

## Title:

Construction Equipments - We Cannot Live Without It

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## Summary:

We would have been still constructing the Panama Canal but for the modern gigantic construction equipments. These Herculean machines made life easy for us by their enormous strengths and capacities for long drawn heavy duties under all torturous conditions.

## Keywords:

construction equipment

## Article Body:

We would have been still constructing the Panama Canal but for the modern gigantic construction equipments. These Herculean machines made life easy for us by their enormous strengths and capacities for long drawn heavy duties under all torturous conditions.

To think that these engineering marvels work for reclaiming lands from bays, striking piles into the hard sea beds or drilling tunnels deep below the sea beds (Trans European Tunnel connecting England to France), is mind boggling. The list can go endless but for the scope of this article which is limited.

## Equipments to Suit All Needs

Construction equipments may be classified as per needs and further by capacities.

1.        Excavating and Earth moving: These gigantic machines are hydraulically operated to safeguard from shock failures. These are the first machines to be employed for preparing the construction sites. Land leveling by digging and cutting terrains are done by excavators of appropriate capacities which run into 1000s of HP. Basic earth movers include dozers, tippers and loaders.

2.        Concrete processors: Batch or continuous concrete mixers are computer programmed for consistent precise mix. These are stationed permanently near the site or in the factory depending on convenience. Small batch mixers of less than one quintal capacities are portable. The concrete is transported from far off plants in transit mixers of minimum capacity 6 cubic meters by volume. Concrete

is poured to the spot using concrete pumps.

3. Bar bending machines: Small high torque generating bar bending machines are handy in bending and forming construction steel bars. These are available in various specifications.

4. Rollers and compactors: Rollers are employed to compact the ground after dozers have leveled it. Some rollers are also equipped with vibrating compactors eliminating the need for separate compacting. For small areas like indoors vibrating plate compactors, which generate up to 1000kgf maybe used. These are just about the equipments fundamentally required for construction of homes and offices.

#### Road Construction

For road construction, depending on whether the road is being asphalted or concretized, the equipments change. Asphalt mixers and asphalt pavers take-up the job of road laying to perfection. Concrete road pavers, although work on similar principle, can't finish the road-laying as concrete needs setting time. There is a need for faster laying technique. Road surface finishing is by a technique called VDF, which stands for vacuum dewatered flooring. Smoother finishes are given by power trowels and anti skid finishes by brooms, mechanized or manual.