

CORROSION PROBLEMS OF SRI LANKA. I—LOSSES SUFFERED**S. Hettiarachchi***(Department of Chemistry, University of Colombo, Colombo 3)*

Countries world over suffer enormous losses due to corrosion. The losses are more acute in developed countries due to the greater use of high technology equipment which are mainly made of metals. In the United Kingdom the losses suffered due to corrosion in 1971 amounted to 3.5% of the GNP. Similar or even greater losses are suffered by other industrialised nations such as the United States and West Germany.

SECTION C

No data was available on the losses suffered by Sri Lanka due to corrosion. The object of this paper is to present the type of losses and the magnitude of losses suffered by Sri Lanka due to corrosion. A survey of the corrosion problems in Sri Lanka revealed that, the annual losses suffered by Sri Lanka due to corrosion amounts to well over Rs. 10 million.

More than 50% of these losses are due to corrosion problems in boilers, particularly on the water side. These problems could mainly be classified as scaling, perforation and caustic cracking. Corrosion in air-conditioning systems and heat exchangers have been identified as being mainly due to poor pH control and water quality management. Internal corrosion of pumps and pipe lines have also been caused by these two factors. Atmospheric corrodents and relative humidity have played a major role in the corrosion of compressors, blowers, exterior of tanks, buildings, etc. Submerged structures have suffered serious damage due to moisture retention ability of soils. Other major types of corrosion was due to salt spraying of exposed metals and metallic structures along the coastal belt of Sri Lanka.

This study covered the major public and private sector industries.