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**MANPOWER STUDIES : 1**

**GOVERNMENT OF  
MAHARASHTRA**

# **Studies in Occupational Patterns of Engineering Personnel in Maharashtra State**

**January 1964**

**Manpower Wing, Planning Division  
Finance Department  
Government of Maharashtra**

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## P R E F A C E

**I**N the long term economic development of the country the availability of trained manpower and adequate training facilities are vital factors in determining the measure of advancement that can be achieved. This calls for organized manpower planning. With this object in view, a Manpower Wing has been established in the Planning Division of the Finance Department of Maharashtra Government to conduct studies at the State level in manpower requirements, to assess the availability of trained personnel, to examine and suggest measures for increasing training facilities and generally to deal with problems connected with manpower.

The present study viz. "Studies in occupational Patterns of Engineering Personnel in Maharashtra State" is an official publication of the Wing. It is based mainly on basic data made available by the Employment Market Information Scheme of the Directorate of Employment, Bombay.

The rapid pace of industrialisation during the last decade has been accompanied by significant changes in the occupational structure of industrial employment. This has created difficulties in estimating and meeting manpower requirements over the vast range of projects and programmes which form part of our developmental planning. This study which relates to industry-wise distribution of workers according to occupations reveals what trades are of importance in the various types of manufacturing industries and establishes certain relationships between Engineers and Craftsmen as also *inter-se* relationships between various types of general craftsmen.

The study is expected to help in determining the Engineer and Craftsmen components of total employment likely to be generated as also the occupational distribution of such components so essential to formulation of manpower training programmes. It should also serve a useful purpose for employment counselling of fresh entrants into the employment market and provide data to Industry for estimating personnel requirements for expansion of existing units or starting of new ones.

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SACHIVALAYA,  
Bombay,  
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## APPENDIX

### *List of Selected Categories of Engineers and Craftsmen*

#### ENGINEERS

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Code No.	Category
001	Civil Engineers (including Overseers.)
002	Machanical Engineers (including Automobile Engineers)
003	Electrical Engineers (including Telecommunication Engineers)
004	Chemical Engineers
....	Others (includes Architects, Metallurgical Engineers and Surveyors.

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#### CRAFTSMEN

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Code No.	Category
730	Furnaceman, Metal.
731	Annealers, Tamperers and Related Heat Treaters.
732	Rolling Mill Operators, Metal.
733	Blacksmiths, Hammersmiths and Forgemen.
734	Moulders and Coremakers.
735	Metal Drawers and Extruders.
739	Furnacemen, Rollers, Drawers, Moulders and Related metal Making and Treating Workers (n.e.c.).
740	Precision Instrument Makers, Watch and Clock Makers and Repairmen.
750	Fitter-Machinists, Toolmakers and Machine Tool Setters.
751	Machine Tool Operators.
752	Fitter-Assemblers and Machine Erectors (except Electrical and Precision Instrument Fitter-Assemblers).
753	Mechanics-Repairmen (except Electrical and Precision Instrument Repairmen).
754	Sheet Metal Workers.
755	Plumbers and Pipe Fitters.
756	Welders and Flame Cutters.

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CRAFTSMEN—*contd.*

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Code No.	Category
757	Metal Plate and Structural Metal Workers.
758	Electro Platers, Dip-Platers and Related workers.
759	Toolmakers, Machinists, Plumbers, Welders, Platers and Related Workers (n.e.c.) (including Metal Engravers other than Printing).
760	Electricians, Electrical Repairmen and Related Electrical Workers.
761	Electrical and Electronics Fitters.
762	Mechanics Repairmen, Radio and Television.
764	Linemen and Cable Jointers.
769	Electricians and Related Electrical and Electronics Workers (n.e.c.).
770	Carpenters, Joiners, Pattern Makers (Wood).
780	Painters and Paper Hangers.
791	Bricklayers, Plasterers and Masons.
870	Operators, Stationary Engine and Related Equipment.
871	Boilermen and Firemen.

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