



महाराष्ट्र राज्य सहकारी दूध महासंघ मर्यादित, मुंबई  
महानंद दुग्धशाला, पश्चिम द्रुतगती महामार्ग, गोरेगांव (पूर्व), मुंबई - ४०० ०६५.  
दुरध्वनी: २६८५ ६३६० /६१, २६८५ ६५८५ • फॅक्स: २६८५ ६७८०.  
Mahanand Dairy Western Express Highway, Goregaon (East), Mumbai - 400 065.  
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Ref.No.MND/6/ENGG/ 2022-23 /0301

Date: 06/05/2022

To,  
M/s.

*Enquiry*  
**UNDER POSTAL CERTIFICATE**

Dear Sir,

Kindly submit your lowest offer for the following items mentioned below. Quotations may please be sent to us on or before 22 / 05 /2022 Quotation received after the due date mentioned here in will not be considered. Quotation should be send in sealed cover duly marked as "Quotation for :- **Yearly rate contract for complete Motor Rewinding & Repairing.**"

Sr. No.	DESCRIPTION
01.	<p><b><u>YEARLY RATE CONTRACT FOR COMPLETE REWINDING AND REPAIRING OF VARIOUS TYPES OF MILK &amp; WATER PUMP, AGITATOR, AMMONIA &amp; AIR COMPRESSOR MOTORS.</u></b></p> <p><b>DETAILS AS PER ATTACHED LIST.</b></p> <p><b><u>TERMS AND CONDITIONS :</u></b></p> <p>(1) The old/scrapped copper wire to be kept by the party and accordingly rates should be quoted after adjusting the value of old/burnt copper wire.</p> <p>(2) There should not be any variation in "No load / full load" current in the rewinded motor.</p> <p>(3) Party should offer six months guarantee for the rewinded motor.</p> <p>(4) <b>Rates should be quoted for 'F' class winding.</b></p> <p>(5) Party should use good and genuine quality copper wire and other rewinding material.</p> <p>(6) No separate transportation charges will be paid for collecting the motor from the dairy and delivering the same at dairy.</p> <p>(7) The party should quote rates inclusive of all mechanical work like replacement of ball Bearings, painting etc;</p> <p>(8) The rates should be inclusive of all applicable taxes.</p> <p>(9) Payment will be made after satisfactory completion of work and satisfactory trial run On load for one week.</p> <p>(10) Testing report of motor should be submit at delivery time.</p> <p>(11) The party should quote rate of all item in Mahanand dairy Format only.</p> <p>(12) The party should attach Technical profile of Company separately along with quotation.</p> <p>(13) For disputes, if any, the decision of the Managing Director, MRSDMM, shall be final.</p>

*T. Fatil*  
*06/05/22*  
**Act. Manager (Engg.)**



## SCOPE OF WORK

Complete rewinding & repairing of various types of motors, as and when required. The list of the existing motors, at Mahanand Dairy, is attached herewith. Whenever a motor is burnt, it will be taken out and the work of rewinding and repairing of the motor is done at the contractors site and taken back to the dairy. Contractors should have proper set up/workshop to execute the related activities. MAHANAND DAIRY Engineer will visit the workshop before issue the order. Loading and unloading of the motors will be in the scope of the contractor. The price break up of the work shall be given, item wise.

### **PART A : REWINDING (ELECTRICAL)**

#### **a) Rewinding**

- 1.0 The contractor shall arrange for the transportation of the motor, to and from Mahanand Dairy and his workshop.
- 2.0 The motor should be rewind as per the original winding data in electrolytic grade new copper & for the "F" Class insulation only along with suitable fiber wedges & leads of sufficient length. Winding should be thoroughly baked Dr. Beck's class F varnish to be applied.
- 2.0 The motor shall be painted with primer & Shalimar make grey paint.
- 3.0 The contractor will have to adhere strictly to the delivery schedule as given in order. They will have to make their own arrangement for collection & delivery of motor at our Electrical Workshop.
- 4.0 The contractor will put their own identification mark with date in order to ensure validity of the guarantee period. In case, the motor burns out due to defective workmanship or defective material used, the contractor should arrange for free rewinding / repair of the same without any extra charges.
- 5.0 If the workmanship is found below standard and services rendered are unsatisfactory, MRSDMM reserves the right to terminate the contract at any point of time during the tenure of contract.
- 6.0 Normally only the Stator / Rotor along with end-covers will be given for repairs / rewinding.
- 7.0 New flexible leads to be used for rewinding job. Normally six flexible leads will be brought out unless specified otherwise or as per the motor's original design.
- 8.0 The party should maintain the originality of winding, as follows :
  - No. of turns
  - Gauge of wire
  - Size of coil
  - Submit the test report (3 phase current)
  - Proper fitting of the motors is needed

#### **b) Re-metallization of Bearing Seat on Shaft /Bearing Housing .**

Re-metallization shall be carried out by metal spraying Metco process using Fero Nickle wire. Re-metallization shall be carried by as per relevant tolerances specified for particular bearing fit. Proper care shall be taken not to damage greasing arrangement & cover insulation.

#### **c) Rewinding with replacement of faulty parts for single phase / misc. motors**

This shall cover dismantling of fan / motor, stator and / or armature rewinding, replacement of faulty parts like bearings, bushes, gears, condensers etc., assembly of the fan / motor, painting and testing.

## SPECIFICATIONS FOR MOTOR REWINDING

1. Complete rewinding of electric induction motor with using copper enameled wire with using 'F' class insulation, with servicing of motor complete with oiling, greasing, reassembling, testing complete.
  - a. Wire : Atlas / BIC make (ISO standard) only.
  - b. Paper : Nomax make only.
  - c. Varnish, bectol, 65 ER : Make - Dr. Beck only.
2. Replacement of old damaged ball, roller bearing and using genuine quality SKF make ball / roller bearing (double Z and C3) only.
3. Replacement of damaged shaft of motor and making new shaft of EN - 8 / EN - 9 material with all new key ways and new key with all machining.
4. Making new S.S. shaft for milk pump with S.S. 304 with all new key ways and new key with all machining.
5. End covers DE and NDE side of inducing motor housing repairing with sleeves making bearing size.
6. Body drilling tapping providing of new bolts, nuts and washer of good quality.
7. Complete repairs to rotor with replacement of copper bar complete with Dynamic balancing complete.
8. Metalizing on shaft making bearing size DE and NDE side complete / each



## PART A : ELECTRICAL – REWINDING & REPAIRING

1. Replacement of following Capacitor-Make EPCOS :

SR.NO.	• Description	Rate in Rs.
1	2 .5 MFD	
2	4 MFD	
3	6 MFD	
4	8 MFD	
5	10 MFD	
6	200 MFD	

- 10 Replacement of capacitor mounting clamp with connector

SR.NO	Description	Rate in Rs
1	Mounting clamp with connector	

3. Overhauling of electric motors / pump motors with rewinding, varnishing, baking, oiling,

Greasing, reassembling & testing (job) of the following motors and fans. :-

- a. **Fan Motors :**

SR.NO.	• Fan Motors ( 1 Phase)	Watts	RPM	AMPS	Rate in Rs.
1	Industrial wall fan 24 inch	195	1440	1.5	
2	Industrial exhaust fan 24 inch	390	1400	1.75	
3	Industrial exhaust fan 18 inch	365	1400	1.6	
4	Small wall fan 16 inch	65	1300	0.75	
5	Exhaust fan 8/12/15 inch	70	1340	0.5	
6	Ceiling fan 36/42/48/56 inch	70	320	0.34	

- b. **Milk Pump, Hot Water Pump, Agitator, Motors : ('F' Class Insulation)**

Sr. No	Description 3 Ph.,415V 50 Hz., Induction Motor.	HP	RPM	AMPS	Rate in Rs.
1	Induction motor	0.25	1440	0.6	
2	Induction motor	0.37	1425	4.2	
3	Induction motor ( Oil pump motor )	0.5	930	0.75	
4	Induction motor ( Oil pump motor )	0.5	1440	0.75	
5	Induction motor	0.5	2800	0.75	
6	Induction motor	0.75	920	1.7	
7	Induction motor	0.75	1405	1.2	
8	Induction motor	1	925	2	
9	Induction motor	1	1440	1.5	
10	Induction motor	1	2800	1.4	
11	Induction motor	1.5	1420	3	
12	Induction motor	1.5	2890	2	
13	Induction motor	2	1440	3.4	
14	Induction motor	2	2855	3.35	



Sr. No	Description 3 Ph.,415V 50 Hz., Induction Motor.	HP	RPM	AMPS	Rate in Rs.
15	Induction motor	3	1410	5.4	
16	Induction motor	3	2880	4.5	
17	Induction motor	3.5	2900	5	
18	Induction motor	5	1430	7.9	
19	Induction motor	5	2885	7.3	
20	Induction motor	5	955	8.2	
21	Induction motor	7.5	955	12.5	
22	Induction motor	7.5	1440	11.5	
23	Induction motor	7.5	2850	11.5	
24	Induction motor	10	710	16	
25	Induction motor	10	1440	15	
26	Induction motor	10	2935	14.7	
27	Induction motor	12.5	1440	19	
28	Induction motor	15	1460	21	
29	Induction motor	15	2880	21	
30	Induction motor	20	1460	35	
31	Induction motor	25	2940	40	
32	Induction motor (Separator )	30	1480	41	
33	Induction motor	40	1445	56	
34	Induction motor(Homogenizer)	50	1445	68	
35	Inverter duty induction motor 130 Hz (Air Compressor Motor)	130	3760	90	
36	Induction motor	100	1485	132	
37	Induction motor ( NH3 Comp.)	125	1485	168	
38	Induction motor ( Homogenizer/NH3 Comp.)	150	1485	210	
39	Induction motor (Homogenizer)	175	1480	232	
40	Induction motor	240	1485	340	

c. Motors : ('H' Class Insulation)

Sr. No	Description 3 Ph.,415V 50 Hz., Induction Motor.	HP	RPM	AMPS	Rate in Rs.
1	Induction motor	5	1430	7.9	
2	Induction motor	5	2885	7.3	
3	Induction motor	7.5	955/1445	12.5	
4	Induction motor	7.5	2850	11.5	
5	Inverter duty induction motor 130 Hz (Air Compressor Motor)	50	3760	90	

4. Replacing the unserviceable terminal plate of monoblock pumps and electric motors

Sr.No.	Motor description	Rate	
		each	Rs.
1			
2	0.5 H.P. to 2 H.P.		
3	3 H.P. to 5 H.P.		
4	7.5 H.P. to 10 H.P.		
5	12.5 H.P. to 15 H.P.		
6	20 H.P. to 30 H.P.		
7	40 H.P. to 50 H.P.		
8	100 H.P. to 125 H.P.		
9	150 H.P. to 175 H.P.		
10	240 H.P.		



## PART B : REPAIRING (MECHANICAL)

Mechanical work details of various type of water and milk pump

1. Pump side repairing with gland, water plunger, seal .

Sr.No.	Motor description	Rate	
		each	Rs.
1	1 H.P. to 3 H.P.		
2	5 H.P. to 7.5 H.P.		
3	10 H.P. to 15 H.P.		
4	20 H.P. to 40 H.P.		

2. Replacing unserviceable Air Release Valve with new Brass Valve with fixing the same.

Sr.No.	Motor description	Rate	
		each	Rs.
1	1 H.P. to 10 H.P.		
2	12.5 H.P. to 20 H.P.		

3. Repairs to Rotor shaft partly new making with new key way & key.

Sr.No.	Motor description	Rate	
		each	Rs.
1	0.75 H.P. to 2 H.P.		
2	3 H.P. to 5.5 H.P.		
3	7.5 H.P. to 10 H.P.		
4	12.5 H.P. to 15H.P.		
5	20 H.P. to 30 H.P.		
6	40 H.P. to 50 H.P.		
7	125 H.P. to 175 H.P.		
8	240 H.P.		

4. Replacement of Rotor shaft & making new with new key way & key & dome nut

Sr.No.	Motor description	Rate	
		each	Rs.
1	0.75 H.P. to 2 H.P.		
2	3 H.P. to 5.5 H.P.		
3	7.5 H.P. to 10 H.P.		
4	12.5 H.P. to 20 H.P.		
5	30 H.P. to 40 H.P.		

5. Supply new impeller of S.S. milk pump and machining complete with key way & S.S. dome nut.

Sr.No.	Motor description	Rate	
		each	Rs.
1	1 H.P. to 2 H.P.		
2	3 H.P. to 5.5 H.P.		
3	7.5 H.P. to 10 H.P.		

6. supply new impeller for water pump with EN - 8 / 9 material, machining complete, cover knurling and machining complete of pump and motors.

Sr.No.	Motor description	Rate	
		each	Rs.
1	1 H.P. to 2 H.P.		
	3 H.P. to 5.5 H.P.		
2	7.5 H.P. to 12.5 H.P.		
3	15 H.P. to 40 H.P.		

7. Making new gun metal bush for water pump.

Sr.No.	Motor description	Rate	
		each	Rs.
1	1 H.P. to 2 H.P.		
2	3 H.P. to 5 H.P.		
3	7.5 H.P. to 10 H.P.		

8. Rotor shaft metal spray with machining making bearing size.

Sr.No.	Motor description	Rate	
		each	Rs.
1	0.5 H.P. to 2 H.P.		
2	3 H.P. to 5.5 H.P.		
3	7.5 H.P. to 10 H.P.		
4	12.5 H.P. to 15 H.P.		
5	20 H.P. to 30 H.P.		
6	40 H.P. to 50 H.P.		
7	100 H.P. to 175 H.P.		
8	240 H.P.		

9. Housing repairing of water pumps with new metals leaving making bearing size

Sr.No.	Motor description	Rate	
		each	Rs.
1	0.5 H.P. to 2 H.P.		
2	3 H.P. to 5.5 H.P.		
3	7.5 H.P. to 10 H.P.		
4	12.5 H.P. to 20 H.P.		
5	30 H.P. to 40 H.P.		



10. Providing of new cooling fan for motors.

Sr.No.	Motor description	Rate	
		each	Rs.
1	0.5 H.P. to 2 H.P. Nylon		
2	3 H.P. to 5.5 H.P. Nylon		
3	7.5 H.P. to 10 H.P. Nylon		
4	12.5 H.P. to 15 H.P. Nylon		
5	20 H.P. to 30 H.P. Nylon		
6	40 H.P. to 50 H.P. Nylon		

11. Providing of new fans cover with drilling the new holes and fixing for motor

Sr.No.	Motor description	Rate	
		each	Rs.
1	0.5 H.P. to 2 H.P.		
2	3 H.P. to 5.5 H.P.		
3	7.5 H.P. to 10 H.P.		
4	12.5 H.P. to 15 H.P.		
5	20 H.P. to 30 H.P.		

12. Providing of new oil seal set including all necessary modification for water pump.

Sr.No.	Motor description	Rate	
		each	Rs.
1	0.5 H.P. to 3 H.P.		
2	5 H.P. to 7.5 H.P.		
3	10 H.P. to 12.5 H.P.		
4	15 H.P. to 20 H.P.		

13. Body drilling tapping providing of new bolts, nuts and washers.

Sr.No.	Motor description	Rate	
		each	Rs.
1	0.5 H.P. to 3 H.P.		
2	5 H.P. to 7.5 H.P.		
3	10 H.P. to 15 H.P.		
4	20 H.P. to 40 H.P.		

14. Mechanical shaft seal for following makes pumps

Sr.No.	Pump makes	Motor HP	Rate	
			each	Rs.
1	Beacon water pump	5HP to 7.5 HP		
		10HP to 20 HP		
2	Fristam/Zeuzer milk pump	5 HP to 10HP		
3	Kirloskar water pump	5HP to 15 HP		
4	Grundfos water pump	3HP to 10 HP		
		20 HP to 25 HP		
5	APV milk pump	1 HP to 3 HP		
		5HP to 7.5 HP		

15. Replacement of following size bearing, make : SKF only

BEARING NO. (C3 & 2Z)	RATE	BEARING NO. (C3 & 2Z)	RATE	BEARING NO. (C3 & 2Z)	RATE
6201		6214		6309	
6202		6215		6310	
6203		6216		6311	
6204		6217		6312	
6205		6218		6313	
6206		6301		6314	
6207		6302		6315	
6208		6303		6316	
6209		6304		6317	
6210		6305		6318	
6211		6306		NU 318	
6212		6307		6317 M	
6213		6308			

ACT. MANAGER ( Engg.)



0301  
06.05.2022

**UPC**

M/s Supar Engineering Works 9/304 Mazagaon Apparmant 3nd Floor Dr.Macardenes Road Mumbai -400010	M/s PRAYOSHA AUTOMATION PVT LTD Gaonraipada Rd. Gaonraipada,Golani Naka Vasai East, Vasai-Virar, Maharashtra -401208
M/s B.R. Brother, 192-A – Deepak, S.V.Road Vile parle (W) Mumbai -400060	M/s Harsh Engineering, 11/A/13 Siddhivinayak Chs, Opp Durga Nagar s.v Link Road, Jogeshori (E) Mumbai 400 093
M/s Gemelca & Associates, Sat guru Nanak apprtment, Opp police camp western express, Highway service rode, Goregaon (E)Mumbai 400 063	M/s Dadan Electricals Works Pahuji ind.Estste Saki-Vihar Road Saki-Naka Mumbai -72
Maan Electrical, 3-88 Maharashtra Housing Board, V.N.Purav Marg, Opp Fish Market, Chunabhatti Sion , Mumbai No.400 022	M/s Standara Eletricals, Near pakaja Hotal, opp papar Mill, L.B.S. Marg, Vikroli (W) Mumbai-400086
M/s Grade Industril Electricals, Gala No.5 Y.A. Chunawala, Industrial Estate, Near Jacob Bldg.J.B Nagar, Kondivittta Rode, Andheri (E) Mumbai – 400 059	M/S SHREE ELECTRICALS SHOP NO-1, BHIDAS COMPOUND, NEAR TEMPO NAKA, TULSHET PADA, BHANDUP (W) Mumbai 400078
	M/s Bombay Electrical, Maistry chawl Ambivali Naka, Kavani Pada s.v.Rode, Jogeshwri (w)Mumbai 400 060