

Analysis of consumption of plastic by the original equipment manufacturers (OEM's) in Delhi-NCR

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Abstract

In the present scenario india is a developing country with a highest growth rate. Along with this the plastic industry is also growing with a faster rate. so it is very important of the efficient consumption of plastics for the equipment manufacturer. In this paper the data of number of industries has been taken and on analysis it is concluded that the growth rate of plastic grades will be 6 to 7 percent in the coming years and the location of the raw material supplier is the utmost importance for the plastic manufacturing industries.

1. Introduction

Over the years, India has made significant progress in the industrial world with healthy economic growth. On purchase power parity basis, it is one of the top five global economics and is expected to be the third largest by the turn of this decade. Plastics, one of the fastest growing industries in India, have a vital role to play. Indian Plastics Industry is expanding at a phenomenal pace. Major international companies from various sectors such as automobiles, electronics, telecommunications, food processing, packing, healthcare etc. have set-up large manufacturing bases in India. Therefore, demand for plastics is rapidly increasing and soon India will emerge as one of the fastest growing markets in the world. The next two decades are expected to offer unprecedented opportunities for the plastic industry in India. This would necessitate industry initiatives to foster investments, grow the market, upgrade quality standards, enhance global participation, encourage Indian industry, to adopt and adapt to world class technology and manufacturing practices. Despite instability in International prices of polymer materials in 2006 - 07, plastics industry in the country has consolidated its performance by consuming about 5.0 million tonnes of polymers, as compared to Chinese consumption of about 30 million tonnes in 2007. Indian plastics industries are enthusiastic about the acceleration of the growth engine in the next 3 to 5 years due to capacity expansion of existing petrochemical complexes and setting up of new crackers in the country currently. Reliance Industries Ltd., (RIL) has about 75% share of Indian Petrochemical Cracker capacity, followed by medium sized capacity of Gas Authority of India Ltd. (GAIL) and Haldia Petrochemicals Ltd., (HPL). RIL has ambitious plan of augmenting its PP capacity from 1010 KT to 2600 KT by the year 2010. Indian Oil Corporation (IOC) has also planned an 800 K tonnes naphtha cracker at Panipat at an investment of Rs.6300 crores to produce 800 KT of PE and PP each at Panipat. IOC would also be setting up a production capacity 150 KT PP at Chennai by year 2009 as well as styrene, which is not being produced in India. These positive factors of availability of polymeric materials would infallibly be harbinger in accelerating the growth of plastics sector in the near future. The capacities of current petrochemicals producers are given in Table – 1

Producer and location	PP	HD PE	LD PE	PET FIL M	SAN /ABS	PS	PVC
RIL hazira	350	–	–	400	–	–	300
RIL Jamnagar	600	–	–	–	800	–	–
RIL patalganga	60	–	–	–	300	–	–
IPCL nagothane	60	–	80	220	–	–	–
IPCL vadodara	75	80	–	–	–	55	–
IPCL Gandhar	–	160	–	–	–	–	–
GAIL auriya	–	100	–	160	–	–	150
HPL haldia	210	200	–	260	–	–	–
BRPL bongaigao n	–	–	–	–	–	–	–
Finolex pisanpar	–	–	–	–	–	–	130
LG poly VIZAG	–	–	–	–	–	80	–
Supreme mumbai	–	–	–	–	–	240	–
Chem plast metturdam	–	–	–	–	–	–	60
DCW Sahupuram	–	–	–	–	–	–	60
DCM sriram kota	–	–	–	–	400	–	35
RPRL abu	–	–	–	–	–	16	–
BASF styrencis bharuch	–	–	–	–	–	60	–
MITSHUB ISHI haldia	–	–	–	–	–	–	–
TOTAL	1355	460	160	1040	1500	360	790

India- one of the fastest growing economies of the world, is all set to attain the premier status along with China. India is a favoured destination for overseas investors and offers the advantages of an open economy, increasing liberalization, a stable democratic political scenario, highly skilled work force with fluency in English. Various overseas players wish to explore the Indian market and invest in opportunities thrown open by the country, projected to be world number 3 in plastics consumption by 2015. This seems a very achievable position as since the past decade, the Indian plastics industry continues to grow at double digit figures. A plethora of queries plague the investor who wishes to tap the Indian market. Few of these queries from overseas include :

- ▶ The raw material scenario: demand and supply
- ▶ Plastics machinery sector : present technology levels and demand
- ▶ Finished products : Export potential
- ▶ The major overseas players with base in India
- ▶ Current consumption, projected growth of the Indian plastics industry

2.RESEARCH METHODOLOGY

OBJECTIVE OF THE STUDY:-

Sub Objectives-

- i. To study the substitute of plastic used in Industries
- ii. To study the utility of plastic products
- iii. To study the quality parameters demanded by clients of major giants in Delhi-NCR
- iv. To study the scope of Recycled plastic
- v.

NEED OF THE STUDY

Despite the innumerable advantages of plastic, industry has been constantly neglecting the applications of plastic. This study tries to be neutral and identify the area where use of plastic can be beneficial to the industry, nation and its people. The increasing demand for recycled plastic, pvc has compelled the industry to find an amicable way to increase the use of plastic. The study also highlights the future demand, parameters chosen by the OEMs for use of plastic. Since DELHI-NCR has highest consumption of plastic, the study becomes important with regards to environmental concerns and commercial use.

DATA COLLECTION

Research is based on primary data and secondary data

PRIMARY DATA:-

Sample size-50

Data collection-Survey

Survey instrument-Questionnaire

Sampling method-Random sampling is adopted

SECONDARY DATA:- The data is collected from following sources--CRISIL Report-ICRA Report-Articles by eminent people, Industry experts, Analyst Reports, Press Articles-Industry Publication

Sampling Details

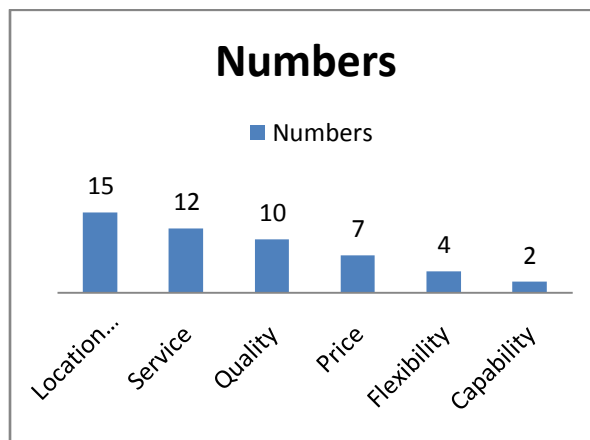
Research design - Exploratory, Descriptive
 Data sources - Primary, Secondary
 Research instrument -Questionnaire
 Sampling design-Random sampling
 Sample size - 50
 Sample location- delhi ncr location

3.RESULTS AND DISCUSSION

criteria for selection of raw materials from your suppliers-

For rank 1:-

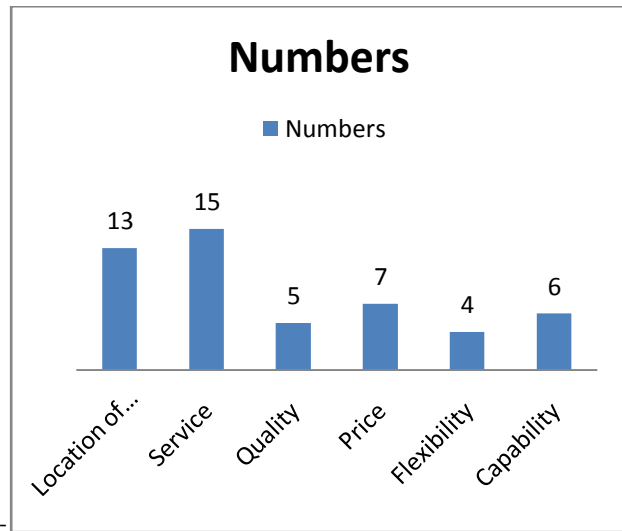
Parameters	Numbers
Location of suppliers	15
Service	12
Quality	10
Price	7
Flexibility	4
Capability	2



Interpretation- First Rank was given to location of suppliers regarding the criteria for selection of raw material from their suppliers.

For rank 2:-

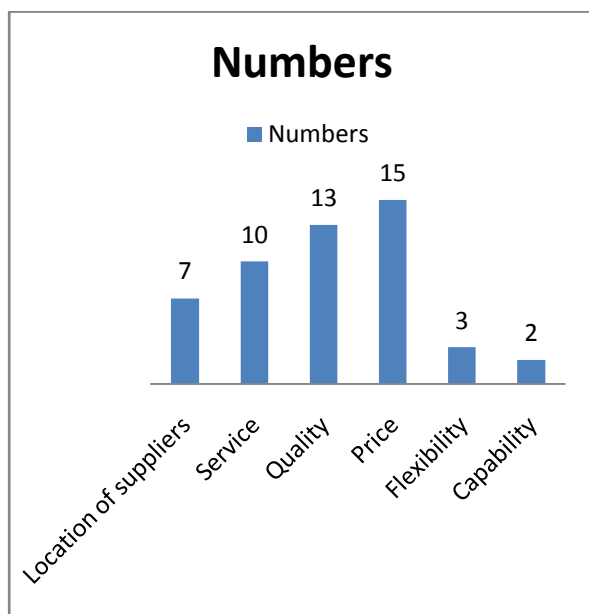
Parameters	Numbers
Location of suppliers	13
Service	15
Quality	5
Price	7
Flexibility	4
Capability	6



Interpretation - Second rank regarding the criteria of selection of raw material was given to the services offered by the suppliers.

Rank 3

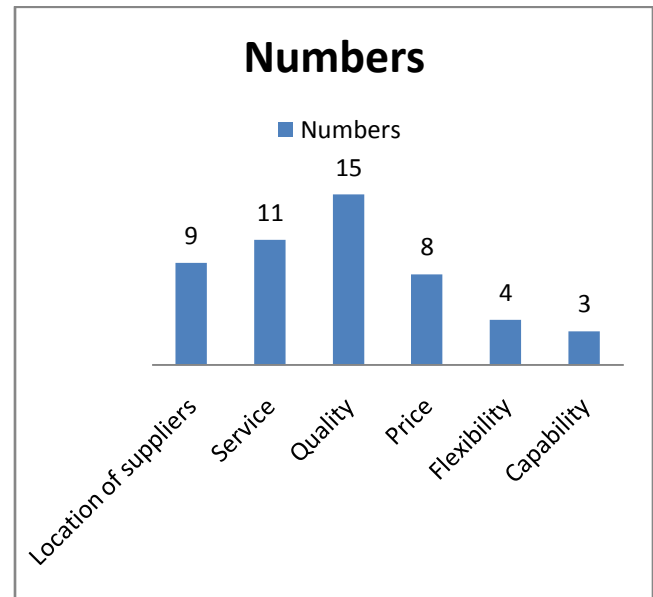
Parameters	Numbers
Location of suppliers	7
Service	10
Quality	13
Price	15
Flexibility	3
Capability	2



Interpretation- Third rank was given to the criteria of Price of raw material with regard to selection of raw material from suppliers

For rank -4:

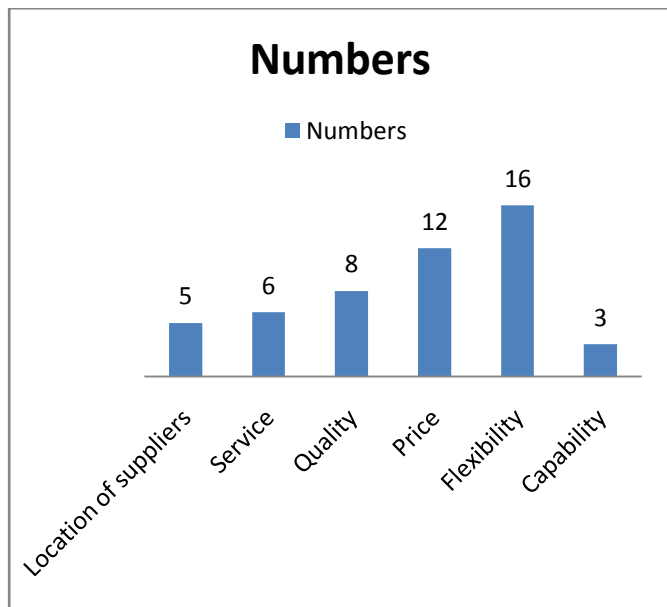
Parameters	Numbers
Location of suppliers	9
Service	11
Quality	15
Price	8
Flexibility	4
Capability	3



Interpretation-Fourth rank was given to criteria of Quality of raw material with regard to selection of raw material from suppliers.

For rank 5:-

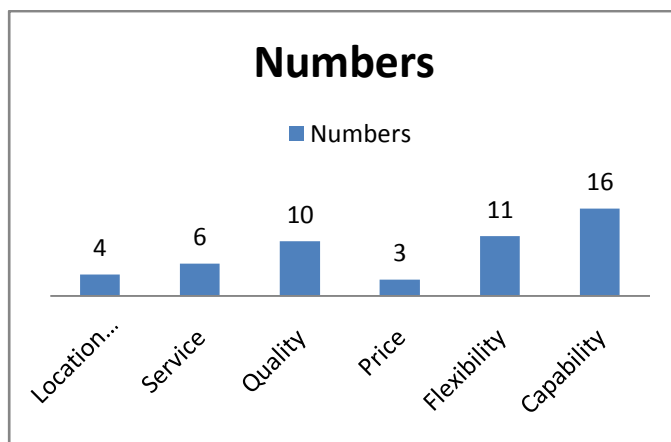
Parameters	Numbers
Location of suppliers	5
Service	6
Quality	8
Price	12
Flexibility	16
Capability	3



Interpretation-Fifth rank was given to the criteria of Flexibility of suppliers.

For rank 6:-

Parameters	Numbers
Location of suppliers	4
Service	6
Quality	10
Price	3
Flexibility	11
Capability	16

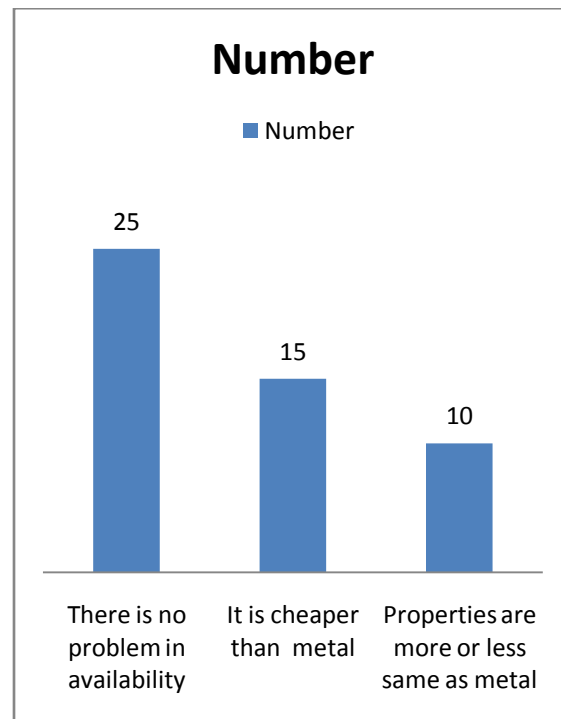


Interpretation- Sixth rank was given to the criteria of capability of suppliers.

The polymer plastic grades for your products according to the use-

For rank 1:-

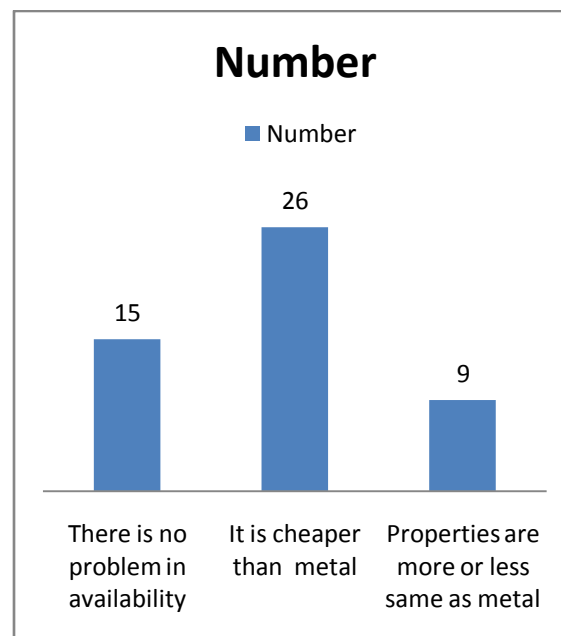
Parameters	Number
There is no problem in availability	25
It is cheaper than metal	15
Properties are more or less same as metal	10



Interpretation-The first rank regarding the reason for using polymer plastic grades was given to the option of easy availability of polymer plastic grades.

For rank 2:-

Parameters	Number
There is no problem in availability	15
It is cheaper than metal	26
Properties are more or less same as metal	9



Interpretation- The second rank was given to the factor of cheapness of polymer plastic grades.

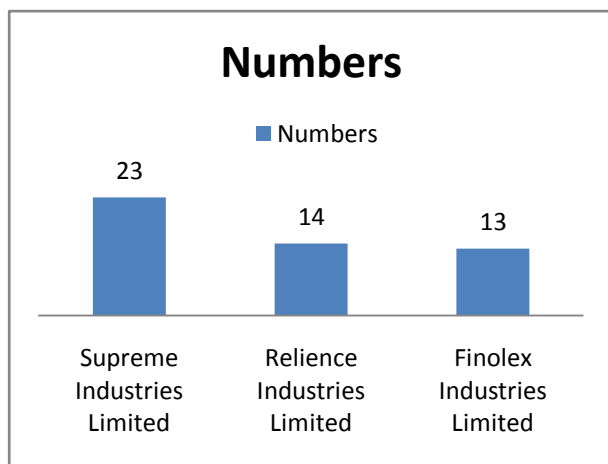
For rank 3:-

Parameters	Number
There is no problem in availability	10
It is cheaper than metal	12
Properties are more or less same as metal	28

major suppliers for your product-

For rank 1:-

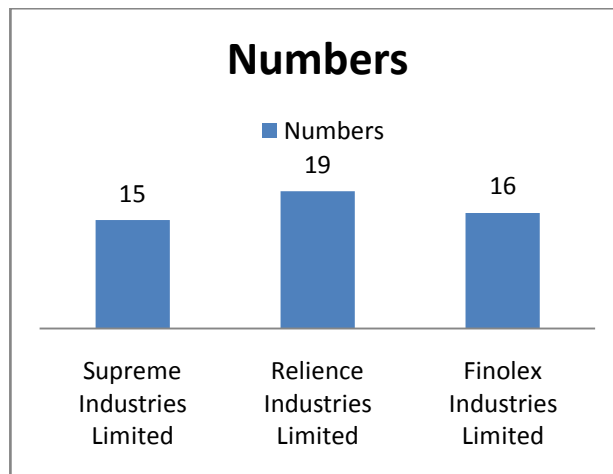
suppliers	Numbers
Supreme Industries Limited	23
Reliance Industries Limited	14
Finolex Industries Limited	13



Interpretation- Supreme industries limited was the supplier for maximum number of major giants in plastic industry in DELHI-NCR

For rank 2:-

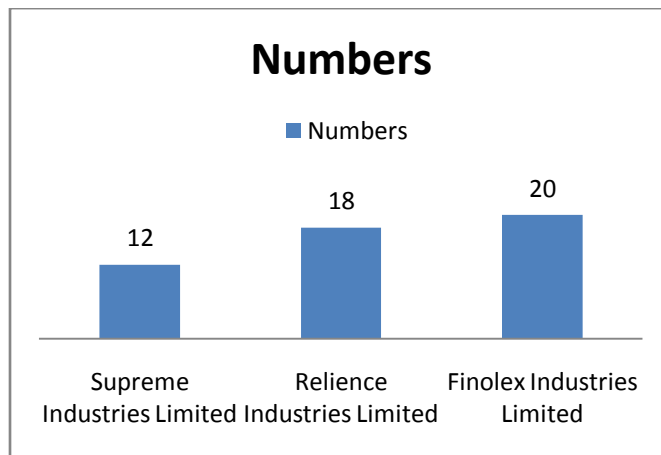
suppliers	Numbers
Supreme Industries Limited	15
Reliance Industries Limited	19
Finolex Industries Limited	16



Interpretation- Reliance Industries Limited was the second most preferred supplier for the major giants in DELHI-NCR

For rank 3-

suppliers	Numbers
Supreme Industries Limited	12
Reliance Industries Limited	18
Finolex Industries Limited	20



Interpretation- Finolex industries limited was the third most preferred supplier for the major giants in plastic industry at DELHI-NCR.

4. CONCLUSION

1. TV Cabinet is the existing product of maximum number of major giants in DELHI-NCR.
2. The Major Suppliers Of Major Giants In Delhi-Ncr Is Supreme Industries Ltd Followed By Reliance Industries Limited.
3. Among the criteria for selection of raw materials for various components in plastic products, Location of suppliers was the most preferred option while the service and the price were the subsequent ones.

4. Having monthly contacts with the suppliers. They gave second preference to having annual contracts with their suppliers.

5. ACKNOWLEDGEMENT

The major giants must also focus their attention and strategy to increase their existing product range such as monitor, refrigerators, washing machines in order to tap the growing plastic demand in the market. The Plastic is increasingly taking a toll on human health and the environment, a new study says. The researchers did say that the ill-effects of plastic can be reduced in the future with the invention of biodegradable and less harmful forms of plastic and with greatly improved systems of plastic recycling.

REFERENCES

1. "Plastic consumption to double in india by 2016"- by Satnam singh, Plastic news, published on December 4th 2013.
2. "Demand for plastic high in south"- Business standard, kochi, November 28th 2013
3. "Plastic per capita consumption to double in 5 years"- Namrata singh, TNN, Nov 29th 2013, Mumbai.
4. ZENITH International Journal of Multidisciplinary Research
Vol.1 Issue 7, November 2011, ISSN 2231 5780 .
www.zenithresearch.org.in 315
5. All India Plastics Manufacturers Association - www.aipma.net
6. Indian Plastic Federation - www.plasticfederation.org
7. Organization of Plastics Processors of India - www.oppindia.org
8. The Plastics Export Promotion Council - www.plexconcil.org