



MOVAX

Total Piling Solutions

RAIL
SOLUTIONS



THE COMPANY

INTRODUCTION

Movax Oy, established in 1993, is a Finnish-based, privately-owned world-leading innovator, developer and manufacturer of excavator-mounted piling and foundation equipment with highly advanced automatic control systems and information management solutions.

Movax Oy is the inventor of the modular, vibratory side grip pile driver technology. Movax Oy's inventions have resulted in numerous patents (50+) and its trademark, MOVAX®, is registered and well known for the quality it represents all over the world.

Movax Oy is strongly committed to continuously develop its products and services in close cooperation with its customers and local partners.



Established in Hämeenlinna, Finland

1996-1997

1st auto-steering for hydraulic excavator

2009

ISO 9001 certificate

2012

Resonance-free side grip pile driver

MOVAX
products



TP Terra Patris



1994

1st side grip pile driver

2006

Terra Patris Group main owner

New factory in Hämeenlinna

2011

New generation modular side grip (SG) pile driver

2014

Introduction of new generation MCS Lite & Pro Control Systems

MAJOR MILESTONES

A TOTAL SOLUTION.

Movax Oy focuses solely on solutions for the piling & foundation industry. The comprehensive range of excavator-mounted piling & foundation equipment and customized solutions cover a complete range of piling technologies - including both driven and bored piles.

UNIQUE, VALUE-ADDING TECHNOLOGY.

Movax Oy's piling and foundation equipment provide the optimum way-of-working - MOVAX WAY-OF-PILING™ - when constructing foundations, building retaining walls, both temporary and permanent, cofferdams and when performing trenching and excavation work and soil stabilisation in a wide range of applications.

GLOBALLY LOCAL CUSTOMER CARE.

Movax Oy focuses on superior customer service and support together with a world-wide network of local partners, established in more than 30 countries all over the world.

GLOBALLY PROVEN FOR RAIL.

MOVAX has a long and proven track record of working on the rail roads with numerous deliveries to customers all around the world. Totally MOVAX has delivered over 3000 units to customers in more than 65 countries with the overall number of deliveries to customers working specifically within the rail segment exceeding 500.

MOVAX can be found on the rails in for instance the UK, Germany, India, Brazil, Belgium, Poland, Finland, Denmark, Russia, Australia, USA and Canada. Movax Oy also has a strong experience of different type of rail roaders and rail road excavators including for example COLMAR, Atlas, CAT, Volvo and Liebherr.

MOVAX way-of-piling™

Higher productivity – Significant savings
fast. efficient. versatile. safe. accurate. reliable.

2015

1st DH piling hammers

1000th delivery


1000



1st MPL manipulator



1st MPL
Multi-tool piling
leader with CFA
rotary drive



2022

Introduction of next generation mControl+™
Control System with autoT™ (tip control)

1st MPL-multi tool piling leader with DTH




3000

2019

MCS for electronically controlled
excavators

MOVAX Information Management
System with mLogbook™ and
mFleetManagement™

1st KB kelly-bar piling drill

1st MPL multi-tool piling leader with
pre-auger rotary drive

2021

1st MPL-multi-tool piling leader with
TG vibratory pile driver

MCS with CAN bus control

THE PRODUCTS AND SOLUTIONS

A TOTAL PILING SOLUTION

MOVAX excavator mounted piling equipment are available for different piling technologies, including both driven and bored piles, and for varying site and soil conditions and requirements.

MOVAX piling equipment is used for piled foundations, temporary and permanent retaining walls and cofferdams - and when performing excavation and trenching work.

MOVAX piling equipment is suitable for applications ranging from rail, road and civil to waterways & piers, energy & environmental and utilities.



PILE DRIVERS

Side grip vibratory-type pile driver for handling, pitching, driving & extracting a complete range of driven piles, including sheet piles, H-beams, tubular steel piles and timber piles.

PILING HAMMERS

Hydraulic, double-acting impact-type piling hammers for driving load-bearing piles or assisting in sheet pile driving in even the most difficult soil conditions.

PILING DRILLS

Telescopic piling drills for bored, cast-in-situ (concrete) piles.





MANIPULATORS

Manipulators are designed for fast, flexible and efficient handling of different kinds of masts, gantries, and poles as well as a wide range of piles. Soft gripping surfaces are available to prevent damage of sensitive surfaces or coatings.

MOVAX CONTROL SYSTEM



The **MOVAX Control System (mControl+)** links the excavator with MOVAX's piling equipment. The system controls the auxiliary hydraulics of the excavator and all the functions of MOVAX's piling equipment.

INFORMATION MANAGEMENT



The **MOVAX Information Management System (MIMS)** provides essential information about the piling process and the pile installation – mLogbook - as well as about the MOVAX piling equipment itself – mFleet Management.

CERTIFIED MANAGEMENT SYSTEM

Movax has a certified Quality Management Systems according to ISO 9001:2015.



THE TECHNOLOGY

UNIQUE, INNOVATIVE & VALUE-ADDING

MOVAX way-of-piling™ provides a most efficient, fast, flexible and versatile, accurate, safe and reliable way-of-working which results in a higher productivity and thus significant overall time and cost savings in a wide range of piling and foundation applications.



higher productivity.
fast. efficient. versatile.



significant overall savings.

accurate. safe. reliable.

THE TECHNOLOGY

HIGHER PRODUCTIVITY - SIGNIFICANT SAVINGS



fast.

The fastest way of managing the entire piling process – from handling, pitching and driving to extracting the piles – due to the superior handling capabilities of the side grip-technology combined with the most advanced automated control system. One and the same control system for all MOVAX piling equipment and customised solutions.

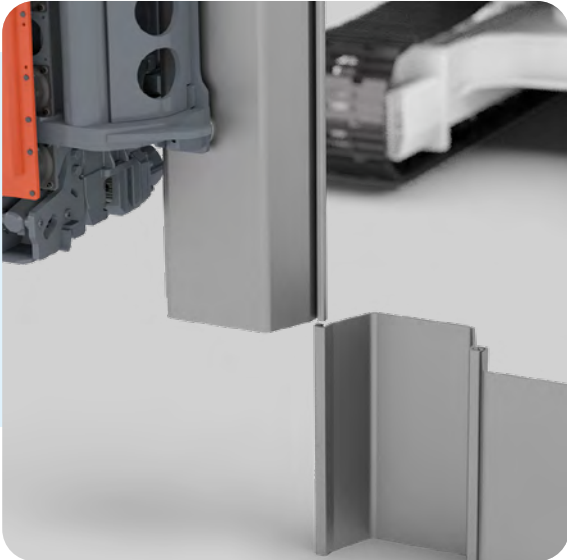
efficient.

The most efficient – and cost-efficient – way-of-piling with no need of assisting machinery or manual handling, additional work, material or tools and with only minimum assisting manpower. Lesser – and thus cheaper – logistics with less and smaller machinery, tools and manpower.



versatile.

The most flexible and versatile usage as the same side grip pile driver can be used for multiple types of piles and different type of piling and foundation work due to the modular design providing the optimum solution for basic piling and foundation work in normal site and soil conditions – and especially suitable when limited access, space or headroom is available and in sensitive environments.



accurate.

The most accurate, precise and high quality piling installation due to the side grip technology combined with the state-of-the-art, automatic control system – further supported by real-time information about the piling works.

safe.

Unsurpassed overall safety because of the inherent safety of the side grip technology combined with high quality manufacture and the multiple safety features of the advanced control system.



reliable.

The highest possible availability and reliability due to continued product development already since 1993 and quality of manufacture combined with the modular construction ensuring quick, easy and high quality maintenance and repair.

THE APPROVALS

BUILT for RAIL

MOVAX technology is officially approved for work on rail roads in numerous countries including Finland, Sweden, Belgium, Germany, the UK, Australia, India and the USA.

MOVAX piling and foundation equipment, control system and handling equipment is approved by for instance Germany's Deutsche Bahn (DB Netz) and the UK's Network Rail.



Allgemeine Gerätefreigabe

Serienzulassung möglich bis: 31.08.2028 Freigabe Nr. 223

für die Infrastruktur der DB Netz AG

Gerät:	Movax Seitengriff Pfahlramme
Bauart:	SG 45V PRO+AUTO
Gerätenummer:	G 9033 007
Hersteller:	Movax Oy, 13130 Hämeenlinna, Finnland
Baujahr:	2020
Fabriknummer:	1719
Fahrzeughalter:	Movax Oy, 13130 Hämeenlinna, Finnland
Bemerkungen:	Trägerfahrzeug ZW-Bagger Liebherr A922 RL mit Movax PRO+AUTO System, Verwendung mit der PRO oder LITE Version ebenfalls möglich
Hinweise:	Diese Gerätefreigabe wurde aus rein technischer Sicht, auf Basis der zu Verfügung gestellten Unterlagen des Herstellers, ohne Beanstandung begutachtet. Der betriebliche Einsatz ist nicht Gegenstand dieser Untersuchung. Verantwortung trägt das einsetzende EVU oder der Halter.

wurde geprüft und darf mit der zugehörigen Freigabe zum Arbeiten auf Baustellen der DB Netz AG bestimmungsgemäß genutzt werden. Die Freigabe zum Arbeiten verlängert sich wiederkehrend und der Berechtigungszeitraum zum Arbeiten ist dem aktuellen Prüfbericht zu entnehmen.

Die Richtlinie 931 mit den dazugehörigen Modulen ist Teil des betrieblich-technischen Regelwerkes der DB Netz AG. Der Einsatz des o.g. Gerätes auf Baustellen der DB Netz AG und aller damit in Zusammenhang stehenden betrieblich-technischen Maßnahmen erfordert das Einhalten dieser Regeln.

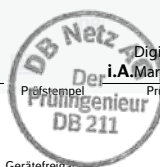
Die Allgemeine Gerätefreigabe verliert ihre Gültigkeit und benötigt eine Überprüfung, wenn einer der folgenden Fälle eintritt:

- Teile der Maschine, die die Arbeitssicherheit betreffen, wurden geändert;
- Konzeptions- oder Konstruktionsmängel sind im Betriebseinsatz aufgetreten;
- bestehende Vorschriften für das Betreiben oder Instandhalten der Maschine wurden nicht eingehalten;
- die periodischen Überprüfungen wurden nicht durchgeführt.

München, 19.08.2021

Ort, Datum

Prüfstempel



Digital unterschrieben von

i.A. Marcel Nachtigall

Prüfingenieur Grundsatz

Bestätigung Anwenderfreigabe der verantwortlichen OE gemäß Ril 931.0003 3(9)

Stefan

i.v. Hänisch

Unterschrift Leiter Schienenfahrzeugmanagement

Digital unterschrieben von Stefan Hänisch
Datum: 2021.08.23
16:16:00 +02'00'

PO_003_Allgemeine_Gerätefreigabe

Rev.: 1.1

17.08.2021

Certificate of Acceptance

OFFICIAL
PA05/07566

Manufacturer:
Movax Oy

Issue : 1
Valid From : 30-09-2022

MOVAX MPM4000

Product Description

The MOVAX MPM-4000 is an excavator mounted manipulator used for precise handing and positioning, in support of operations on Network Rail Managed Infrastructure.

The MPM-4000 require a host machine (On-Track Plant excavator or similar) to provide hydraulic power and is controlled with the MOVAX Control System (MCS™); MCS Lite or MCS Pro.

Product Image



Scope of Acceptance

Full Acceptance

The MOVAX MPM-4000 is granted **FULL** Product Acceptance in accordance with the terms listed on this certificate and any associated reference documentation.

Network Rail Acceptance Panel (NRAP) hereby authorises the product above for use and trial use on railway infrastructure for which Network Rail is the Infrastructure Manager under the ROGS regulations.

Reviewed by:

Authorised by:



Aamir Malik
Product Acceptance Coordinator



Peter Stone
Acting Network Technical Head of Plant

Please contact prodacc@networkrail.co.uk

Network Rail Infrastructure Ltd Registered Office 1 Eversholt Street London NW12DN Registered in England and Wales No. 2904587 www.networkrail.co.uk
Version 7.2 February 2020.

THE KNOW-HOW

GLOBALLY PROVEN for RAIL

EXPERIENCE

With almost 30 years of experience and more than 500 units delivered for rail all over the world - and with a clear focus on the piling and foundation industry – MOVAX way-of-piling is a truly and globally proven solution for even the most demanding tasks when working on rail roads.



EXPERTISE

Sites, soils & applications

Throughout the years MOVAX has gained a deep understanding and know-how of varying site and soil conditions when working on the rails all over the world.

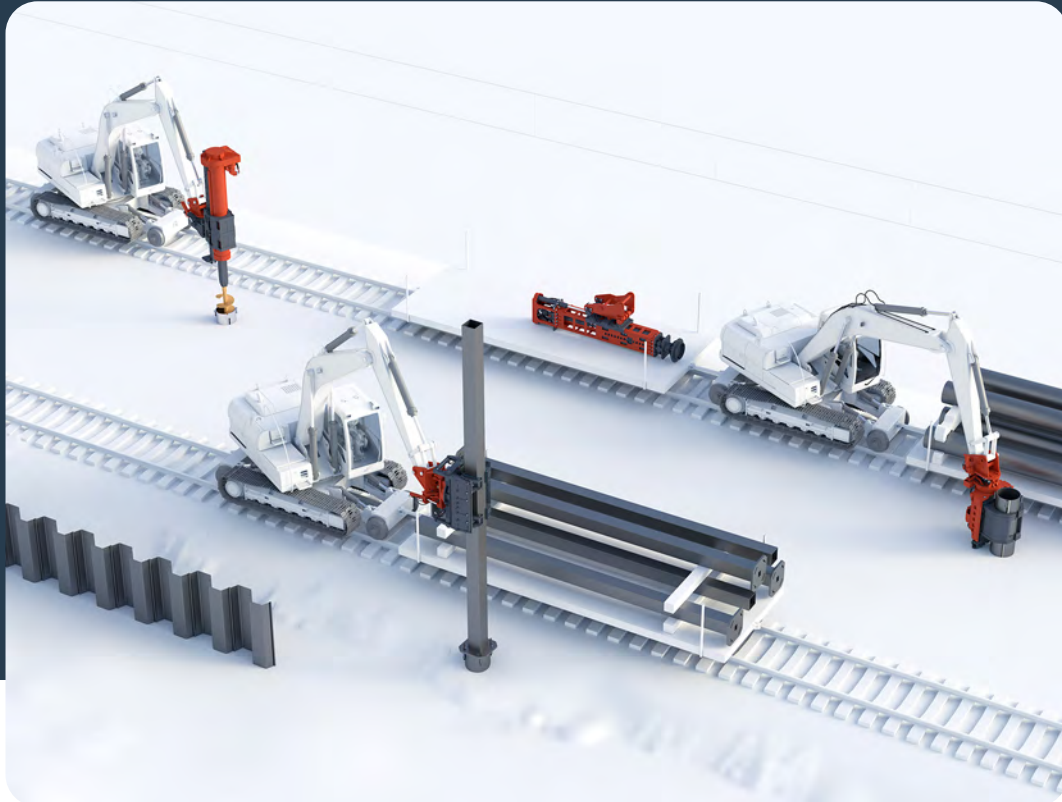
Carriers

Movax Oy's expertise also covers all kinds of different types, brands and models of excavators and rail roaders from all over the world.



THE PROVEN EXPERIENCE

RAIL



”MOVAX piling equipment provides a total, logistically optimum solution covering all piling technologies needed in the construction and electrification of rail roads.”

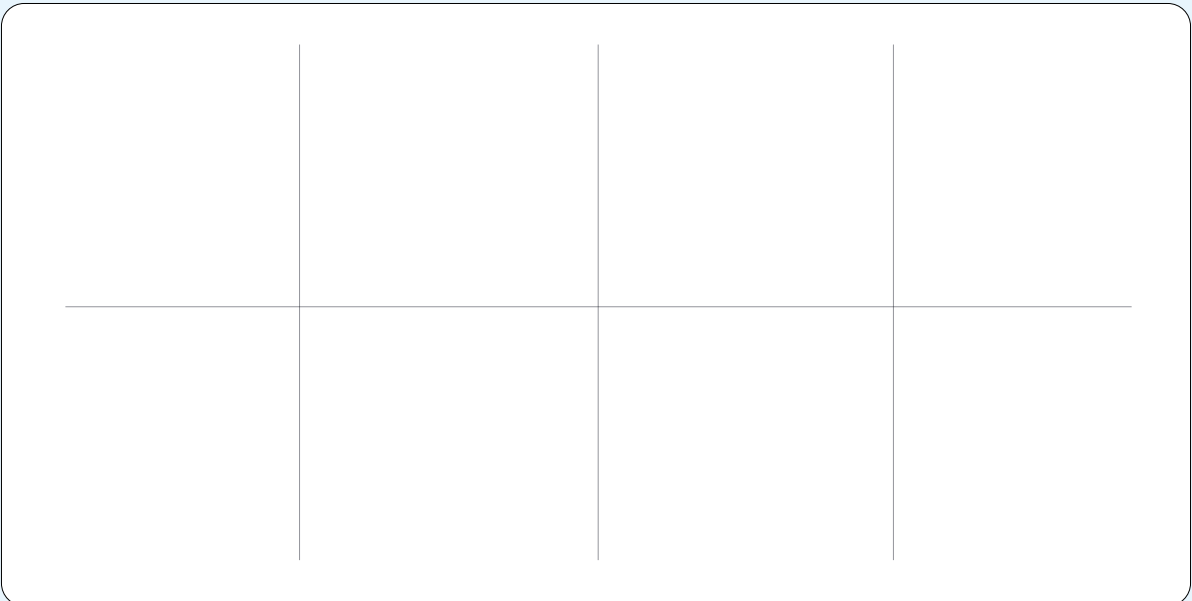


MOVAX piling equipment provides the total, logistically optimised rail roader-mounted solution required for permanent and temporary retaining walls and piled foundations when working on the railroad; including the construction or repair of railroads, underway passages or platforms, when building piled foundations for electrical overhead lines or traffic signals and constructing noise reduction walls or installing gantry masts.

MOVAX way-of-piling is fast, efficient, accurate and safe - and especially suitable for areas with limited access, space or headroom such as when working underneath existing bridges and power lines.



MOVAX RAIL VIDEOS ON YOUTUBE



(Click/tap or scan the QR code for videos.)

THE PROVEN EXPERIENCE

RAIL





MORE THAN 3000 UNITS
DELIVERED ALL OVER THE
WORLD SINCE 1993.
+500 DELIVERIES FOR
RAIL APPLICATIONS



REFERENCES

MOVAX way-of-piling





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

Movax Oy

Tölkimäentie 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.*

