

If accuracy, reliability and ease of use are important to you – you are ready for a MikroDozer™ system.

- Professionals choose MikroDozer™ systems because they can rely on them every day.
- Mikrofyn responds to customer needs and requests for new development.
- Our customers are the #1 most important source for new ideas. That's why MikroDozer™ is so easy to use.
- We have carefully designed and optimized every component in the dozer system to work together as one unit hereby creating the most responsive and accurate dozer system on the market.
- All our sensors and lasers exceed the IP-68 standard (waterproof below 1m).



TECHNICAL DATA	
Supply:	9 – 28 V, full polarity and load dump protected
Operating temperature:	-40° C to 70° C
CB4 Control Box	
Size:	160 x 55 x 100 mm
Weight:	837 g
Seal:	Water resistant, IP-66
JB4 Junction Box	
Size:	180 x 135 x 55 mm
Weight:	1258 g
Seal:	Water proof to IP-68
Driver:	On/Off, proportional or differential valves.
CS4-D Cross Slope Sensor	
Size:	80 x 120 x 35 mm
Weight:	800 g
Seal:	Water proof to IP-68
Type:	Inclination
Resolution:	0.01°
Accuracy:	Typical < 0.1°
EM4 Electrical Mast	
Size:	3200 mm fully extended
Weight:	37 kg, including chock mount
Seal:	Water resistant to IP-66
Accuracy:	0.1 mm
MD10 Laser Receiver	
Sensor pickup range:	Proportional detection 360° capture range
Weight:	2 kg.
Seal:	Water proof to IP-68
Accuracy:	1.5 mm independent of beam width
ML4 Construction Laser	
Operating area:	900 m (1600 m with high power diode)
Dual slope:	Up to + 110% dependent on model
Seal:	Water proof to IP-68
Accuracy:	2mm/100m (-5 to + 40° C)

AUTHORIZED MIKROFYN DISTRIBUTOR:



Mikrofyn A/S · Bondovej 16 · 5250 Odense SV · Denmark · www.mikrofyn.com

Since the start in 1987 Mikrofyn A/S has placed itself among the top-five worldwide manufacturers of professional precision lasers and machine control systems. The profits of the business are reinvested in new products and growing the business. Mikrofyn is built upon sound principals of developing and manufacturing state-of-the-art products, supported by experts and cooperating with outstanding professional local distributors.

www.kornbeck.dk 06.2007 GB 500



MikroDozer™

Maximize productivity, accuracy and profits with MikroDozer™ machine control



The MikroDozer™ systems are versatile solutions made to fit your needs

Wherever bulk earthwork or fine grading is done you'll find MikroDozer™ systems doing the job.

Giving contractors the flexibility they need, the system can be used with a range of sensors, allowing the contractor to choose the best measuring technology to meet the job requirements.

A MikroDozer™ system is also truly upgradeable – you can start with a manual laser based display system and later upgrade all the way to GPS based 3D automatic machine control.

We secure that your local Mikrofyn dealer will give you fast service and support.

You can freely combine any of the mentioned sensors, masts etc. to give you just the right system to fit your needs – "Have it your way". Let's give you a couple of examples.

Example #1



Simple and economical Manual Display System

As all MikroDozer™ systems this laser based system is build around the CB4 control box.

The Manual Display System comprises:

- CB4 Control Box
- CS4-D Cross Slope Sensor
- MD10 Laser Sensor on manual mast
- ML4 Dual Slope Construction Laser

The operator must manually move the blade up or down to maintain grade. He must also work in the same direction as the slope. The bright guide lights and displays on the CB4 Control Box will guide the driver to maintain the correct height and slope of the blade.

The system is ideal for contractors who are looking for an economical yet accurate and versatile system that will do the job. The system can be upgraded with automatic hydraulic control etc.

The system will increase job site profitability by getting to grade in fewer passes.

- Simple to use and easy to afford
- Eliminates grade-checkers, re-work and idle machine time.
- Ideal for leveling of large areas such as parking lots, factory floors, embankments, etc.

Example #2



Automatic Grade Control for high accuracy grading

Maintaining manual control of height and slope can be difficult during fine grading operations. An automated MikroDozer™ system will provide automatic control of both lift and tilt, to place the cutting edge at the precise elevation.

Adding an extra mast and laser sensor will allow the driver to work independent of the slope direction.

This system comprises:

- CB4 Control Box
- Two EM4 Electrical Mast
- Two MD10 Laser Sensor
- Mikrofyn automatic hydraulic control
- ML4 dual slope Construction Laser

The system is ideal for contractors who want to further increase their machine productivity working with the highest possible accuracy.

- With the automatic control of tilt and lift the driver will now be able to focus on material control, ensuring further job site cost savings.
- The automatic system will further minimize material overruns, eliminate rework and excessive material usage to improve bottom line profitability.
- Ideal for grading where high accuracy is required – flat or sloping surfaces in one or two directions, road surfaces, etc.

The Mikrofyn Automated Grade Control system can be fitted to any dozer or scraper.

Example #3



3D MikroDozer™ system with GPS or total station

The 3D MikroDozer™ system will completely alter the way you know earthmoving and fine grading.

The 3D MikroDozer™ system will bring the design surfaces and alignments inside the cab. You will no longer be dependent on survey markers, strings or lasers. You can now work totally independent anywhere on the design surface guided by GPS or a robotic total station.

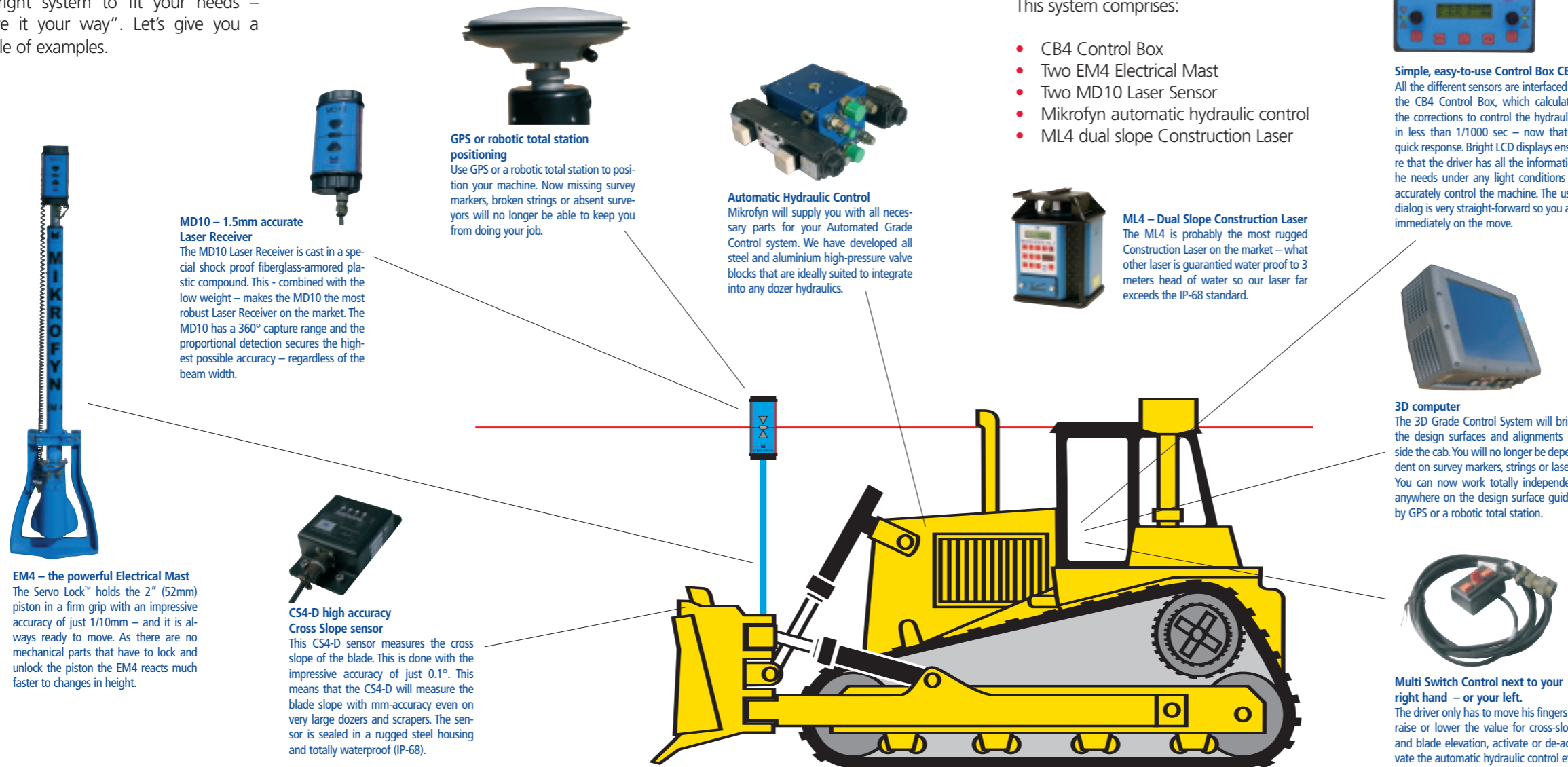
A Mikrofyn Automated Grade Control System comprises:

- CB4 Control Box
- CS4-D Cross Slope Sensor
- EM4 Electrical Mast or manual mast
- Mikrofyn automatic hydraulic control
- Rugged 3D computer in cabin
- GPS or robotic total station

The Mikrofyn 3D MikroDozer™ system will give you all the flexibility you need. It will allow you to choose the best measuring technology to meet the job requirements.

- GPS is ideal for bulk earth works and large site preparation accurate to 30mm.
- A robotic total station accurate to 10mm will be the ideal choice for final fine grading.
- Eliminates setting out stakes or string lines for roads and embankments.
- Ideal for construction of complex terrain models such as golf courses and large landfills.

The Mikrofyn 3D Grade Control System can be fitted to any dozer or scraper. The system can be configured as a manual or automatic system – "Have it your way".



Simple, easy-to-use Control Box CB4
All the different sensors are interfaced to the CB4 Control Box, which calculates the corrections to control the hydraulics in less than 1/1000 sec – now that is quick response. Bright LCD displays ensure that the driver has all the information he needs under any light conditions to accurately control the machine. The user dialog is very straight-forward so you are immediately on the move.



ML4 – Dual Slope Construction Laser
The ML4 is probably the most rugged Construction Laser on the market – what other laser is guaranteed water proof to 3 meters head of water so our laser far exceeds the IP-68 standard.



3D computer
The 3D Grade Control System will bring the design surfaces and alignments inside the cab. You will no longer be dependent on survey markers, strings or lasers. You can now work totally independent anywhere on the design surface guided by GPS or a robotic total station.



Multi Switch Control next to your right hand – or your left.
The driver only has to move his fingers to raise or lower the value for cross-slope and blade elevation, activate or deactivate the automatic hydraulic control etc.