

The bulk of the market is for opencast mining machinery/equipment, accounting for some 65 per cent. The balance is shared between underground mining and material handling segments.

A broad grouping of some of the major machinery and equipment currently in use and in demand are as under:

I. Mining Machinery/Equipment:

- i) Tunnelling idlers with various attachments
- ii) Drilling equipment - rotary and pneumatic drills
- iii) Coal preparation equipment
- iv) Self-advancing roof support
- v) Shovels and excavators including hydraulic (0.9 to 14.0 m³)
- vi) Electric rope shovels (up to 10 m³)
- vii) Walking dragline
- viii) Trucks and dumpers (10 to 170 t capacity, mostly up to 100 t capacity)
- ix) Bulldozers (up to 77 HP)
- x) Backhoe (1 to 85 m³)
- xi) Loaders including wheeled (1.0 to 5.86 m³), and
- xii) Longwall mining equipment

II Material Handling

- i) Conveying equipment - belt and bucket type
- ii) wagon tippers
- iii) Stamping, charging, pushing machines
- iv) Forklift trucks, and
- v) Stackers, blenders, reclaimers and spreaders

In the adoption of mechanised opencast mining the most critical aspect has been the proper maintenance and operation of Heavy Earth Moving Machinery (HEMM). While India has acquired requisite expertise in the maintenance and operation of these machines, a major concern has primarily been the availability of spares, especially those which are to be obtained from outside the country. Large capacity workshops at the unit level and also regional workshops for a group of mines and central workshops in each coalfield have been established to ensure periodical maintenance of these equipments. Till recently, there has been some difficulties in the maintenance of hydraulic system of HEMM, but sufficient capabilities have now been developed in this area as well.