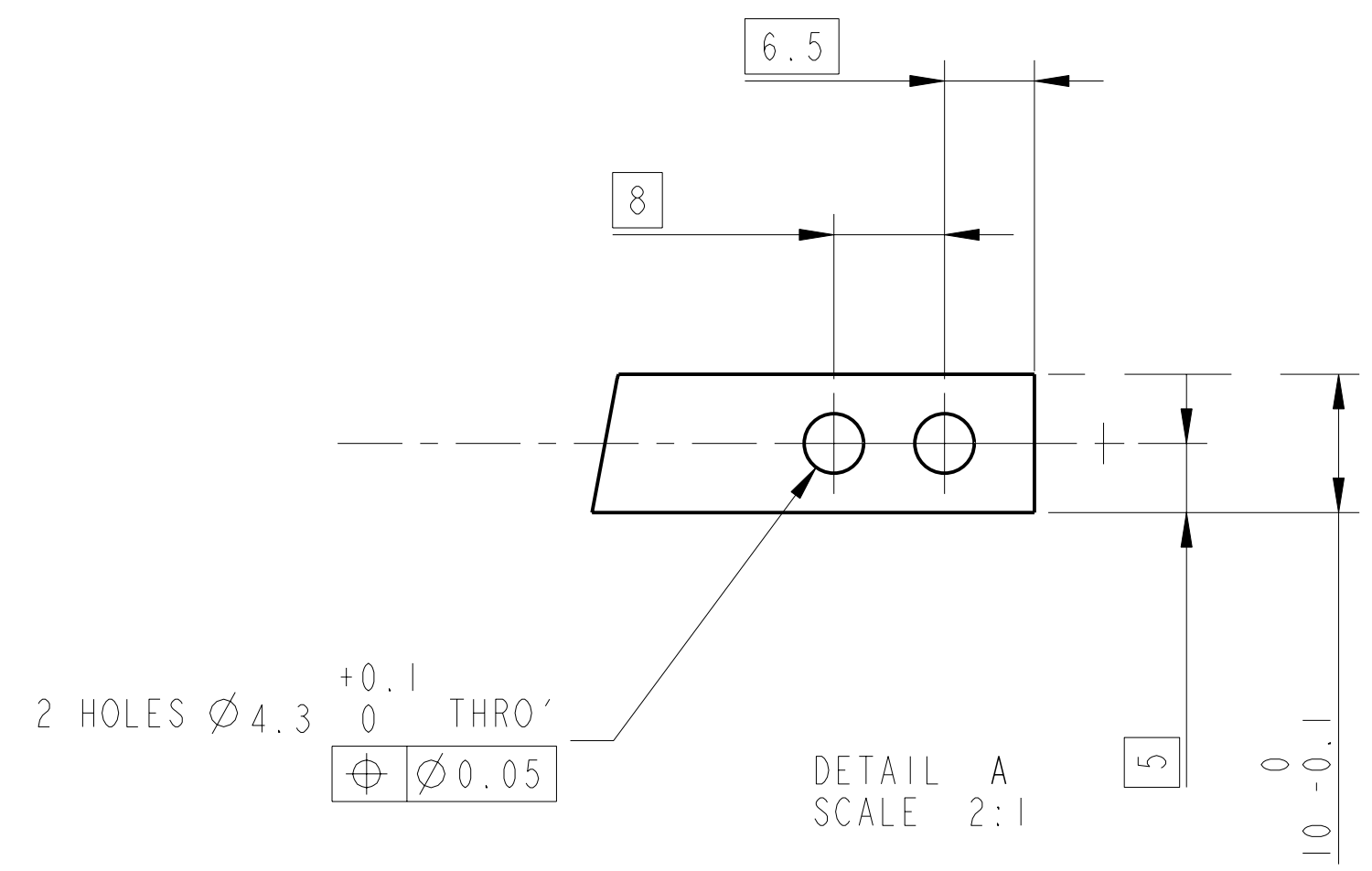
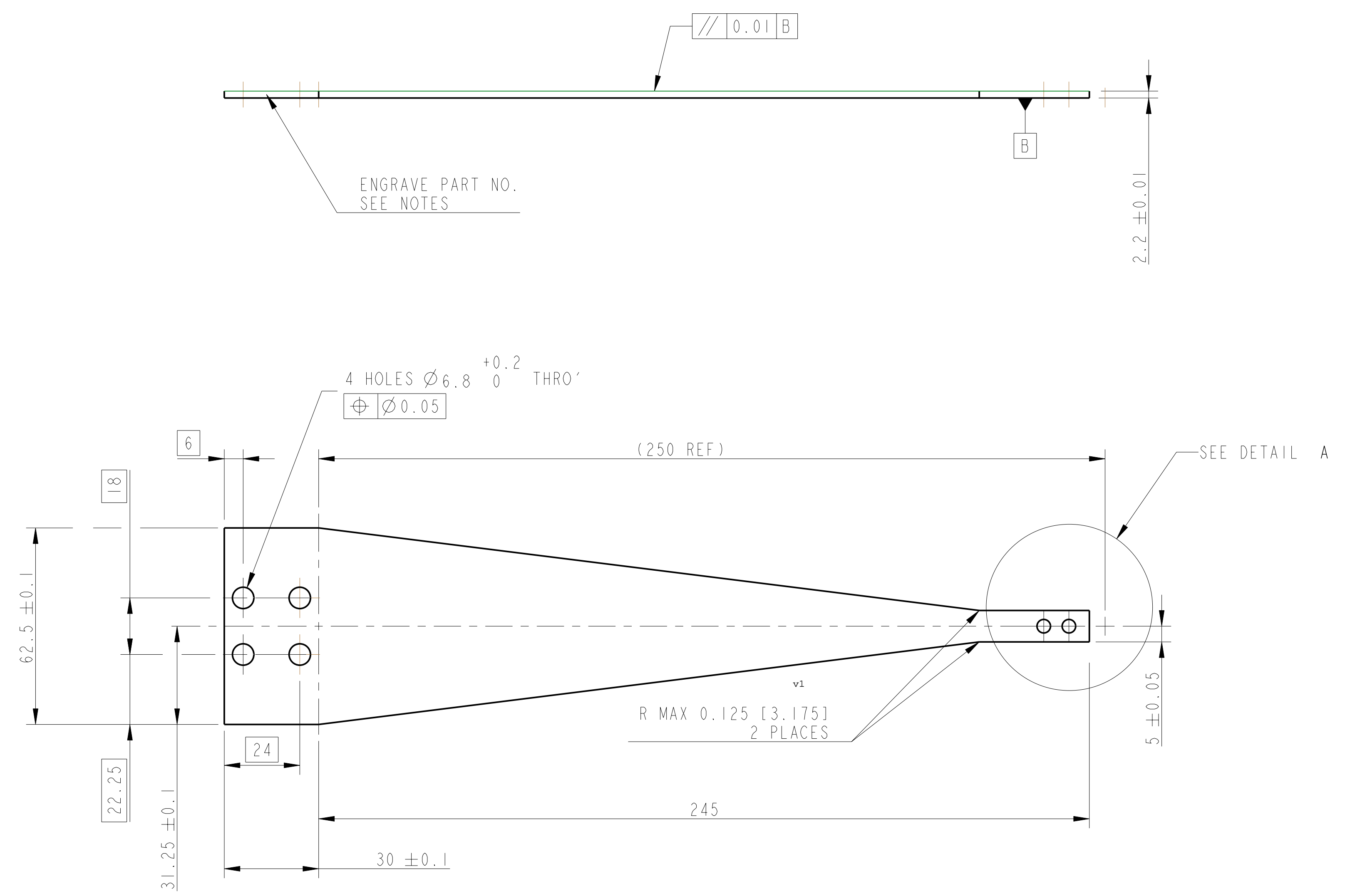


REV.	DATE	DCN #	DRAWING TREE #
A	-	-	-
B	-	-	-
C	-	-	-

FLAT PROFILE



NOTES: (UNLESS OTHERWISE SPECIFIED)

- DO NOT SCALE FROM DRAWING.
- INTERPRET DIMENSIONS PER: ANSI 114.5 (R2)
- ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE AND SILICONE, SUCH AS CINCINNATI MILACRON'S CIMTECH 410 (STAINLESS STEEL).
- FABRICATE FROM SHEET MATERIAL; FORM RADIUS BY ROLLING.
- REMOVE ALL SHARP EDGES - R 0.25 MIN.
- SCRIBE, ENGRAVE OR STAMP DRAWING PART NUMBER ON NOTED SURFACE OF PART AND A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST PART AND PROCEED CONSECUTIVELY. USE "01" HIGH CHARACTERS. EXAMPLE: 000100-001. A VIBRATION TOOL MAY BE USED.
- AFTER PARTS ARE ROLLED TO RADIUS, HARDEN FOR HEAT TREATMENT AT 435 DEG C FOR 100 HOURS AND AIR COOL. PARTS MUST BE SUPPORTED WITH TOOLING DURING HEAT TREATMENT TO AVOID RADIUS CHANGE DUE TO SELF WEIGHT. TOOLING FOR HEAT TREATMENT MAY BE A "SHIRK BACK" TYPE OF TOOL THAT WILL ALLOW THE PARTS TO BE MOUNTED ON THEIR SIDES. PARTS MAY BE ROLLED AGAIN AFTER HEAT TREATMENT TO ADJUST RADIUS TO SPECIFICATION.

DIMENSIONS ARE IN mm
TOLERANCES:
X.XX ± 0.25 mm
X.XXX ± 0.05 mm
ANGULAR ± 0.25 °

MATERIAL: MARAGING STEEL 250
FINISH: CLEAN AND DEGREASED
Ra = 0.8

NAME	DATE
DRAWN	1/15/07
CHECKED	5/30/07
APPROVED	5/30/07

SCALE: 1:1 PROJECTION: 1ST ANGLE

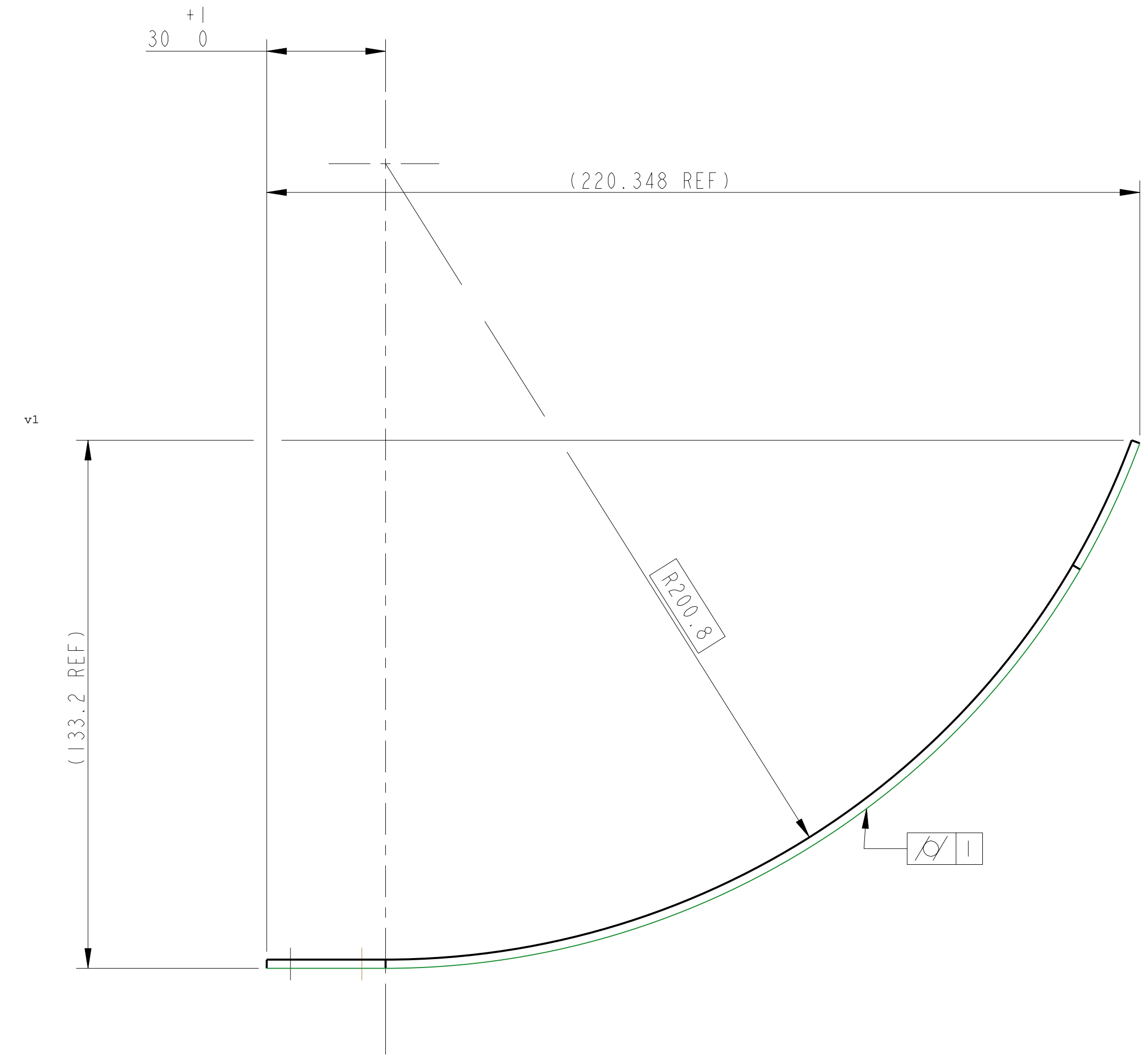
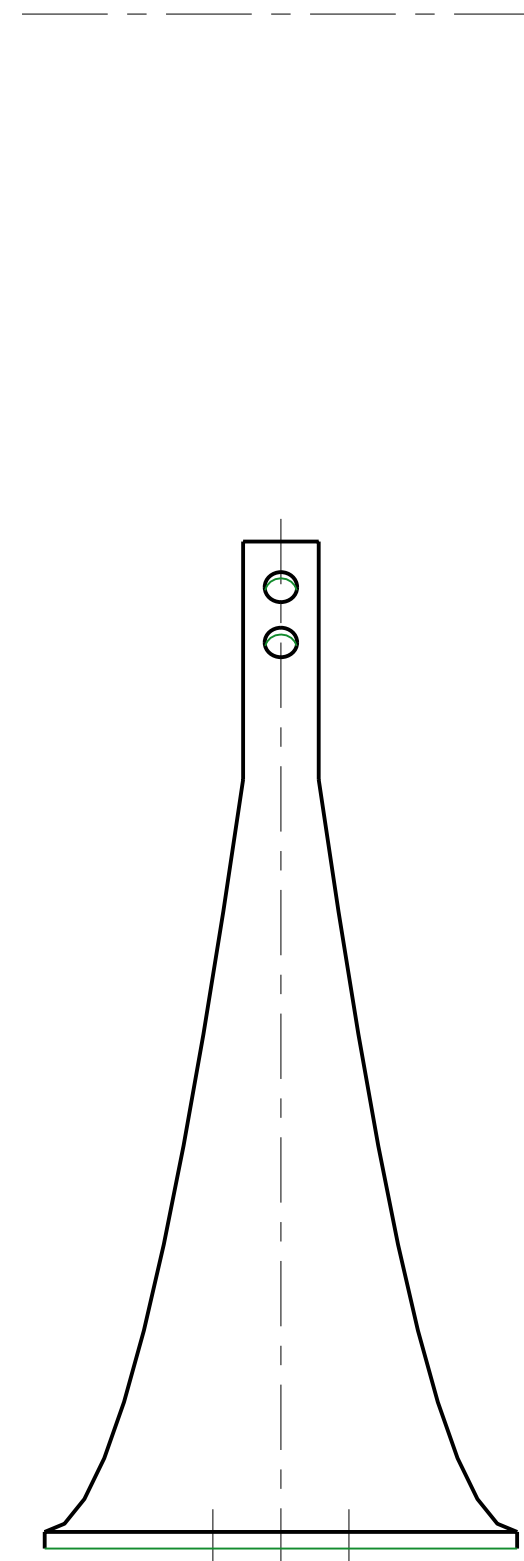
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MASSACHUSETTS INSTITUTE OF TECHNOLOGY
GLASGOW UNIVERSITY GEG ROX GROUP
RUTHERFORD APPLICTION LABORATORIES

SYSTEM: **ADVANCED LIGO**
SUB-SYSTEM: **SUS**
PART NAME: **TOP STAGE BLADE SPRING**
NEXT ASSY: **BS & FM SUS TOP STAGE**

DRG. NO.: **D080513**
SHEET 1 OF 2

INTERNAL NAME: D080513-
 FOR INTERNAL USE ONLY:
 E=186Mpa
 TOTAL SUSP MASS = KG
 UI MASS = KG
 PREDICTED:
 F = Hz
 1st INTERNAL MODE = Hz
 O MAX = Mpa

FORMED BLADE SPRING



NOTES: (UNLESS OTHERWISE SPECIFIED)

- DO NOT SCALE FROM DRAWING.
- INTERPRET DIMENSIONS PER: ANSI Y14.5 1987.
- ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE AND SILICONE, SUCH AS CINCINNATI MILACRON'S CIMTECH 410 (STAINLESS STEEL).
- FABRICATE FROM SHEET MATERIAL; FORM RADIUS BY ROLLING.
- REMOVE ALL SHARP EDGES; R 0.2 MIN.
- SCRIBE, ENGRAVE OR STAMP DRAWING PART NUMBER ON NOTED SURFACE OF PART AND A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST PART AND PROCEED CONSECUTIVELY. USE "01" HIGH CHARACTERS. EXAMPLE: 000100-001. A VIBRATION TOOL MAY BE USED.
- AFTER PARTS ARE ROLLED TO RADIUS, HARDEN FOR HEAT TREATMENT AT 435 DEG C FOR 100 HOURS AND AIR COOL. PARTS MUST BE SUPPORTED WITH TOOLING DURING HEAT TREATMENT TO AVOID RADIUS CHANGE DUE TO SELF WEIGHT. TOOLING FOR HEAT TREATMENT MAY BE A "SHIRE BACK" TYPE OF TOOL THAT WILL ALLOW THE PARTS TO BE MOUNTED ON THEIR SIDES. PARTS MAY BE ROLLED AGAIN AFTER HEAT TREATMENT TO ADJUST RADIUS TO SPECIFICATION.

DIMENSIONS ARE IN mm		TOLERANCES:	
X.XX ± 0.25 mm	X.XX ± 0.25 mm	ANGULAR ±0.25 °	
MATERIAL: MARGING STEEL 250		FINISH: CLEAN AND DEGREASED	
√um (μm) Ra = 0.8		NAME DATE	
DRAWN I WLMOT 5/NOV/07		CHKD RJS 5/NOV/07	
APPROVED RJS		SCALE 1:1 PROJECTION	

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RUTHERFORD APPLERTON LABORATORIES		RUTHERFORD APPLERTON LABORATORIES	
SYSTEM ADVANCED LIGO		SUB-SYSTEM SUS	
NEXT ASSY TOP MASS		PART NAME TOP STAGE BLADE SPRING	
DRG. NO. D080513		SHEET 2 OF 2	