HI-TECH PROJECTS

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MOST DEMANDABLE PROJECTS

WPC (PLASTIC COMPOSITE) BOARD LINE MANUFACTURING [3386]

Wood–plastic composites (WPCs) are a form of composite combining wood-based elements with polymers. The processes for manufacturing WPCs include extrusion, injection molding, and compression molding or thermoforming (pressing). Newer manufacturing processes for WPCs include additive manufacturing via fused layer modeling and laser sintering. An important constraint for polymers used in WPCs is requiring process conditions (melt temperature, pressure) that will not thermally degrade the wood filler. Wood degrades around 220 °C; thus, general-purpose polymers like polyethylene and poly vinyl chloride are typically used for manufacturing WPCs. Wood fibers are inherently hydrophilic because of the hydroxyl groups contained in the cellulose and hemicellulose molecular chains. Thus, modification of the wood fiber via chemical or physical treatments is very critical to making improved WPCs. The most abundant profiles made from wood–plastic composites are boards or lumber used in outdoor decking applications. Although early WPC products were mainly extruded for profiled sections, nowadays, many injected parts made of WPC are being introduced for various industries, including electrical casings, packaging, daily living supplies, and civil engineering applications. Mold and mildew and color fading of WPCs tend to be the durability issues of prime importance for WPCs. Most recent research on WPC durability focuses on studies to better understand the mechanisms contributing to various degradation issues as well as methods to improve durability. Most WPC products in the USA are utilized in building materials with few exceptions for residential and commercial building applications, which means that building codes are the most important national rules for the WPC manufacturers. New developments are being made especially in the area of nano additives for WPCs including nanocellulose. Recently, the trend of patent registrations for WPCs has shifted to new products or applications instead of the materials itself.

COST ESTIMATION

Plant Capacity	8400 Kgs/Day
Land & Building (4000 sq.mt)	Rs. 2 Cr
Plant & Machinery	Rs. 1.25 Cr
W. C. for 2 Months	Rs. 3.50 Cr
Total Capital Investment	Rs. 6.89 Cr
Rate of Return	37%
Break Even Point	44%

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RE-REFINING OF USED ENGINE/ LUBRICATIONG OILS [3387]

Now-a-days engine oil has become an important factor for automobile and other purposes and since the prices of all petroleum products have gone up. It has become extremely necessary to refine used engine oil which could be reused as original. Keeping this view Defense Research (Materials), Kanpur has developed a very simple process which envisages utilization of sulphuric acid, activated clay and filter aid as the raw materials and the suggested reclaimed economical unit for this industry is 200 tons per annum, and estimated capital outlay is Rs.1.5 lacs. Engine oil becomes contaminated with foreign material in service. In circulating systems, where a substantial quantity of oil is involved, it is desirable to maintain it as clean as possible to provide maximum working efficiency and to keep wear and damage of lubricated parts to a minimum. Reconditioning of a used oil may be accomplished by a continuous by pass or batch methods or combination of these. In the continuous system the entire amount of the oil from main pressure line is continuously filtered. In the bypass system a fraction of the total is continuously filtered.

COST ESTIMATION

Plant Capacity	28 MT/Day
Land & Building (1834 sq.mt)	Existing
Plant & Machinery	Rs. 1.50 Cr
W. C. for 1 Month	Rs. 3.99 Cr
Total Capital Investment	Rs. 5.60 Cr
Rate of Return	37%
Break Even Point	44%

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AGRO FOOD PROCESSING UNIT(FRUITS AND VEGETABLES PROCESSING) [3388]

The Indian food industry is poised for huge growth, increasing its contribution to world food trade every year. In India, the food sector has emerged as a high-growth and high-profit sector due to its immense potential for value addition, particularly within the food processing industry. Accounting for about 32 per cent of the country's total food market, The Government of India has been instrumental in the growth and development of the food processing industry. The government through the Ministry of Food Processing Industries (MoFPI) is making all efforts to encourage investments in the business. It has approved proposals for joint ventures (JV), foreign collaborations, industrial licenses, and 100 per cent export oriented units. The Indian food and grocery market is the world's sixth largest, with retail contributing 70 per cent of the sales. The Indian food processing industry accounts for 32 per cent of the country's total food market, one of the largest industries in India and is ranked fifth in terms of production, consumption, export and expected growth. It contributes around 8.80 and 8.39 per cent of Gross Value Added (GVA) in Manufacturing and Agriculture respectively, 13 per cent of India's exports and six per cent of total industrial investment. The Indian gourmet food market is currently valued at US$ 1.3 billion and is growing at a Compound Annual Growth Rate (CAGR) of 20 per cent. India's organic food market is expected to increase by three times by 2020#. The online food ordering business in India is in its nascent stage, but witnessing exponential growth. With online food delivery players like FoodPanda, Zomato, TinyOwl and Swiggy building scale through partnerships, the organized food business has a huge potential and a promising future. The online food delivery industry grew at 150 per cent year-on-year with an estimated Gross Merchandise Value (GMV) of US$ 300 million in 2016.

COST ESTIMATION

Plant Capacity	2 Ton/Day
Land & Building (12000 sq.mt)	Rs. 4.29 Cr
Plant & Machinery	Rs. 90.70 Lacs
W. C. for 1 Month	Rs. 32 Lacs
Total Capital Investment	Rs. 5.66 Cr
Rate of Return	14%
Break Even Point	67%

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QUICK LIME POWDER [3389]

Quicklime (or calcium oxide (CaO), or burnt lime, or unslaked lime), is obtained by calcining (controlled heating - time and temperature) limestone at temperatures above 900°C. This highly reactive product is essential to many industrial processes It is also known as caustic lime. It is obtained by calcination (i.e. heating to redness) of comparatively pure lime stone. It is amorphous in nature, highly caustic and possesses great affinity to moisture. Quicklime is also known as burnt lime. Quicklime (calcium oxide) is a white solid having a crystalline structure. Quicklime is highly reactive with water, generating considerable heat in the hydration process. It can be bought at masonry supply stores. Quicklime is the compound which is used commonly for whitewashing houses. The chemical name of quick lime or lime is calcium oxide. The chemical formula of quicklime is CaO.

COST ESTIMATION

Plant Capacity	300 MT./Day
Land & Building (20000 sq.mt)	Rs. 2.62 Cr
Plant & Machinery	Rs. 5.20 Cr
W. C. for 2 Months	Rs. 9.49 Cr
Total Capital Investment	Rs. 19.71 Cr
Rate of Return	69%
Break Even Point	49%

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STARCH PRODUCTION FROM SWEET POTATOES [3390]

Sweetpotato crop is grown for its sweet root tubers and mainly used as food after steaming, or boiling frying or baking. Sweet

potato is cultivated as starchy food crop in the tropical and subtropicalfrost free climatic regions. Due its high calorie content, sweet potato is being used as livestock feed. Sweet potato is popularly known as “Sakharkanda” in India. Sweet potato is an important source of starch, glucose, industrial alcohol and sugar syrup. Sweet potato is native to tropical America and belongs to the family of “Convolvulaceae” and genus of “Ipomoea”. Health benefits of Sweet Potato. • Sweet potato is a source of excellent fiber, • Sweet potato is a source of vitamins ‘B6’, ‘E’ and ‘C’, • Sweet potato is good for heart, • Sweet potato helps in controlling blood sugar due low glycemic Index, • Sweet potato helps in relieving stress, • Sweet potato has strong Immunity and anti-inflammatory properties, • Sweet potato is good for digestion, • Sweet potato helps in preventing cancer.

COST ESTIMATION

Plant Capacity	20 Ton/Day
Land & Building (20000 sq.mt)	Rs. 7.10 Cr
Plant & Machinery	Rs. 4 Cr
W. C. for 2 Months	Rs. 1.59 Cr
Total Capital Investment	Rs. 12.97 Cr
Rate of Return	28%
Break Even Point	52%

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ELECTROPLATING ON METALS [3391]

Electroplating is a reliable and fast deposition process through which an adherent metallic coating is obtained on a vast variety of metal surfaces. This process of applying protective & decorative coatings has so greatly advanced that properties, dimensions of coat and coating rates can be strictly controlled. Tin, Silver, Rhodium, Platinum, Palladium Zinc, Iridium, Lead, Gold, Nickel, Chromium, Copper, Brass & aluminum are the most used coatings on variety of metal substrates. Any metal & metal alloy product produced in industries can be provided with suitable protective/ decorative coating with the use of proper electrolyte bath, electroplating equipments & accessories, anodes/ cathodes and control instruments while discussing adherent coating, it is advisable to understand that electroformed adherent coating is obtained exclusively by electroplating while electro deposition coatings may include electroless plating and immersion processes too. It is remarkable that practical & technological phases of electroplating matured even before Faraday's laws of electrolysis was pronounced. Until World War-I, electroplating was considered an art. The then electroplaters did not bother to know even the fundamentals of electricity and chemical reactions that took place in the electroplating process. At that time, appearance & appeal of the electroplated surfaces were considered more important than the physical & chemical properties of the coat. It was around World War - II that close tolerances & rigidly specified properties converted electroplating into a technology from its art - status.

COST ESTIMATION

Plant Capacity	1000 SQM/Day
Land & Building (1000 sq.mt)	Rs. 89.50 Cr
Plant & Machinery	Rs. 49 Lacs
W. C. for 1 Month	Rs. 17.43 Lacs
Total Capital Investment	Rs. 1.63 Cr
Rate of Return	32%
Break Even Point	61%

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INDUSTRIAL GASES BOTTLING PLANT WITH VARIOUS GAS MIXTURES [3392]

Industrial gases are gaseous materials that are manufactured for use in Industry. The principal gases provided are nitrogen, oxygen, carbon dioxide, argon, hydrogen, helium and acetylene; although a huge variety of gases and mixtures are available in gas cylinders. The industry producing these gases is known as the industrial gases industry, which is seen as also encompassing the supply of equipment and technology to produce and use the gases. Their production is a part of the wider chemical Industry (where industrial gases are often seen as "specialty chemicals"). Industrial gases are used in a wide range of industries, which include oil and gas, petrochemicals, chemicals, power, mining, steelmaking, metals, environmental protection, medicine, pharmaceuticals, biotechnology, food, water, fertilizers, nuclear power, electronics and aerospace. Industrial gas is sold to other industrial enterprises; typically comprising large orders to corporate industrial clients, covering a size range from building a process facility or pipeline down to cylinder gas supply. Some trade scale business is done, typically through tied local agents who are supplied wholesale. This business covers the sale or hire of gas cylinders and associated equipment to tradesmen and occasionally the general public. This includes products such as balloon helium, dispensing gases for beer kegs, welding gases and welding equipment, LPG and medical oxygen. Retail sales of small scale gas supply are not confined to just the industrial gas companies or their agents. A wide variety of hand-carried small gas containers, which may be called cylinders, bottles, cartridges, capsules or canisters are available to supply LPG, butane, propane, carbon dioxide or nitrous oxide. Examples are Whipped-cream chargers, powerlets, campingaz and sodastream. The great importance of the industrial gas, oxygen is due to the usefulness of the acetylene torch for steel welding and steel cutting, and for the welding of other metals, to lesser degree to the oxyhydrogen flame. Oxygen gas in the breathing apparatus for a visitors at high altitudes and for oxygentents in hospitals is a high altitudes and for oxygentents in hospitals is a more recent development. An extension of the use of oxygen lies in the increased intensity and speed of reactions brought about by oxygen enriched air instead of ordinary air; the reduction of the cycle time so achieved in chemical or metallurgical process permits a greater yield per volume of equipment, and brings about lower costs. Oxygen as a raw material for synthesizing chemical compounds is in daily use (ethylene oxide, sodium peroxide). Liquid oxygen mixed with carbon black may yet become an important and cheap explosive.

COST ESTIMATION

Land & Building (8000 sq.mt)	Rs. 3.64 Cr
Plant & Machinery	Rs. 7 Cr
W. C. for 2 Months	Rs. 79.62 Lacs
Total Capital Investment	Rs. 19.34 Cr
Rate of Return	21%
Break Even Point	56%

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VENEER CUM PLYWOOD CUM MDF PLANT [3393]

The term `Plywood' covers a form of laminated wood in which successive layers of veneer are ordinarily cross laminated, the care of which may be veneer or sawn lumber in are piece several pieces. It is a high pressure bonded wood product composed of layers of waves with resin as the laminating agent. Plywood is a composite material, although we often consider it as a traditional working material. It is composed of individual plies / veneers of wood. It is very strong due to the way the plies are put together. The grain of each ply is positioned at ninety degrees to the pieces of ply above and below it. The plies are glued together with synthetic resin, making a very strong composite material. Furthermore, plywood is usually constructed so that an odd number of plies are used. Plywood is less likely to warp or split, due to this construction. Manmade boards of this type are supplied in a range of sizes and thicknesses. This is an advantage compared to natural woods, as manmade boards can be manufactured so that they are extremely wide. This makes plywood a popular material in the construction industry.

COST ESTIMATION

Land & Building (10000 sq.mt)	Rs. 9.82 Cr
Plant & Machinery	Rs. 10 Cr
W. C. for 1 Month	Rs. 6.12 Cr
Total Capital Investment	Rs. 26.82 Cr
Rate of Return	30%
Break Even Point	49%

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Start Your Own Industry

TMT BAR AND WIRE ROD [3394]

TMT bars or Thermo-Mechanically Treated bars are high-strength reinforcement bars having a tough outer core and a soft inner core. The very first step of the manufacturing process involves passing the steel wires through a rolling mill stand. Thereafter, these rolled steel wires are again passed through the Tempcore water cooling system. While passing the wires through the water cooling system, the water pressure is optimized. The sudden quenching and drastic change in temperature toughen the outer layer of the steel bar, thus making it super tough and durable. Once this process is over, the TMT bars are subject to atmospheric cooling. This is done in order to equalise the temperature difference between the soft inner core and the tough exterior. Once the TMT bar cools down, it slowly turns into a ferrite-pearlite mass. The inner core remains soft giving the TMT bar great tensile strength and elongation point. This design is unique to the TMT bars and gives superior ductility to the bars. Also, this unique manufacturing technique and the absence of Cold stress make this bar corrosion-resistant and boost its weldability. This same manufacturing process is used to manufacture high-quality SRMB TMT bars. This delivers greater tensile strength to the TMT bars. The most important features of SRMB TMT bar include higher elongation. This improves the bend/re-bend properties or the TMT bars, thus making it safe from natural calamities such as an earthquake. The Thermal stability of SRMB TMT bars is high which makes them safe from any fire accidents. The special ribbed design of the SRMB TMT bars form a stronger bond with the concrete or cement, thus, provides additional support and strength to the building structure and improves their longevity and durability. The high tensile strength and flexibility make SRMB TMT bars the ultimate choice for earthquake-prone zones. SRMB TMT bars have greater shock-absorbing capacity when compared to other TMT bars. This prevents the collapse of a building during an earthquake and ensures the longevity of the structure. Compared to ordinary steel bars, the same quantity of TMT bars can provide 20% additional strength to the structure. Other SRMB products include AZAR Bars (Zinga coated TMT bars), De-formed TMT bars, and De-formed corrosion resistant TMT bars.

COST ESTIMATION

Plant Capacity	600 MT./Day
Land & Building (12000 sq.mt)	Rs. 10.32Cr
Plant & Machinery	Rs. 14.98 Cr
W. C. for 1 Month	Rs. 58.37 Cr
Total Capital Investment	Rs. 85.31 Cr
Rate of Return	61%
Break Even Point	30%

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GREEN HOUSE CONSTRUCTION AND ASSEMBLING [3235]

Green house are frequently used to control or modify the exciting enviornmental factor which effects the plant growth. If the enviornmental parameter are controlled, crops can be produced for specific market dates and the quality maintained by eliminating many of the variation and hazards associated with weather Temperature can be regulated with varying degree of precision damage from wind and rain are avoided. Secondly the injury from plant diseases and insect is reduced but not completely eliminated. Growing media, moisture content and fertility levels can be adjusted to meet plant requirement. The precision with which the environment is regulated is determined by the ability of the grower to manage the green houses equipment and control.

COST ESTIMATION (US$ DOLLAR)

Land & Building (8 Acres)	US$ 19.40 Lacs
Plant & Machinery	US$ 3.65 Lacs
W.C. for 3 Months	US$ 1.17 Lacs
Total Capital Investment	US$ 25.54 Lacs
Rate of Return	19%
Break Even Point	60%

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FRUIT JUICE OF DIFFERENT CATEGORY [3234]

Packaged juice market has charted a high growth trajectory, thanks to its easy availability, anytime - anywhere consumption and convenience. Within the beverages market, the fruit-based beverages category is one of the fastest growing categories, and has grown at a CAGR of over 30 percent over the past decade. As of March 2013, the Indian packaged juices market was valued at Rs 1,100 crore (~USD 200 million) and projected to grow at a CAGR of ~15 percent over the next three years. The packaged fruit juices market can be divided into three sub-categories: fruit drinks, juices, and nectar drinks. Fruit drinks, which have a maximum of 30 percent fruit content, are the highest-selling category, with a 60 percent share of the market. Frooti, Jumpin, Maaza, etc. are the most popular products in this category. Fruit juices, on the other hand, are 100 percent composed of fruit content, and claim a 30 percent market share at present. In contrast, nectar drinks have between 25 and 90 percent fruit content, but account for only about 10 percent of the market. The rising number of health-conscious consumers is giving a boost to fruit juices; it has been observed that consumers are shifting from fruit-based drinks to fruit juices as they consider the latter a healthier breakfast/snack option. Dabur is the market leader in the Indian packaged juices market with its brands Real and Real Activ. Other players include Parle, Fresh Gold, and Godrej. Some of the other brands of fruit juices and drinks include Frooti, Appy, Mazza, Minute Maid, Slice, Fresh Gold, and Del Monte. Considering the attractiveness of the segment, diversified consumer food companies such as ITC are working towards making a foray into packaged juices.

COST ESTIMATION

Plant Capacity	4000 Ltr/Day
Land & Building (2000 sq.mt)	Rs. 2.66 Cr
Plant & Machinery	Rs. 1.51 Cr
W.C. for 2 Months	Rs. 1.81 Cr
Total Capital Investment	Rs. 6.13 Cr
Rate of Return	39%
Break Even Point	43%

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POLYETHYLENE BOTTLE MANUFACTURING UPTO 2 LTRS. [3233]

Well over 80 million tones of poly(ethene), often known as polyethylene and polythene, is manufactured each year making it the world's most important plastic. This accounts for over 60% of the ethene manufactured each year. Poly(ethene) is produced in three main forms: low density (LDPE) (< 0.930 g cm-3) and linear low density (LLDPE) (ca 0.915-0.940 g cm-3) and high density (HDPE) (ca0.940-0.965 g cm-3). The LDPE or LLDPE form is preferred for film packaging and for electrical insulation. HDPE is blow-moulded to make containers for household chemicals such as washing-up liquids and drums for industrial packaging. It is also extruded as piping.

COST ESTIMATION

Plant Capacity	4800 Bottles/Day
Land & Building (1000 sq.mt)	Rs. 1.23 Cr
Plant & Machinery	Rs. 75 Lacs
W.C. for 2 Months	Rs. 31.66 Lacs
Total Capital Investment	Rs. 2.36 Cr
Rate of Return	19%
Break Even Point	67%

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CERAMIC TILES FACTORY [3232]

Tiles have been used as surfacing for walls and floors for thousands of years because of their beauty and durability. They have been produced in most of the countries of the world because of the abundance of the raw materials and the simplicity of the manufacturing technology. These two factors, together with the employment, generating capacity of this labour - intensive industry have attracted the interest of developing countries. The term 'ceramic' is normally applied to products made of clay. Clay is a general name for all earths that form

a paste when mixed with appropriate amounts of water and that harden when heated. Most clays are composed of silica and alumina while kaolins are their purest forms. Wall and floor tiles are formed by pressing higher grades of clay after blending them with flint, feldspar and talc. Ceramic tiles are classified under two headings. (i) Unglazed ceramic sets, flag and paving, hearth wall tiles. (ii) Glazed ceramic sets, flay and paving, hearth wall tiles. Unglazed stets, flag and paving, hearth and wall tiles:- This heading covers ceramic stets, flags and tiles commonly for paving or for facing walls hearth etc., provided that they unglazed. Flags and paving, hearth and wall tiles are thinner in relation to their surface dimensions than are building bricks. Whereas bricks play an essential part in construction work, forming the very framework of the building, flags and tiles are more especially intended for setting in cement on the surface of existing wall, etc. They also differ from roofing tiles in that they are usually flat and do not need to be pierced or provided with the nibs or otherwise shaped for interlocking and that they are designed to be placed side by side without overlapping. Flags are larger than tiles and are usually rectangular; tiles may be of other geometric shapes (hexagonal, Octagonal, etc.). Tiles are mainly used for facing walls, mantelpieces, hearth, floors and paths, flags are more especially used for paving or flooring or as hearth slabs. In general unglazed tile may be defined as a hard, dense tile of uniform composition throughout, deriving colour and texture from the materials of which the body is made. Glazed stets, flags and paving, hearth and wall tiles: This heading covers tiles, flags and stets that have been glazed, frequently after some form of decoration. For the purpose of this heading, the term "glazing" includes salt glazing (i.e. spraying the goods with salt during the firing to produce a vitreous glaze), as well as methods using the enamels, glazes, etc. Glazed tiles may be defined as a tile with a fused impervious facial finish composed of ceramic materials, fused to the body of the tile which may be non-vitreous, semi-vitreous, vitreous or impervious. Ceramics industry in India is about 100 year old and has by now formed a sizable industrial base. In fact the industry has been growing at the rate of 10 to 15/- per annum. Ceramic arts and crafts are age-old professions in India. With the impact of modern science and technology, these traditional arts have grown into an important industrial occupation for a large number of our people. Over the years, the ceramic and allied industries of our country have witnessed great changes, both in the quality and quantity of products manufactured, and today these industries play a vital role in the country's industrial and socio-economic-progress.

COST ESTIMATION

Plant Capacity	1500 Boxes/Day
Land & Building (4000 sq.mt)	Rs. 2.07 Cr
Plant & Machinery	Rs. 3 Cr
W.C. for 2 Months	Rs. 1.85 Cr
Total Capital Investment	Rs. 7.07 Cr
Rate of Return	25%
Break Even Point	62%

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LED LIGHTS (HOME AND STREET LIGHTS) ASSEMBLY/ MANUFACTURING PLANT [3231]

Light emitting diode (LED) is a semiconducting device that emits light when electrical current is applied to the device. LEDs are said to be the future light source because of their low energy usage and efficiency. The advantages of LEDs are that they are very robust, have a very long lifetime or up to 50,000 hours, they are easily dimmable and fail by dimming over time, rather than burn off like incandescent light bulbs. LEDs cause less glare irritation because of the smaller beam angle of the luminaire. LEDs are very common as indicator lights in electrical equipment and recently in higher power applications such as flashlights and artificial lighting. The colour of the light depends on the composition and condition of the semiconducting material used. It can be infrared, visible or ultraviolet. Blue, green and red LEDs can be used to produce most perceptible colours, including white.

COST ESTIMATION

Plant Capacity	1623 Nos/Day
Land & Building (600 sq.mt)	Rs. 43.50 Lac
Plant & Machinery	Rs. 2.93 Lacs
W.C. for 2 Months	Rs. 1.95 Cr
Total Capital Investment	Rs. 2.54 Cr
Rate of Return	107%
Break Even Point	24%

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SOLAR LEAD ACID BATTERY [3229]

The lead acid-battery is the most commonly used in solar power system applications. Lead Acid Storage Batteries is an electro-chemical system that converts electrical energy into direct current electricity. It is also known as storage batteries and has wide applications in Automobiles, UPS/Inverters, Traction/Electrical Sub-Station, Telecommunication, Solar Photovoltaic system etc.

COST ESTIMATION

Plant Capacity	1025 Nos/Day
Land & Building (9000sq.mt)	Rs. 7.28 Cr
Plant & Machinery	Rs. 3.45 Cr.
W.C. for 2 Months	Rs. 15.37 Cr.
Total Capital Investment	Rs. 26.63 Cr.
Rate of Return	25%
Break Even Point	56%

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RUBBER HOSE PIPE [3228]

Actually Hose is a super pier and is used where rigid pipe can not go in practice. The Hoses are very popular, because these are the most convenient and flexible means for transportation of fluides, hoses and steam even at high pressure. All their property of Inertness to most of materials which are conveyed keeping the physical and chemical property same. The variety of hoses made is very large, since hose is specially made for such applications. A practical list of type include air, acid, beverage, chemical creamery, water spray paint, gas Hose pipe. Hoses, in fact are used for the transportation of fluid where pressure is present at high rate. Generally at low pressure rubber tubing is used. Gouses have wide range of applications. Another simple type of hose is produced on Barding or weaving cards or threads into tube or sewing strips of cotton duck into a tubular form.

COST ESTIMATION

Plant Capacity	100 Pieces/Day
Land & Building (1000 sq.mt)	Rs. 1.01 Cr
Plant & Machinery	Rs. 22.55 Lacs
W.C. for 2 Months	Rs. 22.12 Lacs
Total Capital Investment	Rs. 1.50 Cr
Rate of Return	22%
Break Even Point	62%

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SOLAR WATER HEATER MANUFACTURING PLANT [3227]

A Solar Water Heater is a device that uses solar energy to heat water for domestic, commercial, and industrial needs. Heating of water is the most common application of solar energy in the world. A typical solar water heating system can save up to 1500 units of electricity every year, for every 100 litres per day of solar water heating capacity The Sun's rays fall on the collector panel (a component of solar water heating system). A black absorbing surface (absorber) inside the collector absorbs solar radiation and transfers the heat energy to water flowing through it. Heated water is collected in a tank which is insulated to prevent heat loss. Circulation of water from the tank through the collectors and back to the tank continues either automatically due to thermo siphon effect or through a circulation pump.

COST ESTIMATION

Plant Capacity	3 Nos/Day
Land & Building (2500 sq.mt)	Rs. 2.07 Cr
Plant & Machinery	Rs. 45.70 Lacs
W.C. for 2 Months	Rs. 1.40 Cr
Total Capital Investment	Rs. 4.19 Cr
Rate of Return	39%
Break Even Point	53%

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Top Industries to Start

PV PANELS MANUFACTURING PLANT [3226]

Solar Panels are in general Silicon made Rectangular Shaped Glass Covered Products which Produce Electricity when exposed to the Sun. These Panels produce Direct Current (DC) Electricity which has to be converted by a Solar Inverter to Alternating Current (AC) Electricity to be used by Consumers Solar PV panel refers to a panel designed to absorb the sun's rays as a source of energy for generating electricity. A photovoltaic (in short PV) module is a packaged, connect assembly of typically 6×10 solar cells. Solar Photovoltaic panels constitute the solar array of a photovoltaic system that generates and supplies solar electricity in commercial and residential applications. Each module is rated by its DC output power under standard test conditions, and typically ranges from 100 to 365 watts A single solar module can produce only a limited amount of power; most installations contain multiple modules. A photovoltaic system typically includes a panel or an array of solar modules, a solar inverter, and sometimes a battery and/or solar tracker and interconnection wiring. The price of solar power, together with batteries for storage, has continued to fall so that in many countries it is cheaper than ordinary fossil fuel electricity from the grid (there is "grid parity")., Solar panel refers to a panel designed to absorb the sun's rays as a source of energy for generating electricity or heating. A photovoltaic (PV) module is a packaged, connect assembly of typically 6×10 solar cells. Solar Photovoltaic panels constitute the solar array of a photovoltaic system that generates and supplies solar electricity in commercial and residential applications. Each module is rated by its DC output power under standard test conditions, and typically ranges from 100 to 365 watts. A photovoltaic cell is a specialized semiconductor diode electronic device that converts light energy into electrical energy. Solar Cell converts light energy into the electrical energy. A solar cell is basically a p-n junction diode. It utilizes photovoltaic effect to convert light energy into electrical energy. Although this is basically a junction diode, but constructionally it is little bit different form conventional p-n junction diode. A very thin layer of p-type semiconductor is grown on a relatively thicker n-type semiconductor. We provide few finer electrodes on the top of the p-type semiconductor layer. These electrodes do not obstruct light to reach the thin p-type layer. Just below the p-type layer there is a p-n junction. We also provide a current collecting electrode at the bottom of the n-type layer. We encapsulate the entire assembly by thin glass to protect the solar cell from any mechanical shock.

COST ESTIMATION

Plant Capacity	84 KW/Day
Land & Building (4000 sq.mt)	Rs. 3.22 Cr
Plant & Machinery	Rs. 2.63 Cr
W.C. for 2 Months	Rs. 9.70 Cr
Total Capital Investment	Rs. 15.94 Cr
Rate of Return	90%
Break Even Point	26%

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AAC BLOCK MANUFACTURING PLANT [3225]

Autoclaved aerated concrete is a versatile lightweight construction material and usually used as blocks. Compared with normal (ie: "dense" concrete) aircrete has a low density and excellent insulation properties. The low density is achieved by the formation of air voids to produce a cellular structure. These voids are typically 1mm-5mm across and give the material its characteristic appearance. Blocks typically have strengths ranging from 3-9 Nmm-2 (when tested in accordance with BS EN 771-1:2000). Densities range from about 460 to 750 kg m-3; for comparison, medium density concrete blocks have a typical density range of 1350-1500 kg m-3 and dense concrete blocks a range of 2300-2500 kg m-3. Autoclaved aerated concrete blocks are excellent thermal insulators and are typically used to form the inner leaf of a cavity wall. They are also used in the outer leaf, when they are usually rendered, and in foundations. It is possible to construct virtually an entire house from autoclaved aerated concrete, including walls, floors - using reinforced aircrete beams, ceilings and the roof. Autoclaved aerated concrete is easily cut to any required shape. Aircrete also has good acoustic properties and it is durable, with good resistance to sulfate attack and to damage by fire and frost.

COST ESTIMATION

Plant Capacity	50 Cubic mtr/Day
Land & Building (4000 sq.mt)	Rs. 1.88Cr.
Plant & Machinery	Rs. 1.21 Cr.
W.C. for 1 Month	Rs. 55.54 Lacs
Total Capital Investment	Rs. 3.74 Cr.
Rate of Return	21%
Break Even Point	66%

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COFFEE ROASTING OF GREEN COFFEE BEANS [3224]

Coffee is a beverage made by grinding roasted coffee beans and allowing hot water to flow through them. Dark, flavorful, and aromatic, the resulting liquid is usually served hot, when its full flavor can best be appreciated. Coffee is served internationally—with over one third of the world's population consuming it in some form, it ranks as the most popular processed beverage—and each country has developed its own preferences about how to prepare and present it. For example, coffee drinkers in Indonesia drink hot coffee from glasses, while Middle Easterners and some Africans serve their coffee in dainty brass cups. The Italians are known for their espresso, a thick brew served in tiny cups and made by dripping hot water over twice the normal quantity of ground coffee, and the French have contributed café au lait, a combination of coffee and milk or cream which they consume from bowls at breakfast. A driving force behind coffee's global popularity is its caffeine content: a six-ounce (2.72 kilograms) cup of coffee contains 100 milligrams of caffeine, more than comparable amounts of tea (50 milligrams), cola (25 milligrams), or cocoa (15 milligrams). Caffeine, an alkaloid that occurs naturally in coffee, is a mild stimulant that produces a variety of physical effects. Because caffeine stimulates the cortex of the brain, people who ingest it experience enhanced concentration. Athletes are sometimes advised to drink coffee prior to competing, as caffeine renders skeletal muscles less susceptible to exhaustion and improves coordination. However, these benefits accrue only to those who consume small doses of the drug. Excessive amounts of caffeine produce a host of undesirable consequences, acting as a diuretic, stimulating gastric secretions, upsetting the stomach, contracting blood vessels in the brain (people who suffer from headaches are advised to cut their caffeine intake), and causing overacute sensation, irregular heartbeat, and trembling.

COST ESTIMATION

Plant Capacity	2000 Kgs/Day
Land & Building (800 sq.mt)	Rs. 1.20Cr
Plant & Machinery	Rs. 85 Lacs
W.C. for 1 Month	Rs. 1.92 Cr
Total Capital Investment	Rs. 4.06 Cr
Rate of Return	26%
Break Even Point	53%

****

MANUFACTURING PLANT FOR CHAPATI, THEPLA AND OTHER SNACKS (CHAKRI, PURI AND KHAKHRA) [3223]

Dry Snacks or Namkeen products are in demand from over many years in India and are being exporting to many countries. Dal Moth, Chanachur & Bhujia are the important names enhancing the flavour & taste as processed foods. The market of these products are good.

COST ESTIMATION

Land & Building (450sq.mt)	Rs. 57.70Lacs
Plant & Machinery	Rs. 49.50 Lacs
W.C. for 2 Months	Rs. 49.61 Lacs
Total Capital Investment	Rs. 1.59 Cr
Rate of Return	36%
Break Even Point	52%

****

Best Industries to Start and Grow

BAMBOO PLYWOOD MANUFACTURE [3222]

Bamboo flooring and bamboo board are the newest and most revolutionary products in woodworking industry. Bamboo sticks are made from the bamboo pole, then hydraulically laminated under high heat and pressure; the resulting boards are then sanded, moulded and finished similar to wood flooring finished product is protected against fungus and insects. Bamboo flooring and bamboo board is found to be superior to most hardwoods in terms of hardness, stability and fire resistance. Bamboo board has the additional advantage of being made from an abundant, renewable natural resderce bamboo. Unlike trees, which take decades to replace, bamboo groves fully rejuvenate within several years. The specialized machinery used for making bamboo flooring, paneling and boards from the raw bamboo to the finished product, includes bamboo cutting, splitting, drying, sizing, gluing, pressing, planning moulding, sandingand UV curing. Bamboo flooring is used for living rooms, bedrooms, dining rooms, offices, restaurants, hotels, apartments etc.

COST ESTIMATION

Plant Capacity	10 Cubic Mtrs./Day
Land & Building (2000 sq.mt)	Rs. 1.03Cr
Plant & Machinery	Rs. 1.25 Cr
W.C. for 1 Month	Rs. 95.35 Lacs
Total Capital Investment	Rs. 3.31 Cr
Rate of Return	36%
Break Even Point	52%

****

MONO SODIUM GLUTAMATE THROUGH STARCH AS RAW MATERIAL [3221]

Monosodium glutamate (MSG, also known as sodium glutamate) is the sodium salt of glutamic acid, one of the most abundant naturally occurring non-essential amino acids. Monosodium glutamate is found naturally in tomatoes, cheese and other foods. MSG is used in the food industry as a flavor enhancer with an umami taste that intensifies the meaty, savory flavor of food, as naturally occurring glutamate does in foods such as stews and meat soups. It was first prepared in 1908 by Japanese biochemist Kikunae Ikeda, who was trying to isolate and duplicate the savory taste of kombu, an edible seaweed used as a base for many Japanese soups. MSG as a flavor enhancer balances, blends, and rounds the perception of other tastes. The U.S. Food and Drug Administration has given MSG its generally recognized as safe (GRAS) designation. A popular belief is that large doses of MSG can cause headaches and other feelings of discomfort, known as "Chinese restaurant syndrome," but double-blind tests fail to find evidence of such a reaction. The European Union classifies it as a food additive permitted in certain foods and subject to quantitative limits. MSG has the HS code 29224220 and the E number E621. Pure MSG is reported not to have a pleasant taste until it is combined with a savory aroma. The basic sensory function of MSG is attributed to its ability to enhance savory taste-active compounds when added in the proper concentration. The optimum concentration varies by food; in clear soup, the pleasure score rapidly falls with the addition of more than one gram of MSG per 100 mL. The sodium content (in mass percent) of MSG, 12%, is about one-third of that in sodium chloride (39%), due to the greater mass of the glutamate counterion. Although other salts of glutamate have been used in low-salt soups, they are less palatable than MSG.

COST ESTIMATION

Plant Capacity	20,000 MT/Annum
Land (10,000 sq.mt)	Rs. 4.40 Cr
Plant & Machinery	Rs. 6.50 Cr
W.C. for 1 Month	Rs. 14.15 Cr
Total Capital Investment	Rs. 25.39 Cr
Rate of Return	19%
Break Even Point	57%

****

ACTIVATED ALUMINA BALLS [3220]

Activated alumina balls are highly capable of adsorbing moisture and water vapors from the applications where air purification is must to obtain the clean product. These balls are produced by heating the aluminum oxide to the high temperature. These balls are odorless, non-toxic, insoluble in water and tasteless that makes this desiccant an ideal choice for several applications used in petrochemical and acid industry. They are helpful in drying of cracked gas, ethylene, propylene, hydrogen and others. They have the ability to adsorb polluted materials as well such as hydrogen sulphide, sulphur oxide, hydrogen fluoride. They are available in different types of sizes which can be used based on the requirements of the particular application and the moisture capacity. Activated alumina balls are perfect desiccant for variety of applications where high moisture adsorption is required. They act as a powerful air drying desiccants which are commonly used for air drying, separation and purification of number of industrial applications. The industries include chemical, petrochemical, air and gas, fertilizer etc. These balls have the tendency of never to shrink, swell or become soften when they adsorbed the water. They are work efficiently in preserving the products from damaging effects of humidity, mold or constructional flaws of leakage etc. They are highly demanding due to the unmatched quality and features that make this desiccant a

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COST ESTIMATION

Plant Capacity	30 MT/Day
Land & Building (5000 sq.mt)	Rs. 4.99 Cr
Plant & Machinery	Rs. 7.39 Cr
W.C. for 2 Months	Rs. 5.45 Cr
Total Capital Investment	Rs.18.70 Cr
Rate of Return	32%
Break Even Point	69%

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OXYGEN CYLINDER GAS FILLING PLANT [3377]

Oxygen, the gaseous element that constitutes 20.946% of the earth's, atmosphere, is essential to respiration and life in all animals and to most forms of vegetation. Oxygen supports the combustion of feels which supply mankind with heat, light and power, and it enters into oxidative Combination with many materials. The speed of reaction and effectiveness of combination increases with oxygen concentrations greater than that of air Industry has established 99.5% purity for the bulk commercial product. The great importance of the industrial gas, oxygen is due to the usefulness of the acetylene torch for steel welding and steel cutting, and for the welding of other metals, to lesser degree to the oxyhydrogen flame. Oxygen gas in the breathing apparatus for a visitors at high altitudes and for oxygentents in hospitals is a high altitudes and for oxygentents in hospitals is a more recent development.

COST ESTIMATION

Plant Capacity	8 MT/Day
Land & Building (8000 sq.mt)	Rs. 4.25 Cr
Plant & Machinery	Rs. 4 Cr
W.C. for 3 Months	Rs. 91.72 Lacs
Total Capital Investment	Rs. 12.51 Cr
Rate of Return	15%
Break Even Point	67%

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LATTICE STEEL TOWER FABRICATION FACTORY [3378]

A lattice tower, also called angle steel tower or electrical tower, is one kind of freestanding framework tower for power transmission line of all voltages, often designed as a space frame or a hyperboloid structure. They are widely used as an electricity transmission towers especially for voltages above 100 kilovolts, being as a self-radiating tower or a carrier of aerials, even an observation tower. Lattice steel towers comprise of several different metal structural elements linked as well as products or welded. A variety of types of lattice steel towers exist. These towers may also be called self supporting transmission towers or free-standing systems, due to their power to help themselves. These systems are not always made from steel; they can also be made from aluminum or galvanized steel. Lattice steel towers are made up of many different steel structural components connected together with bolts or welded. Many different types of lattice steel towers exist. These towers are also called self-supporting transmission towers or free-standing towers, due to their ability to support themselves. Lattice towers provide the advantage of a smaller cost investment compared to others, since they use about half as much material as tubular towers.

COST ESTIMATION

Plant Capacity	100 MT/Day
Land (15000 sq.mt)	Rs. 10.52 Cr
Plant & Machinery	Rs. 5.01 Cr
W.C. for 2 Months	Rs. 23.20 Cr
Total Capital Investment	Rs. 39.31 Cr
Rate of Return	33%
Break Even Point	41%

****

ICING SUGAR MANUFACTURE [3379]

Powdered sugar, also called confectioners' sugar, icing sugar, and icing cake, is a finely ground sugar produced by milling granulated sugar into a powdered state. It usually contains a small amount of anti-caking agent to prevent clumping and improve flow. Although most often produced in a factory, powdered sugar can also be made by processing ordinary granulated sugar in a coffee grinder, or by crushing it by hand in a mortar and pestle. Powdered sugar is utilized in industrial food production when a quick-dissolving sugar is required. Home cooks use it principally to make icing or frosting and other cake decorations. It is often dusted onto baked goods to add a subtle sweetness and delicate decoration. Powdered sugar is available in varying degrees of fineness,

COST ESTIMATION

Plant Capacity	2000 Kgs/Day
Land & Building (800 sq.mt)	Rs. 1.19 Cr
Plant & Machinery	Rs. 15 Lacs
W.C. for 2 Months	Rs. 46.27 Lacs
Total Capital Investment	Rs. 1.86 Cr
Rate of Return	19%
Break Even Point	66%

****

ORTHOPAEDIC IMPLANTS AND INSTRUMENTS (PLATES & SCREWS) [3380]

Orthopedic implants can be defined as medical devices used to replace or provide fixation of bone or to replace articulating surfaces of a joint. In simpler words, orthopedic implants are used to replace damaged or troubled joints. The implant surgeries are performed only by highly specialized and trained surgeons. The surgical procedures for each implant involves removal of the damaged joint and an artificial prosthesis replacement. Orthopedic implants are mainly made from stainless steel and titanium alloys for strength and lined with plastic to act as artificial cartilage.

COST ESTIMATION

Land & Building (1500 sq.mt)	Rs. 2.25 Cr
Plant & Machinery	Rs. 11.10 Cr
W.C. for 2 Months	Rs. 1.71 Cr
Total Capital Investment	Rs. 16.07 Cr
Rate of Return	36%
Break Even Point	50%

****

CABLE LUGS MANUFACTURING (ALUMINIUM AND COPPER) [3382]

Cable lugs are the devices used for connecting cable and wire conductors in electrical installations and equipment. These are used when permanent, direct fastening methods are not feasible or necessary. In general, lugs are fixed to cables and wires by inserting the conductor/s into the barrel (tube) of the device and then barrel is crimped, soldered or welded onto the conductor for secure mechanical and electrical joint. A cable lug also serves as a cable-size reducer, thereby allowing thick cables to be attached to a connector with a smaller diameter. Cable lugs are devices used for connecting cables to electrical appliances, other cables, surfaces, or mechanisms.

COST ESTIMATION

Plant Capacity	400 Kg/Day
Land & Building (500 sq.mt)	Rs. 84.50Lac
Plant & Machinery	Rs. 28.95 Lacs
W.C. for 2 Months	Rs. 1.07 Cr
Total Capital Investment	Rs. 2.34 Cr
Rate of Return	33%
Break Even Point	55%

****

PAN MASALA (RAJNIGANDHA TYPE) WITH FORMULATIONS [3413]

Pan masala tobacco is the refined tobacco with catechu, chuna, flavouring agents and perfumery compounds etc. It refreshens the mouth and gives the feeling of cold in throat when taken in small amount. Pan Masala tobacco is chewed either with pan or directly without any other thing. Zarda of various grades, specified by different numbers, constitutes different proportions of zarda in tobacco. The higher the grade number of zarda panmasala, the higher it will contain zarda content. Zarda if taken in high dose is injurious to health and gives the feeling of laziness and unconsciousness.

COST ESTIMATION

Plant Capacity	1,00,000 Pouches/Day
Land & Building (6000 Sq.ft)	Rs. 1.34 Cr
Plant & Machinery	Rs. 75.00 Lacs
W.C. for 2 Months	Rs. 4.51 Cr
Total Capital Investment	Rs. 6.72 Cr
Rate of Return	26%
Break Even Point	48%

****

Best Industries to Start and Grow

PET PREFORMS AND CLOSURES FOR WATER, BEVERAGES AND EDIBLE OILS PACKING, SHRINK FILM (COLLATION FILM) & STRETCH FILM (INTEGRATED UNIT) [3383]

Stretch wrap or stretch film is a highly stretchable plastic film that is wrapped around items. The elastic recovery keeps the items tightly bound. In contrast, shrink wrap is applied loosely around an item and shrinks tightly with heat. It is frequently used to unitize pallet loads but also may be used for bundling smaller items. Types of stretch film include bundling stretch film, hand stretch film, extended core stretch film, machine stretch film and static dissipative film. The most common stretch wrap material linear low-density polyethylene or LLDPE, which is produced by copolymerization of ethylene with alpha-olefins, the most common of which are butene, hexene and octene. The use of higher alpha-olefins (hexene or octene) gives rise to enhanced stretch film characteristics, particularly in respect of elongation at break and puncture resistance. Other types of polyethylene and PVC can also be used. Many films have about 500% stretch at break but are only stretched to about 100 – 300% in use. Once stretched, the elastic recovery is used to keep the load tight. There are two methods of producing stretch wrap.

COST ESTIMATION

Land & Building (7500 sq.mt)	Rs. 9.75 Cr
Plant & Machinery	Rs. 58.95 Cr
W. C. for 1 Month	Rs. 23.63 Cr
Total Capital Investment	Rs. 97.88 Cr
Rate of Return	22%
Break Even Point	56%

****

N.C. PUTTY FOR AUTOMOBILE [3384]

The manufacture of automobile finishes is a highly specialized and versatile field. Automobile finished should have good durability, high gloss and attractive colours at lowest possible cost. The excellence in appearance of coating is an important criteria. For a paint formulator good appearance means smoothness, uniform and high gloss and brilliant colour and pattern of the finish. For having maximum smoothness in appearance the top coat which is responsible for this characteristic should be based on a resin which atomizes very easily on spraying and the atomized droplets coalesce into uniform continuous and levelled films. The films should have no haziness due flocculation of pigments, the solvents should be compatable and rate of evaporation of solvents should be such that no blushing occurs. The paint film should have good strength, adhesion and durability. The film should not loose gloss, and no peeling , chalking, cracking or blistering of film should take place. There should be no fading of colour. The film should have desired level of adhesive, flexibility, elasticity and impact resistance. The surface of metals is pretreated with a substrate to deposit a layer of a compound which is adherent, uniform and has finely grained crystal type surface.

COST ESTIMATION

Plant Capacity	1000 Kgs/Day
Land & Building (600 sq.mt)	Rs. 74 Lacs
Plant & Machinery	Rs. 15 Lacs
W. C. for 2 Months	Rs. 57.49 Lacs
Total Capital Investment	Rs. 1.51 Cr
Rate of Return	21%
Break Even Point	63%

****

EPOXY COATED TMT BARS (SARIYA) [3385]

TMT bars or Thermo-Mechanically Treated bars are high-strength reinforcement bars having a tough outer core and a soft inner core. The very first step of the manufacturing process involves passing the steel wires through a rolling mill stand. Thereafter, these rolled steel wires are again passed through the Tempcore water cooling system. While passing the wires through the water cooling system, the water pressure is optimised. The sudden quenching and drastic change in temperature toughen the outer layer of the steel bar, thus making it super tough and durable. Once this process is over, the TMT bars are subject to atmospheric cooling. This is done in order to equalise the temperature difference between the soft inner core and the tough exterior. Once the TMT bar cools down, it slowly turns into a ferrite-pearlite mass. The inner core remains soft giving the TMT bar great tensile strength and elongation point. This design is unique to the TMT bars and gives superior ductility to the bars. Also, this unique manufacturing technique and the absence of Cold stress make this bar corrosion-resistant and boost its weldability.

COST ESTIMATION

Plant Capacity	100 MT/Day
Land & Building (12000sq.mt)	Rs. 8.29Cr
Plant & Machinery	Rs. 20.43 Cr
W. C. for 2 Months	Rs. 14 Cr
Total Capital Investment	Rs. 44.98 Cr
Rate of Return	38%
Break Even Point	53%

****

WPC (PLASTIC COMPOSITE) BOARD LINE MANUFACTURING [3386]

Wood–plastic composites (WPCs) are a form of composite combining wood-based elements with polymers. The processes for manufacturing WPCs include extrusion, injection molding, and compression molding or thermoforming (pressing). Newer manufacturing processes for WPCs include additive manufacturing via fused layer modeling and laser sintering. An important constraint for polymers used in WPCs is requiring process conditions (melt temperature, pressure) that will not thermally degrade the wood filler. Wood degrades around 220 °C; thus, general-purpose polymers like polyethylene and poly vinyl chloride are typically used for manufacturing WPCs. Wood fibers are inherently hydrophilic because of the hydroxyl groups contained in the cellulose and hemicellulose molecular chains. Thus, modification of the wood fiber via chemical or physical treatments is very critical to making improved WPCs. The most abundant profiles made from wood–plastic composites are boards or lumber used in outdoor decking applications.

COST ESTIMATION

Plant Capacity	8400 KGS/Day
Land & Building (4000 sq.mt)	Rs. 2 Cr
Plant & Machinery	Rs. 1.25 Cr
W. C. for 2 Months	Rs. 3.50 Cr
Total Capital Investment	Rs. 6.89 Cr
Rate of Return	37%
Break Even Point	44%

****

RE-REFINING OF USED ENGINE/ LUBRICATIONG OILS [3387]

Now-a-days engine oil has become an important factor for automobile and other purposes and since the prices of all petroleum products have gone up. It has become extremely necessary to refine used engine oil which could be reused as original. Keeping this view Defense Research (Materials), Kanpur has developed a very simple process which envisages utilization of sulphuric acid, activated clay and filter aid as the raw materials and the suggested reclaimed economical unit for this industry is 200 tons per annum, and estimated capital outlay is Rs.1.5 lacs. Engine oil becomes contaminated with foreign material in service. In circulating systems, where a substantial quantity of oil is involved, it is desirable to maintain it as clean as possible to provide maximum working efficiency and to keep wear and damage of lubricated parts to a minimum. Reconditioning of a used oil may be accomplished by a continuous by pass or batch methods or combination of these.

COST ESTIMATION

Plant Capacity	28 MT/Day
Land & Building (1834 sq.mt)	Existing
Plant & Machinery	Rs. 1.50 Cr
W. C. for 1 Month	Rs. 3.99 Cr
Total Capital Investment	Rs. 5.60 Cr
Rate of Return	37%
Break Even Point	44%

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Benefication of chromite ore processing charge chrome
Bicycle assembly
Bicycle prts
Bicycle spokes
Blinker for automobile
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Brass artware/hollow ware casting (with thehelp of phenolic resin)
Brass bushes (rods & bushes)
Brass casting
Brass die casting
Brass pipes by extrusion
Brass pipes from brass sheet withlonoitudinally welding
brass ware by casting method (brass articles viz. brass pooja lamps and other casted)
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Brassware by casting method
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Cold storage (controlled atmosphere or ca) for potato cap:1,00,000 bags (50 kg/bag) storing capacity 5000 mt
Cold storage (potato)
Cold storage for potato (1,00,000 bags) 50 kg/bag
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Conveyor beltings
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Copper and brass ingots
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Copper foil
Copper ingots, rods making & wire drawing
Copper powder
Copper products from copper scrap
Copper rod wire drawing & pvc wire & cables
Copper smelting plant
Copper wire drawing and super enamelling
Copper wire rods from copper scrap
Copper/brass sheets, circle & utensils
Corrugated box making machinery and other their parts
CP bath fittings, pipes, accessories and hardware products
Cycle chain
Cylinder liner for automobiles
Die casting (zinc and aluminium)
Display coolers
Door lock/pad lock
Drill bits & tool bits
Drum closures
Dry cells
Ductile iron pipe
Earth moving equipment
Engine coolant
Engine valves for automobiles
Engineering workshop (hand moulding job work)
Erw steel conduit pipes
Fabrication and assembly for railway
Fabrication of bakery and biscuits equipments
Fabrication of heat exchanger
Fabrication of storage tanks and m.s. drum
Fabrication workshop
Fabrication workshop to manufacture trusses & tanks
Fasteners/nut & bolts (industrial & automobiles)
Ferro alloys
Ferro manganese (low and high carbon)
Ferro silicon & ferro manganese from dolomite (sms crade)
Ferro silicon from mineral
Ferrous alloy ni-hardy i.v.casting
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Full body and chassis bus plant
G.i. ladder and perforated trays
G.i. pipe fitting
G.i. pipes
Galvanized iron wire
Galvanized m.s.strips
Galvanizing plant
Gas welding rod of cast iron (ci)
Gas welding torches and nozzles
Gasket for automobile, tractors & machinery
Gasket sheet
Gaskets
Gate grills & window frames
Generating set (diesel)
Generator canopy
Gfr/pp auto industries
Grinding and polishing machine
Grinding media balls and m.s./s.s. ingots
Hard anodised aluminium
Heavy earth moving/ automobile workshop
Helmet and accupressure seat cover
Hepa filter for industrial applications
High pressure cylinder
Hospital furnitures
Hospital wares
Hot dip galvanizing
Hot dip galvanizing plant with steel structural fabrication facility capable of manufacturing electrical tower sub station structure telecom tower structural steel members
Hot forged fasteners
Hot mix plant
Ht air brake switches, d.o. fuse & lightening arrestor
Hydraulic brake cylinders
Hydraulic cylinder
Ice making plant using freon
Idler rollers for conveyors (plain and rubber covered)
Ignition coil for automobile
Incandescent lamp
Induction hardening of machine
Industrial fasteners (nuts and bolts)
Injection moulded plastic components and metal pipe spinning unit
Injection moulded plastic compounds with tool room
Investment casting
Iron ingots
Iron ore pelletization plant
Iron tawa
Iron/steel wire gauge
Jewellery casting investment powder
Kitchen sink (s.s.)
Knitting needles
Knives (s.s.knives)
Lathe finished goods
Lead alloy from battery scrap
Lead battery plates and battery assembly
Lead tube
Leaf springs for tractor drawn trolleys and four wheeler tempos (capacity 25 ton per month)
Leaf springs for tractor, drawn trolleys & four wheeler tempos
Low carbon ferro manganese
Lpg cylinder
Lpg regulators
Lpg regulators (sierra type)
pressure regulator including for cng & lpg gases
Lpg valve and regulator
Lpg valves
M.s. pipe galvanizing plant
M.s. welding electrode
M.s. wire
M.s. wire drawing
M.s.hinges
M.s.ingot and hr. steel structurals
M.s.ingot by induction furnaces
M.s.pipes
Machine made gold chains
Machine screws
Machine screws & self tapping screws
Machine shop (for oil and gas engineering industry, aeroscape engineering industry etc.)
Machinery for cold rolling mill
Magnesium ingots & bullets casting
Manganese ore beneficiation
Manufacture of storage tanks, pressure vessels, heat exchangers
Manufacture of tin containers
Manufacturing of ss rounds & cr coils
Mark ii hand pumps
Maruti workshop cum-service station
Mechanical jacks
Medical oxygen gas cylinder
Metal cable trays
Metal containers
Metal cutting die design
Metal cutting of and grinding wheels (abbrasive cutting wheels)
Metal foundry flux for aluminium
Metal foundry flux for cast iron casting
Metal hooks & clips
Metal separation (copper, tin, lead) from soent wash acid
Metal spectacle frames
Metal wires (zinc wire, brass wire, solder wire, aluminium etc.)
Metallic gasket (spiral wound)
Metallic ring joints
Metallic zip fasteners (brass)

Metallurgical coke
Microvee & absolute filter
Microwave oven
Mild steel ingots
Mini steel plant
Mini steel plant/m.s. ingot by induction furnace
Modern vehicle workshop
Moped
Mufflers & silencers for three wheelers
Multipurpose cold storage & dehydration and canning of fruits/vegetables
Nail cutter with filer & manicure
Nichrome wire
Nickel lined screens
Non coking coal to coking coal
Non ferrous alloy from scrap
Non pressure
Non-ferrous alloy rolling
Non-ferrous forging
Non-ferrous foundry
Number combination locks for luggages
Nuts & bolts
O rings
Oil filters
Oil seal rings/metal cups
Oxygen gas plant
Oxygen lancing pipes
Paper coated aluminium and copper wire
Petrol pump cum modern automobile workshop service station with modern equipments and computerised machines
Petromax container
Photo etching of stainless steel plants
Pipe galvanizing plant
Piston assembly (aluminium alloy)
Piston ring automobile
Plant protection
Plastic auto parts
Platinum laboratory apparatus
Powder coating chamber type
Pressure cooker (aluminium)
Pressure cooker & aluminium utensils
Pressure die casting
Printed aluminium collapsible tubes
Printed tin containers
Printing press (cylinder machine)
Production of all types of fans such as axial fans, centrifugal fans (smoke extract fans & fresh air supply fans), bathroom fans etc.
Pumps for chemical industry (special)
Pvc battery container
manufacturing and assembling of lead acid storage battery
R.c.c spun pipes
Railway sleepers (m.s.)
Razor twin blade
Re-rolling copper and brass sheet and rods
Re-rolling mills
Rechargeable maintenance free sealed lead acid battery
Reconditioning of m.s. drums/ barrels
Recovery of lead from disposed lead acid battery
Resin coated sand
Resin cored soft solder wires
Roller bearing & forging
Rolling mill
Rolling mill (by induction furnace) & manufacture of bras, angles, squares, tubes and others
Rolling mill by indfuction furnace and manufacture of bars
Rolling mill by tmt technology
Rolling of stainless steel patta
Rotary air locks, screw conveyor, motorized/ pneumatic damper, flap valves, air slides required in cement plants and thermal power plant
Rubber (and metal bonded) auto parts
Rubber auto gasket
Rubber auto parts
Rubber belting
Rubber hoses for automobile
Rubber insulated pliers (hand tools)
Rubber transmission belt and V belt
Rubbing compound for automobiles
S.G. iron & alloy steel
Scientific laboratory equipments
Scooter assembling
Seamless M.S. tubes & pipes
Secondary lead extraction by scrap battery plates, pipes & sheet
Self tapping steel scraw
Sewing machine (parts and assembly)
Sewing needles
Sheet metal products (ferrous/ non ferrous)
Ship metal containers
Ship/marine container
Shock absorbers
Shoe eyelets
Shot and grits by automization process
Shovels
Silencers (mufflers exhaust & tail pipe for all types of vehicles
Silencers for auto vehicles
Silico manganese alloys
Sintered metal auto components
Sintered metal bearing
Soldering paste
Solution for storage battery
Spark plug
Spin on filters and spin on filter components (including bowls)
Sponge iron from iron ore
Sponge iron with pelletization plant
Stainless steel hinges
Stainless steel pipe (tubes)
Stainless steel utensils
Stainless steel vacuum flask
Steel drums and barrels
Steel fabrication workshop
Steel forging (automobile)
Steel furniture and room cooler
Steel furnitures and electrical appliances
Steel grating manufacturing plant
Steel re rolling mill
Steel strips (cold rolled)
Steel tanks for drinking water
Steel transmission line towers & rolling mill to produce steel section
Steel tubular poles
Steel wire drawing and galvanizing
Steel wool
Storage battery
Submerged arc welded pipes
Submerged arc welding flux (fused and agglomerated type)
Taper roller bearing
Tie rod ends
Tmt bars
Tool room
Tool room for press tools manufacture
Toughened glass plant
Transmission galvanised tower
Transmission gear for automobiles
Transmission plant fabrication unit
Transport
Truck service center
Tube mill (black pipe and g.i. pipe)
Tyre moulds and dies for different automobiles
Tyre retreading (cold)
U.J. cross for automobiles
Upvc doors & windows fabricating plant (fixing and installation of doors and windows of upvc profiles)
V belt & fan belt
Vanadium pentoxide
Water filter (purifier)
Welded wire mesh
Wheel rims (for car, motor cycle, trucks etc.)
Wire mesh (netting) & wire drawing
Wire nails
Zinc wire drawing

Ayurvedic/Herbal Pharmacy & Cosmetic Products

Aloevera juice and gel
Aloevera gel stabilized
Antiseptic cream
Ayurvedic and unani pharmacy
Ayurvedic churan & tablets
Ayurvedic dant manjan (red colour dabur type)
Ayurvedic hair oil for colouring of hair
Ayurvedic hospital 40 beded
Ayurvedic medicines
Ayurvedic pain balm ointment
Ayurvedic panchkarma resort & hospital 40 Beded
Ayurvedic pharmacy
Ayurvedic sharbat
Ayurvedic tablets (hajmola type)
Ayurvedic/Herbal tablets & churn
Cosmetics industry
Crepe bandage,pop bandage, medical adhesive tape (integrated unit)
Dettol like antiseptic lotion
Face cream and body cream
Face cream and body cream (fully automatic plant)
Hair cream colour
Hair dye in form of hair oil
Hair oil
Hard rubber battery container
Henna paste making
Herbal beer
Herbal capsules
Herbal cigarettes
Herbal clinic
Herbal cosmetics
Herbal extract, essential oils,spices and value addition
Herbal extracts
Herbal face paste
Herbal hair dye oil (coconut oil+ppd based)
Herbal hair oils (ayurvedic like banphool oil)
Herbal medicinal food supplements
Herbal medicines (ayurvedic & herbal) including bhanphool, iodex, hazmola, body pain tabs, headache, tabs, shilajeet, chavana prasa,

Banana Based Industries and Banana Processing

Banana & it's by producs
Banana and it's by products
Banana chips
Banana chips (using microwave drying technology)
Banana chips, banana pulp & banana powder (banana products)
Banana cultivation
Banana fiber cloth manufacturing & it's by products unit
Banana fibre extraction and handmade paper
Banana powder
Banana powder and waffers
Banana powder for babies & banana juice
Banana product manufacture
Banana puree
Banana wafers
Banana, apple & other fruit chips
Banana, mango powder & other freeze dried products

Best Agricultural Research Projects Including Poultry Farming, Organic Farming, Cow Farming, Chicken Farming, Dairy Farming And More

Amla plantation, processing & preservation
Bamboo plantation
Cattle and poultry feed
Cattle farming and dairy products
Chicken farming (hatchery)
Coffee plantation
Cultivation of capsicums in green house
Dairy farming to produce milk with packaging (cow)
Decaffineated tea
Eucalyptus tree plantation
Extraction of aloevera gel
Feed mill for mixed feed (poultry & cattle)
Fish farming
Green house for crop production
Green house/poly house
Jatropha cultivation and processing (biodiesel)
Nursery farm
Organic farming
Pig farming
Pig farming
Piggery farm
Plastic milk crate and plastic fish crate
Poplar plantation
Pork processing
Poultry & broiler farming
Poultry and hatchery farming
Poultry farming
Poultry feed
Rubber plantation
Safed musli cultivation and processing
Sericulture
Shisham plantation
Soyabean cultivation
Stevia cultivation & extraction
Stevia cultivation and safed musli farming
Sunflower plantation
Tea plantation
Tea plantation and processing
Teak tree plantation
Trout fish farming,canning & preservation with aqua feed manufacturing (intregrated complex)

Biochemicals And Biotechnology

Alcohol from broken rice
Alcohol from rice grain
Alcohol from rice straw
Amyl alcohol
Bio fertilisers
Bio tec unit
Bio-diesel with multifeed stock like ffa oil,acid oil, fatty distillete, stearin, tallow, uco with continuous glycerine plant
Bio-pesticides
Biodiesel from algae
Biotech laboratory equipments
Enzymes-bio technology based
Ethanol from molasses (biofuel)
Ethyl alcohol from corn
Gobar gas
Grape wine
Homoeopathic sugar globules
Industrial alcohol from molasses
Metalic stearates (magnesium, calcium, zinc aluminium stearates)
Organic manure
Oyster mushroom cultivation and processing
Plant growth promoters/ regulator (liquid bio extract organic)
Power alcohol & imfl from molasses
Production of lime putty (on hydrated lime base and on white cement base)
Protein hydrolysate from soyabean/groundnut
Radiator coolant
Sodium sulphate (anhydrous)

Breakfast Foods Such As Grains Or Cereals, Fruit, Vegetables, Protein Foods Viz Eggs, Paneer, Meat, Fish, And Beverage Such As Tea, Coffee, Milk, Fruit Juice, Breads, Mushrooms, Butter, Margarine, Soup, Porridge, Noodles, Soy Bean Products

Apple Chips Plant
Asafoetida (Compounded)-Hing
Atta Manufacture Plant (5 Tpd)
Beer Industry And Alcoholic Beverages
Beer Plant (Brewery)
Bread
Bread & Biscuit Plant
Bread And Biscuit Plant (Bakery Industry)
Bread Boards
Bread Plant
Bread Rusks
Butter Milk
Cereal Food (Roasted Dalia)
Coffee Plantation
Coffee Roasting Of Green Coffee Beans
Cold Supply Chain (Fruits & Vegetables Pick-Up, Sorting, Cleaning, Packing, Freezing, String, Warehousing, Transporting, Distributing, Ware Housing, Distributing, To Final Wholesaler, Retailers & Consumers)
Corn Flakes
Dry Pasta Manufacturing Line (Cap 200 Kgs Per Hour)
Egg Powder (Dried) 100% Eou
Egg Tray
Egg Tray From Pulp
Fast Food Parlour
Fast Food Restaurant
Fish Canning & Pouching
Fish Canning In Tin & Pouches
Fish Dehydration (Drying Of Fish)
Fish Farming
Fish Farming (Prawn & Other Marine Products)
Fish Feed From Soyabean
Fish Meal
Fish Net
Fish Oil
Fish Processing
Fish Processing (Beast Freezing Processes)
Fish Processing Unit
Flavours For Food Industries
Food Products (Integrated Units)
Food Colour
Food Colour & Roasted Groundnut Gram Peas Etc. In Pouches
Food Dehydration (Fruits & Vegetables)
Food Flavours (Whisky), Vodka, Grape, Butter Scotch)
Food Grade Grease Or Lubricant
Food Park
Food Processing And Training Centre
Food Processing Industry
Food Processing Unit (Garlic, Pine Apple Canning & Tomato Processing)
Food Products Complex
Food Products Complex (Dehydrated Onions, Garlic Powder & Flakes, Cattle Feed, Tomato Powder, Tomato Products, Canned Fruits & Vegetables, Tomato Puree, Groundnut Oil, Refined Oil, Dehydrated Grapes Etc.
Food Products Manufacturing (Integrated Complex)
Frozen Food By IQF Technology

TERMS AND CONDITIONS

Ask for the quotation for the required project report at

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*** E-Mail : eiriprojects@gmail.com, eiri@eiriindia.org**
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* Hand Book of Pig Farming	400/-	40
* Agro Based H.B. of Plantation, Cultivation & Farming	500/-	75
* Agro-Based Plantation Cultivation & Farming	475/-	50
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* Technology of Modern Rice Milling and Basmati Rice	600/-	60
* Hand Book of Goat Farming	450/-	50
* Floriculture Hand Book (Flowers Growing Technlgy)	1000/-	100
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* Milk Processing and Dairy Products Industries	950/-	95
* Dairy Farming to Produce Milk with Packaging	475/-	50
* Hand Book of Ice Cream Technology and Formulae	750/-	75
* Hand Book of Milk Processing, Dairy Products and Packaging Technology	1675/-	165
* Dairy Farming for Milk Production Technology	975/-	100
* Commercial Dairy Farming with Project Profiles	750/-	75
HERBS CULTIVATION/MEDICINES		
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* Aromatic & Medicinal Plants and Biodiesel (Jatropha)	1100/-	110
* Hand Book of Medicinal & Aromatic Plants	875/-	90
FOOD & AGRO PROCESS, TOMATO PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE, POTATO, MAIZE, MEAT, BANANA		
* Fruits & Vegetable Processing Hand Book (2nd Edn.)	900/-	75
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* Technology of Plastic Additives with Processes & Packaging	900/- 90
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NON WOVEN TECHNOLOGY

* Complete Tech. of Nonwovens Fabrics, CarryBags, Composite, Geotextiles, Medical Textiles, Fibres, Felts, Apparels, Spunlace and Absorbent Nonwoven1175/- 120

PHARMACEUTICALS & DRUGS

* Tablets, capsules, Injectables, Dry Strups, Oral & External Preparations, Eye, Ear 1575/- 155

LEATHER & LEATHER PRODUCTS

* Hand Book of Leather & Leather ProductsTechnology 850/-85

BIOTECHNOLOGY

* Hand Book of Biotechnology900/-90

CERAMICS & CERAMIC PROCESS

* H.B.of Ceramics & Ceramics Processing Technology 1975/- 200
* Modern Tech Of Ceramic Products With Composition 1100/- 110

TREE FARMING

* Hand Book of Tree Farming 800/- 80

MUSHROOM PROCESSING

* Hand Book of Mushroom Cultivation, Processing & Packaging 975/- 98

BIOFERTILIZERS & VERMICULTURE

* Biofertilizers & Vermiculture 900/-100

BIODEGRADABLE PLASTICS AND POLYMERS

* Modern Technology of Biodegradable Plastics and Polymers With Processes (Bio-Plastic, Starch Plastics, Cellulose Polymers & other) 975/- 100
* Production of Biodegradable Plastics & Bioplastics Tech 1500/-150

FROZEN FOOD/FREEZE DRYING

* Frozen Food Processing & Freeze Drying Technology 1000/- 100
* Frozen Food Products 900/- 90

BEER, VODKA, BEVERAGE, WHISKY

* Beer,Cereal Based Beverages, Soy Beverages, Fruit Wine, Vodka, Tea Beverages & Beverages 1100/- 110
* Mfg Tech Hand Book Of Gin, Rum, Whisky, Distillery Spirits, Brandy, Fruit Spirits, Flavours, Maturation & Blending With Other Alcoholic Beverage 1250/- 125

MINERAL AND MINERALS

* Hand Book of Minerals and Minerals Based Industries 975/- 100

RUBBER CHEMICALS, COMPOUNDS

* Rubber Chemicals & Processing Industries 400/- 40
* Modern Rubber Chemicals, Compounds & Rubber Goods Technology 1500/- 150
* Technology of Rubber & Rubber Goods Industries 900/- 90

AYURVEDIC/HERBAL MEDICINES

* Ayurvedic & Herbal Medicines with Formulaes 750/- 75
* Hand Book of Ayurvedic Medicines with Formulations 900/-90

STAINLESS STEEL, NON FERROUS METALS, BILLETS & ROLLING MILL

* Modern Technology of Non Ferrous Metals and Metal Extraction 1100/-110
* Processing Technology of Steels and Stainless Steels 1900/-190
* Modern Technology of Rolling Mill, Billets, Steel Wire, Galvanized Sheet, Forging & Castings 2500/-250
* Mfg Tech of Non-Ferrous Metal Products 1750/- 175

FOOD ADDITIVES/CHEMICALS AND SWEETENERS & FOOD EMULSIFIERS

* Modern Technology of Food Additives, Sweeteners and Food Emulsifiers 1575/- 156
* Technology of Food Chemicals, Pigments and Food Aroma Compounds 1100/- 110

DISPOSABLE MEDICAL PRODUCTS

* Technology of Disposable Medical Products 1750/-175

SOYA MILK, TOFU & SOY PRODUCTS

* Technology of Soya Milk, Tofu, Hydrolyzate, Allied Soyabean Products with project Profile 975/- 100
* Technology of SOYBEAN Products with Formulae 1100/- 100

PRODUCTS FROM WASTE

* Technology of Products from Wastes (Industrial, Agriculture, Medical, Municipality, Organic & Biological) By Panda 900/- 90
* Products from Waste Technology Hand Book 1100/- 110

WINE PRODUCTION

* Technology of Wine Production and Packaging 1750/- 175

CASTING TECHNOLOGY

* Casting Technology H.Book750/- 75

PULP & PAPER TECHNOLOGY

* H.B.of Pulp & Paper, Paper Board & Paper Based Tech. 1150/- 120

FLOUR MILL (ATTA MAIDA, SUJI)

* Start Your Own Wheat Flour Mill (Atta, Maida, Suji, Bran & Besan) 900/- 90

ORGANIC FARMING & FOOD/NEEM

* Hand Book of Organic Farming and Organic Foods with Vermi-Composting & Neem Product 1100/-

FISH FARMING & FISHERY PRODUCTS

* Hand Book of Fish Farming and Fishery Products 650/- 65

TEXTILE AUXILIARY & CHEMICALS

* Textile Auxiliaries & Chemicals with Processes/Formula 1050/- 105
* Tech of Textile Chemicals with Formulations 1450/- 145
* Modern Technology of Textile Auxiliary and chemicals with formulations 1100/- 110
* Textile Processing Chemicals, Enzymes, Dye Fixing Agents and Other Finishes with Project Profiles 1275/- 125

DISINFECTANTS, CLEANERS, PHENYL, DEODORANTS, DISHWASHING DETERGENTS ETC.

* Manufacture of Disinfectants, Cleaners, Phenly, Repellents, Deodorants, Dishwashing Detergents with Formulae 900/- 90

COFFEE & COFFEE PROCESSING

* Coffee & Coffee Processing 525/- 53

ONION CULTIVATION/PROCESSING

* OnionCultivation, Dehydration, Flakes, Powder, Processing & Packaging Technology 975/- 98

BUILDING MATERIAL & CHEMICALS

* Technology of Building Materials & Chemicals with Processes950/- 95

TEXTILE, GARMENTS, DYEING...

* Mod. Tech. of Bleaching, Dyeing, Printing & Finishing of Textiles 750/- 75
* Technology of Textiles (Spinning & Weaving, Dyeing, Scouring, Drying, Printing and Bleaching) 900/- 90
* Garments Manufacturing Tech. 900/- 90

BAKERY, CONFECTIONERY, BISCUITS, COOKIES, BREAKFAST, PASTA & CEREALS

* Technology of Biscuits, Rusks, Crackers & Cookies with Formulations 975/- 98
* Hand Book of Confectionery with Formulations 900/- 90
* Breakfast, Dietary Food, Pasta & Cereal Products Tech 1150/-120
* Modern Bakery Products 900/- 90
* Modern Bakery Technology & Fermented Cereal Products with Formulae 1250/-125
* Confectionery,Chocolates, Toffee, Candy, Chewing & Bubble Gums, Lollipop & Jelly Products 1750/-175
* H.Book of Bakery Industries 950/-95

TECHNOLOGY OF FIBRES

* Fibres With Manufacturing Processes & Properties With Project Profiles 975/- 100