



# **PVE “NL Series” hammers and MeasureStrike system**

**Powerful, Versatile and Efficient**

# PVE "NL Series" hammers

## PVE 'NL Series' hydraulic hammers and 'MeasureStrike' system

PVE has introduced the fully new line of 'NL Series' hydraulic hammers. PVE's strategy is to integrate the latest available environmental friendly technologies to optimize performance and efficiency. The 'NL Series' type hammers are accelerated, sound insulated and guarantee the highest quality and they are made in the Netherlands. Still the hammers are versatile in use, easy to maintain and light in weight. The new 'NL Series' hammers are able to give very small blows and are also offered with the unique 'MeasureStrike' system. The 'MeasureStrike' data monitoring system provides data measurement and registration on the energy, blow count and parameters like depth, driving time and pile number.

Unique product features

- Cylinder assembly in a way that minimizes wear and tear on bearings
- High quality and easy to exchange drive cap assembly
- Shock-resistant electronic connectors & HQ electronic cable
- Accelerated mode to optimize the efficiency
- Modular construction which makes parts exchangeable
- Solid construction of leader guidance assembly
- High frequent blow rate is possible with the new 'NL Series' models

The 'NL Series' hammers are not only very efficient and fast in their operation, they are also sound insulated making the noise decrease by about 25%. With help of the new accumulator and cylinder system the impact hammers are accelerated by 20% creating a higher efficiency and a higher daily pile production. PVE is also able to offer hydraulic power packs with bio-degradable oil, stage 4 engines and full sound insulation. PVE offers the 'NL Series' hammer in a range of 3 till 18 tons drop weight. Separate datasheets on the PVE 'NL Series' hammers are available.



## PVE hydraulic impact hammers

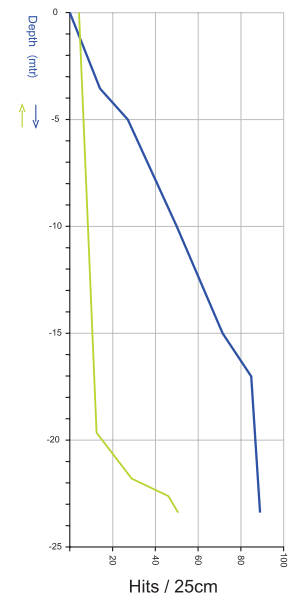
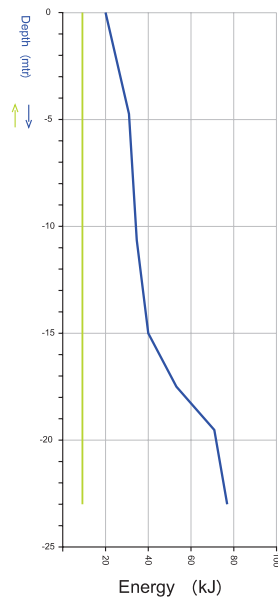
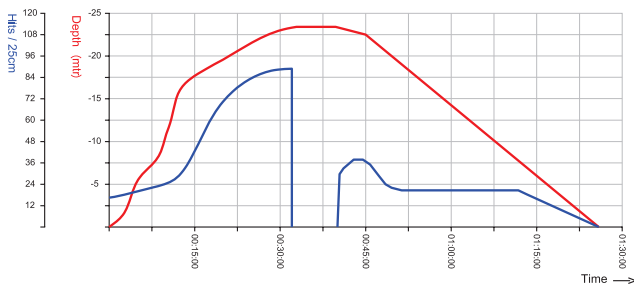
| Model, PVE               |           | 3NL    | 4NL    | 5NL    | 6NL    | 7 NL   | 9NL    | 10NL*   | 12NL*   | 14NL*   | 16NL*   | 18NL*   |
|--------------------------|-----------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| Maximum potential energy | (ft-lb)   | 31,715 | 42,041 | 53,104 | 63,430 | 74,493 | 93,670 | 114,322 | 156,363 | 182,177 | 207,992 | 234,544 |
| Maximum net. energy      | (ft-lb)   | 26,552 | 35,403 | 44,253 | 53,104 | 61,955 | 78,181 | 95,145  | 130,548 | 151,802 | 173,327 | 195,453 |
| Maximum stroke           | (inch)    | 47     | 47     | 47     | 47     | 47     | 47     | 59,05   | 59,05   | 59,05   | 59,05   | 59,05   |
| Minimum stroke           | (inch)    | 4      | 4      | 4      | 4      | 4      | 4      | 7,87    | 7,87    | 7,87    | 7,87    | 7,87    |
| Blow rate at max. stroke | (bl/min)  | 40     | 40     | 40     | 40     | 40     | 40     | 30      | 30      | 30      | 30      | 30      |
| Ram weight               | (lbs)     | 6,614  | 8,818  | 11,023 | 13,228 | 15,432 | 19,842 | 22,046  | 26,455  | 30,865  | 35,274  | 39,683  |
| *Hammer weight incl. cap | (lbs)     | 13,228 | 15,874 | 18,518 | 21,164 | 23,809 | 30,645 | 37,258  | 41,667  | 46,738  | 54,233  | 61,729  |
| Maximum pressure         | (psi)     | 2,030  | 2,248  | 2,393  | 2,538  | 2,683  | 3,408  | 2,175   | 2,465   | 2,944   | 3,335   | 3,770   |
| Required oil flow        | (gpm)     | 103    | 103    | 103    | 103    | 103    | 103    | 171.7   | 171.7   | 171.7   | 171.7   | 171.7   |
| Length indication        | (ft-inch) | 16.47  | 17.70  | 18.90  | 20.11  | 21.32  | 22.50  | 22.30   | 23.60   | 25.30   | 26.90   | 28.50   |
| Max. width indication    | (ft)      | 3.08   | 3.08   | 3.08   | 3.08   | 3.08   | 3.08   | 4.92    | 4.92    | 4.92    | 4.92    | 4.92    |
| Max. height indication   | (ft)      | 3.08   | 3.08   | 3.08   | 3.08   | 3.08   | 3.08   | 4.92    | 4.92    | 4.92    | 4.92    | 4.92    |
| Recommended power pack   |           | 250NL  | 250NL  | 250NL  | 250NL  | 250NL  | 250NL  | 500NL   | 500NL   | 500NL   | 500NL   | 500NL   |

\*10-18NL hammer weights are excl. drive cap

Example of a typical read-out of the PVE MeasureStrike system.  
 These details are based upon the installation of cast-in-situ driven piles as per mentioned data.

|                     |                 |                       |              |
|---------------------|-----------------|-----------------------|--------------|
| <b>Project name</b> | Everdenberg     | <b>Start time</b>     | 10:08:16     |
| <b>Location</b>     | Oosterhout (NL) | <b>End time</b>       | 11:32:58     |
| <b>Contractor</b>   | VVT Piling      | <b>Total duration</b> | 01:24:42     |
| <b>Piling by</b>    | VVT             | <b>Pile length</b>    | 76.1 ft      |
| <b>Piling Rig</b>   | PV80-112-5021   | <b>Pile diameter</b>  | 22 inch      |
| <b>Date</b>         | April, 10, 2012 | <b>Plate diameter</b> | 24 inch      |
|                     |                 | <b>Piling system</b>  | Cast in Situ |

Timediagram



## Power packs

| Model                 |           | 250NL  | 500NL  |
|-----------------------|-----------|--------|--------|
| Engine output         | (HP) min. | 220    | 470    |
| Max. oil flow         | (gpm)     | 105.7  | 211.3  |
| Max. working pressure | (psi)     | 3,627  | 3,627  |
| Operational weight    | (lb)      | 12,130 | 15,210 |
| Length indication     | (ft)      | 11.48  | 13.96  |
| Width indication      | (ft)      | 5.05   | 5.74   |
| Height indication     | (ft)      | 6.71   | 6.94   |

## Accessories

### PVE offers a wide range of high quality accessories

- Inserts for different diameters precast concrete piles
- Accessories to drive sheet piles
- Sleeves for different diameters of steel casings
- 'MeasureStrike' data monitoring system
- Custom made sleeves for spun piles
- Spare parts packages

Please note that the dimensions and weights can vary upon the use of different accessories like drive caps and sleeves. PVE is continuously improving their range of equipment. Developments in relation to emission standards and fuel efficiency might result in different specifications. No rights can be attached to the dimensions and specifications mentioned on this leaflet because they might have changed without further notification. All data is subject printing and conversion errors.

PVE Piling and Drilling Rigs BV is specialized in the worldwide supply of high quality piling and drilling rigs and accessories. The majority of the equipment is assembled in the new production facility of PVE Piling and Drilling Rigs BV in Oosterhout, the Netherlands. PVE offers a full line of different piling- and drilling rigs, rotary heads, powerpacks and a wide range of hydraulic hammers. PVE is using the best available components and is selecting the components on quality and worldwide availability and support. Examples are Caterpillar engines and Bosch Rexroth hydraulics.

PVE Piling and Drilling Rigs BV is part of Dieseko Group BV. Dieseko Group BV has offices and yards with technical support all over the world. With this worldwide network and help of a big number of dedicated dealers the best possible service and response is guaranteed. Dieseko is manufacturer of vibratory hammers which are sold under the brand names PVE (Piling & Vibro Equipment) and ICE (International Constuction Equipment), specialized in the (enhanced) development and innovation of vibro technology. Dieseko Group BV develops, produces, delivers and rents high quality sustainable (tailor-made) vibratory hammers and powerpacks for all your (deep) foundation works.

#### **Vibratory hammers, powerpacks and accessories**

[www.diesekogroup.com](http://www.diesekogroup.com)

[www.PVE-holland.com](http://www.PVE-holland.com)

[www.ICE-holland.com](http://www.ICE-holland.com)

#### **Piling and Drilling Rigs & Impact hammers**

[www.PVEpiling.com](http://www.PVEpiling.com)

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