

# Excavator mounted Vibro Hammer

# LHV

LHV-025

LHV-04

LHV-07

LHV-09



# Extremely Advanced Hydraulic Vibro "LHV" Equipped with New Extension Arms

The hydraulic Vibro LHV series is designed with high mobility and cost performance, available with the hydraulic pressure of the base machines and can be used as attachments on the arms of hydraulic excavators. It features low vibration, low noise, and high performance. With the new extension arm attached, installation of LHV series has become much easier.

The LHV series features ultra low-noise operation and makes use of the mobility of a hydraulic excavator. It can be used under various working conditions such as narrow working spaces, including passageways, farm roads and height-restricted places where a crane-suspension type vibration hammers cannot be used, and crowded construction sites in urban districts or residential areas. Furthermore, the LHV series, with the synergetic effect of vibratory force and the pressing force of a hydraulic excavator, can powerfully drive various types of piles such as small-size steel sheet piles as well as light-weight steel sheet piles, H-section steels, and pine-wood piles.

## Features

- 1** New extension arm is employed.  
The LHV can be operated easily from the push-button panel in the operator's compartment.

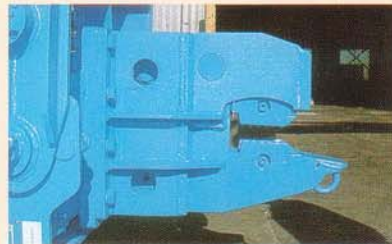


Conventional extension arm



New extension arm

- 7** T-shaped-corner piles can also be chucked firmly.



Chuck

Chucking of T-shaped-corner piles is also possible.

- 2** The LHV can be remote-controlled from the operator's compartment.
- 3** The LHV is mounted on the arm of a hydraulic excavator and powered by the hydraulic pressure from the base machine main body.
- 4** The LHV is an energy-saving item of equipment that does not use a crane or a generator.
- 5** The LHV is designed to be safe, equipped with a chuck press-force retention device.
- 6** The hanger-lock mechanism ensures efficient transmission of the pressing force of the arm.



Hanger-lock mechanism

- 8** The direction of pile driving can be set by the rotating system as desired.
- 9** All the steps from suspending piles to driving, extracting, or overturning piles can be performed by a single LHV.
- 10** Safe and efficient work can be performed with the minimum number of workers.
- 11** Quick movement is possible on a narrow space such as a passageway or farm road.
- 12** Swivel joints and quick-and-easy couplers are used.



Swivel joints and quick-and-easy couplers

They prevent the hydraulic hose from twisting and the hose can be attached or removed quickly and easily.

## Applications

Driving and extraction of light-weight steel sheet piles, small-sized sheet piles, H-section piles, pine-wood piles, and pole piles.

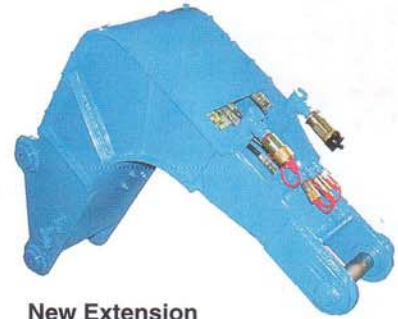
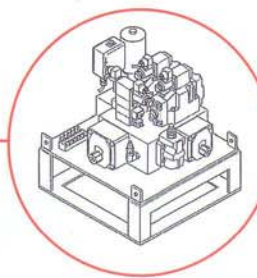
**The LHV series** is the outcome of a number of ingenuities and state-of-the-art technologies and promising high cost performance, mobility, performance, and low-pollution operation.

### New extension arm (hydraulic unit built-in model)

The new extension has solved such problems as the difficulty of mounting a hydraulic unit on the base machine for the downsizing of hydraulic excavator units or the difficulty of modifying the piping setup on the hydraulic excavator unit. With the hydraulic unit housed in the extension, piping modification work on the base machine is no longer required. If Pressure, Turn, and Drain piping are available on the base machine, the new extension can be easily mounted on it.



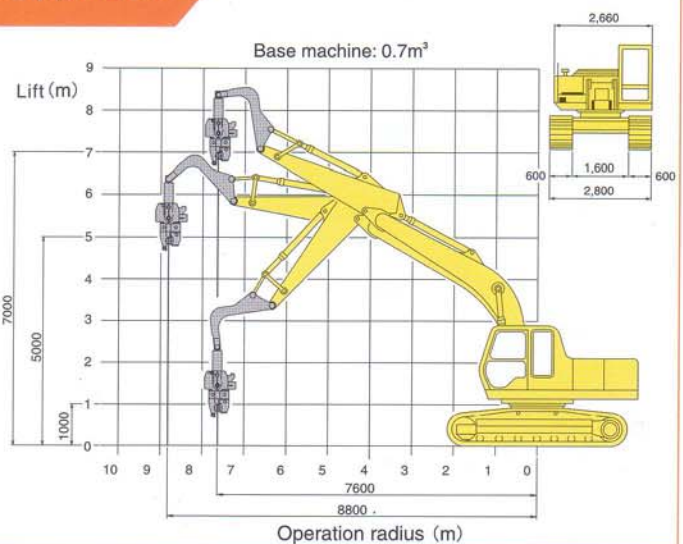
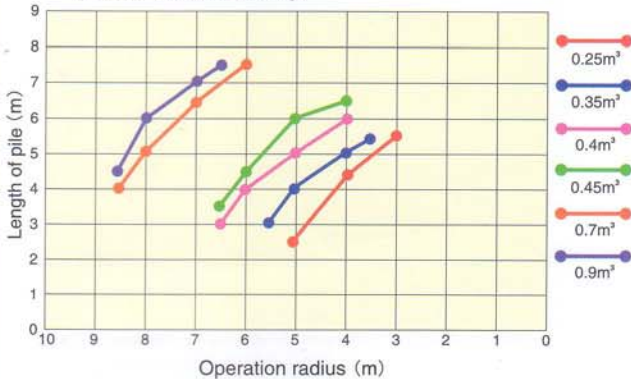
Hydraulic Unit



New Extension

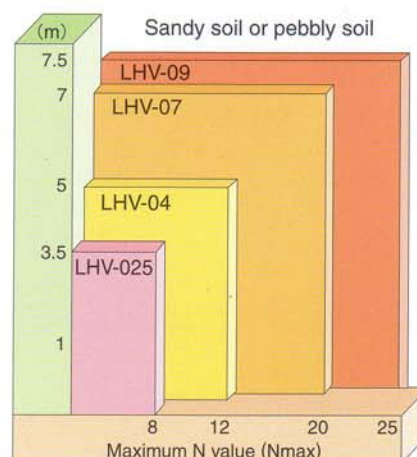
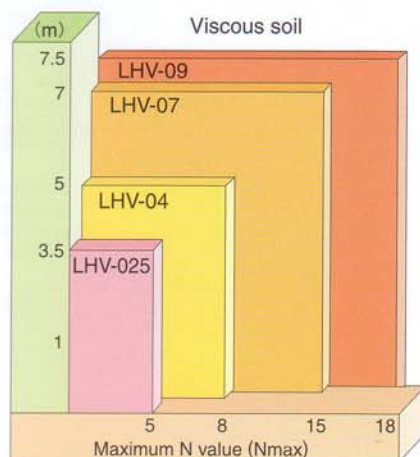
### Approximate length of pile and operation radius applicable when the new extension is mounted

(Steel sheet pile driving)



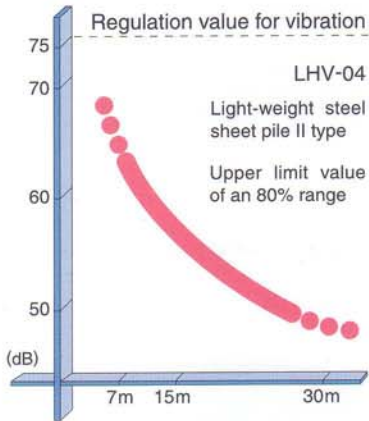
### Model selection guide

\* The length of pile may differ from the type of base machine.

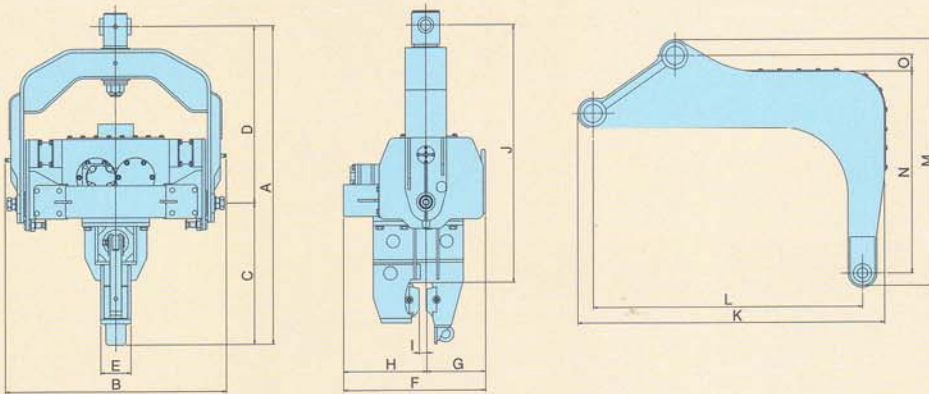
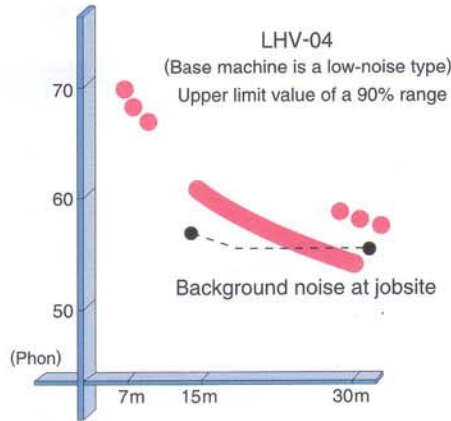


# Applicable vibration and noise level

■ Data 1 (Vibration Level)



■ Data 2 (Noise Level)



## ■ Specifications

Item	Unit	LHV-025	LHV-04	LHV-07	LHV-09
Frequency (vibration)	Hz(cpm)	30.0 ~ 36.7 (1,800 ~ 2,200)	30.0 ~ 36.7 (1,800 ~ 2,200)	26.7 ~ 30.0 (1,600 ~ 1,800)	26.7 ~ 36.7 (1,600 ~ 2,200)
Total weight excl. extension arm	kg	490	890	960	1,310
Operating pressure	MPa (kg/cm <sup>2</sup> )	19.6 (200)	19.6 (200)	27.5 (280)	27.5 (280)
Centrifugal force	KN (ton)	40.2 ~ 59.8 (4.1 ~ 6.1)	61.3 ~ 92.2 (6.3 ~ 9.4)	104.9 ~ 133.4 (10.7 ~ 13.6)	84.3 ~ 159.8 (8.6 ~ 16.3)
Applicable pile length		Up to 3.5m approximately	Up to 5.0m approximately	Up to 7.0m approximately	Up to 7.5m approximately
Hydraulic excavator base machine		10 ~ 12ton class	16ton class	20ton class	22 ~ 30ton class

## ■ Dimensions

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
LHV-025	1,406	950	640	766	124	568	230	338	35	1,148	940	800	1,084	825	119
LHV-04	1,607	1,120	731	876	160	716	298	418	40	1,282	1,170	1,000	1,215	836	129
LHV-07	1,705	1,156	757	948	160	745	305	440	40	1,380	1,575	1,400	1,293	936	202
LHV-09	1,850	1,210	804	1,046	160	805	330	475	40	1,525	1,575	1,400	1,293	936	202

## Important notice

The technical information in this catalogue is provided for the purpose of explaining the typical characteristics and performance of the products and shall not be construed as the guaranteed capacity of the products, except for the items referred to as specified values by certain standards.

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**CHOWA KOGYO CO., LTD.**

SHIN OSAKI KANGYO BLDG.  
1-6-4, OSAKI, SHINAGAWA-KU,  
TOKYO. 141-0032. JAPAN  
TEL: TOKYO (03) 3779-7886  
FAX: TOKYO (03) 3779-7870  
<http://www.chowa.co.jp/>