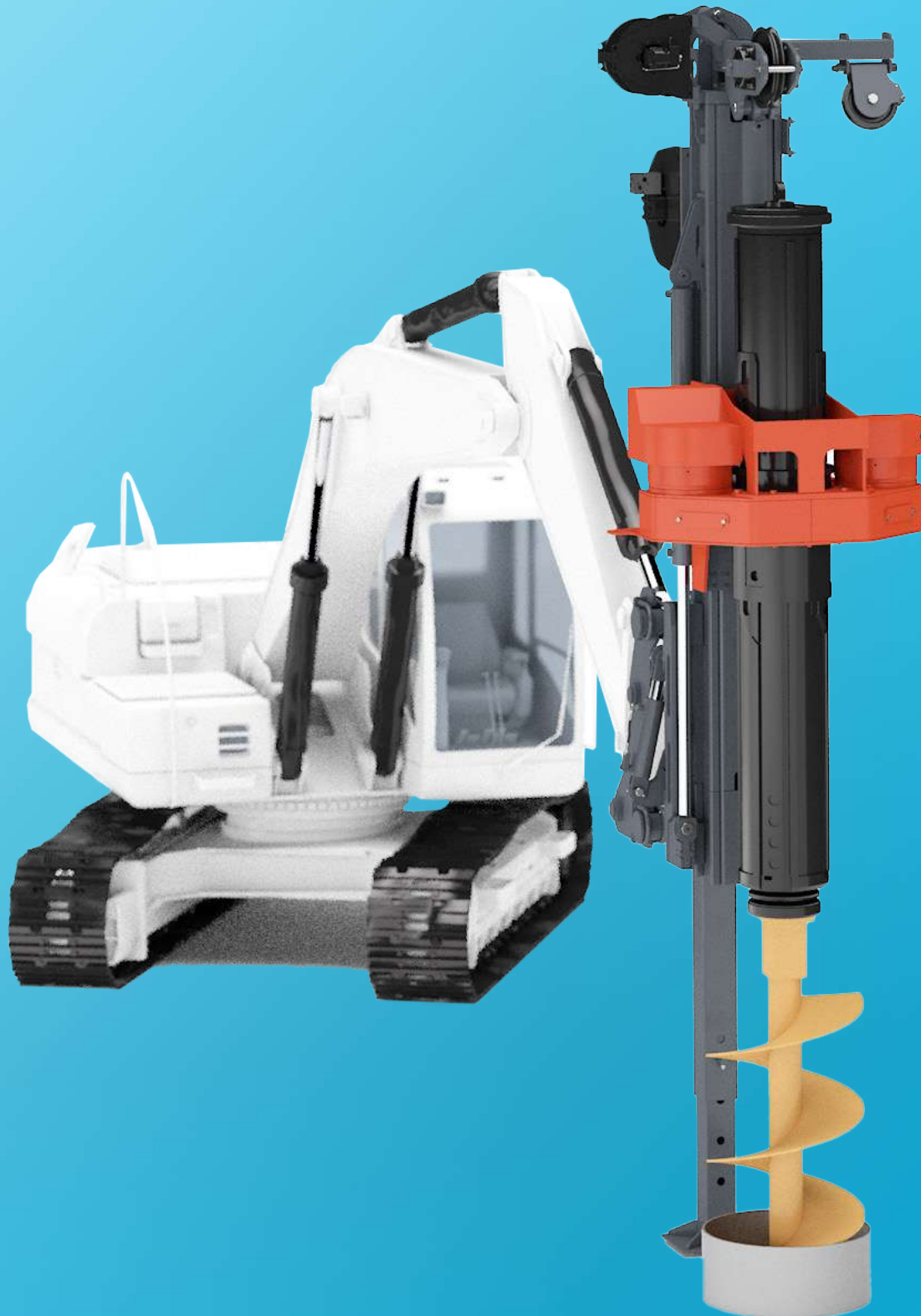




Total Piling Solutions

MOVAX KB & TAD PILING DRILLS

TECHNICAL SPECIFICATION





HIGHER PRODUCTIVITY – SIGNIFICANT SAVINGS

Efficient. Fast. Versatile. Accurate. Safe. Reliable.

MOVAX WAY-OF-PILING

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.

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.

QUALITY BUILT-TO-LAST

MOVAX is made with high-class materials, equipment and components – and modern, state-of-the-art production technologies and machinery ensuring the highest possible quality of manufacture. Movax Oy's Quality Management Systems is certified in accordance with ISO 9001:2015.

GLOBALLY PROVEN

With almost **30 years of experience** and more than **3000 units delivered** to all over the world and with a clear focus on the piling and foundation industry, MOVAX has a deep understanding and know-how of varying site and soil conditions - and of all kinds of different type of excavators and rail roaders. Movax Oy's experience also covers a wide range of applications ranging from Rail, Road and Civil to Waterways & Piers, Utilities and Environmental & Energy.

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, performing trenching and excavation work in a wide range of applications from civil/structural, rail and road to waterways & piers, utilities and environmental.



INNOVATION & CONTINUOUS DEVELOPMENT

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.



TOTAL SOLUTION

PILING, FOUNDATION & SOIL STABILISATION

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

The MOVAX Control System links the excavator with the MOVAX piling equipment and customised solutions whereas the MOVAX Information Management System (MIMS) provides essential information about the piling process and the pile installation - and about the MOVAX piling equipment.



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/kelly bar-type piling drills for bored, cast-in-situ (concrete) piles.



MOVAX CONTROL SYSTEM

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



MULTI-TOOL PILING LEADERS

Customised multi-purpose piling leaders with tooling including vibratory pile driver, piling hammer and rotary drives for pre-augering and CFA piling.



COLUMN STABILISATION LEADERS

Customised column stabilisation leader for increasing strength, improving deformation properties and to increase stiffness of soft soil.



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.



PRODUCTS & SERVICES

PILING DRILLS

MOVAX Piling drills are excavator-mounted, telescopic/kelly bar-type auger drive attachments for cast in-situ (concrete) piling. MOVAX Piling drills are explicitly designed for soil removal tasks. MOVAX piling drills are especially suitable for work in confined spaces while still being good at reaching over obstacles. The telescopic/kelly bar design keeps the drill height low and allows working on sites with limited headroom without compromising on drilling depth.

FEATURES

- **Excavator-mounted**

Utilizing the hydraulic power and lifting capacity of the excavator or rail roader (carrier). Designed to work on any and all wheeled and crawler-type excavators and rail roaders by utilising and commanding the standard auxiliary hydraulics and/or by connecting to the electronic control of the excavator.

- **Comprehensive size range***

Available in four different models for different piling requirements and applications;

- **TAD-32 and TAD-51** are lighter weight piling drills with a maximum drilling depth of 9 meters intended primarily for rail roaders and smaller excavators.
- **KB-70S** is a heavy duty piling drill (kelly bar) with a maximum drilling depth of 15 meters. The KB-70S is intended for larger rail roaders and excavators.
- **KB-70L** is a heavy duty piling drill (kelly bar) with a maximum drilling depth of 20 meters. The KB-70S is intended for large excavators.

- **MOVAX Modular System**

Versatility based on the MOVAX Modular System™ which enables the use of the same unit for a wide range of different piling requirements. The modular system includes a wide range of lead augers in different sizes and for different soil conditions. MOVAX KB-piling drill-models can further be equipped with a service winch (optional) and with a casing adapter (optional).

- **MOVAX Control System**

Controlled with the MOVAX Control System, mControl+.

- **MOVAX Information Management System**

Available with the MOVAX MIMS Information Management System: mFleetManagement for monitoring MOVAX piling equipment operation, performance and condition; and mLogbook for monitoring and reporting the piling works.

*suitability of carrier shall always be confirmed by Movax Oy.



KB-70S with casing adapter (optional) and service winch (optional)

Telescopic, kelly-bar type piling drills for
CAST-IN SITU PILING



PILING DRILLS

TECHNICAL DATA

KELLY-BAR SERIES

| Model | | KB-70L | KB-70S |
|--------------------|-------|----------|------------|
| Drilling depth* | m | 20 | 9-15 |
| Weight** | kg | 6700 | 5300-5800 |
| Height** | mm | 5550 | 4500 |
| Oil flow rate | l/min | 100-200 | 100-200 |
| Oil pressure | bar | 350 | 350 |
| Hole diameter | mm | 420-1500 | 420-1500 |
| Drill speed range | rpm | 10-120 | 10-120 |
| Side tilt angle | ° | ±15 | ±15 |
| Torque | kNm | 70 | 70 |
| Extraction force | kN | 75 | 57 |
| Crowd force | kN | 190 | 190 |
| Excavator class*** | | 35-50 | (30) 35-50 |

| Lead augers | | |
|----------------|----|--------------------------|
| Model | | clay, rock or heavy duty |
| Outer diameter | mm | 420-1500 |

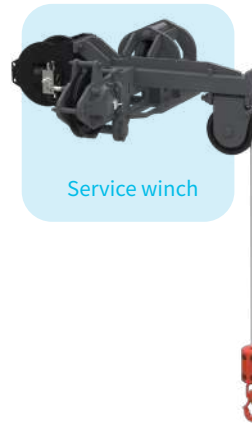
| Accessories (optional) | |
|------------------------|---|
| Service winch | 2,5 ton for handling rebar or reinforcement steel |
| Casing adapter | tailor-made according to customer specifications |
| Cardan joint | tailor-made according to customer specifications |

NOTE!

* drilling depth dependent on length of kelly bar

** excluding adapter and lead auger

*** stick or boom mounted; excavator suitability to be checked



Service winch



Casing adapter



KB-70S



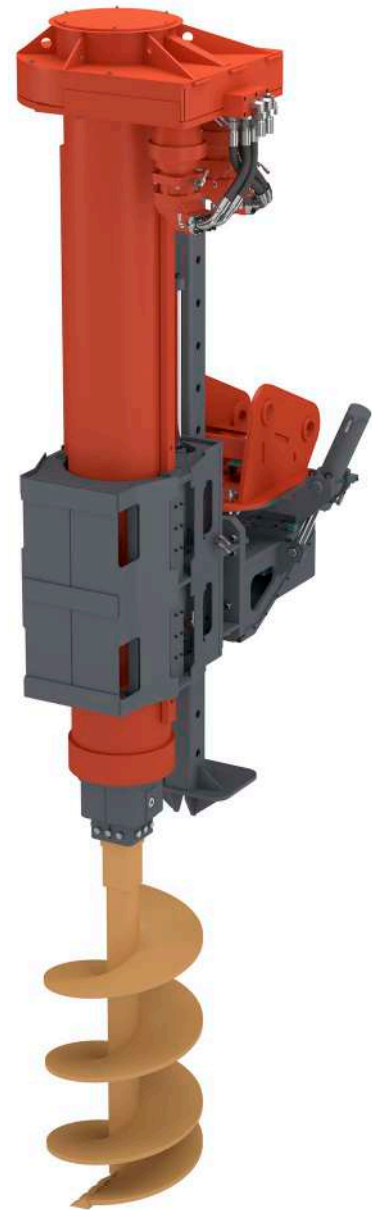
TELESCOPIC SERIES

| Model | | TAD-32 | TAD-51 |
|--------------------|-------|--------------------------|----------|
| Drilling depth | m | 9 | 9 |
| Weight* | kg | 3200 | 3200 |
| Height* | mm | 3855 | 3855 |
| Oil flow rate | l/min | 75-250 | 75-120 |
| Oil pressure | bar | 350 | 350 |
| Hole diameter | mm | 400-1000 | 400-1000 |
| Drill speed range | rpm | 11-74 | 11-74 |
| Side tilt angle | ° | ±30 | ±30 |
| Torque | kNm | 30 | 50 |
| Extraction force | kN | 30 | 60 |
| Crowd force | kN | 15 | 15 |
| Excavator class** | | 24-35 | 24-35 |
| Lead augers | | | |
| Model | | clay, rock or heavy duty | |
| Outer diameter | mm | 400-1000 | |

NOTE!

* excluding adapter and lead auger

** stick or boom mounted; excavator suitability to be checked



TAD-32





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

Movax Oy

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