



M1400C

SERIES 2



HYDREMA





Load Sensing hydraulics – precision and high performance

An advanced, demand-controlled Load Sensing hydraulic system ensures independent operation of all functions, as well as easy and precise manoeuvring. A separate pump ensures a 100% independent swing function.

Along with the powerful engine, the Load Sensing system ensures that demanding tasks are performed with effortless ease. The hydraulic system's high oil volume and the excavator's great break-out forces provide fast duty cycles as well as high precision and high performance. The hydraulic mode control allows the operator to switch between high and low speed at the touch of a button. An advanced power-regulating system ensures that the engine always operates at optimum revs.

The king of swing – short is sweet!

The upper body of the M1400C series 2 is characterised by its extremely short rear end, which, along with the compact kinematics on the excavator, makes the M1400C series 2 the market's most compact 14-tonne machine. This means that it is particularly well suited to working in tight confines in urban areas, on roads where one lane remains open or when carrying out excavating work between buildings. The two-piece boom is specially developed to ensure extensive reach, whilst at the same time enabling work to be carried out very close to the machine. The M1400C series 2 is ideal where strength and flexibility are paramount.

Undercarriage with great stability and exceptional safety

The robust robot-welded undercarriage with its box profile ensures maximum torsional stiffness. The modular construction enables the machine to be configured precisely to the needs of the user, with the dozer blade and stabilisers located at the front or rear respectively – depending on the user's requirements.

The broad, independently adjustable stabilisers are of great benefit when handling heavy objects and ensure perfect levelling of the machine even in very uneven terrain, thus increasing safety, performance and comfort.

The extensive clearance height, large wheels and completely enclosed disc brakes ensure good passage and maximum stopping power in all conditions. The excavating brake activates the brakes in all 4 hubs and ensures that the machine remains rock solid while excavating.

The self-levelling dozer blade helps ensure the best possible stability when excavating and carrying out lifting operations and is also ideal for clearing up at the end of the job in question.

During transport, the hydrostatic drive with its 2-speed powershift transmission ensures high speed or maximum tractive effort in all conditions. Gear changes are smooth under load, even when shifting between creep speed and transport gear.

There are two large lockable tool boxes situated between the wheel fairings on both sides of the vehicle.



Brand new cab interior to meet the highest demands for comfort

The cab combines external compactness with internal spaciousness. A modern, spacious operator's cab suspended in vibration-damped mountings and with large areas of glass providing good all-round visibility. The climate control system and refrigeration compartment under the seat are standard. The brand new smooth-acting joystick featuring even more functions provides the operator with easy and precise control of the machine and its functions – including operation of the dozer blade, stabilisers and other extra hydraulic functions. The joysticks are integrated into the soft touch armrests mounted directly on the seat and follow the seat's - and thereby also the operator's movements. The computer-controlled instrument panel and the well laid out control elements make for a comfortable and fluid working procedure. The computer warns the operator of any system failures on, for example, the engine and whether the failure in question can be remedied by the operator, or whether a service engineer needs to be called out. The computer also switches automatically between "excavating operation" and "driving operation". The operator's seat and armrests are multi-adjustable and can be individually adapted so that the most ergonomic working position can be achieved – high comfort is standard!



Quiet and powerful

Convincing engine performance with plenty of torque.

The machines in Hydrema's C series 2 range are equipped with a Perkins stage 3a common rail engine that produces 96 kW/131 hp. Despite developing plenty of power, the engine is characterised by its quietness. The impressive amount of torque means that work can be carried out even

at low revs, which in turn reduces fuel consumption and noise levels considerably.

On the computer display 4 modes of operation can be chosen whereby the engine revs are electronically regulated depending on the task in question, thus ensuring that the engine always performs in the optimum manner. The automatic idling system reduces noise and fuel consumption.

M1400C series 2: V5.1, L2.5, A1

| Reach m. Lifting height m. | 3 | | | 4 | | | 5 | | | 6 | | | 7 | | | max | | | |
|-------------------------------|------|------|------|------|------|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|-----|--|
| | AQ | F | AL | AQ | F | AL | AQ | F | AL | AQ | F | AL | AQ | F | AL | AQ | F | AL | |
| 8 | 3.7* | 3.7* | 3.7* | 3.2* | 3.2* | 3.2* | | | | | | | | | | | | | |
| 6 | 3.3* | 3.3* | 3.3* | 3.5* | 3.5* | 3.5* | 2.8 | 2.5 | 2.9* | 2.0 | 1.7 | 2.5* | | | | | | | |
| 4 | 5.2* | 5.2* | 5.2* | 3.8 | 3.3 | 4.0 | 2.6 | 2.3 | 3.1* | 1.9 | 1.6 | 2.6* | 1.4 | 1.2 | 2.2* | | | | |
| 2 | 5.2 | 4.4 | 7.0 | 3.2 | 2.7 | 5.3* | 2.3 | 2.0 | 3.7* | 1.7 | 1.5 | 2.9* | 1.3 | 1.1 | 2.4* | | | | |
| 0 | 4.0* | 3.6 | 4.0 | 2.8 | 2.4 | 7.0 | 2.0 | 1.7 | 4.5* | 1.6 | 1.3 | 3.3* | 1.2 | 1.0 | 2.6* | 1.0 | 0.8 | 1.9 | |
| -2 | 4.5 | 3.7 | 7.0 | 2.8 | 2.3 | 5.9* | 2.0 | 1.7 | 4.8* | 1.5 | 1.3 | 3.6* | | | | | | | |
| -3 | 4.6 | 3.9 | 7.0 | 2.9 | 2.4 | 5.9* | 2.0 | 1.7 | 3.7* | | | | | | | | | | |

M1400C series 2: V5.1, L2.5, A3

| | | | | | | | | | | | | | | | | | | | |
|----|------|------|------|------|------|------|------|-----|------|------|-----|------|------|-----|------|------|-----|------|--|
| 8 | 3.7* | 3.7* | 3.7* | 3.2* | 3.2* | 3.2* | | | | | | | | | | | | | |
| 6 | 3.3* | 3.3* | 3.3* | 3.5* | 3.5* | 3.5* | 2.9* | 2.6 | 2.9* | 2.5* | 1.9 | 2.5* | | | | | | | |
| 4 | 5.2* | 5.2* | 5.2* | 4.0* | 3.6* | 4.0* | 3.1* | 2.5 | 3.1* | 2.6* | 1.8 | 2.6* | 2.2* | 1.3 | 2.2* | | | | |
| 2 | 7.0 | 4.8 | 7.0 | 5.3* | 3.0 | 5.3* | 3.7* | 2.1 | 3.7* | 2.9* | 1.6 | 2.9* | 2.4* | 1.2 | 2.4* | | | | |
| 0 | 4.0* | 4.0* | 4.0* | 5.5 | 2.6 | 7.0 | 3.8 | 1.9 | 4.5* | 2.9* | 1.4 | 3.3* | 2.3 | 1.1 | 2.6* | 1.9* | 1.0 | 1.9* | |
| -2 | 7.0 | 4.1 | 7.0 | 5.4 | 2.6 | 5.9* | 3.8 | 1.8 | 4.8* | 2.9 | 1.4 | 3.6* | | | | | | | |
| -3 | 7.0 | 4.2 | 7.0 | 5.6 | 2.7 | 5.9* | 3.7* | 1.9 | 3.7* | | | | | | | | | | |

M1400C series 2: V5.1, L2.5, A1V

| Reach m. Lifting height m. | 3 | | | 4 | | | 5 | | | 6 | | | 7 | | | max | | | |
|-------------------------------|------|------|------|------|------|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|--|
| | AQ | F | AL | AQ | F | AL | AQ | F | AL | AQ | F | AL | AQ | F | AL | AQ | F | AL | |
| 8 | 3.7* | 3.7* | 3.7* | 3.2* | 3.2* | 3.2* | | | | | | | | | | | | | |
| 6 | 3.3* | 3.3* | 3.3* | 3.5* | 3.5* | 3.5* | 2.7 | 2.5 | 2.9* | 1.9 | 1.7 | 2.5* | | | | | | | |
| 4 | 5.2* | 5.2* | 5.2* | 3.6 | 3.3 | 4.0* | 2.5 | 2.3 | 3.1* | 1.8 | 1.6 | 2.6* | 1.3 | 1.2 | 2.2* | | | | |
| 2 | 4.9 | 4.4 | 7.0 | 3.0 | 2.7 | 5.3* | 2.2 | 2.0 | 3.7* | 1.6 | 1.5 | 2.9* | 1.2 | 1.1 | 2.4* | | | | |
| 0 | 4.0* | 3.6 | 4.0* | 2.7 | 2.4 | 7.0 | 1.9 | 1.7 | 4.5* | 1.5 | 1.3 | 3.3* | 1.2 | 1.0 | 2.6* | 1.0 | 0.8 | 1.9* | |
| -2 | 4.2 | 3.7 | 7.0 | 2.6 | 2.3 | 5.9* | 1.9 | 1.7 | 4.8* | 1.4 | 1.3 | 3.6* | | | | | | | |
| -3 | 4.3 | 3.9 | 7.0 | 2.7 | 2.4 | 5.9* | 1.9 | 1.7 | 3.7* | | | | | | | | | | |

M1400C series 2: V5.1, L2.5, A3V

| | | | | | | | | | | | | | | | | | | | |
|----|------|------|------|------|------|------|------|-----|------|------|-----|------|------|-----|------|-----|-----|------|--|
| 8 | 3.7* | 3.7* | 3.7* | 3.2* | 3.2* | 3.2* | | | | | | | | | | | | | |
| 6 | 3.3* | 3.3* | 3.3* | 3.5* | 3.5* | 3.5* | 2.9* | 2.7 | 2.9* | 2.5* | 1.9 | 2.5* | | | | | | | |
| 4 | 5.2* | 5.2* | 5.2* | 4.0* | 3.6 | 4.0* | 3.1* | 2.5 | 3.1* | 2.6* | 1.8 | 2.6* | 2.2* | 1.3 | 2.2* | | | | |
| 2 | 7.0 | 4.8 | 7.0 | 5.3* | 3.0 | 5.3* | 3.7* | 2.2 | 3.7* | 2.9* | 1.6 | 2.9* | 2.2 | 1.2 | 2.4* | | | | |
| 0 | 4.0* | 4.0* | 4.0* | 5.0 | 2.6 | 7.0 | 3.6 | 1.9 | 4.5* | 2.7 | 1.4 | 3.3* | 2.1 | 1.1 | 2.6* | 1.8 | 1.0 | 1.9* | |
| -2 | 7.0 | 4.1 | 7.0 | 5.0 | 2.6 | 5.9* | 3.5 | 1.9 | 4.8* | 2.7 | 1.4 | 3.6* | | | | | | | |
| -3 | 7.0 | 4.2 | 7.0 | 5.1 | 2.7 | 5.9* | 3.5 | 1.9 | 3.7* | | | | | | | | | | |

TECHNICAL DATA:

Hydraulic system:

Dual-circuit system with fully independent slewing function with its own pump. Working hydraulics with variable pump, Load Sensing, pressure cut-off, cumulative power regulation and »flow-sharing«. The system has a very large volume of oil and provides perfect flow distribution regardless of load and engine speed. Multifunctional joystick with optional functions.

| | |
|--|----------------|
| Oil quantity working hydraulic/slewing system..... | 260 + 90 l/min |
| Working pressure..... | 340 bar |
| Steering pump..... | 22 l/min |
| Optional hydraulics..... | 60-200 l/min |
| Working pressure..... | 120-280 bar |
| Hydraulic tank..... | 180 l |

The system has combined hydraulic and electronic mode control. 4 electronic and 2 hydraulic modes can be selected on the instrument panel for optimum choice of excavating speed.

Transmission:

Hydrostatic drive, variable motor with drive brake valve. 2-speed powershift transmission. Permanent 4-wheel drive and differential lock on rear axle. 2-speed powershift gearbox for transport/terrain gear. Power regulated hydrostatic Load Sensing drive system with 1 large variable drive motor. Max. tractive effort : 95 kN.

| | Standard | Option | |
|----------------------------|----------|--------|------|
| Transport gear | 0-20 | 0-33 | km/h |
| Off-road gear | 0-12 | 0-12 | km/h |
| Transp.gear + creeper gear | 0-11,5 | 0-11,5 | km/h |
| Off-road + creeper gear | 0-3,1 | 0-3,1 | km/h |

Axles:

Axles with planetary reduction gear in all wheel hubs. Rocker-mounted front axle with lock for axle oscillation. Oscillating angle± 8°

Brakes:

Hydraulic dual-circuit braking system. Maintenance-free multi-disc brakes immersed in oil, can be locked on when carrying out excavation work. Parking brake via gearbox, acting on all wheels.

Slew:

Slewing ring with internal teeth and long-service lubrication. Swing speed: 9.0 rpm. Swing torque: 48 kNm.

Steering:

Hydrostatic steering with emergency steering.

Electrical system:

24 V electrical system with central electronics for controlling all electrical functions. Computer-controlled instrument panel with central monitoring of the machine's main functions, storage of service data, machine hire menu and soft-touch operation of all functions. Electronic mode control. 2 x 88 A battery capacity, 70A (1680 W) alternator.

Instrument panel:

Electronic control panel with plastic keyboard. Computer-controlled instrument panel with the following functions: Automatic monitoring of important machine functions with alarm - Saving of machine data for service and machine hire - Control of excavating unit.

Engine:

Perkins 1104D-44TA stage 3a engine. 4.4 l turbo diesel engine with air/air intercooler, 16 valves and common rail injection. 96 kW/131 hp at 2200 rpm. Max. torque 516 Nm at 1400 rpm. Latest engine technology which meets EEC stage 3a requirements for exhaust emissions.

Cab:

Spacious cab with opening front windscreen. Window in door can slide open, roof window, adjustable steering column, multi-adjustable and vibration-damped comfort seat. Multiad-justable armrest. Automatic climate control unit with cooling compartment under the seat. Radio with CD and MP3. Comprehensive soundproofing of cab and engine bay.

Boom and dippers:

Boom: two-piece boom V5.1

Dippers: L2.0 / L2.5 / L3.0

Noise level:

EU standard: 2000/14/EC

LwA: (exterior) 99 dB(A) LpA: (cab) 75 dB(A)

DIMENSIONS:

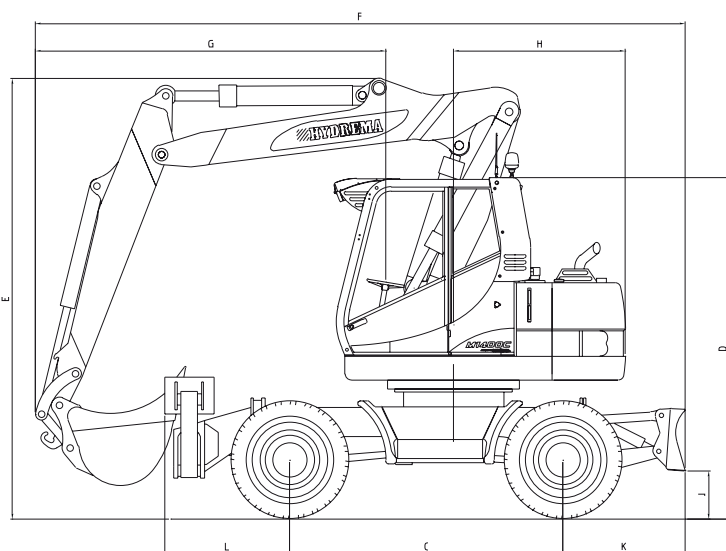
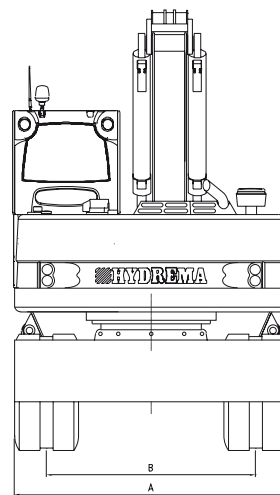
| | L2.0 | L2.5 | L3.0 |
|---|------|------|---------|
| Total weight w. dozer blade | 14,1 | 14,2 | 14,3 t |
| Total weight w. dozer bl. + stabilizers | 15,4 | 15,5 | 15,6 t |
| A Width over tyres | 2500 | 2500 | 2500 mm |
| B Track | 1915 | 1915 | 1915 mm |
| C Wheelbase | 2500 | 2500 | 2500 mm |
| D Cab height | 3080 | 3080 | 3080 mm |
| E Transport height | 3990 | 3990 | 3990 mm |
| F Road transport length | 5940 | 5940 | 5940 mm |
| G Overhang, front | 3200 | 3200 | 3200 mm |
| H Tail swing radius | 1570 | 1570 | 1570 mm |
| J Ground clearing dozer blade | 400 | 400 | 400 mm |
| K Overhang dozer blade | 1120 | 1120 | 1120 mm |
| L Overhang stabilizers | 1145 | 1145 | 1145 mm |

EXCAVATOR:

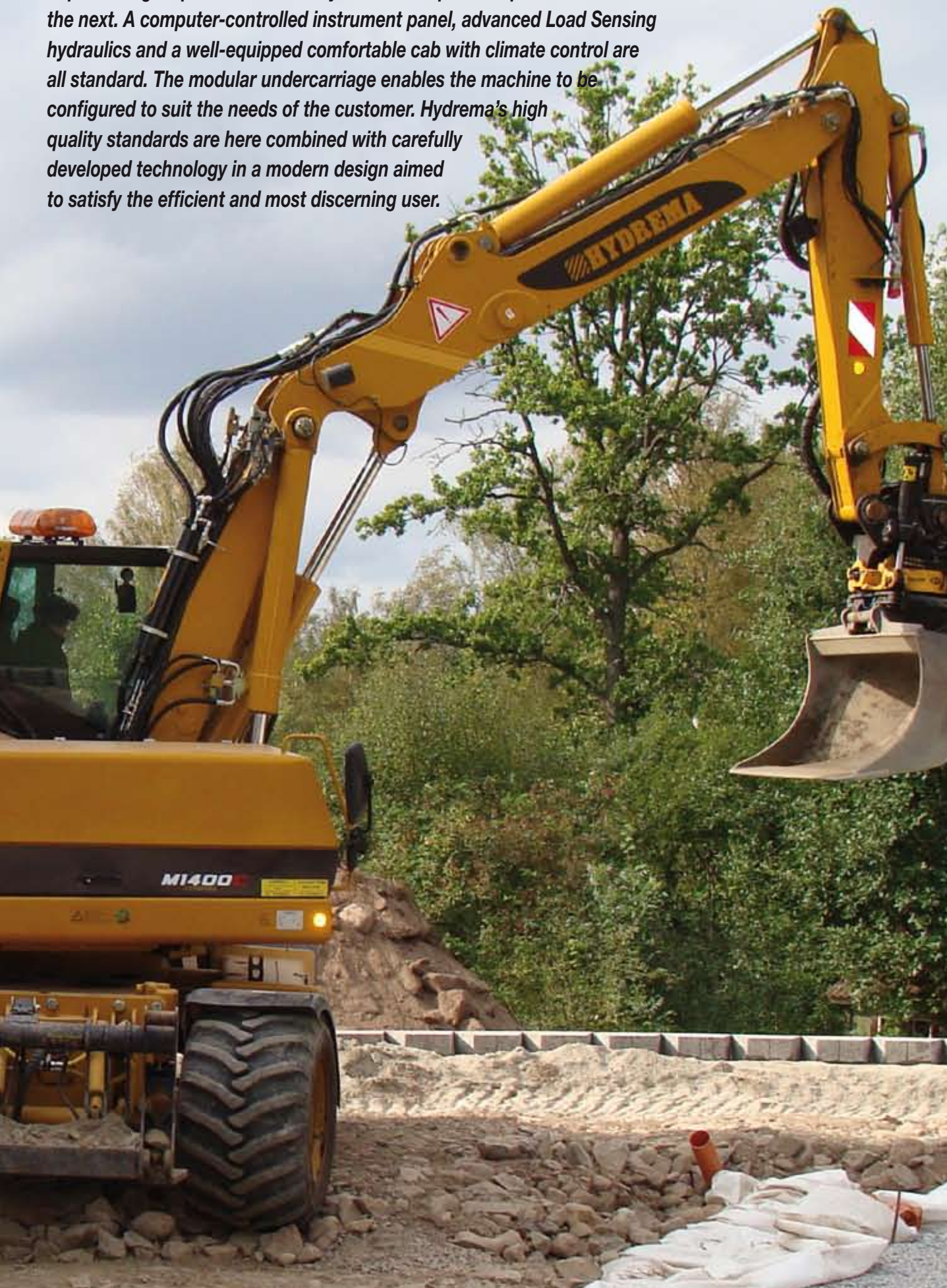
| | | | |
|--|------|------|---------------------|
| Lifting capacity, max. excl. appliance | 7000 | 7000 | 7000 kg |
| Bucket size, max. | 0,80 | 0,80 | 0,80 m ³ |
| Reach max. | 8200 | 8800 | 9300 mm |
| Excavating depth, max. | 4700 | 5200 | 5700 mm |
| Bucket rotation angle | 177 | 177 | 177 ° |

BREAKOUT FORCES:

| | | | |
|--------------------------------------|------|------|---------|
| Excavating cyl., at max. bucket size | 74 | 64 | 56 kN |
| Bucket cyl, at max. bucket size | 90 | 90 | 90 kN |
| Stabilizers – supporting width | 3830 | 3830 | 3830 mm |



A genuine 14-tonne city machine: compact, powerful and fast. During its development, focus has been applied to creating the ideal combination of a 14-tonne machine with high capacity matched to dimensions that are usually found on much smaller machines. M1400C series 2 is able to operate where other excavators are forced to give up. Superior engine performance always ensures rapid transport from one site to the next. A computer-controlled instrument panel, advanced Load Sensing hydraulics and a well-equipped comfortable cab with climate control are all standard. The modular undercarriage enables the machine to be configured to suit the needs of the customer. Hydrema's high quality standards are here combined with carefully developed technology in a modern design aimed to satisfy the efficient and most discerning user.



MI400C

SERIES 2

STANDARD EQUIPMENT:

- ◆ Two-piece boom V5.1
- ◆ 6 working lights (4 front, 2 rear)
- ◆ Computer-controlled instrument panel
- ◆ Automatic climate control with cooling box
- ◆ Heated seat with headrest
- ◆ Multi-adjustable armrests
- ◆ Ergonomic joystick with multi-function
- ◆ Adjustable steering wheel
- ◆ Radio with CD and MP3
- ◆ 12V and 24V sockets in the cab
- ◆ Large sun visor in front and rear
- ◆ 2-speed transmission with creep gear
- ◆ Axles with multiple disk brakes in the hubs
- ◆ Front axle with diff lock and pendulum lock
- ◆ Excavating brake
- ◆ Maintenance-free main and parking brake
- ◆ Automatic engine rpm boost via joystick
- ◆ Cruise control
- ◆ 4-speed electronic pre-selection of engine rpm
- ◆ Option hydraulics 200 l/min
- ◆ Beacon light
- ◆ Hose-burst valve on lifting cylinder
- ◆ Overload indicator



OPTIONAL EQUIPMENT:

- ◆ Dipper lengths: L2.0, L2.5, L3.0
- ◆ Dual tyres: 8 x 10.00-20 EM
- ◆ TWEEN tyres: 4 x 600/40-22.5 or 4 x 700/40-22.5
- ◆ A1 dozer blade front or rear
- ◆ A2 stabilizers front or rear
- ◆ A3 stabilizers rear/front, dozer blade front/rear
- ◆ Load-holding valves
- ◆ Hydraulic quick hitch
- ◆ Pressureless return for hydraulic hammer
- ◆ Separate hydraulic circuit (42 l/min)
- ◆ Central lubrication point
- ◆ Automatic central lubrication system
- ◆ Mirror rhs electrically adjustable
- ◆ Air-suspension comfort seat
- ◆ Front grille
- ◆ FOPS cage
- ◆ Bio oil
- ◆ Refueling pump
- ◆ Dozer blade with towing hook
- ◆ Engine heater
- ◆ 30 km/h transmission
- ◆ Transport bracket for grab



A/S HYDREMA EXPORT

Gl. Kirkevej 16

DK-9530 Støvring

Phone +45 98 37 13 33

Fax +45 98 37 19 96

e-mail: hydrema@hydrema.com



w w w . h y d r e m a . c o m