

# Monster Construction Machines

In one of the earlier posts titled “Widely Used Construction Equipment”, diverse equipment or machines commonly seen or heard about in construction sites were mentioned. Some of them are small in their sizes while some are big. But how big or powerful could these machines really be?

In a programme in the TV channel named “Discovery Science” a number of biggest and mightiest construction equipments were shown and discussed. The programme was quite impressive and this article takes inspiration from that. Below are the names along with few details of some of the massive construction machines in the business. In fact, as of now these are the largest machines ever built in their respective categories.

World’s largest bulldozer: Komatsu D575A-3SD, also known as the super dozer, is the largest of all bulldozers built till date. Powered by a mighty 1150 engine, this 11.7m long, 7.4m wide, 4.9m tall massive 152-ton machine can push over 150 tons of materials easily. The blade weighing 10 tons has a capacity of 69 cu.m. which can be increased to 96 cu.m. by using an optional blade. Some machine !

World’s largest hydraulic excavator: Terex RH 400 is the largest hydraulic excavator in the globe. This monster of a machine, weighing just under 1100 tons, can clock a loading rate of almost 10000 tons/hr which itself is a world record. Powered by two Cummins engines totaling massive 4400 HP, this giant can pick 94 tons of materials in it’s huge 80-ton bucket at one go. All these come with a hefty price tag though – some \$11 million per piece. There are only 11 or so pieces out there.

World’s largest haul truck: Liebherr T282B is the reigning sultan of haul or dumper trucks. With a gross operating weight of about 600 tons and load carrying capacity of almost 400 tons, these machines can clock a speed of 60-plus kmph. A T282B is about 14.5m long, 8.7m wide, 7.4m in height. Fuel capacity of this 3650 HP truck is approx. 4700 litres. Price is \$4 to \$5 million per piece.

World’s largest Dragline: Big Muskie continues to hold the record of the largest dragline excavator ever built even though the machine is no more in operation. It was in the business from 1969 until 1991 when it was dismantled for good. This king of machines was mindboggling in every aspect. It’s size was 68m x 46m and it stood around 22 storeys tall. It’s massive bucket, weighing some 200 tons or so, can pick some 320 tons of earth and dispose at a distance of about 180m. This 13500-ton monster has a 95m long boom. It cost \$25 million in 1969 itself which is equivalent to a whopping \$150 million at current price level. Big Muskie, also known as BE 4250W, was regarded as one of the seven engineering wonders of the world.

The biggest dragline currently in operation is named Liberty. This dragline, made by BNI Coal, weighs about 4000 ton. However, in spite of its massive size Liberty is no match for Big Muskie in any aspect.

Interestingly, unlike other big draglines that moves on tracked wheels, these two moves in steps just like human being, albeit very slowly. That's why they are also called as the walking draglines. Their massive weights make it very difficult to move them on chain linked wheels thus entailing huge mechanical steps.

World's largest wheel loader: L-2350 is the biggest wheel loader as of now. Made by LeTourneau Inc., this 262-ton machine with 2300 HP has a bucket capacity of 41 cu.m. approx. Unlike conventional rubber tyres, tyres of this wheel loader which are massive 1.78m wide and 4m in diameter, are filled with nitrogen gas. Hydraulic lifting capacity is about 72 tons. Price tag is \$1.5 million.

World's largest mobile crane: Liebherr LTM 11200-9.1 rules the world when it comes to the mobile crane fraternity. It is said to be the strongest mobile crane with the longest telescopic boom in the globe. It has a maximum lifting capacity of a whopping 1200 tons at a radius of 2.5m. The telescopic boom extends upto 100m and using fly jibs this can reach almost 190m. That's some reach. The crane travels on a large tyre-mounted trailer that can move as fast as 75 kmph. All these do not come too cheap though – a cool \$12.5 million or so.

Abovementioned machines are obviously not meant for ordinary work. These are mostly used for large-scale mining work where they can prove to be extremely efficient and economic.

Source: <http://civilconstructionresourcez.wordpress.com/2012/04/07/monster-construction-machines/>