

# Hiab XS 477 Range 40-44 tm



Product brochure



# A powerful solution



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# The HIAB XS 477

The HIAB XS 477 is a powerful solution for efficient load handling. An outreach of over 21 metres, 6.5, 7.0 and 8.0 metres stabilizer span options, and intelligent electronics provide you with a crane second to none. The model is available with two different boom systems, either extending your capabilities of reaching higher up and further out. Chose either our regular boom system

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with up to 8 extensions, or, if your needs include handling big, bulky loads at close quarters consider opting for the P-boom system, available with up to 5 extensions. To enhance lifting performance the crane is equipped with a powerful E-link system, retaining maximum lifting capacity when working with a straight boom system or when handling of loads close to the column. The HIAB XS 477 is delivered with a Duo, HiDuo or HiPro control system.

#### E-link

An inner boom link makes it possible to lift a heavier load close to the column, and the outer boom link helps in lifting to higher positions such as scaffolding.

#### Load-holding valve

The load-holding valve is a combined hose-failure and load-holding valve which is mounted on the cylinder.

#### VSL

Thanks to the VSL function drivers can give their full attention to driving the crane. The crane's intelligent system (SPACE) automatically takes care of the stability – something that improves safety for you and those around you.

#### **High-torque slewing**

A heavy-duty, high-torque slewing mechanism ensures safe and efficient operation even on inclines or slopes.

#### X-function

Angling the outer boom upwards relative to the inner boom gives greater accessibility in confined spaces.

#### Hoses internally

The hoses are routed internally in the loader body, also in other parts of the crane, where they are out of harm's way, thus reducing maintenance costs.

#### Oil bath

Keeping the slewing mechanism in an oil bath provides smooth and precise slewing. Reduced wear on the mechanism keeps repair and service costs to a minimum and also guarantees a longer crane life.

#### Hexagonal boom profile

The hexagonal profile ensures the boom is always in perfect balance, thanks to its shape and large support surface. The profile also minimizes boom deflection, which reduces maintenance costs and increases efficiency.

#### Side supports for stability

Side supports fitted on each boom extension stabilize the boom laterally and minimize the play. Most Hiab crane models can be delivered with extension side supports.



#### JIC couplings

JIC couplings are standard on most Hiab cranes. They ensure easy and secure coupling, but are still very simple to disconnect for service.

#### Large slide pads

The hexagonal profile enables the use of larger slide pads. This makes the extensions move more smoothly and reduces mechanical wear on the boom.

#### Attachable tools

A wide range of attachable tools are available for your Hiab crane. These make sure you can carry out a lot of different tasks.

# HiDuo control system

The HiDuo control system is based upon the renowned Hiab Valve 80. HiDuo comes with the SPACE 4000 intelligence system which intelligently monitors and controls the electronic functions of your crane. These functions are focused on assisting the operator in two aspects, safety and productivity. The HiDuo control system support remote controlling with the XSDrive remote control.

# **HiPro control system**

HiPro is simply the most advanced control system on the truck-crane market today, delivering unrivalled speed, precision and safety. This is achieved by combining the CombiDrive<sup>2</sup> remote control, SPACE 5000 intelligence and Valve 91. Capacity is increased significantly by Automatic Speed Control (ASC). Pump Flow Distribution (PFD) maximizes productivity by ensuring super-smooth operation at all times.

# **Pump Flow Distribution (PFD)**

Hiab cranes can handle the highest oil throughput in the market. But skilled crane drivers, able to operate several functions at the same time, want even more from their crane. And Hiab delivers, with PFD. In situations where the operator is working at the limits and using multiple functions simultaneously, even the largest pump may not be able to supply enough oil. This can result in the crane acting unpredictably, but not if your crane is equipped with PFD. This innovative system distributes the available oil in proportion to the operator's lever movements. All functions will continue to work just as expected with no disturbances or surprises, although you require more oil flow than available. Once full oil flow is restored, it is full speed ahead once again.

PFD has proven extremely useful in practice. Even at an oil flow of 100 l/min, the system activates three times per load cycle during normal use. If you demand maximum convenience and productivity from your crane, you should not settle for less than a crane equipped with PFD.

# Valve 80

The Hiab Valve 80 is a top-of-the-line opencentre valve based on well-proven technique which gives superb reliability. The valve handles large oil flows and provides great precision and ease of operation.





The Hiab Valve 91 represents the pinnacle of valve technology, handling very large oil throughputs. It is a closed-centre, pressurecompensated, load-sensing control valve, providing the operator with finger-tip feel when handling the crane.



#### **XSDrive**

The Hiab XSDrive has been ergonomically developed to relieve you of stress and strain in hands, arms and back. The load indicators provide information for quick and correct actions while work is on-going. There are also a number of accessories that can be added in order to find the ideal control solution for you.



# CombiDrive<sup>2</sup>

With the Hiab CombiDrive<sup>2</sup> you can position yourself at the best possible location when operating the crane. It features 24 proportional and 12 on/off functions for controlling the crane, optional equipment and accessories, all with the same precision.



# Intelligence systems

All electronic functions are managed by a SPACE system, which is a computer devised to intelligently assist you in operating your crane. The SPACE electronics are housed in a 100% weather-proof casing and is extremely reliable and easy to use. On the front of the casing a number of indicators clearly show vital information to the operator. As an example, the pressure in the cylinders is displayed continuously. Observing these indicators proves very useful when positioning the booms for lifting loads at maximum capacity.

The SPACE intelligence system is available in different packages, each one with an increasing number of advanced and productive functions.

All SPACE-packages benefit from the highly advanced Over Load Protection (OLP) system. Productivity functions in the system are Automatic Duty Control (ADC), Automatic Speed Control (ASC) and Pump Flow Distribution (PFD). These functions can be used separately or in combination. A valuable feature for service personnel is that fault code indication and load cycle data is also stored in the system. This can be used for analysis and feedback to the customer as to how he or she uses the crane.

# SPACE 4000 intelligence system

The SPACE 4000 system features Automatic Duty Control (ADC) and the Automatic Speed Control (ASC) function. The ASC function boosts capacity in a smooth, stepless motion and thus gives an edge in load handling and capacity that proves very valuable.

The SPACE 4000 is a part of the HiDuo control system.

# SPACE 5000 intelligence system

The SPACE 5000 system features Automatic Duty Control (ADC) and the Automatic Speed Control (ASC) function. The later function boosts capacity in a smooth, stepless motion and in addition to this Pump Flow Distribution (PFD) ensures super-smooth operation at all times.

The SPACE 5000 is a part of the HiPro control system.



# A jib takes you there

Equipping your crane with a jib gives you yet another degree of freedom. Manoeuvring your load to a roof top or into a narrow passage is no match with a jib.



# **Automatic Duty Control (ADC)**

Automatic Duty Control (ADC), patented by Hiab, is the only fully automatic duty control function on the market. ADC will automatically boost the maximum capacity of the crane with around 10% during regular operation. If the crane registers upward pressure on the boom tip – as is the case when digging or auguring – the capacity will return to normal level. The ADC-function is active in the background at all times – leaving the operator free to fully concentrate on the job at hand, thereby increasing productivity.

# **Automatic Speed Control (ASC)**

ASC gives a stepless increase in lifting capacity of up to 10%. All in one smooth, continuous, stepless motion. This Hiab unique function activates as you reach the regular capacity limit, meaning that you can still lift the load where other cranes would have come to a complete stop. In return for the capacity boost, the speed of the inner and outer boom is slightly reduced.

#### E-link

An E-link system is a kind of lever connection between the column and the inner boom, as well as the inner and the outer boom. This is beneficial when lifting heavy loads straight up to high positions, such as on scaffolding.



#### High boom warning

When the pressure is on and you need to get to the next job fast, mistakes can happen. For example, if a driver forgets to park the crane, the consequences could be serious. In these situations, you'll appreciate a safety function like high boom warning. The SPACE system continuously monitors the boom position. If the crane is left in its upright position, an indicator lamp in the cabin will alert the driver before driving away.



# Productivity at its best

#### Operating your crane by remote control

One of the benefits of Hiab's remote control units is that the crane operator can be positioned at the best possible location when operating the crane. This leads to more efficient, comfortable work and also increases safety. A further spin-off effect is that you can be your own loading assistant positioning yourself next to the load, or wherever the loading assistant should be standing. Tasks will be completed faster and at lower cost.

#### Design innovation – driven by you

Hiab is part of Cargotec, renowned throughout the world for innovation and engineering excellence. The quality and reliability of our cranes are without equal in the truck loader market. But there is another crucial factor in our global success. We have a philosophy of listening, and responding, to the needs of those who matter most – the people who own and operate our cranes. The design and development of every crane we manufacture are customer-driven. This will become really clear when using your Hiab loader crane.

**Cargotec** improves the efficiency of cargo flows by offering solutions for the loading and unloading of goods on land and at sea – wherever cargo is on the move. Cargotec's main daughter brands for cargo handling Hiab, Kalmar and MacGregor are global market leaders in their fields. www.cargotec.com

