# A Study on Scrap Management In Medium And Small Scale Industries

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Abstract-In manufacturing industries especially those medium and small scale industries, scraps can result from mistakes, failure, blemish, changing of design, apathetic employees will be in immense manner. This study determines in wholeness the actual process of recycling and selling of scraps in the industry. The recycling process over scrap was analyzed in medium and small scale industries if necessary when there is faulty product rather than outright dumping of the faulty product. In this study, we are going to see how scraps can be managed in the manufacturing sector. This study also recommends in what way we can get profit from scraps, what are the strategies going on to upgrade products and process performance in terms of cost.

**Keywords:** Scraps, Recycling process, selling of scraps, Profit

#### I. INTRODUCTION

Quality has become one of the most importantfierce strategic tools which many industries have realized as a key to develop products and services that will ensure continuous success. In order to exist and be able to provide customers with better products, manufacturing industries are required to make sure that their process are constantly monitored and product quality enhanced. It is a system of maintaining standards in manufactured products by testing a sample of a manufactured product against the specification. Quality control is a process that evaluates output relative to a standard and takes corrective action when the output doesn't meet the standard. Whenever a manufacturing industry fails to take its quality seriously, it will always results to products being scraped, recycled or returned by customers.

Scraps are the waste coming out of the materials that are manufactured. Scraps are composed of recyclable materials persisting from product fabrication and utilization such as parts of vehicles, boiler components and surplus materials. It includes:

- Pasty-faced materials
- Blemished materials
- Imperfect and faulty materials
- Rejected components
- Materials which cannot be returned

Packing cases

Unlike waste, scrap has fiscal value, especially retrieved metals and non-metals are also retrieved for recycling. There are different types of scrap materials. They are given below:

- Stainless steel
- Steel
- Copper
- Aluminum
- Brass
- Automotive batteries
- Iron
- Lead
- Gold
- Titanium
- Tungsten

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## Strategies In Which The Manufacturing Industries Following Inorder To Gain Profit From Scraps:

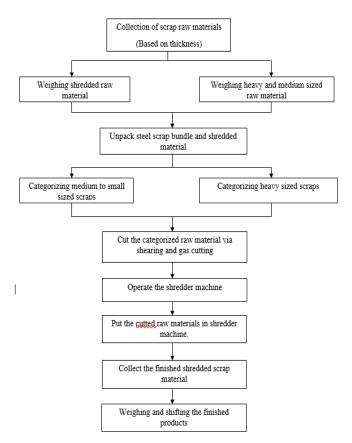
There are Four important strategies, the medium and small scale industries under BHEL following. They are:

- Recycling process
- Return to the supplier at original or discounted price
- Sell to consumers of scrap
- Selling to other firms

#### II. RECYCLING PROCESS

In most of small and medium scale industries, the recycling process is carried out in a large manner. Instead of buying new materials, they itself start recycling of scraps into further metals. It is always the most profitable form of using scraps.

Page | 959 www.ijsart.com



Key word: Shredding –Reducing raw material into fit sized materials and Extracting metals from other materials using magnets and air classifiers.

#### **Return To Suppliers:**

If the scrap raw materials cannot be used within that manufacturing industry, the return to supplier at original or discounted price is the next best. Suppliers generally permit the return of both fresh and used scraps as diplomacy to good accounts. The scrap raw materials that are to be sold traditionally at original cost, less than nominal replenishing charge. Since all manufacturing industries don't progress technically at the same rate. Rate may vary depends upon the suppliers.

#### **Sell To Consumers Of Scrap:**

Scrap raw material consumers and brokers compose an excellent outlet for getting rid of scraps. When a manufacturing industry advertises scraps for sale, consumer often respond. Transaction with consumers are on "As is Where is" basis and most of the time against cash. These consumers operate in two ways:

- Either, they bid firms entire scrap raw material i.e; they sell the scraps to bidders and receive commission.
- They sell scraps in small lots.

#### **Selling To Other Firms:**

Some manufacturing industries sell scrap raw materials directly to other manufacturing firms. Sales of those particular scraps to other manufacturing firms depend on the condition of scrap, the economics of price and availability of scrap from other sources. Scrap raw materials sales directly to the user usually results in a good price rather than sales made to consumers and brokers.

#### WHY SCRAP SHOULD BE RECYCLED OR SOLD?

- Less amount of scrap would be a result of theft.
- Large amount of scrap shows use of imprecise materials or ineffectual methods of manufacturing / processing.
- Systematic collection and separation of scrap assure better awareness.
- If scrap can't be sold, get rid of it on payment to contractor.
- If scrap remains uncontrolled, find out if any product can be obtained from it.

#### **Sales Strategies:**

- "As is" condition It means all scrap raw materials as publicized or examined and in condition reported. There is no warranty other than that of title.
- Inspection by buyers When the value of the scrap declares the expense, a private inspection by the buyer can prevent many misunderstanding.
- "Where is" condition It means the obtained scrap raw material has to be taken over by the buyer and removed at his cost.

#### III. CONCLUSION

The study presented in this paper set out to determine the actual process of recycling and selling of scraps in the industry. Two important points in this paper are strategies in which the manufacturing industries following in order to gain profit from scraps and how it is managed. It is also recommended that small and medium scale manufacturing industries should take the following activities seriously so as to avoid the huge amount of scraps being mounted. These strategies if properly carried out will help to reduce the

Page | 960 www.ijsart.com

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amount of scraps so that quality of the product will be increased in the manufacturing industry.

#### **REFERENCES**

- [1] W.J. Stevenson, Operations Management, 10th ed., New York: The McGraw-Hill Companies, 2009.
- [2] D.C. Montgomery, Introduction to Statistical Quality Control, 2nd ed., New York: John Wiley, 2000.
- [3] J.L. Ashford, The Management of Quality in Construction. London: E & F Spon, 1992.

Page | 961 www.ijsart.com