

DRAWING NUMBER

SHEET 1 OF 2

EXPLODED VIEW

18

29

11

21

9

3

10

19

16

13

32

25

30

2

6

4

4

8

22

17

24

26

12

13

15

14

23

31

20

1

7

33

28

27

NOTES

1. ALL SURFACES INDICATED 0.8µm OR LESS TO BE FREE FROM SURFACE IMPERFECTIONS AND FULLY PROTECTED AT ALL TIMES REFER TO DETAIL DRAWINGS FOR LOCATION.

2. CLEANROOM GLOVES TO BE WORN AT ALL TIMES DURING ASSEMBLY.

3. **IMPORTANT** CHECK REFERENCE DIMENSION TO ENSURE THERMOCOUPLE HAS BEEN CORRECTLY FITTED.

4. PLACE IN SUITABLE PROTECTIVE PACKAGING, BAG OR CONTAINER LABELLED WITH DRAWING NUMBER, ISSUE AND PURCHASE ORDER NUMBER.

REV

MOD No.

MODIFICATIONS

DRN

DATE

01

FIRST ISSUE

02

15640

ITEM 2 NOW AT ISSUE 2

RWT

6/10/05

03

18011

ITEM 233 M6x16 CAP HD WAS M6x16 BUTN TITANIUM ITEM 207 S/S WAS TITANIUM ITEM 14 REMOVED ITEM 3 MODIFIED

S.H.

16/01/06

04

21186

REPLACE PIN LIFT ASY

G.S.Y

26/03/07

05

21550

NICKEL PLATED SCREWS REPLACED TITANIUM SCREWS, REDRAWN & PARTS LIST ADDED

S.H.

20/03/07

06

18965

G/VAC/FIT/275 REMOVED FROM BOM. SHOWN AS REF ONLY.

APF

16/05/07

07

21999

MA91C30405 BELLOW ASY WAS MA91C28931, G-GAS-FIT-384 ADDED. EXPLODED VIEW ADDED. SCALE CHANGE 1:2 WAS 1:1

GSY

27/06/07

08

25980

G-MA00D32377 WAS G-MA00D30147

GSY

10/12/08

09

29190

RE-SCALED ASY VIEWS & THERMOCOUPLE REF. DIM. ADDED TO SHEET 2, NOTES UPDATED.

GSY

16/02/10

10

29163

EPP0012 NOW EFB2011

APF

24/03/10

11

30811

2 OFF EFB2011 REMOVED. 2 OFF G-EWT0090 & G-EWT0127 (HEAT SHRINK) ADDED.

APF

04/08/10

12

32122

PART 94-G-FIX-PIN-121 ADDED

S.H.

13/01/11

13

33053

3 OFF MD91D26306 NOW G-MA91C35180

B.C.

17/05/11

14

35933

MA61B29473 WAS MA91B27295.

GSY

19/04/12

ITEM

PART NO

DESCRIPTION

QTY

1

94-G-FIX-PIN-121

2.0 x 16LG S/S ROLL PIN

1

2

EPA0402

RING CRIMP 4mm RED

2

3

EST0001C

THERMO SW N/C 90° C

1

4

G-EWT0090

HEAT SHRINK Ø9.5 x 50MM

2

5

G-EWT0127

HEAT SHRINK Ø12.7 x 50MM

2

6

G-FIX-NUT-104

M4 S/S NUT

4

7

G-FIX-S21-616

M6x16MM S/S HEX HD SCW

2

8

G-FIX-S21-830

M8x30MM S/S HEX HD SCW

15

9

G-FIX-S21-931

M10x35MM S/S HEX HD SCREW

8

10

G-FIX-S32-306

M3x6MM S/S CAP HD SCW

2

11

G-GAS-FIT-284C

UNION 1/4" SWAGE S/S

8

12

G-GAS-FIT-384C

1/4" SWAGelok CAP

1

13

G-GAS-FIT-618C

1/2" VCR GASKET/RETAINER

1

14

G-MA00D32377

M5x16MM CAP HD AL ION IMP 5µm

3

15

G-MA91C30405

BELLOW / CYLINDER ASSEMBLY

1

16

G-MA91C35180

MESH / O-RING RETAINING ASY (1/2")

3

17

G-SEL-O-V-244

O-RING 3.53 x 107.5 VITN

2

18

G-SEL-O-V-371C

O-RING BS371 VIT 5.3x215.3MM

1

19

G-SEL-O-V-900

3.0x12mm VITON O'RING 206-312

3

20

G-SUN-SPG-013

SPG INCONEL 30.4 x 50.8

1

21

G-VAC-CLP-315C

CLAW GRIP M10

8

22

G-VAC-CLP-420

CLAW DN100 SHORT

15

23

MA61B29473

ELECTRODE LOWER 400°C (IN LINE)

1

24

MA91C26919

LOWER TEE MOUNTING FLANGE

1

25

MA91D24964

CLAMP THERMOCOUPLE ASY

1

26

MA91D26297

BELLOW PUSHROD ASY

1

27

MA91D26955

WAFER LIFT

1

28

MA91D27294

GUIDE, WAFER LIFT ASSEMBLY

1

29

MD91B26915

FLANGE MOUNTING

1

30

MD91D26307

HEATER LEG INSULATING COLLAR

2

31

MD91D27289

COLLAR, TOP SPRING

1

32

MD93D25717

TABLE LEG SEAL NUT

3

33

MD93D25722

TAB LOCKING M6

2

MATERIAL

SEE B.O.M.

DO NOT SCALE IF IN DOUBT ASK

REMOVE ALL BURRS AND SHARP EDGES

THIS DRAWING BELONGS TO OXFORD INSTRUMENTS PLASMA TECHNOLOGY LTD. AND IS ISSUED ON CONDITION THAT IT IS NOT COPIED, PRINTED OR DISCLOSED EITHER WHOLLY OR IN PART TO A THIRD PARTY WITHOUT PRIOR CONSENT IN WRITING FROM OXFORD INSTRUMENTS PLASMA TECHNOLOGY LTD. NORTH END, YATTON, BRISTOL, BS49 4AP, ENGLAND.

THIRD ANGLE PROJECTION

TOLERANCES UNLESS STATED

X ± 0.5mm

XX ± 0.3mm

XXX ± 0.1mm

ANGLE ± 0° 15'

1/6 UNLESS STATED

1:2 UNLESS STATED

mm UNLESS STATED

DATE

04/11/2004

DATE

11/11/2004

REV. REV. No.

135

TITLE

ELECTRODE, LOWER 400° C ASSEMBLY (CAST ALUMINIUM)

DRAWN - P.F.BURNS

CHECKED - R.J.W.CROAD

DATE - 04/11/2004

DATE - 11/11/2004

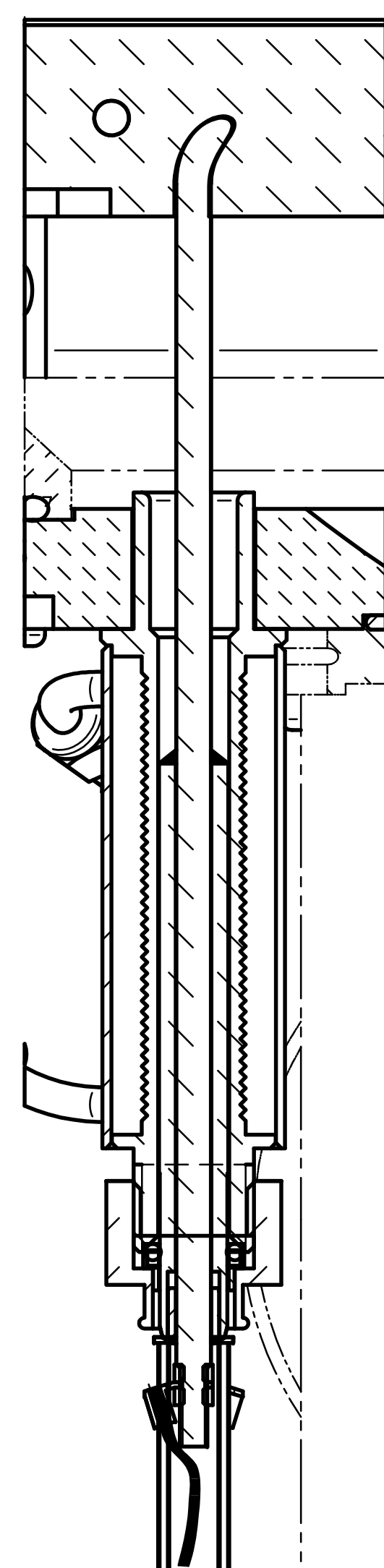
REV. REV. No.

135

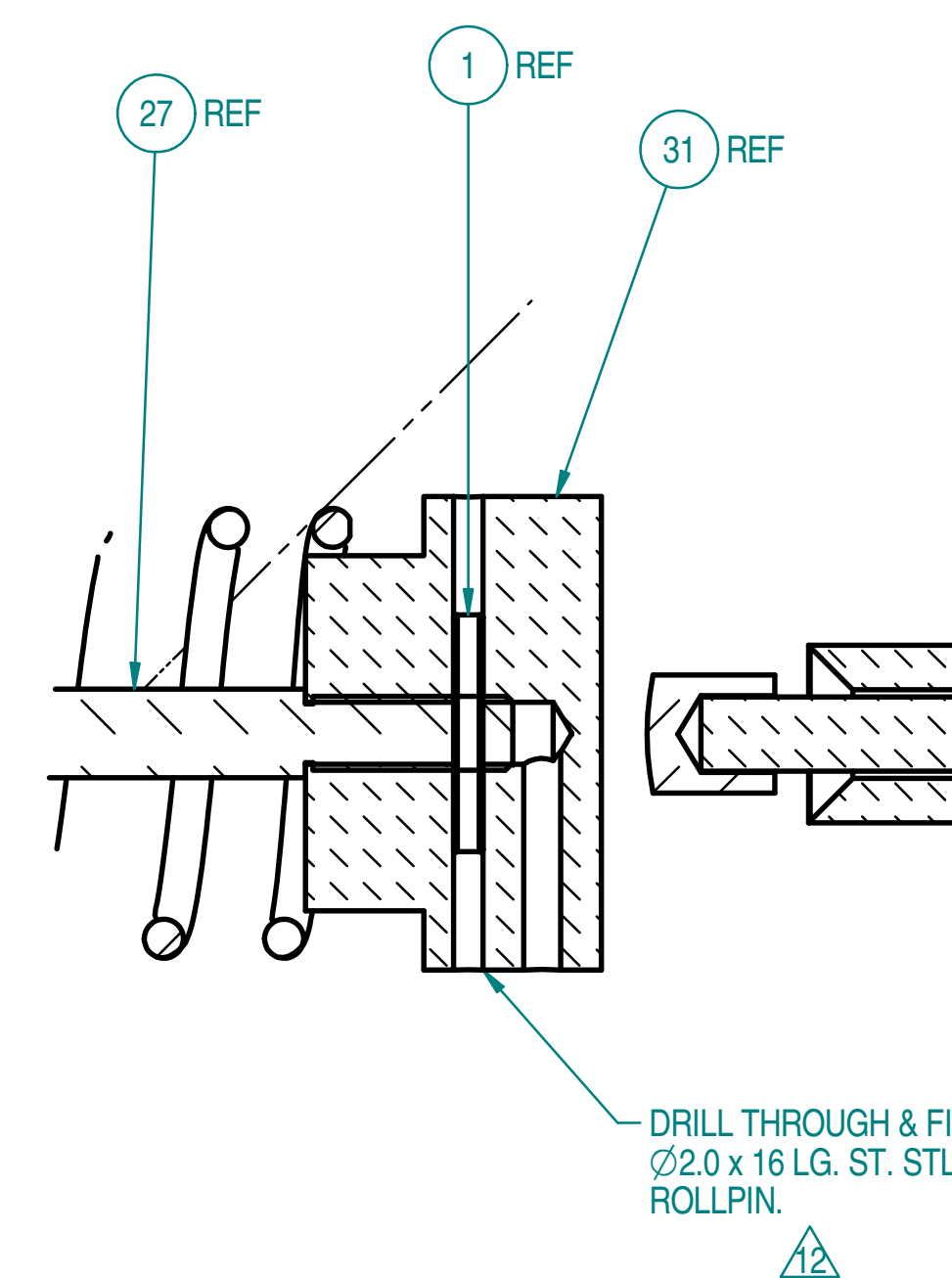
DRAWING NUMBER

SHEET 1 OF 2

REV	MOD No.	MODIFICATIONS	DRN	DATE
01		FIRST ISSUE		
02	15640	ITEM 2 MS-16 CAP HD WAS MS-16 BUTIN TITANIUM ITEM 207 S/S WAS TITANIUM ITEM 14 REMOVED ITEM 3 MODIFIED	RWT	6/10/05
03	18011		S.H.	16/01/06
04	21186	REPLACE PIN LIFT ASY	G.S.V	26/03/07
05	21550	NICKEL PLATED SCREWS REPLACED TITANIUM SCREWS. REPAIRMAN & PARTS LIST ADDED	S.H.	20/03/07
06	18965	G/VAO/FIT/725 REMOVED FROM BOM. SHOWN AS REF ONLY.	APF	16/05/07
07	21999	MA91C30405 BELLOW ASY WAS MA92C39931. G-GAS-FIT-384 ADDED. EXPLODED VIEW ADDED. SCALE CHANGE 1/2 WAS 1/4	GSY	27/06/07
08	25980	G-MA00032377 WAS G-MA00030147	GSY	10/12/08
09	29190	RE-SCALE ASY DIMS & THERMOCOUPLE REF. DIM. ADDED TO SHEET 2. NOTES UPDATED.	GSY	16/02/10
10	29163	EPP012 NOW EFB2011	APF	24/03/10
11	30811	2 OFF EFB2011 REMOVED 2 OFF G-EW70000 & G-EW70127 (HEAT SHRINK) ADDED.	APF	04/08/10
12	32122	PART 94-G-FIX-PIN-121 ADDED.	S.H.	13/01/11
13	33053	3 OFF OM91D26306 NOW G-MA91C35180	B.C.	17/05/11
14	35933	MA61B29473 WAS MA61B27295.	GSY	19/04/12



SECTION B-B
1:1



DETAIL D
2:1

1. ALL SURFACES INDICATED 0.8mm OR LESS TO BE FREE FROM SURFACE IMPERFECTIONS AND FULLY PROTECTED AT ALL TIMES. REFER TO DETAIL DRAWINGS FOR LOCATION.
2. CLEANROOM GLOVES TO BE WORN AT ALL TIMES DURING ASSEMBLY.
3. **IMPORTANT** CHECK REFERENCE DIMENSION TO ENSURE THERMOCOUPLE HAS BEEN CORRECTLY FITTED.
4. PLACE IN SUITABLE PROTECTIVE PACKAGING, BAG OR CONTAINER LABELED WITH DRAWING NUMBER, ISSUE AND PURCHASE ORDER NUMBER.

MATERIAL		SEE B.O.M.				PLASMA TECHNOLOGY					
DO NOT SCALE IF IN DOUBT ASK		THIS DRAWING BELONGS TO OXFORD INSTRUMENTS PLASMA TECHNOLOGY LTD. AND IS ISSUED ON CONDITION THAT IT IS NOT COPIED, PHOTOCOPIED OR DISCLOSED EITHER WHOLLY OR IN PART TO A THIRD PARTY WITHOUT PRICE CONSENT IN WRITING FROM OXFORD INSTRUMENTS PLASMA TECHNOLOGY LTD.		TOLERANCES UNLESS STATED				TITLE		DRAWING NUMBER	
REMOVE ALL BURRS AND SHARP EDGES		THIRD ANGLE PROJECTION						ELECTRODE, LOWER 400° C ASSEMBLY (CAST ALUMINIUM)			
				X ± 0.5mm XX ± 0.3mm XXX ± 0.1mm ANGLE ± 0° 15'		mm UNLESS STATED		DRAWN - P.F.BURTON DATE - 04/11/2004		CHECKED - R.L.W.CROOK DATE - 11/11/2004	
								DES. REF. No. - 128		SHEET 1 of 2	