

### **CRANES**

## REACH PEAK PERFORMANCE WITH HYVA



# COMPLETE SOLUTIONS, CUSTOMISED TO YOUR NEEDS



Hyva is a leading global provider of innovative and highly efficient transport solutions for the commercial vehicle and environmental service industries. The company is committed to the development, production, marketing and distribution of solutions used in hydraulic loading and unloading systems on trucks and trailers. Its products are used worldwide across a range of sectors including transport, construction, mining, materials handling and environmental services providers.

Founded in 1979, the company is headquartered in Alphen aan den Rijn in The Netherlands and operates in more than 130 countries with over 2,500 employees around the world. The Hyva Group, encompasses 37 subsidiaries globally, with

an extraordinary sales and service coverage and 12 production facilities in Brazil, China, Germany, India, and Italy,

Hyva is one of the largest global manufacturers of cranes and related equipment, with a complete range of easy-to-use solutions for simple and compact uses as well as the most heavy duty tasks. The series features a class lifting capacity from 1 to 165 tonne metre and different crane architectures, including compact, telescopic, articulated, rolloader and linkage-equipped models. We also provide a vast variety of accessories that allow our cranes to be easily adapted for diverse applications.

#### **NEW PRODUCT DEVELOPMENT**

Our concept to field approach assures that every solution is expertly designed with cutting-edge technology and extensive structural verification techniques to meet precise specifications, while prototypes are rigorously field-tested in real, day-to-day operating conditions to guarantee operational durability and effectiveness. Our commitment to your success extends beyond delivery through a series of comprehensive training and feedback programs that prepare your team to make the most of our purpose-built solutions.



#### **3D DEVELOPMENT**

Our research and development department uses a state-of-theart 3D CAD system to model each individual component of the crane and assess adequate functional geometry for all movements.







### FINITE ELEMENT METHOD (FEM)

Finite Element Method (FEM) facilitates the detailed analysis of the crane's structure as well as loading conditions and helps achieve strength-to-weight optimisation at the design stage.

#### **OUR PRODUCTION PROCESS**

Hyva cranes are manufactured at our dedicated facilities in Italy and Brazil, which have been equipped with best-in-class technologies to support our lean manufacturing processes and high standards of ergonomics and precision. Every stage of the process is actively monitored to ensure each crane adheres to exact specifications as well as our world-renowned quality standards.

#### HIGH STRENGTH SPECIAL STEEL

The robustness of our cranes is achieved using high performance and extra high-strength steel, which is sourced from trusted, market-leading partners such as SSAB. The high-tensile steel reinforces the flexibility and performance of structural components, which maximises the load capacities of the vehicles on which the cranes are installed.

# EXCEPTIONAL DURABILITY AND PROTECTION

The structure of our cranes is fortified using a number of cutting-edge methods, including sandblasting and cataphoresis for superior protection against corrosion. Once these protective treatments have been applied, the cranes are immersed in high quality paint to achieve a flawless coat that is checked for thickness and consistency. This 'dance of colours' is conducted in a quarantined space devoid of impurities and with thoughtful consideration to environmental factors.

## ADVANCED AUTOMATION FOR CONSISTENT QUALITY

We deploy a range of purpose-built equipment for the preparation of structural parts, such as a laser cutting machine for crafting components with negligible margin of error and advanced nesting tools to minimise production time and waste material. Our innovative techniques include the use of a single weld seam to secure the crane's extension, significantly reducing the possibility of breakage. The welding process utilises a fully programmed robot and high-tech masks to guarantee consistency throughout production.

## INTEGRATED QUALITY CONTROL

Whether it be design, functionality, efficiency or endurance, our cranes are produced to meet the highest standards of quality in every respect. This is achieved by incorporating strict controls and quality checks throughout the production process, from the verification of components to dimension control and field testing. Cranes are only delivered to our customers once all assessments have been qualified and final checks completed.



#### PROTOTYPE PRODUCTION

All components are thoroughly assessed for compliance with design specifications before the prototype is assembled in a dedicated area. The entire process is documented so that it can be optimised for the production phase.



#### **TESTED IN ALL CONDITIONS**

The prototype is fatigue-tested in different positions and working conditions for up to 600,000 loading cycles, simulating 10 years of regular use, while being computermonitored to detect any operational inconsistencies.



#### **FIELD TESTS**

Expert users test the crane in real, day-to-day operating conditions, directly communicating any feedback to our team for further enhancements. Cranes are only launched once the extensive field testing programme is complete.



#### LOADER CRANES



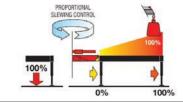
Hyva loader cranes are the preferred choice across more than 130 countries worldwide given their remarkable ease of use, operational efficiency and cost effectiveness. A comprehensive range of models with loading capacities of up to 165 tonne metre and vast variety of extensions ensure that our loader cranes are well-suited to versatile applications in construction, oil & gas, mining, waste handling, logistics, gardening, power generation, maintenance and building industries.

#### **FEATURES**



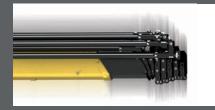
## **EES** – EXTRA EXTENSION SPEED

to optimise speed without compromising on safety. This is achieved by a special regenerative valve that recycles oil during extension for increased efficiency.



## **SCS** – STABILITY CONTROL SYSTEM

All eight stability control systems are optimised to crane characteristics, such as lifting capacity and architecture. SCS assures cranes only operate when optimal stabiliser positions are achieved. SCS is standard on CE cranes with lifting capacities of over 1000kg and are optional for non-CE cranes



### **SDS** – SMOOTH DESCENT SYSTEM

The Soft Descent Drive system utilises a special counter-balance valve to minimise boom oscillation. This grants the user perfect control over crane motions as well as enhanced safety and damage prevention.



#### LAS – LIFTROD ARTICULATING SYSTEM

Most models are fitted with LAS, which enables them to adopt a broad array of working positions. The system uses a durable double linkage to raise the mechanical advantage of the articulation, facilitating high adaptation with negative angle as well as constant capacity in all positions.



## LCS – LIFT CONTROL SYSTEM

This feature automatically adjusts the speed of the crane for heavier loads while maintaining smooth, continuous motion, which offers the benefit of improved safety, efficiency as well as an up to 10% increase in lifting capacity.

## P-LCS – PROPORTIONAL LIFT CONTROL SYSTEM

P-LCS is an advanced system that fortifies the crane's ability to manage heavy loads by reducing the speed of the boom's motion in proportion to the weight of the load. This allows the lifting capacity to be extended by as much as 15%

#### **CUTTING-EDGE INNOVATIONS**



#### **MAGIC TOUCH**

A graphic display which allows the driver to automatically fold (from any position to transport position) and unfold (to working position) when required. This easy-to-use function improves driver attention, promotes safe operation and enhancing productivity by saving time.



## **DYNAMIC**LOAD DIAGRAM

The Dynamic Load Diagram offers impeccable precision while minimising risk, allowing operators to easily determine accurate crane lifting capacity.

Electronic sensors determine truck stability based on a 360-degree evaluation of truck characteristics as well as beam positioning. An intuitive graphic illustrates the crane's available outreach capacity for the selected load in addition to the exact boom slewing position.





#### **HA SERIES**

#### Compact Telescopic - From 1 to 3 tonne metre

HA telescopic cranes pack incredible power and endurance in a highly compact and light design. The range is additionally equipped with electro-hydraulic power packs that enable the cranes to be installed in special locations, such as where no power take-off is available or stationary mounting is necessary. The HA series is the go-to range for customers in need of a compact, easy to use and adaptable solution.



#### **HT SERIES**

#### Telescopic - From 5 to 24 tonne metre

The HT series of telescopic boom cranes have superior strength, given their high lifting capacity and rigid structure. They are also conveniently compact, with their four hydraulic extension cylinders positioned adjacent to the boom in order to optimise crane height. The compact, light and easy-to-operate nature of the cranes, combined with their strength, make them ideal for car recovery and simple loading applications.



#### **HV SERIES**

#### V Line Articulated – From 3 to 22 tonne metre

The HV series of compact articulated cranes strike the perfect balance between cost effectiveness and peak performance. Simple to use yet capable of hard work, these cranes are available in seven different lifting capacities.



#### **HB SERIES**

#### Articulated - From 3 to 70 tonne metre

Known for its extensive versatility and user-friendliness, this range of basic articulated cranes have a lifting capacity range from 3 to 70 tonne metre. HB cranes are simple and low-weight given their light booms and extensions as well as lack of linkages. However, their articulate geometry and top-of-range components make them perfectly robust and flexible for wide-ranging applications.



#### **HBR SERIES**

#### Articulated - From 30 to 60 tonne metre

The HBR series is the natural choice for tough applications that require especially high functionality and robustness. The large articulated cranes remain constant in all boom positions, and are available with manual or radio controls for enhanced flexibility.



#### **HC SERIES**

#### Articulated LAS - From 8 to 165 tonne metre

The high-performance double linkages and innovative variations and accessories make the HC series our best-in-class articulated cranes. Equipped with long outreaches (with a broad range of hydraulic extensions available), negative 2nd boom angle and high precision positioning capability, HC cranes are well-suited to diverse uses, including challenging loads that require absolute precision and high lifting capacity.





#### **HCe SERIES**

#### **Endless Slewing**

HCe cranes are equipped with endless slewing, which allows them to operate in an unrestricted radius of action. These models utilize hydraulic gear motor for rotation, as opposed to a rack and pinion slewing. This not only speeds up cycle times, but also boosts the cranes' ability to operate regardless of the vehicle's position. The robust structure of these cranes further contributes to lifetime value, with the ball bearing slewing system scarcely requiring maintenance in exchange for a longer service life.



#### **HCK SERIES**

#### 'Kompact' Boom

The 'K' line of HC cranes are fortified with a 'K' boom. The shorter second boom makes it easier for the cranes to manage high loads, increasing their lifting capacity. K cranes can conveniently fit inside short truck bodies and are augmented by many signature features including Extra Extension Speed (EES), Smooth Descent System (SDS) and Liftrod Articulating System (LAS).





#### SPECIAL APPLICATION CRANES

Our ability to keep up with the latest market demands and local requirements is what makes Hyva a leading global manufacturer of cranes. With an advanced R&D department and an entrenched global presence, Hyva is at the forefront of developing new solutions to cater to the evolving nature and demands of crane applications across various industries and geographies.

#### **FFB**

Our FFB line of cranes is uniquely engineered to support advanced applications in agriculture. By automating various costly manual processes, the cranes boost the productivity and efficiency of fruit collection and also improve the speed and safety of harvesting activities.

Customers can choose from a variety of models as well as a dedicated range of accessories, including hooks, forks, grabs and augers, to adapt the cranes for their selected tractors and harvesting procedures.

FFB cranes have a distinguished reputation for their strength, reliability, safety and ease of use. Built in accordance with the EN12999 ISO9001 standards, each model features a modern structure that is fortified with an internal extension cylinder on the HB50 FFB model. The entire range has been extensively field-tested under the toughest conditions, including off-road and hilly terrains, high temperatures, humidity and frequent rains, for proven resilience across several repeat daily cycles of routine processes and intense applications.

#### HA-MB

The Hyva Man Basket (HA-MB) cranes are especially tailored for maintenance and repair works. A fibreglass basket at the head of the crane safely positions a worker to perform a wide range of tasks at a height of up to 14 meters, with proportional speed control bolstering precision and flexibility.

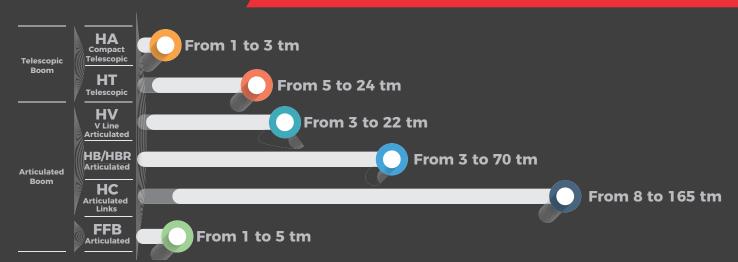
Available in two different models, HA-MB Telescopic cranes are able to accommodate a combined crane and basket weight of up to 1300 kg despite their compact dimensions and lightweight design. Controls are conveniently positioned near a dedicated control bank, with the added ability to manage stabilisers via radio remote. Other features include a special 'self-aligning' balancing system, that allows the basket to be constantly positioned horizontally without any intervention from the user.

The specialist crane can be further equipped with a range of custom accessories including a load limiting device, extra extensible stabilisers and turning stabiliser legs.





#### **PRODUCT RANGE**





#### **NEW CONTROL STATION**

is designed to incorporate the most ergonomic working position, user-friendly interface and smooth management of crane operations.

#### **KEY FEATURES**

**7" colour display**Quick, intuitive and effortless access to all functions and information.

#### Vertical stabilisers levers

Ergonomic design for enhanced ease of use, responsiveness, safety and supervision of stabilising operation.

#### Crane controls

Low and horizontal positioning of levers maximises comfort and convenience.









#### **HOOK CLEARANCE**

The powerful hook clearance function allows loading at significant height and proximity to the column, boosting payloads for considerable gains on performance.



#### TOP SEAT

Top seats across the range are ergonomically designed to maximise comfort. Customers can also opt to have the seat equipped with hydraulic lift and descent.



#### **DOUBLE RACK AND PINION**

Every model over 11 ton/meters is fitted with a double rack and pinion system which amplifies the torque and resilience of the crane regardless of the angle of elevation.



#### **LINKAGE**

For consistent loading speeds across the working area, foldable cranes with capacities of up to 10 ton/meters are equipped with a linkage system on main boom.



#### **CHAIN SYSTEM**

Each crane is fortified with an advanced chain system that boosts efficiency by delivering outstanding speed with minimal heating and friction.



#### **HEAVY DUTY**

Designed in accordance with the European standard EN12999, the cranes are built to withstand extreme temperatures and working conditions. High value retention is achieved with simplified maintenance.

#### **RECYCLING CRANES**

The HZR series are especially designed for the highly variable and demanding nature of scrap and container handling applications. In addition to their high speed and robust design, the cranes are also valuable for their unique flexibility and ease of installation across different vehicle types and mounting needs.





#### **HZR LO**

Improved speed and reliability is achieved with the ability to park the boom on the body. An articulation cylinder over the boom supports damage protection.



#### HZR L1

In addition to superb hook clearance, the L-shaped geometry of this model accommodates an extendible main boom that facilitates quick and precise movements.



#### HZR ZO

The compact structure of the crane can fold in transport position and maximise truck loading, offering improved versatility as well as lifting capacity.



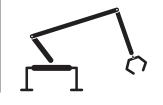
#### HZR Z1

Optimal versatility and robust performance is achieved with a foldable structure as well as an extendible main boom propelled by an internal double effect cylinder.

#### **TIMBER CRANES**

The HZT cranes guarantee the endurance and reliability that is pivotal for smooth, balanced operation in forestry. The cutting-edge design of their structural and hydraulic components facilitates top speed performance regardless of the size and weight of the load. An ergonomic top seat and intuitive controls assure complete user safety as well as easy crane manoeuvrability through even the toughest and most unpredictable terrains.





#### HZT LO

The ability to park the boom on the body improves speed and reliability. An articulation cylinder over the boom secures the structure from accidental damage.



#### HZT ZO

These cranes optimise truck loading with the ability to fold in transport position, offering greater flexibility as well as lifting capacity.



#### **ROLLOADER CRANES**









## ENHANCED MOBILITY FOR OPTIMISED PAYLOADS

Cutting-edge design optimises the rolloaders' mobility and functionality, offering significant gains on time, effort and efficiency. The ability to manoeuvre the cranes close to loading points eliminates the need to reposition trucks while loading. The cranes can also be conveniently transferred between trailers and semi-trailers, boosting payload proportions per assignment. With a chassis less than 1.5m long, the maximum length of payloads is never restricted by our rolloader cranes, making offloading easier than ever.

## BUILT TO PUSH THE LIMITS FORTIFIED FOR HEAVY LIFTING

Their robust and agile build guarantees that no load is too cumbersome for our heavy duty rolloader cranes. From building materials to timber, heavy equipment, glass and rails, Kennis rolloader cranes can adeptly handle a broad variety of loads regardless of size and shape. Special features include a heavy-duty protection plate that secures the load when the vehicle is moved, as well as foldable stabiliser legs that make lifting bulky loads easier than ever.

## SAFE AND SECURE TOP SEAT FOR EFFICIENT OPERATION

All Kennis rolloader cranes are equipped with a comfortable top seat which is securely positioned at a comfortable height to offer strategic visibility of the loading platform while limiting the risk of blind angles. Standard models are fitted with five levers and two pedals, with the possibility of adding up to two more pedals as well as two joysticks.



## **ALL-IN-ONE**KENNIS STABILITY SYSTEM

The custom-built Kennis stability system combines the power of side extension cylinders and stabiliser legs to present extraordinary stability and resilience. All Kennis stability control systems are compliant with the European standard EN12999. Customers can choose between two variants – the KSS-01, which positions the stabiliser on the ground, on either side of the truck, and the KSS-02, which has inclination sensors that can dynamically adjust the crane's lifting capacity based on its operating position.



#### COMPACT STRUCTURE FOR HASSLE-FREE STORAGE

The compact structure of the Kennis rolloader cranes allows it to be easily folded and stored in nominal space, while the minimal tare weight efficiently amplifies payload capacity.







#### **WARNING LIGHTS**

Cranes equipped with radio remote control feature two warning lights in a visible area to inform the operator when maximum lifting capacity is approached. In keeping with CE rules, a warning light is also installed in the cabin to indicate if the manual stabiliser beam is open.



#### **OIL COOLER**

A large exchanging surface and an electric fan enables the oil cooler to reduce the temperature of the oil and prevent overheating in the hydraulic circuit of the crane. This facilitates precise movement, longer seal life as well as longer pump and valve life.



#### **WINCH**

The compact dimensions, low weight, high power and unrivalled safety makes our winches the best in the market. Stainless steel components strengthen their resistance to corrosion while a wide range of accessories extend their applications.



#### **BRICKS CLAMP**

Brick clamps enable safe and efficient handling of building materials and pallets. Customers can choose from a wide range of attachments for this purpose which can be easily installed on our various cranes.



#### **TOP SEAT**

Available in a medium as well as large size, the top seat makes it possible for the operator to control crane operations from an elevated position using control leversthatare ergonomically attached to the seat.



## STAND UP PLATFORM

The platform can be securely attached to the base of our cranes, enabling the operator to use the machine while standing. Our CE cranes are also equipped with a safety device that prevents the boom rotating over the stand up platform when the accessory is in use.





#### Tipping Solutions | Container Handling | Waste Handling | Cranes

130 countries +3,000 employees 25,000 customers 37 subsidiaries 12 production facilities



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For more information on Hyva, please visit www.hyva.com

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