



**THE NEW KALMAR 9-18 TONNES  
A TOTAL FEELING OF CONTROL**





*Longer service intervals.*

*Enhanced Kalmar electronics  
with opportunities for total  
customisation of the truck.*

*Choose your driver  
environment: new  
FlexCab or Spirit Delta.*

*New lifting equipment  
with better visibility  
and reduced servicing  
requirement.*

*Improved visibility  
in all directions.*

*Optirev.*

*Optispeed.*

  
DCE 160



## A brand new range of medium trucks

Machines in a league of their own when it comes to driving sensation, smart handling and visibility. Characteristics that together with high quality, long life and simple servicing lay the right foundations for efficient working – with superior overall economy.

The new Kalmar 9-18 tonnes is also easy to adapt to your needs. Choose from a host of unique solutions, where advanced electronics rationalise handling and make it safer than ever – all on your terms.

Welcome to a total feeling of control.

*New electronically  
controlled gearbox  
with several intelligent  
functions.*

*All engines fulfil the latest  
low-emission requirements.*

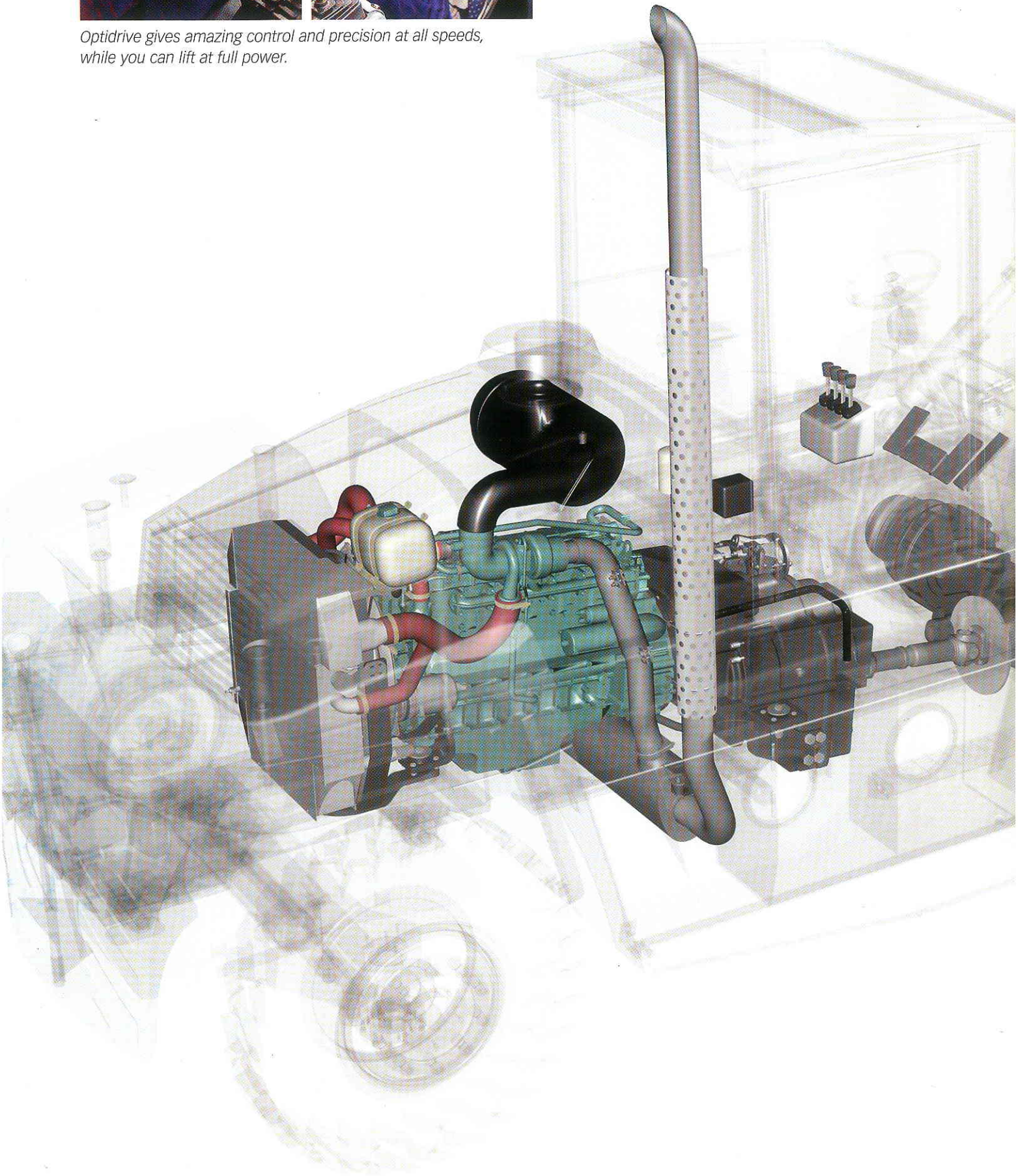
*Heavy duty radiator.*







*Optidrive gives amazing control and precision at all speeds, while you can lift at full power.*







## Unique driving sensation

The feeling of driving the new Kalmar 9-18 tonnes is an experience all its own. The visibility, the comfort and the very low centre of gravity form the basis. The new, electronically controlled gearbox developed in co-operation with Dana offers totally unique opportunities. You can drive gently and precisely at all speeds, while operating the lifting equipment with the same high precision. A monitoring system increases reliability, and the program controlling gear changes is optimised for each individual truck.

There are many different settings, and you can choose exactly the driving sensation you want.

### **Stepless automatic gearbox**

Allows comfortable, efficient, safe driving with better ergonomics. The extremely gentle up and down gear changes are almost completely stepless, and it's equally smooth changing from forward to reverse.

### **Optidrive**

A completely unique new solution that offers extremely high-precision driving and handling of the lifting equipment. You can inch along at an even speed while lifting at full power. The accelerator controls the speed, and the hoist lever governs engine power – completely independently of each other.

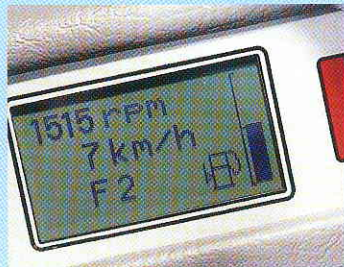
### **Electronic inching**

A totally new development that enables you to precision drive while maintaining high engine revs for the hydraulic functions. Slip control means you can steplessly regulate the speed with the brake pedal while lifting at full power.

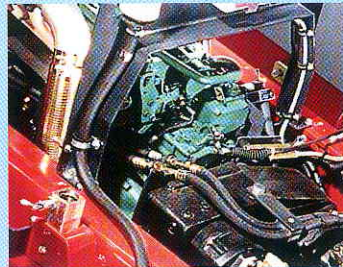




*Improved Kalmar electronics offer unique possibilities for smart handling.*



*Intelligent Optirev reduces fuel consumption, emissions and noise levels.*



*The engines fulfil the latest low-emission requirements.*



*New ORFS couplings provide safe, completely secure hydraulic connections.*







## Smart handling

The new Kalmar 9-18 tonnes is built for fast, safe handling in every way. The drive line, lifting equipment, chassis and driver environment are all finely tuned to one another. All parts work together, and modern manufacture based on modules guarantees consistently high quality. Smart functions unique to Kalmar help further increase efficiency.

### **Optispeed**

A patent-pending intelligent solution that increases unladen lifting speed by up to 50%. When you activate the lifting function Optispeed senses the weight of the load and the engine revs, and produces the maximum lifting speed based on those parameters.

### **Optirev**

A system that takes full advantage of the engine power at every rev, producing the lowest possible fuel consumption, exhaust emissions and noise level. Patent-pending Optirev is an intelligent solution that takes account of the engine revs, the position of the hoist lever and the weight of the load. A variable pump delivers the exact flow needed for any given situation.

### **Load-sensitive piston pump**

A mechanically controlled function which regulates the pressure and flow of the hydraulic oil in relation to the weight of the load. As with Optirev, this produces lower fuel consumption and reduced exhaust emissions.



# Build your own driver environment!

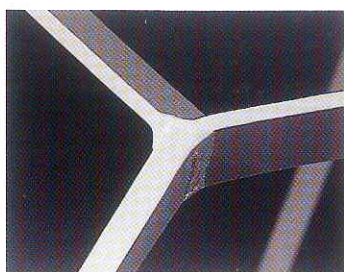
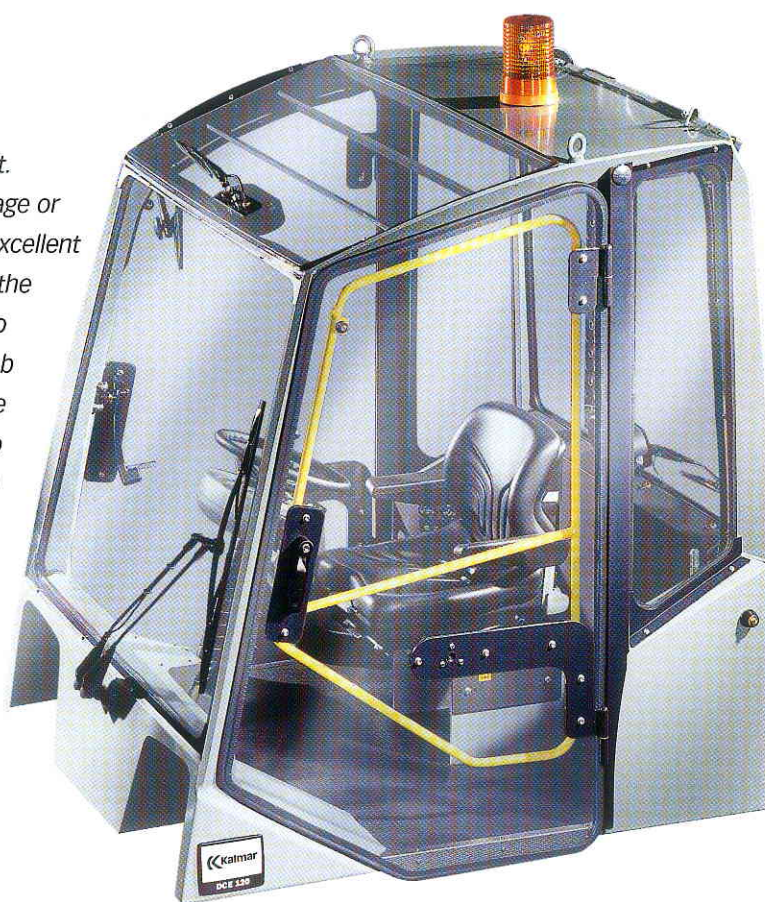
The demands on driver environment vary and depend on many different factors, such as the type of business, the work area and the individual driver. Now you can build your own completely customised driver environment, based on two different concepts:

**Spirit Delta** offers first-class comfort and ergonomics. Simply add the extras that best suit your requirements, from the basic cab design to various accessories for even better ergonomics.

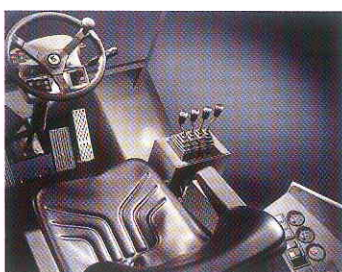
**New FlexCab** can be adapted from a complete cab to an open safety cage. A simpler robust alternative that easily fulfils requirements on visibility, safety and ergonomics.

## *FlexCab*

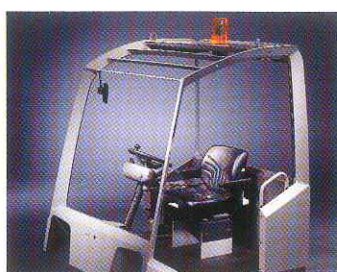
*New FlexCab is what you make it. A covered cab, an open safety cage or just a windscreen – but all with excellent all round visibility. The beams in the cage frame have been profiled to eliminate blind spots, and the cab offers excellent close view to the front. FlexCab can be adapted to the local climate – windows and doors are completely optional.*



*FlexCab has profiled beams for maximum visibility.*



*The interior is spacious and robust, with excellent close view to the front.*



*Open safety cage that can be fitted with windows and doors, even after delivery.*





The steering wheel is vertically and horizontally adjustable.



The instrument panel has a new design and is curved for optimum ergonomics.



The high-comfort seat has 70% better wear resistance.




The electronics are well protected yet easily accessible.

### *Spirit Delta*

*Kalmar has long been a leader in ergonomics and efficient driver environments. Spirit Delta is based on extensive research and offers superior ergonomics with intuitive control over all the truck's functions. Everything is logically positioned and within easy reach. The climate system is effective, and there are a host of possible individual settings and optional extras. Quite simply, Spirit Delta makes for efficient driving.*





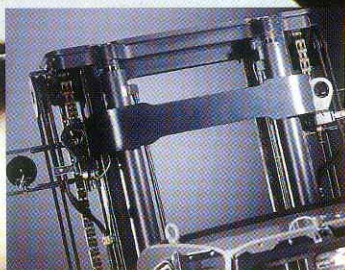


*The bonnet, counterweight and mast have been optimised for the best possible visibility.*



## Visibility is safety

The new Kalmar 9-18 tonnes offers excellent visibility. It does of course fulfil all current and known future requirements. However, it goes further than that. We have paid particular attention to visibility in our development, as it is absolutely crucial to safe, fast handling. Everything that could possibly obstruct the driver's view has been tucked out of the way. The sound insulation is underneath the machine, and the air filter under the bonnet – away from the field of vision. Take a test drive and you'll notice the difference!



*The cross-head in the mast has been made narrower – yet still as strong – for better forward visibility.*



*The air filter is totally concealed under the cab, and the exhaust pipe is positioned for minimum interference.*



*In the way – but not. Smart positioning of hydraulic cylinders, hoses and chains optimises visibility for the driver.*



*Standard service intervals are now 500 hours, which means a full 15% lower running costs.*



*The effective new air filter is easily accessible, and cartridges are simple to replace.*

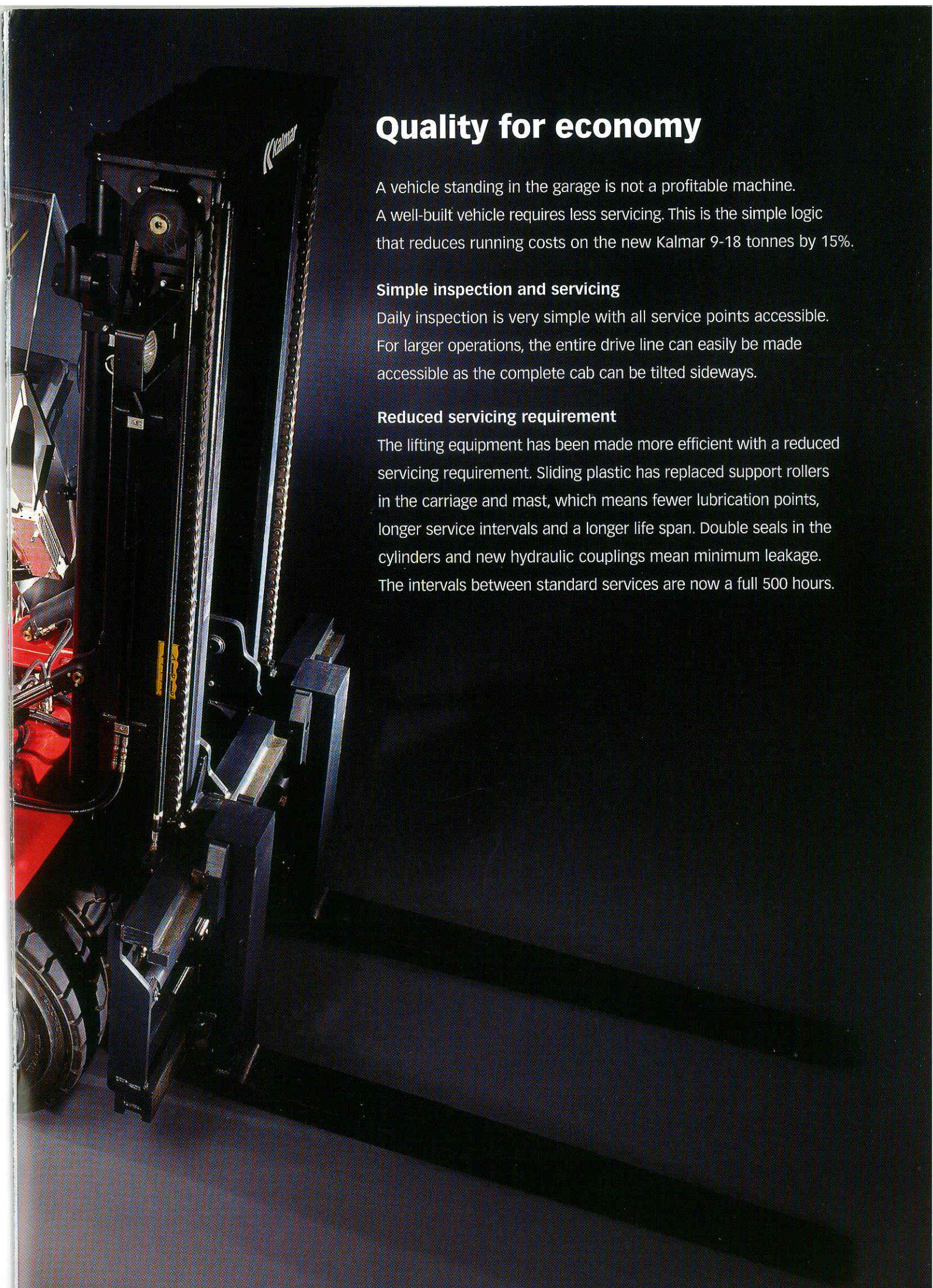


*Sliding plastic in the carriage and mast means fewer lubrication points, lower servicing requirement, a longer life and increased stability.*



*Daily inspection is simple with all service points easily accessible.*





## Quality for economy

A vehicle standing in the garage is not a profitable machine. A well-built vehicle requires less servicing. This is the simple logic that reduces running costs on the new Kalmar 9-18 tonnes by 15%.

### Simple inspection and servicing

Daily inspection is very simple with all service points accessible. For larger operations, the entire drive line can easily be made accessible as the complete cab can be tilted sideways.

### Reduced servicing requirement

The lifting equipment has been made more efficient with a reduced servicing requirement. Sliding plastic has replaced support rollers in the carriage and mast, which means fewer lubrication points, longer service intervals and a longer life span. Double seals in the cylinders and new hydraulic couplings mean minimum leakage. The intervals between standard services are now a full 500 hours.



# Everything you need

Kalmar has a truly comprehensive programme of services for ownership, rental, servicing and much more. We focus on offering the lowest possible ownership cost thanks to simple working solutions tailored to your requirements.

Kalmar is represented worldwide by an increasing number of well-trained dealers. The network has expanded dramatically in recent years, especially in Europe and the USA.

You can find information about your nearest dealer at [www.kalmarind.com](http://www.kalmarind.com)





## The new medium range

| Model designation | Load centre (mm) | Wheel base (mm) | Height/Cab (mm) | Lift height, classified load (mm) | Weight (kg) | Tyres (4/2) front/rear |
|-------------------|------------------|-----------------|-----------------|-----------------------------------|-------------|------------------------|
| DCE 90-6          | 600              | 2750            | 2890            | 5000                              | 15000       | 11.00*20               |
| DCE 100-6         | 600              | 3000            | 2890            | 5000                              | 15300       | 11.00*20               |
| DCE 120-6         | 600              | 3000            | 2890            | 5000                              | 15800       | 11.00*20               |
| DCE140-6          | 600              | 3250            | 2910            | 5000                              | 17000       | 12.00*20               |
| DCE 100-12        | 1200             | 3250            | 2910            | 5000                              | 18900       | 12.00*20               |
| DCE 120-12        | 1200             | 3500            | 2910            | 5000                              | 19700       | 12.00*20               |
| DCE 150-12        | 1200             | 3500            | 2910            | 5000                              | 21600       | 12.00*20               |
| DCE 160-6         | 600              | 3500            | 2910            | 5000                              | 19500       | 12.00*20               |
| DCE 160-12        | 1200             | 3750            | 2910            | 5000                              | 23000       | 12.00*20               |
| DCE 180-6         | 600              | 3250            | 2910            | 5000                              | 22000       | 12.00*20 HD            |



Contact Information:



Make things easy. These three little words symbolise the Kalmar philosophy.

Making heavy things easier to handle is nothing new for Kalmar. The company has over 100 years of experience in lifting and moving heavy objects with our machines in over 140 countries around the world.

But the three little words "make things easy" also encompass another dimension. Kalmar is more than just a machine supplier. Kalmar offers solutions that make life easier for its customers, everything from driver assistance to contract maintenance and fleet management.

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 **Kalmar**

*Make things easy*