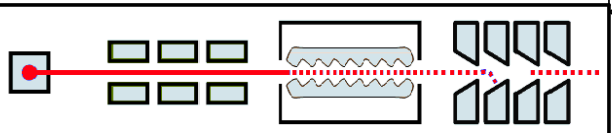
CAMERA POST BRACKET MODIFICATION





#0035



Title:	MkII Emittance Measurement Device		
Drawn by:	P. Savage	Projection:	Third angle
Designed by:	P. Savage	Model file:	CameraPostBracket.ipt
Checked by:		Drawing file:	Emittance.idw
Date:	26/3/07	Version number:	2
Manufactured by:	N/A	Project:	F.E.T.S.
Material:	Dural	Sheet number:	17 / 21
Remove all burrs		Number off:	1
Scale:	Do not scale	Drawing number:	IC_HEP_PJS_FETS_0035
Notes:	To create diam 20 x 20 long slot in place of diam 18 hole		

Unless otherwise stated:

Dimensional tolerance:	X	± 0.5 mm
	X.X	± 0.2 mm
	X.XX	± 0.1 mm
Angular tolerance:		± 0.5˚
Hole centres:		± 0.05 mm
Surface finish:		1.6 microns
Dimensions in mm		☐

Contact: p.savage@imperial.ac.uk (Work) 0207 594 7817 (Mobile) 07884 268058

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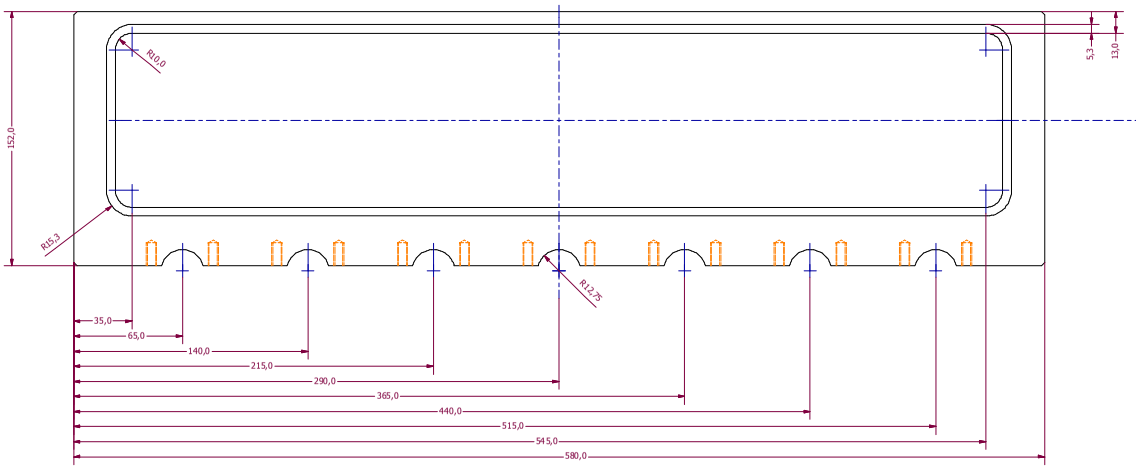
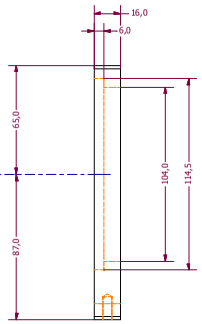
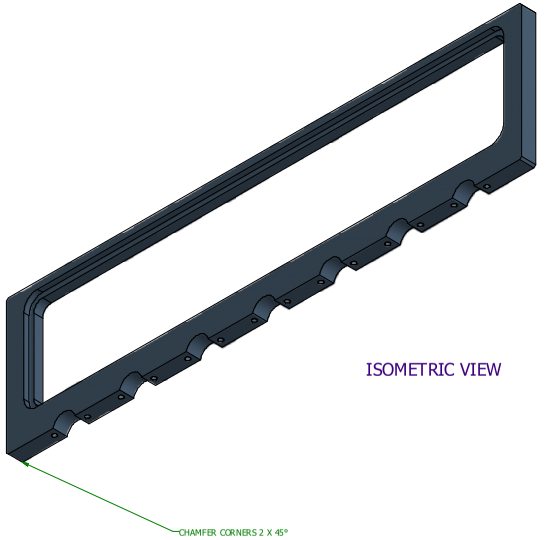
#0036

TOP VIEW



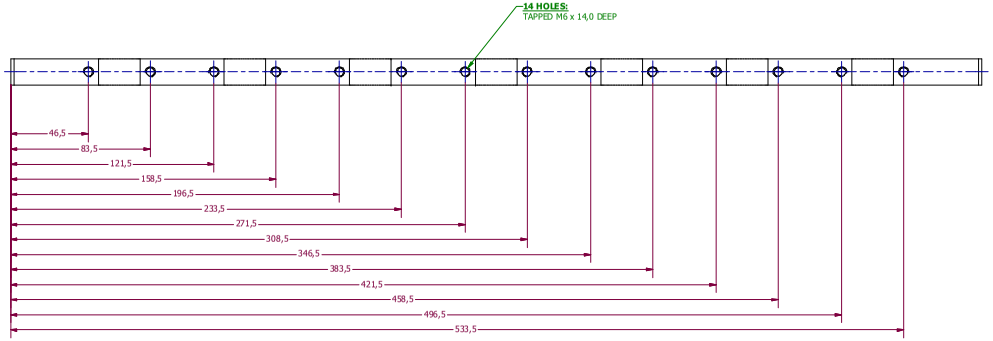


SIDE VIEW



ISOMETRIC VIEW

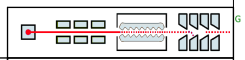
SIDE VIEW



CAMERA ASSEMBLY BASE PLATE

Material: Cast Aluminium Tooling Plate

Number off: 1



Title:	PI-MAX Camera Mounting System		
Drawn by:	P. Savage	Projection:	Third angle
Designed by:	P. Savage	Model file:	PI-MAX_BottomCameraPlate.ipt
Checked by:	N/A	Drawing file:	Emittance.idw
Date:	July 2009	Version number:	1
Manufactured by:	HEP workshop	Project:	Front End Test Stand
Material:	Cast Alu Tooling Plate	Sheet number:	18 / 21
Remove all burrs		Number off:	1
Scale:	Do not scale	Drawing number:	IC_HEP_PJS_FETS_0036
Notes:	-		
	-		
Contact:	p.savage@imperial.ac.uk (Work) 0207 594 7817 (Mobile) 07884 268058		

Unless otherwise stated:		
Dimensional tolerance:	X	± 0.5 mm
	X.X	± 0.2 mm
	X.XX	± 0.1 mm
Angular tolerance:		± 0.5°
Hole centres:		± 0.05 mm
Suiface finish:		1.6 microns
Dimensions in mm		□

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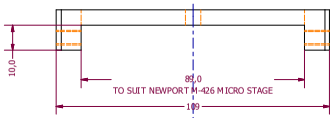
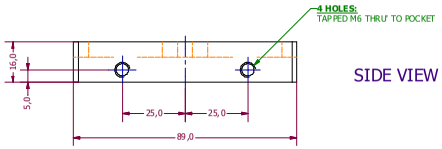
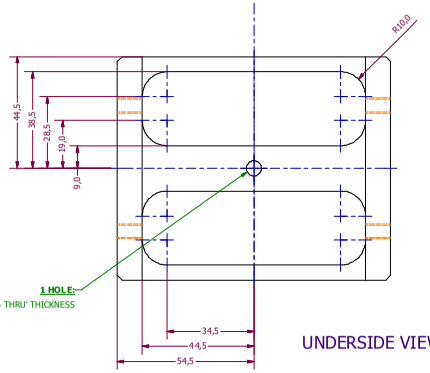
#0037

END VIEW

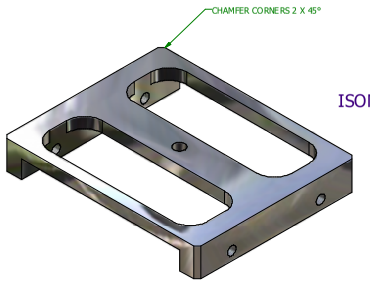




SIDE VIEW



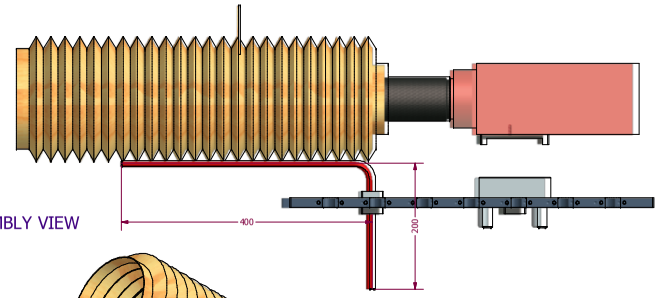
UNDERSIDE VIEW



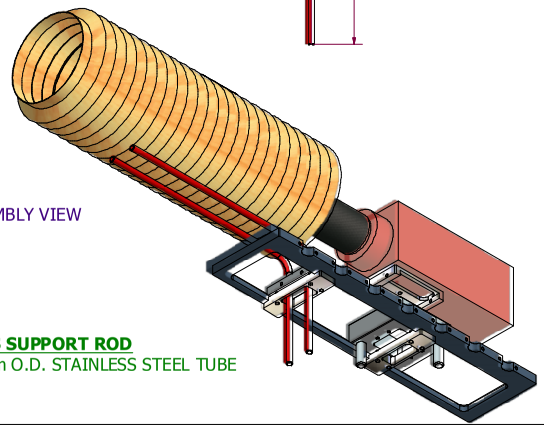
ISOMETRIC VIEW

PI-MAX CAMERA MOUNT

Material: Cast Aluminium Tooling Plate
Number off: 1



SIDE ASSEMBLY VIEW



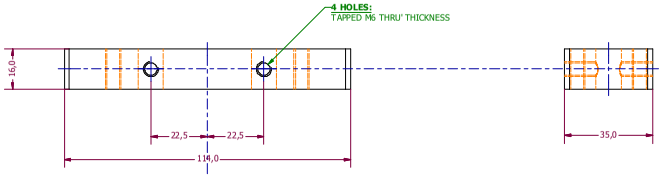
ISOMETRIC ASSEMBLY VIEW

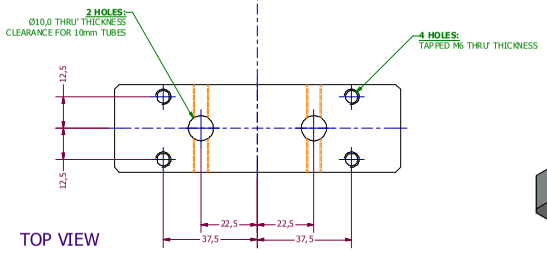
CAMERA BELLOWS SUPPORT ROD

Material: 10mm O.D. STAINLESS STEEL TUBE
Number off: 2

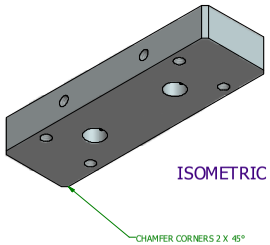
SIDE VIEW

END VIEW





TOP VIEW

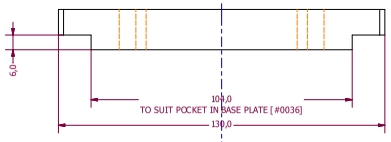


ISOMETRIC VIEW

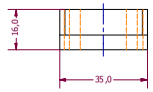
CAMERA BELLOWS SUPPORT BLOCK

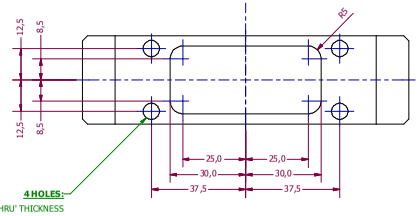
Material: Cast Aluminium Tooling Plate
Number off: 1

SIDE VIEW

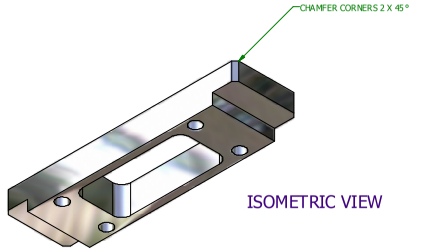


END VIEW





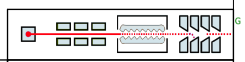
TOP VIEW



ISOMETRIC VIEW

KINEMATIC ASSEMBLY CLAMP

Material: Cast Aluminium Tooling Plate
Number off: 2



Title:	PI-MAX Camera Mounting System		
Drawn by:	P. Savage	Projection:	Third angle
Designed by:	P. Savage	Model file:	PI-MAX_CameraMount.iam
Checked by:	N/A	Drawing file:	Emittance.idw
Date:	July 2009	Version number:	1
Manufactured by:	HEP workshop	Project:	Front End Test Stand
Material:	Stated per part	Sheet number:	19 / 21
Remove all burrs		Number off:	Stated per part
Scale:	Do not scale	Drawing number:	IC_HEP_PJS_FETS_0037
Notes:	-		
	-		

Unless otherwise stated:

Dimensional tolerance: X	± 0.5 mm
X.X	± 0.2 mm
X.XX	± 0.1 mm
Angular tolerance:	± 0.5°
Hole centres:	± 0.05 mm
Suiface finish:	1.6 microns
Dimensions in mm	□

Contact: p.savage@imperial.ac.uk (Work) 0207 594 7817 (Mobile) 07884 268058

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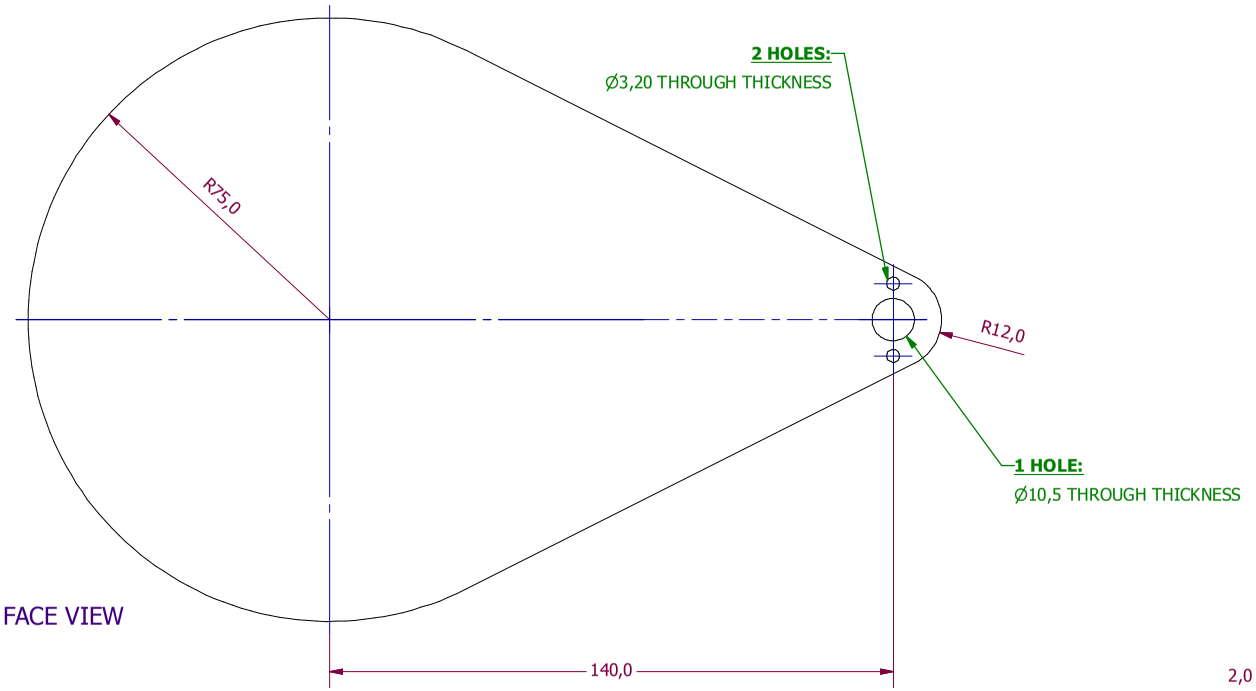
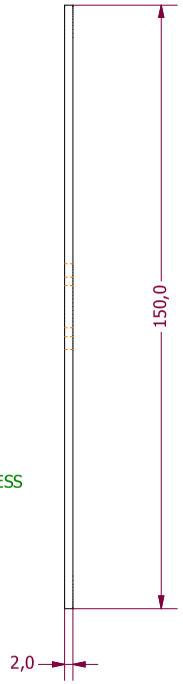
#0038

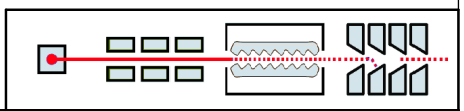


FACE VIEW



END VIEW

SIDE VIEW



BEAM SHUTTER - ROUND

Material: Aluminium alloy

Number off: 3

Title:	Beam Shutter - Round		
Drawn by:	P. Savage	Projection:	Third angle
Designed by:	P. Savage	Model file:	BeamShutter_Round.ipt
Checked by:	N/A	Drawing file:	Emittance.idw
Date:	July 2009	Version number:	1
Manufactured by:	HEP workshop	Project:	Front End Test Stand
Material:	Aluminium alloy	Sheet number:	20 / 21
Remove all burrs		Number off:	3
Scale:	Do not scale	Drawing number:	IC_HEP_PJS_FETS_0038
Notes:	-		
	-		

Unless otherwise stated:

Dimensional tolerance:	X	± 0.5 mm
	X.X	± 0.2 mm
	X.XX	± 0.1 mm
Angular tolerance:		± 0.5˚
Hole centres:		± 0.05 mm
Surface finish:		1.6 microns
Dimensions in mm		☐

Contact: p.savage@imperial.ac.uk (Work) 0207 594 7817 (Mobile) 07884 268058

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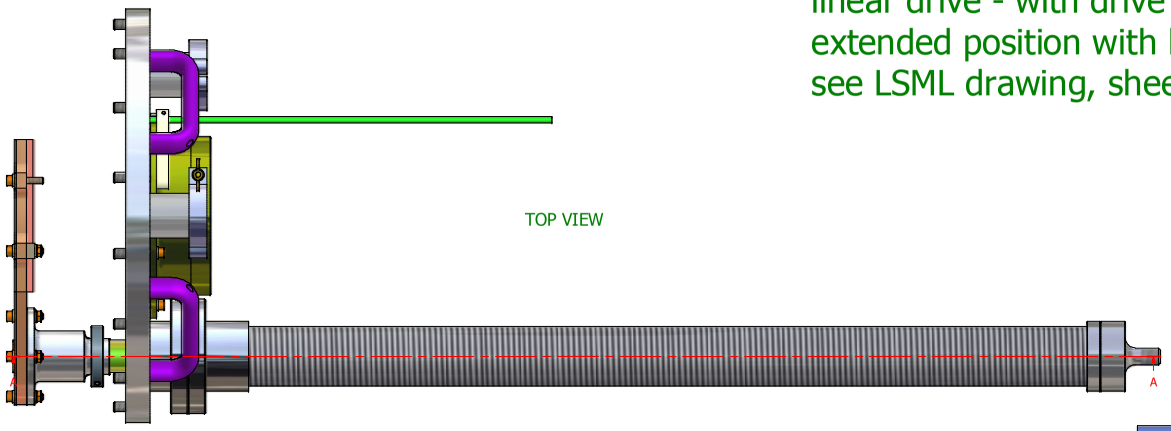
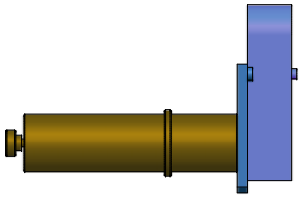
#0039

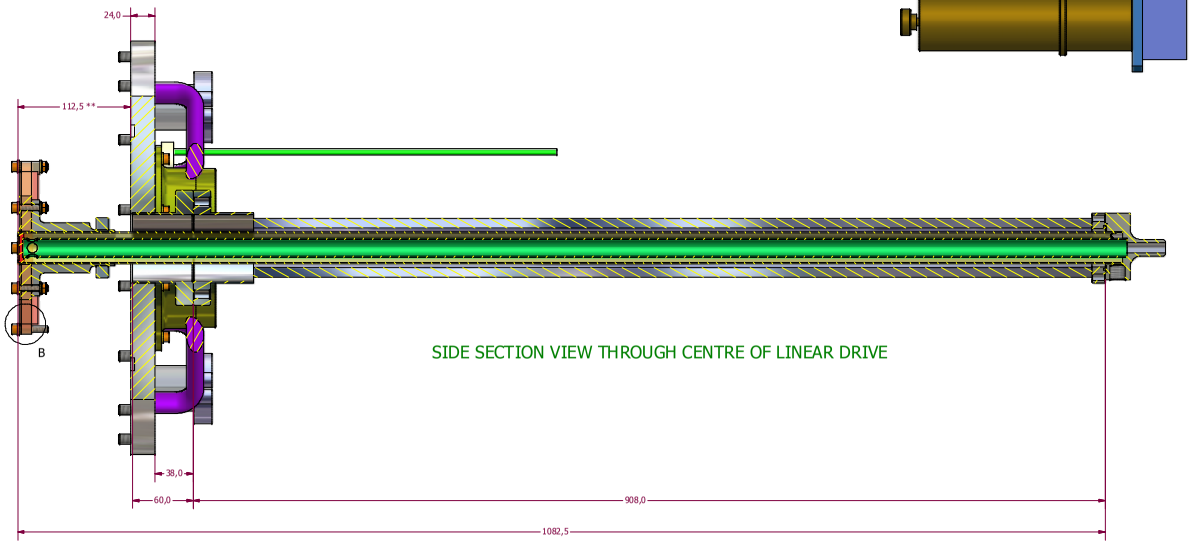
Position of pepperpot head relative to linear drive - with drive shown in fully extended position with length 908mm - see LSML drawing, sheet 13

** NB: PEPPERPOT HEAD CAN BE MOUNTED ANYWHERE ALONG LENGTH OF COOLED ROD

TOP VIEW

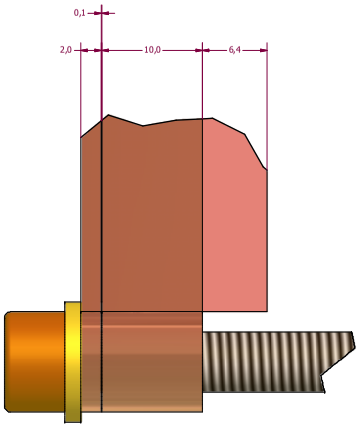


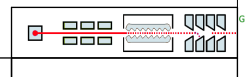




SIDE SECTION VIEW THROUGH CENTRE OF LINEAR DRIVE

DETAIL VIEW SHOWING THICKNESS OF PEPPERPOT HEAD PLATES





Title:	
Drawn by:	Projection:
Designed by:	Model file: Complete2.iam
Checked by:	Drawing file: Emittance.idw
Date:	Version number:
Manufactured by:	Project:
Material:	Sheet number: 21 / 21
Remove all burrs	Number off:
Scale:	Drawing number:
Notes:	

Unless otherwise stated:

Dimensional tolerance:	X	± 0.5 mm
	X.X	± 0.2 mm
	X.XX	± 0.1 mm
Angular tolerance:		± 0.5'
Hole centres:		± 0.05 mm
Suiface finish:		1.6 microns
Dimensions in mm		□

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