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## APPENDIX

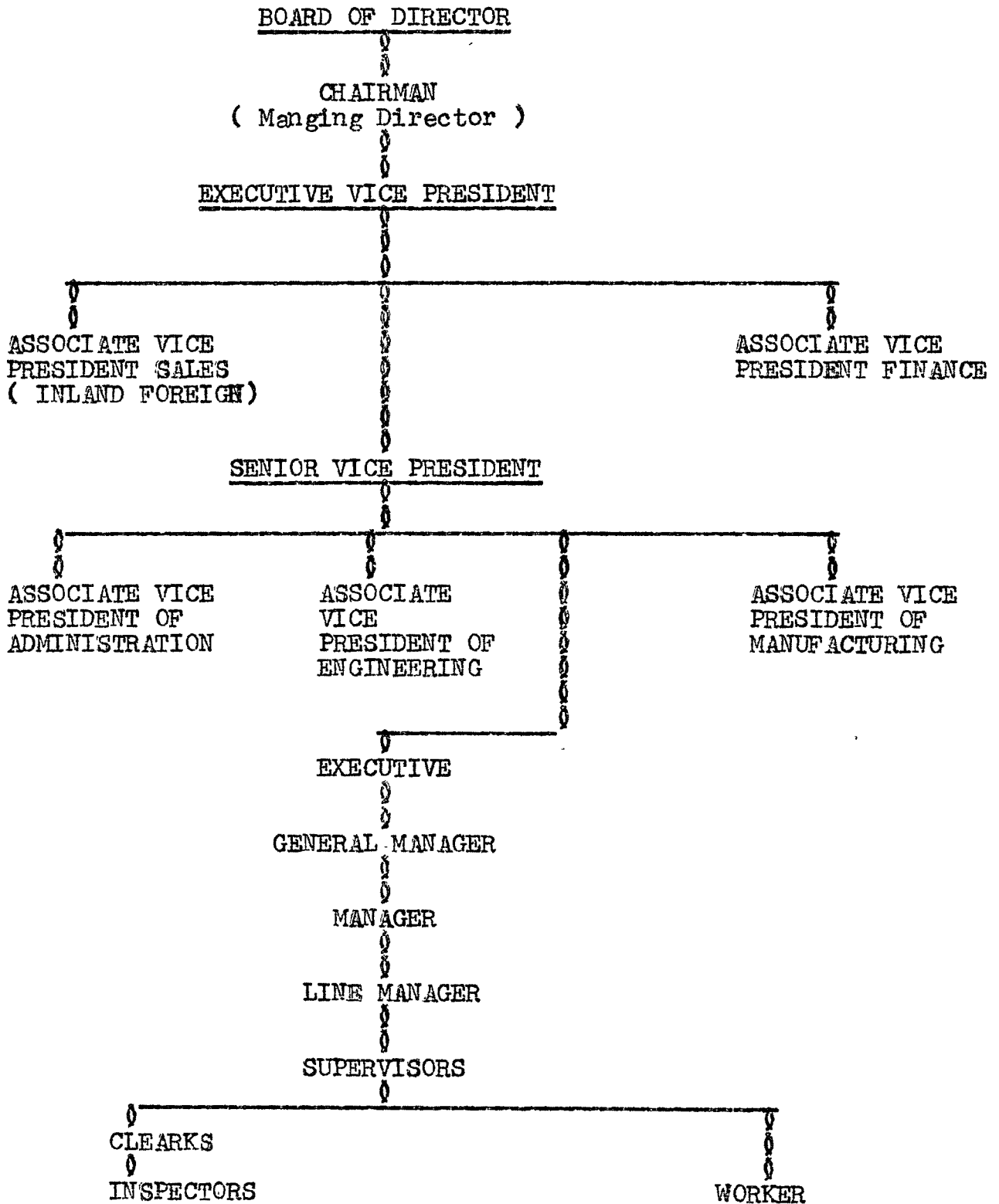
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## BIBLIOGRAPHY

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ORGANISATION CHART



FUNCTION AND DUTIES

VICE PRESIDENT	--	Overall Incharge of Factory
ASSOCIATE VICE PRESIDENT ( Adm. )		Administration Personnel, Labour, Purchase, Sub Contract, Accurets, Stores, Gest House, Canteen, Motor - Transport, Town Dept. Building.
A.V.P. (Mfg.)	--	Manufacturing, Stock and Despatch, Industrial Engg., Division, MT. D. Tool room.
A.V.P. (Q.C.)	--	Quality Control, Inspection, Training Centre.
A.V.P. (Engg.)	--	Product Engg., Research, Development H.R.C. Pump Testing.
A.V.P. (Foundry)	--	All foundries pattern shop, Material Testing Lab.
G.M.E. (C.P.D.)	--	Incharge control planning compositic orders, stock desposal.
G.M. ( I.E.D. )	--	Industrial Engg., Cost Estimation, method, motion study.
G.M. (Cost A/c.)	--	Cost A/c, payment, Receipt, Bill Passing.
G.M. (Material)	--	Purchase, stores, sub-contracts.

G. M. (Labour P.)	--	Labour, Personnel Security.
G. M. (Plant Engg.)	--	Plant maintance, plant layout, House keeping, Material handling.
G. M. (Foundry)	--	Incharge Heavy, Non ferrous foundry.
G. M. (C.I.Foundry)	--	Incharge Cast Iron foundry and Sub-section.
G. M. (Q.C.)	--	Quality Control incharge, inspection.
G. M. (H.R.C.)	--	Incharge Research, Development, Tendering.
G. M. (M.T.D.)		Incharge MT.D. Engineering.
G.M. (P.E.D.)		Product Design, Drawing, issue drawing, Pump testing.

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ANNEXURE "A"PRODUCTS RANGE

Particulars	Size	Capacity	Head	Manufactured at
1) Vertical turbine pumps up to BHM, MA, BHA, BHQ, etc.	1200 mm	4500/ L/s	150 m	Division 1
2) End Section mixed flow type upto Mf. SV. NK., etc.	650	1850/ L/s	80 m	"
3) Heavy multistage 54 - 30 MN	300	375/ L/s	385 m	"
4) Chobeless Pumps large upto NK.	500	975/ L/s	45 m	"
5) large size Valves ( sluice cast steel)	12" to 48" 300mm to 1200mm	---	---	"
6) Large splict case pump	800 m	3400/ L/s	100 m	"
7) Double section split	350	400/ L/s	50 m	"
8) Two stage DSM up	200 mm	160 L/s	1500	"
9) Split Thru borne pump	100mm to 250 mm	---	3600 m	Division 2
10) Slucis Valve upto	50 mm to 120 mm	---	---	"
11) Reflux "	365mm to 675 mm	---	1000 m	"
12) Cast Steel Gate Valve	250mm to 350 mm	---	1000 m	%
13) Pump valves upto	100mm to 300 mm	---	58 m	"
14) Small chemical pumps	100mm to 100 L/s	---	58 m	"
15) DIN Std D.B.	32 to 150	155 L/s	162 m	"
16) RKB Pump up	32mm to 200 mm	1 to 150 L/s		"

17)	Chemical pump NK	150 mm	60 l/s	30 m	Division 3
18)	Multi Stage pumps	150 mm	62 l/s	300 m	"
19)	Bore Hold Pumps	200 mm	--	--	"
20)	N. S. Pump	50 mm	5 to 130 l/s	--	"
21)	Solid Handling S.H.D.	50mm to 200 mm	--	--	"
22)	K.P.D. Pump	150 mm			
		25 mm	03 to 105 l/s	--	"

ANNEXURE - "B"

PRODUCT DEVELOPMENT

<u>Particulars</u>		<u>Years</u>
1.	Chaff cutters	1900
2.	Iron Plough	1905
3.	Sugar car crusher	1920
4.	Drilling Machine	1921
5.	Steel furniture	1926
6.	Decrticator centrifugal pump	1927
7.	Diesel Engines	1930 - 39
8.	Electric Motors	- do -
9.	Lathe 8 drilling Machine	- do -
10.	Screw Pump	1951
11.	Axial Flow pump	1953
12.	Sluice Valves	1957
13.	Mixed flow pump	1958
14.	Vertical Trubrine pump ( Salzer collbration)	1958
15.	Mixed flow Pump	1958
16.	Bull and USA	1961
17.	Vertical Turres lathe	1961
18.	Sealed Comprissors Tecumesh Product Co., U.S.A.	1963
19.	Shaper Butter Machine Tool Co., U.K.	1964
20.	Engine Monoblock Pump	1966

Particulars	Years
21. Monoblock pump	1969
22. Bigaest split case pump	1972 - 73
23. Pump for Atomic power BHMA Project Work	- do -
24. Project work	- do -
25. Pumps for dry docks BHM 85	1974
26. Pump for export per OIN 2425 Market Collberation with M/s. Sigmund Pulsomter.	- do -
27. Job work for Automic Engery	1973 - 74
28. KPD Pumps	1975
29. N.S. Pumps	1978
30. S.H. Pumps	- do -
31. 44 UPHI	1980
32. Firefognting Pump	1978
33. BHQ 92 Pumps for Termal power station.	1978
34. HBQ 70 power station	- do -
35. BHM 100 -- --	- do -
36. BHQ SM -- --	1981
37. Large size pump 28 Up 1-1, 24 Up H3 34 PH1, 20 UP H3, 16 Up H3, 16 UP H2.	- do -
38. New Series of DSM Pump	1981
39. Large size D.B. Pumps To replace M.R. Pump.	1981



ANNEXURE "C"

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Specialities Capacity  
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A) MACHINERY :

- |    |                               |                                       |
|----|-------------------------------|---------------------------------------|
| 1. | Planning Machine              | 2250 mm side 2250 mm high             |
| 2. | Vertical Turrets lathe        | 4 Meter dia X 2.5 mm high             |
| 3. | <del>XXX</del> Shipping borer |                                       |
| 4. | Dynamic Balancing Machine     | upto 3 ton capacity                   |
| 5. | Gear cutting grinding         | Helical, spur, work and bevel types.  |
| 6. | Grinding machine              | 450 mm dia X 1800 mm length           |
| 7. | SK 40 Skola - (VBM)           | 2500mm Table dia - 3777.7mm H.P. 224. |

B) HEAT TREATMENT :

- |    |                                           |                        |
|----|-------------------------------------------|------------------------|
| 1. | Case hardening total hardening injuction  | Max size job.          |
| 2. | Annealing normalising contibroned furnass | 1500mm X 900mm X 600mm |
- 

C) QUALITY CONTROL :

- 1) A well equiped physical and chemical laboratory.
- 2) Non destructive testing facilities Radiography upto 8" thickness of metal manetic particle testing equipment, Ultrasonic flow detector Dye ponetrint equipment 600 mm dia.
- 3) Performance testing lab capacity 1800 1/s upto as per Std B/s / Is etc.
- 4) Hydraylic testing wing upto 5000 1/s - 1250 H.P. IPh completic.

D) MACHINE CENTRE :

1. S. B. C.N.C. Late - 600 mm to 250 mm bet centres Machine Memory - 1600 blocks max. 99 programme at a time.
2. VIE - Dyn 100 to Dyn 250 can be supplied with PH;C & CNC.
3. Co-ordinate Table - 500 mm to 1000 mm.

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ANNEXURE "D"

GENERAL :

Factory Area - land 1.699 lack Sqm. ( 42 Acres )

Built up area - 5100 Sqm. ( 13 Acres )

Colony Area & Irigated land - (180 Acres )

FACILITIES :

1. Latest quality control equipment
2. Various types of Machines.
3. Cast Iron Alloy steel & Nonferrous foundries
4. Research & Development Division, Process Research foundry  
Engg. etc.
5. Hydraulic Research Centres.

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FOUNDRIES :

TONNAGE

- |                                                |            |
|------------------------------------------------|------------|
| 1. Production Foundry                          | 450        |
| 2. Six Ton main frequency<br>3400 Kg. per hour | ---        |
| 3. Heavy foundry                               | 200 to 250 |
| 4. Alloy Cast steel                            | 50         |
| 5. Non ferrous Foundry                         | 30         |
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APPENDIX "E"

GUIDE : PROF. S. V. DESHPANDE

SHRI. V. D. PHUKE  
CHH. SHAHU CENTRAL  
INSTITUTE OF BUSINESS  
EDUCATION AND RESEARCH.

" A STUDY OF THE EMPLOYEE WELFARE BENEFITS AND SERVICES WITH  
SPECIAL REFERENCE TO KIRLOSKAR BROTHERS LTD. KIRLOSKARWADI. "

Q U E S T I O N N A I R E

I) PERSONAL DATA :

- a) Name of the worker
- b) Age
- c) Permanent Address
- d) Designation
- e) Educational Qualification
- f) Male or female
- g) Experience                      Years \_\_\_\_\_ Month \_\_\_\_\_
- h) Nature of services \_\_\_\_\_ Permanent/Temporary
- i) Per month Salary in Rs. \_\_\_\_\_
- j) Married / Unmarried
- k) Size of the family - Males \_\_\_\_\_ Adults No. \_\_\_\_\_ Children \_\_\_\_\_  
Total \_\_\_\_\_.

II) STATUTORY WELFARE FACILITIES PROVIDED BY THE MANAGEMENT :

(A) HEALTH AND SANITATION :-

- 1. Does the factory provide you hospital facilities ? Yes/No
- 2. Can you get this benefit for you and your dependents ? Yes/No
- 3. What's your opinion about this hospital services ? Good/Bad

4. Do you want to suggest anything about it ?
  - i)
  - ii)
5. Are there Lavatories / Urinals ? Yes/No  
What is the condition of these ? Good/Bad
6. Do you want to make any suggestion to improve it ? Yes/No
  - i)
  - ii)
7. Can you get cool drinking water and washing facilities ? Yes/No
8. State your opinion about it - Good/Bad
9. Is there proper arrangement for seating and taking rest in the rest room ? Yes/No
10. What facilities are provided to you in rest period like Radio, Newspaper, T.V.etc.?
11. What is your opinion about rest room and sitting arrangement ? Good/Bad
12. Any suggestions from you regarding rest room and sitting arrangement ? Yes/No
  - i)
  - ii)
13. Are there spittoons in your department ? Yes/No
14. Do you have any suggestions to make regarding ?
  - i) Ventilation
  - ii) Dust and fumes
  - iii) Gases and smoke
  - iv) Other pollutants

(B) SAFETY :

1. Does the factory make first aid provision in the department ? Yes/No
2. Are there first-aid attendants in the factory ? Yes/No
3. Are there safety equipments & machinery guards in your departments ? Yes/No

4. Do you think that these equipment are of proper use for the safety purpose ? Yes/No
5. Are there Notice-Boards in your department ? Yes/No
6. Does the factory arrange any safety training programme ? Yes/No
7. (a) Is there a safety committee in your factory ? Yes/No  
(b) If yes, are there any departments Representative on this committee ? Yes/No
8. Do you think that the committee is functioning property ? Yes/No
9. What is the number of accidents in your department ?
10. Which facilities you can get at the
  - (a) Hospital
  - (b) First-aid
  - (c) Ambulance
  - (d) Leave & wages
  - (e) Any other.
11. Do you think that accidents takes place due to -
  - (a) Labourers carelessness
  - (b) Lack of safety equipments
  - (c) Any other causes.
12. Do you get uniform for your Job ? Yes/No
13. Have you any suggestions to make regarding safety equipment in your factory.

(C) CANTEEN :

1. Is there a canteen, dinning hall in your factory ? Yes/No
2. What are the eatables aviabile in your canteen ? Yes/No
3. i) Is there a canteen committee ? Yes/No  
ii) If yes, are there departmental Representative on this committee ? Yes/No.

4. Is there a Tea-trolley system in your Canteen? Yes/No
5. What is your opinion about cleanliness of canteen and dinning hall ? Good/Bad
6. Do you bring your food your home Yes/No
7. What are your suggestion about etables canteen and dinning hall. Good/Bad
8. If canteen provides you subsidised meals will you tale it ? Yes/No

(D) PROVIDENT FUND AND GRATUITY :

1. (a) Is the provident fund Act 1952 applicable to your factory ? Yes/No
2. (b) If yes, what is the rate of contribution ?
2. Would you like to make any suggestion regarding this shheme ?
3. (a) Does the factory give gratuity to the workers ? Yes/No
- (b) If yes, how much amount of gratuity is given.
4. Workmen compensation Act.
  - a) Is workmens compensation act applicable to your factory ? Yes/No
  - b) If yes, how and when you get this benefits.
  - c) What is your opinion about these shceme? Good/Bad
5. What is your opinion about Gratuity scheme ?

(E) LEAVE FACILITIES :

1. (a) Do you get leave with Pay ? Yes/No
- (b) If yes, how many days in the year and what types ?  
Privalege / Sick / Casual / any other.
2. How many days you will get leave without pay ?
3. Do you get any travel cancessions from the factory ? Yes/No
4. If yes, to what extents ?

(F) WORKING HOURS :

1. What are the working hours at your factory and how many shifts are there and or what duration ?
2. (a) What's your opinion about the working hours ?  
(b) Do you feel that any change is needed ? Yes/No.

III) NON STATUTORY WELFARE FACILITIES PROVIDED BY THE MANAGEMENT :

(A) HOUSING :

1. Does the management provide you Housing facilities ? Yes/No
2. If yes, on what basis you get the accommodation ?
3. Are you satisfied with the housing facilities provided by your employer. Yes/No
4. Do you have any suggestion to make regarding the same. Yes/No
5. If yes ? State your suggestions ?
6. If you are provided the quarter, are you ready to accept the quarters ? Yes/No

(B) TRANSPORT :

1. What is the distance between your residence and work place ? .....
2. What are the means of conveyance for you to reach the factory ? ....  
Bicycle / City Bus / Factory Bus / Train / Walking any other.
3. Do you have any difficulties in the conveyance ? Yes/No
4. Do you have suggestion to make regarding transport facilities. Yes/No

(C) RECREATION AND EDUCATION :

1. Any there the following provision for recreation and education ?
  - a) Child youth, adult, and woman welfare ?

- b) Games/Sports, Dramas, Musial programmes ?
- c) Crafts and social education facilities ?
- d) Play ground, school, park etc.
- e) Cinema shows and exhibitions.
- f) Celebration of festivals
- j) Others.

2. Does the factory arrange any workers education and training classes ? Yes/No

(D) GENERAL :

1. How many trade unions are functioning in your factory ?
2. Which trade union is recognised by the management ?
3. Are you a member of the trade union ? Yes/No
4. Do you think that the Trade unions are working satisfactorily about the right and providing them certain welfare facilities ? Yes/No
5. Is there a co-operative society ?
  - (a) Society loans
  - (b) Society shops
  - (c) Housing society.
6. Do you get any loan from the society ? Yes/No
7. If yes, to what extent ? .....
8. What is your opinion about the working of the factory ?
9. Any suggestion, you have to make in welfare facilities.