

Most of the available equipment and machinery was developed with foreign collaborators. For example, the MAMC has collaborations with Polish Kopex for coal preparation plants and jigs, Netherland's Stamicarbon for cyclone processes for coal treatment, Germany, UK and former USSR for other products. Similarly, BEML has collaborations with the Japanese Komatsu, the U.S. Caterpillar and Dressers of Australia and HEC with former USSR (for heavy machinery building plant), Czechoslovakia (foundry and forging plant) and former West Germany (steel plant equipment).

Size and Production Capacity

Presently, India has 17 mining equipment, 20 earth moving equipment, 12 construction equipment and 20 material handling equipment manufacturers in the organised sector. In addition, several small and medium sized facilities have been producing equipments and parts for the machinery. In fact, mining equipment/machinery is one of the poorly documented sectors in the industry. Information on major parameters such as the actual size of the industry, its productive capacity, or actual performance is lacking. Despite this lacuna, the present study has identified most of the information. Annex 1.1 provides an illustrative list of mining & allied machinery equipment manufactured in India. The total sales volume far exceeds the production levels indicating sales of imported items and the large volume coming from smaller units. According to available data, sale of select mining, earth moving, material handling and construction equipments amounted to Rs. 17 billion in 1992-93, shared as follows:

**Table 1
Total Industry Size (Ra. Billion)**

Segment	Sales Values
(a) Mining machinery	0.51
(b) Earth Moving Machinery	13.13
(c) Material handling equipment	0.60
(d) Construction Machinery	2.64
Total	16.88

Mining Machinery

The installed capacity of the mining machinery alone, expressed in value terms, is Rs. one billion and its production amounted to Rs. 890 million in 1993-94. The major products include coal cutters, haulages, winders, armoured face conveyors, self-advancing powered roof support and coal washeries. The total production trend in recent years is as follows (the performance of select companies appears in Annex 1.2):