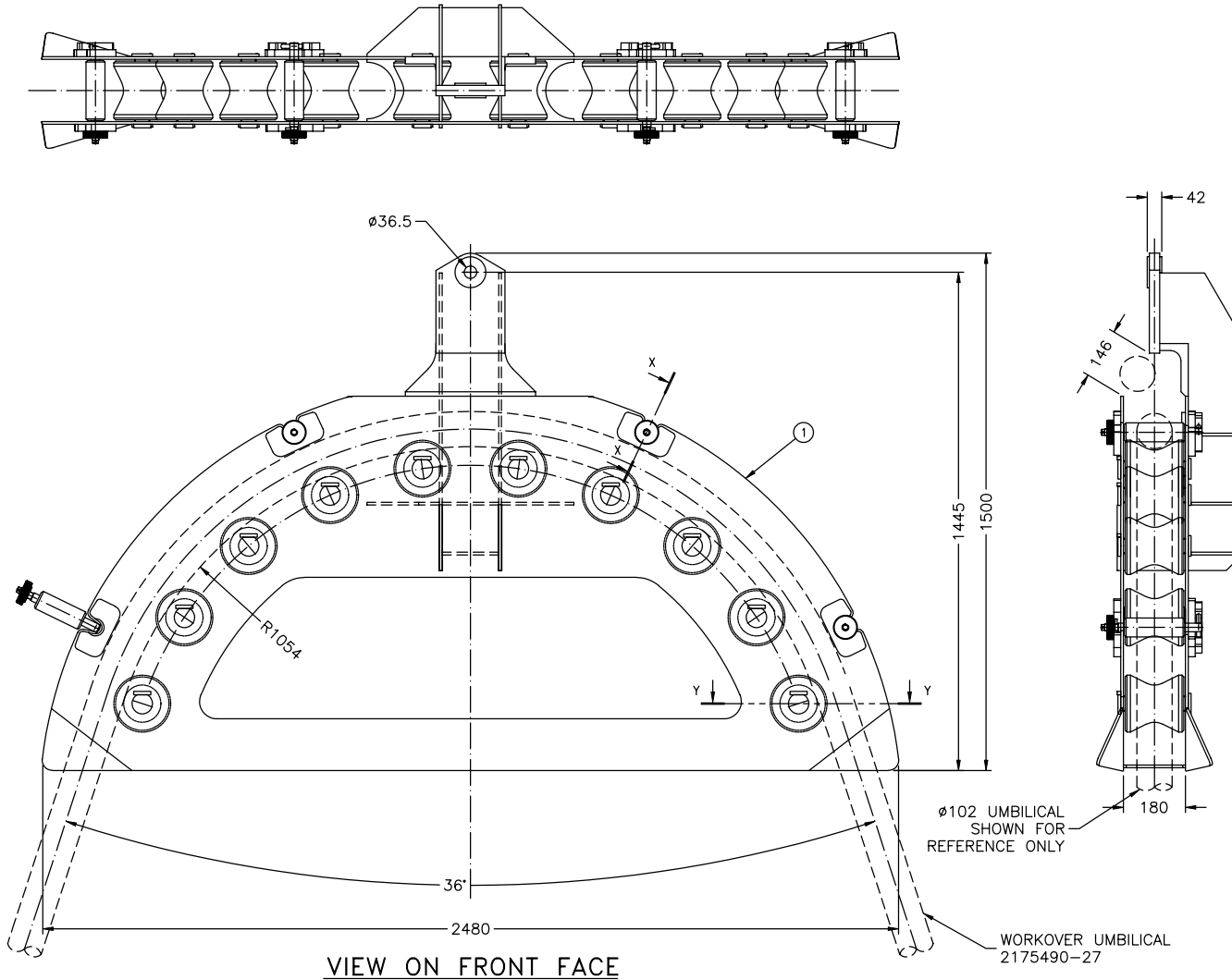


NOTES:

1. SEE SHEET 2 FOR SECTIONS.
2. WEIGHT = 400 kg.
3. UMBILICAL DIAMETER = 102 ±2mm. MIN. BEND RADIUS = 1000mm.
4. SAFE WORKING LOAD = 6 TONNES AT HEAD FITTING
3 TONNE LINE PULL
5. TEST LOAD = 12 TONNES.
6. MPI OPERATOR QUALIFICATIONS TO ASNT/CSWIP/PCN LEVEL II.
7. NO SHARP EDGES.
8. BOLTS (ITEM 7) TO BE TORQUED TO 678 Nm & SECURED USING LOCTITE NUTLOK 243



VIEW ON FRONT FACE

C	28/03/08	21908 - ISSUED TO CLIENT FOR APPROVAL	I.R.	M.McQ.	I.R.
B	13/03/08	21776 - ISSUED TO CLIENT FOR APPROVAL	I.R.	M.McQ.	I.R.
A	02/02/08	21303 - ISSUED TO CLIENT FOR APPROVAL	G.D.	M.McQ.	I.R.
VENDOR REVISION	DATE	REVISION REASON	DRAWN BY	CHECKED	APPROVED



Control Systems Ltd.

UNIT V2, VIEWFIELD ROAD,
VIEWFIELD INDUSTRIAL ESTATE,
GLENROTHES, FIFE
KY6 2RG

VENDOR PROJECT NUMBER: 11690	VENDOR DOCUMENT NUMBER: 11690-301
---------------------------------	--------------------------------------

ISSUED FOR INFORMATION	10 APR 08	0
REASON FOR ISSUE	DATE	CLIENT REV.



CLIENT CONTRACT NUMBER: 3600013747	CLIENT DOCUMENT NUMBER: CAM1-00PY-D412-0010
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CAD	REV. BY: B.E. Jones	DATE: 10/04/08	Rev A
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TOLERANCE U.O.S.		THIRD ANGLE U.O.S.	
X ± 0.5	ANGLES ± 0.5°		
X.X ± 0.3	N9 ON ALL MACHINED SURFACES	DIMENSIONS IN mm	
X.XX ± 0.1		GRAPHIC SYMBOLS U.O.S. ACCORDING TO BS2917 OR BSEN60617	
EST. WEIGHT: 460kg		SUPERSEDES:	
		SCALE: 1:10	

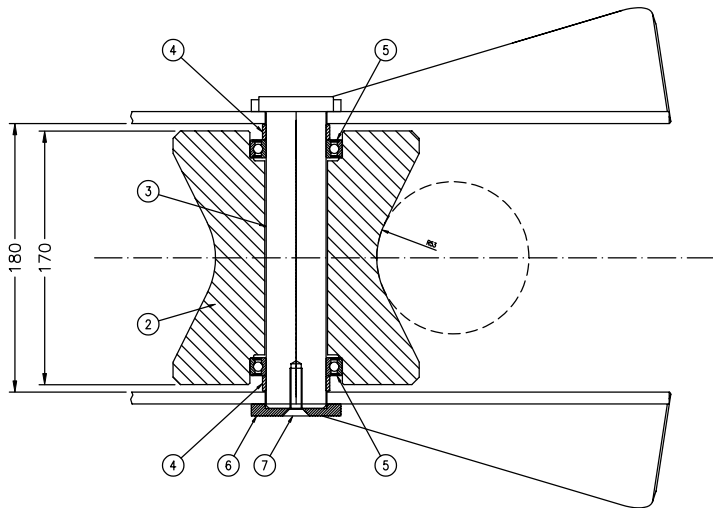
DO NOT SCALE	
DRAWN: B.E. Jones	DATE: 10/04/08
CHECKED:	DATE:
APPROVED:	DATE:



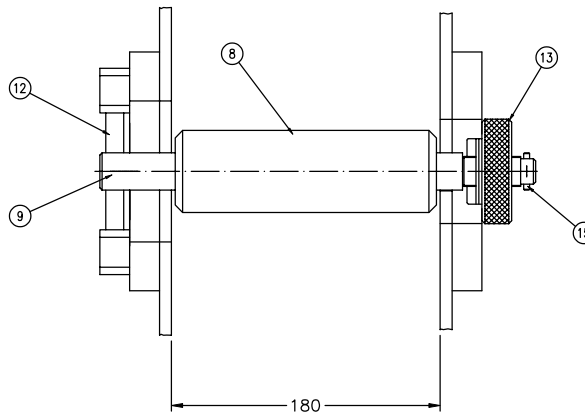
CAMERON
BADENTON ROAD,
PORTLETHEN,
ABERDEEN AB12 4YA

GENERAL ARRANGEMENT,
WORKOVER UMBILICAL SHEAVE

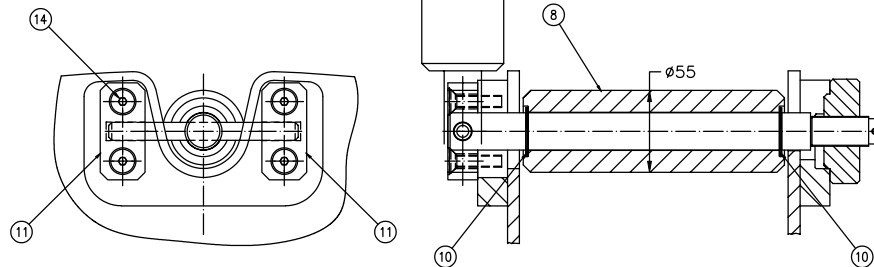
COPYRIGHT:- COPYING OF THIS DOCUMENT, AND GIVING IT TO OTHERS AND THE USE OF COMMUNICATION OF THE CONTENTS THEREOF, ARE FORBIDDEN WITHOUT EXPRESS WRITTEN PERMISSION OF CAMERON.	INITIAL USE BOM: 2175490-04	SHEET 1 of 2	DRAWING NUMBER: SK-140254-04
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PART SECTION Y-Y
(TYP. 10 PLACES)



PART SECTION X-X
(TYP. 4 PLACES)



NOTES:

- SEE SHEET 2 FOR SECTIONS.
- WEIGHT = 400 kg.
- UMBILICAL DIAMETER = 102 ±2mm. MIN. BEND RADIUS = 1000mm.
- SAFE WORKING LOAD = 6 TONNES AT HEAD FITTING
3 TONNE LINE PULL
- TEST LOAD = 12 TONNES.
- MPI OPERATOR QUALIFICATIONS TO ASNT/CSWIP/PCN LEVEL II.
- NO SHARP EDGES.
- BOLTS (ITEM 7) TO BE TORQUED TO 678 Nm & SECURED USING LOCTITE NUTLOK 243

VENDOR REVISION	DATE	REVISION REASON	DRAWN BY	CHECKED	APPROVED
C	28/03/08	21908 - ISSUED TO CLIENT FOR APPROVAL	I.R.	M.McQ.	I.R.
B	13/03/08	21776 - ISSUED TO CLIENT FOR APPROVAL	I.R.	M.McQ.	I.R.
A	02/02/08	21303 - ISSUED TO CLIENT FOR APPROVAL	G.D.	M.McQ.	I.R.



Control Systems Ltd.

UNIT V2, VIEWFIELD ROAD,
VIEWFIELD INDUSTRIAL ESTATE,
GLENROTHES, FIFE
KY6 2RG

VENDOR PROJECT NUMBER: 11690	VENDOR DOCUMENT NUMBER: 11690-301
---------------------------------	--------------------------------------

ISSUED FOR INFORMATION	10 APR 08	0
REASON FOR ISSUE	DATE	CLIENT REV.



CLIENT CONTRACT NUMBER: 3600013747	CLIENT DOCUMENT NUMBER: CAM1-00PY-D412-0010
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CAD	REV. BY: B.E. Jones	DATE: 10/04/08	Rev A
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DO NOT SCALE	DRAWN: B.E. Jones	DATE: 10/04/08	<p>CAMERON BADENTOY ROAD, PORTLETHEN, ABERDEEN AB12 4YA</p>
	CHECKED:	DATE:	

APPROVED:	DATE:	GENERAL ARRANGEMENT, WORKOVER UMBILICAL SHEAVE
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EST. WEIGHT: 460kg	SUPERSEDES:	SCALE: 1:2.5	INITIAL USE BOM: 2175490-04	SHEET 2 of 2	DRAWING NUMBER: SK-140254-04
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TOLERANCE U.O.S.	THIRD ANGLE U.O.S.
X ± 0.5	ANGLES ± 0.5°
X.X ± 0.3	GRAPHIC SYMBOLS
X.XX ± 0.1	U.O.S. ACCORDING TO BS2917 OR BSEN60617

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ITEM	QTY	DESCRIPTION	SUPPLIER
15	4	SPRING TENSION PIN, Ø4 x 25 LG	-
14	16	SKT HEAD C'SUNK SCREW, M8 x 1.25 x 35 LG	-
13	4	LOCKING KNOB	HCS DRAWING No. 11690-311
12	4	HINGE SHAFT	HCS DRAWING No. 11690-310
11	8	HINGE BLOCK	HCS DRAWING No. 11690-309
10	8	INTERNAL CIRCLIP, TO SUIT Ø25 SHAFT x 1.2 THK	-
9	4	TOP ROLLER SHAFT	HCS DRAWING No. 11690-308
8	4	TOP ROLLER	HCS DRAWING No. 11690-307
7	10	SKT HEAD C'SUNK SCREW, M8 x 1.25 x 30 LONG	-
6	10	END CAP	HCS DRAWING No. 11690-306
5	20	ROLLER BEARING	SKF PART No. W-6210-2RS1
4	20	ROLLER SPACER	HCS DRAWING No. 11690-305
3	10	ROLLER SHAFT	HCS DRAWING No. 11690-304
2	10	ROLLER	HCS DRAWING No. 11690-303
1	1	SHEAVE BODY	HCS DRAWING No. 11690-302