



HEENA ENGINEERING CO. LTD.,

MFG. OF ALL TYPES OF REDUCTION GEAR BOXES

3425, Phase - IV, G.I.D.C., Vatva, Ahmedabad-382 445 (India)

Phone : 079- 40034461

TRACTION MACHINERY ASSEMBLY TEST REPORT

Machine Model	HE-5 "MONO"		
1. Gear Ratio	40:1		
2. Sheve Diameter	21"	Motor HP	5
3. No. of Groves	3	Motor Voltage	400
4. Grove Diameter	13MM	Motor RPM	920
5. Sheve Hardness	208 BHN	Worm Shaft Hardness	55 HRC
6. Input Shaft Run Out (At Brake Wheel Side)	15	Max - 20 Micron	
7. Run Out Measured on the Brake Drum Dia	35	Max - 50 Micron	
8. Axial Play Input Shaft	20	Max - 30 Micron	
9. Backlesh			
	A	80	(Min - 50 Microns Max - 100 Microns)
	B	90	(Min - 50 Microns Max - 100 Microns)
	C	80	(Min - 50 Microns Max - 100 Microns)
	D	90	(Min - 50 Microns Max - 100 Microns)
10. Bearing Used			
		TYPE	QUNATITY
	A	BAH-0013D	1
	B	6012 ZZ	2
	C	32212	2
11. Vibration CW/CCW			
		(Max - 1.0 mm /sec)	Gear Side
	Clock Wise	H.P.	0.8 MM / SEC
		V.P.	0.7 MM / SEC
	Anti Clock Wise	H.P.	0.8 MM / SEC
		V.P.	0.7 MM / SEC
12. Brake Type / Voltage	110 VDC Electromagnetic		
13. Brake Test	HV OK		
14. Test Run Time	(Min - 30 Minutes)		
15. Visual Inspection For			
	A. Oil Leakage	NIL	
	B. Abnormal Loss	NIL	


Tested By



TYPE TEST REPORT OF THREE PHASE INDUCTION MOTOR.

(AS PER IS 8151 : 1976, REF, IS 325 :1996)

1. NAME PLATE DATA :

Output (kw/Hp)	Phase	Volts (v)	Connection	F.L.Current (Amp.)	Freq. (Hz)	F.L.Speed (RPM)	Duty	Insu. (Class)
3.7 / 5	3	415		8.5	50	920	S4	F

2. INSULATION RESISTANCE TEST (500V. D.C.) (>1M Ω)

- Cold Winding / Earth : >1 M Ω
- Hot Winding / Earth : >1 M Ω

3. RESISTANCE OF WINDINGS PER PHASE :

- R. 3.29 Ω Y. 3.29 Ω B. 3.27 Ω Ravg 4.40 Ω @ 44 C°atmo.

4. REDUCED VOLTAGE RUNNING UP TEST :

- Machine runs up to speed at @ 415 Voltage.
- @ 240V Clockwise Speed 997 / 49.90 RPM/Hz.
- @ 240V Anticlockwise Speed 997 / 49.90 RPM/Hz.

5. NO LOAD TEST :

V Line (Voltage)	I Line (Ampere)	W line (Watts)	Frequency (Hz)	Speed (rpm)
415	5.8	600.63	49.9	997

6. LOCKED ROTOR TEST :

V Line (Voltage)	I Line (Ampere)	W line (Watts)	Torque Ratio (Kg.m)
100	6.80	726.3	2.2

7. LOAD TESTS :

Load	V Line (Voltage)	I Line (Ampere)	Input Power (Watts)	Output Power (Watts)	RPM/Hz	P.F.Cos ϕ
	415	8.50	4156.9	3565.20	922/49.9	.67

8. HIGH VOLTAGE TEST : 1.8 KV FOR ONE MINUTE

Approved by

