

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

Some of the major machinery and equipment currently in use and demand is:

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

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 is the availability of spares, especially those which are to be obtained from outside the country. Large capacity workshops at the unit level and regional workshops for a group of mines and central workshops in each coalfield have been established to ensure periodical maintenance of these equipments. Until recently there have been some difficulties in the maintenance of the HEMM hydraulic system; however, sufficient capabilities have now been developed in this area as well.