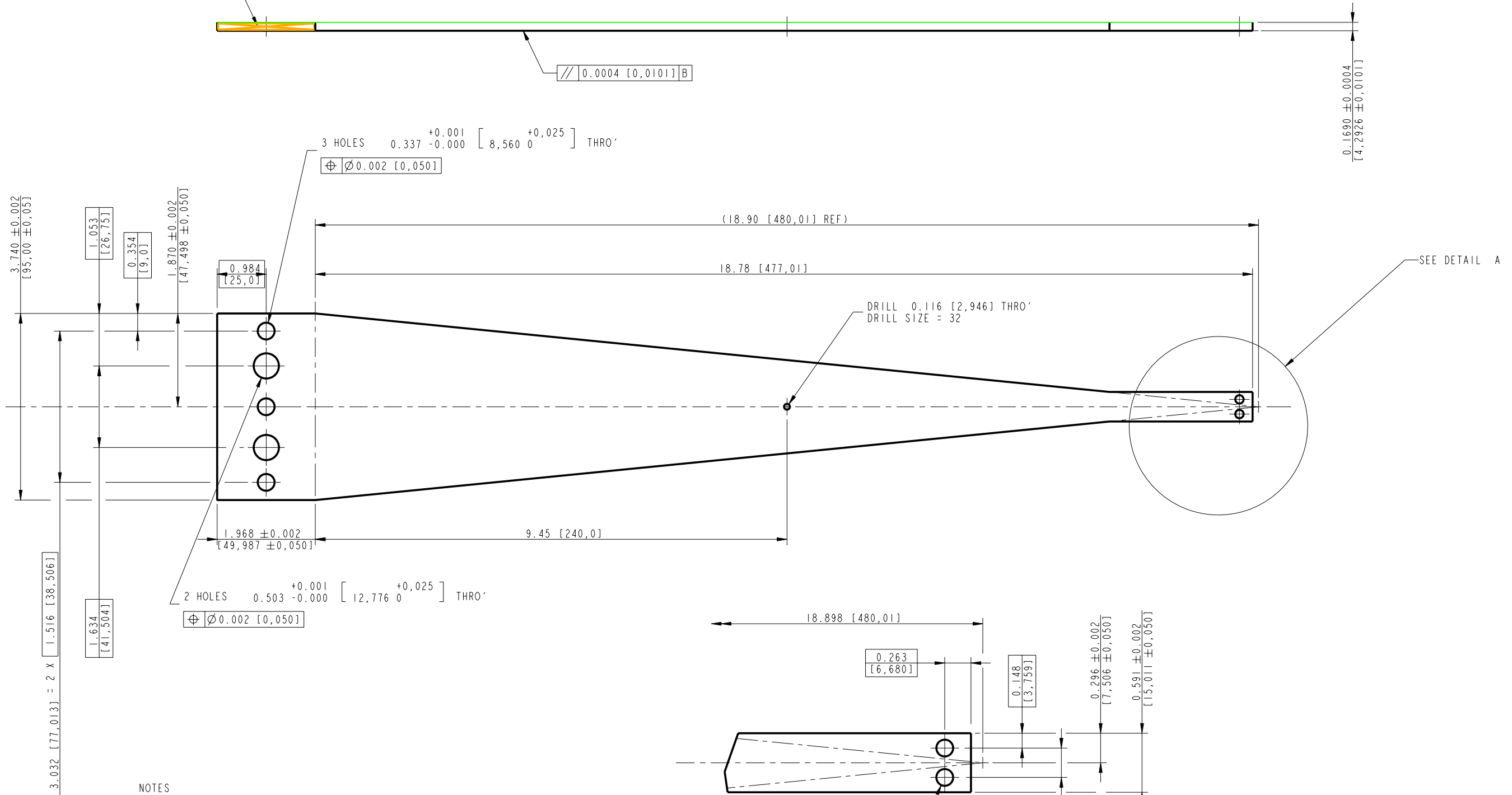


ENGRAVE PART NO.
SEE NOTES



NOTES

1. INTERPRET DIMENSIONS PER: ANSI Y14.5 1982
2. AFTER FORMING HEAT TREAT AT 435°C FOR 100 HOURS AND AIR COOL
3. DURING HEAT TREATMENT THE PART MUST BE SUPPORTED SO THAT IT DOES NOT CHANGE RADIUS DUE TO SELF WEIGHT

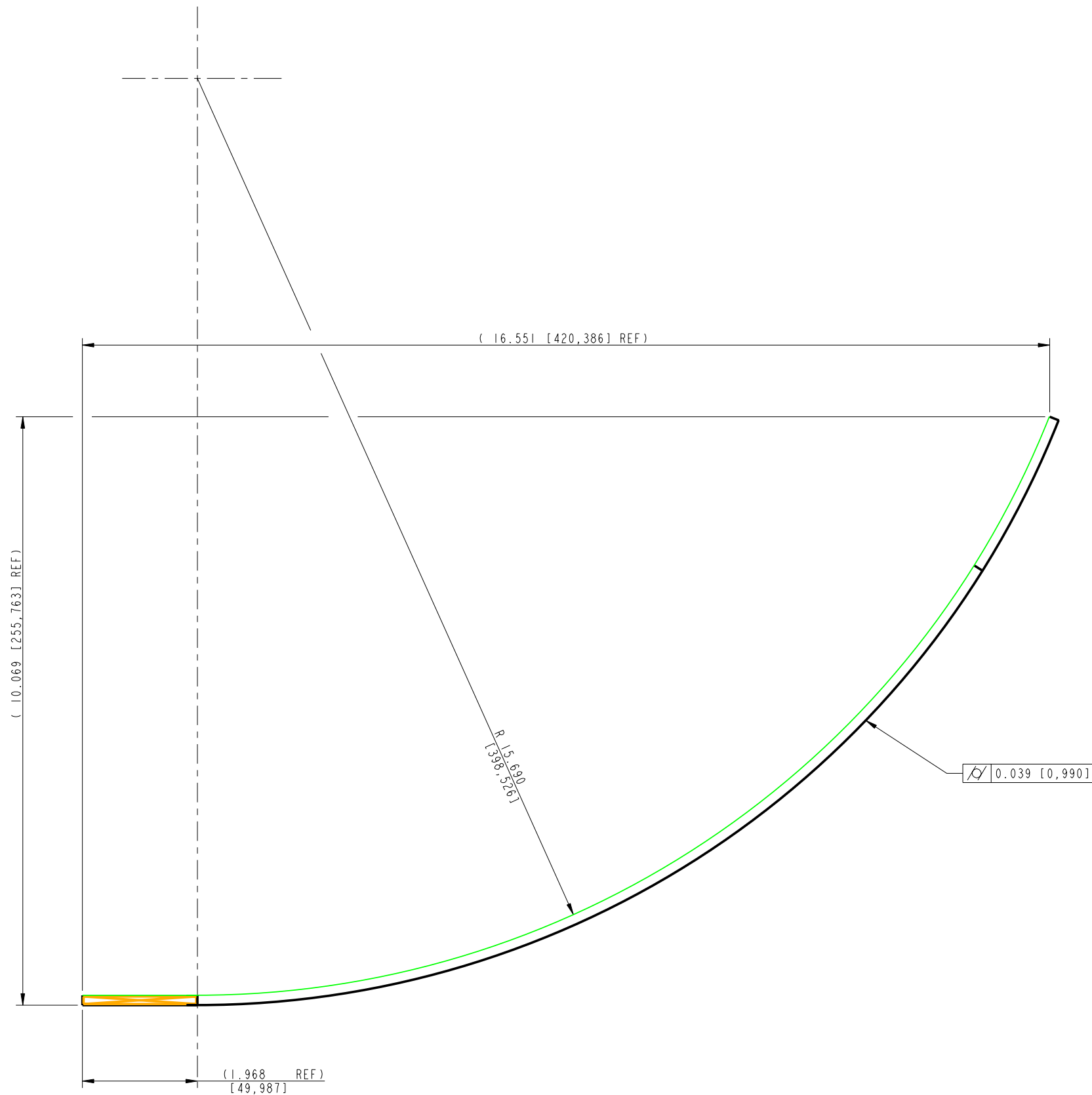
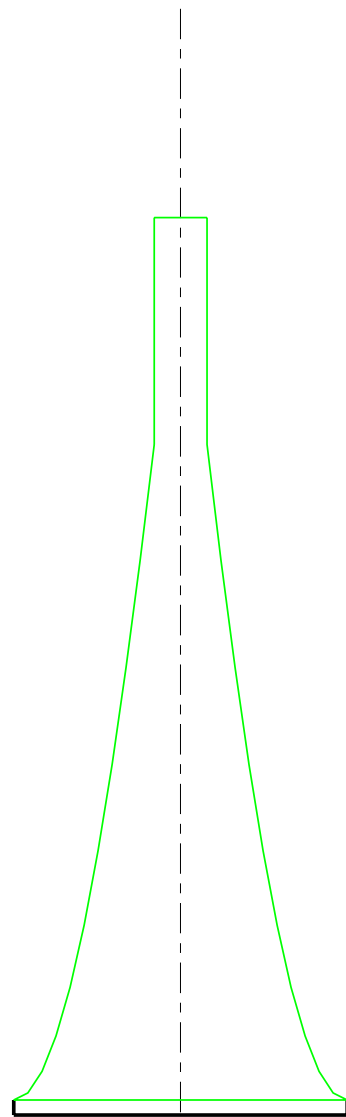
DETAIL A
SCALE 2:1

<p>NOTES: (UNLESS OTHERWISE SPECIFIED):</p> <p>1. REMOVE ALL SHARP EDGES. R.02 MIN.</p> <p>2. DO NOT SCALE FROM DRAWING.</p> <p>3. ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SODIUM, CHROMIUM AND SILICONE, SUCH AS CINCINNATI MILACRON'S CINTEC-H10 (STAINLESS STEEL).</p> <p>4. SCRIBE, ENGRAVE OR STAMP DRAWING PART NUMBER ON MATED SURFACE OF PART AND A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST PART AND PROCEED CONSECUTIVELY. USE 077 HIGH CHARACTERS. EXAMPLE: 000100-001-A VIBRATORY TOOL MAY BE USED.</p>		<p>DIMENSIONS ARE IN INCHES (mm)</p> <p>TOLERANCES:</p> <p>X.XX ±0.01 (0.250 mm)</p> <p>X.XXX ±0.005</p> <p>ANGULAR ±0.250 °</p> <p>MATERIAL: MARAGING STEEL 250</p> <p>FINISH: CLEAN AND DEGREASE</p> <p>NAME: _____ DATE: _____</p> <p>SCALE: 1:1 PROJECTION: </p>	<p>CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY FOR: GLASGOW UNIVERSITY GEO 400 GROUP HITHEROFT APLETON LABORATORIES</p> <p>SYSTEM: ADVANCED LIGO</p> <p>SUB-SYSTEM: SUS</p> <p>NEXT ASSEMBLY: TOP STAGE</p> <p>PART NAME: TOP STAGE BLADES</p> <p>CONTROL: PROTOTYPE</p> <p>DRG. NO.: D040298</p> <p>REV: 04</p>
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INTERNAL NAME: TD-1039-201--

FOR INTERNAL USE ONLY:

E=186Gpa
ALPHA=1.35
TOTAL SUSP MASS = 61 KG
P MASS = 11 KG
PREDICTED:
F = 2.33Hz
1st INTERNAL MODE = 70.26Hz
σ MAX = 981Mpa
REF: COMMUNICATION WITH BLADE COMMITTEE



NOTES: (UNLESS OTHERWISE SPECIFIED):		CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY MITRE RESEARCH LABORATORIES	
1. REMOVE ALL SHARP EDGES. R 0.02 MIN.	2. DO NOT SCALE FROM DRAWING.	DIMENSIONS ARE IN INCHES (mm)	SYSTEM: ADVANCED LIGO
3. ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SODIUM, CHROMIUM AND SILICONE, SUCH AS CINCINNATI MILACRON'S CINTEC-H10 (STAINLESS STEEL).	4. SCRIBE, ENGRAVE OR STAMP DRAWING PART NUMBER ON MATED SURFACE OF PART AND A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST PART AND PROCEED CONSECUTIVELY. USE 07* HIGH CHARACTERS. EXAMPLE: 00101 - A VIBRATORY TOOL MAY BE USED.	TOLERANCES: X.XX ±0.01 (0.250 mm) X.XXX ±0.005 ANGULAR ±0.250 °	SUB-SYSTEM: SUS
		MATERIAL: MARAGING STEEL 250	NEXT ASSY: TOP STAGE
		FINISH: CLEAN AND DEGREASE Ra = 32 (0.8)	PART NAME: TOP STAGE BLADES
		DATE: 1/18/04	CONTROL: PROTOTYPE
		DRAWN: J. WILMET	DRG. NO.: D040298
		CHECKED: ...	SCALE: 1:1 PROJECTION: ...
		APPROVED: ...	SHEET: 2 OF 2