C H A P T E R - IV

DEVELOPMENT OF ENGINEERING INDUSTRY: A CASE STUDY OF MENON AND MENON PVT.LTD

A) Development of Engineering Industries with Special Reference to Engineering Industry in India.

B) History and Development of Menon & Menon Pvt.Ltd.,Vikramnagar,Kolhapur.

C) Organisation Set-up Chart.

D) Production Map.

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C H A P T E R - IV

HISTORICAL DEVELOPMENT OF ENGINEERING INDUSTRIES IN INDIA

A) DEVELOPMENT OF ENGINEERING INDUSTRIES WITH SPECIAL REFERENCE TO ENGINEERING INDUSTRY IN INDIA:

The engineering industry occupies a premier position as one of the major instruments of the economic development of the country. Since independence, this industry has achieved spectacular growth. Emphasis an industralisation during the plan periods has encouraged the establishment of thousands of large, medium and small manufacturing undertakings scattered all over the country.

This industry accounts for Rs.400 crores by way of capital employed and provides employment to about 16 lakh people in the engineering sector. There are about 5,000 manufacturing units in the industry at present and the estimated gross annual production value of Rs.3,000 crores is obtained from these units covering a variety of products from simple tools to sophisticated machinery and equipment. Further, the exports of engineering goods rose significantly from rupees 10.5 crores in 1960-61 to Rs.900.5 crores in 1980-81 and as a result, their share in the country's total exports

went up steadily from one per cent to 14 percent in the same period. During the five year plan periods the industry has succeeded in laying down a firm foundation for the manufacture of a very large variety of goods including heavy electrical equipment, heavy machine tools, industrial machinery and other engineering items which are considered to be basic pre-conditions for an accelerated industrial growth of our country.

By nature of engineering industry is heterogeneous and includes different industries. Therefore, it becomes difficult to shows the scope and character and the locational pattern of each and every industrial unit in the field of engineering which is complex in character. For the purpose of analysis, the industry may be classified into two groups, i.e., the heavy engineering industries and light engineering industries. Industries producing capital goods such as ships, industrial machinery, power generators, machine toos, railway wagons, etc., are classified as heavy engineering industries. The progress of engineering industry, in general, has been rapid both in public and private sectors. Most of the heavy engineering industries are established and developed in the public sector,

with the technical collaboration of USSR, the heavy machine building plant is being set-up at Ranchi in the public sector. This plant is designed to produce machinery and equipment primarily for iron and steel industry besides possessing adequate capacity to meet the requirements of the manufacture of general engineering items like oil drilling rigs, excavators, press and forge equipment, heavy cranes etc.

The most important units in the branch of engineering are Heavy Electricals (India) Limited and Bharath Heavy Electricals, which are engaged in the manufacture of heavy electricals, equipment, set-up in the public sector. Heavy Electricals (India) Limited is being planned to produce specialised heavy electrical equipment such as large size power transformers, industrial traction motors, switch gears, capacitors, equipment for railway electrification, turboalternators, hydraulic turbines and generators, etc. The Bharat Heavy Electrical Comprising four units is located at three places. Heavy power equipment plant and switch gear units were set up at Hyderabad.

Heavy power equipment unit is meant for producing steam turbo-alternators and their auxiliaries. The next is Heavy pressure boiler plant which is located at Madras and started its production in 1965. The fourth unit of Bharat Heavy Electrical Limited is heavy electrical equipment plant set up at Ranipur

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(Hardwar) with Soviet collaboration. This plant is designed for manufacturing steam turbo-alternators, hydro-electric generating sets and large size electric motors. On the other-hand, some industrial units engaged in the line of producing locomotives, wagons etc. For railways are set up both in public sector as well as in private sector.

The broad-guage locomotives, electric locomotives and diesel locomotives are being manufactured at Chittaranjan and Varanasi in the public sector. Originally Chittaranjan Locomotive Works was designed to produce 120 locomotives of average size, equivalent to 96 WG locomotives and 50 spare boilers a year, but later it has been expanded to produce WG, WT, WP and LW type locomotives equivalent to over 200 standard type locomotives. With a planned capacity of 150 main line BG diesel electric locomotives per year, the diesel Locomotive Works was set up at Varanasi. While the metre-guage locomotives were to be manufactured by Tata Engineering and Locomotive Company at Jamshedpur in private sector, for the manufacture of spare parts and equipments for locomotive, there are five other firms in the private sector in addition to Tata Engineering and Locomotive Company. In the public sector railway repair workshops were quickly turned into

large scale units manufacturing locomotives and coaches. For the manufacture of passenger coaches started at Perambur near Madras, Intergal coach factory was established which went into production in October,1955. Wagon requirements of the railways are largely met by production in the private sector where the existing capacity is about 38 thousand units per annum.

On account of rapid industralisation, the demand for machine tools has increased considerably. Consequently, the sound development of the machine tools industry is of vital importance to the country's economy. Machine tool industry has developed in both public and private sector. Before Second World War, there existed only a few firms in private sector, who were engaged in the manufacture of machine tools. The most important unit in this branch of machine tools is the Hindustran Machine Tools which was set up at Jalahalli, near Bangalore, in public sector.

The capacity of this unit is 2,000 machines per annum and in terms of rupees this unit can produce goods worth Rs.2.5 crores per year. In private sector also the industry is well established and able to produce more complicated types of machines and different machine tools. For instance,

M/s Mysore Kirloskar Limited, Harihar, undertook the manufacture of lathe cone, pulling and geared head, hacksaw machines, capstan and turrets. In general, the machine tool industry in India enjoyed high priority and Government's assistance since independence.

The ship building industry is also progressing in India since 1942. Ship building yard at Visakhapatham was originally established by the Seindia Steam Navigation Company. But in March 1952, the Visakhapatham ship yard was acquired by the Government of India and the management of the shipyard was entrusted to the Hindustan Shipyard Limited. Now this shipyard has four building berths with a capacity of 15,000 DWT each to build ships ranging from 320 to 550 feet in length besides a fifth berth for the building of minor crafts.

Mazgaon Docks Limited, under the Ministry of Defence, near Bombay, is turning into a major shipbuilding concern in India which was initially started to carry out all types of repairs of ships. For the first time the Mazgaon Docks have undertaken the design and construction of two luxury passanger air-conditioned ships with all facilities like swimming pool, a lounge with arrangements for sereching films, games deck, dinning saloons, etc. The Mazagaon Docks, for the first time,

has also undertaken the concentration of twin screw training section hopper units. The Garden Reach Workshop in Calcutta builds all types inland and harbour crafts and smaller coastal vessels. Apart from all these, the cochin shipyard provides a dock for building ships of 85,000 OWT, and another dock for repair of ships upto 100,000 DWT.

EXPORTS OF ENGINEERING GOODS:

Changes in the structure of the Indian economy, which have taken place in the plan era, are being reflected increasingly in the engineering goods exports. According to the study by the secretariat of General Agreement for Trade and Tariff (GATT) 1968, the average annual export growth rate of Indian engineering goods between 1958 and 1967 was 23.7 per cent as against 4.6 percent for other manufactures and 1.5 percent for primary commodities. Engineering goods exparts of India increased from mere Rs.5.4 crores in 1956-57 to Rs.10.55 cores in 1960-61 and Rs.84.97 crores in 1968-69 and finally it rose significantly to Rs.900.5 crores in 1980-81. The share of engineering goods in the country's total exports went up steadily from one percent in 1960-61 to 14.0 percent in 1980-81 as is evident from following table[1].

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1. Sivayya,K.V., Das,V.B., Indian Industrial Economy, S.Chand & Co.Ltd.,New Delhi, 1983, pp.461-463.

EXPORTS OF ENGINEERING GOODS

Year	Export of Engineering Goods.	Total Exports	Percentage, Share of Engineering Goods in total Exports.
1960-61	10.55	1,011.65	1.0
1961-62	12.31	1,040.81	1.2
1962-63	14.84	1,079.79	1.4
1963-64	21.13	1,249.80	1.7
1964-65	26.47	1,286.16	2.1
1965-66	29.77	1,269.37	2.3
1966-67	31.14	1,156.56	2.7
1967-68	41.48	1,198.69	3.5
1968-69	84.79	1,357.78	6.3
1969-70	106.37	1,413.20	7.5
1970-71	115.00	1,520.60	7.5
1971-72	122.30	1.608.20	7.6
1972-73	138.70	1,960.90	7.6
1973-74	201.70	2,523.40	12.4
1974-75	356.79	3,328.83	9.3
1975-76	408.66	3,941.62	9.6
1976-77	552.00	5,143.00	10.8
1977-78	624.00	5,394.00	11.7
1978-79	685.00	6,001.00	11.4
1979-80	737.00	5,999.00	12.5
1980-81	900.50	6,072	14.0

It is clear from the above table that engineering good exports during the year 1980-81 were higher by 163.5 crores than the previous year 1979-80. The items which recorded appreciable increase over the previous year were automobites and automobile parts, bicycles and bicycle parts, iron and steel castings, small and cutting tools, electric motors, switchgear and transformers, industrial machinery including boilers, radio and components, non ferrous semis (including aluminium) wire ropes, wire hails and other products, air compressors and diesel engines. The items which showed fall were MS pipes and tubes, jute and textile machinery, machine tools, aluminium ingots, transmission line towers, electric fans, bright steel bars and shaftings, sewing machines, etc. The Engineering Exports Promotion Council aims at a target of Rs.1250 crores exports of engineering goods for 1981-82[2].

PROGRESS UNDER FIVE YEAR PLAN:

Though some progress was made during the First Five Year Plan in industries like textile machinery, manufacturing whose output in terms of value increased from rupees four crores during 1946-50 to about Rs.11 crores during 1951-56, very little emphasis was laid during the first five year plan

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2. State Bank of India, Monthly Review, June,1981, Bombay Central Office.

on the development of engineering industry. During the same plan a modest beginning was made in the manufacture of cement machinery, jute machinery, electrical equipment, etc. As considerable emphasis was placed by the Second Five Year Plan on the development of basic and heavy industries like iron and steel, the engineering industry also was one of the priority industries. Accordingly many programmes for the establishment of workshops, heavy foundaries, forgings and structural shops were initiated during this period. There was a rapid increase in the production of machine tools. A steep rise in the manufacture of diesel engines for automobiles, bicycles, power driven pumps, sewing machines, etc. was found by the end of the Second Five Year Plan. In terms of absolute figures, the production in machine tools increased from Rs.108 lakhs in 1956 to Rs.771 lakhs in 1961. In view of the increasing which are considered to be the base of the other consumer goods industries, during the third plan too, engineering industries were accorded high priority. While a great role has been assigned to the private sector, many projects like Precision Instrument Factory,Hindustan Cables, Heavy Pressure and Pumps, Surgical Instruments, etc., were initiated during the Third Plan. Though the target was 11 percent annual growth rate, the achievement was an annual growth rate of seven to eight percent in the engineering industries.

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The provision in the public sector for machinery and engineering was only Rs.75 crores in the Fourth Plan, the investments being intended mainly to complete projects under construction and diverfication of some existing units like Hindustan Machine Tools, Minerals and Metals Corporation, and Bharat Hea-vy Electricals. The Fourth Plan set a target of Rs.875 crores for the five year period for engineering exports. Against this target the exports of engineering goods during the fourth plan period amounted to Rs.684 crores.

In the Fifth Plan, the primary emphasis was on the fuller exploitation of the potential of engineering industry through better utilisation of the existing capacity, diverification of production and in filling up the gaps in machine building capacity.

The exports during 1975-76 exceeded Rs.400 crores and enthused by these results, the Export Promotion Council had fixed an ambitious target of Rs.650 crores in 1978-79, the last year of fifth plan. We could succeed in crossing this target since the exports of engineering goods during the year 1978-79 were of the order of Rs.685 crores. The Engineering Export Promotion Council aims at a target of Rs.1,000 crores exports of engineering goods by the year 1980-81. But the actual exports in this year are of Rs.900.5 crores.

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The main strategy in the Sixth Plan would be to limit investment in heavy engineering units to those required for balancing facilities, modernisation, technological upgradation and improvements in quality and productivity. Then investments are postulated for increasing the output of power equipment arising out of a larger power programme, diverfification and rationalisation of production to meet demand and for modernisation of the sick units in the Eastern region. No new units are proposed to be set up in the public sector in the heavy engineering industry[3].

B) HISTORY AND DEVELOPMENT OF MENON AND MENON PVT.LTD., VIKRAMNAGAR,KOLHAPUR:

Kolhapur is the home-town of Menon and Menon, one of the largest companies in the area. A company that has played an important part in helping this back-ground region to catch up with the more industrially advanced centres in the country.

Today, the small industries in Kolhapur are actually equipped with more sophisticated machines and use more modern production techniques than most of India.

THE EARLY DAYS:

The company started off in a very modest fashion way back in 1954. Chandran Menon, a young tool engineer, set-up a

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3. Sivayya,K.V., Das,V.B.M, Indian Industrial Economy, S.Chand & Co.Ltd.,New Delhi, 1983, pp.464-465.

small machine shop that to begain with carried out general purpose jobbing work on hired machines. It did well. But Menon had much bigger plans.

He ploughed back profits to buy his own machines what he could buy, he made on his own. The transion from non-precision machining to large runs of precision jobs was matter of course. Soon he was manufacturing intricate, high quality components for various O.E.manufactures components such as pistons, cranks, shaftes and lines for diesel enginees.

The company is probably the earliest one of its size to be entrusted with the production of critical components for large O.E.manufactures under sub-contract.

In the year 1956, they started a small industrial unit manufacturing dieseal enginees in Udyamnagar. This tiny unit was serving with only four workers with two lathes.

In 1958, this unit started production of Diesel Enginees. Such as MV6 A, MV6 B, 650 R.P.M. and MV B, 850 R.P.M. which were very famous because of the superior quality and less consumption of fuel. Due to the superior technology and reputation these products were accepted by the famour organisations such as Cooper Engineering Ltd., Ruston Horhsby India Ltd.,Punjab Tractors, HMT, TELCO, Kirloskar, Escorts, Simpons and Co., Mahindra and Mahindra etc.

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THE FIRST STEP FORWARD:

In 1961, there was a big slump in the engineering industry. A lot of companies were forced to wind-up. But instead of cutting back on overheads, Memon took on the challange and diversfied.

Activities were decentralised by starting a new company. Menon & Menon that manufactured diesel engineers. The parent company Menon Ancillaries continued manufacturing engine, components and later on become Memon Pistons.

Manufacture of diesel enginees ranging from 3 H.P. to 6 H.P. was started in 1962 and this products found good customer acceptance. The increase in the volume of business required of the company into separate units as department for better supervision and control.

Thus in 1963, the component unit was shifted to the new location in Vikramnagar. A modern small cast iron foundary was also set up. In 1965, this company was seperated into individual units. One is the Menon Automobiles, producing oil enginees and the other Menon & Menon Company.

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THE BIG LEAP:

In the early 70's another major slump bit the diesel engine industry. A natural sequel, further expansion, in 1972, a foundary was established to manufacture high duty machined very iron castings for the Automobile industry.

Within a few years, the company had required the expertise, high technology castings for automotive and engineering industry.

Large scale production of castings like cylinder blocks, cylinder heads, crank cases etc., all import substitution items started in earliest. In a short time Menon's quality was accepted and a acknowledged as one of the best in the country. O.E.manufactures including organisations with world reowned names Perking, MWM, International Havvester and M.A.N. to name a few put their trust in Menon & Menon[4].

MENON & MENON TODAY:

Menon & Menon's large integrated foundary and machine shop complex is backed by nearly three decades of concerted effort towards the development of technology and skilled manpower. This enables the company to manufacture a whole wide range of castings, many of which such as the V-12 cliner

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4. Annual Magazine, Menon & Menon Pvt.Ltd.,Vikramnagar, Kolhapur, 1984, p.1.

block for MWM engines and the AD 3-152 Perkins engine block, were made in India for the first time. What's more Menon and Menon could supply them in raw, proof or fully machined conditions which few others can.

The company has a division manufacturing diesel engines and a sister company, Memon Pistons Manufacturing cyliner liners, pistons, piston pins and rings.

Menon & Menon alone today have a turnover of over Rs.50 million.

THE PRODUCT MIX CASTINGS:

Over 5,000 M.T. of graded castings of tactors, trucks, Jeeps, hydraulics, multi cyliner diesel engines and other applications are produced annually. The product mix is heavily oriented towards high duty castings.

The company's ability to supply of machined castings a facility it to become the first choice of manufactures including:

1) Fscorts Ltd.,Faridabad, Hariyana.
2) H.M.T.,Bangalore.
3) Kirloskar Oil Enginees Ltd.,Pune.
4) Mahindra & Mahindra,Bombay.

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5) Punjab Tractors Ltd.,Punjab.

6) Ruston & Horusby India Ltd.,Pune.

7) Simpson & Co.,Madras.

8) Telco, Pune.

9) Automobile Products of India Ltd.

10) Brakes India Ltd.

Menon & Menon has an excellent working relationship with these clients because the company has always had a heavily customer oriented outlook.

Consistently high quality as well as sensible pricing have almost become a hall mark. In addition, the company keeps the customers inventory planning in mind and takes pains to ensure that delivery of its products are right on schedule.

DIESEL ENGINES:

Every year over 4,000 enginees in the 5 to 8 H.P. range find a ready market all over India. With domestic sales regulated by the Government overseas markets, are being tapped to ensure continued growth. Export orders worth Rs.20 million are in the pipeline. Menon's export division at Bangalore is intended to accelerate export growth.

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MENON PISTONS:

A seperate unit under the name - Menon Pistons was established in the every increasing demand for quality pistons and pistons rings. This unit situated in Shiroli industrial area is engaged in manufacturing aluminiumalloy pistons for all categories of automobiles and enginees. Menon piston is the fine unit producing aluminium pistons in Maharashtra and is one of the best unit having sophisticated machinery instruments and well equipped laboratory.

Their customes include.

- M/s Kisan Equipment Ltd.
- M/s Kirloskar Cummins Ltd.
- M/s Kirloskar Oil Enginees Ltd.
- M/s Hindustan Tractors Ltd.
- M/s Rustan Hornsby India Ltd.
- M/s Cooper Engineering Ltd.

These names of industrial concerns themselves indicate the high quality of Menon Piston for and rings. The credit for development of pistons for defence industry also goes to Menon Pistons development to alfine bounded pistons a latest technology in piston manufacturing was an important land mark in history of unit. Menon pistons supplied these pistons to M/s Kirloskar Cummins.

These pistons proved substitute for the pistons which were imported, otherwise, from M/s Cummins Engineering Company, Columber India (U.S.A.). Recently, the company's working in collaboration with M/s Nippon Piston Rings Co.Ltd.,Japan.

ORGANISATION & MANPOWER RESOURCES:

Organisationally, Menon & Menon has evolved for itself a structure that permits centralised review and control with decentralised operations each product line being a profit centre.

Computarised systems provide assistance in management decision making, cost control and quality control. In fact, the company has evolved a system of op-erations when production figures and costing are checked out every week. However, the accent of computer usage is an management control system and decision making.

Continuous structured training to upgrade profession and technical skills is provided to the company's 800 workers and 200 technical personnel. To help its people keep with technological advances and gain valuable experience.

THE COMPANY'S STRENGTH:

The strength to survive and grow in serve advertise. For instance both in 1961 and 1970, when slumps hit business and

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other companies closed shop, Menon & Menon diversfied and achieved a substuntial growth.

The engineering capability to design and manufacture special purpose machines, vigs, fix and pattern which ensures consistent quality.

Highly qualified and competent personnel working in a result oriential environment with emphasis on responsible accounting and management by objectives.

Highly productive labour force working in a peaceful constructive atmosphere no man our last dute to strike during the last six years[5].

COMPANY'S PHILOSOPHY:

The company's philosophical foundation and value systems were laid by the Chairman Menon. It provides the staying power and stimulates growth even in serve adersties some of the aspects are.

"Belief that high quality, low margin and a large thrunover is the key to growth."

Conviction that a highly motivated competent management team is the only resource for achieving long term corparate objectives.

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5. Annual Magazine, Menon & Menon Pvt.Ltd.,Vikramnagar, Kolhapur,1984, pp.2,3,45.

EMPHASIS ON LONG RANGE AND PLANNING:

Reliance on the use of corporate technology by using the most effective machinery and process of manufacture not just the most sophisticated one available.

Stress on continuous organisation and diverfication in high technology areas.

Recognition of the need for continuous development of skills to increase capability and technical superiority.

Labour and management relations built up on the belief that the very reason for the existance of an industry is to serve huminity.

FUTURE PLANS:

Menon and Menon there is on unending commitment to growth. In the phase, whenever this growth has needed financial assistance from an external source. The company always organised promt repayment of loans from internally generated funds. This assurance is built into future growth plans. The long term objectives, framed after careful analysis of the environment and assessment of internal strengths, have resulted in a phased development programme. A matter of plan of growth is an advanced stage of execution and the phase wise programme is as under.

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PHASE-I: COMPLETION BY 1982:

(Foundary capacity 10,000 M.T. and matching machinery facilities).

1. Automotive grade high duty castings.
2. Heavy automotive grade castings made by interest no break process.
3. S.G.Iron castings both heavy and light.

PHASE-II: COMPLETION BY 1985:

(Foundary capacity 15,000 M.T. and matching machinery facilities).

1. High duty automotive grade castings made by latest high pressure moulding process with foreign know.
2. Further expansion of S.G.Iron casting.
3. Machine building with foreign collaboration.

PHASE-III: COMPLETION BY 1990:

(Foundary capacity 30,000 M.T. and matching machinery facilities).

1. Mass production of light automotive and high duty castings by using the latest flaskless moulding process.
2. Non-famous castings especially aluminium castings using high and medium pressure die-casting process.
3. Expansion of tool room capability to enter to the outside requirements.

THE COMPANY'S TRACK RECORD AT A GLANCE:

1954 - Establishment of a very small general purpose jobbing machine shop.

1959 - Specialised in machining capabilities for liners cast iron pistons and craft.

1960 - Slum in engineering industry. The company diversfied in diesel enginees.

1965 - Decentralisation of operation, seperate companies forced for automobile.

1967 - Ancillary products and diesel enginees.

1970 - Begining of a two year slump in the engineering industry. expansion of foundary plan.

1972 - Started commercial production of high technology castings for the automotive and engineering industry.

1975 - Large scale production of sophisticated castings like cylinder blocks and heads.

1979 - The company's foundary products found acceptance by major O.E. manufacturers. Foundary among the top row in the country.

VALUABLE PROJECTS:

Menon & Menon Pvt.Ltd., is a medium scale engineering concerns having two sub units.

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1. Foundary,

2. Machine shop.

Foundary has the capacity of 750 terms casting per month. Recently foundary has been machined and many operations are being automatically carried out. A foundary which is run fulfil own requirement is called captive foundary. Eventhough TELCO is having a well equipped, modern captive foundary, Menon and Menon fulfills. Some casting requirements of leading industrial unit in India as per their needs in the form of casting as well as both castings and machined products which include:

1) Praumple housing (2) wheel reduction gear box housing (3) Lift cover (4) Bearing caps (5) Exhaust and intake manifold. (6) E-scort block- 2 cylinder (7) Geer box (8) Mahindra blocks (9) Mahindra head. (19) Frapt cover (11) Bracket cover (12) Eydraulic lift cover (13) Auxilliary gear bar housing, (14) Rear cover (15) Clutch housing (16) Bear axle housing (17) Porter housing (18) Parter cover (19) Crant pulley (20) feed pump and (21) Cylinder head[6].

TOTAL DIVISION:

1) Auto component division.

2) Engineen division,

3) Chemical division.

4) Special purpose machine division.

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6. Annual Magazine, Menon & Menon Pvt.Ltd.,Vikramnagar, Kolhapur,1984, pp.6-7.

ADMINISTRATIVE DEPARTMENT:

1) Personnel (2) Accounts (3) Establishment (4) Stores (5) Sales (6) Purchase (7) Management service (8) Production planning and control (9) Electronic data processing co-related with accounts (10) Audit, inspection.

PERSONNEL PRACTICES:

Employer Grades & Skilled Required:

For convenience, there are 8 grades employees and they have given the corresponding skilled required for that on this basis recruitment of employees done.

GRADES

VIII	-	Unskilled.
VII	-	Semiskilled 'B',
VI	-	Semiskilled 'A'.
V	-	Skilled 'B'.
IV	-	Skilled 'A'
III	-	Highly skilled.
II	-	Supervisors.
I	-	Engineers.

OVER TIME:

The workers are entitled to secure the payment for overtime 1.5 times the wages on usual hour basis.

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INCENTIVE SCHEMES:

To ensure production incentive is paid to the workers first, a standard in terms of minimum number of units to be produced in each week is fixed for each department. Here amount is sanctioned on the basis of piece rate system for the number of units of output above the fixed standard. Then this amount is distributed among all the workers in connected department with more production. The quality of the product is also required to be maintained.

Thus incentive is paid only after the quality is approved by inspection of department. In some units of output for which incentive paid are rejected by the customers. The amount of incentives paid for the same unit is deducted from the amount to be paid next for the concerned department.

ATTENDENCE BONUS:

To ensure regularity in attendance, bonus is paid. The worker who attend all the working days in a month, is entitled to an attendence bonus (Rs.107). The worker is on leave for one day Rs.5/- are deducted from attendance bonus. For more leave the whole amount is deducted.

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STAFF ADVANCE:

Staff advance is a loan allocated to on employee in contigency conditions for medical expenses, marriage expenses, and expenditure incurred for education of children etc. No interest is charged on this loan and amount is recovered through the salary deductions regularly.

ALLOWANCES:

Only the officers are entitled to have rent allowances, medical allowances and petrol allowances is paid to them who own the vehicles. No other employee entitled to allowance.

WELFARE FACILITIES:

Tea and eatables are made available to the employees at the subsidized rate, 50 % of the bills are paid by the company.

UNIFORM & SHOES:

Every permanent worker is provided with a pair of uniform and shoes each year.

SOAP:

Every worker is supplied a cake of soap each week to clean the uniform and hands.

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LEAVE:

Every employee is entitled to 7 days casual leave and 12 days earned leave for every year according to Factories Act. Sick leave is sanctioned as per provisions of E.S.I. With these, there are 7 day paid holiday which includes, Independent day, Republic day, Shivaji Jayanti, two days of Diwali, two or more days demanded by Trade Union.

RECREATION:

All the employees and officers get together at "Temblai Hall" at the time of 'Temblai Yatra' to enjoy a meal. The workers enjoy the drama and variety entertainment on the Independence day; Republic day. These programmes are staged by workers themselves.

WORKING HOURS:

The workers is required to work 8 hours daily in the concerned shift except the third shift.

- General shift	9.00 a.m.	to	5.00 p.m.
- Ist shift	8.00 a.m.	to	4.30 p.m.
- IInd shift	4.30 p.m.	to	1.00 m.n.
- IIIrd shift	1.00 m.n.	to	8.00 a.m.

Instead of this, sometimes the intermittent shifts are also run for convenience. The Clerical staff is working 9.00 a.m. to 5.00 a.m.

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FINANCIAL ASSISTANCE:

In the begining the unit was started on proprietary basis and when the necessity of enchanced capital faced the structure of organisation changed into private limited form. Increasing demand of capital investment drastically changed the initial form and it started enlarging financial sources. At present, the same principle of securing the majority of share of the unit and similar distribution of the capital investment. The unit is very efficient and standard.

The bankers includes Bank of Baroda, Shri Mahalaxmi Co-operative Bank Ltd., Ratnakar Bank Ltd., United Western Bank and the sound financies policy has resulted into progressive nature of organisation.

FIVE YEARS HIGHLIGHTS[7]

(Rs. in thousand)

Description	1977-78	1978-79	1979-80	1980-81	1981-82
Sales and other incomes	14925	31197	37282	51092	52873
Profit before taxes & description allowances	1416	3689	3975	5907	5382
Retained earning.	940	1234	1420	1399	1209

7. Menon & Menon Pvt.Ltd.,Vikramnagar,Kolhapur, Personnel office record,1984.

Description	1977-78	1978-79	1979-80	1980-81	1981-82
Assets & Liabilities.					
Cross Block	6377	9277	5093	24134	29597
Net Block	4161	4813	8206	12913	14339
Total Net Assets.	7721	9857	13531	24480	25614
Represented by					
Net worth.	3707	4384	5804	7400	8609
Share Capital.	2023	2143	2143	2323	2323
Reserve Surplus.	1684	2241	3661	5077	6286
Boardings.	1014	5473	7724	17080	17005
Total Funds.	774	9857	13531	24480	25014

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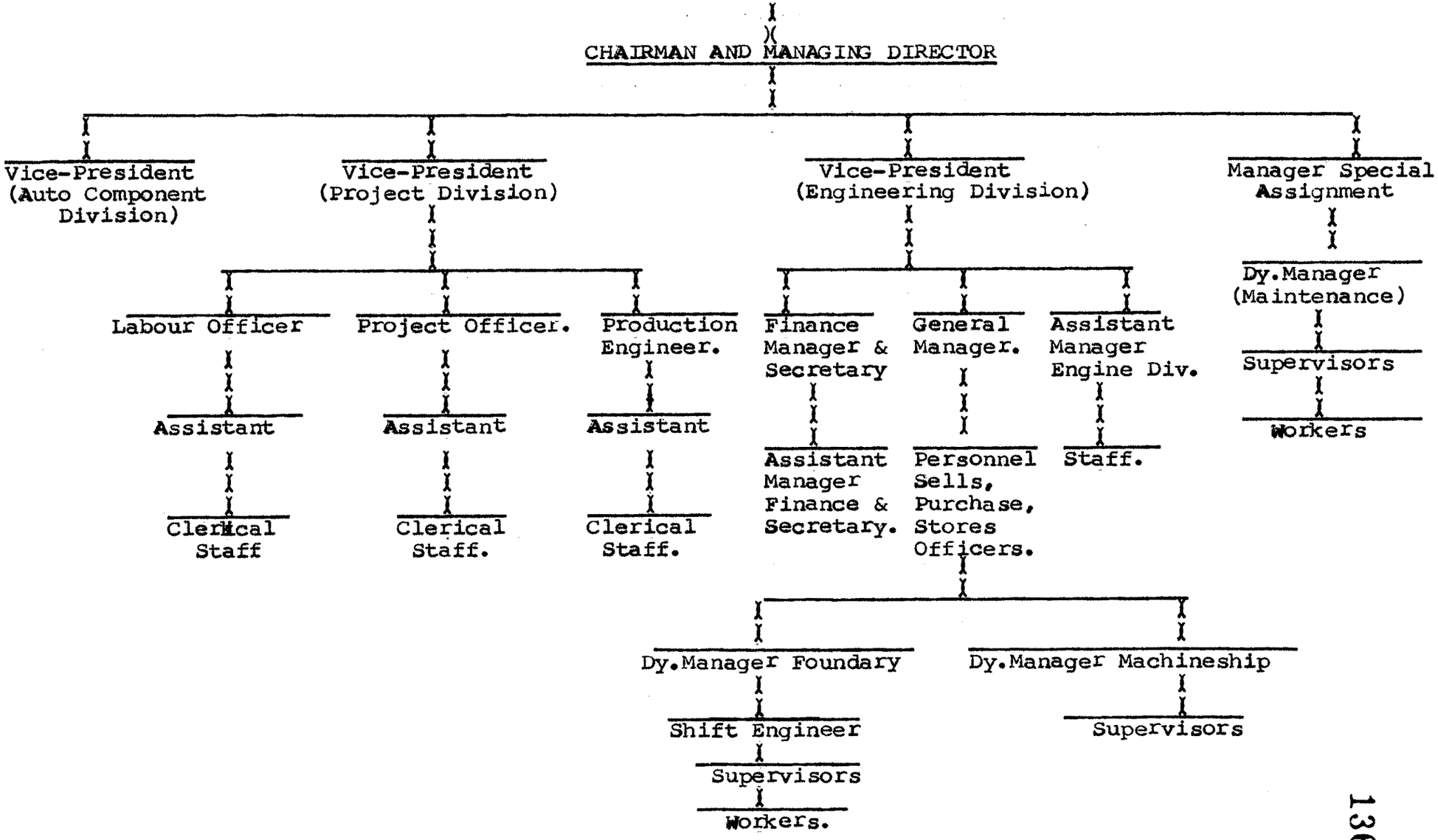
MENON AND MENON PVT.LTD.

VIKRAMNAGAR,KOLHAPUR

-: CENTRALISATION OF POWER :-



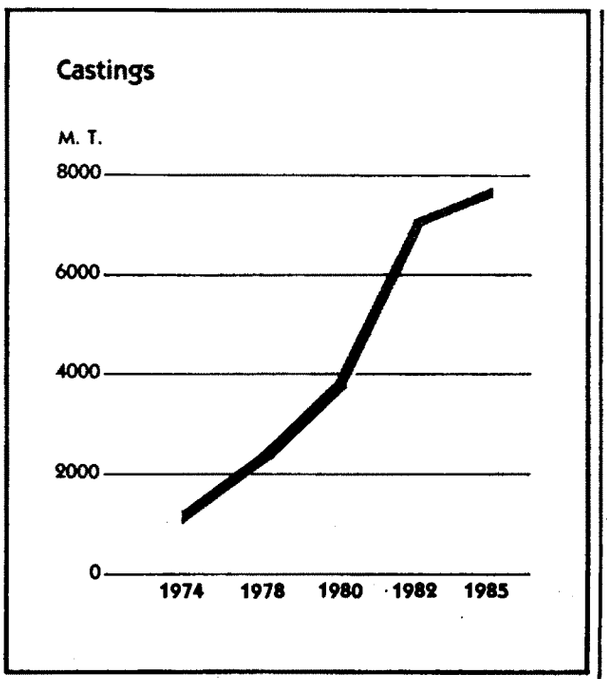
Menon and Menon Today

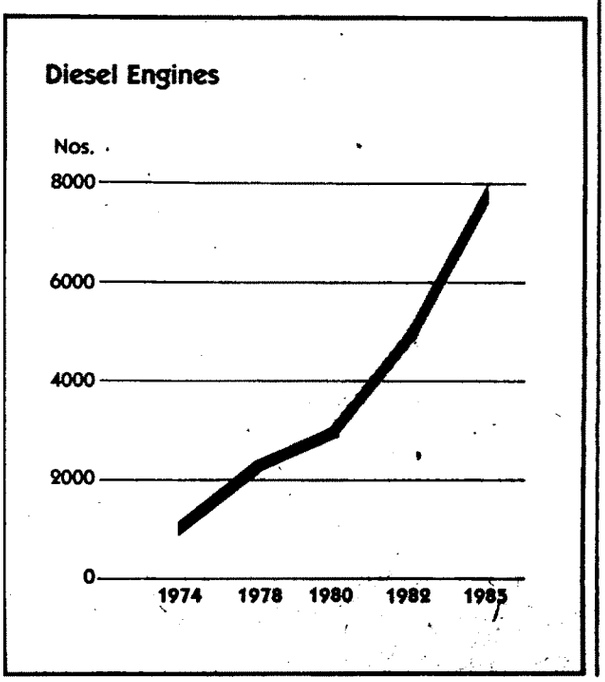
Menon and Menon's large integrated foundry and machine shop complex is backed by nearly three decades of concerted effort towards the development of technology and skilled manpower. This enables the Company to manufacture a whole wide range of castings, many of which, such as the V-12 cylinder block for MWM engines and the AD 3-152 Perkins engine block, were made in India for the first time. What's more, Menon and Menon could supply them in raw, proof or fully machined condition, which few others can.

The Company has a division manufacturing diesel engines and a sister Company, Menon Pistons, manufacturing cylinder liners, pistons, piston pins and rings.

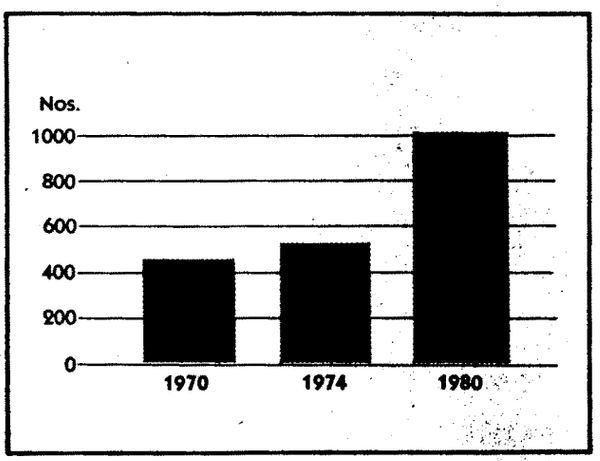
Menon and Menon alone today have a turnover of over Rs. 50 million.

Production Growth

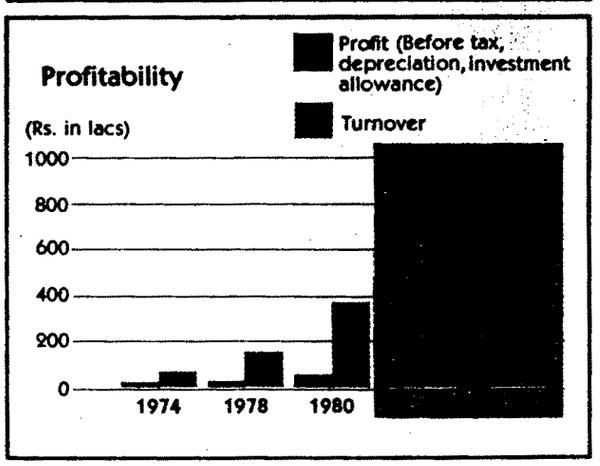


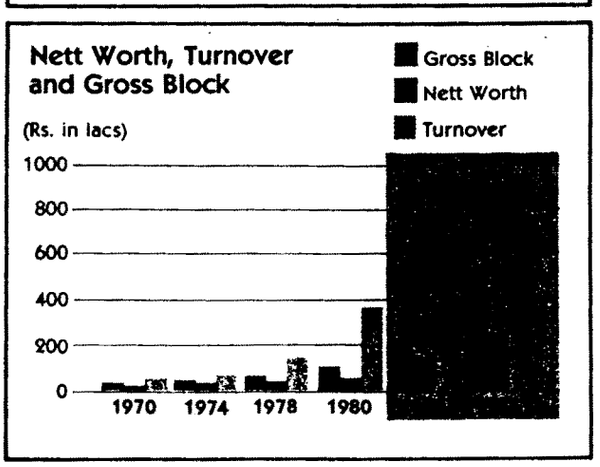


Employment



Operating Results





The Product Mix

Castings

Over 5,000 MT of graded castings for tractors, trucks, jeeps, hydraulics, multi-cylinder diesel engines and other applications are produced annually. The product mix is heavily oriented towards high duty castings.