## Sector: Engineering products

# **Nut - Bolts**

#### Introduction:

Nut and Bolts are essential items for the construction and other engineering Industries. They are required at big scale in almost all types of machinery manufacturing, construction of buildings, wood working and infrastructure projects. The demand of Nut and Bolts of various sizes is quite large in the country as well as in export markets. The project requires knowledge of some mechanical engineering but not a pre requisite.



### **Production Capacity/annum:**

Quantity: 200 lac Nut - Bolts.

Value: Rs. 600 lac.

#### **Production Process:**

Steel wire coil of required thickness is cut into the sizes of Bolts and stamped to make heads. The cut wire goes for forging operation and then trimming operation is carried out followed by threading. Finally Zinc plating or other type of plating is done as per the requirements. For Nuts, they are made in the Nut former and threading is done in the tapping machine.

### Infrastructure required:

a) Land and Building: 4000 Sq.ft. (Area required)

### b) Plant & Machinery / Equipments:

- (i) Power Press
- (ii) Tapping Machine
- (iii) Weighing Machine
- (iv) Tanks for Zinc Plating
- (v) Piller Drilling Machine
- (vi) Wire Straightening Machine
- (vii) Automatic Heading Machine
- (viii) Die Head Threading Machine
- (ix) Tools & Dies of various sizes
- (x) Hardness Tester and Gauges and Instruments
- (xi) Pickling Tanks

#### c) Raw Materials & Consumables:

- (i) Grease and Oil (iii) Packing Material.
- (ii) M.S. Rounds of various thickness

d) Powerload: 40 kw.

e) Water (per shift basis): 1000 Ltrs.

### Manpower required:

Manager: 1No.

Supervisor: 1No.

Skilled Workers: 6Nos.

Other Workers: 4Nos.

Total Manpower: 12Nos.

### Investment required:

#### Fixed Investment: a)

Land & Building:	Owned or rented
Plant & Machinery:	Rs. 110.00 lac.
Furniture & Fixtures:	Rs. 05.00 lac.
Other Fixed Assets:	Rs. 10.00 lac.
Capital Investment:	Rs. 125.00 lac.
Working Capital:	Rs. 75.00 lac.
Total Investment:	Rs. 200.00 lac.

Loan Amount required: Rs. 150.00 lac.

(75% of investment)

**Expected Annual Profit:** Rs. 75.00 lac.

(before tax.)

Estimated Annual Income:	Rs. 600.00 lac.
Estimated Annual Expenditure:	Rs. 560.00 lac.
Net Profit Per Annum (before tax):	Rs. 40.00 lac.