



Rapid Impact Compaction



Rapid Impact Compaction uses a hydraulic hammer for shallow compaction of soft soils to increase density and reduce settlement.

Rapid Impact Compaction is a ground improvement technique for shallow ground densification ranging from 15 to 20 feet. Energy is created using a hydraulic hammer to compact areas of loose granular soils, slabs or waste material. Rapid Impact Compaction is used to increase bearing capacity and reduce settlement. It is often used in low headroom sites or when the vibrations generated with traditional Dynamic Compaction equipment is challenging to near-by structures and/or excavation is cost prohibitive.

Rapid Impact Compaction Applications

- Airport Runways
- Buildings
- Building Support in Seismic Areas
- Roads and Roadway Embankments
- Parking Lots
- Landfills
- Liquefaction Mitigation

Menard Rapid Impact Compaction

Menard Rapid Impact Compaction uses a hydraulic hammer, varying in weight from 7.7 to 9.9 tons, installed on a special mast on a large backhoe. Results from a trial zone and ground characteristics determine the location and grid spacing of the impact points. The impacts can be repeated at the rate of 40 or more blows per minute; applying a compactive energy of approximately 45,000 tons-foot per hour, more or less equivalent to that applied with a conventional crawler crane and a 14 ton tamper. The limited height of drop, slightly less than 3 feet, and the weight of the available hammers limit the depth of improvement to about 15 to 20 feet.