

dynamic DC compaction



Dynamic Compaction (DC) is a Ground Modification technique whereby loose soils can be effectively and economically densified to improve its mechanical characteristics and allow construction of structures directly on compacted soil, without need of deep foundations or soil replacement.

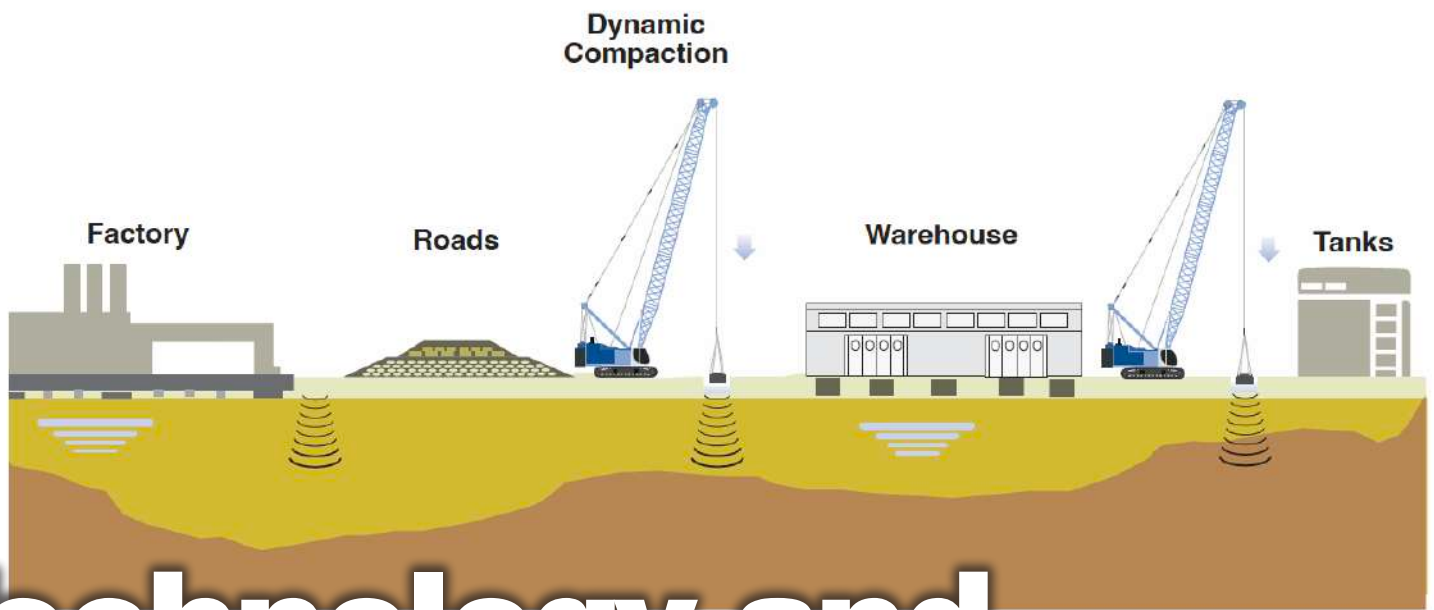
The method involves dropping heavy steel pounders repeatedly on the ground at regularly spaced intervals. The weight and height of pounding depends on the degree of compaction desired. The usual range of pounder weight is between 12 Ton to 25 Ton and the drop height can be up to 25m.

Very fast production
(more than 50,000 sq.m
/crane/shift/month)

**Applicable for wide
range of soils with
fines content up to 35%**

**Very sustainable
technique:**

- no disposal,
- no aggregate,
- no cement

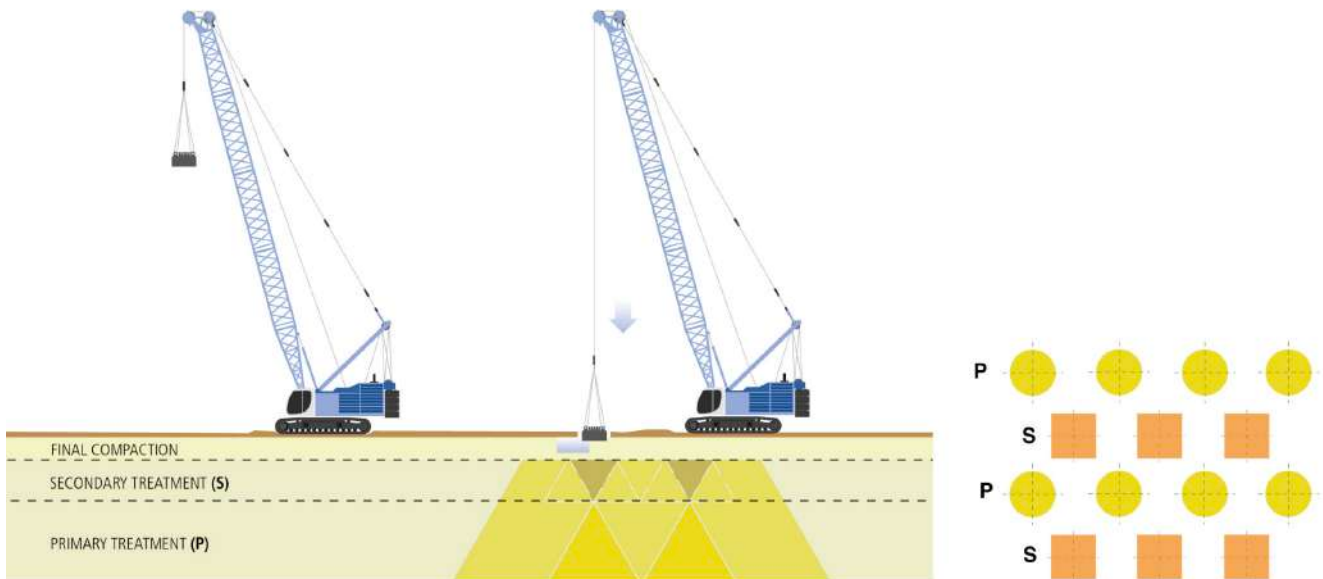


Technology and fields of application



Dynamic Compaction (DC) technique is well suited for a wide range of applications and projects with different sizes up to several million sq.m, covering Industrial buildings, oil & Gas facilities, Infrastructure constructions, Platforms and logistics facilities, commercial and residential buildings, tanks, artificial islands, road and railway embankments, land reclamations...

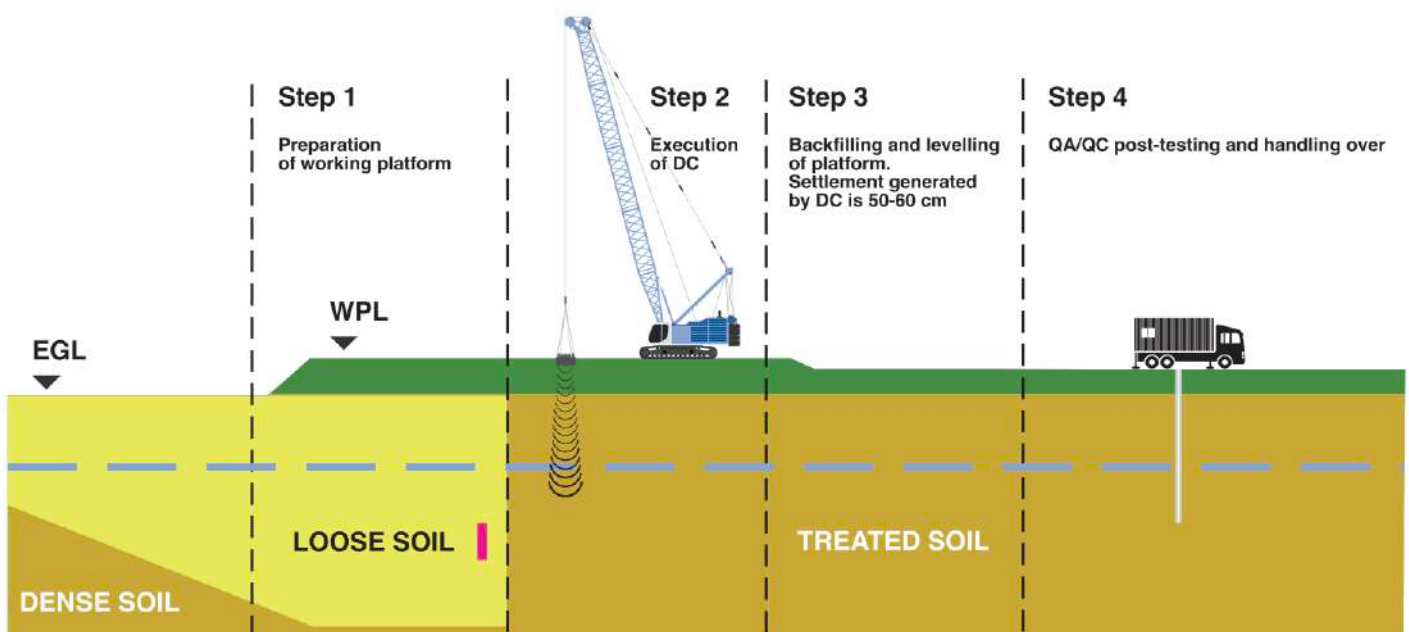
Dynamic Compaction (DC) technique was implemented as value engineering alternative to deep foundation or soil replacement for a large number of structures throughout the world.



Dynamic Compaction operational sequence

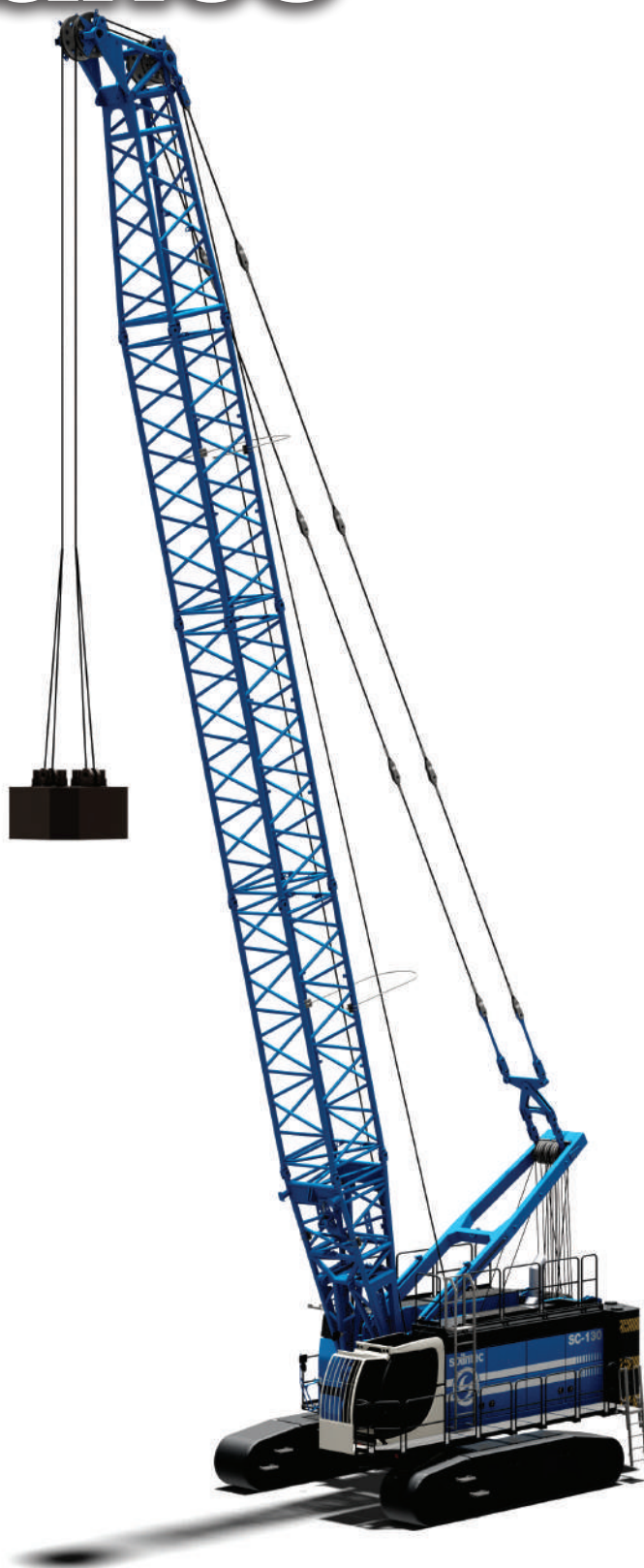
The method involves dropping heavy steel pounders repeatedly on the ground several times, following a pre-set grid (usually a square grid), split into a primary grid (P) and a secondary grid (S).

The weight and height of pounding depends on the degree of compaction desired. The usual range of pounder weight is between 12 Ton to 25 Ton and the drop height can be up to 25 m.



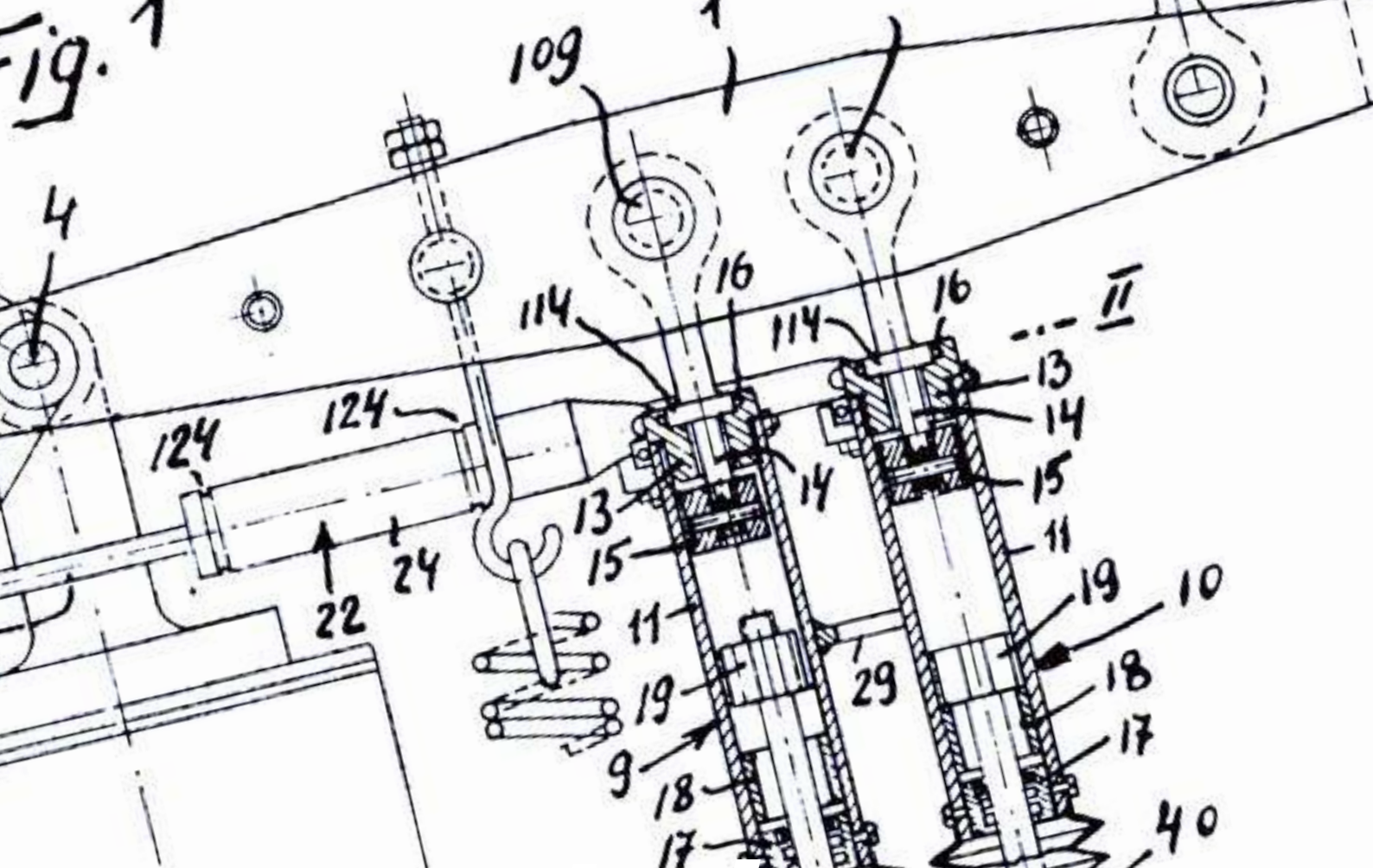
performance

Drilling rig performance



working radius	Boom length				
	20 m	23 m	26 m	29 m	32 m
8 m	30 t	30 t	30 t	28,4 t	24,8 t
9 m	30 t	30 t	27,5 t	25,8 t	23,7 t
10 m	29,6 t	26,8 t	25,1 t	23,4 t	21,8 t

working radius	Boom length				
	66 ft	75 ft	85 ft	95 ft	105 ft
26 ft	66139 lb	66139 lb	66139 lb	62611 lb	54675 lb
30 ft	66139 lb	66139 lb	60627 lb	56879 lb	52249 lb
33 ft	65257 lb	59084 lb	55336 lb	51588 lb	48061 lb



controls

DMS suite for DC

- Parameter displayed: height of fall, depth of the crater generated, number of impacts performed, number of passes, cycle duration, braking, etc.
- Automatic sequence of the complete fall cycle
- Job planning and progress tracking in real time
- Condition monitoring and maintenance management software
- Worldwide remote assistance





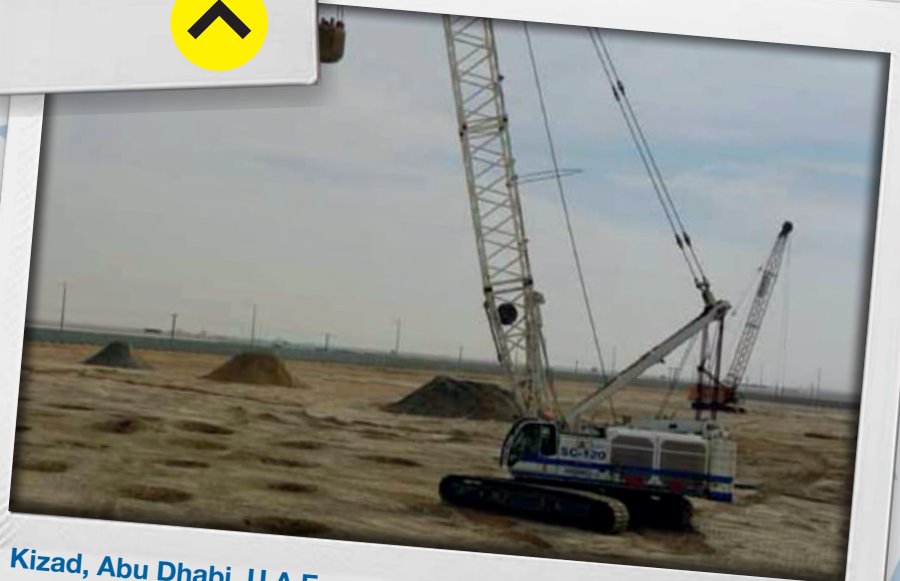
U.A.E.
Sheikh Zayed Housing Programme



Al Riyadh, KSA
Salboux Project



Sweden
Stockholm Norvik Port



Kizad, Abu Dhabi, U.A.E.
Taweelah Aluminium Extrusion Plant



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