

INDUSTRIAL CRANES  
NUCLEAR CRANES  
PORT CRANES  
**HEAVY-DUTY LIFT TRUCKS**  
SERVICE  
MACHINE TOOL SERVICE

**FORK LIFT TRUCKS**

**KONECRANES**<sup>®</sup>  
Lifting Businesses<sup>™</sup>

# 10-65 tons FORK LIFT TRUCKS WITH HEART



What are your requirements?

# THE RIGHT FORK LIFT TRUCK FOR YOUR JOB

Konecranes has hundreds of heavy industry customers around the world and deep knowledge of heavy industry requirements for fork lift trucks. Choose your fork lift according to the weight of the material you need to handle and the diversity of tasks you need it to perform. You will find the right lifting capacity, features, and attachments in our range.





# EXPERIENCE AT YOUR SERVICE

**Konecranes fork lift trucks are remarkably adaptable to industrial material handling. We have a long track record of meeting specialized industrial handling requirements like yours.**

What is your industry? What kind of material do you need to lift and move? Contact us. You'll probably find we have lots of experience in your industry and can provide the ideal fork lift truck.

## Industries we serve

- Steel, aluminum, and mining
- Wood and building materials
- Container ports and terminals
- Transport, shipping, and logistics
- Pulp and paper
- Concrete, bricks, and rock
- Automotive
- General manufacturing
- Oil and gas
- Wind power
- Nuclear
- Waste-to-energy
- Shipyards and marinas

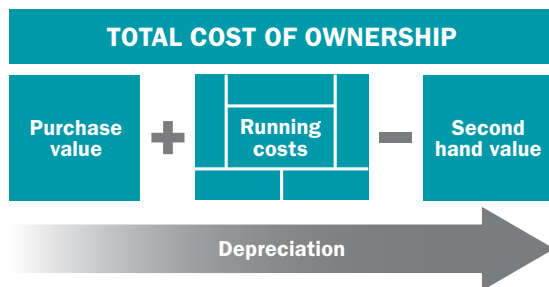


**Made with heart  
in every detail**

# SMARTER WHERE IT MATTERS

**Konecranes has been manufacturing, selling, and supporting heavy-duty fork lift trucks for some 60 years. The first truck we ever made and delivered, back in the 1950s, was a fork lift truck. Buy one from us today and you will get the latest technology, the lowest Total Cost of Ownership, and a fork lift truck made with heart.**

We claim the lowest Total Cost of Ownership with our fork lift trucks, understood as an equation running over a time period of years as shown below. When you're shopping around the suppliers and comparing prices, our truck will probably not be the cheapest. But it will provide the best value over time.



### Close to you

We sell our lift trucks around the world in two main ways: directly via our own sales and service organizations, and indirectly via distributors. In both cases, our fork lift trucks are fully supported with spare parts and personalized service. Konecranes has the widest service reach of any company in the lifting business. And our distributors are some of the most respected in the business.

### Service made easy

To reduce lifetime running and maintenance costs, we have extended the service interval of the engine by 500 hours, the gearbox by 1000 hours, and the hydraulics by 4000 hours.

Our HLL ultra-fine filter system extends the hydraulic oil change interval from 4000 up to 12000 hours. In practice, you will use up to 80% less hydraulic oil than with a conventional hydraulic system.

## GENUINE KONECRANES PARTS

Genuine Konecranes parts are the best protection for your investment. They pay off in truck performance and uptime.

### PARTS ONLINE

> Easy to find, easy to buy

### REAL-TIME SHIPMENT INFORMATION

> You know where your parts are

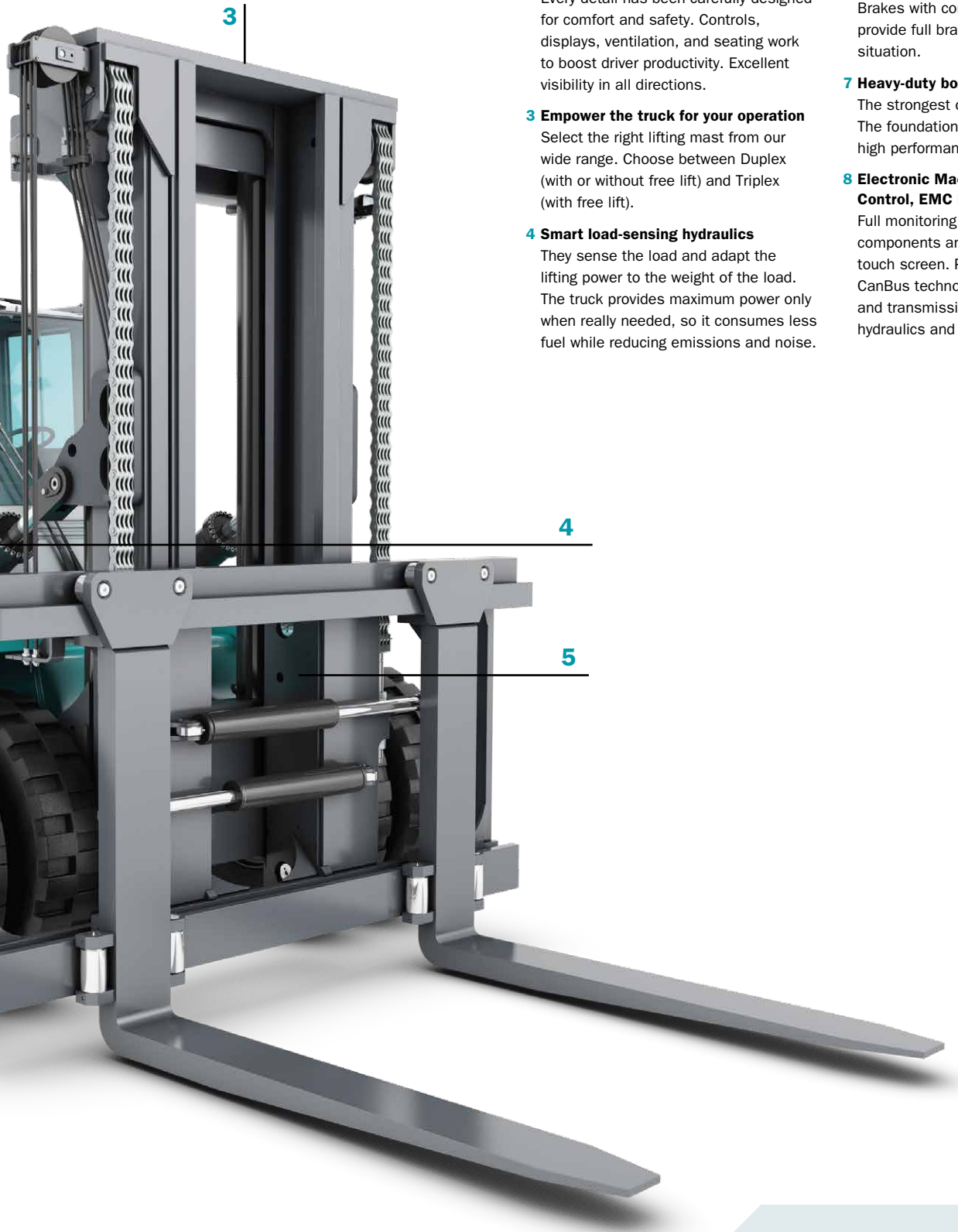
### FAST DELIVERY

> Parts in stock are in your hands within 1–3 days

### PROTECTION BOX

> All the filters you need, in one package





### 1 Powerful engines

Certified low-emission engines provide extra high torque at low revs, reduced fuel consumption, and low noise levels. We offer a variety of engines for EU stage 4 and EPA Tier 4f.

### 2 OPTIMA – probably the best cabin on the market

Every detail has been carefully designed for comfort and safety. Controls, displays, ventilation, and seating work to boost driver productivity. Excellent visibility in all directions.

### 3 Empower the truck for your operation

Select the right lifting mast from our wide range. Choose between Duplex (with or without free lift) and Triplex (with free lift).

### 4 Smart load-sensing hydraulics

They sense the load and adapt the lifting power to the weight of the load. The truck provides maximum power only when really needed, so it consumes less fuel while reducing emissions and noise.

### 5 Quick-change fork system

Different forks, coil rams, other attachments. What do you need to handle? Steel, wood, paper, containers? Something extraordinary? We'll provide the right attachment for the work you need to do.

### 6 Maintenance-free brakes

Brakes with continuous oil cooling provide full braking power in every situation.

### 7 Heavy-duty box-type chassis

The strongest on the market. The foundation of long-lasting high performance.

### 8 Electronic Machine Control, EMC Master

Full monitoring of all the vital components and functions on a 7" touch screen. Programmable settings. CanBus technology increases engine and transmission reliability as well as hydraulics and levers.



# Satisfied customers around the world OUT IN THE FIELD

From Sweden to South Africa, from the USA to Uruguay, from Canada to China, Konecranes fork lift trucks are hard at work across an amazing range of applications and industries.



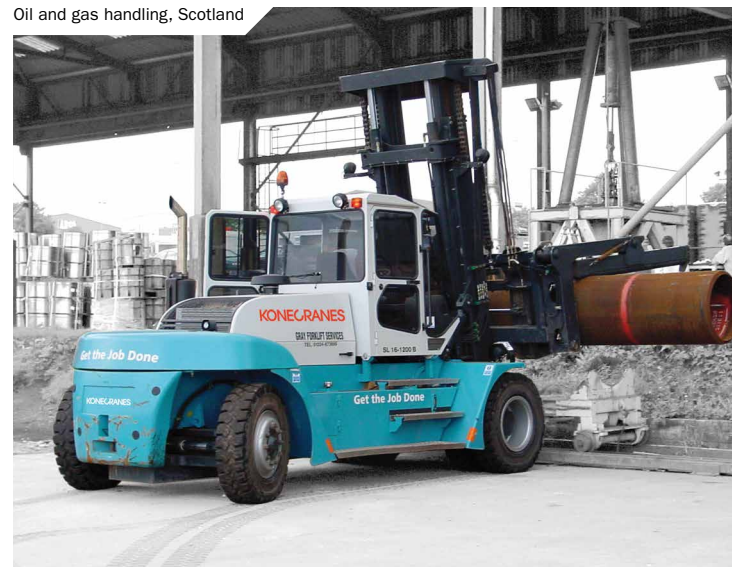
Container handling, United Arab Emirates



Paper roll handling, Finland



Marble rock handling, Italy



Oil and gas handling, Scotland



Pulp and paper handling, Germany



Wood chip handling, Norway



Aluminum handling, Norway



Logistics handling, Australia



Oil and gas handling, Norway



Steel recycling, Finland



Wind power handling, United Arab Emirates



Empty container handling, Germany



# OPTIMA ENHANCED SPACIOUSNESS AND VISIBILITY

## Customized for your container handling needs.

When you step inside OPTIMA cabin, you find outstanding spaciousness and superior visibility. That makes operating the lift truck safe and efficient, along with valuable extra equipment.

The remarkable visibility is made possible by very large, lowered windows with no corner posts, thin but very strong roof crossmember, and curved panels. Sightlines to key working areas are clear both in the front, to the sides, and to the rear.

New EMC Master with MD4 7" touch screen enables a more spacious cabin with its integrated solutions. There is also more space for operating the foot pedals.

The positioning of the instrumentation improves operating ergonomics. Instrumentation has been moved from the driver's left side to his right, above his seat, where it is conveniently accessible.

OPTIMA is customizable for your exact operational needs. You can select levers or joystick, mini-wheel steering, lever steering, the driver's seat, and precisely the instrumentation that you need. The cabin can be raised from the standard position by 250 up to 700 mm if required.

### 1 Remarkable visibility

Visibility is very difficult to measure objectively: you just know it when you see it. Sit down in OPTIMA, see what visibility from a lift truck cabin can be.

### 2 Electronic Machine Control, EMC Master

Full monitoring of all the vital components and functions on a MD4 7" touch screen. Programmable settings. CanBus technology increases engine and transmission reliability as well as hydraulics and levers.

### 3 Left armrest lever or mini-steering

Optional, ergonomic steering solutions that improve productivity.

### 4 Ergonomic instrumentation

Whatever extra equipment you need, we can install it as part of an ergonomic instrumentation layout. OPTIMA is truly spacious.

### 5 Comfort

An excellent seat with compressor suspension, powerful cabin heating and ventilation, air conditioning – the driver is provided with every possible comfort.

### 6 Lifting controls – levers

Available as standard, the lifting levers offer super-smooth touch control at every point of a handling operation.

### 3 Left armrest mini-steering options



Lever steering with return



Mini-wheel steering



Lever steering without return







**6** Right armrest control options



Electronic servo joystick

## A world of options

# BOOSTING SAFETY AND EFFICIENCY

**Konecranes invests significantly in fork lift truck R&D to be the first to offer new technologies that improve performance and safety. We also ensure that our fork lifts are fully compliant with current emissions regulations, anticipating their evolution as a normal part of our product development process.**

### Emissions-compliant diesel engines

We offer a wide range of powerful Volvo and Scania engines certified according to EU stage 4/4f and US EPA Tier 4/4f.

### EMC Master

Our Electronic Machine Control system, EMC Master, provides the following functions as standard:

- Full truck monitoring
- ECO-Drive and fuel management
- Productivity counter management
- Driver log-in (20 drivers)
- Auto accelerator / power control
- Data logging of alarms and errors

The following functions are optional:

- Electronic weight scale
- Mini-wheel steering
- Lever steering
- Auto engine shut-down
- Auto parking brake
- Auto tilt-to-zero of lift mast
- Drive speed limitation (unloaded/loaded)
- Remote Access Service via GPRS/(3G)
- TRUCONNECT Remote Services
- Joystick with auto accelerator/power control

### TRUCONNECT® Remote Monitoring and Reporting

TRUCONNECT Remote Monitoring and Reporting enables you to track the real usage of your lift trucks through a remote connection. It provides you with an online view and periodic PDF reports that illustrate the actual use of your lift trucks, making it a great tool for scheduling your lift truck fleet's maintenance actions and consequently improving the fleet's uptime.

The reports include:

- Safety alerts
- Machine status
- Average fuel consumption
- Average fuel consumption per lifted load
- Total fuel consumption

- Traveling distance
- Average traveling speed
- Load spectrum
- Total load lifted
- Tire pressure monitoring
- Collision sensors
- Cleanliness of hydraulic oil

### Tire pressure monitor

Under-inflated tires can increase fuel consumption by as much as 15% while impairing stability and drivability. Our tire pressure monitor makes it easy to keep your lift truck tires properly inflated. It's installed in minutes. If you combine it with the drive speed limitation provided by EMC Master, you can extend the life of your tires even further.

### Fire alarm and suppression system

We offer an effective fire alarm and suppression system that can be activated either manually or automatically. When the lift truck is in use, the system discharges in three ways: manually from inside the cabin; manually from outside via a mudguard trigger; automatically by sensors in the engine compartment. When the fork lift is not in use, i.e. when the master power switch is turned off, the system discharges automatically when the fire alarm goes off.

### Other safety options

- Parking Distance Control (PDC): with sensors for driving in reverse
- Breath Analyzer: an alcohol test unit which requires the driver to take a breath test before starting the lift truck
- Camera Supervision System: can be mounted as a reversing camera on the rear of the lift truck, or as a forward camera mounted on for example the mast

- 1 EMC Master – full monitoring of all the vital components and functions on a 7" touch screen
- 2 TRUCONNECT® remote monitoring and reporting for lift trucks
- 3 Cabin options: keyboard, reading lamp, side mirror, side-mounted roof wiper, sun visor roof & front, compressor seat etc.

1



2

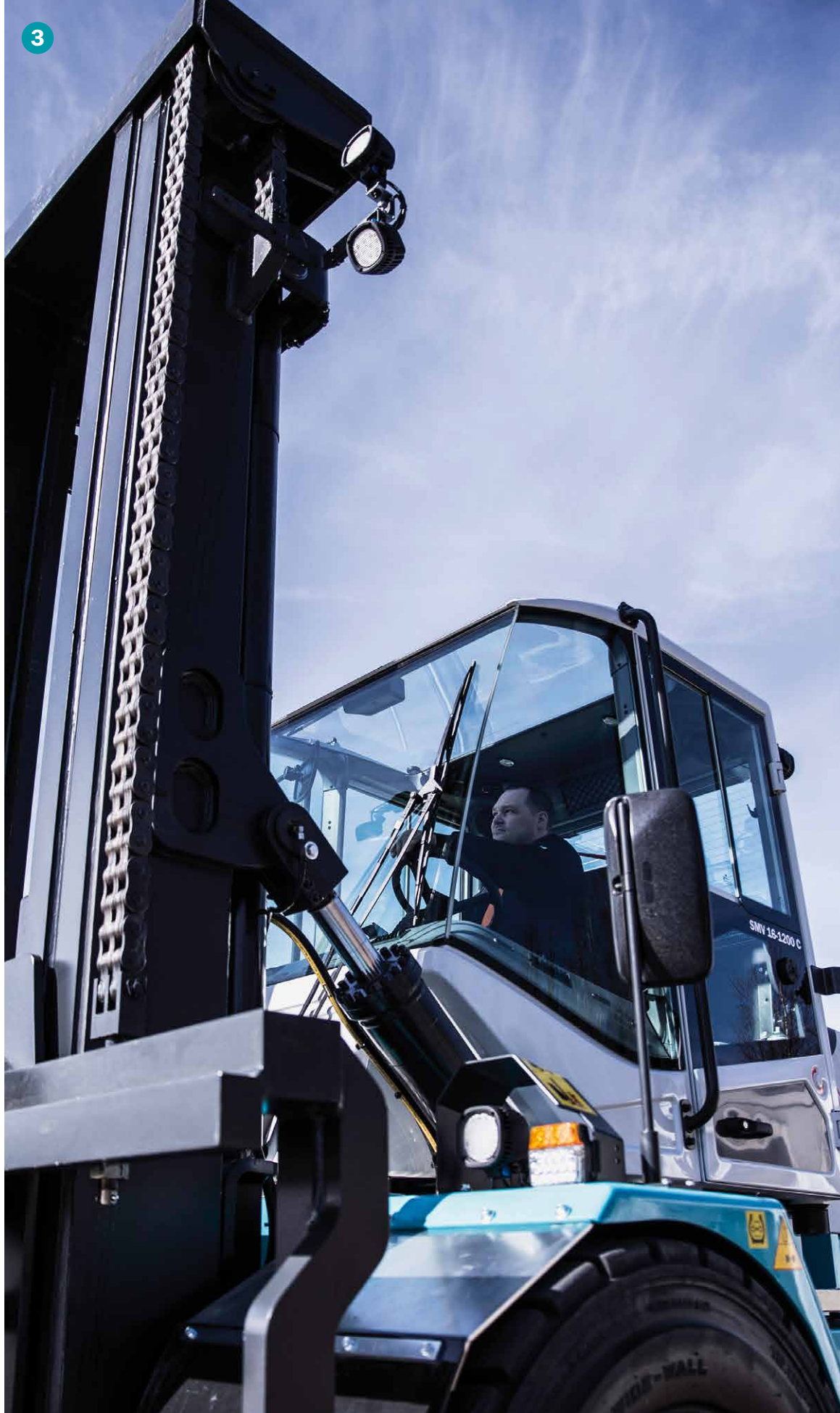
REMOTE W



Portal

Konecran  
Remote Data





3

### WORKFLOW



Modem

es  
Center



## What do you need to lift? **WE HAVE THE ATTACHMENT**

You'll find your lifting solution in our complete range of lifting masts, fork/carriage combinations, fork/shaft systems, and attachments. What you see here is just a sample of what we offer.



### Fork and carriage combinations



Standard carriage, integrated forks, sideshift, and fork positioning

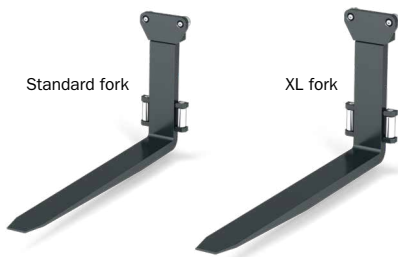


Carriage with kissing forks for steel handling



Carriage with reinforced forks for round cargo

### Forks and fork shaft systems (fss)



Standard fork

XL fork

Different cross-sections, lengths, tapering, and reinforcements



Fork shaft system hook-type



Fork shaft system, pin-type

### Coil rams



Single coil ram with fork shaft



Double coil ram with fork shaft



Single coil ram, integral version



## Lifting masts



Duplex, 2-stage, no freelif



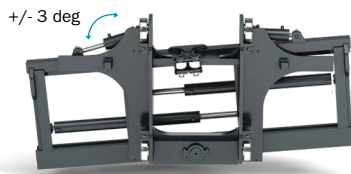
Duplex, 2-stage with freelif



Triplex, 3-stage with freelif



Carriage with one leveling fork (up/down) for sensitive cargo like saw mill products



Carriage with center leveling (2 forks) for sensitive cargo

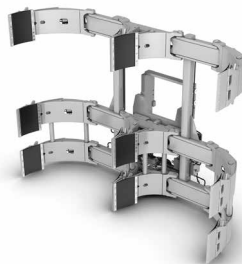


Carriage with fork shaft system (multi-function), pin-type and hook-type versions

## Attachments



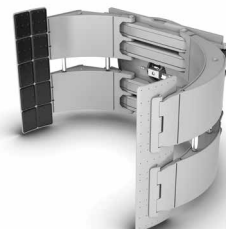
Different container spreaders with inverted forks and fork shafts



Multiple paper roll clamp (single or double)



Fork rotator carriage



Concrete tube clamp (different versions)

### Also available

- Fork extensions: pantograph, lifting hook, lifting jib
- Pipe and tube clamp
- Pallet handlers: double, triple
- Magnets for lifting steel

And more available upon request

# EQUIPMENT

For all Konecranes fork lift trucks

## STANDARD EQUIPMENT

### Models with standard lifting capacities and wheelbases

#### TRUCK BODY

##### Box-type chassis

- Strong box profile and crossmembers
- Safe, ergonomic access steps and hand rails LHS + RHS
- Strong tilt cylinder fixtures on mast and chassis
- Lifting eyes, front and rear
- Low cabin mounting in the front

##### Standard colors

- Chassis, tanks, mudguards and rear: seagreen NCS S2555 B30G
- Mast, carriage, spreader, and axles: black RAL 7021
- Cabin and engine hood: light grey RAL 7035

##### Steel mudguards

#### STEERING AXLE

- Smooth power steering with double-acting cylinder
- Wide steering angles providing small turning radius

#### DRIVE AXLE

##### Kessler D81/91/102/106/111

- Wide axle with 2-stage hub reduction and differential
- Oil-cooled, maintenance-free wet disc brakes

#### DIESEL ENGINE

See technical info chart, certified for EU stage 4 / EPA Tier 4f

- Certified for EU stage 4 / EPA Tier 4f
- Low-emission
- Clean, powerful, fuel-efficient with CanBus controls

##### Engine air filter, 2-stage type

#### TRANSMISSION

SMV 10–18: ZF 3WG-171 (3+3 gears)

SMV 18–33: ZF 4WG-191 (4+3 gears)

SMV 37–65: DANA TE-27 (4+4 gears)

- Fully automatic, softshift
- Torque converter, smooth powershift, declutch, Reverse protection, CanBus controls

#### COOLING SYSTEM

##### Tropical, multi-radiator

- Radiators for engine water, air for intercooler, oil for transmission
- Oil cooling / flushing for brakes

#### HYDRAULIC SYSTEM

##### Load-sensing, power-on-demand

- Smooth, accurate, high-speed lifting and lowering
- Variable piston pumps with intelligent control
- Leak-free ORFS couplings (O-ring) for entire truck
- Large oil tanks with return line filters (12 microns)
- 4 hydraulic functions (lift, tilt, sideshift, and fork positioning)

## OPTIONAL EQUIPMENT

### Alternative lifting capacities and wheelbases are available

#### TRUCK BODY

- Extra counterweights for increased stability
- Extra mirrors on chassis

- SMV 10–18: raised front cabin position, 250 or 500 mm higher than standard
- SMV 18–65: raised front cabin position, 400 or 700 mm higher than standard
- Hydraulic sliding cabin, from center to the right side, raised 400–600 mm
- Fire extinguisher on truck body or inside cabin
- Fire fighting system for driveline compartment (semi-automatic)
- Galvanized storage boxes with lid (on bottom step)
- Central greasing unit for truck and spreaders
- Custom color painting, stickers, and customer logos

##### Different mud flap models, front and rear

- Extra chassis mirrors
- Slip protection: strips or aluminum plates
- Fire extinguisher on truck body
- Fire suppression system

#### STEERING AXLE

- Wheel nut protection and steering cylinder spacers

#### DRIVE AXLE

- SMV 37–50: Kessler D102 in narrow axle width 3750 mm (repl 4150 mm)
- SMV 37–50: Kessler D106 extra strength

#### DIESEL ENGINE

- SMV 10–18: Volvo (160–185 kW / 910–1160 Nm)
- SMV 18–33: Volvo (185 kW / 1160 Nm)
- SMV 37–65: Volvo and Scania (257–294 kW / 1785–2157 Nm)
- Certified for EU stage 4 / EPA Tier 4f
- Clean, powerful, fuel-efficient with CanBus controls

##### Engine air filter Turbo II, 2-stage cyclone type

#### TRANSMISSION

ZF 4WG-191 (3+3 gears)

SMV 37–65: DANA TE-32 (4+4 gears), ZF 4WG-261 (4+3 gears)

- Fully automatic, softshift
- Torque converter, smooth powershift, declutch, Reverse protection, CanBus controls

#### COOLING SYSTEM

##### Extra radiator / cooling circuit for hydraulic system

#### HYDRAULIC SYSTEM

- Extra hydraulic functions and quick connections
- Shock-absorbing lift mast accumulator, 1 or 3 pressure(s)
- High-pressure filters (12 um)
- HLL hydraulic longlife filters (3 um)
- Hydraulic oil cooling circuit for working hydraulics
- Hydraulic weight scale in cabin
- SMV 10–18: 1 extra lifting pump for higher lifting speeds



## STANDARD EQUIPMENT

### ELECTRICAL SYSTEM

Alternator standard size 100–110 Ah (see engine chart)

### LIGHTS

Full road lighting LED: blinkers, brake lights, tail lights, position lights  
2 x LED front lights on mudguard  
2 x LED reverse lights on cabin (10–25 t) / counter weight (28–65 t)  
2 x LED work lights in lift mast

### CABIN

L x W x H = 1605 x 1480 x 1620 mm

Spacious, comfortable, excellent ergonomics  
Excellent visibility: no front corner posts

Powerful heating and cooling unit

Electrical connection 24V (1 x in cab roof RHS)

3 x windshield wipers/washers  
Adjustable seat, seat belt, steering wheel

4 electronic servo lift levers

## OPTIONAL EQUIPMENT

### ELECTRICAL SYSTEM

Reverse alarm (beeper)  
NearGuard RFID warning system (receiver and transmitters)  
NATO starting aid contact  
Built-in battery charger  
Pre-heater for engine, transmission, hydraulics, and cabin  
Power connections 400V/3-phase for multiple preheaters

### LIGHTS

Lamp console on cabin roof: up to 8 work lamps and 2 warning beacons  
Extra work lights: Xenon, LED  
LED warning beacons: cabin roof, lamp console, mast, rear, or other position  
LED strobe warning flash lights: front, rear, or other position

### CABIN

Extra mirrors inside cabin  
Reverse and front cameras with 7" display  
Air conditioning or climate control unit (stepless fan speed)  
Extra electric cabin heater 220V (DEFA)  
Extra diesel-powered cabin heater (Webasto)  
Extra electrical connections 24V (cab roof or front panel RHS)  
Extra electrical connections 12V (cab roof or front panel RHS)  
Interval wiper speed switches: front, roof, and rear windows  
Pneumatic compressor horn: extra button or on joystick  
Various compressor seats: BEGE, ISRI, Grammer  
Additional seat dampening: single or double  
Two-point or three-point seat belt  
Seat heating  
Extra trainer's seat, fully foldable LHS  
Joystick  
Tire pressure monitor: cabin display, 6 tire sensors  
Sun blinds: front, roof, or rear windows, fixed or adjustable  
Alcohol lock / start-up prohibitor (Draeger)  
Reverse alarm (beeping)  
Universal mounting system for RHS for A4/A5 writing pad, keyboard, computer, monitor, com radio, and reading lamp  
CD player / radio / MP3 player with dual loudspeakers  
180 deg rotating driver seat  
NearGuard RFID warning system (receiver and transmitters)

### MACHINE CONTROL

Intelligent machine control with EMC Master, display: MD4, size 7"  
Monitoring of engine, transmission, hydraulic system, service, hydraulic joystick, counters, and info  
EMC 106: Monitoring (diagnostics/parameters/settings)  
EMC 123: ECO-Drive (fuel consumption, saving, settings)  
EMC 125: DATA-Log (storage of alarms and errors)

### MACHINE CONTROL

EMC 102: Lever steering (with spring return to zero)  
EMC 103: Lever steering (no spring return to zero)  
EMC 104: Mini-wheel steering (speed progressive steering function)  
EMC 107: Electronic weight scale (resolution 0.1 ton)  
EMC 112: Auto engine shut-down timer  
EMC 114: Servo joystick (auto throttle)  
EMC 122: Drive speed settings (on/off, programmable)  
EMC 124: Driver log-in (up to 20 drivers)  
EMC 126: GSM remote access  
EMC 127: Paper clamp handling (4 clamp pressures)  
EMC 128: Auto tilt-to-zero function for lift mast

### LIFTING MASTS

Duplex mast (lifting height 3–10 m), free-visibility design  
2-stage with high tilt mountings and 2 lifting cylinders (mounted outside)  
2 pairs of mast wheels, 2 pairs of side rollers

### LIFTING MASTS

Duplex freelif (lifting height 3–10 m) with 2 pairs of lifting cylinders (mounted outside)  
Triplex freelif (lifting height 4.5–8.25 m) with 2 pairs of lifting cylinders (mounted inside or outside)  
Extra mast wheels and extra side rollers  
Extended mast wheel distance 125 mm or 250 mm

### FORK CARRIAGES

Fixed integral fork carriage, free-visibility design  
2 hydraulic cylinders for sideshift and fork positioning (long stroke)  
2 pairs of mast wheels, 2 pairs of side rollers  
Integral forks mounted in carriage

### FORK CARRIAGES

Wider fork carriage, fork leveling / center leveling, turning carriage, etc.  
Extra hydraulic functions and quick connections  
Extra mast wheels and extra side rollers (for tough applications)  
Fork shaft system: quick-change (FSS / term west / hook or pin-type)

### FORKS

Integral forged forks with standard tapering (600 mm to tip)  
Fork fixtures in 2 upper / 2 upper-rear / 2 lower roller bearings (per fork)  
Forged forks with standard / long tapering (tapering from 600 mm to tip)  
Fork steel grade R0-651 with tensile strength 715–830 N/mm<sup>2</sup>

### FORKS

Other fork tapering, fork cross sections, different steel qualities  
Reinforced fork fixtures in 3 upper / 3 upper-rear roller bearings (per fork)  
XL or XXL shorter tapering (tapering from 1200 mm to tip / thicker tip)  
Higher steel grade CrNiMo and HRO with strength 900–1300 N/mm<sup>2</sup>  
Other fork tapering options, cross-sections, kissing forks, etc.  
Special solutions for steel, paper, concrete, wood, etc.

### SERVICE AND PARTS

Regular warranty 12 months / 2000 hours

### SERVICE AND PARTS

Extended warranty on truck and driveline (18–36 months / 3000–6000 hours)  
Spare tires, rims, complete wheels: various brands  
Spare part kits: basic, extended, special  
Complete filter kits: 2000 hours up to 8000 hours

# LIFTING MAST HEIGHT

## Free visibility design

SMV 10-600 C – 13.6-600 C			SMV 10-1200 C – 18-900 C			SMV 18-1200 C – 25-1200 C			SMV 28-1200 C – 33-1200 C		
<b>Duplex no freelif (2-stage)</b>											
Lift (mm)	Mast height min-max (mm)	Freelift (mm)	Lift (mm)	Mast height min-max (mm)	Freelift (mm)	Lift (mm)	Mast height min-max (mm)	Freelift (mm)	Lift (mm)	Mast height min-max (mm)	Freelift (mm)
3000	2945 / 4415	-	3000	3145 / 4600	-	3000	3310 / 4755	-	-	-	-
3500	3195 / 4915	-	3500	3395 / 5100	-	3500	3560 / 5255	-	-	-	-
4000	3445 / 5415	-	4000	3645 / 5600	-	4000	3810 / 5755	-	4000	4010 / 5955	-
4500	3695 / 5915	-	4500	3895 / 6100	-	4500	4060 / 6255	-	4500	4260 / 6455	-
5000	3945 / 6415	-	5000	4145 / 6600	-	5000	4310 / 6755	-	5000	4510 / 6955	-
5500	4195 / 6915	-	5500	4395 / 7100	-	5500	4560 / 7255	-	5500	4760 / 7455	-
6000	4445 / 7415	-	6000	4645 / 7600	-	6000	4810 / 7755	-	6000	5010 / 7955	-
6500	4695 / 7915	-	6500	4895 / 8100	-	6500	5060 / 8255	-	6500	5260 / 8455	-
-	-	-	7000	5145 / 8600	-	7000	5310 / 8755	-	7000	5510 / 8955	-
-	-	-	8000	5645 / 9600	-	8000	5810 / 9755	-	8000	6010 / 9955	-
-	-	-	-	-	-	9000	6310 / 10755	-	9000	6510 / 10955	-
-	-	-	-	-	-	10000	6810 / 11755	-	10000	7010 / 11955	-
<b>Duplex freelif (2-stage)</b>											
Lift (mm)	Mast height min-max (mm)	Freelift (mm)	Lift (mm)	Mast height min-max (mm)	Freelift (mm)	Lift (mm)	Mast height min-max (mm)	Freelift (mm)	Lift (mm)	Mast height min-max (mm)	Freelift (mm)
3000	2945 / 4415	1500	3000	3145 / 4600	1500	3000	3310 / 4755	1500	-	-	-
3500	3195 / 4915	1750	3500	3395 / 5100	1750	3500	3560 / 5255	1750	-	-	-
4000	3445 / 5415	2000	4000	3645 / 5600	2000	4000	3810 / 5755	2000	4000	4010 / 5955	2000
4500	3695 / 5915	2250	4500	3895 / 6100	2250	4500	4060 / 6255	2250	4500	4260 / 6455	2250
5000	3945 / 6415	2500	5000	4145 / 6600	2500	5000	4310 / 6755	2500	5000	4510 / 6955	2500
5500	4195 / 6915	2750	5500	4395 / 7100	2750	5500	4560 / 7255	2750	5500	4760 / 7455	2750
6000	4445 / 7415	3000	6000	4645 / 7600	3000	6000	4810 / 7755	3000	6000	5010 / 7955	3000
6500	4695 / 7915	3250	6500	4895 / 8100	3250	6500	5060 / 8255	3250	6500	5260 / 8455	3250
-	-	-	7000	5145 / 8600	3500	7000	5310 / 8755	3500	7000	5510 / 8955	3500
<b>Triplex freelif (3-stage)</b>											
Lift (mm)	Mast height min-max (mm)	Freelift (mm)	Lift (mm)	Mast height min-max (mm)	Freelift (mm)	Lift (mm)	Mast height min-max (mm)	Freelift (mm)	Lift (mm)	Mast height min-max (mm)	Freelift (mm)
4500	2945 / 5945	1500	4500	3150 / 6100	1500	4500	3310 / 6310	1500	4500	3510 / 6510	1500
5250	3195 / 6695	1750	5250	3400 / 6850	1750	5250	3560 / 7060	1750	5250	3760 / 7260	1750
6000	3445 / 7445	2000	6000	3650 / 7600	2000	6000	3810 / 7810	2000	6000	4010 / 8010	2000
6750	3695 / 8195	2250	6750	3900 / 8350	2250	6750	4060 / 8560	2250	6750	4260 / 8760	2250
-	-	-	7500	4150 / 9100	2500	7500	4310 / 9310	2500	-	-	-
<b>SMV 37-1200 C – 45-1200 C</b>											
<b>Duplex no freelif (2-stage)</b>											
Lift (mm)	Mast height min-max (mm)	Freelift (mm)	Lift (mm)	Mast height min-max (mm)	Freelift (mm)	Lift (mm)	Mast height min-max (mm)	Freelift (mm)	Lift (mm)	Mast height min-max (mm)	Freelift (mm)
4000	4550 / 6485	-	4000	5050 / 6975	-	4000	5750 / 7700	-	-	-	-
4500	4800 / 6985	-	4500	5300 / 7475	-	-	-	-	-	-	-
5000	5050 / 7485	-	5000	5550 / 7975	-	5000	6250 / 8700	-	-	-	-
5500	5300 / 7985	-	5500	5800 / 8475	-	-	-	-	-	-	-
6000	5550 / 8485	-	6000	6050 / 8975	-	6000	6750 / 9700	-	-	-	-
6500	5800 / 8985	-	6500	6300 / 9475	-	-	-	-	-	-	-
7000	6050 / 9485	-	7000	6550 / 9975	-	7000	7250 / 10700	-	-	-	-
8000	6550 / 10485	-	8000	7050 / 10975	-	-	-	-	-	-	-
9000	7050 / 11485	-	9000	7550 / 11975	-	-	-	-	-	-	-
10000	7550 / 12485	-	10000	8050 / 12975	-	-	-	-	-	-	-
<b>Duplex freelif (2-stage)</b>											
Lift (mm)	Mast height min-max (mm)	Freelift (mm)	Lift (mm)	Mast height min-max (mm)	Freelift (mm)	Lift (mm)	Mast height min-max (mm)	Freelift (mm)	Lift (mm)	Mast height min-max (mm)	Freelift (mm)
4000	4400 / 6345	2000	4000	5050 / 7050	2000	-	-	-	-	-	-
4500	4650 / 6845	2250	4500	5300 / 7550	2250	-	-	-	-	-	-
5000	4900 / 7345	2500	5000	5550 / 8050	2500	-	-	-	-	-	-
5500	5150 / 7845	2750	5500	5800 / 8550	2750	-	-	-	-	-	-
6000	5400 / 8345	3000	6000	6050 / 9050	3000	-	-	-	-	-	-
6500	5650 / 8845	3250	6500	6300 / 9550	3250	-	-	-	-	-	-
7000	5900 / 9345	3500	7000	6550 / 10050	3500	-	-	-	-	-	-
8000	6400 / 10345	4000	8000	7050 / 11050	4000	-	-	-	-	-	-
<b>Triplex freelif (3-stage)</b>											
Lift (mm)	Mast height min-max (mm)	Freelift (mm)	Lift (mm)	Mast height min-max (mm)	Freelift (mm)	Lift (mm)	Mast height min-max (mm)	Freelift (mm)	Lift (mm)	Mast height min-max (mm)	Freelift (mm)
4500	3930 / 6930	1500	-	-	-	-	-	-	-	-	-
5250	4180 / 7680	1750	-	-	-	-	-	-	-	-	-
6000	4430 / 8430	2000	-	-	-	-	-	-	-	-	-
6750	4680 / 9180	2250	-	-	-	-	-	-	-	-	-
6750	4680 / 9180	2250	-	-	-	-	-	-	-	-	-

NOTE 1. For 3-high container handler, choose 7000 mm mast + 2230 mm for spreader = 9230 mm (3 x 9'6")

NOTE 2. For 4-high container handler, choose 10000 mm mast + 2230 mm for spreader = 12230 mm (4 x 9'6")

NOTE 3. Triplex 6000 = 3 x 8'6" with inverted forks (+2300 mm)

NOTE 4. Triplex 6750 = 3 x 9'6" with inverted forks (+2450 mm)

NOTE 5. For lifting heights starting at 7000 mm or higher the tilt angles are reduced to 4/2 deg from 10/5 deg

# DRIVELINES

## Fork lift trucks 10–33 tons

MODEL		SMV 10-600 C – 18-900 C	SMV 18-1200 C / 33-1200 C
<b>Engine</b>	<b>Units</b>		
Make		Volvo	Volvo
Model		TAD-572-VE	TAD-871-VE
Emission approval, EU / US		St 4 / Tier 4f	St 4 / Tier 4f
Power / max speed (ISO 3046)	kW/rpm	160 / 2300	185 / 2200
Torque @ speed (ISO 3046)	Nm/rpm	910 / 1200	1160 / 1200
Displacement / cylinders	L/--	5.1 / 4-cyl	7.7 / 6-cyl
Alternator power / capacity	W/Amp	2800 / 100	2800 / 100
Fuel consumption (normal)	L/hour	5-10	7-13
Transmission (make / model)		ZF 3WG-171	ZF 4WG-191

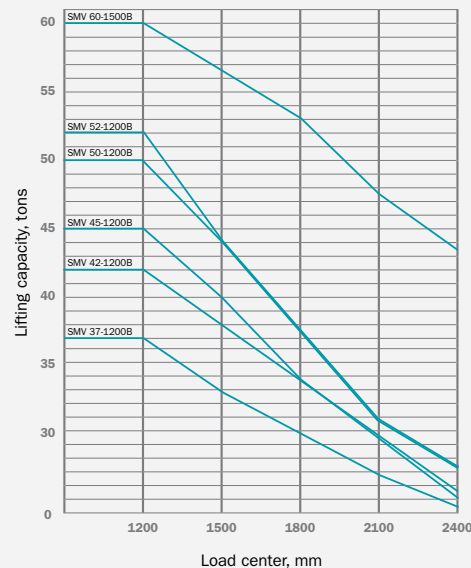
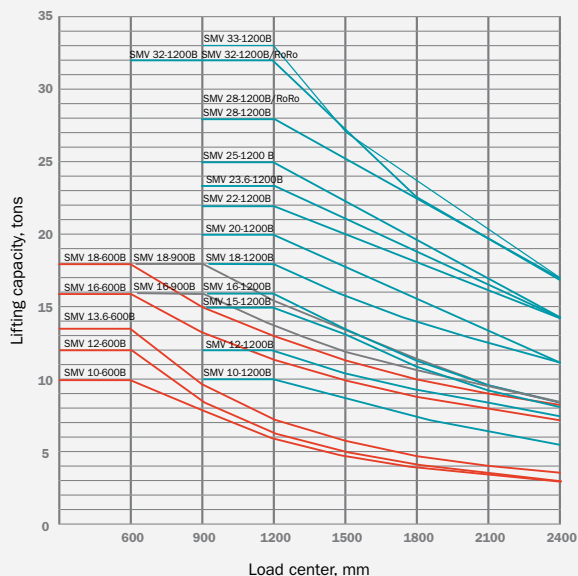
MODEL		SMV 10-600 C – 18-900 C	SMV 18-1200 C – 33-1200 C
<b>Transmission</b>	<b>Units</b>		
Make		ZF	ZF
Model		3WG-171	4WG-191
Gear shift type		Automatic	Automatic
No. of gears (fwd / rev)	No.	3 / 3	4 / 3
Power rating (max)	kW	180	200

## Fork lift trucks 37–65 tons

MODEL		SMV 37-1200 C – 65-1200 C			
<b>Engine</b>	<b>Units</b>				
Make		Volvo	Volvo	Volvo	Scania
Model		TAD-1171-VE	TAD-1172-VE	TAD-1371-VE	DC-13-087
Emission approval, EU / US		St 4 / Tier 4f	St 4 / Tier 4f	St 4 / Tier 4f	DC-13-084
Power / max speed (ISO 3046)	kW/rpm	265 / 2100	285 / 2000	285 / 1900	257 / 2100
Torque @ speed (ISO 3046)	Nm/rpm	1785 / 1250	1938 / 1250	1965 / 1200	1950 / 1300
Displacement / cylinders	L/--	10.84 / 6-cyl	10.84 / 6-cyl	12.78 / 6-cyl	12.7 / 6-cyl
Alternator power / capacity	W/Amp	3080 / 110	3080 / 110	3080 / 110	2800 / 100
Fuel consumption (normal)	L/hour	12-18	12-18	14-20	12-18
Transmission (make / model)		DANA TE27 (opt. ZF 4WG-261)	DANA TE32	DANA TE32	DANA TE27 (opt. ZF 4WG-261)

MODEL		SMV 37-1200 C – 65-1200 C		
<b>Transmission</b>	<b>Units</b>			
Make		DANA	ZF	DANA
Model		TE-27400	4WG-261	TE-32400
Gear shift type		Automatic	Automatic	Automatic
No. of gears (fwd / rev)	No.	4 / 4	4 / 3	4 / 4
Power rating (max)	kW	270	280	325

## Lifting capacity vs. load center





# TECHNICAL DATA

## Fork lift trucks 10–18 tons

MODEL			SMV 10-600 C	SMV 12-600 C	SMV 13.6-600 C	SMV 10-1200 C	
LIFTING DATA	<b>Dimensions</b>	<b>Identifier</b>	<b>Units</b>				
	Lifting capacity		kg	10000	12000	13600	10000
	Load center	<b>LC1</b>	mm	600	600	600	1200
	Full lifting capacity up to lifting height		mm	7000	7000	7000	7000
	Lost load center	<b>L4</b>	mm	835	835	840	915
	Wheelbase	<b>L3</b>	mm	3000 (opt. 2800)	3000 (opt. 2800)	3250	3250
WEIGHT	Service weight		kg	14800	15200	16100	18900
	Axle pressure front, unloaded / at rated load		kg	7900 / 22600	7900 / 25600	8300 / 27900	10400 / 26900
	Axle pressure rear, unloaded / at rated load		kg	6900 / 2200	7300 / 1600	7800 / 1800	8500 / 2000
WHEELS	Tire type			Pneumatic	Pneumatic	Pneumatic	Pneumatic
	Tire dimension / ply rating, front & rear		Inch	11.00 x 20" / PR20	11.00 x 20" / PR20	12.00 x 20" / PR20	11.00 x 20" / PR20
	Rim dimensions, front & rear		Inch	8.00 x 20"	8.00 x 20"	8.00 x 20"	8.00 x 20"
	Tire pressure, front / rear		MPa	0.9 / 0.9	1.0 / 1.0	1.0 / 1.0	1.0 / 1.0
	Number of wheels, front / rear (X = driven)			4X / 2	4X / 2	4X / 2	4X / 2
	Track width, front / rear	<b>T1 / T2</b>	mm	1859 / 2036	1859 / 2036	1859 / 2036	1859 / 2036
DIMENSIONS	Mast tilt, backward / forward	<b>β / α</b>	deg	5 / 10	5 / 10	5 / 10	5 / 10
	Lifting height	<b>H1</b>	mm	4000	4000	4000	4000
	Mast height, retracted / extended	<b>H3 - H4</b>	mm	3445 / 5415	3445 / 5415	3445 / 5415	3645 / 5600
	Truck height over cabin / seat height	<b>H5 - H6</b>	mm	2890 / 1800	2890 / 1800	2890 / 1800	2905 / 1815
	Overall length (to back of fork)	<b>L2</b>	mm	4625	4625	4880	4955
	Drive axle width	<b>W1</b>	mm	2500	2500	2500	2550
	Fork dimensions (width x thickness x length)	<b>W x T x L</b>	mm	200 x 65 x 1500	200 x 65 x 1500	200 x 70 x 1500	200 x 90 x 2400
	Fork carriage type			Hydraulic-powered sideshift & fork positioner			
	Fork carriage width	<b>W2</b>	mm	2500	2500	2500	2550
	Fork positioning (min - max / outside)	<b>FP</b>	mm	570 / 2352	570 / 2352	570 / 2352	600 / 2344
	Fork sideshift (max / at fork position)	<b>SS</b>	mm	± 470 / 1215	± 470 / 1215	± 470 / 1215	± 470 / 1207
	Ground clearance (mast / middle / steer axle)	<b>C1 / C2 / C3</b>	mm	250 / 320 / 320	250 / 320 / 320	250 / 320 / 320	250 / 335 / 197
Aisle width	<b>A1</b>	mm	6735	6735	7015	7990	
	Turning radius (inner - outer)	<b>R1 - R2</b>	mm	< 250 - 4205	< 250 - 4205	< 250 - 4480	< 250 - 4480
PERFORMANCE	Drive speed forward, unloaded / at rated load		km/h	30 / 30	30 / 30	30 / 30	30 / 30
	Drive speed reverse, unloaded / at rated load		km/h	30 / 30	30 / 30	30 / 30	30 / 30
	Lifting speed, unloaded / at rated load		m/s	0.50 / 0.45	0.50 / 0.45	0.40 / 0.35	0.50 / 0.45
	Lowering speed, unloaded / at rated load		m/s	0.40 / 0.40	0.40 / 0.40	0.40 / 0.40	0.40 / 0.40
	Gradeability, at rated load, 0/2 km/h		% / %	44 / 35	40 / 32	37 / 29	37 / 30
	Towing power, at rated load, 0/2 km/h		kN / kN	108 / 86	108 / 86	107 / 85	107 / 85
DRIVELINE	Engine power (min - max)	<b>EU4</b>	kW	160 - 185	160 - 185	160 - 185	160 - 185
	Engine torque (min - max)	<b>EU4</b>	Nm	910 - 1160	910 - 1160	910 - 1160	910 - 1160
	Transmission, gears forward + reverse			ZF 3 + 3	ZF 3 + 3	ZF 3 + 3	ZF 3 + 3
	Transmission type, function, shifting			Fully automatic transmission, torque convertor, reverse protection, powershift			
	Drive axle model			Kessler D81 (PL478) with differential			
	Driving brake system, type			Oil-cooled multiple wet disc brakes (WDB)			
	Parking brake system, type			Dry single disc / spring release			
	Steering system / steer axle type			Hydraulic power steering / HD axle with double-acting cylinder			
OTHERS	Load-sensing hydraulics / power-on-demand			Yes / yes	Yes / yes	Yes / yes	Yes / yes
	Hydraulic oil pressure		MPa	22	25	20	23
	Diesel / hydraulic tank volumes		Lit	131 / 152	131 / 152	168 / 192	168 / 192
	Batteries (voltage / capacity)		V - Ah	2 x 12 / 88	2 x 12 / 88	2 x 12 / 88	2 x 12 / 88
	Noise level inside cab (LM) DIN 45635	<b>EU4</b>	dB(A)	66	66	66	66
	Noise level inside cab (LpAZ) EN 12053		dB(A)	72	72	72	72
	Noise level outside (LWA) 2000/14/EC		dB(A)	109	109	109	109

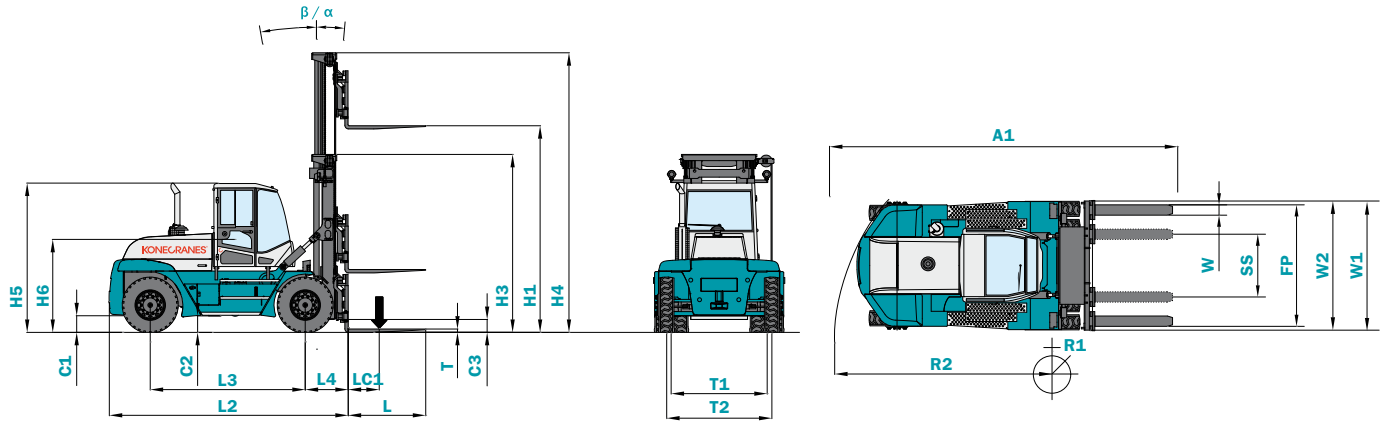
NOTE 1. All lifting capacities with duplex mast (4 m), carriage with sideshift & fork positioner, and integral forks

NOTE 2. Other lifting capacities, wheelbases, lifting equipment combinations according to factory information and upon request

NOTE 3. For available driveline combinations, see driveline chart and latest factory information

NOTE 4. SMV 10-600 B and SMV 12-600 B are available in shorter wheelbase of 2800 mm, only with Volvo TAD-561/620/660-VE engine

# Dimension measurement identifiers



SMV 12-1200 C	SMV 15-1200 C	SMV 16-600 C	SMV 16-900 C	SMV 16-1200 C	SMV 18-600 C	SMV 18-900 C
12000	15000	16000	16000	16000	18000	18000
1200	1200	600	900	1200	600	900
7000	7000	7000	7000	7000	7000	7000
925	925	905	915	925	905	915
3500	3750	3500	3500	3750	3750	3750
19900	21700	19500	21300	22400	20200	22100
10500 / 29800	10700 / 34200	10500 / 33400	10500 / 34800	10700 / 35800	10700 / 36000	10700 / 37400
9400 / 2200	11000 / 2600	9000 / 2000	10800 / 2500	11800 / 2700	9500 / 2200	11400 / 2600
Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic
12.00 x 20" / PR20	12.00 x 20" / PR20	12.00 x 20" / PR20	12.00 x 20" / PR20	12.00 x 20" / PR20	12.00 x 20" / PR20	12.00 x 20" / PR20
8.00 x 20"	8.00 x 20"	8.00 x 20"	8.00 x 20"	8.00 x 20"	8.00 x 20"	8.00 x 20"
1.0 / 1.0	1.0 / 1.0	1.0 / 1.0	1.0 / 1.0	1.0 / 1.0	1.0 / 1.0	1.0 / 1.0
4X / 2	4X / 2	4X / 2	4X / 2	4X / 2	4X / 2	4X / 2
1859 / 2036	1859 / 2036	1859 / 2036	1859 / 2036	1859 / 2036	1859 / 2036	1859 / 2036
5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10
4000	4000	4000	4000	4000	4000	4000
3645 / 5600	3645 / 5600	3645 / 5600	3645 / 5600	3645 / 5600	3645 / 5600	3645 / 5600
2905 / 1815	2905 / 1815	2905 / 1815	2905 / 1815	2905 / 1815	2905 / 1815	2905 / 1815
5205	5455	5205	5205	5455	5455	5455
2550	2550	2550	2550	2550	2550	2550
200 x 100 x 2400	200 x 100 x 2400	200 x 80 x 1500	200 x 90 x 2400	200 x 100 x 2400	200 x 80 x 1500	200 x 90 x 2400
2550	2550	2550	2550	2550	2550	2550
600 / 2344	600 / 2344	600 / 2344	600 / 2344	600 / 2344	600 / 2344	600 / 2344
± 470 / 1207	± 470 / 1207	± 470 / 1207	± 470 / 1207	± 470 / 1207	± 470 / 1207	± 470 / 1207
250 / 335 / 197	250 / 335 / 197	250 / 335 / 197	250 / 335 / 197	250 / 335 / 197	250 / 335 / 197	250 / 335 / 197
8285	8565	7385	8285	8565	7665	7665
< 500 - 4775	< 500 - 5055	< 500 - 4775	< 500 - 4775	< 500 - 5055	< 500 - 5055	< 500 - 5055
30 / 30	30 / 30	30 / 30	30 / 30	30 / 30	30 / 30	30 / 30
0.40 / 0.35	0.40 / 0.35	0.40 / 0.35	0.40 / 0.35	0.40 / 0.35	0.33 / 0.29	0.33 / 0.29
0.40 / 0.40	0.40 / 0.40	0.40 / 0.40	0.40 / 0.40	0.40 / 0.40	0.40 / 0.40	0.40 / 0.40
34 / 27	29 / 23	30 / 24	30 / 24	28 / 22	28 / 22	27 / 21
107 / 85	107 / 85	107 / 85	107 / 85	107 / 85	107 / 85	107 / 85
160 - 185	160 - 185	160 - 185	160 - 185	160 - 185	160 - 185	160 - 185
910 - 1160	910 - 1160	910 - 1160	910 - 1160	910 - 1160	910 - 1160	910 - 1160
ZF 3 + 3	ZF 3 + 3	ZF 3 + 3	ZF 3 + 3	ZF 3 + 3	ZF 3 + 3	ZF 3 + 3
Yes / yes	Yes / yes	Yes / yes	Yes / yes	Yes / yes	Yes / yes	Yes / yes
18	22	23	23	23	19	19
206 / 227	243 / 272	206 / 227	206 / 227	243 / 272	243 / 272	243 / 272
2 x 12 / 88	2 x 12 / 88	2 x 12 / 88	2 x 12 / 88	2 x 12 / 88	2 x 12 / 88	2 x 12 / 88
66	66	66	66	66	66	66
72	72	72	72	72	72	72
109	109	109	109	109	109	109

# TECHNICAL DATA

## Fork lift trucks 18–33 tons

MODEL			SMV 18-1200 C	SMV 20-1200 C	SMV 22-1200 C	SMV 23.6-1200 C	
LIFTING DATA	<b>Dimensions</b>	<b>Identifier</b>	<b>Units</b>				
	Lifting capacity		kg	18000	20000	22000	23600
	Load center	<b>LC1</b>	mm	1200	1200	1200	1200
	Full lifting capacity up to lifting height		mm	9000	9000	9000	9000
	Lost load center	<b>L4</b>	mm	1090	1090	1090	1090
	Wheelbase	<b>L3</b>	mm	4000	4000	4250	4250
WEIGHT	Service weight		kg	30000	31500	32000	33200
	Axle pressure front, unloaded / at rated load		kg	16700 / 45000	16700 / 48100	16700 / 50500	16700 / 53000
	Axle pressure rear, unloaded / at rated load		kg	13300 / 3000	14800 / 3400	15300 / 3500	16500 / 3800
WHEELS	Tire type			Pneumatic	Pneumatic	Pneumatic	Pneumatic
	Tire dimension / ply rating, front & rear		Inch	14.00 x 24" / PR24	14.00 x 24" / PR24	14.00 x 24" / PR24	14.00 x 24" / PR24
	Rim dimensions, front & rear		Inch	10.00 x 24"	10.00 x 24"	10.00 x 24"	10.00 x 24"
	Tire pressure, front / rear		MPa	0.9 / 0.9	0.9 / 0.9	0.9 / 0.9	0.9 / 0.9
	Number of wheels, front / rear (X = driven)			4X / 2	4X / 2	4X / 2	4X / 2
	Track width, front / rear	<b>T1 / T2</b>	mm	2199 / 2336	2199 / 2336	2199 / 2336	2199 / 2336
DIMENSIONS	Mast tilt, backward / forward	<b>β / α</b>	deg	5 / 10	5 / 10	5 / 10	5 / 10
	Lifting height	<b>H1</b>	mm	4000	4000	4000	4000
	Mast height, retracted / extended	<b>H3 - H4</b>	mm	3810 / 5755	3810 / 5755	3810 / 5755	3810 / 5755
	Truck height over cabin / seat height	<b>H5 - H6</b>	mm	3280 / 2180	3280 / 2180	3280 / 2180	3280 / 2180
	Overall length (to back of fork)	<b>L2</b>	mm	5995	5995	6245	6245
	Drive axle width	<b>W1</b>	mm	3020	3020	3020	3020
	Fork dimensions (width x thickness x length)	<b>W x T x L</b>	mm	200 x 110 x 2400	200 x 110 x 2400	250 x 110 x 2400	250 x 110 x 2400
	Fork carriage type			Hydraulic-powered sideshift & fork positioner			
	Fork carriage width	<b>W2</b>	mm	3000	3000	3000	3000
	Fork positioning (min - max / outside)	<b>FP</b>	mm	950 / 2550 (opt. 650 / 2810)		1000 / 2600 (opt. 750 / 2860)	
	Fork sideshift (max / at fork position)	<b>SS</b>	mm	± 400 / 1550 (opt. ± 550 / 1510)			
Ground clearance (mast / middle / steer axle)	<b>C1 / C2 / C3</b>	mm	300 / 330 / 325	300 / 330 / 325	300 / 330 / 325	300 / 330 / 325	
Aisle width	<b>A1</b>	mm	8970	8970	9240	9240	
Turning radius (inner - outer)	<b>R1 - R2</b>	mm	< 750 - 5280	< 750 - 5280	< 750 - 5550	< 750 - 5550	
PERFORMANCE	Drive speed forward, unloaded / at rated load		km/h	29 / 28	29 / 27	29 / 27	29 / 27
	Drive speed reverse, unloaded / at rated load		km/h	29 / 28	29 / 27	29 / 27	29 / 27
	Lifting speed, unloaded / at rated load		m/s	0.30 / 0.25	0.30 / 0.25	0.30 / 0.25	0.30 / 0.25
	Lowering speed, unloaded / at rated load		m/s	0.40 / 0.40	0.40 / 0.40	0.40 / 0.40	0.40 / 0.40
	Gradeability, at rated load, 0/2 km/h		% / %	43 / 33	39 / 30	37 / 28	35 / 26
	Towing power, at rated load, 0/2 km/h		kN / kN	196 / 147	196 / 147	196 / 147	196 / 147
DRIVELINE	Engine power (min - max)	<b>EU4</b>	kW	185	185	185	185
	Engine torque (min - max)	<b>EU4</b>	Nm	1160	1160	1160	1160
	Transmission, gears forward + reverse			ZF 4 + 3	ZF 4 + 3	ZF 4 + 3	ZF 4 + 3
	Transmission type, function, shifting			Fully automatic transmission, torque converter, reverse protection, powershift			
	Drive axle model			Kessler D91 (PL488) with differential			
	Driving brake system, type			Oil-cooled multiple wet disc brakes (WDB)			
	Parking brake system, type			Dry single disc / spring release			
	Steering system / steer axle type			Hydraulic power steering / HD axle with double-acting cylinder			
OTHERS	Load-sensing hydraulics / power-on-demand			Yes / yes	Yes / yes	Yes / yes	Yes / yes
	Hydraulic oil pressure		MPa	19	20	22	22
	Diesel / hydraulic tank volumes		Lit	280 / 312	280 / 312	336 / 368	336 / 368
	Batteries (voltage / capacity)		V - Ah	2 x 12 / 140	2 x 12 / 140	2 x 12 / 140	2 x 12 / 140
	Noise level inside cab (LM) DIN 45635	<b>EU4</b>	dB(A)	68	68	68	68
	Noise level inside cab (LpAZ) EN 12053		dB(A)	75	75	75	75
	Noise level outside (LWA) 2000/14/EC		dB(A)	110	110	110	110

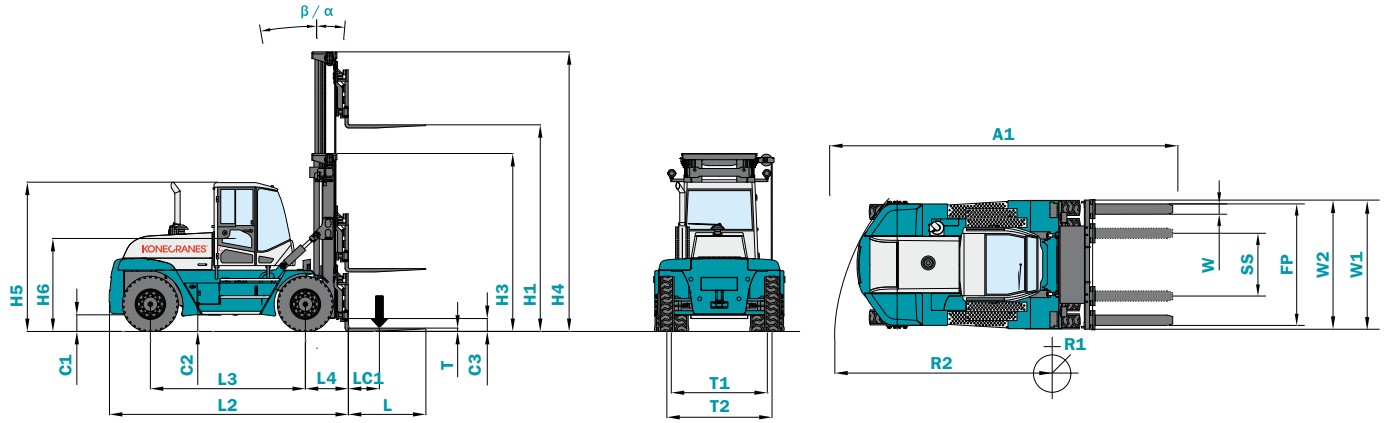
NOTE 1. All lifting capacities with duplex mast (4 m), carriage with sideshift & fork positioner, and integral forks

NOTE 2. Other lifting capacities, wheelbases, lifting equipment combinations according to factory information and upon request

NOTE 3. For available driveline combinations, see driveline chart and latest factory information



# Dimension measurement identifiers



SMV 25-1200 C	SMV 28-1200 C	SMV 32-1200 C	SMV 33-1200 C	SMV 28-1200 C RoRo	SMV 32-1200 C RoRo
25000	28000	32000	33000	28000	32000
1200	1200	1200	1200	1200	1200
9000	9000	9000	9000	3100	3100
1090	1195	1195	1195	1430	1430
4250	4500	4750	4750	4500	4750
34100	39600	41300	42400	41900	44500
16700 / 55100	20300 / 63100	20500 / 68600	20800 / 70400	20700 / 65100	21400 / 71100
17400 / 4000	19300 / 4500	20800 / 4700	21600 / 5000	21200 / 4800	23100 / 5400
Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic
14.00 x 24" / PR24	16.00 x 25" / PR28	16.00 x 25" / PR28	16.00 x 25" / PR32	16.00 x 25" / PR28	16.00 x 25" / PR32
10.00 x 24"	11.25 x 25"	11.25 x 25"	11.25 x 25"	11.25 x 25"	11.25 x 25"
0.9 / 0.9	0.9 / 0.9	0.9 / 0.9	0.9 / 0.9	0.9 / 0.9	0.9 / 0.9
4X / 2	4X / 2	4X / 2	4X / 2	4X / 2	4X / 2
2199 / 2336	2467 / 2657	2467 / 2657	2467 / 2657	2467 / 2657	2467 / 2657
5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10
4000	4000	4000	4000	3100	3100
3810 / 5755	4010 / 5955	4010 / 5955	4010 / 5955	2925 / 4565	2925 / 4565
3280 / 2180	3400 / 2300	3400 / 2300	3400 / 2300	2925 / 1860	2925 / 1860
6245	6755	7005	7005	6970	7240
3020	3440	3440	3440	3440	3440
250 x 110 x 2400	300 x 110 x 2400	300 x 110 x 2400	300 x 110 x 2400	300 x 110 x 2400	300 x 110 x 2400
	Hydraulic-powered sideshift & fork positioner				
3000	3400	3400	3400	3400	3400
	1550 / 2750 (opt. 900 / 2850)			1550 / 2750	
	± 300 / 1850 (opt. ± 500 / 1550)			± 300 / 1850	
300 / 330 / 325	300 / 360 / 390	300 / 360 / 390	300 / 360 / 390	250 / 340 / 390	250 / 340 / 390
9240	10150	10435	10435	10390	10670
< 750 - 5550	830 - 6360	970 - 6640	970 - 6640	830 - 6360	970 - 6640
28 / 27	24 / 23	24 / 22	23 / 21	24 / 22	23 / 21
28 / 27	24 / 23	24 / 22	23 / 21	24 / 22	28 / 27
0.30 / 0.25	0.32 / 0.27	0.32 / 0.27	0.32 / 0.27	0.32 / 0.27	0.32 / 0.27
0.40 / 0.40	0.40 / 0.40	0.40 / 0.40	0.40 / 0.40	0.40 / 0.40	0.40 / 0.40
34 / 24	33 / 22	29 / 19	27 / 17	30 / 20	27 / 17
196 / 147	225 / 156	225 / 156	225 / 156	225 / 156	225 / 156
185	185	185	185	185	185
1160	1160	1160	1160	1160	1160
ZF 4 + 3	ZF 4 + 3	ZF 4 + 3	ZF 4 + 3	ZF 4 + 3	ZF 4 + 3
	Fully automatic transmission, torque convertor, reverse protection, powershift				
	Kessler D91 (PL408) with differential				
	Oil-cooled multiple wet disc brakes (WDB)				
	Dry single disc / spring release				
	Hydraulic power steering / HD axle with double-acting cylinder				
Yes / yes	Yes / yes	Yes / yes	Yes / yes	Yes / yes	Yes / yes
24	20	22	22	20	22
336 / 368	316 / 355	371 / 406	371 / 406	316 / 355	371 / 406
2 x 12 / 140	2 x 12 / 140	2 x 12 / 140	2 x 12 / 140	2 x 12 / 140	2 x 12 / 140
68	68	68	68	68	68
75	75	75	75	75	75
110	110	110	110	110	110

# TECHNICAL DATA

## Fork lift trucks 37–65 tons

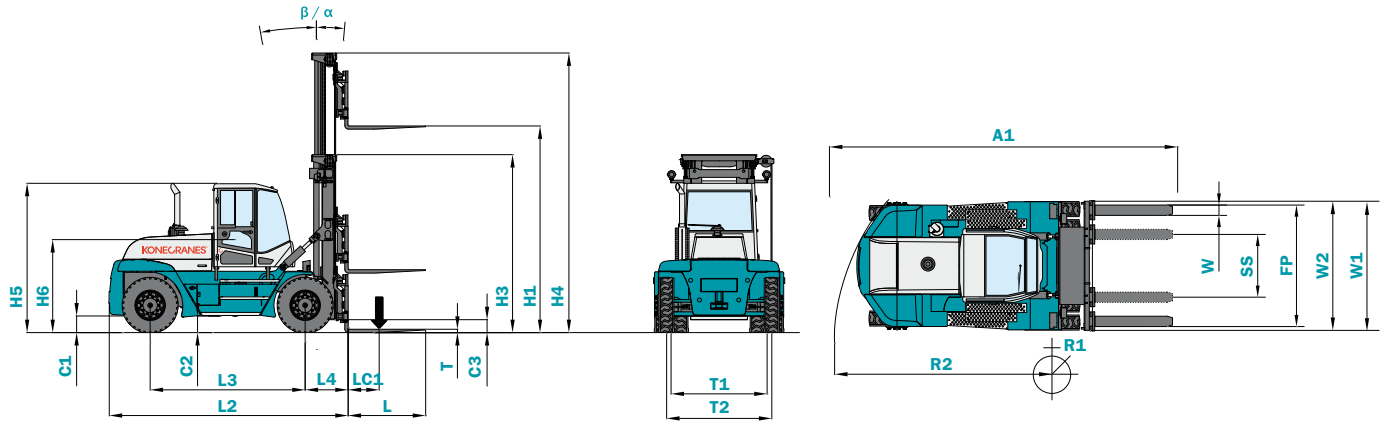
MODEL			SMV 37-1200 C	SMV 42-1200 C	SMV 45-1200 C	
LIFTING DATA	<b>Dimensions</b>	<b>Identifier</b>	<b>Units</b>			
	Lifting capacity		kg	37000	42000	45000
	Load center	<b>LC1</b>	mm	1200	1200	1200
	Full lifting capacity up to lifting height		mm	9000	9000	9000
	Lost load center	<b>L4</b>	mm	1240	1240	1240
	Wheelbase	<b>L3</b>	mm	5000	5500	5500
WEIGHT	Service weight		kg	49600	50100	51900
	Axle pressure front, unloaded / at rated load		kg	25700 / 80800	25600 / 86300	25600 / 90600
	Axle pressure rear, unloaded / at rated load		kg	23900 / 5800	24500 / 5800	26300 / 6300
WHEELS	Tire type			Pneumatic	Pneumatic	Pneumatic
	Tire dimension / ply rating, front & rear		Inch	18.00 x 25" / PR40	18.00 x 25" / PR40	18.00 x 25" / PR40
	Rim dimensions, front & rear		Inch	13.00 x 25"	13.00 x 25"	13.00 x 25"
	Tire pressure, front / rear		MPa	1.0 / 1.0	1.0 / 1.0	1.0 / 1.0
	Number of wheels, front / rear (X = driven)			4X / 2	4X / 2	4X / 2
	Track width, front / rear	<b>T1 / T2</b>	mm	3030 / 2612	3030 / 2612	3030 / 2612
DIMENSIONS	Mast tilt, backward / forward	<b>β / α</b>	deg	5 / 10	5 / 10	5 / 10
	Lifting height	<b>H1</b>	mm	4000	4000	4000
	Mast height, retracted / extended	<b>H3 - H4</b>	mm	4550 / 6485	4550 / 6485	4550 / 6485
	Truck height over cabin / seat height	<b>H5 - H6</b>	mm	3660 / 2550	3660 / 2550	3660 / 2550
	Overall length (to back of fork)	<b>L2</b>	mm	7300	7800	7800
	Drive axle width	<b>W1</b>	mm	4160	4160	4160
	Fork dimensions (width x thickness x length)	<b>W x T x L</b>	mm	300 x 135 x 2400	300 x 135 x 2400	300 x 135 x 2400
	Fork carriage type			Sideshift & fork positioner		
	Fork carriage width	<b>W2</b>	mm	3400	3400	3400
	Fork positioning (min - max / outside)	<b>FP</b>	mm	1950 / 2750 (opt. 850 / 3150)		
	Fork sideshift (max / at fork position)	<b>SS</b>	mm	± 200 / 2050 (opt. ± 550 / 1700)		
	Ground clearance (mast / middle / steer axle)	<b>C1 / C2 / C3</b>	mm	300 / 440 / 520	300 / 440 / 520	300 / 440 / 270
Aisle width	<b>A1</b>	mm	10700	11300	11300	
Turning radius (inner - outer)	<b>R1 - R2</b>	mm	750 - 6900	1100 - 7500	1100 - 7500	
PERFORMANCE	Drive speed forward, unloaded / at rated load		km/h	24 / 23	24 / 23	24 / 23
	Drive speed reverse, unloaded / at rated load		km/h	24 / 23	24 / 23	24 / 23
	Lifting speed, unloaded / at rated load		m/s	0.26 / 0.21	0.26 / 0.21	0.26 / 0.21
	Lowering speed, unloaded / at rated load		m/s	0.40 / 0.40	0.40 / 0.40	0.40 / 0.40
	Gradeability, at rated load, 0/2 km/h		% / %	37 / 28	34 / 26	34 / 26
	Towing power, at rated load, 0/2 km/h		kN / kN	309 / 248	309 / 248	309 / 248
DRIVELINE	Engine power (min - max)	<b>EU4</b>	kW	257 - 294	257 - 294	257 - 294
	Engine torque (min - max)	<b>EU4</b>	Nm	1785 - 2157	1785 - 2157	1785 - 2157
	Transmission, gears forward + reverse			DANA 4 + 4 / ZF 4 + 3	DANA 4 + 4 / ZF 4 + 3	DANA 4 + 4 / ZF 4 + 3
	Transmission type, function, shifting			Fully automatic transmission, torque convertor, reverse protection, powershift		
	Drive axle model			Kessler D102		
	Driving brake system, type			Oil-cooled multiple wet disc brakes (WDB)		
	Parking brake system, type			Dry single disc / spring release		
Steering system / steer axle type			Hydraulic power steering / HD axle with double-acting cylinder			
OTHERS	Load-sensing hydraulics / power-on-demand			Yes / yes	Yes / yes	Yes / yes
	Hydraulic oil pressure		MPa	20	21	22
	Diesel / hydraulic tank volumes		Lit	410 / 480	550 / 630	550 / 630
	Batteries (voltage / capacity)		V - Ah	2 x 12 / 140	2 x 12 / 140	2 x 12 / 140
	Noise level inside cab (LM) DIN 45635	<b>EU4</b>	dB(A)	70	70	70
	Noise level inside cab (LpAZ) EN 12053		dB(A)	76	76	76
Noise level outside (LWA) 2000/14/EC		dB(A)	111	111	111	

NOTE 1. All lifting capacities with duplex mast (4 m), carriage with sideshift & fork positioner and integral forks

NOTE 2. Other lifting capacities, wheelbases, lifting equipment combinations according to factory information and upon request

NOTE 3. For available driveline combinations, see driveline chart and latest factory information

# Dimension measurement identifiers



SMV 50-1200 C	SMV 52-1200 C	SMV 60-1500 C	SMV 65-1200 C
50000	52000	60000	65000
1200	1200	1500	1200
6000	6000	6000	6000
1340	1430	1620	1620
6000	6000	6000	6000
58100	61700	89600	89600
30500 / 101700	32000 / 106800	48300 / 139600	48300 / 139600
27600 / 6400	29700 / 6900	41300 / 10000	41300 / 10000
Pneumatic	Pneumatic	Pneumatic	Pneumatic
18.00 x 25" / PR40	18.00 x 33" / PR36	21.00 x 35" / PR40 + 18.00 x 33" / PR36	
13.00 x 25"	13.00 x 33"	13.00 x 33" + 11.25 x 25"	
1.0 / 1.0	1.0 / 1.0	1.0 / 1.0	1.0 / 1.0
4X / 2	4X / 2	4X / 2	4X / 2
3030 / 2612	3030 / 2911	3225 / 2911	3225 / 2911
5 / 10	5 / 10	5 / 10	5 / 10
4000	4000	4000	4000
5050 / 6975	5050 / 6975	5750 / 7700	5750 / 7700
3660 / 2550	3840 / 2725	4025 / 2900	4025 / 2900
8400	8550	8750	8750
4160	4160	4600	4600
300 x 150 x 2400	300 x 150 x 2400	300 x 200 x 2400	300 x 200 x 2400
Sideshift & fork positioner		Sideshift & fork positioner	
3400	3400	4400	4400
1950 / 2750 (opt. 850 / 3150)		1950 / 2750 (opt. 850 / 3150)	
± 200 / 2050 (opt. ± 550 / 1700)		± 200 / 2050 (opt. ± 550 / 1700)	
300 / 440 / 270	300 / 600 / 400	350 / 750 / 400	350 / 750 / 400
12000	12100	12300	12300
1200 - 8050	1200 - 8050	950 - 8100	950 - 8100
24 / 22	26 / 23	29 / 22	29 / 22
24 / 22	26 / 23	29 / 22	29 / 22
0.21 / 0.16	0.21 / 0.16	0.21 / 0.16	0.21 / 0.16
0.40 / 0.40	0.40 / 0.40	0.22 / 0.26	0.22 / 0.26
28 / 23	35 / 23	23 / 17	23 / 17
313 / 253	260 / 214	360 / 275	360 / 275
257 - 294	257 - 294	257 - 294	257 - 294
1785 - 2157	1785 - 2157	1785 - 2157	1785 - 2157
DANA 4 + 4 / ZF 4 + 3	DANA 4 + 4 / ZF 4 + 3	DANA 4 + 4 / ZF 4 + 3	DANA 4 + 4 / ZF 4 + 3
	Kessler D106	Fully automatic transmission, torque converter, reverse protection, powershift Kessler D111	
		Oil-cooled multiple wet disc brakes (WDB)	
		Dry single disc / spring release	
		Hydraulic power steering / HD axle with double-acting cylinder	
Yes / yes	Yes / yes	Yes / yes	Yes / yes
19	22	24	24
550 / 630	550 / 630	550 / 650	550 / 650
2 x 12 / 140	2 x 12 / 140	2 x 12 / 140	2 x 12 / 140
70	70	70	70
76	76	76	76
111	111	112	112





INDUSTRIAL  
CRANES



NUCLEAR  
CRANES



PORT  
CRANES



HEAVY-DUTY  
LIFT TRUCKS




SERVICE

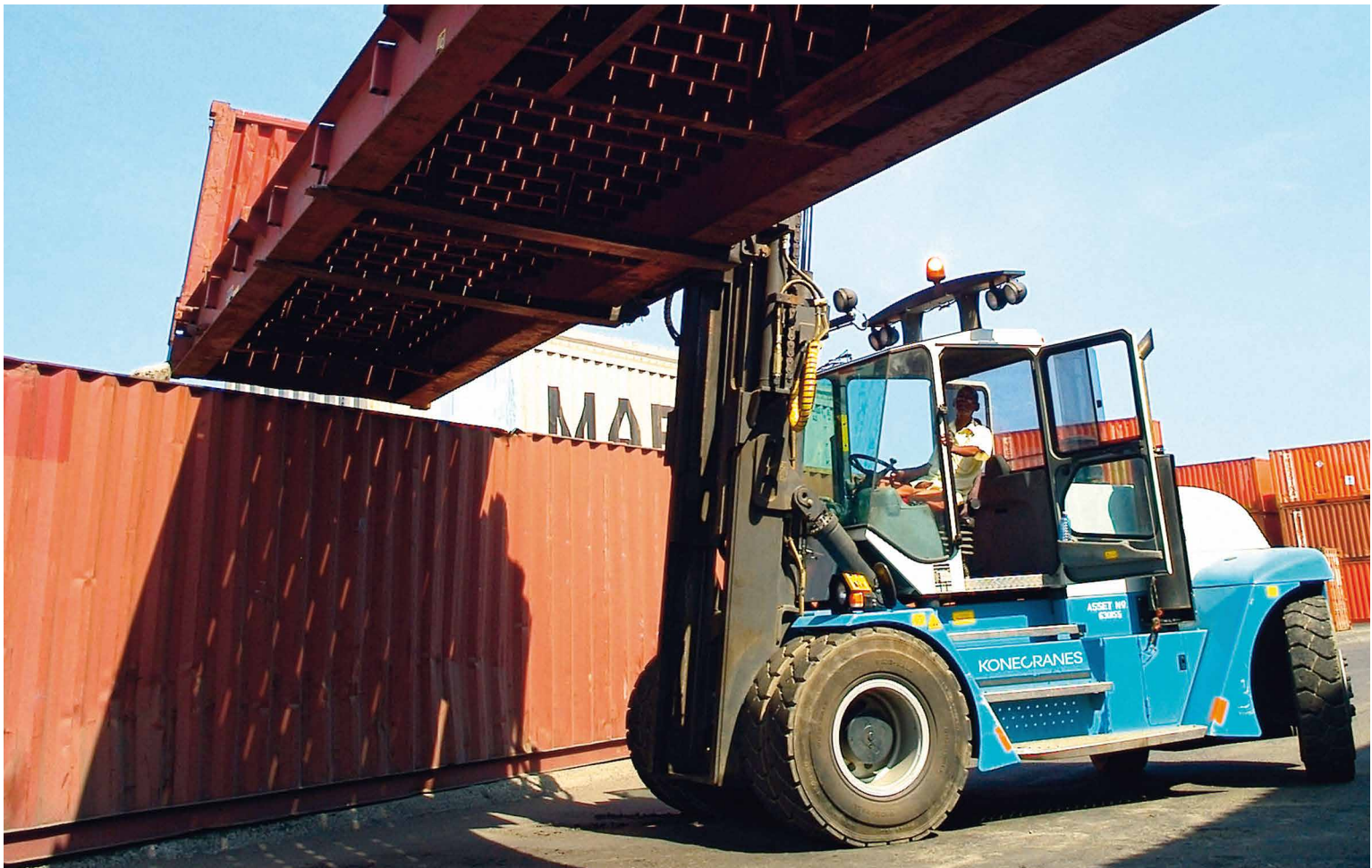


MACHINE  
TOOL  
SERVICE



Konecranes is a world-leading group of Lifting Businesses™ offering lifting equipment and services that improve productivity in a wide variety of industries. The company is listed on NASDAQ OMX Helsinki Ltd (symbol: KCR1V). With almost 12,000 employees at 600 locations in nearly 50 countries we have the resources, technology and determination to deliver on the promise of Lifting Businesses™.

© 2014 Konecranes Plc. All rights reserved. 'Konecranes', 'Lifting Businesses' and  are either registered trademarks or trademarks of Konecranes Plc.



**Konecranes Liftrucks AB** Box 103, SE-285 23 Markaryd, Sweden  
Tel. +46 433 73300, E-mail: [info.liftrucks@konecranes.com](mailto:info.liftrucks@konecranes.com)  
[www.kcliftrucks.com](http://www.kcliftrucks.com)