

BJS Biotechnologies xxplate guide



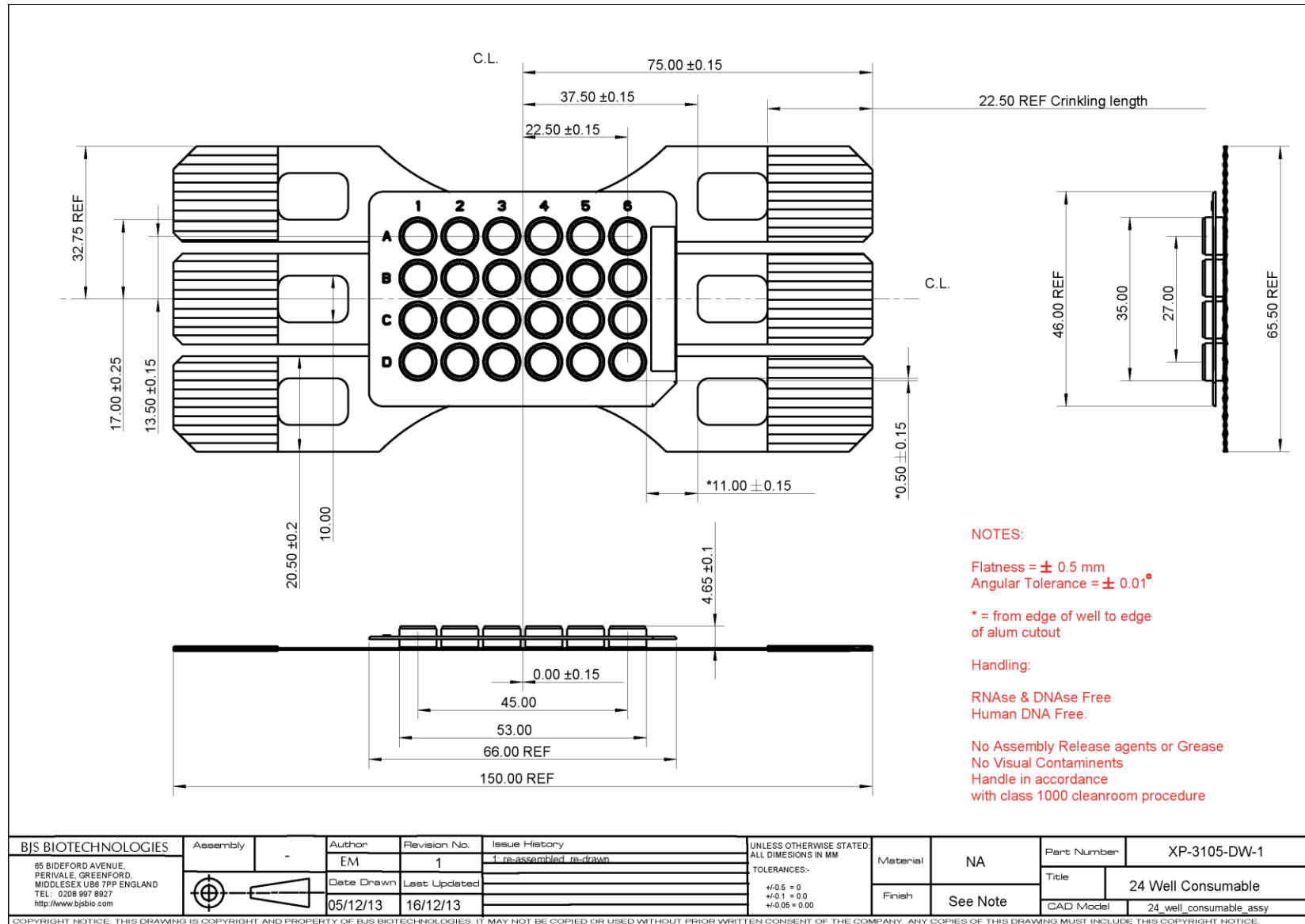
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Overview

- The xxplate is the bespoke consumable that is used in the xxpress Real-Time PCR Thermal Cycler made by BJS Biotechnologies Ltd.
- There are currently three types of xxplate which are identified by the number of test wells they contain; 24well, 54well and 96well.
- This guide includes drawings of the test plates and information on the position, size and pitch of the wells so that users can program or adapt handling equipment.
- There is also information on the capacity of the test wells.



24 Well Plate – Mechanical Details



24 Well Plate – Well coordinates

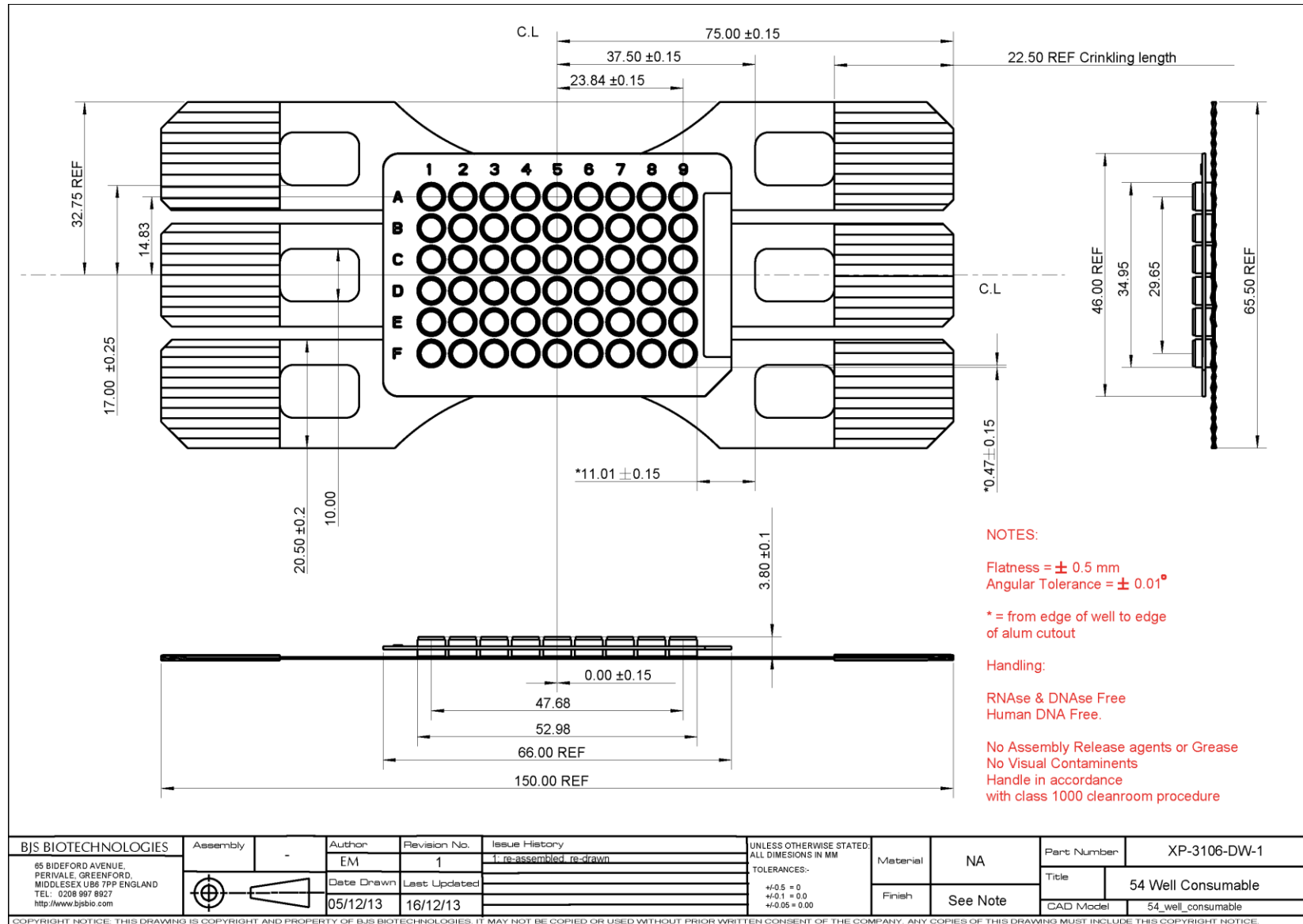
Well coordinates taken from the horizontal and vertical centrelines as shown on the drawings

		1	2	3	4	5	6
A	X	-22.5	-13.5	-4.5	4.5	13.5	22.5
	Y	13.5	13.5	13.5	13.5	13.5	13.5
B	X	-22.5	-13.5	-4.5	4.5	13.5	22.5
	Y	4.5	4.5	4.5	4.5	4.5	4.5
C	X	-22.5	-13.5	-4.5	4.5	13.5	22.5
	Y	-4.5	-4.5	-4.5	-4.5	-4.5	-4.5
D	X	-22.5	-13.5	-4.5	4.5	13.5	22.5
	Y	-13.5	-13.5	-13.5	-13.5	-13.5	-13.5

Dimensions in millimetres

Well diameter is 6.0mm

54 Well Plate – Mechanical Details



NOTES:

Flatness = ± 0.5 mm
Angular Tolerance = ± 0.01°

* = from edge of well to edge of alum cutout

Handling:

RNase & DNase Free
Human DNA Free.

No Assembly Release agents or Grease
No Visual Contaminants
Handle in accordance with class 1000 cleanroom procedure

54 Well Plate – Well coordinates

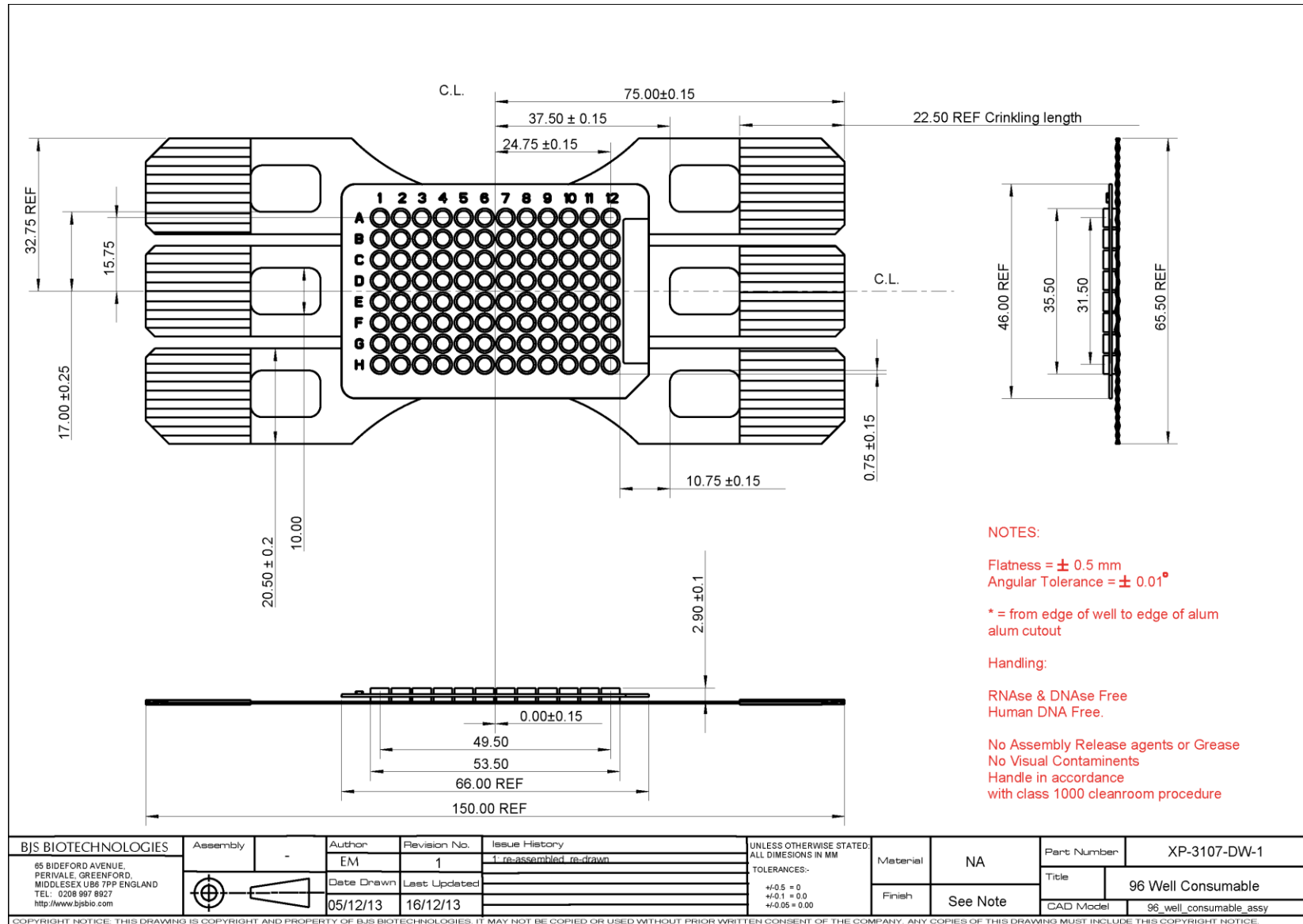
Well coordinates taken from the horizontal and vertical centrelines as shown on the drawings

		1	2	3	4	5	6	7	8	9
A	X	-23.84	-17.88	-11.92	-5.96	0.00	5.96	11.92	17.88	23.84
	Y	14.83	14.83	14.83	14.83	14.83	14.83	14.83	14.83	14.83
B	X	-23.84	-17.88	-11.92	-5.96	0.00	5.96	11.92	17.88	23.84
	Y	8.90	8.90	8.90	8.90	8.90	8.90	8.90	8.90	8.90
C	X	-23.84	-17.88	-11.92	-5.96	0.00	5.96	11.92	17.88	23.84
	Y	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97
D	X	-23.84	-17.88	-11.92	-5.96	0.00	5.96	11.92	17.88	23.84
	Y	-2.96	-2.96	-2.96	-2.96	-2.96	-2.96	-2.96	-2.96	-2.96
E	X	-23.84	-17.88	-11.92	-5.96	0.00	5.96	11.92	17.88	23.84
	Y	-8.89	-8.89	-8.89	-8.89	-8.89	-8.89	-8.89	-8.89	-8.89
F	X	-23.84	-17.88	-11.92	-5.96	0.00	5.96	11.92	17.88	23.84
	Y	-14.82	-14.82	-14.82	-14.82	-14.82	-14.82	-14.82	-14.82	-14.82

Dimensions in millimetres

Well diameter is 4.0mm

96 Well Plate – Mechanical Details



NOTES:

Flatness = ± 0.5 mm
Angular Tolerance = $\pm 0.01^\circ$

* = from edge of well to edge of alum
alum cutout

Handling:

RNase & DNase Free
Human DNA Free.

No Assembly Release agents or Grease
No Visual Contaminants
Handle in accordance
with class 1000 cleanroom procedure

96 Well Plate – Well coordinates

Well coordinates taken from the horizontal and vertical centrelines as shown on the drawings

		1	2	3	4	5	6	7	8	9	10	11	12
A	X	-24.75	-20.25	-15.75	-11.25	-6.75	-2.25	2.25	6.75	11.25	15.75	20.25	24.75
	Y	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75
B	X	-24.75	-20.25	-15.75	-11.25	-6.75	-2.25	2.25	6.75	11.25	15.75	20.25	24.75
	Y	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25
C	X	-24.75	-20.25	-15.75	-11.25	-6.75	-2.25	2.25	6.75	11.25	15.75	20.25	24.75
	Y	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75
D	X	-24.75	-20.25	-15.75	-11.25	-6.75	-2.25	2.25	6.75	11.25	15.75	20.25	24.75
	Y	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
E	X	-24.75	-20.25	-15.75	-11.25	-6.75	-2.25	2.25	6.75	11.25	15.75	20.25	24.75
	Y	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75
F	X	-24.75	-20.25	-15.75	-11.25	-6.75	-2.25	2.25	6.75	11.25	15.75	20.25	24.75
	Y	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25
G	X	-24.75	-20.25	-15.75	-11.25	-6.75	-2.25	2.25	6.75	11.25	15.75	20.25	24.75
	Y	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75	15.75
H	X	-24.75	-20.25	-15.75	-11.25	-6.75	-2.25	2.25	6.75	11.25	15.75	20.25	24.75
	Y	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25

Dimensions in millimetres

Well diameter 6.0mm

Well Fill Volumes

Recommended Fill
Volumes at Max Ramp Rate

24 Well Fill Volume	10ul to 40ul
54 Well Fill Volume	4ul to 15ul
96 Well Fill Volume	1ul to 5ul