

The Complete Book on Production of Automobile Components & Allied Products

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The Complete Book on Production of Automobile Components & Allied Products

(Engine Parts, Piston, Pin, Piston Ring, Valve, Control Cable, Engine Mounting, Auto Lock, Disc Brake, Drum, Gear, Leaf Spring, Shock Absorber, Silencer, Chain, Cylinder Block, Chassis, Battery, Tyre & Flaps)

The rapid urbanization, coupled with an overwhelming growth in the middle class population, has created a market that is extremely conducive for the automobile industry to flourish. It is inferred from the demand, the investment in the automobile industry is estimated at over hundredths of billions in the vehicles and auto components segment. The auto market is thought to be made primarily of automakers, but auto parts makes up another lucrative sector of the market. The major areas of auto parts manufacturing are: Original Equipment Manufacturers (OEMs) - The big auto manufacturers do produce some of their own parts, but they can't produce every part and component that goes into a new vehicle; Replacement Parts Production and Distribution - These are the parts that are replaced after the purchase of a vehicle.

The book provides a characterization of vehicles, including structure, load, fuel used, requirement of various components, fabrication and so on. It will prove to be a layman's guide and is highly recommended to entrepreneurs, existing units who wants to diversify in production of automobile and allied products, research centers, professionals and libraries, as it contains information related to manufacturing of integral parts of an automobile and practices followed in the finishing of the products.

The topics covered in the book are: Classification of vehicles on the basis of load, fuel used and their parts; Material used in the manufacturing of automobile (Metals, Alloys, Polymers etc.); Technology used; Use of Aluminium in Automobiles; Use of Plastics in Automobiles; Manufacturing practices for Engine Parts(Auto Piston, Pins, Piston ring, Lead Storage Battery, Valve & Valve Seat, Automobile Silencer, Automobile Chain, Cylinder Block, Automobile Control Cable, Engine Mounting PAD, Auto Locks etc.); Manufacturing of Automobile Chassis, Disc Brake, Brake Drum, Gear, Gear Blank, Leaf Spring, Shock Absorbers, Automobile Tyres; Heat Treatment System for Automobile Parts; Forging Technology (Open Die Forging Process, Close Die Forging Process, Designing of forged parts) and Painting Technology(Conversion Coating, NAD Finishes, Aluminium Flake Orientation, Opacity, Gloss, Electro Powder Coating, Spot Repair, Electrostatic Spray etc.) for automobile parts; Scab Corrosion Test, Peel Resistance.

1. INTRODUCTION

Classification of Vehicles

On the Basis of Load

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JNEX

JNHF

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Graphite Steel "HFC1 Steel"

BN Free Cutting Steel "CCBN Steel"

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High Toughness Microalloyed Steel for Hot Forging

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Powder Coatings and Aqueous Slurries
Aqueous Powder Slurries
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