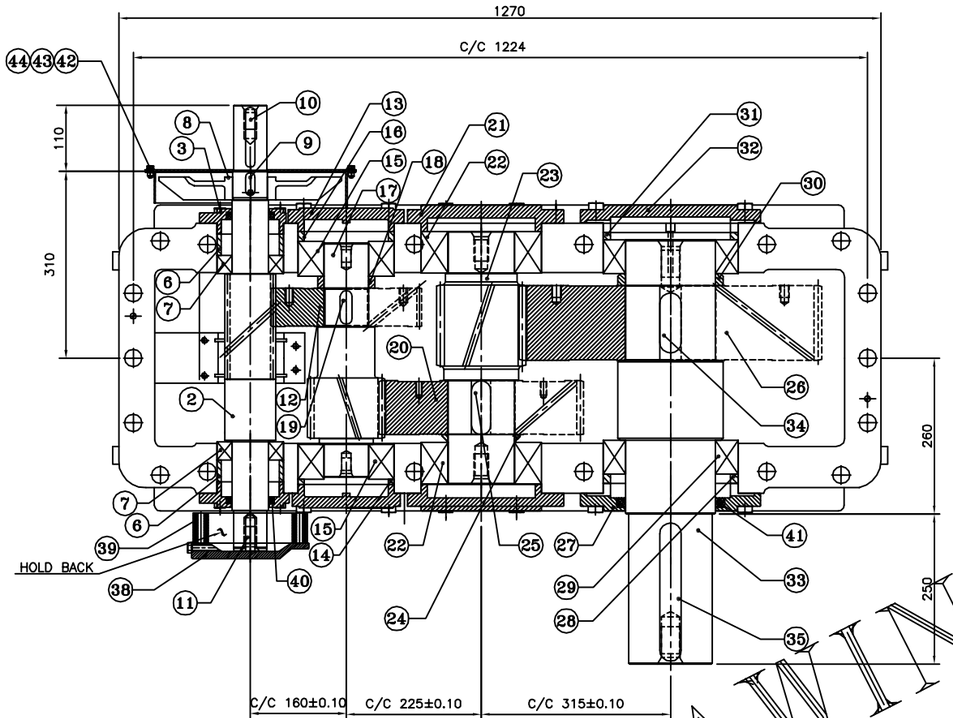


TECHNICAL SPECIFICATIONS

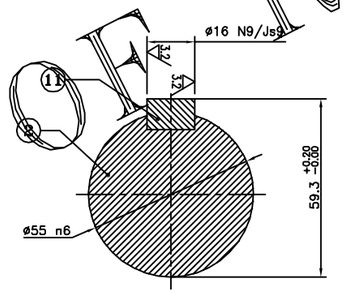
1.	INPUT POWER	110 KW
2.	INPUT RPM	1000
3.	OUTPUT R.P.M	31.37
4.	NOMINAL RATIO	31.5:1
5.	ACTUAL RATIO	31.880
6.	QUANTITY OF OIL	80 LITRES (APPROX)
7.	TYPE OF OIL	SERVOMESH EE 320 / EQV
8.	LUBRICATION	SPLASH
9.	OUTPUT RATING	142 KW
10.	EFFICIENCY	97.5%

MAKE: NEW ALLENBERRY WORKS

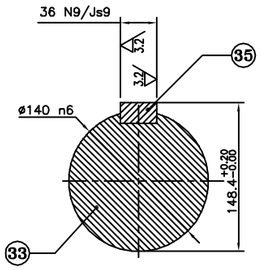
CHARACTERISTICS OF GEARS

DESCRIPTION		1st STAGE		2nd STAGE		3rd STAGE	
		PINION	GEAR	PINION	GEAR	PINION	GEAR
TYPE		HELICAL		HELICAL		HELICAL	
No. OF TEETH	Z	21	67	23	64	22	79
MODULE	m	3.50		5		6	
OUTSIDE DIA.	da1	83.36	250.64	128.97	341.03	149.23	504.77
CENTRE DISTANCE	a	160±0.10		225±0.10		315±0.10	
HAND OF HELIX		RH	LH	LH	RH	RH	LH
HELIX ANGLE	β	15°44'24"		14°50'24"		15°52'12"	
RATIO	i	3.19		2.78		3.59	
OVERALL RATIO	i	31.83					

THE MANUFACTURER/SUPPLIER SHALL ENSURE THE CORRECTNESS AND COMPLETENESS OF THE TOTAL ASSEMBLY FOR IT'S ASSEMBLY COMPATIBILITY AND FUNCTIONING.

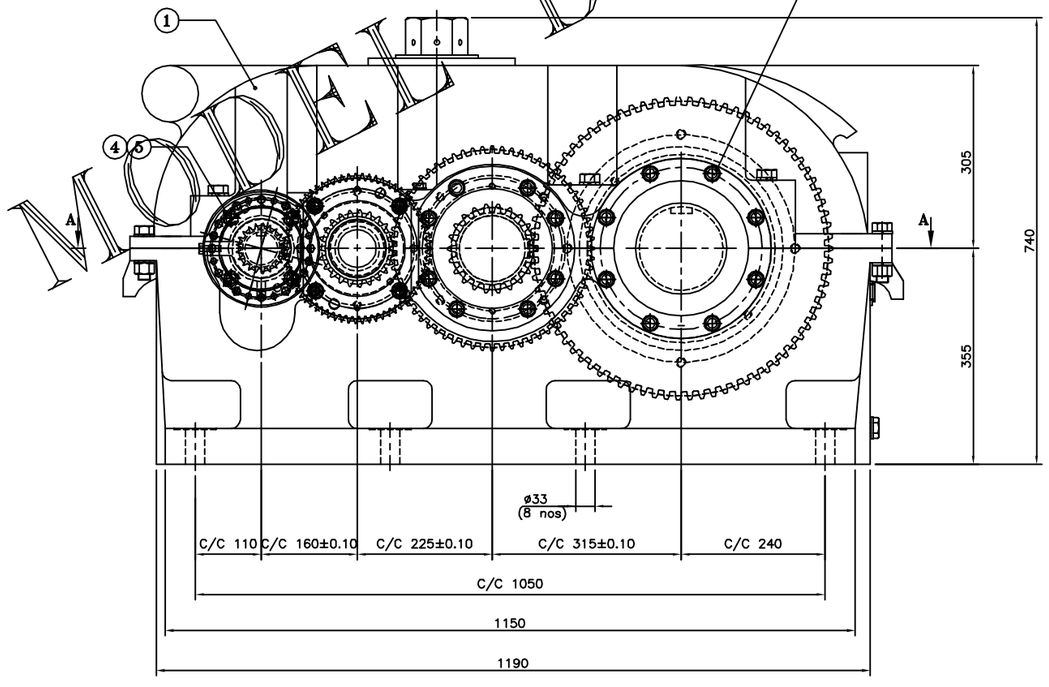


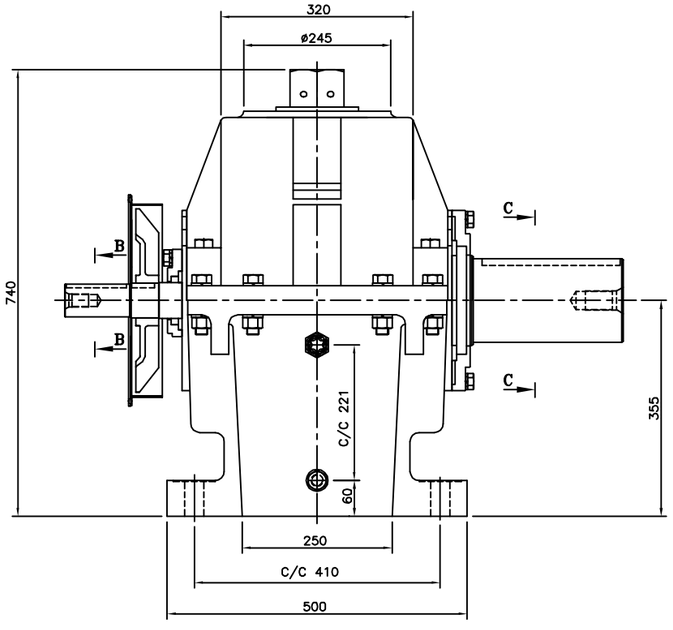
SECTION–BB
(SCALE 1:1)



SECTION–CC
(SCALE 1:3)

SECTION–AA





PART No.	DESCRIPTION	DRG. No./ SPECN.	MATERIAL SPECN.	QTY.	UNIT WEIGHT (Kg.)	TOTAL (APPROX.)	REMARKS/ CATALOGUE No.
44.	HEX. NUT M6	IS:1363(3) -1998	STEEL CL.-8 IS:1367(6)-2004	6	–	–	
43.	WASHER B6	IS:2016-2001	STRL. STEEL E 250 B IS:2062-2006	6	–	–	
42.	HEX. HEAD BOLT M6 X 10 Lg.	IS:1363(1) -2002	STEEL CL.-8.8 IS:1367(3)-2002	6	–	–	
41.	OIL SEAL OD 180 X ID 150 X 16 thk.	–	NBR	1	–	–	
40.	OIL SEAL OD 80 X ID 60 X 12 thk.	–	NBR	1	–	–	
39.	FLANGE (HOLD BACK DEVICE) OD 190 X ID 140 X 50 THK.	SHEET-9	STRL STEEL E250 B IS:2062-2006	1	5.08	5.08	LOOSE PART
38.	BLIND COVER (HOLD BACK DEVICE) OD 195 X 26 THK.	SHEET-9	STRL STEEL E250 B IS:2062-2006	1	6.09	6.09	LOOSE PART
37.	SPRING LOCK WASHER B16	IS:3063-2004	SPRING STEEL 70 C6 IS:4072-2001	40	–	–	
36.	HEX. HEAD SCREW M16 X 45 Lg.	IS:1363(2)-2002	STEEL CL.-8.8 IS:1367(3)-2002	40	–	–	
35.	PARALLEL KEY A 36 X 20 X 230 Lg.	IS:2048-1999	CARBON STEEL 30C8 IS:1875-2004	1	1.30	1.30	
34.	PARALLEL KEY A 36 X 20 X 100 Lg.	IS:2048-1999	CARBON STEEL 30C8 IS:1875-2004	1	0.56	0.56	
33.	OUTPUT SHAFT ø150 X 707 Lg.	SHEET-8	FORGED STEEL CL.4 IS:2004-2001	1	100.27	100.27	
32.	BLIND COVER (OUTPUT) OD 300 X 46 THK.	SHEET-9	STRL STEEL E250 B IS:2062-2006	1	16.64	16.64	
31.	SPACER OD 225 X ID 200 X 12 THK.		CARBON STEEL 45C8 IS:1875-2004	1	0.78	0.78	
30.	SPACER OD 175 X ID 150 X 20 THK.	SHEET-9	CARBON STEEL 45C8 IS:1875-2004	1	1.00	1.00	
29.	SPHERICAL ROLLER BEARING OD 225 X ID 150 X 56 THK.	FAG No. 23030	STD	2	–	–	
28.	SPACER OD 225 X ID 200 X 16 THK.		CARBON STEEL 45C8 IS:1875-2004	1	1.05	1.05	
27.	THROUGH COVER (OUTPUT) OD 300 X ID 152 X 46 Thk.	SHEET-9	STRL STEEL E250 B IS:2062-2006	1	12.36	12.36	
26.	OUTPUT GEAR (Z=79, m=6) OD 504.77X ID 150 X 125	SHEET-7	ALLOY STEEL 15Ni5Cr4Mo1 IS:4432-2004	1	96.99	96.99	–
25.	PARALLEL KEY A 32 X 18 X 90 Lg.	IS:2048-1999	CARBON STEEL 30C8 IS:1875-2004	1	0.40	0.40	
24.	SPACER OD 130 X ID 110 X 12.5 THK.	SHEET-9	CARBON STEEL 45C8 IS:1875-2004	1	0.37	0.37	
23.	2ND INT. PINION SHAFT(Z=22,m=6) OD 149.23 X 421 Lg.	SHEET-7	ALLOY STEEL 15Ni5Cr4Mo1 IS:4432-2004	1	40.68	40.68	–
22.	SPHERICAL ROLLER BEARING OD 200 X ID 110 X 69.5 THK.	FAG No. 23222	STD	2	–	–	
21.	BLIND COVER (SECOND INTERMEDIATE) OD 275 X 44 THK.	SHEET-9	STRL STEEL E250 B IS:2062-2006	2	13.98	27.97	
20.	2nd INT. GEAR(Z=64,m=5) OD 341.03 X ID 110 X 90 Thk.	SHEET-6	ALLOY STEEL 15Ni5Cr4Mo1 IS:4432-2004	1	29.61	29.61	
19.	PARALLEL KEY A 20 X 12 X 56 Lg.	IS:2048-1999	CARBON STEEL 30C8 IS:1875-2004	1	0.10	0.10	
18.	SPACER OD 95 X ID 75 X 20 THK.	SHEET-9	CARBON STEEL 45C8 IS:1875-2004	1	0.42	0.42	
17.	1st INT. PINION SHAFT(Z=23,m=5) OD 128.97 X 390 Lg.	SHEET-6	ALLOY STEEL 15Ni5Cr4Mo1 IS:4432-2004	1	25.18	25.18	
16.	SPACER OD 160 X ID 140 X 17 THK.		CARBON STEEL 45C8 IS:1875-2004	1	0.74	0.74	
15.	TAPER ROLLER BEARING OD 160 X ID 75 X 58 THK.	FAG No. 32315A	STD	2	–	–	
14.	SPACER OD 160 X ID 140 X 9 THK.		CARBON STEEL 45C8 IS:1875-2004	1	0.44	0.44	
13.	BLIND COVER (FIRST INTERMEDIATE) OD 235 X 39 THK.	SHEET-9	STRL STEEL E250 B IS:2062-2006	2	7.45	14.90	
12.	1st INT. GEAR(Z=67,m=3.5) OD 250.64 X ID 75 X 64	SHEET-5	ALLOY STEEL 15Ni5Cr4Mo1 IS:4432-2004	1	12.17	12.17	
11.	PARALLEL KEY A 16 X 10 X 60 Lg.	IS:2048-1999	CARBON STEEL 30C8 IS:1875-2004	1	0.07	0.07	
10.	PARALLEL KEY A 16 X 10 X 100 Lg.	IS:2048-1999	CARBON STEEL 30C8 IS:1875-2004	1	0.12	0.12	
9.	PARALLEL KEY A 16 X 10 X 38 Lg.	IS:2048-1999	CARBON STEEL 30C8 IS:1875-2004	1	0.05	0.05	
8.	FAN ASSEMBLY OD 352 X ID 58 X 65 Lg.	SHEET-10	SUB-ASSEMBLY	1	10.18	10.18	
7.	TAPER ROLLER BEARING OD 110 X ID 60 X 29.75 THK.	FAG No. 32212A	STD	2	–	–	
6.	SPACER OD 110 X ID 97 X 36 THK.		CARBON STEEL 45C8 IS:1875-2004	2	0.60	1.20	
5.	SPRING LOCK WASHER B12	IS:3063-2004	SPRING STEEL 70 C6 IS:4072-2001	8	–	–	
4.	HEX. HEAD SCREW M12 X 45 Lg.	IS:1363(2) -2002	STEEL CL.-8.8 IS:1367(3)-2002	8	–	–	
3.	THROUGH COVER (INPUT) OD 170 X ID 63 X 43 THK.	SHEET-9	STRL STEEL E250 B IS:2062-2006	2	2.31	4.62	
2.	INPUT PINION (Z=21,m=3.5) OD 83.36 X 742 Lg.	SHEET-5	ALLOY STEEL 15Ni5Cr4Mo1 IS:4432-1988	1	32.27	32.27	
1.	CASING ASSEMBLY 1270 X 510 X 740	SHEET-2	SUB-ASSEMBLY	1	624.40	624.40	

ASSEMBLY OF DRIVE GEAR BOX FOR K47–K48 CONVEYORS

MODEL DRAWING