

# HIGHER PRODUCTIVITY with THE HIGHEST QUALITY

AVAILABILITY - RELIABILITY - SAFETY - OPERATIONAL EXCELLENCE

### INTRODUCTION TO

## MOVAX mFleetCare

MOVAX mFleetCare™ is a total service solution intended to maximise the productivity and the quality of the piling work when using MOVAX piling equipment. The MOVAX way-of-piling provides an inherently faster, more efficient, accurate and safe way of performing the piling work resulting in higher productivity and significant overall time and cost savings. The productivity is, however, obviously also dependent on the skills and capabilties of the operator and the availability of the MOVAX piling equipment. The goal of MOVAX mFleetCare is to ensure the maximum availability of the MOVAX piling equipment and to provide the operator with the required skills and best practises - and with superior support in all conditions and at all times - thus enabling the operator to perform the work with the highest productivity, accuracy and quality.

MOVAX mFleetCare addresses all aspects of ensuring the highest possible availability and the best use of MOVAX piling equipment. mFleetCare covers audits and inspections, preventive and corrective maintenance, training services for the continued growth of expertise and skills, efficient and fast on-site and remote support, installation and calibration services, as well as engineering and spare parts services.

MOVAX mFleetCare services are provided world wide by Movax Oy's own specialists and by a trained and certified network of partners. In addition, Movax Oy utilises the most modern IT-based solutions to provide support anywhere in the world, always and at any time.



### MOVAX mFleetCare



**Audits** 



Preventive maintenance



Corrective maintenance



Installation services



Training services



Engineering services



Spare parts

### **MOVAX Audit™**

Inspection of mechanical, hydraulic and electric components of MOVAX piling equipment, and MOVAX Control System.



## **AUDITS**

The MOVAX Audit™ includes the inspection of the mechanical, hydraulic and electric components of the MOVAX piling equipment and the MOVAX Control System. As a result of the MOVAX Audit a written Inspection Report including recommendations with urgency levels for the needed maintenance & possible repair measures, and the recommended replacement, wear and spare parts needed to maintain the MOVAX piling equipment safe and productive, is generated.

### **MOVAX AUDITS**

### MOVAX piling equipment audit;

- · Inspection related to general, overall condition of the equipment
- · Temperature measurement(s)
- · Wear part-evaluation
- · Test drive, including test report
- Inspection report, including required maintenance and repair measures and specifications of needed wear, spare and replacement parts

#### MOVAX Control system audit;

- · Calibration of current/existing control system
- · Evaluation of electrical components
- · Evaluation and update of set values
- · Software update(s)

The MOVAX Audit forms the basis for the maximum availability of the MOVAX piling equipment. Based on the Inspection Report the decision regarding measures to be taken and parts to be changed or replaced can be made in advance before any failure occurs and based on facts.





### MOVAX Preventive Maintenance

Regular, scheduled maintenance and surveillance for maximum availability and reliability.



## PREVENTIVE MAINTENANCE

Preventive maintenance will ensure the maximum availability of the MOVAX piling equipment and solve problems before they even happen. Preventive maintenance is of utmost importance to ensure productive reliable and safe operation of the MOVAX piling equipment and is the most feasible method to minimise any unscheduled downtime.

### PREVENTIVE MAINTENANCE

- **First service**, after 20 hours of operation
- Yearly service, once a year or after 250 hours of operation
- · Refurbishment service, after 1000 hours of operation

Basic instructions for the preventive maintenance can be found in the 'Operating & Maintenance Manual' for the specific MOVAX piling equipment type and model in question.

The MOVAX Information Management System (MIMS) **mFleet Managment™** application provides essential information about the operation, performance and condition of the MOVAX piling equipment

The state-of-the-art mFleet Management includes the tools & reports for both a quick analysis and for a more detailed diagnostics - to be done either on-site or remotely in the office - thus ensuring quick and fast support from Movax Oy's specialists or local partner.

mFleet Management is designed specifically for preventive maintenance - for trouble-shooting, diagnostics and analysis, and support; and to ensure that the proper service is made and that problems are detected before they even happen.





### MOVAX SERVICE AGREEMENT

By signing a MOVAX Sevice Agreement Movax Oy or Movax Oy's local partner assumes the responsibility of the preventive maintenance. mFleet Management monitoring and reporting can be included as a part of the Service Agreement.

## MOVAX Corrective Maintenance

Skilled repair and maintenance services supported by fast and efficient spare parts logistics.





## CORRECTIVE MAINTENANCE

Corrective maintenance is the traditonal maintenance and needed 'when something fails'. mFleetCare focuses strongly on finding the root causes of any problem and the fast and quick corrective solutions for the problem. As time is of the essence the corrective measures must be fast in order to avoid unnecessary downtime. On the otherhand the corrective solution must also be the correct one.

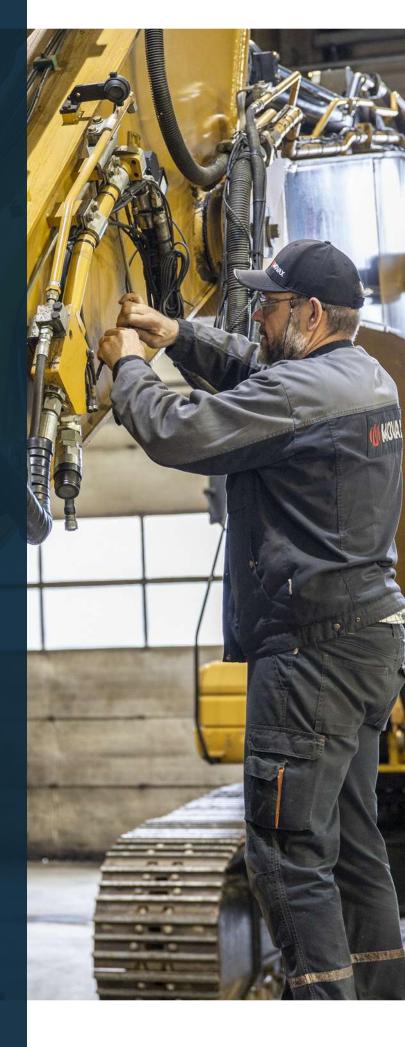
### CORRECTIVE MAINTENANCE

- · Mechanical maintenance based on inspection of failed/broken part
- Welding- and Machining services related to MOVAX parts and components
- · MOVAX Control System parts change/ repair
- · Hydraulic parts change and repairs
- · Test drive at Movax Oy's factory, Movax Oy's partner's facilities or on-site

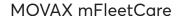


## MOVAX Installation Services

Installation supervision, installation, start-up & commissioning and onsite operational and maintenance training.







## INSTALLATION SERVICES

Installation supervision, installation and start-up & commissioning services are provided for new MOVAX piling equipment as well as for replacements or when transfering the MOVAX piling equipment and MOVAX Control System onto a new excavator.

For a new installation, the basic operator and maintenance training is also provided during start-up & commissioning as a part of the installation services. Additional on-site training is provided by request.

### **INSTALLATION SERVICES**

- · Installation supervision
- · Installation
- · Start-up & commissioning of new
- · Dismantling and installation of old, existing MOVAX piling equipment and MOVAX control system
- · BASIC operator training





## **MOVAX Training Services**

Operator training for safe, efficient and high quality operation.







## TRAINING SERVICES

The more skilled the operator is the higher the productivity and quality of the installation will be.

BASIC operator training is done during the start & commissioning of the MOVAX piling equipment.

ADVANCED operator training courses are available at Movax Oy's factory in Hämeenlinna, Finland and by a select number of certified operator training partners.

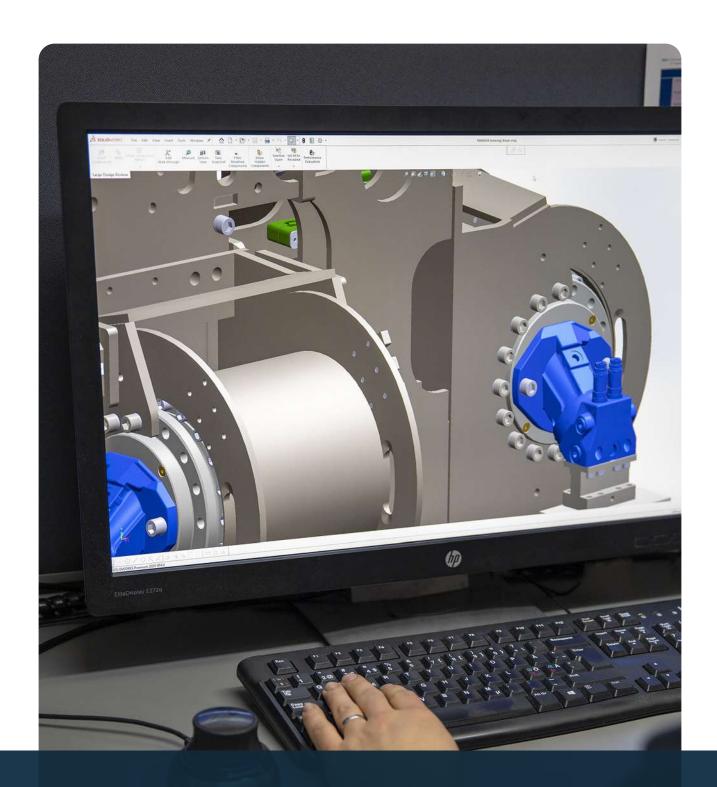
### ADVANCED OPERATOR TRAINING

- · Training required to become a qualified and certified MOVAX operator
- · Equipment specific training for each MOVAX piling equipment type and model.
- · MOVAX Control System training
- · MOVAX Information Management System training
- · Training including:
  - Basic technical knowledge and adjustments, settings and calibration.
  - "How to operate and use the MOVAX piling equipment in the right manner, best operating practises and what avoir, the 'don't do's'.
  - "How to make the required daily / monthly maintenance tasks".
- · Training related to MOVAX piling equipment maintenance and repairs
- · Training including:
  - More detailed and in-depth technical knowledge of the MOVAX piling equipment, its components and accessories.
  - "How to make the needed maintenance and also major/bigger repairs".
  - Detailed troubleshooting of mechanical, hydraulic and control system related problems and issues.
  - Settings and adjustment of the MOVAX piling equipment and MOVAX Control System as well as needed measurements.

Tools for the operator training include theoretical, 'class room' training, simulator\* based training and actual hands-on training.

\*Simulator based training is available at Movax Oy's factory and by a select number of certified partners.





## CUSTOMISED SOLUTIONS

productivity – performance – optimisation – reliability – safety

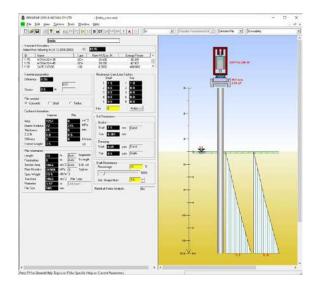


## **ENGINEERING SERVICES**

Engineering services are provided starting from the selection of the correct piling technology or method to the selection of the correct MOVAX piling equipment model and carrier. Movax Oy's engineering services also includes tailored solutions for specific projects and the desing & engineering related to refurbishment, repair and maintenance.

### **ENGINEERING SERVICES**

- · Selection of piling technology
- · Selection of MOVAX piling equipment model
  - Suitability of MOVAX piling equipment for specific site and soil conditions utilising GRLWEAP\*
  - Stability calculations; e.g. suitability of excavator/carrier for MOVAX piling equipment or customised Multi-tool piling leader
- Customisation of MOVAX piling equipment for specific piles and pile profiles; e.g. arms, clamps & pads
- Customised MOVAX solutions; e.g. multi-tool piling leaders with associated tooling
- Design & engineering related to modification or refurbishment of existing MOVAX piling equipment incl. FEM-analysis etc



### Productivity through innovation

MOVAX is all about improving productivity, reliability and availability; and about enabling our customers to be faster, more flexible and more efficient, but mostly to save our customers both time and money. All at the highest quality - without any compromises in safety.

Movax Oy's product development always starts at the job site. Movax Oy is not only capable but also willing to customise its solution to even better meet customer requirements.

<sup>\*</sup> developed by the founders of Pile Dynamics Inc

### **MOVAX Spare Parts**

Large central stock of spare and wear parts for fast deliveries world wide – combined with professional and skilled local support.





## SPARE PARTS SERVICES

Movax Oy carries a large stock with the goal to be able to service customers all over the world in a speedy and timely manner. Spare parts stock is also carried by Movax Oy's local partners to further be able to support local MOVAX user's even faster and more efficiently.

### SPARE PARTS SERVICES

- · MOVAX wear parts
- · MOVAX spare parts
  - MOVAX piling equipment
  - MOVAX Control System
- · Sets for Modernisations and upgrades





## GLOBALLY LOCAL CUSTOMER CARE

MOVAX supports its global customers centrally from the factory located in Hämeenlinna, Finland and locally through a network of partners all over the world.

In close cooperation with - and through the MOVAX network of trained and certified, highly skilled partners in more that 30 countries MOVAX has the capabilities to provide local support needed to ensure the highest possible availability and reliability of the MOVAX piling equipment and the unsurpassed customer support at all times.



## ( MOVAX way-of-piling

is not MOVAX is not merely piling equipment but a most efficient, fast, flexible, accurate and safe way-of-working – which results in a higher productivity and thus significant time and cost savings in a wide range of applications and different works.

With more than 2,000 units delivered – to more than 60 countries, on six continents – Movax Oy is a proven supplier of innovative piling solutions.

MOVAX world wide partners: www.movax.com/contact us





HIGHER PRODUCTIVITY - SIGNIFICANT SAVINGS fast, efficient, versatile, accurate, safe, reliable.

Movax Ov

Tölkkimäentie 10 FI-13130 Hämeenlinna Finland

Tel. +358 3 628 070 Fax +358 3 616 1641

marketing@movax.fi | movax.com

Please refer to www.movax.com for worldwide. certified partners.

