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**Submitted to**



**JINDAL SHADEED IRON & STEEL LLC**  
**SULTANATE OF OMAN**

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**PROJECT PROFILE**  
**FOR SETTING UP A**  
**BOLTS AND NUTS MANUFACTURING UNIT**

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## **ANNEXURE - FINANCIAL PROJECTIONS**

## 1. PROJECT BRIEF

This report relates to a study on the feasibility of setting up a Bolts and Nuts Manufacturing Unit in Sultanate of Oman. The following is the Brief illustration of the project:

| <b>Name of Product</b>                   |           | <b>Bolts and Nuts</b> |
|--|-----------|-----------------------|
| Domestic Market Size (as of 2021)        |           | 9,000 tons per annum  |
| Capacity of the Project                  |           | 1,080 tons per annum  |
| Total Investment                         |           | RO 156,000            |
| Equity Investment                        |           | RO 62,400             |
| <b>Key Appraisal Criteria:</b>           |           |                       |
| IRR on total investment                  |           | 16.0%                 |
| IRR on Equity                            |           | 24.9%                 |
| Payback period of Total Investment       |           | 6 years 3 months      |
| Payback period on equity                 |           | 5 Years 3 months      |
| Break Even Point (as % of Capacity)      |           | 51%                   |
| Cash Break Even Point (as % of Capacity) |           | 47 %                  |
| DSCR                                     |           | 3.15                  |
| Manpower                                 | Total     | 11                    |
|  | Nationals | 4                     |

## 2. GENERAL INDUSTRY ANALYSIS

### 2.1. OVERVIEW OF CONSTRUCTION SECTOR IN OMAN

The following table illustrates the trend in the growth of the construction sector GDP during 2010 to 2020.

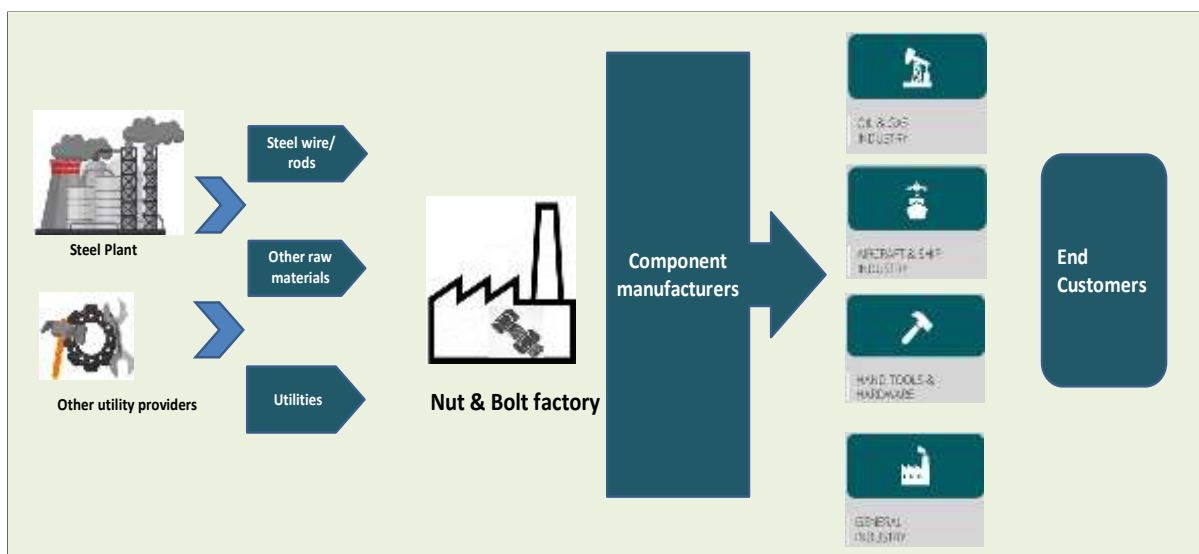
| Details                       | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   |
|-------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| GDP (RO million)              | 21,935 | 26,152 | 29,458 | 30,292 | 31,174 | 26,500 | 25,354 | 27,216 | 35,184 | 33,859 | 28,442 |
| Construction GDP (RO Million) | 1,314  | 1,390  | 1,747  | 1,803  | 1,904  | 2,067  | 2,285  | 2,080  | 3,258  | 3,202  | 2,623  |
| Growth Rate (%)               | 6%     | 6%     | 26%    | 3%     | 6%     | 9%     | 11%    | -9%    | 57%    | -2%    | -18%   |
| Construction / Total GDP (%)  | 6%     | 5%     | 6%     | 6%     | 6%     | 8%     | 9%     | 8%     | 9%     | 9%     | 9%     |

Source: NCSI Statistical Year Book 2021

- The construction sector contribution to the GDP has consistently grown till 2018. However, with limited new projects being executed it has witnessed a slide during 2019 and 2020.
- The Construction sector GDP was around 2,623 million in 2020 which comprises to about 9% of the total GDP of Oman.

### 2.2. VALUE-CHAIN OF BOLT & NUTS PRODUCTS AND USES

The following chart illustrates the overall value chain of Bolts and Nuts Unit:



## **2.3. VALUE CHAIN IN OMAN**

### **2.3.1. Upstream Value Chain activities**

The raw material for Bolts and Nuts are Steel Rods. Iron ore is currently mined in about 50 countries globally, majorly from Brazil, China, India, Russia, USA and Australia. Following are some of the upstream Iron steel players in the Sultanate:

- **Jindal Shadeed Iron & Steel LLC. (JSIS)** located in Sohar, operates a 1.8 MTPA Direct Reduced Iron (DRI) Plant which was established in 2010. The company established a Steel Making Shop in 2014 having a capacity of 2.4 MTPA. Jindal Shadeed also operates a 1.4 MTPA Rebar Rolling Mill which was established in 2016.
- **Sohar Steel LLC** located in Sohar Industrial Port is capable of producing 600,000 MT of Steel Billets and 500,000 MT of Re-bars annually.

### **2.3.2. Downstream Value Chain activities**

The products find application in the following:

- a. Transportation industries, Railways, aircraft, wagon, bicycles, automobile, body builders, etc.
- b. Electrical industries like manufacturing of transformer, electric motors, fans etc.
- c. Building activities such as construction of bridges, fabrication of various steel structures etc.
- d. Other heavy and light industries, steel and wooden furniture, machine tools, Agricultural machines and agricultural implements etc.

As various types of MS and HT nuts and bolts are used in above sectors, the market demand is directly proportionate to the development of these industrial segments.

**2.4. ENABLERS IN VALUE CHAIN IN OMAN**

World class infrastructure and required utilities are provided by Madayn for establishing industrial units in Oman.

**2.5. HURDLES IN VALUE CHAIN IN OMAN**

- High labor cost
- Comparatively lower local demand but can be addressed if the proposed project targets export markets, in future.

**2.6. SWOT ANALYSIS**

| <b>SWOT ANALYSIS</b>   |   |
|--|---|
| <b>Strengths</b>   | <b>Weaknesses</b>   |
| <ul style="list-style-type: none"><li>• Low-technology manufacturing which can be effectively adopted by a Small Industry</li><li>• Cheaper Land Rentals / Utilities</li></ul> | <ul style="list-style-type: none"><li>• Rising input costs</li></ul>  |
| <b>Opportunity</b>   | <b>Threats</b>  |
| <ul style="list-style-type: none"><li>• Product Acceptance</li><li>• Demand from Infrastructure projects &amp; Fabrication</li><li>• Potential for exports</li></ul>           | <ul style="list-style-type: none"><li>• Fluctuations in demand</li><li>• Competition from cheaper imports</li></ul> |



### **3. MARKET ANALYSIS**

#### **3.1. PRODUCT USES & APPLICATIONS**

Nuts and Bolts are the key linking equipment in Industries. Bolt is a piece of metal rod with one end settled and the other end threaded. Nut is the item which rolls on these threads. Nut and bolts are available in various shapes, designs and sizes. Nuts and bolts are used for fastening purpose in industries.

Nuts and bolts are produced of various sizes and the main raw material is mild steel rod of required diameter. The composition of materials controls the quality of the bolts and nuts.

Different types of bolts & nuts as per body types are as follows:

- Hex Bolts: Hex Bolts are the commonly used bolts and hex bolt's shaft may have threading all the way up to the head, or be only partially threaded.

The other common bolts are

- Hanger Bolts
- Carriage Bolts
- Chicago Bolts
- Hex Nut Types: A basic hex nut has six sides and is also called a "finished hex nut." This is used along with Hex Bolts and the most commonly used nuts.

The other common bolts are

- Wing Nuts
- Cap and Acorn Nuts

### **3.1.1. Product specifications**

Threads are one of a bolt's main characteristics. A thread functions under the basic concept of an inclined plane that is spiraled around the length of a fastener. This spiral requires rotational pressure to be inserted into a slot. Turning the bolt causes the threads to move the complementary slot or nut upward against the inclined plane. The greater the torque, or turning force, the greater the pressure pulling the nut forward along the threads. This in turn creates tension in the bolt and a clamping force that presses the two components together. A higher number or a denser arrangement of threads can strengthen the joint. In addition, cutting threads into the bolt after it has been heat-treated also improves thread strength.

- **Mechanical Forces:** The act of tightening a bolt engages several different types of mechanical force that help the resultant joint remain secure. The main forces generated by bolt installation include:
- **Clamping Force:** This is a type of compression that the bolt applies to the joint, holding the two components together.
- **Preloading Force:** Turning the bolt causes the threads to engage and stretch, which produces the preload force that keeps the threads in place.
- **Shear Force:** The shear force is the transverse pressure working against the bolt in a perpendicular direction. It can be present alone or in combination with tension force.
- **Tension Force:** Tension force applies to the length of the bolt, providing pressure along its vertical dimension, rather than its width.

The clamping force accomplishes the task of holding multiple parts together, and is determined by the difference between the preloading force and the tension force. When the strength of the tension force equals that of the preload force, the bolt fails and the joint breaks apart.

Bolts come in many varieties, such as T-Head or T-Slot bolts, and can be produced from a wide range of materials, but steel is the most common material used for most high-strength applications. Steel bolts are graded according to N / mm squared for tensile strength as compared to yield strength. For example, a steel bolt with a rating of 5.5 will provide roughly 500 N /mm<sup>2</sup> of tensile strength and approximately 400 N / mm<sup>2</sup> of yield strength. Other popular bolt materials, such as corrosion-resistant stainless steel, alloys, and composite materials can be rated in similar fashion.

### **3.1.2. Product uses & applications**

The products find application in the following:

- a. Transportation industries, Railways, aircraft, wagon, bicycles, automobile, body builders, etc.
- b. Electrical industries like manufacturing of transformer, electric motors, fans etc.
- c. Building activities such as construction of bridges, fabrication of various steel structures etc.
- d. Other heavy and light industries, steel and wooden furniture, machine tools, Agricultural machines and agricultural implements etc.

### **3.2. GLOBAL MARKET OUTLOOK**

Bolts and Nuts are internationally classified under the following HS codes:

- *731815 - Threaded screws and bolts, of iron or steel, whether or not with their nuts and washers (excluding coach screws and other wood screws, screw hooks and screw rings, self-tapping screws, lag screws, stoppers, plugs and the like, threaded)*
- *731816 - Nuts of iron or steel*

### 3.2.1 Major Global Exporters

**HS Code: 731815**

| Rank  | Exporting countries            | Value/<br>Quantity | 2017       | 2018       | 2019       | 2020       | 2021       |
|-------|--------------------------------|--------------------|------------|------------|------------|------------|------------|
| 1     | China                          | USD('000)          | 2,413,429  | 3,070,497  | 3,073,951  | 3,237,274  | 3,600,955  |
|       |                                | Ton                | 1,443,126  | 1,622,833  | 1,572,435  | 1,466,654  | 1,509,053  |
|       |                                | USD/Ton            | 1,672      | 1,892      | 1,955      | 2,207      | 2,386      |
| 2     | Taipei,<br>Chinese             | USD('000)          | 2,195,880  | 2,481,850  | 2,290,296  | 2,017,628  | 2,610,363  |
|       |                                | Ton                | 853,236    | 902,184    | 828,285    | 720,223    | 812,754    |
|       |                                | USD/Ton            | 2,574      | 2,751      | 2,765      | 2,801      | 3,212      |
| 3     | Germany                        | USD('000)          | 2,757,445  | 3,031,201  | 2,838,898  | 2,616,208  | 3,105,743  |
|       |                                | Ton                | 485,962    | 495,227    | 478,160    | 423,354    | 474,135    |
|       |                                | USD/Ton            | 5,674      | 6,121      | 5,937      | 6,180      | 6,550      |
| 4     | United<br>States of<br>America | USD('000)          | 2,087,159  | 2,044,602  | 2,063,934  | 1,676,056  | 1,931,929  |
|       |                                | Ton                | 527,834    | 533,859    | 523,203    | 411,359    | 376,985    |
|       |                                | USD/Ton            | 3,954      | 3,830      | 3,945      | 4,074      | 5,125      |
| 6     | Italy                          | USD('000)          | 1,226,978  | 1,336,284  | 1,215,844  | 1,039,755  | 1,322,745  |
|       |                                | Ton                | 336,678    | 331,957    | 316,127    | 266,920    | 309,394    |
|       |                                | USD/Ton            | 3,644      | 4,025      | 3,846      | 3,895      | 4,275      |
| 5     | Japan                          | USD('000)          | 1,571,814  | 1,632,706  | 1,513,264  | 1,302,542  | 1,577,118  |
|       |                                | Ton                | 226,582    | 233,894    | 208,046    | 172,225    | 209,968    |
|       |                                | USD/Ton            | 6,937      | 6,981      | 7,274      | 7,563      | 7,511      |
| 7     | India                          | USD('000)          | 256,261    | 294,110    | 305,924    | 240,433    | 379,525    |
|       |                                | Ton                | 120,389    | 124,423    | 128,663    | 95,734     | 166,893    |
|       |                                | USD/Ton            | 2,129      | 2,364      | 2,378      | 2,511      | 2,274      |
| 9     | Korea                          | USD('000)          | 506,607    | 519,346    | 510,458    | 445,507    | 517,028    |
|       |                                | Ton                | 135,990    | 141,827    | 137,430    | 118,117    | 131,273    |
|       |                                | USD/Ton            | 3,725      | 3,662      | 3,714      | 3,772      | 3,939      |
| 8     | Netherland                     | USD('000)          | 457,599    | 450,420    | 429,366    | 409,117    | 462,734    |
|       |                                | Ton                | 138,869    | 126,061    | 118,910    | 98,202     | 127,717    |
|       |                                | USD/Ton            | 3,295      | 3,573      | 3,611      | 4,166      | 3,623      |
| 10    | Turkey                         | USD('000)          | 187,789    | 256,288    | 246,623    | 223,091    | 328,053    |
|       |                                | Ton                | 71,050     | 87,292     | 88,484     | 84,627     | 114,378    |
|       |                                | USD/Ton            | 2,643      | 2,936      | 2,787      | 2,636      | 2,868      |
| 11    | Others                         | USD('000)          | 4,474,376  | 5,194,692  | 4,704,092  | 4,137,065  | 4,702,686  |
|       |                                | Ton                | 1,072,044  | 1,345,536  | 1,114,483  | 873,454    | 920,219    |
|       |                                | USD/Ton            | 4,174      | 3,861      | 4,221      | 4,736      | 5,110      |
| TOTAL |                                | USD('000)          | 18,135,337 | 20,311,996 | 19,192,650 | 17,344,676 | 20,538,879 |
|       |                                | Ton                | 5,411,760  | 5,945,093  | 5,514,226  | 4,730,869  | 5,152,769  |
|       |                                | USD/Ton            | 3,351      | 3,417      | 3,481      | 3,666      | 3,986      |

Source: UN Trade data

**HS Code: 731816**

| Rank         | Exporting countries            | Value/<br>Quantity | 2017             | 2018             | 2019             | 2020             | 2021             |
|--------------|--------------------------------|--------------------|------------------|------------------|------------------|------------------|------------------|
| 1            | China                          | USD('000)          | 925,477          | 1,201,387        | 1,161,588        | 1,254,335        | 1,428,499        |
|              |                                | Ton                | 521,968          | 595,164          | 548,587          | 516,922          | 574,473          |
|              |                                | USD/Ton            | 1,773            | 2,019            | 2,117            | 2,427            | 2,487            |
| 2            | Taipei,<br>Chinese             | USD('000)          | 895,411          | 995,556          | 897,104          | 731,365          | 1,044,051        |
|              |                                | Ton                | 298,487          | 313,577          | 274,868          | 213,782          | 281,187          |
|              |                                | USD/Ton            | 3,000            | 3,175            | 3,264            | 3,421            | 3,713            |
| 3            | Germany                        | USD('000)          | 826,097          | 917,996          | 908,181          | 820,872          | 985,740          |
|              |                                | Ton                | 115,140          | 117,173          | 115,090          | 100,748          | 116,521          |
|              |                                | USD/Ton            | 7,175            | 7,835            | 7,891            | 8,148            | 8,460            |
| 4            | Japan                          | USD('000)          | 683,754          | 715,337          | 670,060          | 566,055          | 710,916          |
|              |                                | Ton                | 85,364           | 87,913           | 82,416           | 67,573           | 84,704           |
|              |                                | USD/Ton            | 8,010            | 8,137            | 8,130            | 8,377            | 8,393            |
| 6            | United<br>States of<br>America | USD('000)          | 685,642          | 680,308          | 691,148          | 564,272          | 619,828          |
|              |                                | Ton                | 61,905           | 62,798           | 51,847           | 37,537           | 51,442           |
|              |                                | USD/Ton            | 11,076           | 10,833           | 13,331           | 15,032           | 12,049           |
| 5            | Korea                          | USD('000)          | 191,886          | 207,214          | 198,329          | 174,701          | 201,597          |
|              |                                | Ton                | 40,248           | 41,462           | 37,980           | 33,945           | 36,830           |
|              |                                | USD/Ton            | 4,768            | 4,998            | 5,222            | 5,147            | 5,474            |
| 7            | India                          | USD('000)          | 61,869           | 70,336           | 70,727           | 55,056           | 88,202           |
|              |                                | Ton                | 23,411           | 26,216           | 24,242           | 18,123           | 31,221           |
|              |                                | USD/Ton            | 2,643            | 2,683            | 2,918            | 3,038            | 2,825            |
| 9            | Italy                          | USD('000)          | 172,350          | 198,437          | 200,123          | 186,206          | 218,136          |
|              |                                | Ton                | 25,654           | 27,154           | 27,939           | 23,980           | 28,090           |
|              |                                | USD/Ton            | 6,718            | 7,308            | 7,163            | 7,765            | 7,766            |
| 8            | Turkey                         | USD('000)          | 51,018           | 62,671           | 67,454           | 60,299           | 89,341           |
|              |                                | Ton                | 13,976           | 16,532           | 20,110           | 17,097           | 24,743           |
|              |                                | USD/Ton            | 3,650            | 3,791            | 3,354            | 3,527            | 3,611            |
| 10           | Netherlands                    | USD('000)          | 127,887          | 116,651          | 105,955          | 90,047           | 109,700          |
|              |                                | Ton                | 26,213           | 21,876           | 18,654           | 15,914           | 20,750           |
|              |                                | USD/Ton            | 4,879            | 5,332            | 5,680            | 5,658            | 5,287            |
| 11           | Others                         | USD('000)          | 1,206,038        | 1,358,085        | 1,328,134        | 1,151,608        | 1,330,086        |
|              |                                | Ton                | 265,575          | 257,215          | 240,710          | 147,649          | 159,290          |
|              |                                | USD/Ton            | 4,541            | 5,280            | 5,518            | 7,800            | 8,350            |
| <b>TOTAL</b> |                                | USD('000)          | <b>5,827,429</b> | <b>6,523,978</b> | <b>6,298,803</b> | <b>5,654,816</b> | <b>6,826,096</b> |
|              |                                | Ton                | <b>1,477,941</b> | <b>1,567,080</b> | <b>1,442,443</b> | <b>1,193,270</b> | <b>1,409,251</b> |
|              |                                | USD/Ton            | <b>3,943</b>     | <b>4,163</b>     | <b>4,367</b>     | <b>4,739</b>     | <b>4,844</b>     |

Source: UN Trade data

### 3.2.2 Major Global Importers

*HS Code: 731815*

| Rank | Importing countries      | Value/<br>Quantity | 2015              | 2016              | 2017              | 2018              | 2019              |
|------|--------------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| 1    | United States of America | USD('000)          | 5,332,373         | 4,785,747         | 5,153,815         | 6,020,470         | 5,841,885         |
|      |                          | Ton                | 1,606,723         | 1,511,588         | 1,544,328         | 1,769,259         | 1,638,850         |
|      |                          | USD/Ton            | 3,319             | 3,166             | 3,337             | 3,403             | 3,565             |
| 2    | Germany                  | USD('000)          | 3,467,271         | 3,569,316         | 3,993,399         | 4,453,242         | 4,020,040         |
|      |                          | Ton                | 851,694           | 898,173           | 987,158           | 1,044,994         | 939,665           |
|      |                          | USD/Ton            | 4,071             | 3,974             | 4,045             | 4,262             | 4,278             |
| 3    | Mexico                   | USD('000)          | 2,708,584         | 2,495,856         | 2,738,779         | 2,991,347         | 3,024,594         |
|      |                          | Ton                | 305,971           | 310,255           | 346,800           | 365,226           | 363,853           |
|      |                          | USD/Ton            | 8,852             | 8,045             | 7,897             | 8,190             | 8,313             |
| 4    | China                    | USD('000)          | 2,877,820         | 2,937,849         | 3,121,441         | 3,220,670         | 2,838,988         |
|      |                          | Ton                | 286,643           | 303,485           | 322,682           | 316,940           | 266,956           |
|      |                          | USD/Ton            | 10,040            | 9,680             | 9,673             | 10,162            | 10,635            |
| 5    | France                   | USD('000)          | 1,593,677         | 1,613,149         | 1,702,145         | 1,834,098         | 1,735,715         |
|      |                          | Ton                | 341,695           | 341,288           | 350,597           | 372,045           | 359,081           |
|      |                          | USD/Ton            | 4,664             | 4,727             | 4,855             | 4,930             | 4,834             |
| 6    | Canada                   | USD('000)          | 1,480,345         | 1,421,303         | 1,508,565         | 1,643,887         | 1,658,628         |
|      |                          | Ton                | 1,595,775         | 1,698,407         | 2,149,639         | 2,092,625         | 2,026,229         |
|      |                          | USD/Ton            | 928               | 837               | 702               | 786               | 819               |
| 7    | United Kingdom           | USD('000)          | 1,320,394         | 1,268,609         | 1,301,563         | 1,413,683         | 1,369,001         |
|      |                          | Ton                | 285,163           | 300,070           | 305,320           | 313,892           | 305,302           |
|      |                          | USD/Ton            | 4,630             | 4,228             | 4,263             | 4,504             | 4,484             |
| 8    | Netherlands              | USD('000)          | 852,154           | 933,375           | 1,133,202         | 1,241,080         | 1,152,816         |
|      |                          | Ton                | 240,061           | 268,059           | 307,638           | 302,134           | 285,485           |
|      |                          | USD/Ton            | 3,550             | 3,482             | 3,684             | 4,108             | 4,038             |
| 9    | Thailand                 | USD('000)          | 912,341           | 924,515           | 988,646           | 1,085,157         | 1,039,262         |
|      |                          | Ton                | 141,793           | 150,496           | 153,913           | 164,476           | 163,996           |
|      |                          | USD/Ton            | 6,434             | 6,143             | 6,423             | 6,598             | 6,337             |
| 10   | Czech Republic           | USD('000)          | 903,141           | 883,577           | 929,068           | 1,032,872         | 969,021           |
|      |                          | Ton                | 186,951           | 210,050           | 208,034           | 222,034           | 218,425           |
|      |                          | USD/Ton            | 4,831             | 4,207             | 4,466             | 4,652             | 4,436             |
| 11   | Others                   | USD('000)          | 16,973,404        | 16,774,268        | 18,403,898        | 20,563,623        | 18,968,037        |
|      |                          | Ton                | 4,261,570         | 4,177,640         | 4,490,131         | 4,636,464         | 4,339,277         |
|      |                          | USD/Ton            | 3,983             | 4,015             | 4,099             | 4,435             | 4,371             |
|      | World                    | USD('000)          | <b>38,421,504</b> | <b>37,607,564</b> | <b>40,974,521</b> | <b>45,500,129</b> | <b>42,617,987</b> |
|      |                          | Ton                | <b>10,104,039</b> | <b>10,169,511</b> | <b>11,166,240</b> | <b>11,600,089</b> | <b>10,907,119</b> |
|      |                          | USD/Ton            | <b>3,803</b>      | <b>3,698</b>      | <b>3,670</b>      | <b>3,922</b>      | <b>3,907</b>      |

Source: UN Trade data

*Project Profile for Setting up a Bolts and Nuts Manufacturing Unit*

**HS Code: 731816**

| Rank  | Importing countries      | Value/<br>Quantity | 2017      | 2018      | 2019      | 2020      | 2021      |
|-------|--------------------------|--------------------|-----------|-----------|-----------|-----------|-----------|
| 1     | United States of America | USD('000)          | 1,134,825 | 1,297,790 | 1,240,694 | 1,011,600 | 1,375,802 |
|       |                          | Ton                | 293,328   | 328,484   | 301,770   | 238,932   | 314,109   |
|       |                          | USD/Ton            | 3,869     | 3,951     | 4,111     | 4,234     | 4,380     |
| 2     | Germany                  | USD('000)          | 576,866   | 654,170   | 592,091   | 526,635   | 677,591   |
|       |                          | Ton                | 149,318   | 162,278   | 137,540   | 120,136   | 147,972   |
|       |                          | USD/Ton            | 3,863     | 4,031     | 4,305     | 4,384     | 4,579     |
| 3     | China                    | USD('000)          | 632,319   | 639,789   | 548,045   | 513,459   | 540,798   |
|       |                          | Ton                | 57,895    | 57,136    | 47,106    | 44,303    | 45,973    |
|       |                          | USD/Ton            | 10,922    | 11,198    | 11,634    | 11,590    | 11,763    |
| 4     | Mexico                   | USD('000)          | 470,582   | 516,205   | 511,213   | 423,190   | 533,922   |
|       |                          | Ton                | 96,218    | -         |           |           | 449,720   |
|       |                          | USD/Ton            | 4,891     | #DIV/0!   | #DIV/0!   | #DIV/0!   | 1,187     |
| 5     | Canada                   | USD('000)          | 336,786   | 355,720   | 357,030   | 283,970   | 334,668   |
|       |                          | Ton                | 388,740   | 370,822   | 407,729   | 340,879   | 335,874   |
|       |                          | USD/Ton            | 866       | 959       | 876       | 833       | 996       |
| 6     | France                   | USD('000)          | 248,257   | 268,094   | 251,530   | 207,818   | 217,965   |
|       |                          | Ton                | 40,126    | 41,214    | 43,103    | 38,919    | 38,744    |
|       |                          | USD/Ton            | 6,187     | 6,505     | 5,836     | 5,340     | 5,626     |
| 7     | Poland                   | USD('000)          | 105,915   | 142,949   | 39,557    | 133,386   | 188,899   |
|       |                          | Ton                | 33,697    | 40,653    | 11,911    | 37,777    | 43,492    |
|       |                          | USD/Ton            | 3,143     | 3,516     | 3,321     | 3,531     | 4,343     |
| 8     | Japan                    | USD('000)          | 202,707   | 223,121   | 215,095   | 166,382   | 188,477   |
|       |                          | Ton                | 37,474    | 38,349    | 39,205    | 31,449    | 34,770    |
|       |                          | USD/Ton            | 5,409     | 5,818     | 5,486     | 5,291     | 5,421     |
| 9     | United Kingdom           | USD('000)          | 198,087   | 212,701   | 201,489   | 160,646   | 183,138   |
|       |                          | Ton                | 35,768    | 37,707    | 33,380    | 26,022    | 32,130    |
|       |                          | USD/Ton            | 5,538     | 5,641     | 6,036     | 6,173     | 5,700     |
| 10    | Thailand                 | USD('000)          | 163,027   | 178,907   | 169,365   | 136,107   | 180,013   |
|       |                          | Ton                | 25,143    | 27,398    | 27,570    | 23,573    | 27,538    |
|       |                          | USD/Ton            | 6,484     | 6,530     | 6,143     | 5,774     | 6,537     |
| 11    | Others                   | USD('000)          | 2,264,342 | 2,560,023 | 2,449,515 | 2,182,420 | 2,809,939 |
|       |                          | Ton                | 1,219,020 | 1,338,471 | 1,234,564 | 1,093,782 | 1,222,679 |
|       |                          | USD/Ton            | 1,858     | 1,913     | 1,984     | 1,995     | 2,298     |
| TOTAL |                          | USD('000)          | 6,333,713 | 7,049,469 | 6,575,624 | 5,745,613 | 7,231,212 |
|       |                          | Ton                | 2,376,727 | 2,442,512 | 2,283,878 | 1,995,772 | 2,693,001 |
|       |                          | USD/Ton            | 2,665     | 2,886     | 2,879     | 2,879     | 2,685     |

Source: UN Trade data

### 3.3. ESTIMATE OF DOMESTIC DEMAND

#### 3.3.1. Local Production

Currently there are a few local manufacturing units in Oman. details about them are provided in the analysis of competition.

#### 3.3.2. Foreign Trade - Imports

##### 3.3.2.1.Imports - 2017 to 2021

| HS Code                              | Units          | 2017       | 2018       | 2019       | 2020       | 2021      |
|--------------------------------------|----------------|------------|------------|------------|------------|-----------|
| 73181500                             | Value in RO    | 14,761,205 | 16,496,092 | 13,034,960 | 11,668,760 | 8,157,116 |
|                                      | Quantity in KG | 20,553,017 | 17,916,445 | 15,167,540 | 9,878,094  | 6,567,342 |
|                                      | RO/Kg          | 0.718      | 0.921      | 0.859      | 1.181      | 1.242     |
| 73181600                             | Value in RO    | 955,057    | 894,679    | 1,050,818  | 1,248,770  | 975,434   |
|                                      | Quantity in KG | 662,728    | 375,428    | 687,100    | 545,025    | 565,049   |
|                                      | RO/Kg          | 1.441      | 2.383      | 1.529      | 2.291      | 1.726     |
| Imported Quantity - Grand Total (Kg) |                | 21,215,745 | 18,291,873 | 15,854,640 | 10,423,119 | 7,132,391 |

(Source: Foreign Trade Statistics, ROP)

##### 3.3.2.2.Import Sources - 2021

#### 73181500

| Country        | Value in RO | Weight in Kg | RO/Ton | % of Total    |
|----------------|-------------|--------------|--------|---------------|
| UAE            | 6,035,840   | 5,150,984    | 1,172  | 78%           |
| China          | 397,669     | 781,530      | 509    | 12%           |
| India          | 422,905     | 322,752      | 1,310  | 5%            |
| Saudi Arabia   | 117,272     | 73,190       | 1,602  | 1%            |
| Turkey         | 48,350      | 56,260       | 859    | 1%            |
| Qatar          | 237,619     | 26,723       | 8,892  | Less than 1 % |
| Taiwan         | 14,942      | 19,283       | 775    |               |
| Germany        | 218,922     | 17,105       | 12,799 |               |
| Oman           | 16,127      | 13,697       | 1,177  |               |
| Hong Kong      | 38,220      | 13,687       | 2,792  |               |
| Bahrain        | 22,219      | 11,706       | 1,898  |               |
| United States  | 77,927      | 10,206       | 7,635  |               |
| Japan          | 65,689      | 9,978        | 6,583  |               |
| Egypt          | 3,637       | 7,413        | 491    |               |
| Singapore      | 22,405      | 7,413        | 3,022  |               |
| Luxembourg     | 95,431      | 7,031        | 13,573 |               |
| United Kingdom | 64,869      | 6,934        | 9,355  |               |
| Portugal       | 11,295      | 6,183        | 1,827  |               |
| Italy          | 45,703      | 6,181        | 7,394  |               |



*Project Profile for Setting up a Bolts and Nuts Manufacturing Unit*

| Country                              | Value in RO      | Weight in Kg     | RO/Ton       | % of Total |
|--------------------------------------|------------------|------------------|--------------|------------|
| Belgium                              | 67,241           | 3,398            | 19,788       |            |
| Vietnam                              | 2,921            | 3,334            | 876          |            |
| Latvia                               | 280              | 2,767            | 101          |            |
| Netherlands                          | 40,537           | 1,604            | 25,272       |            |
| France                               | 17,272           | 1,424            | 12,129       |            |
| Malaysia                             | 5,579            | 1,090            | 5,118        |            |
| Spain                                | 5,708            | 974              | 5,860        |            |
| Oman Free zone                       | 903              | 784              | 1,152        |            |
| Switzerland                          | 20,547           | 562              | 36,560       |            |
| Kuwait                               | 1,132            | 543              | 2,085        |            |
| Nigeria                              | 5,971            | 464              | 12,869       |            |
| Palau                                | 630              | 403              | 1,563        |            |
| Canada                               | 811              | 345              | 2,351        |            |
| Philippines                          | 7,790            | 297              | 26,229       |            |
| South Africa                         | 1,342            | 163              | 8,233        |            |
| Greece                               | 52               | 150              | 347          |            |
| Thailand                             | 897              | 141              | 6,362        |            |
| Korea                                | 1,193            | 128              | 9,320        |            |
| Brazil                               | 54               | 100              | 540          |            |
| Romania                              | 2,141            | 65               | 32,938       |            |
| Denmark                              | 1,383            | 41               | 33,732       |            |
| Georgia                              | 252              | 36               | 7,000        |            |
| Sweden                               | 2,650            | 33               | 80,303       |            |
| Austria                              | 211              | 32               | 6,594        |            |
| Croatia                              | 207              | 30               | 6,900        |            |
| United States Minor Outlying islands | 972              | 28               | 34,714       |            |
| Norway                               | 1,777            | 25               | 71,080       |            |
| Czech Republic                       | 1,582            | 21               | 75,333       |            |
| Australia                            | 925              | 18               | 51,389       |            |
| Finland                              | 1,265            | 16               | 79,063       |            |
| Indonesia                            | 345              | 13               | 26,538       |            |
| Poland                               | 110              | 13               | 8,462        |            |
| Guernsey                             | 160              | 11               | 14,545       |            |
| Pakistan                             | 68               | 10               | 6,800        |            |
| Swaziland                            | 2,300            | 6                | 383,333      |            |
| New Zealand                          | 385              | 5                | 77,000       |            |
| Sri Lanka                            | 123              | 5                | 24,600       |            |
| Ireland                              | 998              | 4                | 249,500      |            |
| Argentina                            | 656              | 1                | 656,000      |            |
| Colombia                             | 1                | 1                | 1,000        |            |
| Hungary                              | 33               | 1                | 33,000       |            |
| Iraq                                 | 443              | 1                | 443,000      |            |
| Mexico                               | 223              | 1                | 223,000      |            |
| Slovenia                             | 6                | -                |              |            |
| <b>Total</b>                         | <b>8,157,117</b> | <b>6,567,344</b> | <b>1,242</b> |            |

(Source: Foreign Trade Statistics, ROP)

*Project Profile for Setting up a Bolts and Nuts Manufacturing Unit*

**73181600**

| Country              | Value in RO    | Weight in Kg   | RO/Ton           | % of Total   |
|----------------------|----------------|----------------|------------------|--------------|
| China                | 251,703        | 352,511        | 714              | 62%          |
| United Arab Emirates | 387,011        | 123,191        | 3,142            | 22%          |
| India                | 74,711         | 69,832         | 1,070            | 12%          |
| Qatar                | 58,939         | 4,645          | 12,689           | 1%           |
| Germany              | 38,993         | 3,817          | 10,216           | 1%           |
| Japan                | 16,696         | 1,768          | 9,443            | Less than 1% |
| Italy                | 8,717          | 1,671          | 5,217            |              |
| Luxembourg           | 31,245         | 1,519          | 20,569           |              |
| United States        | 48,611         | 1,511          | 32,171           |              |
| Latvia               | 4,064          | 923            | 4,403            |              |
| Turkey               | 6,841          | 907            | 7,542            |              |
| Singapore            | 1,342          | 576            | 2,330            |              |
| Belgium              | 8,415          | 521            | 16,152           |              |
| France               | 4,422          | 342            | 12,930           |              |
| Philippines          | 2,595          | 302            | 8,593            |              |
| Netherlands          | 5,458          | 277            | 19,704           |              |
| United Kingdom       | 5,316          | 166            | 32,024           |              |
| Saudi Arabia         | 8,748          | 146            | 59,918           |              |
| Bahrain              | 268            | 89             | 3,011            |              |
| Austria              | 857            | 68             | 12,603           |              |
| Korea                | 350            | 42             | 8,333            |              |
| Switzerland          | 650            | 40             | 16,250           |              |
| Norway               | 1,412          | 31             | 45,548           |              |
| Canada               | 1,404          | 30             | 46,800           |              |
| Sri Lanka            | 1,053          | 26             | 40,500           |              |
| Egypt                | 1,065          | 17             | 62,647           |              |
| New Zealand          | 594            | 17             | 34,941           |              |
| Taiwan               | 919            | 15             | 61,267           |              |
| Thailand             | 167            | 12             | 13,917           |              |
| Pakistan             | 15             | 10             | 1,500            |              |
| Finland              | 50             | 9              | 5,556            |              |
| Australia            | 2              | 6              | 333              |              |
| Hong Kong            | 2,075          | 5              | 415,000          |              |
| Algeria              | 63             | 3              | 21,000           |              |
| Kuwait               | 214            | 3              | 71,333           |              |
| Malaysia             | 385            | 2              | 192,500          |              |
| Czech Republic       | 57             | -              |                  |              |
| Hungary              | 3              | -              |                  |              |
| Indonesia            | 2              | -              |                  |              |
| <b>Total</b>         | <b>975,432</b> | <b>565,050</b> | <b>1,311,866</b> | <b>100%</b>  |

### 3.3.2.3. Major Traders

Listed below are some of the traders in Oman

- Asia Bolts Industry (FZC) LLC
- Ultimate Hardware Solutions LLC
- Industrial Supplies Centre LLC
- Blue Target Trading LLC
- Vector Enterprises

### 3.3.3. Foreign Trade - Exports

#### 3.3.3.1. Exports - 2017 to 2021

| HS Code                              | Units          | 2017    | 2018   | 2019    | 2020   | 2021   |
|--------------------------------------|----------------|---------|--------|---------|--------|--------|
| 73181500                             | Value in RO    | 92,023  | 19,016 | 121,248 | 61,446 | 33,815 |
|                                      | Quantity in KG | 160,371 | 51,466 | 137,508 | 99,492 | 46,938 |
|                                      | RO/Kg          | 0.574   | 0.369  | 0.882   | 0.618  | 0.720  |
| 73181600                             | Value in RO    | 150     | 797    | 1,059   | 146    | 823    |
|                                      | Quantity in KG | 99      | 780    | 624     | 135    | 312    |
|                                      | RO/Kg          | 1.515   | 1.022  | 1.697   | 1.081  | 2.638  |
| Exported Quantity - Grand Total (Kg) |                | 160,470 | 52,246 | 138,132 | 99,627 | 47,250 |

(Source: Foreign Trade Statistics, ROP)

#### 3.3.3.2. Export Destinations - 2021

##### 73181500

| Country              | Value in RO   | Weight in Kg  | RO/Ton | % of Total  |
|----------------------|---------------|---------------|--------|-------------|
| United Arab Emirates | 7,595         | 26,098        | 291    | 56%         |
| Saudi Arabia         | 10,605        | 10,601        | 1,000  | 23%         |
| Bahrain              | 15,439        | 9,562         | 1,615  | 20%         |
| Qatar                | 144           | 477           | 302    | 1%          |
| United Kingdom       | 33            | 200           | 165    | 0%          |
| <b>Total</b>         | <b>33,816</b> | <b>46,938</b> |        | <b>100%</b> |

(Source: Foreign Trade Statistics, ROP)

##### 3181600

| Country      | Value in RO | Weight in Kg | RO/Ton       | % of Total |
|--------------|-------------|--------------|--------------|------------|
| Kuwait       | 568         | 310          | 1,832        | 99%        |
| UAE          | 255         | 2            | 127,500      | 1%         |
| <b>Total</b> | <b>823</b>  | <b>312</b>   | <b>2,638</b> |            |

(Source: Foreign Trade Statistics, ROP)

### 3.3.4. Foreign Trade - Re-Exports

#### 3.3.4.1. Re-Exports - 2017 to 2021

| HS Code                                     | Units          | 2017             | 2018             | 2019           | 2020           | 2021           |
|---|----------------|------------------|------------------|----------------|----------------|----------------|
| 73181500                                    | Value in RO    | 690,725          | 827,461          | 659,791        | 456,482        | 496,949        |
|   | Quantity in KG | 927,964          | 1,189,950        | 727,427        | 739,625        | 561,615        |
|   | RO/Kg          | 0.744            | 0.695            | 0.907          | 0.617          | 0.885          |
| 73181600                                    | Value in RO    | 176,769          | 142,271          | 82,581         | 215,209        | 80,331         |
|   | Quantity in KG | 82,771           | 134,904          | 22,585         | 84,680         | 19,186         |
|   | RO/Kg          | 2.136            | 1.055            | 3.656          | 2.541          | 4.187          |
| <b>Exported Quantity - Grand Total (Kg)</b> |                | <b>1,010,735</b> | <b>1,324,854</b> | <b>750,012</b> | <b>824,305</b> | <b>580,801</b> |

(Source: Foreign Trade Statistics, ROP)

#### 3.3.4.2. Re-Export Destinations - 2021

##### 73181500

| Country       | Value in RO    | Weight in Kg   | RO/Ton     | % of Total |
|---------------|----------------|----------------|------------|------------|
| Qatar         | 91,149         | 225,639        | 404        | 40%        |
| Oman Freezone | 250,868        | 155,889        | 1,609      | 28%        |
| UAE           | 89,043         | 115,464        | 771        | 21%        |
| Somalia       | 16,304         | 27,999         | 582        | 5%         |
| Saudi Arabia  | 17,504         | 16,950         | 1,033      | 3%         |
| Tanzania      | 3,891          | 11,916         | 327        | 2%         |
| Others        | 28,190         | 7,760          |            |            |
| <b>Total</b>  | <b>496,949</b> | <b>561,617</b> | <b>885</b> |            |

(Source: Foreign Trade Statistics, ROP)

##### 73181600

| Country              | Value in RO   | Weight in Kg  | RO/Ton       | % of Total  |
|----------------------|---------------|---------------|--------------|-------------|
| Oman Freezone        | 12,365        | 7,082         | 1,746        | 37%         |
| Qatar                | 8,637         | 6,752         | 1,279        | 35%         |
| United Arab Emirates | 52,693        | 4,724         | 11,154       | 25%         |
| Iran                 | 815           | 274           | 2,974        | 1%          |
| Malaysia             | 30            | 115           | 261          | 1%          |
| Singapore            | 124           | 99            | 1,253        | 1%          |
| Others               | 5,668         | 139           |              |             |
| <b>Total</b>         | <b>80,332</b> | <b>19,185</b> | <b>4,187</b> | <b>100%</b> |

(Source: Foreign Trade Statistics, ROP)

### 3.3.5. Estimated Demand / Consumption

It may be noted that the data regarding the local production for the past years is not available. However discussions with the industry experts indicate that the local production of fasteners during the year 2021 could be pegged at about 3000 tons. Considering the above, the following table illustrates the net imports of fasteners (Imports - exports - re-exports) in Oman for the period 2017 to 2020 and the consumption (Net imports + Local production) for the year 2021.

*All figures in Tons*

| Units                                 | 2017   | 2018   | 2019   | 2020  | 2021         |
|---------------------------------------|--------|--------|--------|-------|--------------|
| Local Production                      | NA     |        |        |       | 3,000        |
| Import                                | 20,553 | 17,916 | 15,168 | 9,878 | 6,567        |
| Export                                | 160    | 51     | 138    | 99    | 47           |
| Re-Export                             | 928    | 1,190  | 727    | 740   | 562          |
| Net Imports                           | 19,465 | 16,675 | 14,303 | 9,039 |              |
| <b>Demand /<br/>Local Consumption</b> |        |        |        |       | <b>8,959</b> |

### 3.4. DEMAND PROJECTION

While the overall output construction / fabrication / oil and gas sectors have been showing a declining trend in the past few years, the increased oil prices and the government stimulus to kick start the economy are expected to fuel moderate growth in the subsequent years. Considering this, the expected demand for fasteners in Oman is illustrated in the following table.

| Year                           | 2021  | 2022         | 2023         | 2024         | 2025          | 2026          |
|--------------------------------|-------|--------------|--------------|--------------|---------------|---------------|
| Demand (Tons )                 | 8,959 |              |              |              |               |               |
| Projected Growth rate (%)      |       | 3%           | 3%           | 3%           | 3%            | 3%            |
| <b>Projected Demand (Tons)</b> |       | <b>9,228</b> | <b>9,504</b> | <b>9,790</b> | <b>10,083</b> | <b>10,386</b> |

### 3.5. EXPORT POTENTIAL TO GCC COUNTRIES

The import into the various GCC markets (illustrated below) can be considered as the potential for exports for a local manufacturer in Oman. However, as there very limited exports from Oman currently, the financial projections do not consider export of fasteners from the project.

• **731815**

| HS Code 731815       | Value/ Quantity  | 2017           | 2018           | 2019           | 2020           |
|----------------------|------------------|----------------|----------------|----------------|----------------|
| United Arab Emirates | USD('000)        | 163,783        | 156,690        | 147,407        | 136,464        |
|                      | Ton              | 61,254         | 55,271         | 60,937         | 53,064         |
|                      | USD/Ton          | 2,674          | 2,835          | 2,419          | 2,572          |
| Saudi Arabia         | USD('000)        | 112,038        | 128,385        | 123,294        | 129,977        |
|                      | Ton              | 44,364         | 43,304         | 47,205         | 56,170         |
|                      | USD/Ton          | 2,525          | 2,965          | 2,612          | 2,314          |
| Kuwait               | USD('000)        | 40,055         | 39,026         | 33,649         | 21,356         |
|                      | Ton              | 10,709         | 8,580          | 6,282          | 3,621          |
|                      | USD/Ton          | 3,740          | 4,548          | 5,356          | 5,898          |
| Bahrain              | USD('000)        | 10,183         | 9,012          | 9,296          | 12,488         |
|                      | Ton              | 3,346          | 2,309          | 2,920          | 3,828          |
|                      | USD/Ton          | 3,043          | 3,903          | 3,184          | 3,262          |
| Qatar                | USD('000)        | 34,985         | 38,643         | 31,441         | 25,745         |
|                      | Ton              | 12,189         | 13,430         | 10,012         | 9,002          |
|                      | USD/Ton          | 2,870          | 2,877          | 3,140          | 2,860          |
| <b>TOTAL</b>         | <b>USD('000)</b> | <b>361,044</b> | <b>371,756</b> | <b>345,087</b> | <b>326,030</b> |
|                      | <b>Ton</b>       | <b>131,862</b> | <b>122,894</b> | <b>127,356</b> | <b>125,685</b> |
|                      | <b>USD/Ton</b>   | <b>2,738</b>   | <b>3,025</b>   | <b>2,710</b>   | <b>2,594</b>   |

• **731816**

| HS Code 731816       | Value/ Quantity  | 2017          | 2018          | 2019          | 2020          |
|----------------------|------------------|---------------|---------------|---------------|---------------|
| United Arab Emirates | USD('000)        | 20,538        | 20,326        | 19,644        | 18,372        |
|                      | Ton              | 38,139        | 44,087        | 43,306        | 40,093        |
|                      | USD/Ton          | 539           | 461           | 454           | 458           |
| Saudi Arabia         | USD('000)        | 8,746         | 7,989         | 6,695         | 9,066         |
|                      | Ton              | 17,686        | 20,222        | 20,807        | 22,054        |
|                      | USD/Ton          | 495           | 395           | 322           | 411           |
| Kuwait               | USD('000)        | 525           | 306           | 343           | 222           |
|                      | Ton              | 4,407         | 3,724         | 5,650         | 3,811         |
|                      | USD/Ton          | 119           | 82            | 61            | 58            |
| Bahrain              | USD('000)        | 317           | 285           | 282           | 297           |
|                      | Ton              | 1,262         | 1,299         | 1,257         | 1,105         |
|                      | USD/Ton          | 251           | 219           | 224           | 269           |
| Qatar                | USD('000)        | 2,683         | 2,392         | 1,530         | 1,738         |
|                      | Ton              | 7,346         | 6,810         | 5,636         | 4,752         |
|                      | USD/Ton          | 365           | 351           | 271           | 366           |
| <b>TOTAL</b>         | <b>USD('000)</b> | <b>32,809</b> | <b>31,298</b> | <b>28,494</b> | <b>29,695</b> |
|                      | <b>Ton</b>       | <b>68,840</b> | <b>76,142</b> | <b>76,656</b> | <b>71,815</b> |
|                      | <b>USD/Ton</b>   | <b>477</b>    | <b>411</b>    | <b>372</b>    | <b>413</b>    |

Source: UN Trade Data

### **3.6. COMPETITION ANALYSIS**

There are two major manufacturers in Oman. In addition to supply by the local manufacturers, the demand is catered to by the major traders.

#### **3.6.1. Major Local Manufacturers**

- **INSCO Fasteners (<https://www.inscofasteners.com/about.html>)**

INSCO Fasteners located in Phase 7 in Sohar Industrial Area is a manufacturer, stockholder and distributor of petrochemical grade bolting and special fasteners for the Oil, Gas and Petrochemical industries. With over 12,500 square meters of land they have all the manufacturing processes in house. The processes handled in-house include forging, machining, heat treatment and coating, The unit has been setup with technical collaboration and partnership with India's Kapil Enterprises.

INSCO is manufacturing stud bolts in ASTM A193 Grade B7, B7M, L7, L7M, B16, B8, B8M and L43, with corresponding nuts as per A 194 Grade 2H, 2HM, 4, 7, 8, 8M, 8T, L4, 7 and 7M

INSCO also manufactures complete range of hexagonal bolts & nuts as per ISO 4014, 4017, 4032 and 4762 in grades 8.8, 10.9 and 12.9 with corresponding hexagon nuts as per grades 8, 10 and 12

INSCO manufactures bolts from M-24 diameter to M-64 and up to 1000 mm long. They also produce Stud bolts and fasteners used for the water industry all over Middle East. Stud bolts and hexagon bolts are in high tensile grade B7, B7M, B8, B8M, L7, L7M, 8.8, 10.9, 12.9 in Hex bolts and nuts and fasteners in DIN, ASTM, ASME, IS and ISO standards like DIN EN ISO 898-1, ASTM A193 and A 194

- **Gulf Studs LLC** (<https://gulfstuds.com/about-us/>)

Gulf Studs LLC manufactures a range of fasteners that finds application in the Oil & Gas, Petroleum Industry, General & Civil Engineering, Power & Energy, Automotive, Construction, Transmission Tower Lines, Precast Concrete, Marine, Shipping, Steel Fabrication and Heavy Machinery.

Gulf Studs LLC also supplies assembly & accessories of All kind of Anchor Bolt (J- Type, L- Type, Vertical Type & U-Type), Hex Bolts Nuts and Washers, Custom made Fasteners, special Fabricated (Design-Based) products.

### **3.7. MARKETING MIX STRATEGY OF COMPETITORS**

#### **3.7.1. Product**

The Bolts and Nuts are of different sizes and the specifications are based on the end-use requirements.

#### **3.7.2. Pricing**

Based on the brief primary survey and on secondary research, the Bolts and Nuts are sold in the range of RO 540 - 770 (USD 1,400 - 2,000 per ton).

#### **3.7.3. Promotion**

The existing players promote their products mainly through contacts with construction companies, fabricators as well as distributors / dealers. The major players use the digital platform especially websites detailing their capabilities for promoting their product / services.

#### **3.7.4. Trade Credit**

The industry practice is to offer a reasonable credit period depending on the credit worthiness of the client. Often discounts of 5 - 10 percent are also given to the clients.



### **3.7.5. Distribution**

The products are distributed directly to contractors / fabricators as well as traders as per their requirement.

## **3.8. PROPOSED MARKETING MIX STRATEGY FOR THE COMPANY**

### **3.8.1. Product Mix**

The unit shall produce Bolt of 6 mm to 18 mm Diameter & Length of 20 mm to 150 mm and the associated nuts.

### **3.8.2. Target Market**

The project shall focus on the local market only.

Though analysis of the GCC imports indicates potential for exports, the past trend of exports to GCC countries from Oman is not encouraging.

### **3.8.3. Pricing**

Based on the competition expected from the local players and from imports, the average selling price of Bolts and Nuts is considered at RO 610 per ton (USD 1,580 per ton).

### **3.8.4. Promotion**

The company shall concentrate on building healthy personal contacts with various segments mainly in fabrication / construction industry. The plant manager shall be responsible for sales as well. Distribution

### **3.8.5. Distribution**

The products shall be distributed directly to contractors / fabricators as well as traders as per their requirement. A pickup has been provided in the project for the distribution of the products.

### 3.9. PROJECTED MARKET SHARE

The unit with a production capacity of 1,080 MT per day can effectively leverage its capability to service the target market.

| Detail   | 2024  | 2025   | 2026   | 2027   | 2028   |
|--|-------|--------|--------|--------|--------|
| Projected Demand (Tons)                                    | 9,790 | 10,083 | 10,386 | 10,697 | 11,018 |
| Estimated sales (Tons)                                     | 432   | 540    | 648    | 756    | 756    |
| Market share (%)   | 4.4%  | 5.4%   | 6.2%   | 7.1%   | 6.9%   |
| Capacity utilization (%) -<br>Total Capacity of 1,080 tons | 40%   | 50%    | 60%    | 70%    | 70%    |

The project shall operate on a single shift basis. However, as the sales / production improve, the unit will have to hire additional manpower to support enhanced level of operations.

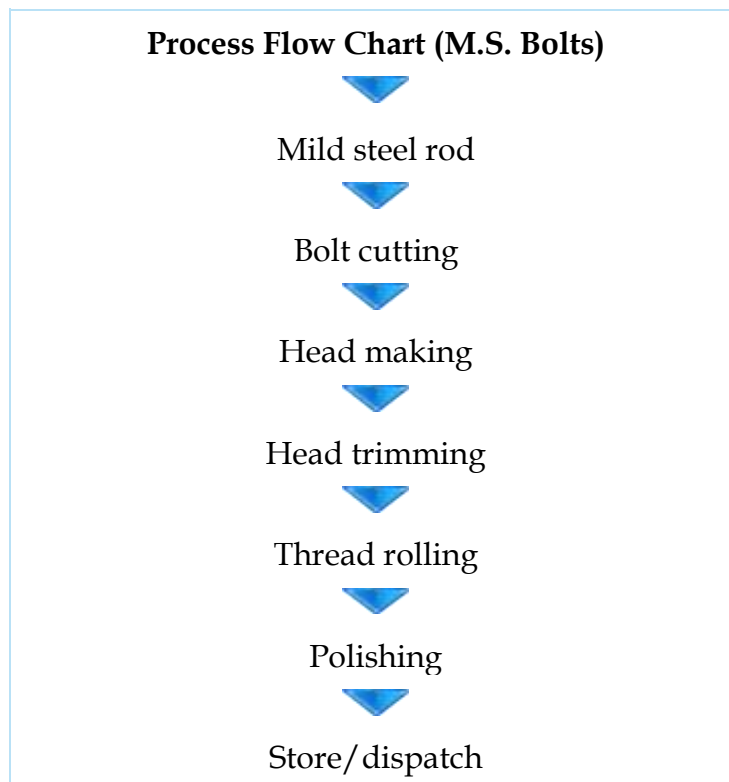
## 4. TECHNICAL ANALYSIS

### 4.1. LOCATION

The proposed project can be located either at Sohar Industrial City. The referred locations are taking proximity to raw material and the target market into consideration.

### 4.2. MANUFACTURING PROCESS

The raw material used for manufacture of bolt is MS Rounds. The rounds are pickled in the acid tanks, washed and drawn in a drawing machine. The cleaned rod is fed into the cold heading machine. In the machine, one end of the rod is cut into the desired length with cutting stroke and simultaneously the head formation takes at other end. The pins are then trimmed in the trimming machine. In quality bolts, the lower side of the head is also faced. Threading is done in the thread rolling machines.



While manufacturing nuts, the hexagonal rod of desired size is procured and the nuts are cut on the automatic nut-cutting machine. Cut nuts blanks are drilled and tapped on the nut-tapping machine. Finally, these are deburred in the polishing barrel. The process involved is depicted in the following flow process chart.

Typically at the end of the manufacturing process, nuts and bolts are heat treated for increasing their overall strength.

#### 4.3. LAND & BUILDING

The total land area required for the project is around 1,200 Sq. M. Building area required for the project is estimated at 1,050 Sq. Meters. It will be taken on lease. Lease rent will be RO 2.5 per square meter per month.

#### 4.4. MACHINERY

The major machinery required for the project is the automated Bolts and Nuts making machine. Major suppliers are available in India and China.

| <b>MAIN PLANT AND MACHINERY</b>   |                   |
|---|-------------------|
| <b>BOLT FORMING</b>   | <b>Load in KW</b> |
| Cold Head Forging Machine - To produce Bolt of 6 mm to 18 mm Diameter & Length of 20 mm to 150 mm | 11.25             |
| Head Trimming Machine   | 7.50              |
| Thread Rolling Machine  | 11.25             |
| Wire Drawing Machine  | 3.75              |
| Wire Pointing Machine   | 0.75              |
| <b>NUT POLISHING</b>  |                   |
| Automatic Nut Forming Plant   | 18.75             |
| Nut Tapping Machine   | 2.25              |
| Steel Polishing Barrel  | 3.00              |

The details of the main and auxiliary machineries required for the project is as detailed in Annexure 1.3.

**4.5. PLANT CAPACITY**

The capacity of the plant for producing bolts & nuts per annum (based on 8 hours of working per day) is 1,080 tons. The estimated production and the capacity utilization are detailed in the following table:

| Details  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--|--------|--------|--------|--------|--------|
| Installed capacity (Tons)  | 1,080  | 1,080  | 1,080  | 1,080  | 1,080  |
| Capacity utilization   | 40%    | 50%    | 60%    | 70%    | 70%    |
| Actual Production / sales considered for financial Projection (Tons) | 432    | 540    | 648    | 756    | 756    |

**4.6. VEHICLES**

One pickup has been considered for movement of raw materials as well as finished goods and one forklift has been considered for internal material movement. Details of Vehicles are provided in Annexure 1.4.

**4.7. RAW MATERIALS AND CONSUMABLES**

Steel rods are the main raw materials. Consumables are Lubricating Oil, Acids, cotton wastes etc. Details are in Annexure 2.1.

The following table illustrates the requirement of raw materials (including 2% wastage) and Consumables at full capacity utilization of bolts & nuts, i.e., for production of 1,080 tons of nuts and bolts.

| Item           | Quantity (Tons) | Rate - RO per Ton |
|----------------|-----------------|-------------------|
| MS Rods        | 707             | 269               |
| Hexagonal Rods | 395             | 269               |
| Total          | 1,102           |                   |

#### 4.8. UTILITIES

##### 4.8.1. Water

Water is required for mainly human consumption. It is estimated that 600 cubic metres of water is required per annum.

##### 4.8.2. Electricity

Electricity is used for machine operations and for general purpose lighting. The connected load is around 100 kW.

#### 4.9. MANPOWER

It is estimated that 8 persons are required at the production department. The number of staff required in the administration and accounts department is estimated at 2. One person is proposed for the sales department. Omanization has been considered at 36%.

The details of annual wages with 40% additional benefits are detailed as below:

| S. No        | Department                | No of Resource Personnel | Annual Wages (RO) |
|--------------|---------------------------|--------------------------|-------------------|
| 1            | Production                | 8                        | 50,568            |
| 2            | Administration & Accounts | 2                        | 16,800            |
| 3            | Sales                     | 1                        | 10,080            |
| <b>Total</b> |                           | <b>11</b>                | <b>77,448</b>     |

#### 4.10. PROJECT IMPLEMENTATION

The total expected time for project implementation is around 12 months.

## 5. FINANCIAL ANALYSIS

### 5.1. PROJECT COST

The total cost of the project is estimated at RO 156,000. Details are given in Annexure - 1. The break-up is given below:

| Details                         | Amount (RO)    |
|---------------------------------|----------------|
| Plant & Machinery               | 51,000         |
| Vehicles and Internal Transport | 19,000         |
| Furniture & Office Equipment    | 10,000         |
| Pre- Operative Expenses         | 12,000         |
| Contingency & Escalation        | 5,000          |
| <b>Sub Total</b>                | <b>97,000</b>  |
| Working Capital                 | 59,000         |
| <b>TOTAL CAPITAL</b>            | <b>156,000</b> |

#### 5.1.1. Land & Building

The total extent of building is 1,050 Sq. M. An industrial shed will be rented for the project. Rent has been considered at RO 2.5 per sq. meter per month.

#### 5.1.2. Plant & Machinery

The total cost of plant and machinery is estimated at RO 51,000. Details are given in Annexure- 1.3.

#### 5.1.3. Vehicles & Internal Transport

The total cost of vehicles and internal transport is estimated at RO 19,000. Details are given in Annexure- 1.4.

#### 5.1.4. Furniture & Office Equipment

The total cost of furniture and office equipment is estimated at RO 10,000. Details are given in Annexure- 1.5.

### 5.1.5. Pre-Operative Expenses

The pre-operative expenses include expenses for feasibility study, interest during project implementation, salaries and wages of project staff, travel and communication, legal fees, audit fees and other miscellaneous expenses. The total pre-operative expenses are estimated at RO 12,000. Details are given in Annexure- 1.6.

### 5.1.6. Contingency & Escalation

A provision of 5 % of the estimated cost of items including building, plant & machinery, vehicles etc., is provided in the Project cost towards price escalation and any unforeseen expenses. This works out to RO 5,000. Details are given in Annexure- 1.7

### 5.1.7. Working Capital

Following assumptions are made for computation of working capital.

| Details                 | Period   |
|-------------------------|----------|
| Accounts Receivable     | 2 Months |
| Raw Materials           | 1 Month  |
| Consumables & packing   | 1 Month  |
| Utilities               | 1 Month  |
| Factory Wages           | 1 Month  |
| Administration Expenses | 1 Month  |
| Sales Expenses          | 1 Month  |
| Work in Progress        | 2 Days   |
| Finished Goods          | 10 Days  |
| Finance Cost            | 1 Month  |
| <b>PAYABLES</b>         |          |
| Raw Materials           | 1 Month  |



The working capital requirements for the first 4 years of operation are given below. The working capital requirement in the first year comes to RO 59,000. Details are given in Annexure 1.8.

| Particulars                           | Year 1 | 2  | 3  | 4  |
|---------------------------------------|--------|----|----|----|
| Working Capital Requirement (RO '000) | 59     | 68 | 80 | 89 |

## 5.2. MEANS OF FINANCE

It is proposed to finance the Project as indicated in the following table.

| Means of Finance                      | Amount (RO)    |
|---------------------------------------|----------------|
| Equity Capital (40% of Project Cost)  | 62,400         |
| Term Loan from ODB @ 3% interest rate | 58,200         |
| <b>Sub-Total</b>                      | <b>120,600</b> |
| Commercial Loan for Working Capital   | 35,400         |
| <b>TOTAL</b>                          | <b>156,000</b> |

### 5.3. COST OF SALES

The cost of sale has been projected for the first ten years of operation (Annexure-2) and those of first five years are summarized as below:

*Figures are in RO '000)*

| Details                          | Year 1     | Year 2     | Year 3     | Year 4     | Year 5     |
|----------------------------------|------------|------------|------------|------------|------------|
| Raw Materials and consumables    | 127        | 159        | 190        | 222        | 222        |
| Utilities                        | 9          | 11         | 13         | 15         | 15         |
| Factory Wages                    | 51         | 52         | 68         | 70         | 72         |
| <b>PRIME COST</b>                | <b>186</b> | <b>222</b> | <b>271</b> | <b>307</b> | <b>309</b> |
| Rent for Land                    | 32         | 32         | 32         | 32         | 32         |
| Factory Overheads                | 3          | 3          | 4          | 4          | 4          |
| Misc. Factory Exp.               | 4          | 5          | 6          | 7          | 7          |
| <b>FACTORY COST</b>              | <b>225</b> | <b>262</b> | <b>312</b> | <b>349</b> | <b>351</b> |
| Admin. Salaries                  | 17         | 18         | 19         | 19         | 20         |
| Admin. Expenses                  | 7          | 7          | 7          | 7          | 8          |
| <b>TOTAL ADMIN EXPENSES</b>      | <b>24</b>  | <b>25</b>  | <b>26</b>  | <b>27</b>  | <b>28</b>  |
| Sales Salaries                   | 10         | 10         | 11         | 11         | 11         |
| Sales Expenses                   | 2          | 2          | 2          | 2          | 2          |
| Advert.& Business Promotion      | 5          | 13         | 16         | 18         | 18         |
| Total sales & distribution costs | 17         | 25         | 28         | 31         | 32         |
| <b>OPERATING COST</b>            | <b>266</b> | <b>312</b> | <b>366</b> | <b>407</b> | <b>411</b> |
| <b>Finance cost</b>              |            |            |            |            |            |
| Int. on Institutional finance    | 2          | 2          | 1          | 1          | 1          |
| Int. on working capital          | 2          | 2          | 2          | 2          | 2          |
| Total finance cost               | 4          | 4          | 4          | 3          | 3          |
| <b>Non-cash expenses</b>         |            |            |            |            |            |
| Depreciation                     | 12         | 12         | 12         | 12         | 12         |
| Prelim Expenses written off      | 12         | 0          | 0          | 0          | 0          |
| <b>Total Cost</b>                | <b>294</b> | <b>328</b> | <b>382</b> | <b>423</b> | <b>426</b> |

#### 5.3.1. Raw Materials

The cost of raw materials & consumables at 100% capacity utilization works out to RO 317,250 and the details are in Annexure 2.1.

### 5.3.2. Utilities

The total cost of utilities for working in full capacity is RO 21,396. The basis of estimate is given in Annexure 2.2.

### 5.3.3. Salaries & Wages

The cost of salaries and wages in the first year of operation is RO 77,448. Details are given in Annexure 2.3. Wages for the production staff has been increased by about 30% when the capacity utilization crosses 50%.

### 5.3.4. Factory Overheads

The annual expenses include repairs and maintenance, civil repairs, cost of spares, spare parts, insurance and vehicle expense and the same is estimated at RO 2,810 for the first year, RO 3,420 for the second and RO 3,515 for the third year. Details are given in Annexure- 2.4.

### 5.3.5. Administrative Expenses

The basis of estimates of administrative expenses excluding salaries & wages is given in Annexure 2.5 and it works out to RO 6,895 for the first year of operation.

### 5.3.6. Depreciation

Depreciation works out to RO 12,282. Depreciation calculation is given in annexure- 2.7. The following are the rates considered for the calculation of depreciation.

| Assets                          | Life (years) | % of depreciation |
|---------------------------------|--------------|-------------------|
| Plant & Machinery               | 10           | 10                |
| Vehicles and Internal Transport | 4            | 25                |
| Furniture & Office Equipment    | 5            | 20                |

### 5.3.7. Loan & Interest Calculation

Interest rate for term loan and loan for working capital is taken at 3% and 6% respectively. Details of interest calculations are given in Annexure- 2.8.

### 5.4. INCOME TAX

No income tax is provided for the first 5 years of operation as the new units are exempted from tax for the first five years and 15% tax is considered from 6<sup>th</sup> year onwards.

### 5.5. COST RATIOS

Cost indicators as a percentage of sales realization, for 10 years, are given in Annexure- 8. The summary for the first 5 years of operation is illustrated below

| Details                           | Year 1        | Year 2       | Year 3       | Year 4       | Year 5       |
|-----------------------------------|---------------|--------------|--------------|--------------|--------------|
| Raw Material / Total Sales        | 48.2%         | 48.2%        | 48.2%        | 48.2%        | 48.2%        |
| Utilities / Total Sales           | 3.3%          | 3.3%         | 3.3%         | 3.3%         | 3.3%         |
| Factory wages / Total Sales       | 19.2%         | 15.8%        | 17.1%        | 15.1%        | 15.6%        |
| <b>Prime Cost / Total Sales</b>   | <b>70.7%</b>  | <b>67.3%</b> | <b>68.6%</b> | <b>66.6%</b> | <b>67.1%</b> |
| Factory exp. / Total Sales        | 2.7%          | 2.6%         | 2.4%         | 2.2%         | 2.3%         |
| <b>Factory Cost / Total Sales</b> | <b>85.4%</b>  | <b>79.5%</b> | <b>79.0%</b> | <b>75.7%</b> | <b>76.1%</b> |
| Admin. exp. / Total Sales         | 9.0%          | 7.5%         | 6.5%         | 5.8%         | 6.1%         |
| Selling exp. / Total Sales        | 6.5%          | 7.7%         | 7.2%         | 6.8%         | 6.9%         |
| Finance Cost / Total Sales        | 1.5%          | 1.2%         | 0.9%         | 0.7%         | 0.7%         |
| Non-Cash exp. / Total Sales       | 9.2%          | 3.7%         | 3.1%         | 2.7%         | 2.7%         |
| <b>Total Cost / Sales</b>         | <b>111.5%</b> | <b>99.5%</b> | <b>96.7%</b> | <b>91.7%</b> | <b>92.4%</b> |

Being an engineering unit with skilled operators employed, the factory wages other than Raw Material costs would be a major cost element.

**5.6. NET PROFIT AND PROFITABILITY ANALYSIS**

As per the financial projection in Annexure - 3, the venture is financially viable. The summary of the analysis is given under:

|           | <b>Year of Operation</b>                         | <b>1</b>           | <b>2</b>  | <b>3</b>  | <b>4</b>  | <b>5</b>  |
|-----------|--|--------------------|-----------|-----------|-----------|-----------|
|           | <b>Production</b>                                | 40%                | 50%       | 60%       | 70%       | 70%       |
| <b>No</b> | <b>Item</b>                                      | <b>In R.O.'000</b> |           |           |           |           |
| 1         | <b>Operating Cost</b>                            | 266                | 312       | 366       | 407       | 411       |
| 2         | Expected Sales                                   | 264                | 329       | 395       | 461       | 461       |
| 3         | <b>Profit before Interest &amp; depreciation</b> | <b>-2</b>          | <b>18</b> | <b>29</b> | <b>54</b> | <b>50</b> |
| 4         | Depreciation                                     | 12                 | 12        | 12        | 12        | 12        |
| 5         | Finance Cost                                     | 4                  | 4         | 4         | 3         | 3         |
| 6         | <b>Operating profit</b>                          | <b>-18</b>         | <b>2</b>  | <b>13</b> | <b>38</b> | <b>35</b> |
| 7         | Other income if any                              |                    |           |           |           |           |
| 8         | Prelim Expenses written off                      | 12                 | -         | -         | -         | -         |
| 9         | Profit/Loss before tax                           | -30                | 2         | 13        | 38        | 35        |
| 10        | Income Tax                                       | 0                  | 0         | 0         | 0         | 0         |
| 11        | <b>Profit after tax</b>                          | <b>-30</b>         | <b>2</b>  | <b>13</b> | <b>38</b> | <b>35</b> |
| 12        | Statutory reserve                                |                    | 0         | 1         | 4         | 3         |
| 13        | Profit for appropriation                         | -30                | 1         | 12        | 35        | 31        |
| 14        | Dividend   | 0                  | 0         | 0         | 0         | 0         |
| 15        | General reserve                                  | -30                | 1         | 12        | 35        | 31        |
| 16        | <b>Net cash accruals</b>                         | <b>-6</b>          | <b>14</b> | <b>25</b> | <b>51</b> | <b>47</b> |

**5.7. KEY APPRAISAL CRITERIA**

The viability of the project based on major appraisal criteria is given below.

| <b>Detail</b>                                  | <b>Value</b>     |
|--|------------------|
| IRR on total investment                        | 16.0%            |
| IRR on Equity                                  | 24.9%            |
| Payback period of Total Investment             | 6 years 3 months |
| Payback period on equity                       | 5 Years 3 months |
| Break Even Sales (as % of plant capacity)      | 43.5%            |
| Cash Break Even Sales (as % of plant capacity) | 40.2 %           |
| DSCR   | 3.15             |

## 5.8. SENSITIVITY ANALYSIS

A sensitivity analysis has been carried out to determine the susceptibility of the project to changes in main variables. Effect on the IRR on equity investment, based on 10 years of operation due to change in various variables is as follows:

| Particulars       | Original | Sales volume down by 5% | RM Cost up by 5% | Sales Value down by 5% |
|-------------------|----------|-------------------------|------------------|------------------------|
| IRR on Investment | 16.0%    | 10.9                    | 11.0             | 5.4                    |
| IRR on equity     | 24.9%    | 16.5                    | 16.5             | 8.0                    |

As it can be seen, the profitability of the project is susceptible to variation of all the key performance variables. Support for procurement as well as raw material supply at competitive prices shall help the unit in its success.

## **6. FACTORS TO CONSIDER BEFORE PROJECT IMPLEMENTATION**

The following key factors have to be considered before implementing the project:

- The cost estimates of Plant and Machinery is based on secondary research. It is advised that the investor should receive revised quotations from potential machinery suppliers before implementing the project.
- Capacity utilization is one of the major factors that shall determine the actual viability of the project.
- Quality is another major parameter to consider based on which customer build up shall happen over the period of years. Failure in delivering quality service to clients shall lead to the failure of the unit. It is recommended that required qualified technical resources are deployed for the successful operation of the project.
- The cost of raw material is a major factor that influences the profitability of the project. Prudent management of raw material stocks is key to ensuring profitable operations.

## 7. CONCLUSION

The IRR on Total Investment for the project is 16% and the IRR on Equity Investment is 24.9%.

The project has a healthy DSCR of 3.15.

Based on the various analysis carried out and as detailed above, the project is found to be technically feasible and financially viable.



*Annexures - Financial Projections*

| ANNEXURE- 1            |                             |       |        |         |                           |
|------------------------|-----------------------------|-------|--------|---------|---------------------------|
| BOLTS & NUTS UNIT      |                             |       |        |         |                           |
| ESTIMATED PROJECT COST |                             |       |        |         |                           |
| S.No.                  | Item                        | Refer |        | Amount  | Remarks                   |
|                        |                             | App.  |        | (R.O.)  |                           |
| <b>A1</b>              | <b>PROJECT COST</b>         |       |        |         |                           |
| 1                      | Land for Plant Site         | 1.1   | 0      |         | Lease Rental              |
| 2                      | Building etc.               | 1.2   | 0      |         |                           |
| 3                      | Plant & Machinery           | 1.3   | 51,000 |         | Estimates                 |
| 4                      | Vehicles and Int. Transport | 1.4   | 19,000 |         | Estimates                 |
| 5                      | Furniture & Office Equip.   | 1.5   | 10,000 |         | Estimates                 |
| 6                      | Pre- Operative Expenses     | 1.6   | 12,000 |         | Estimates                 |
| 7                      | Contingency & Escalation    | 1.7   | 5,000  |         | Estimates                 |
|                        | Sub Total                   |       | 97,000 | 97,000  |                           |
| <b>A2</b>              | <b>WORKING CAPITAL</b>      |       | 59,000 | 59,000  |                           |
|                        |                             |       |        |         |                           |
| <b>A3</b>              | <b>TOTAL</b>                |       |        | 156,000 |                           |
|                        | Say                         |       |        | 156,000 |                           |
|                        |                             |       |        |         |                           |
| <b>B</b>               | <b>MODE OF FINANCE</b>      |       |        |         |                           |
| 1                      | Equity                      |       |        | 62,400  | 40% of Total Project Cost |
| 2                      | Term loan                   |       |        | 58,200  |                           |
| 3                      | Total                       |       |        | 120,600 |                           |
| 4                      | Working Capital Loan        |       |        | 35,400  |                           |
|                        | <b>TOTAL</b>                |       |        | 156,000 |                           |

| ANNEXURE- 1.1                             |                |       |       |        |        |         |
|---|----------------|-------|-------|--------|--------|---------|
| BOLTS & NUTS UNIT                         |                |       |       |        |        |         |
| ESTIMATED COST OF LAND & SITE DEVELOPMENT |                |       |       |        |        |         |
| S.No.                                     | Item           | Unit  | Q'ty  | Rate   | Amount | Remarks |
|   |                |       |       | (R.O.) | (R.O.) |         |
|   |                |       | 3%    |        |        |         |
| <b>A</b>                                  | <b>LAND</b>    |       |       |        |        |         |
| 1   | Land for Plant | Sq. M | 1,200 | 0      | -      | Lease   |
|   |                |       |       |        |        |         |
| <b>B</b>                                  | <b>TOTAL</b>   |       |       |        | -      |         |
|   | Say            |       |       |        | -      |         |

| ANNEXURE- 1.2                            |                                |              |              |                |                  |          |
|--|--------------------------------|--------------|--------------|----------------|------------------|----------|
| BOLTS & NUTS UNIT                        |                                |              |              |                |                  |          |
| ESTIMATED COST OF BUILDING & CIVIL WORKS |                                |              |              |                |                  |          |
| S.No.                                    | Item                           | Area         | Unit         | Rate<br>(R.O.) | Amount<br>(R.O.) | Remarks  |
| <b>A</b>                                 | <b>MAIN PLANT BUILDINGS</b>    |              |              | 0              |                  |          |
| 1  | Industrial Building            | 900          | Sq. M        | -              | -                | On Lease |
| 2  | Store                          | 100          | Sq. M        | -              | -                |          |
|  | <b>Sub Total</b>               | <b>1,000</b> | <b>Sq. M</b> |                | -                |          |
|  |                                |              |              |                |                  |          |
|  |                                |              |              |                |                  |          |
| <b>B</b>                                 | <b>ADMIN BUILDING</b>          |              |              |                |                  |          |
| 1  | Administrative Office Building | 50           | Sq. M        | -              | -                |          |
|  | <b>Sub Total</b>               | <b>50</b>    | <b>Sq. M</b> |                | -                |          |
|  |                                |              |              |                |                  |          |
|  | <b>Total</b>                   | <b>1,050</b> |              |                | -                |          |
|  |                                |              |              |                | -                |          |
|  |                                |              |              |                | -                |          |

| ANNEXURE- 1.3                       |   |             |            |              |                  |           |
|-------------------------------------|---|-------------|------------|--------------|------------------|-----------|
| BOLTS & NUTS UNIT                   |   |             |            |              |                  |           |
| ESTIMATED COST OF PLANT & MACHINERY |   |             |            |              |                  |           |
| S.No.                               | Item  | Power<br>KW | 0          | Rate<br>(RO) | Amount<br>(R.O.) | Remarks   |
| <b>A</b>                            | <b>MAIN PLANT AND MACHINERY</b>   |             |            |              |                  |           |
| <b>BOLT FORMING</b>                 |   |             |            |              |                  |           |
| 1                                   | Cold Head Forging Machine - To produce Bolt of 6 mm to 18 mm Diameter & Length of 20 mm to 150 mm | 11.25       | 1          | 9,375        | 9,375            |           |
| 2                                   | Head Trimming Machine   | 7.5         | 1          | 5,625        | 5,625            |           |
| 3                                   | Thread Rolling Machine  | 11.25       | 1          | 5,700        | 5,700            |           |
| 4                                   | Wire Drawing Machine  | 3.75        | 1          | 1,500        | 1,500            |           |
| 5                                   | Wire Pointing Machine   | 0.75        | 1          | 240          | 240              |           |
| <b>NUT POLISHING</b>                |   |             |            |              |                  |           |
| 6                                   | Automatic Nut Forming Plant   | 18.75       | 4          | 2,250        | 9,000            |           |
| 7                                   | Nut Tapping Machine   | 2.25        | 4          | 700          | 2,800            |           |
| 8                                   | Steel Polishing Barrel  | 3           | 1          | 850          | 850              |           |
| <b>HEAT TREATMENT EQUIPMENT</b>     |   |             |            |              |                  |           |
| 9                                   | Semi Muffle Oil Fired Furnace   |             | 1          | 1,000        | 1,000            |           |
| 10                                  | Tempering Furnace - Electrically Treated Temperature upto 500 Degree C                            | 3           | 1          | 500          | 500              |           |
|                                     | <b>Sub Total</b>  | <b>62</b>   |            |              | <b>36,590</b>    |           |
| <b>B</b>                            | <b>AUXILIARY ITEMS</b>  |             |            |              |                  |           |
| 1                                   | Hand Tools, Dies etc  |             | <b>Set</b> |              | 3,000            |           |
| 2                                   | Mis equipments  |             | <b>Set</b> |              | 1,000            |           |
|                                     | <b>Sub Total</b>  |             |            |              | <b>4,000</b>     |           |
| <b>C</b>                            | <b>ELECTRIFICATION</b>  |             |            |              |                  |           |
|                                     |   |             |            |              | <b>3,659</b>     |           |
| <b>D</b>                            | <b>AT SITE COST</b>   |             |            |              |                  |           |
| 1                                   | Total Plant   |             |            |              | 44,249           | Sum A+B+C |
| 2                                   | Spares  |             |            |              | 1,000            | Lumpsum   |
| 3                                   | Packing, Insurance Forwarding   |             |            |              | 1,327            |           |
| 4                                   | C I F Cost  |             |            |              | 46,576           |           |
| 5                                   | Clearing & Transport to Site  |             |            |              | 466              |           |
| <b>6</b>                            | <b>At Site Cost</b>   |             |            |              | <b>47,042</b>    |           |
| <b>F</b>                            | <b>ERECTED COST</b>   |             |            |              |                  |           |
| 1                                   | At Site Cost  |             |            |              | 47,042           |           |
| 2                                   | Cost of erection - Local  |             |            |              | 4,425            | Lumpsum   |
| 3                                   | Technical Supervision   |             |            |              |                  |           |
|                                     | <b>TOTAL ERECTED COST</b>   |             |            |              | <b>51,467</b>    |           |
|                                     | <b>Say</b>  |             |            |              | <b>51,000</b>    |           |

| ANNEXURE- 1.4                                   |                                    |                |           |                  |                  |
|---|------------------------------------|----------------|-----------|------------------|------------------|
| BOLTS & NUTS UNIT                               |                                    |                |           |                  |                  |
| ESTIMATED COST OF VEHICLES & INTERNAL TRANSPORT |                                    |                |           |                  |                  |
| S.No.   | Item                               | Q'ty<br>(Nos.) | Rate<br>0 | Amount<br>(R.O.) | Remarks          |
| <b>A</b>  | <b>VEHICLES</b>                    |                |           |                  |                  |
| 1   | Pick up                            | 1              | 7,500     | 7,500            |                  |
|   | <b>Sub Total</b>                   | <b>1</b>       |           | <b>7,500</b>     |                  |
| <b>B</b>  | <b>TRANSP. EQUIPMENT</b>           |                |           |                  |                  |
| 1   | Forklift                           | 1              | 10,000    | 10,000           |                  |
| 2   | Registration, Painting, Spares etc |                |           | 1,750            | 10% of the above |
|   | <b>Sub Total</b>                   | <b>1</b>       |           | <b>11,750</b>    |                  |
| <b>C</b>  | <b>TOTAL</b>                       | <b>2</b>       |           | <b>19,250</b>    |                  |
|   | Say                                |                |           | <b>19,000</b>    |                  |

| ANNEXURE-1.5                                   |                               |      |     |                  |         |
|--|-------------------------------|------|-----|------------------|---------|
| BOLTS & NUTS UNIT                              |                               |      |     |                  |         |
| ESTIMATED COST OF FURNITURE & OFFICE EQUIPMENT |                               |      |     |                  |         |
| S.No.  | Item                          | Q'ty |     | Amount<br>(R.O.) | Remarks |
| <b>A</b>                                       | <b>OFFICE</b>                 |      |     |                  |         |
| 1  | P.C with Printer              | 2    | 500 | 1,000            | Lumpsum |
| 2  | Photocopier                   | 1    |     | 1,000            | Lumpsum |
| 3  | Fax, Telephone                | Set  |     | 1,000            | Lumpsum |
| 4  | Other Office Equipment        | Set  |     | 500              | Lumpsum |
| 5  | Air Conditioners              | 2    | 250 | 500              | Lumpsum |
| 6  | Office Furnitures             |      |     | 3,000            | Lumpsum |
|  | <b>Sub Total</b>              |      |     | <b>7,000</b>     |         |
| <b>B</b>                                       | <b>FACTORY FURNITURE</b>      |      |     |                  |         |
| 1  | Work bench/Rack/Firniture etc |      |     | <b>3,000</b>     |         |
|  | <b>Sub Total</b>              |      |     | <b>3,000</b>     |         |
| <b>C</b>                                       | <b>TOTAL</b>                  |      |     | <b>10,000</b>    |         |

| ANNEXURE- 1.6                            |                                      |        |        |                                     |
|--|--------------------------------------|--------|--------|-------------------------------------|
| BOLTS & NUTS UNIT                        |                                      |        |        |                                     |
| ESTIMATED COST OF PRE-OPERATIVE EXPENSES |                                      |        |        |                                     |
| S.No                                     | Item                                 | Amount |        | Remarks                             |
|  |                                      | (R.O.) | 0      |                                     |
| 1  | Preliminary Expenses                 |        | 500    | Upto formation of Co.               |
| 2  | Feasibility Studies                  |        | 1,000  |                                     |
| 3  | Salary during construction period    |        |        |                                     |
| a  | Salary & benefits - Plant Engineer   | 2,000  |        | 2 Months                            |
| b  | Salary & benefits - Production Staff | 525    |        | 1 Month                             |
| c  | Salary & benefits - Admin. Staff     | 500    |        | 1 Month                             |
| d  | Salary & benefits - Sales Staff      | 600    |        | 1 Month                             |
| e  | Visa, Passage etc.                   | 1,600  |        | For Expatriates at R.O. 400/ person |
|  | Sub Total                            |        | 5,225  |                                     |
| 4  | Financing Cost                       |        |        |                                     |
| a  | Institutional Loan Interest          | 873    |        | At 3%                               |
| b  | Mortgage Expenses                    | 291    |        | At 0.5 % on Institu: Loan           |
| c  | Other Bank Charges                   | 500    |        | Lumpsum                             |
|  | Sub Total                            |        | 1,664  |                                     |
| 5  | Communication                        |        | 600    | lumpsum                             |
| 6  | Travel                               |        | 1,000  | Lumpsum                             |
| 7  | Recruitment & Training Charges       |        | 1,000  | Lumpsum                             |
| 8  | Audit Fees, Legal Fees               |        | 500    | Lumpsum                             |
| 9  | Insurance                            |        | 255    | At 0.5 % of Plant & Bldg.           |
| 10                                       | Miscellaneous                        |        | 500    | Provision                           |
| 11                                       | Total                                |        | 12,244 |                                     |
|  | Say..                                |        | 12,000 |                                     |



| ANNEXURE-1.7                            |                             |                |               |                     |         |
|---|-----------------------------|----------------|---------------|---------------------|---------|
| BOLTS & NUTS UNIT                       |                             |                |               |                     |         |
| ESTIMATES OF CONTINGENCY AND ESCALATION |                             |                |               |                     |         |
| S.No.                                   | Item                        | Cost<br>(R.O.) | Rate<br>( % ) | Provision<br>(R.O.) | Remarks |
| A                                       | <b>FIXED ASSETS</b>         |                |               |                     |         |
| 1                                       | Land for Plant Site         | -              | 0.0           | -                   |         |
| 2                                       | Building etc.               | -              | 5.0           | -                   |         |
| 3                                       | Plant & Machinery           | 51,000         | 5.0           | 2,550               |         |
| 4                                       | Technical Know-How          | -              | 5.0           | -                   |         |
| 5                                       | Vehicles and Int. Transport | 19,000         | 5.0           | 950                 |         |
| 6                                       | Furniture & Office Equip.   | 10,000         | 5.0           | 500                 |         |
| 7                                       | Pre- Operative Expenses     | 12,000         | 5.0           | 600                 |         |
|   | <b>TOTAL</b>                |                |               | 4,600               |         |
|   |                             |                |               | <b>5,000</b>        | say     |

**ANNEXURE- 1.8**

**BOLTS & NUTS UNIT**

**ESTIMATES OF WORKING CAPITAL REQUIREMENTS**

| S.No. | Item             | Req.     | Year 1    | Year 2       | Year 3    | Year 4     | Remarks  |  |
|-------|------------------|----------|-----------|--------------|-----------|------------|--|--|
|       |                  |          | 0         | In R.O. '000 |           |            |  |  |
| 1     | Acct. Receivable | 2 Months | 45        | 53           | 62        | 68         | Cost of sales - Non C Ex.                      |  |
| 2     | Raw Materials    | 1 Month  | 10.6      | 13.2         | 15.9      | 18.5       |  |  |
| 3     | Utilities        | 1 Month  | 0.7       | 0.9          | 1.1       | 1.3        |  |  |
| 4     | Factory Wages    | 1 Month  | 4         | 4            | 6         | 6          |  |  |
| 5     | Admn. Expenses   | 1 Month  | 2         | 2            | 2         | 2          |  |  |
| 6     | Sales Expenses   | 1 Month  | 1.4       | 2.1          | 2.4       | 2.6        |  |  |
| 7     | Work in Progress | 3 Day    | 1.8       | 2.2          | 2.6       | 2.9        | At Factory Cost                                |  |
| 8     | Finished Goods   | 5 Days   | 3.5       | 4.0          | 4.7       | 5.2        | At total Cost-Non cash-<br>Selling and Distrbn |  |
| 9     | Finance Cost     | 1 Month  | 0.3       | 0.3          | 0.3       | 0.3        | At Finance Cost                                |  |
|       | <b>Sub Total</b> |          | <b>69</b> | <b>82</b>    | <b>96</b> | <b>107</b> |  |  |
| 10    | Payables         | Months   |           |              |           |            |  |  |
|       | Raw Materials    | 1 Months | 11        | 13           | 16        | 19         |  |  |
|       | <b>Sub Total</b> |          | <b>11</b> | <b>13</b>    | <b>16</b> | <b>19</b>  |  |  |
|       | <b>Total</b>     |          | <b>59</b> | <b>68</b>    | <b>80</b> | <b>89</b>  |  |  |

## ANNEXURE- 2

## BOLTS &amp; NUTS UNIT

## COST OF SALE

|    | Year of Operation            | 1           | 2          | 3          | 4          | 5          | 6          | 7          | 8          | 9          | 10         |  |
|----|------------------------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--|
|    | Capacity Utilization         | 40%         | 50%        | 60%        | 70%        | 70%        | 70%        | 70%        | 70%        | 70%        | 70%        |  |
| No | Item                         | In R.O.'000 |            |            |            |            |            |            |            |            |            | Remarks                                    |
| 1  | Raw Material & Consumables   | 127         | 159        | 190        | 222        | 222        | 222        | 222        | 222        | 222        | 222        | Ref. Annexure 2.1                          |
| 2  | Utilities                    | 9           | 11         | 13         | 15         | 15         | 15         | 15         | 15         | 15         | 15         | Ref. Annexure 2.2                          |
| 3  | Factory Wages                | 51          | 52         | 68         | 70         | 72         | 74         | 76         | 78         | 81         | 83         | Ref Annexure 2.3                           |
| 4  | <b>PRIME COST</b>            | <b>186</b>  | <b>222</b> | <b>271</b> | <b>307</b> | <b>309</b> | <b>311</b> | <b>314</b> | <b>316</b> | <b>318</b> | <b>321</b> | <b>Sub total of 1 to 3</b>                 |
| 5  | Rent for industrial shed     | 32          | 32         | 32         | 32         | 32         | 32         | 32         | 32         | 32         | 32         | Rent at RO 2.5 per Sq M per Month          |
| 6  | Factory Overheads            | 3           | 3          | 4          | 4          | 4          | 4          | 4          | 4          | 4          | 4          | Ref Annexure 2.4                           |
| 7  | Misc. Factory Exp.           | 4           | 5          | 6          | 7          | 7          | 7          | 7          | 7          | 7          | 7          | At 2 % of (5)&(6)                          |
| 8  | <b>FACTORY COST</b>          | <b>225</b>  | <b>262</b> | <b>312</b> | <b>349</b> | <b>351</b> | <b>353</b> | <b>356</b> | <b>358</b> | <b>360</b> | <b>363</b> | <b>Sub total of 4 to 7</b>                 |
| 9  | Admin. Salaries              | 17          | 18         | 19         | 19         | 20         | 21         | 23         | 24         | 25         | 26         | Ref Annexure 2.3&2.5                       |
| 10 | Admin. Expenses              | 7           | 7          | 7          | 7          | 8          | 8          | 8          | 8          | 8          | 9          | Ref Annexure 2.5                           |
| 11 | Total Admin expenses         | 24          | 25         | 26         | 27         | 28         | 29         | 30         | 32         | 33         | 35         | Sum (9) to (10)                            |
| 12 | Sales Salaries               | 10          | 10         | 11         | 11         | 11         | 12         | 12         | 12         | 13         | 13         | Ref Annexure 2.3&2.6                       |
| 13 | Sales Expenses               | 2           | 2          | 2          | 2          | 2          | 2          | 2          | 2          | 2          | 3          | Ref Annexure 2.6                           |
| 14 | Advert.& Business Promotion  | 5           | 13         | 16         | 18         | 18         | 18         | 18         | 18         | 18         | 18         | 2% on Sales for 1st year and 4% thereafter |
| 15 | Total sales & dist: costs    | 17          | 25         | 28         | 31         | 32         | 32         | 33         | 33         | 34         | 34         | Sum of (12 to 14)                          |
| 16 | <b>OPERATING COST</b>        | <b>266</b>  | <b>312</b> | <b>366</b> | <b>407</b> | <b>411</b> | <b>415</b> | <b>419</b> | <b>423</b> | <b>427</b> | <b>432</b> | Sum(8)+(11)+(15)                           |
|    | <b>Finance cost</b>          |             |            |            |            |            |            |            |            |            |            |  |
| 17 | Int on Institutional finance | 2           | 2          | 1          | 1          | 1          | 1          | 0          | 0          | 0          | 0          | Ref Annexure 2.8                           |
| 18 | Int on working capital       | 2           | 2          | 2          | 2          | 2          | 2          | 2          | 2          | 2          | 2          | Ref Annexure 2.8                           |
| 19 | Total finance cost           | 4           | 4          | 4          | 3          | 3          | 3          | 3          | 2          | 2          | 2          | Sum(17)+(18)                               |
|    | <b>Non cash expenses</b>     |             |            |            |            |            |            |            |            |            |            |  |
| 20 | Depreciation                 | 12          | 12         | 12         | 12         | 12         | 12         | 12         | 12         | 12         | 12         | Ref Annexure 2.7                           |
| 21 | Prelim Expenses written off  | 12          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | Ref Annexure 2.7                           |
| 22 | <b>COST OF SALE</b>          | <b>294</b>  | <b>328</b> | <b>382</b> | <b>423</b> | <b>426</b> | <b>430</b> | <b>434</b> | <b>438</b> | <b>442</b> | <b>446</b> | Sum 16+19+20+21                            |

| ANNEXURE- 2.1                   |                              |      |              |      |                |                           |
|---------------------------------|------------------------------|------|--------------|------|----------------|---------------------------|
| BOLTS & NUTS UNIT               |                              |      |              |      |                |                           |
| ESTIMATED COST OF RAW MATERIALS |                              |      |              |      |                |                           |
| S.No.                           | Item                         | Unit | Qty          | Rate | Amount         | Remarks                   |
| <b>A</b>                        | <b>RAW MATERIALS</b>         |      |              |      | <b>(R.O.)</b>  |                           |
| 1                               | M S Rods ( 2% wastage)       | Tons | 707          | 269  | 190,261        |                           |
| 2                               | Hexagonal Rods ( 2% wastage) | Tons | 395          | 269  | 106,234        |                           |
|                                 | <b>SubTotal</b>              |      | <b>1,102</b> |      | <b>296,496</b> |                           |
| <b>B</b>                        | <b>CONSUMABLES</b>           |      |              |      |                |                           |
| 1                               | Lubricating Oil              |      |              |      | 14,825         | @ 5% of Raw Material Cost |
| 2                               | Cotton waste                 |      |              |      |                |                           |
| 3                               | Others including acid etc.   |      |              |      |                |                           |
|                                 | <b>SubTotal</b>              |      |              |      | <b>14,825</b>  |                           |
| <b>C</b>                        | <b>PACKING MATERIALS</b>     |      |              |      |                |                           |
|                                 | Packing materials            |      |              |      | <b>5,930</b>   | @ 2% of Raw Material Cost |
| <b>D</b>                        | <b>GRAND TOTAL</b>           |      |              |      | <b>317,250</b> |                           |

| ANNEXURE- 2.2               |              |      |         |       |                       |         |
|-----------------------------|--------------|------|---------|-------|-----------------------|---------|
| BOLTS & NUTS UNIT           |              |      |         |       |                       |         |
| ESTIMATED COST OF UTILITIES |              |      |         |       |                       |         |
| S.No.                       | Item         | Unit | Qty     | Rate  | Amount                | Remarks |
|                             |              |      | 3%      |       | (R.O.)                |         |
|                             |              |      |         |       | At installed capacity |         |
| 1                           | Water        | Cu M | 600     | 0.770 | 462                   |         |
| 2                           | Electricity  | KWH  | 503,748 | 0.027 | 13,601                |         |
| 3                           | Furnace Oil  | Ltrs | 64,008  | 0.12  | 7,873                 |         |
|                             |              |      |         |       |                       |         |
|                             | <b>TOTAL</b> |      |         |       | <b>21,936</b>         |         |

## ANNEXURE- 2.3

## BOLTS &amp; NUTS UNIT

## ESTIMATES OF ANNUAL SALARIES AND WAGES

| S.No.    | Item                                 | No of personnel |            | Salary (RO per Month) |          | Annual<br>RO  | Remarks           |
|----------|--------------------------------------|-----------------|------------|-----------------------|----------|---------------|-------------------|
|          |                                      | Expat           | National   | Expat                 | National |               |                   |
| <b>A</b> | <b>PRODUCTION</b>                    |                 |            |                       |          |               |                   |
| 1        | Plant Manager                        | 1               | 0          | 1,000                 | -        | 12,000        |                   |
| 2        | Skilled workers                      | 1               | 1          | 250                   | 400      | 7,800         |                   |
| 3        | Semiskilled workers                  | 1               | 2          | 220                   | 370      | 11,520        |                   |
| 4        | Unskilled workers                    | 2               | 0          | 200                   | -        | 4,800         |                   |
|          | Sub Total                            | 5               | 3          |                       |          | 36,120        |                   |
|          | <b>Total Manpower Cost</b>           |                 |            |                       |          |               |                   |
|          | Total Salary                         |                 |            |                       |          | 36,120        |                   |
|          | Other Benefits                       |                 |            |                       |          | 14,448        | At 40 % of Salary |
|          | <b>Total Production Salary</b>       |                 |            |                       |          | <b>50,568</b> |                   |
| <b>B</b> | <b>ADMINISTRATION &amp; ACCOUNTS</b> |                 |            |                       |          |               |                   |
| 1        | PRO                                  | 0               | 1          |                       | 400      | 4,800         |                   |
| 2        | Accountant                           | 1               | 0          | 600                   | -        | 7,200         |                   |
|          | Sub Total                            | 1               | 1          |                       |          | <b>12,000</b> |                   |
|          | <b>Total Manpower Cost</b>           |                 |            |                       |          |               |                   |
|          | Total Salary                         |                 |            |                       |          | 12,000        |                   |
|          | Other Benefits                       |                 |            |                       |          | 4,800         | At 40 % of Salary |
|          | <b>Total Cost</b>                    | <b>1</b>        | <b>1</b>   |                       |          | <b>16,800</b> |                   |
| <b>C</b> | <b>SALES</b>                         |                 |            |                       |          |               |                   |
| <b>a</b> | <b>Sales</b>                         |                 |            |                       |          |               |                   |
| 1        | Sales Executives                     | 1               | 0          | 600                   | 0        | 7,200         |                   |
| 2        | Sub Total                            | 1               | 0          |                       |          | 7,200         |                   |
| <b>b</b> | <b>Total Manpower Cost</b>           |                 |            |                       |          |               |                   |
| 1        | Total Salary                         |                 |            |                       |          | 7,200         |                   |
| 2        | Other Benefits                       |                 |            |                       |          | 2,880         | At 40 % of Salary |
| 3        | Total Cost                           |                 |            |                       |          | <b>10,080</b> |                   |
| <b>D</b> | <b>GRAND TOTAL</b>                   | <b>7</b>        | <b>4</b>   |                       |          | <b>77,448</b> |                   |
|          | <b>Omanisation</b>                   |                 | <b>36%</b> |                       |          |               |                   |

**ANNEXURE- 2.4****BOLTS & NUTS UNIT****ESTIMATES OF ANNUAL FACTORY EXPENSES**

| <b>S.No.</b> | <b>Item</b>               | <b>Year</b>  | <b>Year</b>  | <b>Year</b>  | <b>Remarks</b>   |
|--------------|---------------------------|--------------|--------------|--------------|--|
|              |                           | <b>1</b>     | <b>2</b>     | <b>3</b>     |  |
| 1            | M/C Repairs & Maintenance | 255          | 0            | 0            | At 0.5 % of erected cost of P&M                            |
| 2            | Civil Repairs             | -            | -            | -            | At 1 % , 2%,3%of cost of Building and Civil Works          |
| 3            | Spare Parts               | 255          | 1,020        | 1,020        | At 0.5%, 2.0% and 2.0% of 'at-site' cost of P&M            |
| 4            | Insurance                 | 510          | 510          | 510          | At 1 % of cost Building, Plant and Machinery               |
| 5            | Vehicle                   | 1,800        | 1,890        | 1,985        | At RO 150 per forklifet per month increased by 5% annually |
| 6            | TOTAL                     | <b>2,820</b> | <b>3,420</b> | <b>3,515</b> |  |

| ANNEXURE- 2.5                               |                          |        |        |                         |
|---|--------------------------|--------|--------|-------------------------|
| BOLTS & NUTS UNIT                           |                          |        |        |                         |
| ESTIMATES OF ANNUAL ADMINISTRATIVE EXPENSES |                          |        |        |                         |
| S.No.                                       | Item                     |        | Amount | Remarks                 |
|   |                          | (R.O.) | (R.O.) |                         |
| 1   | Salaries & Benefits      |        | 0      |                         |
| 2   | Rents and Rates          |        |        |                         |
| 3   | Telephone, Fax etc.      |        | 1,200  | At R.O. 100/Month       |
| 4   | Safety services          |        | 1,200  | At R.O. 100/Month       |
| 5   | Medical Expenses         |        | -      | Incl. in Staff Benefits |
| 6   | Passage                  |        |        | Incl. in Staff Benefits |
| 7   | Travel & Recruitment     |        | 1,000  | Lumpsum                 |
| 8   | Legal, Audit Fees        |        | 1,000  | Lumpsum                 |
| 9   | Registratioin & Renewals |        | 1,000  |                         |
| 10  | Insurance                |        | 425    | Lumpsum                 |
| 11  | Other Expenses           |        | 1,000  |                         |
|   | Total                    |        | 6,825  |                         |



## ANNEXURE- 2.6

## BOLTS &amp; NUTS UNIT

## ESTIMATES OF ANNUAL SALES EXPENSES

| S.No. | Item                      | (R.O.) | Amount<br>(R.O.) | Remarks                |
|-------|---------------------------|--------|------------------|------------------------|
| 1     | Salaries                  |        | 0                | See Annexure 2.3       |
| 2     | Travel                    |        | 1,000            | Lumpsum                |
| 3     | Vehicle Expenses & Petrol |        |                  |                        |
| a     | Pick Up Vehicle           | 300    | 300              | At R.O. 300/Month each |
|       | <b>Sub Total</b>          |        | <b>300</b>       |                        |
| 4     | Miscellaneous Expenses    |        | 80               | At 5% of above         |
|       | <b>Total</b>              |        | <b>1,680</b>     |                        |

| <b>ANNEXURE- 2.7</b>             |  |             |             |               |               |                 |
|----------------------------------|--|-------------|-------------|---------------|---------------|-----------------|
| <b>BOLTS &amp; NUTS UNIT</b>     |  |             |             |               |               |                 |
| <b>DEPRECIATION CALCULATIONS</b> |  |             |             |               |               |                 |
|                                  | <b>Item</b>  | <b>Cost</b> | <b>Rate</b> | <b>S.V.</b>   | <b>Amount</b> | <b>Renewals</b> |
|                                  |  |             | <b>(%)</b>  | <b>(R.O.)</b> | <b>(R.O.)</b> |                 |
| <b>A</b>                         | <b>FIXED ASSETS</b>  |             | 0           |               |               |                 |
| 1                                | Land for Plant Site  | 0           | 0           | 0             | -             | Nil             |
| 2                                | Building etc.  | -450        | 5           | -225          | (23)          | Nil             |
| 3                                | Plant & Machinery  | 50540       | 10          | 0             | 5,054         | Year 11         |
| 4                                | Technical Know-How   | 0           | 10          | 0             | -             | Nil             |
| 5                                | Vehicles and Int. Transp.                                  | 19000       | 25          | 9500          | 4,750         | Years 5, 9      |
| 6                                | Furniture & Office Equip.                                  | 10000       | 20          | 0             | 2,000         | Years 6, 11     |
| 7                                | Contingency & Escalation                                   | 5000        | 10          | 0             | 500           | Nil             |
| 8                                | Sub Total  | 84090       |             | 9275          | <b>12,282</b> |                 |
| <b>B</b>                         | <b>PRELIM &amp; PRE OPE: EXP</b>                           | 12000       | 100         | 0             | <b>12,000</b> | Nil             |
| <b>C</b>                         | <b>WORKING CAPITAL</b>                                     |             |             |               |               |                 |
| 1                                | Working Capital  | 88704       | 0           | 88704         | -             |                 |
| <b>D</b>                         | <b>TOTAL</b>   |             |             | <b>97,979</b> | <b>24,282</b> |                 |
|                                  | Less Balance Loan  |             |             | <b>35,400</b> |               |                 |
| <b>E</b>                         | <b>SALVAGE VALUE</b>                                       |             |             | <b>62,579</b> |               |                 |
|                                  | <b>Note: S.V. = Salvage Value at the end of 10th year.</b> |             |             |               |               |                 |

| ANNEXURE- 2.8                |      |           |     |     |      |     |        |     |
|------------------------------|------|-----------|-----|-----|------|-----|--------|-----|
| BOLTS & NUTS UNIT            |      |           |     |     |      |     |        |     |
| LOAN & INTEREST CALCULATIONS |      |           |     |     |      |     |        |     |
|                              |      | Term Loan |     |     | Bank |     | Annual |     |
| No                           | Year | Prn       | Int | Rep | Prn  | Int | Int    | Rep |
|                              | 7    |           | 3%  |     |      | 6%  |        |     |
| 1                            |      | 58        | 0.9 | 0   | 35   | 1.1 |        |     |
| 2                            | 1    | 58        | 0.9 | 0   | 35   | 1.1 | 3.9    | 0   |
| 3                            |      | 58        | 0.9 | 4   | 35   | 1.1 |        |     |
| 4                            | 2    | 54        | 0.8 | 4   | 35   | 1.1 | 3.8    | 8   |
| 5                            |      | 50        | 0.7 | 4   | 35   | 1.1 |        |     |
| 6                            | 3    | 46        | 0.7 | 4   | 35   | 1.1 | 3.6    | 8   |
| 7                            |      | 42        | 0.6 | 4   | 35   | 1.1 |        |     |
| 8                            | 4    | 37        | 0.6 | 4   | 35   | 1.1 | 3.3    | 8   |
| 9                            |      | 33        | 0.5 | 4   | 35   | 1.1 |        |     |
| 10                           | 5    | 29        | 0.4 | 4   | 35   | 1.1 | 3.1    | 8   |
| 11                           |      | 25        | 0.4 | 4   | 35   | 1.1 |        |     |
| 12                           | 6    | 21        | 0.3 | 4   | 35   | 1.1 | 2.8    | 8   |
| 13                           |      | 17        | 0.2 | 4   | 35   | 1.1 |        |     |
| 14                           | 7    | 12        | 0.2 | 4   | 35   | 1.1 | 2.6    | 8   |
| 15                           |      | 8         | 0.1 | 4   | 35   | 1.1 |        |     |
| 16                           | 8    | 4         | 0.1 | 4   | 35   | 1.1 | 2.3    | 8   |
| 17                           |      | 0         | 0.0 | 0   | 35   | 1.1 |        |     |
| 18                           | 9    | 0         | 0.0 | 0   | 35   | 1.1 | 2.1    | 0   |
| 19                           |      | 0         | 0.0 | 0   | 35   | 1.1 |        |     |
| 20                           | 10   | 0         | 0.0 | 0   | 35   | 1.1 | 2.1    | 0   |
| 20                           | 10   | 0         | 0.0 | 0   | 35   | 1.1 | 2.1    | 0   |

| ANNEXURE- 3               |                             |             |     |     |     |     |     |     |     |     |     |                           |
|---------------------------|-----------------------------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------------------|
| BOLTS & NUTS UNIT         |                             |             |     |     |     |     |     |     |     |     |     |                           |
| ESTIMATED WORKING RESULTS |                             |             |     |     |     |     |     |     |     |     |     |                           |
|                           | Year of Operation           | 1           | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  |                           |
|                           | Production                  | 40%         | 50% | 60% | 70% | 70% | 70% | 70% | 70% | 70% | 70% |                           |
| No                        | Item                        | In R.O.'000 |     |     |     |     |     |     |     |     |     | Remarks                   |
| 1                         | Operating Cost              | 266         | 312 | 366 | 407 | 411 | 415 | 419 | 423 | 427 | 432 | Ref Annexure 2            |
| 2                         | Expected Sales              |             |     |     |     |     |     |     |     |     |     |                           |
| a                         | Total Sales                 | 264         | 329 | 395 | 461 | 461 | 461 | 461 | 461 | 461 | 461 |                           |
| 3                         | Profit before Int & dep     | -2          | 18  | 29  | 54  | 50  | 46  | 42  | 38  | 34  | 30  | Sum of (2-1)              |
| 4                         | Depreciation                | 12          | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | Ref Annexure 2.7          |
| 5                         | Finance Cost                | 4           | 4   | 4   | 3   | 3   | 3   | 3   | 2   | 2   | 2   | Ref Annexure 2.8          |
| 6                         | Operating profit            | -18         | 2   | 13  | 38  | 35  | 31  | 28  | 24  | 20  | 15  | Sum of (3 - 4 - 5)        |
| 7                         | Other income if any         |             |     |     |     |     |     |     |     |     |     |                           |
| 8                         | Prelim Expenses written off | 12          | -   | -   | -   | -   | -   | -   | -   | -   | -   | Ref Annexure 2.7          |
| 9                         | Profit/Loss before tax      | -30         | 2   | 13  | 38  | 35  | 31  | 28  | 24  | 20  | 15  | Sum of (6 - 7 - 8)        |
| 10                        | Income Tax                  | 0           | 0   | 0   | 0   | 0   | 5   | 4   | 4   | 3   | 2   | 15% on Profit from Year 6 |
| 11                        | Profit after tax            | -30         | 2   | 13  | 38  | 35  | 27  | 23  | 20  | 17  | 13  |                           |
| 12                        | Statutory reserve           |             | 0   | 1   | 4   | 3   | 3   | 2   | 2   | 2   | 1   |                           |
| 13                        | Profit for appropriation    | -30         | 1   | 12  | 35  | 31  | 24  | 21  | 18  | 15  | 12  |                           |
| 14                        | Dividend                    | 0           | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |                           |
| 15                        | General reserve             | -30         | 1   | 12  | 35  | 31  | 24  | 21  | 18  | 15  | 12  | Difference (13) - (14)    |
| 16                        | Net cash accruals           | -6          | 14  | 25  | 51  | 47  | 39  | 36  | 32  | 29  | 25  |                           |

**ANNEXURE- 3.1****BOLTS & NUTS UNIT****ESTIMATES OF SALES REALISATION**

| <b>S.No.</b> | <b>Item</b>   | <b>Unit</b> | <b>Qty</b>   | <b>Rate</b> | <b>Amount</b>  | <b>Remarks</b> |
|--------------|---------------|-------------|--------------|-------------|----------------|----------------|
|              |               |             | 0            | RO          | (R.O.)         |                |
| <b>A</b>     | <b>Income</b> |             |              |             |                |                |
| 1            | Nuts & Bolts  | Ton         | 1,080        | 610         | 658,800        |                |
|              |               |             |              |             |                |                |
|              |               |             |              |             |                |                |
|              | <b>Total</b>  |             | <b>1,080</b> |             | <b>658,800</b> |                |

**ANNEXURE- 4**

**BOLTS & NUTS UNIT**

**PROJECTED CASH FLOW STATEMENT**

| Year of Operation |                             | 1           | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  |     |                      |
|-------------------|-----------------------------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------------|
| Production        |                             | 40%         | 50% | 60% | 70% | 70% | 70% | 70% | 70% | 70% | 70% |     |                      |
| No                | Item                        | In R.O.'000 |     |     |     |     |     |     |     |     |     |     | Remarks              |
| <b>A</b>          | <b>CASH INFLOW</b>          |             |     |     |     |     |     |     |     |     |     |     |                      |
| 1                 | Equity                      | 62          | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | Ref Annexure 1       |
| 2                 | Profit bef tax & int        |             | -26 | 5   | 17  | 42  | 38  | 34  | 30  | 26  | 22  | 17  | Ref Annexure 3       |
| 3                 | Depreciation                | 0           | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | Ref Annexure 2.7     |
| 4                 | Prel exp written off        |             | 12  | -   | -   | -   | -   | -   | -   | -   | -   | -   | Ref Annexure 2.7     |
| 5                 | Increase in Other term loan | 0           | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | Ref Annexure 1       |
| 6                 | Increase in Bank Term Loan  | 58          | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | Ref Annexure 1       |
| 7                 | Increase in W C loan        | 35          | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | Ref Annexure 1       |
| 8                 | Other income                | 0           |     |     |     |     |     |     |     |     |     |     | Ref Annexure 3       |
| 9                 | Sub Total                   | 156         | -2  | 18  | 29  | 54  | 50  | 46  | 42  | 38  | 34  | 30  | Sum of A1 to A8      |
| <b>B</b>          | <b>CASH OUTFLOW</b>         |             |     |     |     |     |     |     |     |     |     |     |                      |
| 1                 | Capital Project expenditure | 85          | 0   | 0   | 0   | 0   | 19  | 10  | 0   | 0   | 19  | 0   | Ref Annexure 1& 2.7  |
| 2                 | Other normal cap exp        | 12          |     |     |     |     |     |     |     |     |     |     | Ref Annexure 1& 2.7  |
| 3                 | Increase in Working Cap:    | 59          | 0   | 9   | 12  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | Ref Annexure 1.7     |
| 4                 | Decrease in Institu:Loan    | 0           | 0   | 8   | 8   | 8   | 8   | 8   | 8   | 8   | 0   | 0   | Ref Annexure 2.8     |
| 5                 | Decrease in Other term loan |             | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |                      |
| 5                 | Interest on term loans      |             | 2   | 2   | 1   | 1   | 1   | 1   | 0   | 0   | 0   | 0   | Ref Annexure 2.8     |
| 6                 | Interest on work cap loan   |             | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | Ref Annexure 2.8     |
| 7                 | Income Tax                  | 0           | 0   | 0   | 0   | 0   | 0   | 5   | 4   | 4   | 3   | 2   | Ref Annexure 3.2     |
| 8                 | Dividend                    | 0           | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | Provision            |
| 9                 | Sub Total                   | 156         | 4   | 22  | 24  | 12  | 30  | 26  | 15  | 14  | 24  | 4   | Sum of B1 to B10     |
| 10                | <b>OPENING BALANCE</b>      | 0           | 0   | -6  | -10 | -5  | 37  | 57  | 78  | 105 | 129 | 139 |                      |
| <b>C</b>          | <b>SURPLUS</b>              | 0           | -6  | -4  | 5   | 42  | 20  | 21  | 27  | 24  | 10  | 25  | Difference(A9)-(B11) |
| <b>D</b>          | <b>CLOSING BALANCE</b>      | 0           | -6  | -10 | -5  | 37  | 57  | 78  | 105 | 129 | 139 | 164 |                      |

**ANNEXURE- 5**

**BOLTS & NUTS UNIT**

**INTERNAL RATE OF RETURN ON TOTAL CAPITAL**

|          | Year of Operation                                  |             | 1         | 2        | 3         | 4         | 5         | 6         | 7         | 8         | 9            | 10         |                      |
|----------|--|-------------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|--------------|------------|----------------------|
|          | Production   |             | 40%       | 50%      | 60%       | 70%       | 70%       | 70%       | 70%       | 70%       | 70%          | 70%        |                      |
| No       | Item   | In R.O.'000 |           |          |           |           |           |           |           |           |              |            | Remarks              |
| <b>A</b> | <b>CASH INFLOW</b>                                 |             |           |          |           |           |           |           |           |           |              |            |                      |
| 1        | Net Profit bef. Tax                                |             | -30       | 2        | 13        | 38        | 35        | 31        | 28        | 24        | 20           | 15         | Refer Annexure - 3   |
| 2        | Depreciation                                       | 0           | 12        | 12       | 12        | 12        | 12        | 12        | 12        | 12        | 12           | 12         | Ref Annexure 2.7     |
| 3        | Prelim Exp written off                             |             | 12        | 0        | 0         | 0         | 0         | 0         | 0         | 0         | 0            | 0          | Ref Annexure 2.7     |
| 4        | Finance Cost                                       | 0           | 4         | 4        | 4         | 3         | 3         | 3         | 3         | 2         | 2            | 2          | Ref Annexure 2.8     |
| 5        | Salvage Value                                      | 0           | 0         | 0        | 0         | 0         | 0         | 0         | 0         | 0         | 0            | 220        | Ref Annexure 2.7     |
| 6        | Sub Total  | 0           | -2        | 18       | 29        | 54        | 50        | 46        | 42        | 38        | 34           | 249        | Sum of A1 to A5      |
| <b>B</b> | <b>CASH OUTFLOW</b>                                |             |           |          |           |           |           |           |           |           |              |            |                      |
| 1        | Capital Project expenditure                        | 85          | 0         | 0        | 0         | 0         | 19        | 10        | 0         | 0         | 19           | 0          | Refer Annexure - 1   |
| 2        | Other normal cap exp                               | 12          | 0         | 0        | 0         | 0         | 0         | 0         | 0         | 0         | 0            | 0          | Refer Annexure - 1   |
| 3        | Working Capital                                    | 59          | 0         | 9        | 12        | 0         | 0         | 0         | 0         | 0         | 0            | 0          | Refer Annexure - 1   |
| 4        | Income Tax   |             | 0         | 0        | 0         | 0         | 0         | 5         | 4         | 4         | 3            | 2          | Refer Annexure - 3.2 |
| 5        | Sub Total  | 156         | 0         | 9        | 12        | 0         | 19        | 15        | 4         | 4         | 22           | 2          | Sum of B1 to B4      |
| <b>C</b> | <b>NET CASHFLOW (AT)</b>                           | <b>-156</b> | <b>-2</b> | <b>8</b> | <b>17</b> | <b>54</b> | <b>31</b> | <b>32</b> | <b>38</b> | <b>35</b> | <b>12</b>    | <b>247</b> |                      |
|          |  |             |           |          |           |           |           |           |           |           |              |            |                      |
| <b>D</b> | <b>NETCASH FLOW(PT)</b>                            | <b>-156</b> | <b>-2</b> | <b>8</b> | <b>17</b> | <b>54</b> | <b>31</b> | <b>36</b> | <b>42</b> | <b>38</b> | <b>15</b>    | <b>249</b> |                      |
|          |  |             |           |          |           |           |           |           |           |           |              |            |                      |
| <b>E</b> | <b>INTERNAL RATE OF RETURN ON TOTAL INVESTMENT</b> |             |           |          |           |           |           |           |           |           | <b>16.0%</b> |            |                      |

**ANNEXURE- 6**

**BOLTS & NUTS UNIT**

**INTERNAL RATE OF RETURN ON EQUITY CAPITAL (AFTER TAX)**

| Year of Operation | 0   | 1           | 2         | 3         | 4        | 5         | 6         | 7         | 8            | 9         | 10        |            |                      |
|-------------------|---|-------------|-----------|-----------|----------|-----------|-----------|-----------|--------------|-----------|-----------|------------|----------------------|
| Production        |   | 40%         | 50%       | 60%       | 70%      | 70%       | 70%       | 70%       | 70%          | 70%       | 70%       |            |                      |
| No                | Item  | In R.O.'000 |           |           |          |           |           |           |              |           |           |            | Remarks              |
| <b>A</b>          | <b>CASH INFLOW</b>                                  |             |           |           |          |           |           |           |              |           |           |            |                      |
| 1                 | Net Profit before Tax                               | 0           | -30       | 2         | 13       | 38        | 35        | 31        | 28           | 24        | 20        | 15         | Refer Annexure- 3    |
| 2                 | Depreciation  | 0           | 12        | 12        | 12       | 12        | 12        | 12        | 12           | 12        | 12        | 12         | Refer Annexure - 2.7 |
| 3                 | Prelim Exp written off                              | 0           | 12        | 0         | 0        | 0         | 0         | 0         | 0            | 0         | 0         | 0          | Refer Annexure - 2.7 |
| 4                 | Salvage Value                                       | 0           | 0         | 0         | 0        | 0         | 0         | 0         | 0            | 0         | 0         | 220        | Refer Annexure - 2.7 |
| 5                 | Sub Total   | 0           | -6        | 14        | 25       | 51        | 47        | 44        | 40           | 36        | 32        | 247        | Sum of A1 to A4      |
| <b>B</b>          | <b>CASH OUTFLOW</b>                                 |             |           |           |          |           |           |           |              |           |           |            |                      |
| 1                 | Equity  | 62          | 0         | 0         | 0        | 0         | 0         | 0         | 0            | 0         | 0         | 0          | Refer Annexure - 1   |
| 2                 | Fixed Assets  | 0           | 0         | 0         | 0        | 0         | 19        | 10        | 0            | 0         | 19        | 0          | Refer Annexure - 1   |
| 3                 | Working Capital                                     | 0           | 0         | 9         | 12       | 0         | 0         | 0         | 0            | 0         | 0         | 0          | Refer Annexure - 1   |
| 4                 | Loan Instalment                                     | 0           | 0         | 8         | 8        | 8         | 8         | 8         | 8            | 8         | 0         | 0          | Refer Annexure - 2.8 |
| 5                 | Income Tax  | 0           | 0         | 0         | 0        | 0         | 0         | 5         | 4            | 4         | 3         | 2          | Refer Annexure - 3.1 |
| 6                 | Sub Total   | 62          | 0         | 18        | 20       | 8         | 27        | 23        | 12           | 12        | 22        | 2          | Sum of A1 to A5      |
| <b>C</b>          | <b>NET CASHFLOW</b>                                 | <b>-62</b>  | <b>-6</b> | <b>-4</b> | <b>5</b> | <b>42</b> | <b>20</b> | <b>21</b> | <b>27</b>    | <b>24</b> | <b>10</b> | <b>245</b> |                      |
| <b>D</b>          | <b>INTERNAL RATE OF RETURN ON EQUITY INVESTMENT</b> |             |           |           |          |           |           |           | <b>24.9%</b> |           |           |            |                      |



| ANNEXURE- 7             |                        |             |            |            |            |            |            |            |            |            |            |            |                      |
|-------------------------|------------------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------|
| BOLTS & NUTS UNIT       |                        |             |            |            |            |            |            |            |            |            |            |            |                      |
| PROJECTED BALANCE SHEET |                        |             |            |            |            |            |            |            |            |            |            |            |                      |
|                         | Year of Operation      |             | 1          | 2          | 3          | 4          | 5          | 6          | 7          | 8          | 9          | 10         |                      |
|                         | Production             |             | 40%        | 50%        | 60%        | 70%        | 70%        | 70%        | 70%        | 70%        | 70%        | 70%        |                      |
| No                      | Item                   | In R.O.'000 |            |            |            |            |            |            |            |            |            |            | Remarks              |
| <b>A</b>                | <b>ASSETS EMPLOYED</b> |             |            |            |            |            |            |            |            |            |            |            |                      |
| 1                       | Fixed Assets           |             |            |            |            |            |            |            |            |            |            |            |                      |
| a                       | Gross Fixed Assets     | 85          | 85         | 85         | 85         | 85         | 104        | 114        | 114        | 114        | 133        | 133        | Refer Annexure - 2.7 |
| b                       | Preliminary expenses   | 12          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | Refer Annexure- 2.7  |
| c                       | Acc. Depreciation      | 0           | 12         | 25         | 37         | 49         | 61         | 74         | 86         | 98         | 111        | 123        | Refer Annexure - 2.7 |
| d                       | Net Fixed Assets       | 97          | 73         | 60         | 48         | 36         | 43         | 40         | 28         | 16         | 22         | 10         |                      |
| 2                       | Current Assets         |             |            |            |            |            |            |            |            |            |            |            |                      |
| a                       | Cash                   | 0           | -6         | -10        | -5         | 37         | 57         | 78         | 105        | 129        | 139        | 164        | Refer Annexure - 4   |
| b                       | Other Cur. Assets      | 59          | 59         | 68         | 80         | 80         | 80         | 80         | 80         | 80         | 80         | 80         | Refer Annexure - 1.7 |
| c                       | Total Cur. Assets      | 59          | 53         | 59         | 76         | 118        | 138        | 158        | 186        | 210        | 220        | 245        |                      |
| 3                       | Less: Cur. Liabilities | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |                      |
|                         |                        | <b>156</b>  | <b>126</b> | <b>119</b> | <b>124</b> | <b>154</b> | <b>180</b> | <b>199</b> | <b>214</b> | <b>225</b> | <b>242</b> | <b>255</b> |                      |
| <b>B</b>                | <b>FINANCED BY</b>     |             |            |            |            |            |            |            |            |            |            |            |                      |
| 1                       | Equity                 | 62          | 62         | 62         | 62         | 62         | 62         | 62         | 62         | 62         | 62         | 62         | Refer Annexure - 1   |
| 2                       | Statutory reserve      |             | 0          | 0          | 1          | 5          | 9          | 11         | 14         | 16         | 17         | 19         |                      |
| 3                       | General reserves       | 0           | -30        | -29        | -17        | 17         | 49         | 73         | 94         | 112        | 127        | 138        | Cu.NP-Cu.Divident    |
| 4                       | Other term loan        | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | Refer Annexure - 2.8 |
| 5                       | Institutional Finance  | 58          | 58         | 50         | 42         | 33         | 25         | 17         | 8          | 0          | 0          | 0          | Refer Annexure - 2.8 |
| 6                       | Bank Borrowings        | 35          | 35         | 35         | 35         | 35         | 35         | 35         | 35         | 35         | 35         | 35         | Refer Annexure - 2.8 |
|                         |                        | <b>156</b>  | <b>126</b> | <b>119</b> | <b>124</b> | <b>154</b> | <b>180</b> | <b>199</b> | <b>214</b> | <b>225</b> | <b>242</b> | <b>255</b> |                      |

**ANNEXURE- 8**

**BOLTS & NUTS UNIT**

**RATIO ANALYSIS**

|          | Years of Operation                | 1      | 2    | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    |
|----------|-----------------------------------|--------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>A</b> | <b>COST RATIOS</b>                |        |      |       |       |       |       |       |       |       |       |
| 1        | Raw Material / Total Sales        | 3%     | 48%  | 48%   | 48%   | 48%   | 48%   | 48%   | 48%   | 48%   | 48%   |
| 2        | Utilities / Total Sales           | 3%     | 3%   | 3%    | 3%    | 3%    | 3%    | 3%    | 3%    | 3%    | 3%    |
| 3        | Factory wages / Total Sales       | 19%    | 16%  | 17%   | 15%   | 16%   | 16%   | 17%   | 17%   | 18%   | 18%   |
| 4        | Prime Cost / Total Sales          | 71%    | 67%  | 69%   | 67%   | 67%   | 68%   | 68%   | 69%   | 69%   | 70%   |
| 5        | Factory exp. / Total Sales        | 3%     | 3%   | 2%    | 2%    | 2%    | 2%    | 2%    | 2%    | 2%    | 2%    |
| 6        | Factory Cost / Total Sales        | 85%    | 79%  | 79%   | 76%   | 76%   | 77%   | 77%   | 78%   | 78%   | 79%   |
| 7        | Administrative exp. / Total Sales | 9%     | 7%   | 6%    | 6%    | 6%    | 6%    | 7%    | 7%    | 7%    | 7%    |
| 8        | Selling exp. / Total Sales        | 6%     | 8%   | 7%    | 7%    | 7%    | 7%    | 7%    | 7%    | 7%    | 7%    |
| 9        | Finanace Cost / Total Sales       | 1%     | 1%   | 1%    | 1%    | 1%    | 1%    | 1%    | 1%    | 0%    | 0%    |
| 10       | Non-Cash exp. /Total Sales        | 9%     | 4%   | 3%    | 3%    | 3%    | 3%    | 3%    | 3%    | 3%    | 3%    |
| 11       | Total Cost / Sales                | 111%   | 100% | 97%   | 92%   | 92%   | 93%   | 94%   | 95%   | 96%   | 97%   |
|          |                                   |        |      |       |       |       |       |       |       |       |       |
| <b>B</b> | <b>PROFITABILITY RATIOS</b>       |        |      |       |       |       |       |       |       |       |       |
| 1        | PBDIT / Sales                     | -0.8%  | 5.4% | 7.3%  | 11.7% | 10.9% | 10.1% | 9.2%  | 8.3%  | 7.4%  | 6.4%  |
| 2        | Operating profit / Sales          | -6.9%  | 0.5% | 3.3%  | 8.3%  | 7.6%  | 6.8%  | 6.0%  | 5.1%  | 4.2%  | 3.3%  |
| 3        | PAT / Sales                       | -11.5% | 0.5% | 3.3%  | 8.3%  | 7.6%  | 5.8%  | 5.1%  | 4.4%  | 3.6%  | 2.8%  |
| 4        | PAT / Investment                  | -25.1% | 1.3% | 10.8% | 31.8% | 28.9% | 22.0% | 19.4% | 16.7% | 13.8% | 10.7% |
| 5        | Payout Ratio                      | 0.0%   | 0.0% | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  |
| 6        | EPS                               | -485   | 23   | 188   | 553   | 503   | 383   | 337   | 290   | 240   | 185   |

| ANNEXURE- 9         |                              |        |        |                        |
|---------------------|------------------------------|--------|--------|------------------------|
| BOLTS & NUTS UNIT   |                              |        |        |                        |
| BREAK EVEN ANALYSIS |                              |        |        |                        |
| S.No.               | Item                         | Year 1 | Year 6 | Remarks                |
| In R.O. '000        |                              |        |        |                        |
| <b>A</b>            | <b>FIXED COST</b>            |        |        |                        |
| 1                   | Production Wages             | 51     | 74     | Refer Annexure - 2     |
| 2                   | Factory Overhads             | 3      | 4      | Refer Annexure - 2     |
| 3                   | Misc. Factory Exp.           | 4      | 7      | Refer Annexure - 2     |
| 4                   | Admin. Expenses              | 24     | 26     | Refer Annexure - 2     |
| 5                   | Sales Expenses               | 17     | 32     | Refer Annexure - 2     |
| 6                   | Depreciation                 | 12     | 12     | Refer Annexure - 2     |
| 7                   | Prelim. Expenses written off | 12     | 0      | Refer Annexure - 2     |
| 8                   | Financing Cost               | 4      | 3      | Refer Annexure - 2     |
| 9                   | Income Tax                   | 0      | 5      | Refer Annexure - 2     |
| 10                  | Sub Total                    | 127    | 162    |                        |
| <b>B</b>            | <b>VARIABLE COST</b>         |        |        |                        |
| 1                   | Raw materials                | 127    | 222    | Refer Annexure - 2     |
| 2                   | Utilities                    | 9      | 15     | Refer Annexure - 2     |
| 3                   | Misc. Expenses               | 0      | 0      |                        |
| 4                   | Sub Total                    | 136    | 237    |                        |
| <b>C</b>            | <b>SALES</b>                 | 264    | 461    | Refer Annexure - 3     |
| <b>D</b>            | <b>CONTRIBUTION</b>          | 128    | 224    | Difference C - B       |
| <b>E</b>            | <b>BREAK EVEN POINT</b>      | 99.0   | 72.5   | As % of Production     |
|                     |                              | 39.6   | 50.7   | As % of Plant Capacity |
| <b>F</b>            | <b>CASH BEP</b>              | 80.0   | 67.0   | As % of Production     |
|                     |                              | 32.0   | 46.9   | As % of Plant Capacity |

| ANNEXURE- 10                             |                                       |            |                    |             |              |
|--|---------------------------------------|------------|--------------------|-------------|--------------|
| BOLTS & NUTS UNIT                        |                                       |            |                    |             |              |
| SENSITIVITY ANALYSIS ( IRR FOR 10 YEARS) |                                       |            |                    |             |              |
| S.No.                                    | Item                                  | Projection | Change in One      |             |              |
|  |                                       | No Change  | Variable at a Time |             |              |
|  |                                       |            | 0                  |             |              |
| <b>A</b>                                 | <b>VARIABLE</b>                       |            | <b>Volume</b>      | <b>R. M</b> | <b>Sales</b> |
|  |                                       |            | <b>Nos</b>         | <b>Cost</b> | <b>Value</b> |
| <b>B</b>                                 | <b>PESSIMISTIC</b>                    |            |                    |             |              |
|  | Change                                |            | -5%                | 5%          | -5%          |
| <b>C</b>                                 | <b>OPTIMISTIC</b>                     |            |                    |             |              |
|  | Change                                |            | 5%                 | -5%         | 5%           |
| <b>D</b>                                 | <b>I R R - PESSIMISTIC PROJECTION</b> |            |                    |             |              |
| 1  | I R R on Investment                   | 16.0%      | 10.9               | 11.0        | 5.4          |
| 2  | I R R on Equity                       | 24.9%      | 16.5               | 16.5        | 8.0          |
| <b>E</b>                                 | <b>I R R - OPTIMISTIC PROJECTION</b>  |            |                    |             |              |
| 1  | I R R on Investment                   | 16.0%      | 20.9               | 20.9        | 26.1         |
| 2  | I R R on Equity                       | 24.9%      | 33.7               | 33.6        | 43.4         |

