



FOUNDATION CONSTRUCTION EXPERTISE

TOUGH WORLD. TOUGH EQUIPMENT.

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Foundation Engineering Construction is your world so you know how tough it can be. There are always complex geotechnical challenges to overcome and there is continued pressure to lower costs and increase productivity.

We understand your world and we are here to help with innovative solutions which help you do more – for less.

EXCELLING ON THE ESSENTIALS

In foundation construction our expert team is here to help you with 3 essentials...

- 1  **SUPERIOR PERFORMANCE**
- 2  **HIGHLY EFFICIENT**
- 3  **TECHNICAL SUPPORT & FLEXIBILITY**

Our machines and our people are constantly working hard to deliver on these essentials. Every site. Every Shift. Every Day.



OUR EXPERIENCE WILL GIVE YOU A COMPETITIVE EDGE

With over 60 years' industry experience the combination of LiuGong and Jintai is a powerful, specialist team you can trust. Jintai has built a worldwide reputation in the piling and foundation industry for innovation and R&D. Together, the partnership between LiuGong and Jintai gives you access to a full range of foundation construction equipment, backed up by a team with the very best knowledge and industry expertise.



ONE SIZE WON'T FIT ALL

No geotechnical challenge is the same, so our team of highly qualified engineers is here to help you find the perfect solution. From suitability and stress testing to material analysis and bespoke engineering design, our experts can help you prepare a business-winning tender, supported by the right machines to deliver on time and on budget.



THE PERFECT MATCH

From foundation excavation and anchorage, to bored piles and diaphragm walls, we know that delivering the perfect foundation solution is about speed and precision. Our technical service team works with you to ensure that you get the perfect match of machines and attachments for your specific geotechnical challenge.

OVER 60 YEARS OF FOUNDATION INNOVATION

Our approach to your foundation challenge is to work with you every step of the way. From helping you assess the feasibility of a site, right through to the final foundation solution. We have a long reputation for delivering smart, innovative solutions so you can trust our LiuGong and Jintai team to deliver the highest levels of performance and efficiency.





TRUST OUR PROVEN EXPERTISE

We deliver thousands of foundation engineering equipment solutions worldwide. Trust our expertise to help you win your next tender and deliver the project on time and on budget.

Whatever your geotechnical challenge – we have the machine solution.



LET'S MEET THE TEAM!



1 SITE FEASIBILITY AND DESIGN

Foundation engineering projects can be challenging owing to the geology of the site. Not only is specialist data required before a site can be developed but bespoke machines and attachments may also be required.

Our expert technical service team is here to advice on all geotechnical, measurement and construction material issues.



2 BASE PREPARATION

No matter what the project; commercial and industrial buildings, towers, tunnels, bridges, dams and ports, you can rely on our expertise.

We help you plan and prepare the site.

We carry out important suitability, load stress and anchor tests to help you understand the site's geology. Nothing is left to chance. Nothing is compromised. Our experts use this insight to ensure you have the right solution in place – before you start.



TRUST OUR EXPERT ADVICE



FOUNDATION EXCAVATION

Whether your project demands shallow foundations, deep foundations or a combination of both, excavation will be required.

From earthworks and banks to ground stabilization, we have a tough team of machines designed to perform with high productivity and cost efficiency.



FAST AND EFFICIENT EXCAVATION

From 15 to 36 tonnes our excavator team is focused on getting the site ready as fast as possible.

LET'S FOCUS ON OUR 922E EXCAVATOR

In the crucial excavation stage of a major foundation project, you can trust the 922E to deliver.

POWER AND PERFORMANCE

With a low emission Cummins QSB 6.7 engine, and intelligent hydraulics, the 922E delivers enhanced power output, faster cycle times and improved breakout force.

LiuGong's Intelligent Power System also helps boost productivity and save fuel.

ALL TERRAIN CAPABILITY

MAXIMUM FLEXIBILITY

EXCAVATOR

| MODEL | 922E |
|--------------------------|--------------------|
| Powered by | Cummins Engine |
| Max. Digging Depth | 6,562 mm |
| Standard Bucket Capacity | 1.0 m ³ |



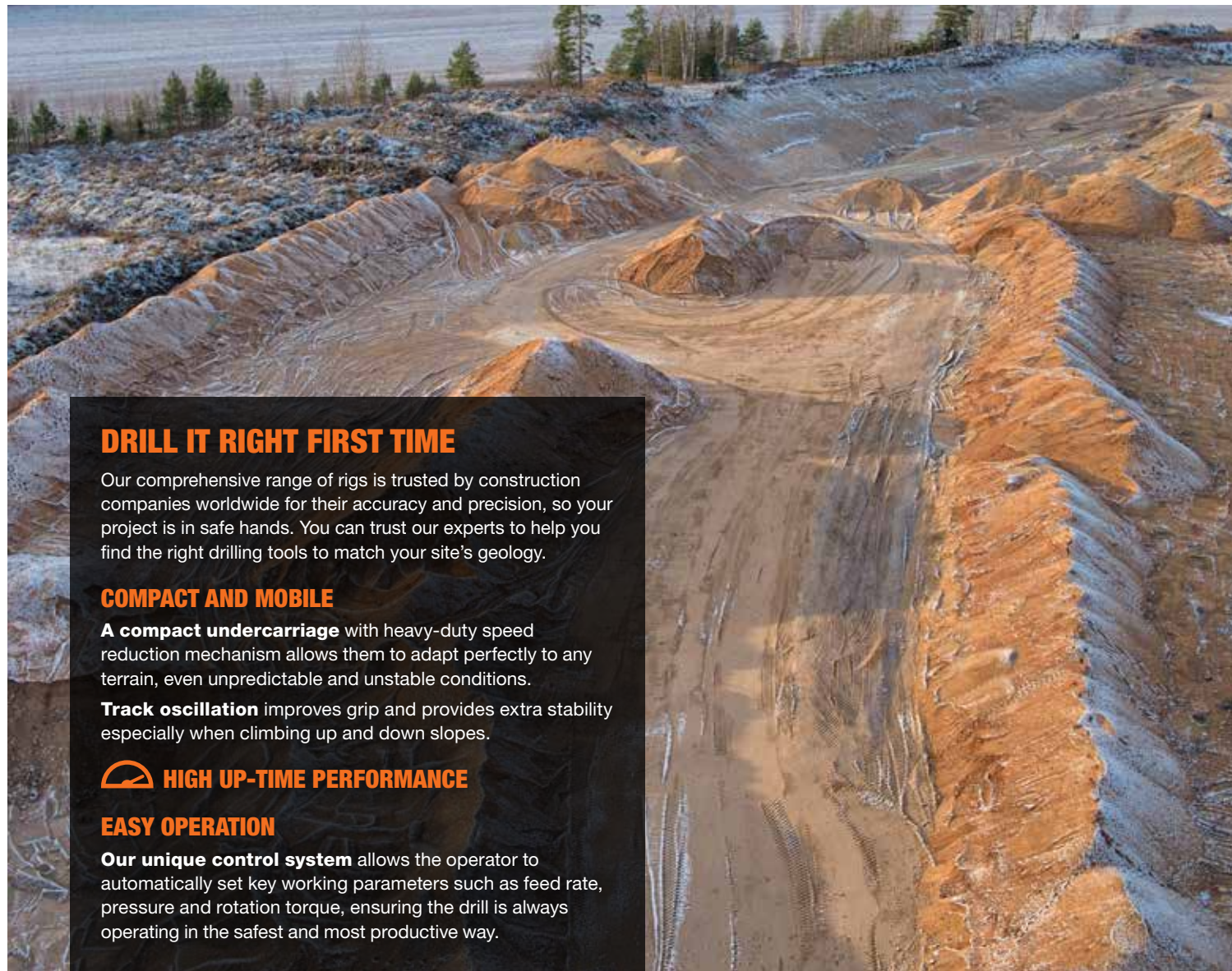
EXCAVATION EXCELLENCE



SITE ANCHORAGE

One of the many challenges faced on construction sites is the issue of strengthening retaining walls. **Whether it's a subway, quay or excavation pit, ground anchors are a smart, economical solution.**

Piled walls, diaphragm walls and steep embankments can all be secured with anchors. Inserting micro-piles or sinking temporary or permanent anchors can be completed with speed and efficiency with our range of mobile drilling rigs.



DRILL IT RIGHT FIRST TIME

Our comprehensive range of rigs is trusted by construction companies worldwide for their accuracy and precision, so your project is in safe hands. You can trust our experts to help you find the right drilling tools to match your site's geology.

COMPACT AND MOBILE

A compact undercarriage with heavy-duty speed reduction mechanism allows them to adapt perfectly to any terrain, even unpredictable and unstable conditions.

Track oscillation improves grip and provides extra stability especially when climbing up and down slopes.

HIGH UP-TIME PERFORMANCE

EASY OPERATION

Our unique control system allows the operator to automatically set key working parameters such as feed rate, pressure and rotation torque, ensuring the drill is always operating in the safest and most productive way.

DRILLING RIG

| | |
|-------------|--|
| MODELS | DH45A-H; DH46A-H; DH47A-H WITH COMPRESSOR |
| Hole range | 90-185 mm |
| Rated power | 59-75 kW |

Recommended air compressors to work with the drill rigs: CS580A-17MD and CSH660A-20MDB.



EFFICIENT PRODUCTIVITY



DIAPHRAGM WALL INSTALLATION

Working efficiency, accuracy, and high quality are important considerations when constructing diaphragm walls. These tough, reinforced concrete walls can serve as a retaining or cut-off wall where the project needs them. Regardless of the soil conditions, size, or depth of the diaphragm wall, ensuring vertical accuracy is critical to success. Depending on geology of the site, two different excavation methods are available.



DIAPHRAGM WALL GRAB

The first, the Diaphragm Wall Grab is suitable for soft, normal and hard soil strata with wall thicknesses of 600-1,500mm.

TRENCH CUTTER

The second, the Trench Cutter is suitable for a wide variety of strata including ultra-hard rock where wall a thickness of 800 to 1,500 mm is required. Our equipment excels in both these conditions.

TRUST OUR EXPERTISE

Our experts can help you decide on the best method for your project and advise on any technical modifications which may be required to ensure you get the optimum operational performance.

HIGH EFFICIENCY. PERFECT ACCURACY

In underground structures such as car parks, subways and underpasses, speed and accuracy are key.

PROVEN VERTICALITY

Our SG series of hydraulic diaphragm wall grabs guarantee precision and verticality through our own patented steering plates.

HIGH PERFORMANCE EXCAVATION

Fast and efficient excavation is achieved with a variable grab which can handle 18 to 35 tonnes.

QUIET AND EFFICIENT

Our intelligent hydraulics deliver an extremely high and efficient closing force which ensures more material can be moved with minimum noise and vibration.

A SAFE CHOICE

As with all LiuGong machines, the SG series are tough machines which are comfortable and safe to operate, easy to maintain and built to last.

DIAPHRAGM WALL GRAB

| MODEL | SG50A | SG70 |
|------------------|--------------|--------------|
| Extraction Force | 500 kN | 700 kN |
| Wall Width | 300-1,500 mm | 800-1,500 mm |
| Wall Depth | 75 m | 80 m |

A WORLDWIDE REPUTATION

For world-class precision and verticality, the SX series can be relied upon to deliver – every time. Applicable for a variety of soil conditions, the SX series is particularly well suited to hard-rock excavation.

CUTTING PRECISION

The well-balanced design with dual lifting points and symmetrical oil and air pipe ensure the frame is always stable, improving cutting precision performance. Accuracy is further improved using the onboard intelligent correction system.

EFFICIENT SLAG DISPOSAL

Air lifted slagging speeds up the disposal of broken materials beneath the cutter significantly increasing operational performance. A closed slag separation system and slurry circulation system are used to increase efficiency and reduce the environmental impact.

MULTI-FUNCTIONALITY

With optimum productivity in mind, the SX series has the potential for dual use thanks to both milling and grabbing slot functions.

TRENCH CUTTER

| MODEL | SX40-A | SX50 |
|---------------|--------------|------------------|
| Output torque | 100*2 kN·m | 100*2/160*2 kN·m |
| Wall Width | 800-1,500 mm | 800-1,500 mm |
| Wall Depth | 80 m | 120 m |

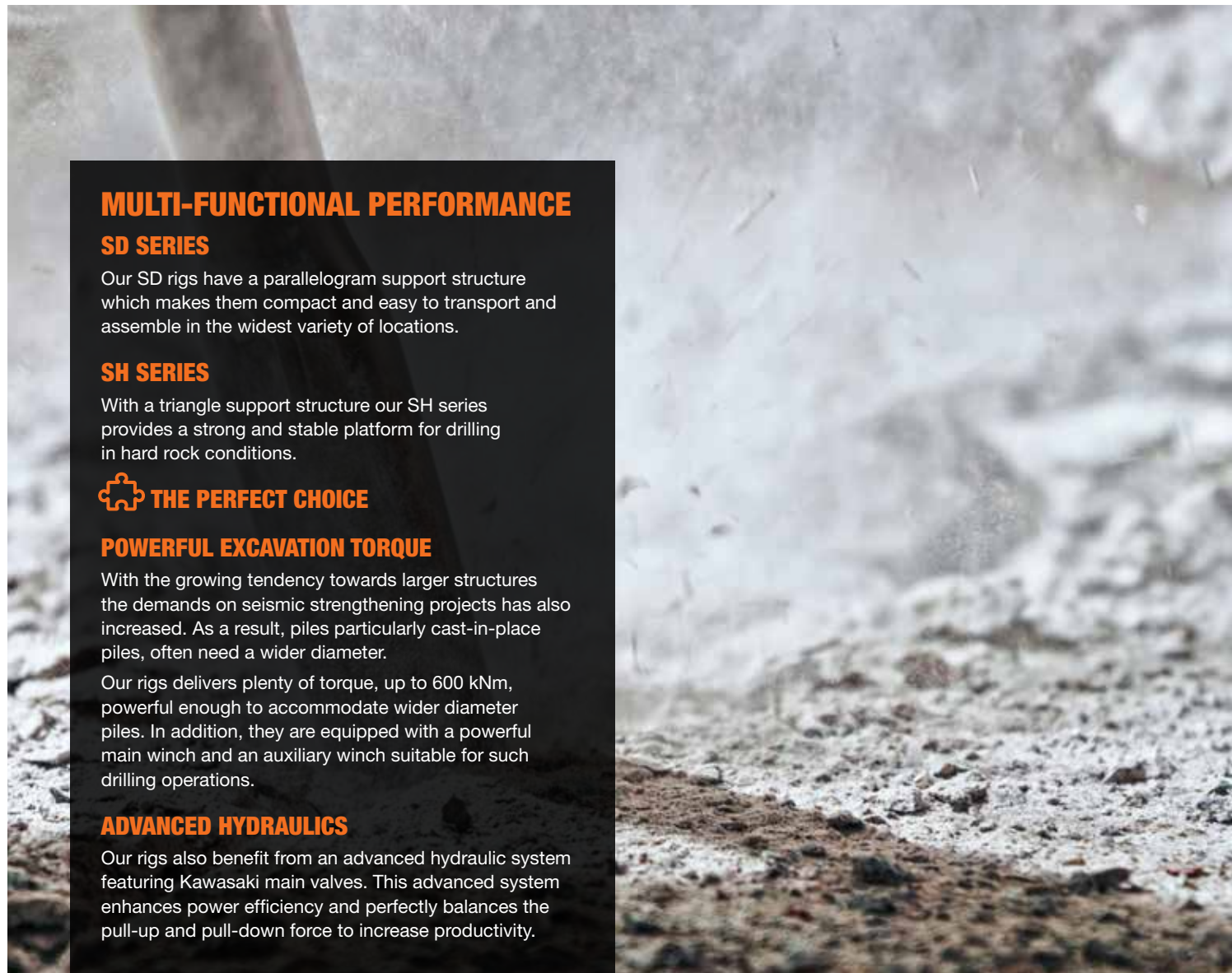
HIGHLY PRODUCTIVE



PILE DRILLING

Drilled or bored piles with or without reinforcement are a common and effective method of foundation building where weight bearing columns transfer their load down to layers of soil or rock.

Whatever drilling method is selected for the site, whether it is Kelly drilling or the popular Continuous Flight Auger Drilling, our SD and SH range of drilling rigs excel in delivering flexible pile drilling performance with speed, accuracy and efficiency.



MULTI-FUNCTIONAL PERFORMANCE

SD SERIES

Our SD rigs have a parallelogram support structure which makes them compact and easy to transport and assemble in the widest variety of locations.

SH SERIES

With a triangle support structure our SH series provides a strong and stable platform for drilling in hard rock conditions.

THE PERFECT CHOICE

POWERFUL EXCAVATION TORQUE

With the growing tendency towards larger structures the demands on seismic strengthening projects has also increased. As a result, piles particularly cast-in-place piles, often need a wider diameter.

Our rigs delivers plenty of torque, up to 600 kNm, powerful enough to accommodate wider diameter piles. In addition, they are equipped with a powerful main winch and an auxiliary winch suitable for such drilling operations.

ADVANCED HYDRAULICS

Our rigs also benefit from an advanced hydraulic system featuring Kawasaki main valves. This advanced system enhances power efficiency and perfectly balances the pull-up and pull-down force to increase productivity.



| PILING RIGS | |
|---------------|---------------------------|
| MODELS | SD SERIES AND SH SERIES |
| Rotary Torque | Min. 250 kNm Max. 600 kNm |
| Max. Diameter | 3.5 m |

INCREASED STABILITY AND EFFICIENCY



REINFORCED CAGE INSTALLATION

Positioning steel reinforcement cages into excavated piles and diaphragm walls requires speed, control and precision. Time wasted in this sensitive operation can delay and add cost to the overall project.

Mobility and power. Combining highway mobility with heavy lifting power, LiuGong truck cranes feature superior lifting and stability. Easy to operate – easy to maintain – our truck cranes provide a cost-effective way to get reinforcement cages in place.



MEET THE HIGH LIFTING TEAM

Over high-speed highways or on rough roads, our truck crane team gets on site and working fast.

8 TO 130 TONNES CAPABILITY

With strong lifting capacity a maximum lifting height of 105m, our cranes have the power and the reach to really make a difference. Cages can be speedily and accurately lowered into position thanks to our world-class hydraulics system.

COMPACT AND STABLE

No matter how confined the space, our truck cranes provide unbeatable stability thanks to their small footprint, ultra-long outrigger span and counterweight. Fuel efficient lifting power, stability and sensitive hydraulic control, our trucks cranes have it all, but we go further.

★ HIGH-CLASS OPERATING ENVIRONMENT

TRUCK CRANE

| MODELS | TC250A4-TC1300C7 |
|------------------------------|------------------|
| Rated Power | 285-460 hp |
| Max. Lifting Capacity | 25-130 t |
| Length of Full extended Boom | 34-73m |



SUPERIOR LIFTING PERFORMANCE



CONCRETE CASTING

Casting concrete piles and diaphragm walls onsite requires speed and efficiency. We have a perfectly matched team of machines that can mix, transport and pump high-quality concrete to where you need it.

Let's meet the team.

HIGHLY EFFICIENT BATCH PLANTS

High-quality concrete produced onsite or at a distance, is vital to the casting process. Our range of high capacity batch plants are designed for easy transportation, fast installation and the highest quality productivity.

TRUSTED COMPONENTS

For proven reliability world-class components such as Sicoma, Airtac and Cimei are used in all the key systems.

CONCRETE BATCH PLANT

| MODELS | HZS25A-HZS180A | HYS35A-HYS75A |
|-------------------|----------------|----------------|
| Type | Mobile | Stationary |
| Productivity | 25 -180 m³/h | 35-75 m³/h |
| Aggregate Hoppers | 3*6-4*30 m³ | 2*12-2*15 m³ |
| Mixer Power | 22-2*55 kW | 2*18.5-2*30 kW |

STABLE, RELIABLE CONCRETE MIXERS

Built for stability and reliability our concrete mixers use world-class components from Sinotruk & Danfoss.

CONTROL AND EFFICIENCY

To ensure a fast and efficient casting process our mixers use double screw blades to provide a perfect mix and to provide a continuous and controllable discharge, without segregation.

HIGH CAPACITY

With a large diameter hopper, they have the capacity to get the job done right without spillage. Easy to clean, easy to maintain and safe for the operator to use our mixers always deliver.

TRUCK MIXER

| MODELS | CLGTM306E-CLGTM412E |
|-------------------------|---------------------|
| Drum Geometrical Volume | 11.8-19.2 m³ |
| Drum Agitating Capacity | 6-12 m³ |
| Water Supply | Pneumatic Pressure |

FAST, EFFICIENT PUMPING SOLUTIONS

For concrete piling and reinforced caging, we offer a range of pumping solutions which perfectly complement our cement mixers. Using the Tremie method, excavated piles are filled using 2 pumps for maximum speed and efficiency.

MEET OUR TRAILER PUMPS

Our trailer pump and concrete mixer solution provides a highly competitive option for a wide variety of sites where high levels of mobility are not required. With a maximum pouring height of 135m this powerful team delivers a consistent and high-quality result.

TRAILER PUMP

| HBT8018132E | HBT6013132E/ HBT8018186E | HBT8018132E |
|---------------------------------|------------------------------|------------------------------|
| Engine/Motor | Diesel | Electrical |
| Max. Concrete Output (L/H) | 60/38-80/45 m³/h | 60/38-80/45 m³/h |
| Max. Concrete Pressure (L/H) | 8.4/13.5-10/18 MPa | 8.4/13.5-10/18 MPa |
| Concrete Cylinder Bore & Stroke | Φ200×1,400- Φ200×1,800 mm | Φ200×1,400- Φ200×1,800 mm |

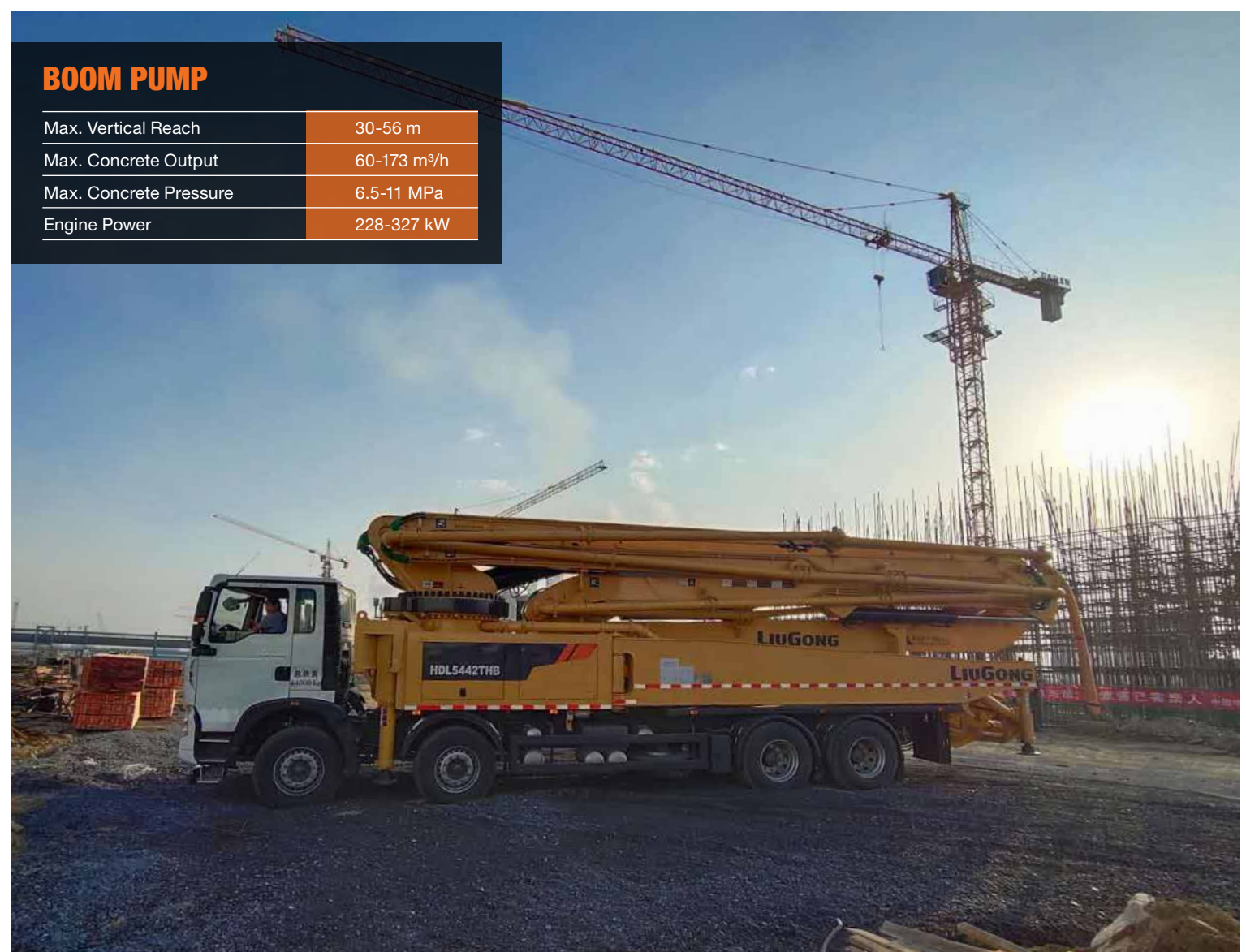
MEET OUR BOOM PUMPS

Our boom pump and concrete mixer team offer a more flexible solution for larger projects where high-volume pouring, speed and mobility are required at a maximum pouring height of 62m. No matter which solution you choose, you'll find that our pumps and concrete mixers complete the piling process on time and on budget.



BOOM PUMP

| | |
|------------------------|-------------|
| Max. Vertical Reach | 30-56 m |
| Max. Concrete Output | 60-173 m³/h |
| Max. Concrete Pressure | 6.5-11 MPa |
| Engine Power | 228-327 kW |



RAPID & EFFICIENT PRODUCTION

BACKING YOU EVERY STEP OF THE WAY

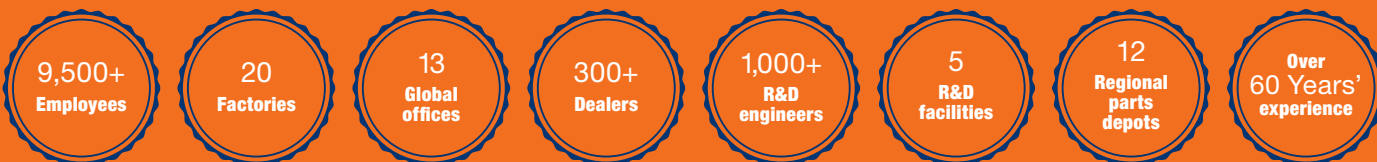
Delivering superior operational performance and project cost efficiency is about having the right advice – the right machines and the right support.

A GLOBAL SUPPORT NETWORK

Wherever you are in the world you can trust our LiuGong and Jintai service teams to keep your machines working and earning. With over 300 dealers, 17 parts distribution hubs and over 4,000 highly trained service technicians using the latest diagnostics and telematic intelligence, we are at your service, wherever you may be.



WE ARE LIUGONG. WORKING HARD TO KEEP OUR GLOBAL CUSTOMERS EARNING



ONSITE SUPPORT

Depending on your location, we can have a fully equipped mobile response team with parts, tools and diagnostic equipment at your site within 2 hours for fast repairs, maintenance and updates.

PROTECTING YOUR INVESTMENT

Operational performance is about getting the most from your machine. We help you achieve long-term value by working with you to create a upgrade and modification plan allowing you to maximise the value of your machines – now and in the future.

SUPPORTING YOUR PEOPLE

We know that a skilled operator will get more performance and productivity from a machine and cause less wear and damage. We provide comprehensive operator training to make sure your operators get the very best experience.

In addition, our service experts provide different levels of maintenance and service training to help you develop an in-house service capability.



**Right parts.
Right price.
Right service.**

**Above all,
we get it right
the first time.**

1st

IT ALL ADDS UP

In foundation construction you can trust our LiuGong and Jintai team to deliver.

We give you a full range of machines designed to give the highest levels of performance and economy all backed up by comprehensive support and expert advice. From tendering to completion our team is with you every step of the way. Add up the benefits and you will see that we give you the formula for success.



SUPERIOR OPERATIONAL PERFORMANCE

+

PROJECT COST EFFICIENCY

+

TECHNICAL SUPPORT & FLEXIBILITY

CUSTOMER SATISFACTION

TRUST OUR EXPERTISE



TOUGH WORLD. TOUGH EQUIPMENT.

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