

An aerial photograph of a large white tracked drilling rig operating in a deep construction pit. The rig is positioned vertically, with its long boom extending upwards. The ground around the rig is sandy and uneven, with various construction materials and equipment scattered nearby. The rig's tracks are visible at the base, and the overall scene is one of active construction work.

DIESEKO GROUP

FOUNDATION EQUIPMENT

**Welcome to the
Dansk Spuns- & Rammedag**

DIESEKO GROUP

MENU



DIESEKO GROUP



ACTIVITIES



FACTS & FIGURES



INNOVATIONS



REFERENTIES

DIESEKO GROUP

MENU

INTRODUCTION

HISTORY

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ORGANIZATION

BRANDS



DIESEKO GROUP



ACTIVITIES



INNOVATIONS



INTRODUCTION

THIS IS DIESEKO GROUP



- Dieseko is the global player in the foundation technology market based in the Netherlands
- Products marketed under brands ICE, PVE and Woltman
- Shareholder of 
- Clear focus on foundation equipment
- World leader in vibratory equipment

DIESEKO GROUP

Netherlands

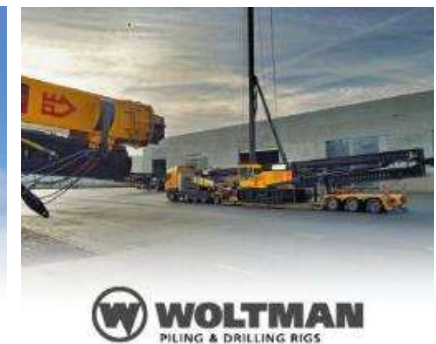
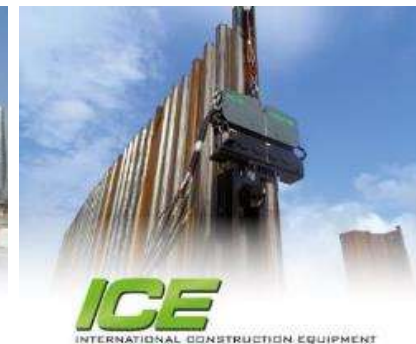
USA

Singapore

China

Brasil

Australia



DIESEKO GROUP

INTRODUCTION

THIS IS DIESEKO GROUP

- Turnover 2018: € 89 Mio
- 200 employees worldwide
- 7 branches worldwide
- 60 dealers worldwide

DIESEKO GROUP





DIESEKO GROUP

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DIESEKO GROUP



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INNOVATIONS

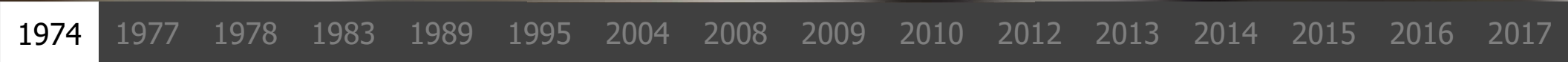
INTRODUCTION

OVER 40 YEARS HISTORY



PVE

- 1974 Founding Dieseko – Bolnes



INTRODUCTION

OVER 40 YEARS HISTORY



ICE

- 1977 Founding ICE – Amsterdam as an importer of American vibratory hammers



1974 1977 1978 1983 1989 1995 2004 2008 2009 2010 2012 2013 2014 2015 2016 2017

INTRODUCTION

OVER 40 YEARS HISTORY



- 1978 Dieseko moves to Papendrecht and becomes a dealer of foreign vibratory hammers
- 1979 ICE produces first vibratory hammer



1974 1977 1978 1983 1989 1995 2004 2008 2009 2010 2012 2013 2014 2015 2016 2017

INTRODUCTION

OVER 40 YEARS HISTORY



- 1983 Dieseko moves to Sliedrecht
Where it is still based
- 1983 ICE equipment is used on the
construction of the Delta Works
- 1985 Dieseko focuses on its own
manufacturing plant: VIP -
Versluis Industrial Products



1974 1977 1978 **1983** 1989 1995 2004 2008 2009 2010 2012 2013 2014 2015 2016 2017

INTRODUCTION

OVER 40 YEARS HISTORY



- 1989 Dieseko launches PVE
- 1990 ICE part of Geveke
- 1992 Introduction of PVE 2320 VM
Variable Moment vibratory hammer



Piling & Vibro Equipment

1974 1977 1978 1983 1989 1995 2004 2008 2009 2010 2012 2013 2014 2015 2016 2017

DIESEKO GROUP

INTRODUCTION

OVER 40 YEARS HISTORY



- 1995 Going global
 - Dieseko attracts dealers in Europe and far east.
 - Dieseko opens a branch in teh USA.
 - ICE expands its dealer network to 32
- 1996 The PVE ringvibrator is introduced
- 2001 The huge PVE 200M is introduced and directly put to work on the construction of the Betuwelijn



1974 1977 1978 1983 1989 1995 2004 2008 2009 2010 2012 2013 2014 2015 2016 2017

INTRODUCTION

OVER 40 YEARS HISTORY



- 2004 Active Share takes over ICE
- 2005 ICE products active in Dubai for Palm Island
- 2007 ICE wins Gazelle award for the second time in a row.



1974 1977 1978 1983 1989 1995 2004 2008 2009 2010 2012 2013 2014 2015 2016 2017

INTRODUCTION

OVER 40 YEARS HISTORY



2008 Founding of DIESEKO GROUP

PVE and ICE merge and they join forces in a single strong company with a comprehensive product portfolio and global service network. Dieseko Group starts as a house of brands.

DIESEKO GROUP



1974 1977 1978 1983 1989 1995 2004 2008 2009 2010 2012 2013 2014 2015 2016 2017

DIESEKO GROUP

INTRODUCTION

OVER 40 YEARS HISTORY



- 2009 The new emerging market: offshore
 - Developing the 200M 'twin' for the constructions of wind farms.
 - The PVE 200M active in Bard1 offshore project



1974 1977 1978 1983 1989 1995 2004 2008 2009 2010 2012 2013 2014 2015 2016 2017

INTRODUCTION

OVER 40 YEARS HISTORY



- 2010
 - PVE 300M, Dieseko Group once again introduces the biggest vibratory hammer in the World
 - With the establishment of ICE China in Shanghai a fully owned rental fleet comes available.
 - With the Vibroflot, a new product is added to the range
- 2011
 - A rental fleet is established in Brazil



1974 1977 1978 1983 1989 1995 2004 2008 2009 2010 2012 2013 2014 2015 2016 2017

INTRODUCTION

OVER 40 YEARS HISTORY



- 2012
 - The award for "Best Managed Companies" is won again
 - Dieseko Group provides two sets of the PVE 300 MU upending vibratory hammer, to the prestigious Global Tech wind farm in Germany



1974 1977 1978 1983 1989 1995 2004 2008 2009 2010 2012 2013 2014 2015 2016 2017

INTRODUCTION

OVER 40 YEARS HISTORY



- 2013
 - Dieseko Group introduces the variable moment into China and Brazil
 - Introduction of the modular offshore hammer PVE "Giant"
 - Introduction of a patented start-stop system
 - NPM Capital, a subsidiary of SHV acquires a majority stake in Dieseko Group



1974 1977 1978 1983 1989 1995 2004 2008 2009 2010 2012 2013 2014 2015 2016 2017

DIESEKO GROUP

INTRODUCTION

OVER 40 YEARS HISTORY



- 2014
 - Dieseko Group celebrates 40th anniversary.
 - Introduction of PVE 500M, the world's biggest mono bloc vibro hammer



1974 1977 1978 1983 1989 1995 2004 2008 2009 2010 2012 2013 2014 2015 2016 2017

INTRODUCTION

OVER 40 YEARS HISTORY



- 2015
 - Dieseko Group acquires PVE Piling & Drilling Rigs.
 - Dieseko shows the world a new pile driving technology. In cooperation with RTI, Dieseko Group develops the Resonator.
 - PVE PDR builds the largest rig in its history: the PVE 300PD.
 - PVE introduces the 250M vibratory hammer for heavy duty pile driving.



1974 1977 1978 1983 1989 1995 2004 2008 2009 2010 2012 2013 2014 2015 2016 2017

INTRODUCTION

OVER 40 YEARS HISTORY



2016

- Dieseko acquires Woltman Piling Equipment and founds: **Woltman Piling & Drilling Rigs**
- Dieseko Group establishes a branche in Australia by taking a majority interest in Pilequip Australia
- A sales record at bauma Munic show



1974 1977 1978 1983 1989 1995 2004 2008 2009 2010 2012 2013 2014 2015 **2016** 2017

DIESEKO GROUP

INTRODUCTION

OVER 40 YEARS HISTORY



2017

- Sales divided in Benelux and International Division
- A brand new design for the Woltman Piling & Drilling Rigs. Starting with the 50PR-FF the range will be modernised
- From april Dieseko Group is worldwide supplier of Bell dredging pumps and amphibious dredgers



1974 1977 1978 1983 1989 1995 2004 2008 2009 2010 2012 2013 2014 2015 2016 2017

DIESEKO GROUP

DIESEKO GROUP

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INNOVATIONS

A photograph of industrial machinery, likely a robotic arm or assembly line, in a factory setting. The machinery is yellow and black, with various pipes, hoses, and a large white cylindrical component. The background shows a dark industrial structure with overhead lighting. A red semi-transparent banner is overlaid on the bottom half of the image.

MISSION
AMBITIONS

DIESEKO GROUP is committed
to be the world's best provider
of solutions for the foundation
industry

DIESEKO GROUP



VISION
AMBITIONS



Leadership is the important
condition to innovate [the
Foundation Equipment
market]

DIESEKO GROUP

STRATEGY
AMBITIONS



Productleadership through
**Innovation, Customizing
and Partnerships**

DIESEKO GROUP

GROWTH DRIVERS

AMBITIONS



Growth world population



Reclamation of land
Protect coastal area's



Increase construction at 'wet'
area's



Emerging markets (Eastern
Europe, Russia, India, China)



Climate change



New offshore structures



Wider scope of foundation work



Meeting safety and pollution
requirements

COMMERCIAL FOCUS
AMBITIONS



Increase focus on offshore

Intensify presence emerging markets

Expand rental fleets

SOCIAL AND ENVIRONMENTAL SUSTAINABILITY AMBITIONS



To contribute to a clean and social world

Minimise (noise) pollution

Save fossil fuel

OUR CONTRIBUTIONS

AMBITIONS



Do the job efficient: silent, agile and fast pile driving

Large variety of foundation equipment for multiple foundation applications
Customized solutions

Do the job almost harmless: zero vibration technology Resonator based on the resonance principle

Do the job sustainable

Stop-start iTimer saves up to 30% fuel consumption
Biodegradable oil and Ad Blue
Compliant to regulations worldwide
Noise reduction offshore -60 dB under regulation

RESPONSIBILITY TO SOCIETY, CUSTOMERS AND STAFF AMBITIONS



DIESEKO GROUP



DIESEKO GROUP

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INNOVATIONS

ORGANIZATION

DIESEKO GROUP

- Branches and dealers
- Distribution
- Certification / Quality
- Employees
- Safety
- Financial figures
- Awards
- Partners and suppliers

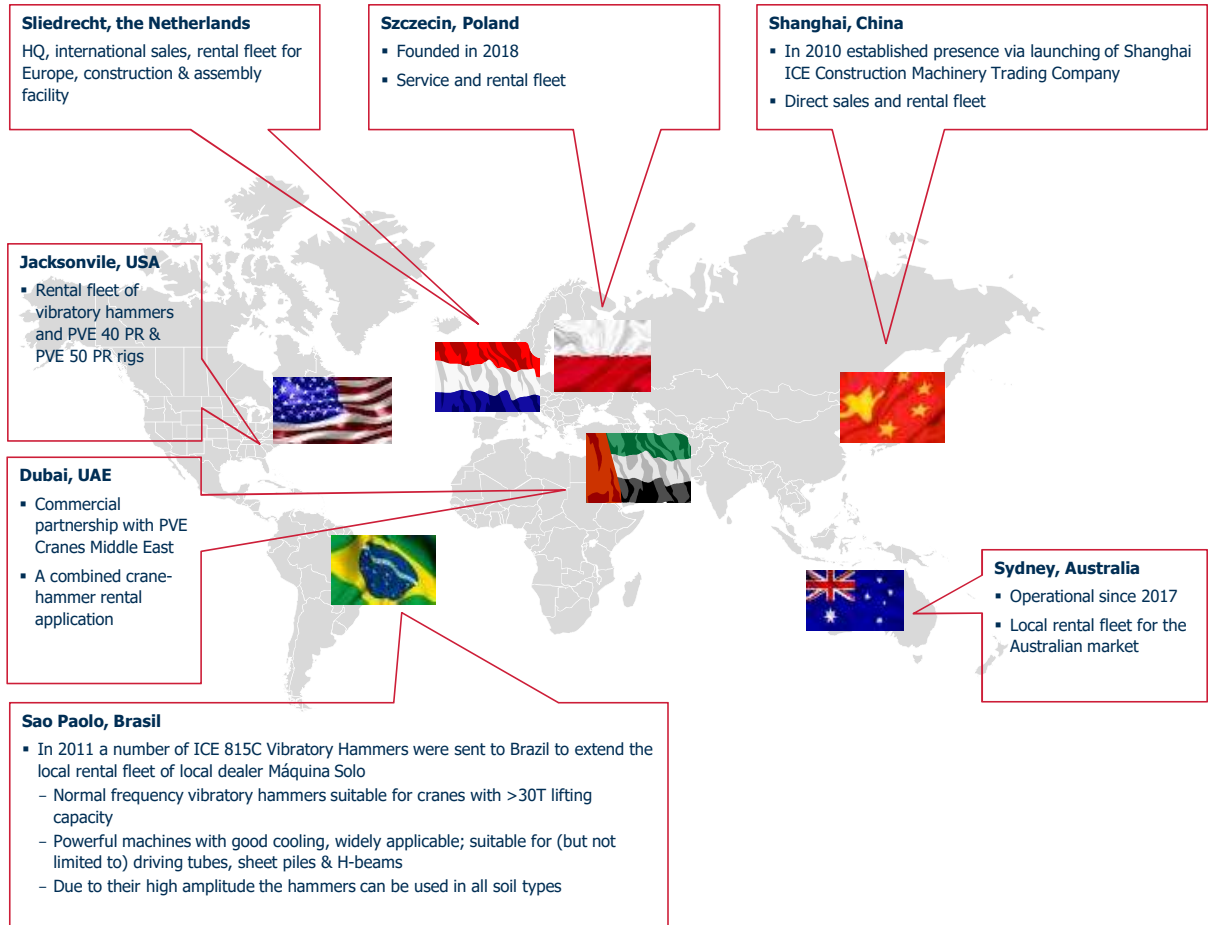
DIESEKO GROUP



ORGANIZATION

DIESEKO GROUP

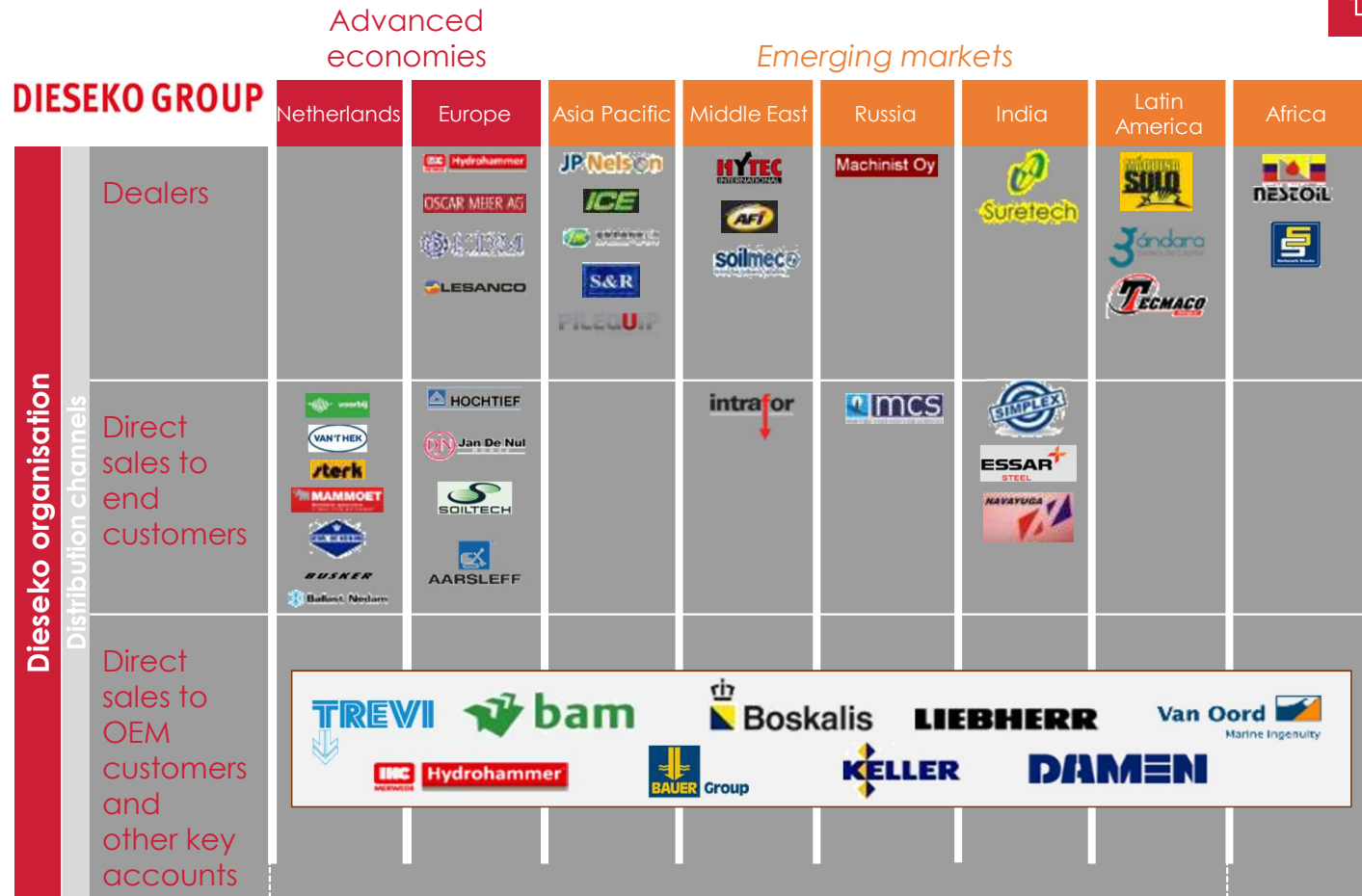
- Branches and dealers
- Distribution
- Certification / Quality
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- Partners and suppliers



ORGANIZATION

DIESEKO GROUP

- Branches and dealers
- **Distribution**
- Certification / Quality
- Employees
- Safety
- Financial figures
- Awards
- Partners and suppliers



ORGANIZATION

DIESEKO GROUP

- Branches and dealers
- Distribution
- **Certification / Quality**
- Employees
- Safety
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- Awards
- Partners and suppliers



ISO 9001
CE DEMANDS
DNV-CERTIFICATION

DIESEKO GROUP



ORGANIZATION

DIESEKO GROUP

- Branches and dealers
- Distribution
- Certification / Quality
- **Employees**
- Safety
- Organization chart
- Awards
- Partners and suppliers



200

Employees
worldwide



ORGANIZATION

DIESEKO GROUP

- Branches and dealers
- Distribution
- Certification / Quality
- Employees
- **Safety**
- Financial figures
- Awards
- Partners and suppliers



NVAF
DFI, PDCA

DIESEKO GROUP



ORGANIZATION

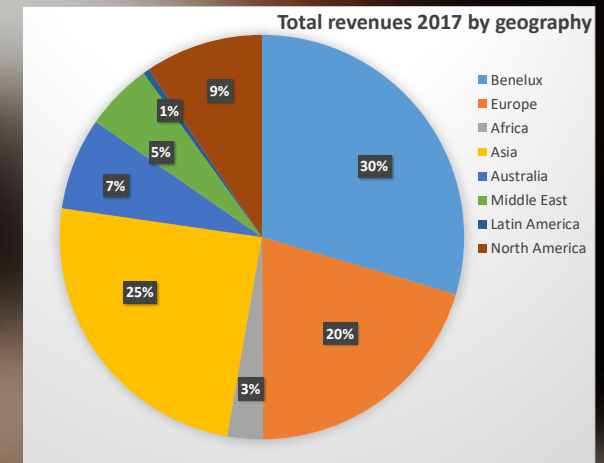
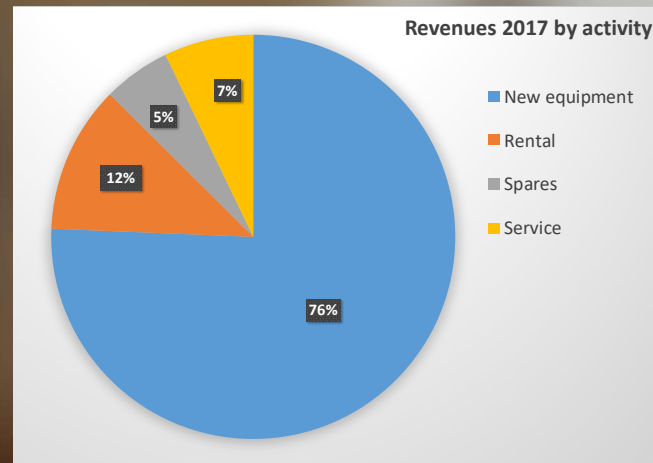
DIESEKO GROUP

- Branches and dealers
- Distribution
- Certification / Quality
- Employees
- Safety
- **Financial figures**
- Awards
- Partners and suppliers

DIESEKO GROUP

Revenues (in € million)

2011 2012 2013 2014 2015 2016 2017



ORGANIZATION

DIESEKO GROUP

- Branches and dealers
- Distribution
- Certification / Quality
- Employees
- Safety
- Financial figures
- **Awards**
- Partners and suppliers



Best Managed
Company
(2010, 2012)



Gazellen Award
(2007, 2009, 2013)



ORGANIZATION

PARTNERS AND SUPPLIERS

- Branches and dealers
- Distribution
- Certification / Quality
- Employees
- Safety
- Financial figures
- Awards
- Partners and suppliers

BUSINESS



PARTS



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DIESEKO GROUP AND ITS BRANDS



DIESEKO GROUP



PILING & VIBRO EQUIPMENT



WOLTMAN

PILING & DRILLING RIGS

ICE

INTERNATIONAL CONSTRUCTION EQUIPMENT

bell

DREDGING PUMPS

DIESEKO GROUP

PVE Piling & Vibro Equipment

PRODUCT LINES



Vibratory Hammers



Resonators



Impact Hammers



Pressing Machines



Rotary Heads



Power Packs

ICE International Construction Equipment

PRODUCT LINES



ICE



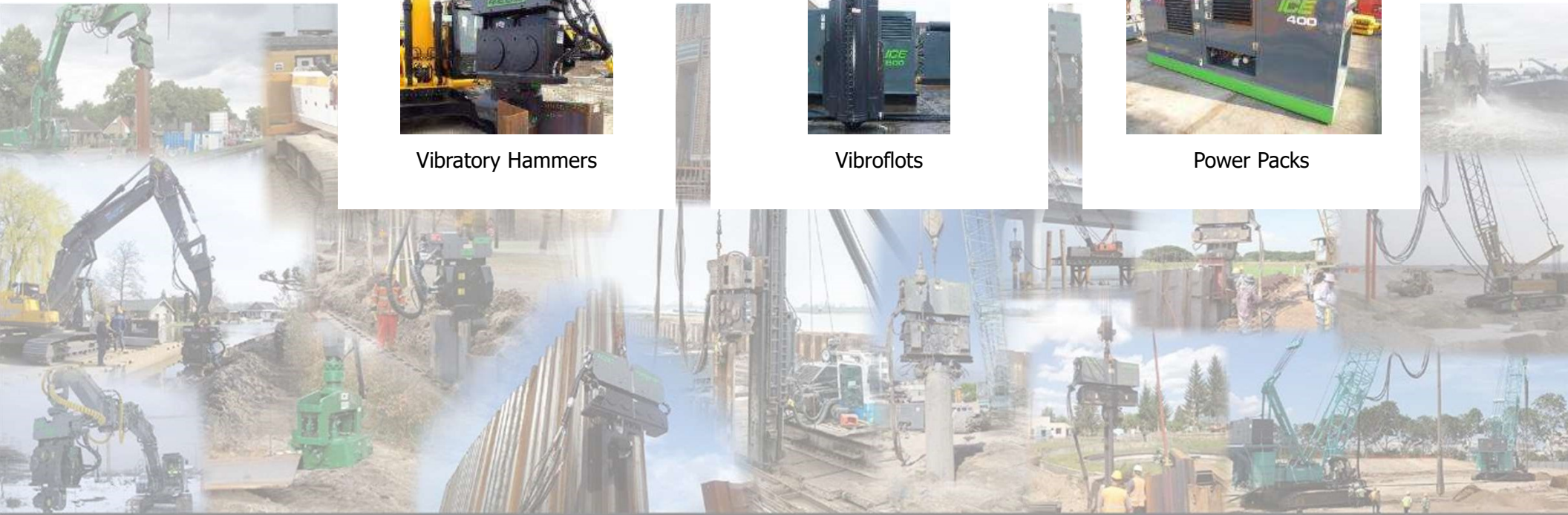
Vibratory Hammers



Vibroflots



Power Packs



DIESEKO GROUP



WOLTMAN Piling & Drilling Rigs

PRODUCT LINES



Piling Rigs



Drilling Rigs



PDS type Piling Rigs



VR (HSP) Rigs



Sheetpile Pressing Rigs



Concrete Pumps



BELL Dredging Equipment

PRODUCT LINES



Dredging pumps



Amphibious Cranes



Cutter Dredgers



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ICE

DIESEKO GROUP

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DIESEKO GROUP



ACTIVITIES



INNOVATIONS

BUSINESS AREAS

ACTIVITIES



FOUNDATION

GROUND IMPROVEMENT

SHORING

SHALLOW DREDGING



DIESEKO GROUP

PRODUCT PORTFOLIO

ACTIVITIES

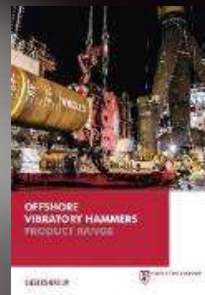
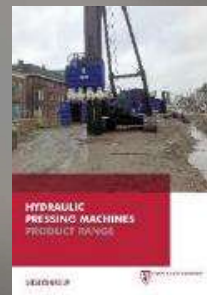
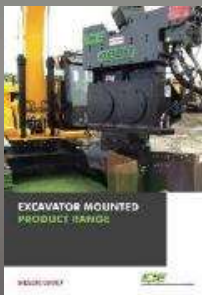
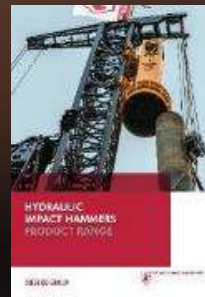
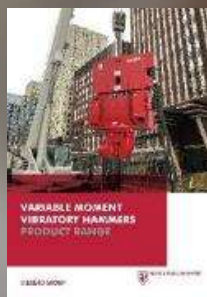
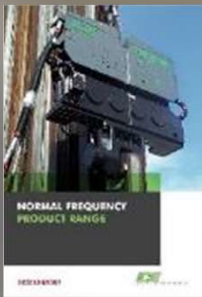


FOUNDATION EQUIPMENT

PILING AND DRILLING RIGS

GROUND IMPROVEMENT EQUIPMENT

POWER & OTHER



Click for more information



DIESEKO GROUP

PRODUCT GROEPEN

PRODUCTEN & DIENSTEN



PILING EQUIPMENT

- 1** Variable Moment Vibrato incl. Ringvibrator PVE
- 2** Offshore Vibratory Equip PVE
- 3** Normal Frequency Vibrat ICE
- 4** Excavator Mounted Vibra ICE
- 5** Resonator Technology PVE
- 6** Pressing Machines PVE
- 7** Impact Hammers PVE + PDR
- 8** Rotary Heads PVE + PDR

COMPACTION EQUIPMENT

- 9** Vibroflots ICE

PILING & DRILLING RIGS

- 10** Piling Rigs PVE + PDR
- 11** Drilling Rigs PVE + PDR
- 12** MPR Rigs PVE + PDR
- 13** PDS Rigs PVE + PDR

OVERIG

- 14** Power Packs OEM
- 15** Dredging Pumps ICE
- 16** Trade Products DIES EKO

SUPPORT & SERVICES ACTIVITIES



DIESEKO GROUP

RENTAL ACTIVITIES



DIESEKO GROUP



DIESEKO FINANCE

ACTIVITIES

Deferred payment of investments in customer equipment fleet

- Available for Dieseko Group products
- For accelerating customer sales growth



CONSULTANCY

ACTIVITIES

Specific advise for the right equipment

- Drive-ability studies
- Knowledge center
- Consulting service for new piling and ground improvement technologies



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ACTIVITIES



INNOVATIONS

RESONANCE TECHNOLOGY

INNOVATIONS

- Driving without vibrations
- PVE RD260, 4th generation
- High frequency piston cylinder arrangement
- Automatic tuning of frequency
- Ideal adjacent to heritage structures, transportation links or major utilities
- In cooperation with RTI



RESONATOR TECHNOLOGY

INNOVATIONS

- Free hanging and rig mounted
- Tubes and sheetpiles
- Fast and secure



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RD430 Resonator

“Game changing technology
at even higher powers”

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RD430 Resonator

| Item | Value |
|---|-------------------------------|
| Max. Flow / Max. Pressure | 550 L/min / 350 bar |
| Hydraulic power | 430 kW |
| Frequency | 60 – 160 Hz |
| Max. amplitude (in resonance) | 4 mm |
| Max. static line pull | 400 kN |
| Total weight (incl. / excl. Clamp/Backing mass) | 6649 / 5177 kg |
| Clamp mass | 472 kg |
| Clamp / Clamp pressure | RPC 3 / 690 bar |
| Max. profile types | 610 Casing HEB 600 PU28 |
| Power pack | 600 |
| Dimensions (L x W x H) | 1671 x 651 x 3480 mm |

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RESONATOR TECHNOLOGY

INNOVATIONS

- Absolutely vibration free!



UPENDING PROFILES

INNOVATIONS

- Break through patented PVE innovation
- Upending, lifting and driving in one sequence
- Started as an offshore application

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UPENDING PROFILES

INNOVATIONS

- Also available as (after market) add-on



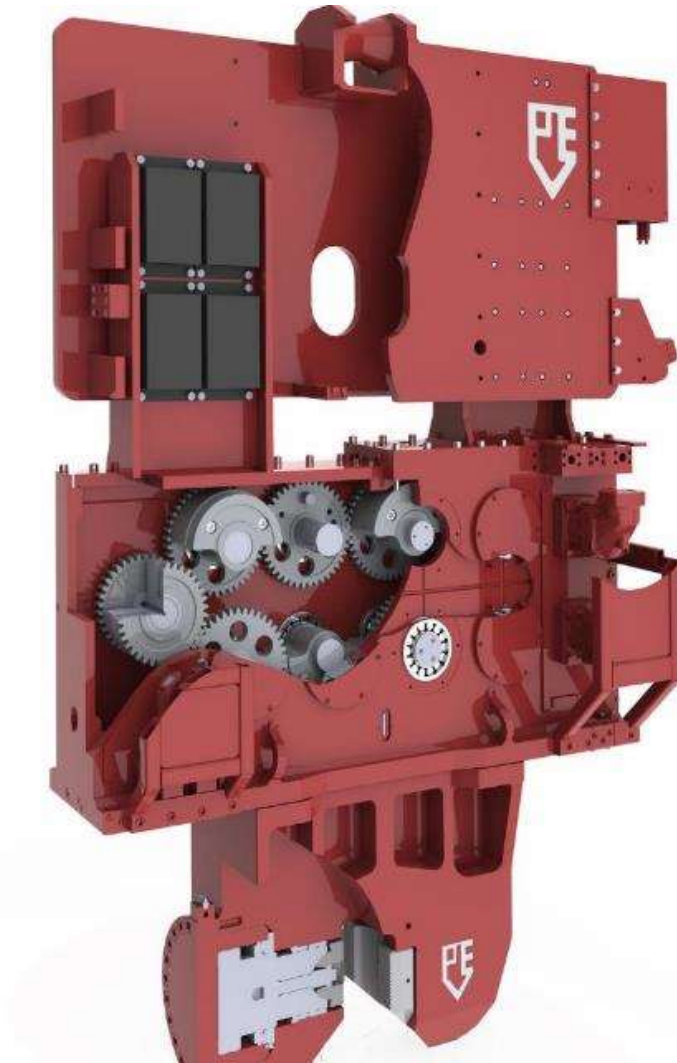
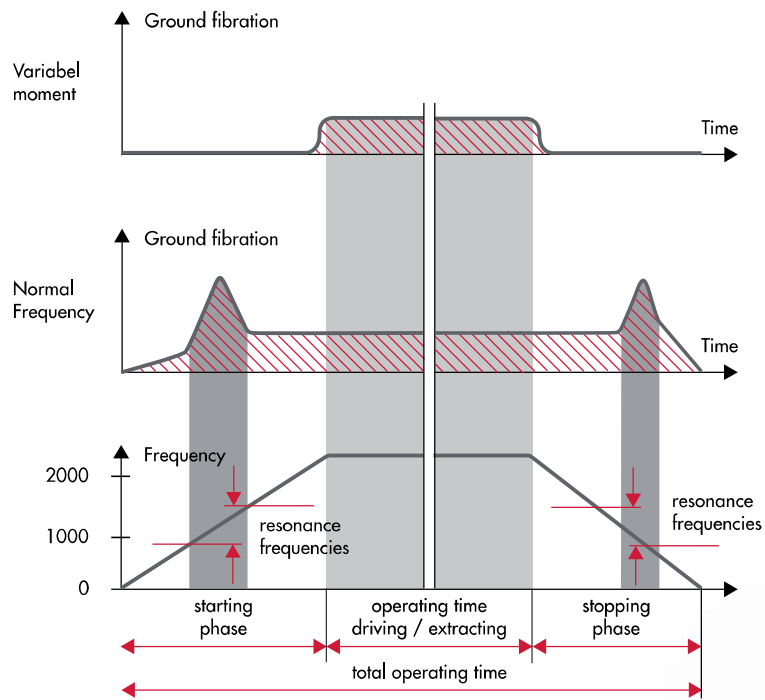
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VARIABLE MOMENT

INNOVATIONS

- Resonance free start and stop



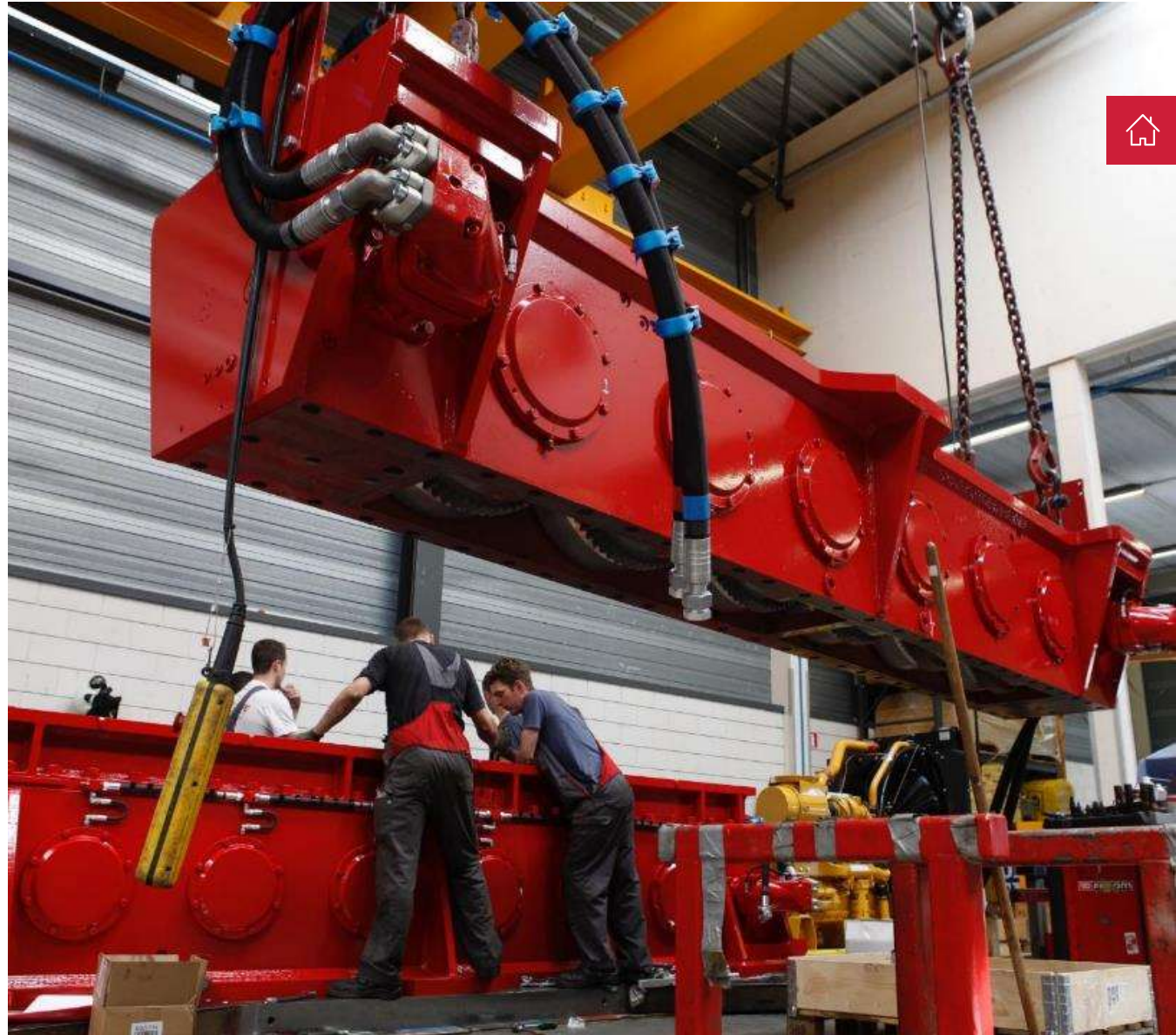
MODULAR CONCEPTS

INNOVATIONS

- 250kgm gearboxes stacked to 500kgm
- Patented synchronization module



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GIANT 2000M

“A GIANT step for
mono pile foundations”

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GIANT 2000M

| Item | Value |
|--|-----------------------|
| Max. Flow / Max. Pressure | 12800 L/min / 350 bar |
| Max Centrifugal force | 42992 kN |
| Eccentric moment | 2000 kgm |
| Max. frequency | 1400 rpm |
| Max. amplitude (incl. Clamps) | 13,5 mm |
| Max. static line pull | 20160 kN |
| Forced lubrication | Yes |
| Dynamic weight (incl. clamp) | 295 mT |
| Total weight (incl. Clamps) | 407 mT |
| Clamps | 16 x PPK 350T |
| Casing dia (min. / max.) | 4500 / 6500 |
| Max. casing weight | 1650 mT |
| Power pack | 4 x 3200 |
| Dimensions (L x W x H) (incl. clamps) | 7880 x 7880 x 8650 mm |



2308SG Excavator Mounted Side Gripper

“Side-gripping using
new technology”

DIESEKO GROUP



2308SG Excavator Mounted Side Gripper

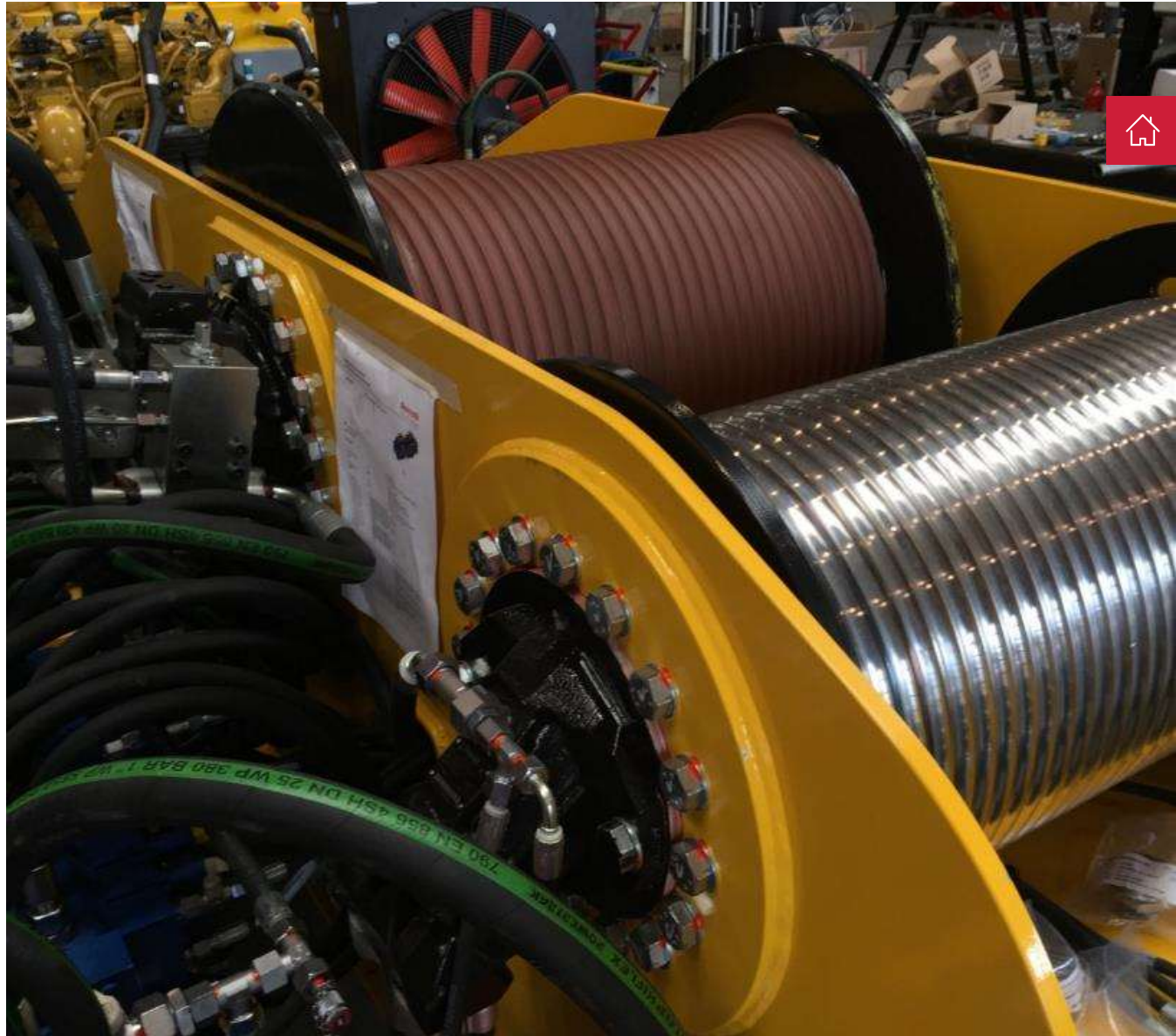
| Item | Value |
|--|-----------------------|
| Max. Flow / Max. Pressure | 214 L/min / 350 bar |
| Max Centrifugal force | 464 kN |
| Eccentric moment | 8 kgm |
| Max. frequency | 2300 rpm |
| Max. amplitude (incl. / excl. Clamp) | 6,2 / 6,9 mm |
| Max. static line pull | 160 kN |
| Forced lubrication | no |
| Dynamic weight (incl. / excl. Clamp) | 2576 / 2326 kg |
| Total weight (incl. / excl. Clamp + tilting adapter) | 3284 / 3034 kg |
| Weight tilting adapter | 242 kg |
| Clamp | 60TU |
| Dimensions (L x W x H) (incl clamp+tilting adapter) | 1306 x 1320 x 2580 mm |
| Power pack | 250 |



FREE FALL WINCHES

INNOVATIONS

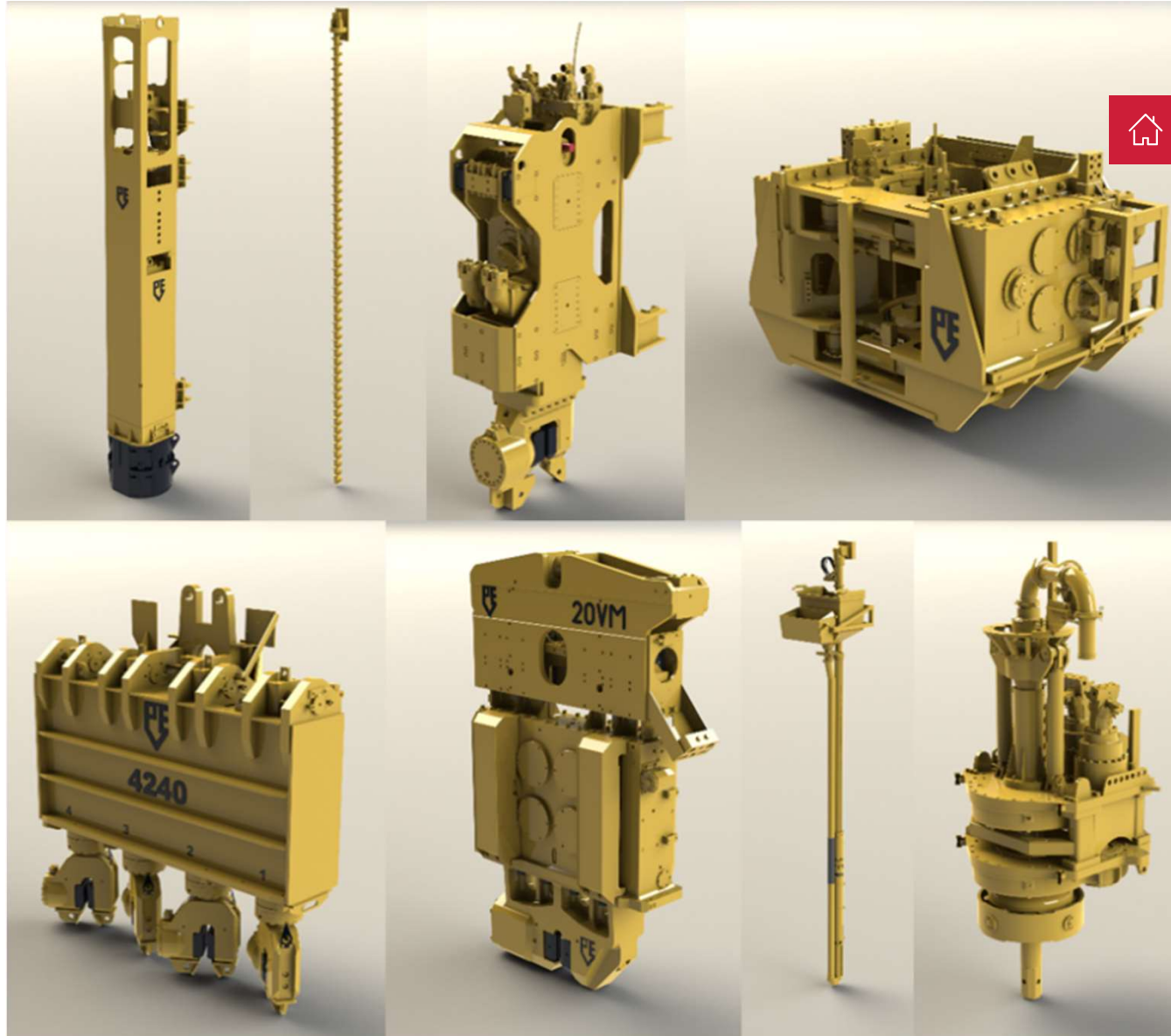
- New way of efficient piling



MULTIPURPOSE RIG

INNOVATIONS

- Sufficient power supply for great variety of attachments
- Multifunctional use



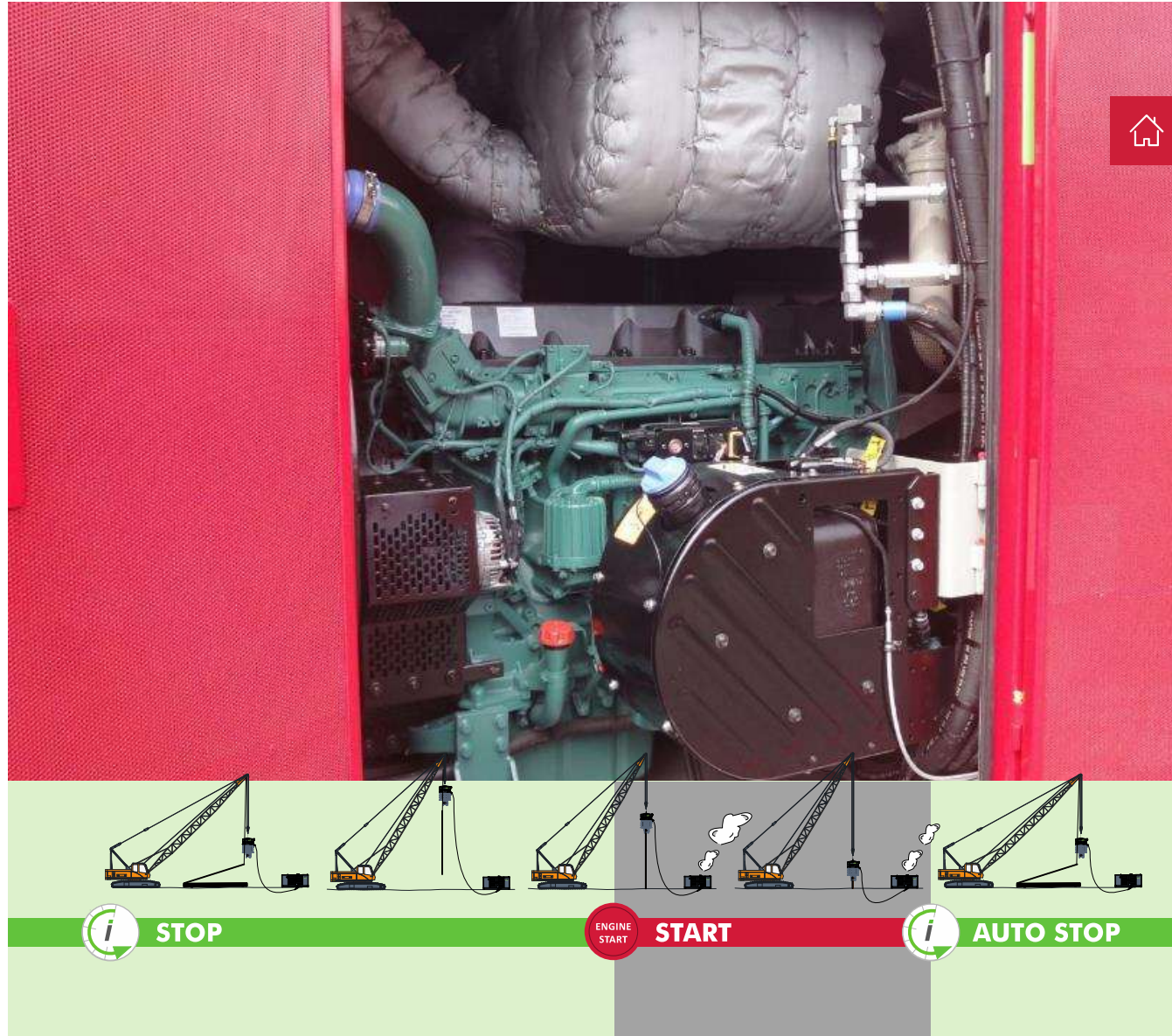
STOP-START SYSTEM

INNOVATIONS

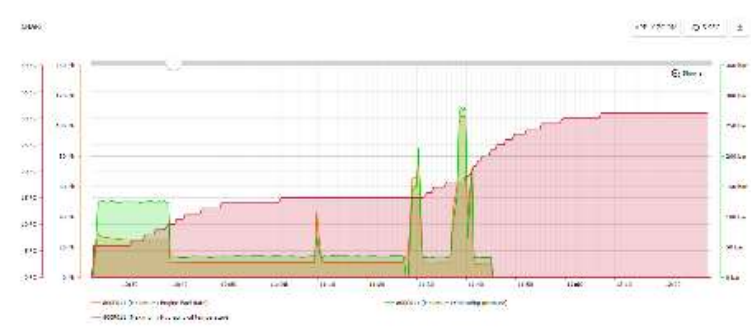
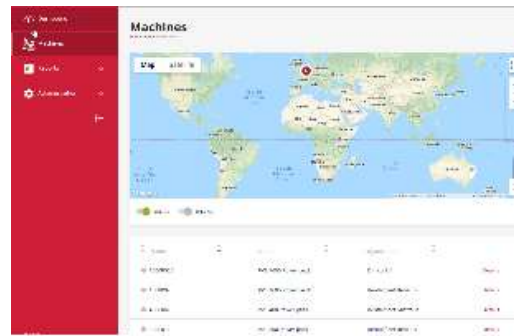
- Intelligent auto timer
- Reduces fuel consumption up to 33%
- Tier4 final compliant



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Power Pack Monitoring System



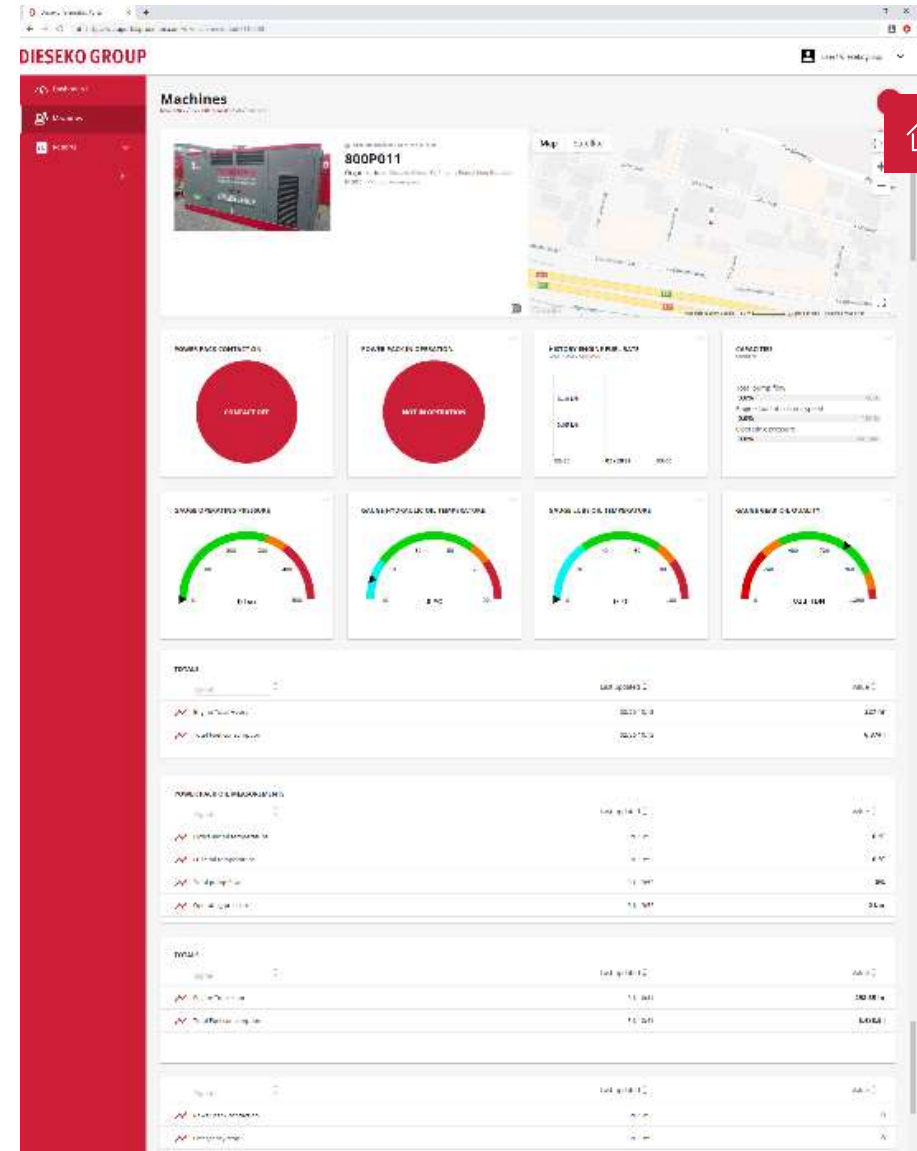
“Economic operations using remote diagnostic monitoring”

Power Pack Monitoring System

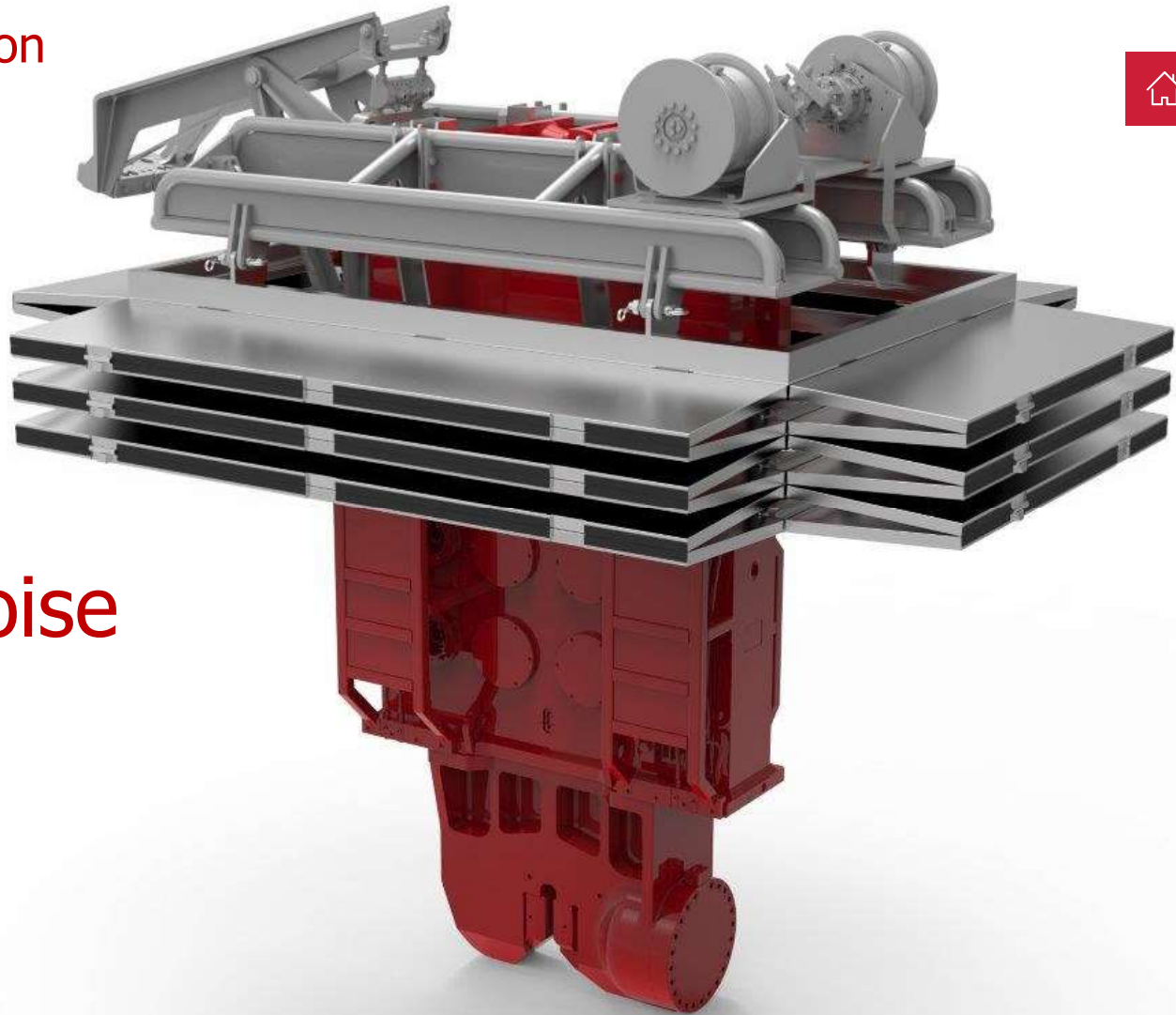
Items Monitored

| | |
|------------------------------|--------------------------------|
| Geo position [mapped] | Hydraulic oil temp [°C] |
| Contact on [0/1] | Lube oil temp [°C] |
| Unit in operation [0/1] | Gear oil Quality [TDN] |
| Engine fuel rate [L/h] | Engie total hours [Hr] |
| Total pump flow [%] | Total fuel consumption [L] |
| Engine load [%] | Emergency stop [0/1] |
| Operating pressure [bar] | Return filter clogged [0/1] |
| High lube oil pressure [0/1] | Vibrator oil flow low [0/1] |
| Hydr. oil temp high [0/1] | Leak filter clogged [0/1] |
| Hydr. oil warming up [0/1] | Interm. speed warming up [0/1] |
| General emergency stop [0/1] | Interm. speed cooling [0/1] |
| Suction valve not open [0/1] | Hydraulic level low [0/1] |
| Vibrator oil temp high [0/1] | |

DIESEKO GROUP



Vibratory Hammer Noise Reduction



“Mastering piling noise
in a mobile way”

Vibratory Hammer Noise Reduction

| Item | Value |
|---|---|
| Max. Flow / Pressure | 150 L/min / 145 bar |
| External dimensions (H x L x W) | 2,6 x 4 x 3 m (retr.) 20,8 x 3 x 2 m (ext.) |
| Internal dimensions | 2,6 x 1,6 m |
| Total weight (20,8m screen) | 5800 kg |
| Weight lifting frame | 1640 kg |
| Weight screen (20,8m screen) | 4160 kg |
| Max. traveling speed | 0,5 m/s |
| Leveling principle | Self aligning with hydraulic flow divider |
| Noise reduction at 2m (measured on 24VM) | -6,3 to -7,5 dB |
| Noise level at 2m (measured on 24 VM) | 85 dB |
| Materials | Galvanised steel frames Aluminium panels Polyurethane isolation |



Noise Reduction Pack



“Proven technology
but without the noise”

Noise Reduction Pack

| Item | Value |
|--|--|
| Noise reduction (prognosed for 600 powerpack) | -6 to -10 dB |
| Noise level at 1m / 5m (prognosed for 600 powerpack) | 77 to 86 dB / 71 to 76 dB |
| Dimensions Inlet (L X W X H) Based on 600 power pack | 918 x 400 x 1650 mm |
| Dimensions Outlet (L X W X H) Based on 600 power pack | 1473 x 604 x 1890 mm |
| Materials | Galvanised steel frame Aluminium plating Stone wool insulation |
| Application | Interchangeable with all Dieseko power packs |



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INNOVATIONS



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Thank you for your attention

