

— ULTRA-HIGH ENERGY SERIES

HC240

Rapid Impact Compaction Machine

A 16-ton dropweight and 240 kJ impact energy for foundations, high fills and demanding infrastructure ground improvement.

The high-energy Hangshen model for deep ground treatment.

240 kJ	5-9 m	2 m
Impact Energy	Effective Depth	Plate Diameter



Product Overview

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HC240 Rapid Impact Compaction Machine is the ultra-high-energy model in Taian Hengda Machinery Co., Ltd.'s Hangshen series. It combines a 16,000 kg dropweight with 240 kJ impact energy for deep fill and weak-ground treatment.

The complete attachment weighs 28.9 t and has a supplied working height of 7,613 mm. Its rated effective compaction depth is 5-9 m, subject to soil conditions, trial compaction and the approved project method.

HC240 is installed on a 70 t or larger excavator with a converted boom. Compatible carrier examples include LIEBHERR R976, VOLVO EC750 and CAT 395F.

Typical Applications

- Factory floors and industrial building foundations
- High-fill embankments and deep backfill zones
- Airport, road, bridge and heavy infrastructure foundations
- Loess, weak soil and mixed soil-rock fill treatment

Core Technical Specifications

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Parameter	Value	Unit	Description
Dropweight Mass	16,000	kg	16-ton dropweight
Total Weight	28.9	t	Complete attachment assembly
Impact Energy	240	kJ	Rated impact energy
Working Height	7,613	mm	Supplied working-height value
Effective Compaction Depth	5-9	m	Varies with soil and project conditions
Standard Tamping Plate Diameter	2,000	mm	Standard configuration
Overall Dimensions	1,730 x 1,638 x 6,920	mm	Length x width x height; supplied new-version dimensions
Working Pressure	31.5	MPa	Rated hydraulic system pressure
Working Flow	600	L/min	Required hydraulic flow
Carrier Excavator	70 or above	t	Converted boom required
Compatible Excavator Examples	LIEBHERR R976, VOLVO EC750 and CAT 395F		

Advantages & Applications

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240 kJ Energy Class <i>Ultra-High Impact Energy</i> The 16,000 kg dropweight delivers 240 kJ rated impact energy for demanding ground improvement work.	5-9 m Rated Depth <i>Deep Ground Treatment</i> The supplied effective compaction depth range supports deep fill and weak-ground treatment planning.	Factory Applications <i>Controlled Working Height</i> A supplied working height of 7,613 mm supports planning for factory foundations and other height-sensitive sites.
Heavy Carrier Platform <i>70 t or Larger Excavator</i> Designed for a converted-boom excavator in the 70 t or larger class, matched to the 28.9 t attachment.	Large Tamping Plate <i>2,000 mm Standard Plate</i> The standard 2,000 mm tamping plate provides a broad contact area for high-energy ground treatment.	Hydraulic Requirements <i>31.5 MPa / 600 L/min</i> Specified working pressure and flow provide clear requirements for carrier selection and hydraulic matching.

Factory Industrial Foundations	High Fill Deep Embankments	Infrastructure Airport, Road & Bridge	Weak Ground Loess & Mixed Fill
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HC240 Project References

Documented Projects & Field Images

CHINA - CHONGQING

Factory Foundation Compaction
HC240 Indoor Factory Foundation Treatment

The field sequence documents an HC240 operating inside an existing factory building. The excavator-mounted system treats foundation fill below the roof structure while maintaining a compact working footprint.

Carrier: 70 t+ converted-boom excavator
Equipment: HC240

Application: Factory foundation compaction
Rated depth: 5-9 m

The photographs document the application and equipment configuration. Final impact spacing, blow count, treatment depth and acceptance criteria must be confirmed through site investigation, trial compaction and field testing.

Company Profile & Contact

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Taian Hengda Machinery Co., Ltd. China's first Rapid Impact Compaction Machine was invented and named by Chief Engineer Cao Bin in 2002 and has since evolved to its seventh generation. Our equipment has been deployed in Saudi Arabia, the United Arab Emirates, Indonesia, Cambodia, Angola, Canada, Hong Kong and other markets, with extensive field experience across airports, ports, roads, industrial parks and building foundations.	70%+ Domestic market share	#1 Internationally developed
National High-Tech Enterprise • Official high-tech enterprise recognition	2002 Year of invention	7+ International markets
Shandong Specialized and Innovative Enterprise • Recognized by the Shandong Provincial Department of Industry and Information Technology	National Technology-Based SME • Recognized by the Ministry of Science and Technology	
19 Utility Model Patents + 4 Invention Patents	ISO Quality Management System Certification • International standard	
	China Highway & Transportation Society • Council member, Road Construction Machinery Branch	

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High-energy ground improvement with documented specifications and field-proven equipment.