#### RECYCLING OF PLASTIC SCRAP

by

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Project Report

submitted to

the Department of Mechanical Engineering

of the Higher Technical Institute

Nicosia Cyprus

in partial fulfillment of the requirements

for the diploma of

#### **TECHNICIAN ENGINEER**

in

#### MECHANICAL ENGINEERING

JUNE 1992

Project Supervisor : Dr. A. Stasis

LICHER	PROJECT NO
TECHNICAL	0066
INSTITUTE	2000

# **CHAPTER 1**

## **HISTORICAL REVIEW**

The present day hysteria over control and improvement in the environment can blind us to the fact that through out history man has always practiced a certain amount of recycling of scrap metal and other waste materials.

Certainly ever since he first discovered metals, originally those which occurred naturally and some what later those which occurred by reduction in the primitive fires, he practiced recycling of waste, partially reduced ores, or spare metal which he produced at the time of making a finished weapon, or articles such as jewellery, nails, ploughshares or horseshoes etc.

There are two reasons for this. First that metals have always been relatively valuable in comparison with many of the other materials which man uses, and the second, and probably more important reason, is that it is relatively easy operation to collect scrap, particularly at the source of manufacture, and recycle it by simple melting operation. Possibly the earliest reference to recycling is the biblical admonition to beat swords into ploughshares and spears into pruning hooks.(Isaiah Chapter 2, verse 4). Two main reasons exist for this early awareness of recycling metals.

a) Metals, by their rarity to early man, not yet master to large scale extraction, have always been relatively valuable compared with other materials,

b) Engineering practice has in the past, used solid metal which, especially as in-process scrap, may easily be collected and reclaimed by simple melting. Modern practice has reversed this trend, possibly because of the increasing value of metals; consumer goods now avoid the use of large pieces of integral metal for the above reason.

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#### ACKNOWLEDGMENTS

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