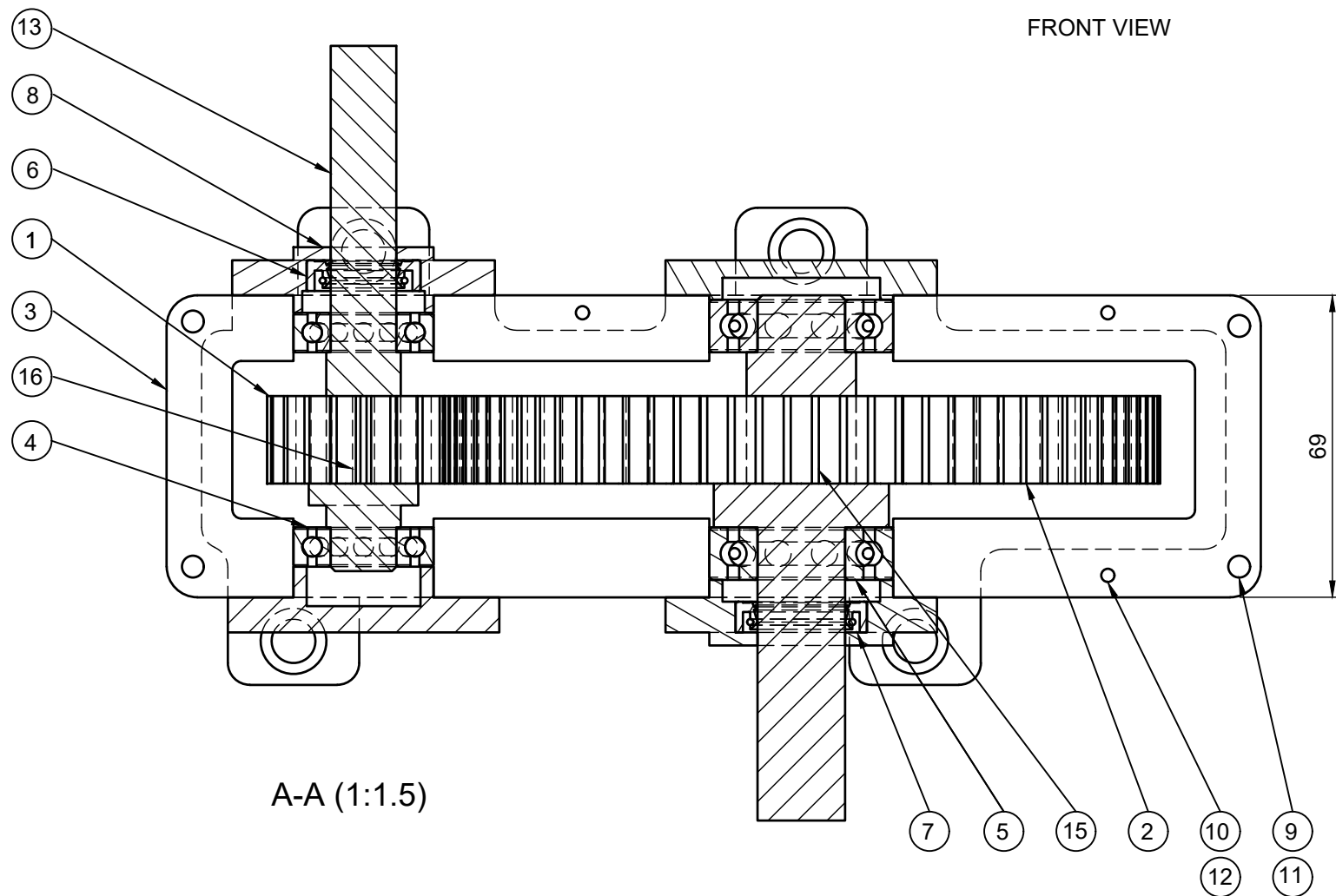
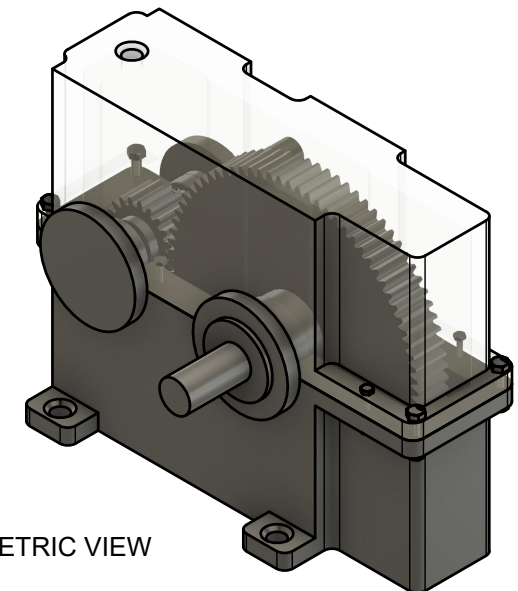


FRONT VIEW



16	PARALLEL KEY	Parallel key 5x5x25	Steel	1
15	PARALLEL KEY	Parallel key 8x7x25	Steel	1
14	GEAR SHAFT	D = 20	Al 46000	1
13	PINION SHAFT	D = 15	Al 46000	1
12	NUT	M3	Steel	3
11	NUT	M5	Steel	4
10	BOLT	M3	Steel	3
9	BOLT	M5	Steel	4
8	BEARING CAP	Die casted	CI (IS: 1865)	4
7	OIL SEAL	d = 20, D = 40	BUNA S	1
6	OIL SEAL	d = 15, D = 30	BUNA S	1
5	BEARING	SKF 6004	Carbon steel	2
4	BEARING	SKF 6002	Carbon steel	2
3	CASING	Die casted	Aluminium (IS: 2447)	1
2	GEAR	m = 2, Z = 80	35 Ni 1 Cr 60	1
1	PINION	m = 2, Z = 20	C50	1
SR.	PART	DESCRIPTION	MATERIAL	QTY.
PARTS LIST				



ISOMETRIC VIEW

ALL DIMENSIONS ARE IN mm.

COLLEGE OF ENGINEERING PUNE

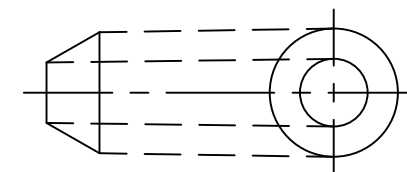
MRUDULA SAWAIKAR
NIHAR APTE

111910060
111910063

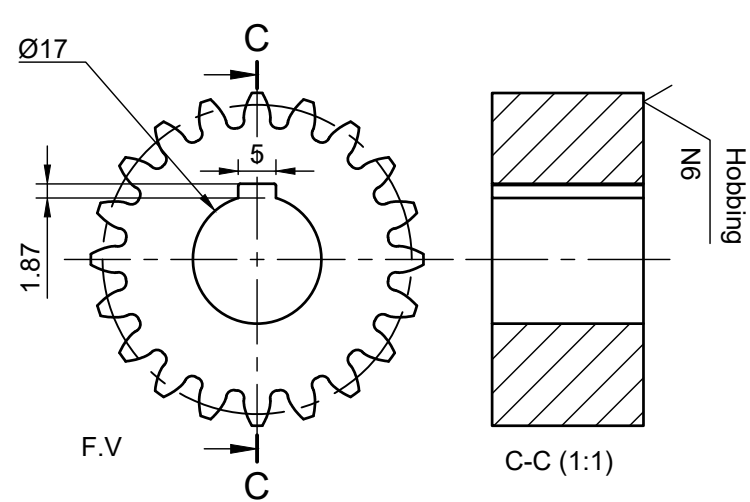
CLASS : T.Y.MECHANICAL

TITLE : GEARBOX ASSEMBLY FOR FOOD PROCESSOR
SINGLE STAGE GEARBOX (REDUCTION 4:1)

THEORY AND DESIGN OF MECHANICAL SYSTEMS

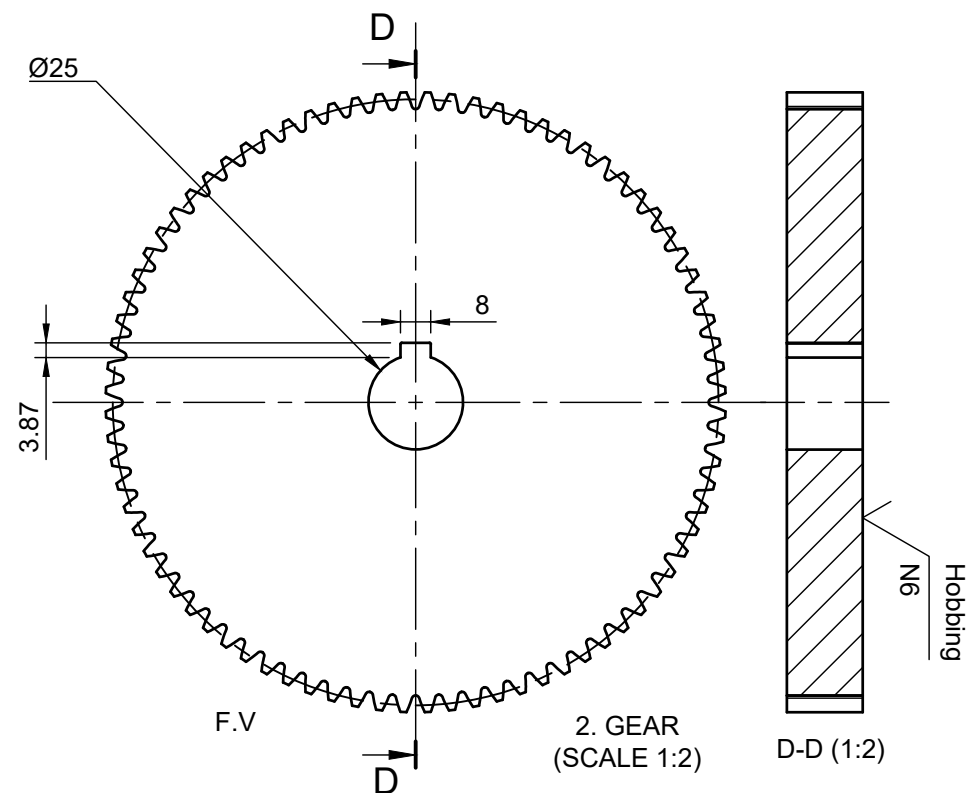


DATE : 13/4/22



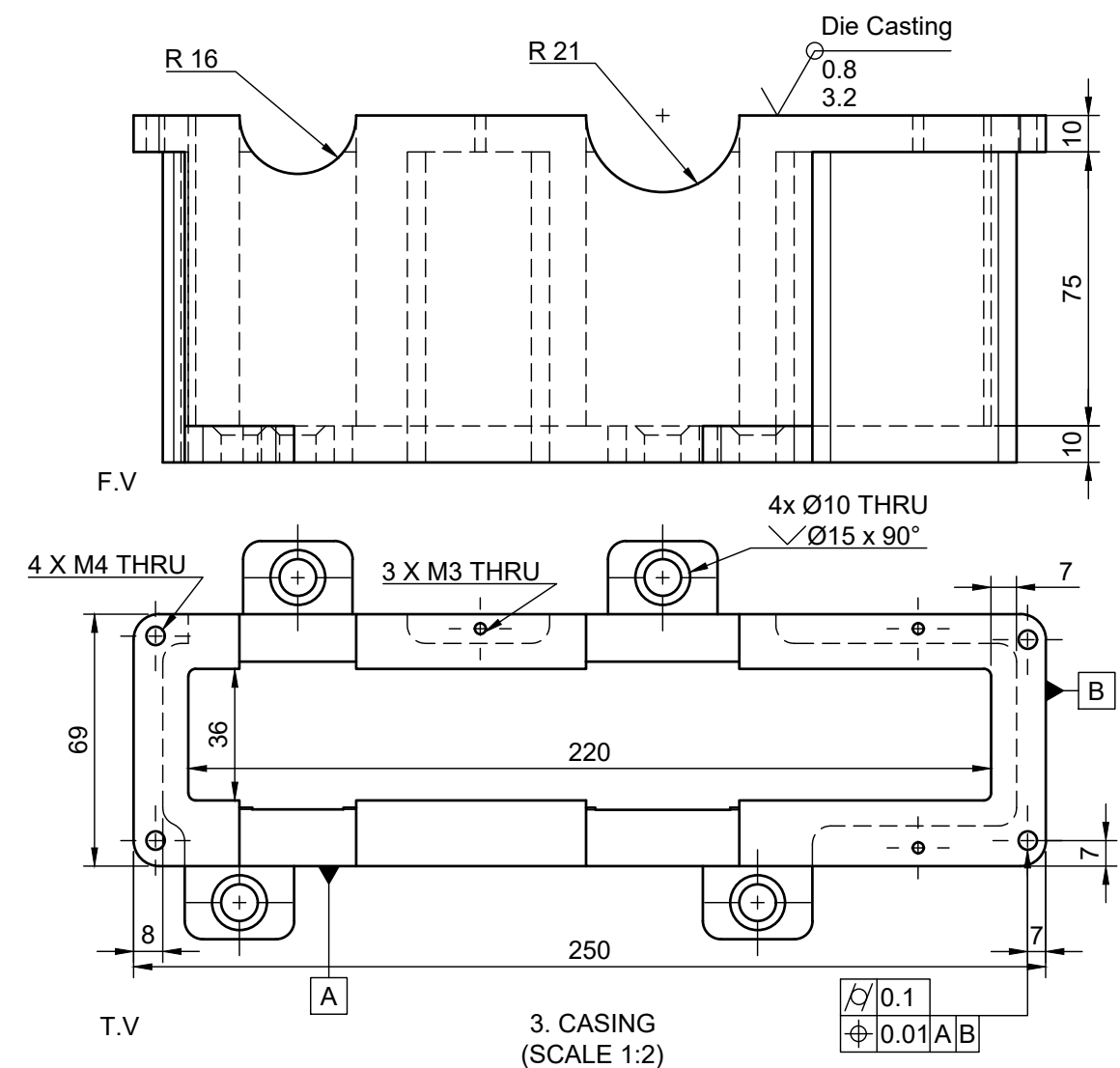
GEAR SPECIFICATIONS		
MODULE	2	mm
NUMBER OF TEETH	20	
PITCH DIAMETER	40	mm
PRESSURE ANGLE	20	°

1. PINION
(SCALE 1:1)

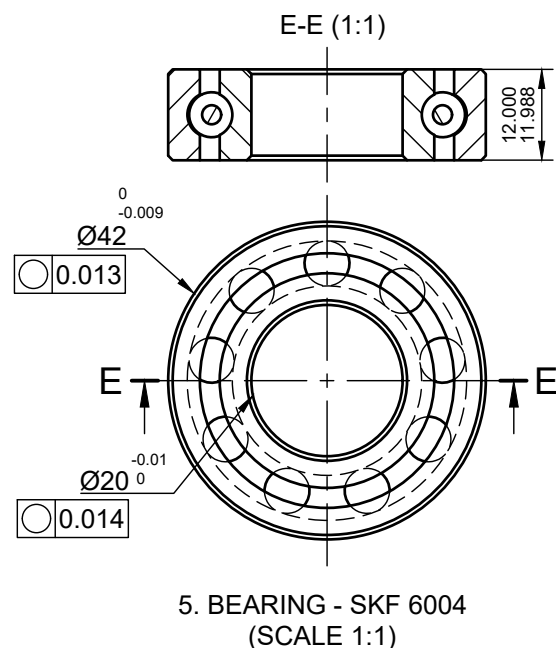


GEAR SPECIFICATIONS		
MODULE	2	mm
NUMBER OF TEETH	80	
PITCH DIAMETER	160	mm
PRESSURE ANGLE	20	°

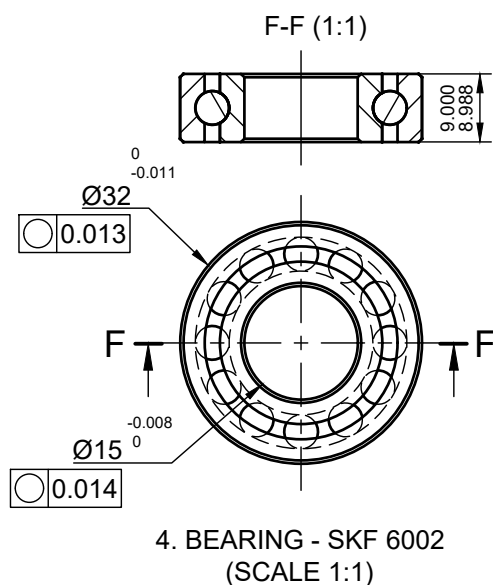
2. GEAR
(SCALE 1:2)



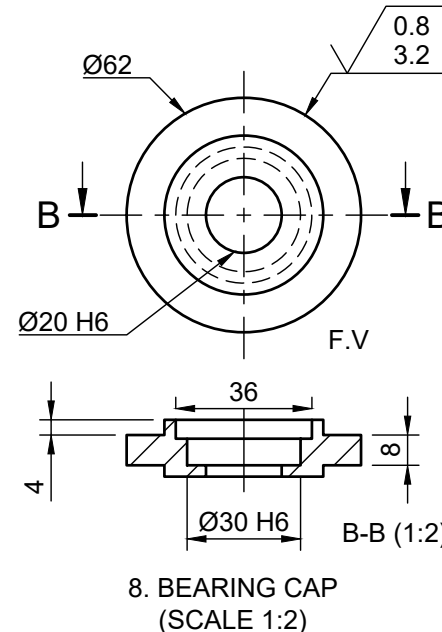
3. CASING
(SCALE 1:2)



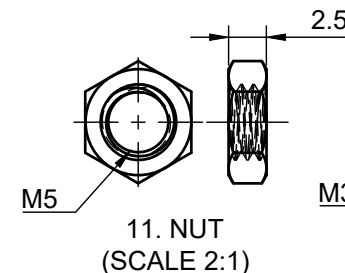
5. BEARING - SKF 6004
(SCALE 1:1)



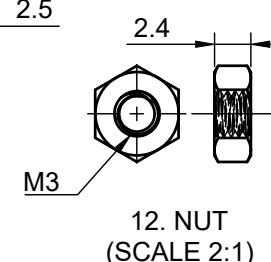
4. BEARING - SKF 6002
(SCALE 1:1)



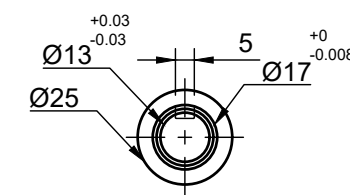
8. BEARING CAP
(SCALE 1:2)



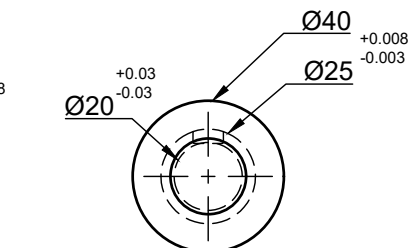
11. NUT
(SCALE 2:1)



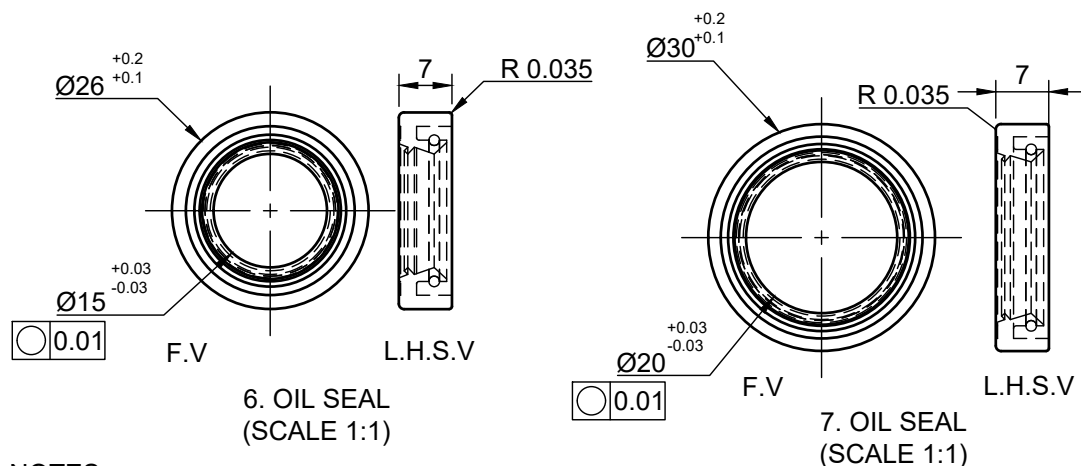
12. NUT
(SCALE 2:1)



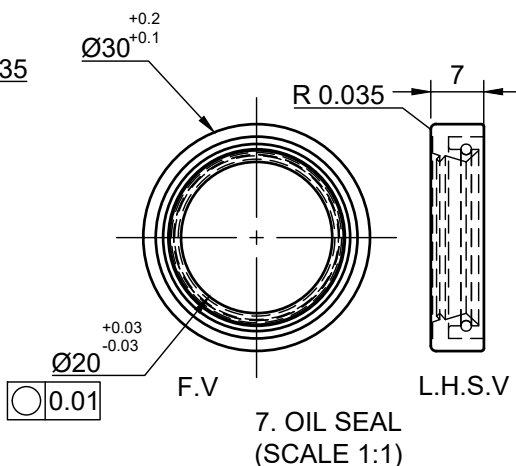
13. PINION SHAFT
(SCALE 1:2)



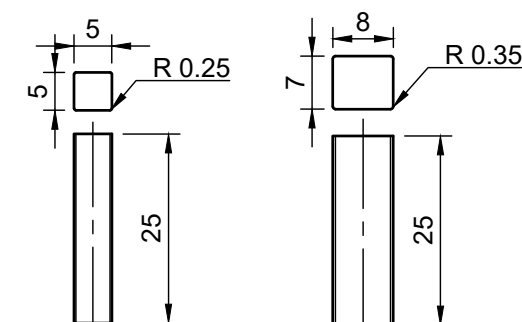
14. GEAR SHAFT
(SCALE 1:2)



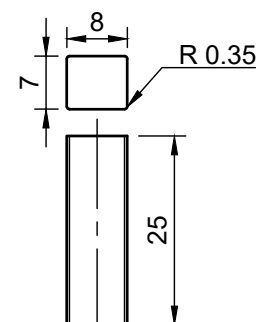
6. OIL SEAL
(SCALE 1:1)



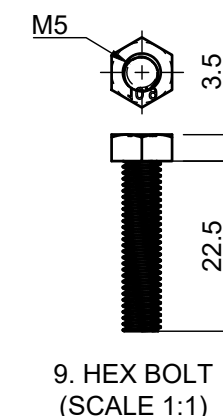
7. OIL SEAL
(SCALE 1:1)



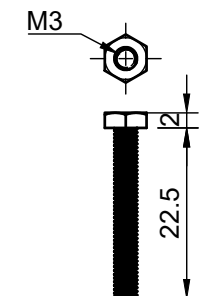
16. PARALLEL KEY
(SCALE 1:1)



15. PARALLEL KEY
(SCALE 1:1)



9. HEX BOLT
(SCALE 1:1)



10. HEX BOLT
(SCALE 1:1)

- NOTES:
1. SCALE 1:1
 2. ALL DIMENSIONS ARE IN mm.
 3. ALL FILLET RADII EQUAL 5 mm. UNLESS SPECIFIED
 4. ALL SURFACE FINISH HIGHER THAN OR EQUAL TO 1.6 - 6.3 UNLESS SPECIFIED.