



For Earth, For Life  
Kubota

**RM**

**KUBOTA PLOUGHS**

**CM1000/RM2000/RM3000  
SERIES**

Mounted Reversible Ploughs



# FOR ALL REQUIREMENT

## HEADSTOCKS



### **Two different headstocks**

The Kubota program has two different headstocks with the designations 150 and 200. Both are constructed from the highest quality steel and are subject to Kubota's special heat treatment processes which infuse additional properties such as strength and hardness. Strong sealed roller bearings are used for years of trouble-free and maintenance free service.

### **Smooth and safe turnover**

The headstocks employ a strong 80 mm turnover cylinder, positioned at the rear of the headstock mast, to give correct and safe turnover.

The design retains the proven Kubota concept of having the centre of gravity close to the tractor in order to minimise lift requirement and to improve stability.

### **Clever layout of hoses**

To avoid the risk of hose damage during the turnover operation, the majority of the hoses pass through the main support axle – no hose pass over the turning point of the headstock. Even the valve block is integrated.

### **Transport lock**

The headstocks are equipped with an integrated transport lock to transport the plough in the "butterfly" position.

### **Front furrow width adjustment**

As standard equipment, front furrow width adjustment is via a turnbuckle. Hydraulic cylinders can be specified as an option.



### Headstock 150

Designed for the Kubota RM2000 plough serie and for tractors up to 150 hp. Cross shaft Cat. II and III. Robust 110 mm heat treated hollow shaft forged of 1 piece. Dustproof ball bearings.



### Headstock 200

For intensive ploughing and tractors up to 200 hp. Trouble free 120 mm heat treated monoblock hollow shaft, fitted with sealed roller bearings. Cross shaft Cat. II and III.

### Sequence valve

The sequence valve controls the reversing cycle of the plough. It automatically activates an alignment cylinder which 'narrows' the plough prior to reversal. After reversal, the plough returns to its working position. This system gives a smoother reversal of the plough bodies.

### Memory valve

The memory valve together with the memory-sequence valve, is also activated during reversal; it closes the plough down to the narrowest ploughing width of 12" (30 cm) before reversing. Once the cycle is completed, it returns automatically to the pre-set furrow width.

The memory valve is fitted to the 4, 5, 6 furrow Variomat® ploughs of the RM2000/ RM3000 series, depending on countries.

### Quick coupling

All headstocks can be fitted with a quick coupling cross shaft.

### Cross shaft

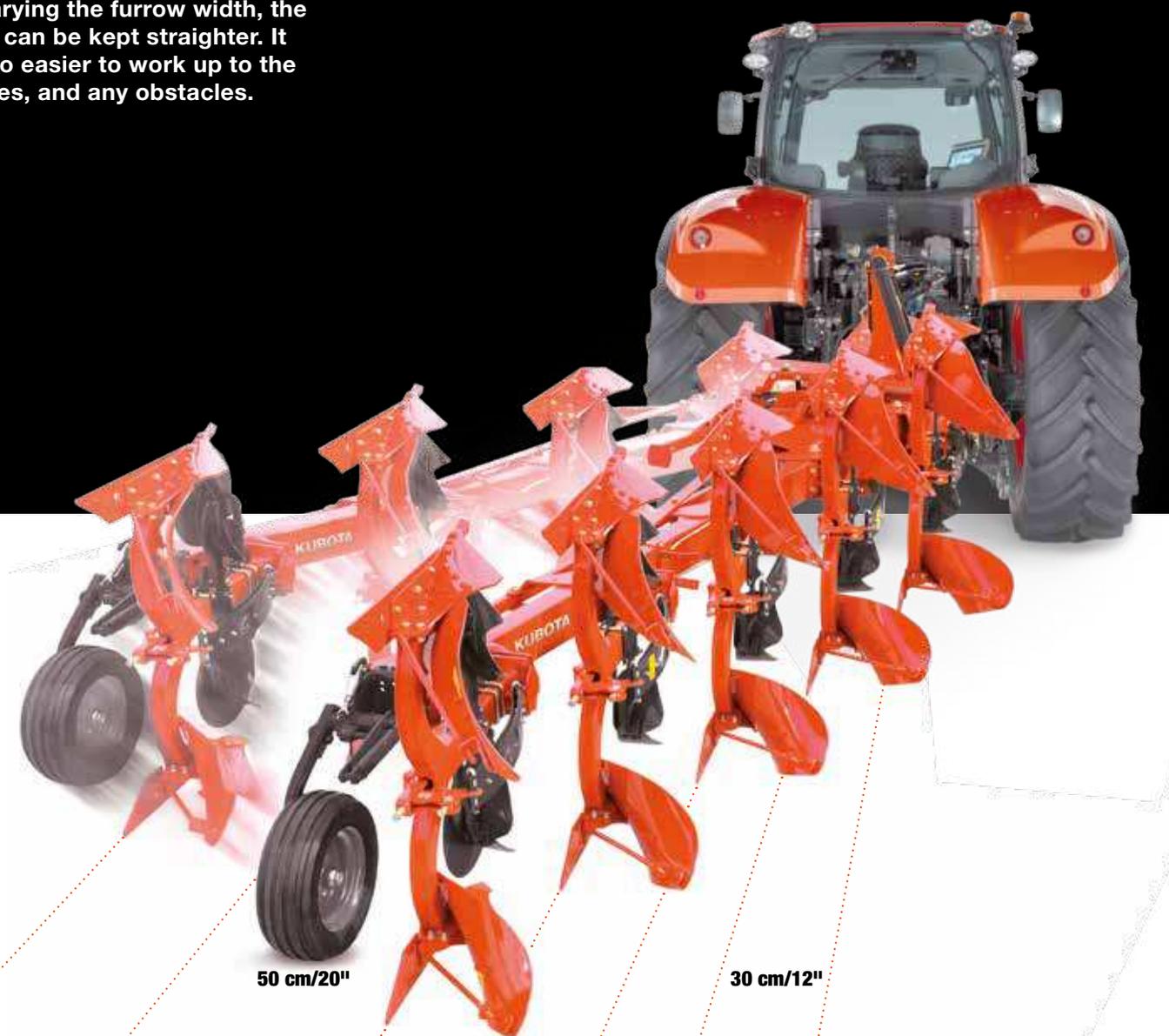
The Kubota cross shafts are supplied with cat II or cat III.

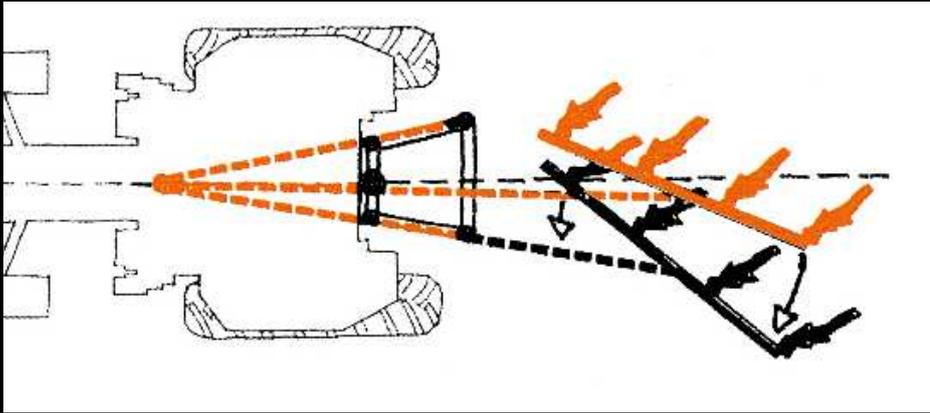
# VARIATION ON THE MO

## VARIOMAT®

Kubota Variomat® system allows the optimal match between the soil conditions, the plough and the tractor for the maximum output. Kubota's patented Variomat® is the most reliable system on the market. It also ensures the correct parallel linkage along the whole plough. The pulling line adjustments are hence automatic. The benefits are easy handling, low draft requirements, low wear and tear.

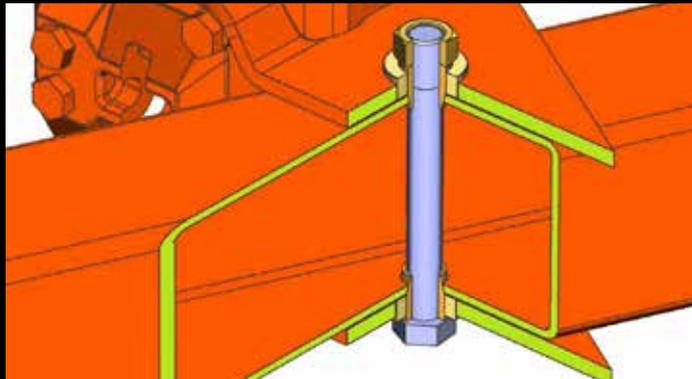
By varying the furrow width, the work can be kept straighter. It is also easier to work up to the hedges, and any obstacles.





### Auto-Line:

Kubota Auto-line system is a standard device which guarantees the correct pulling line at any time. When changing the working width, both front furrow width and pulling line adjust accordingly. Kubota Auto-line system makes these adjustments automatically. The position of the headstock remains in the center of the tractor, all the time, ensuring a favorable and an even geometry of the three point linkage. Side pull and unnecessary high landside pressure are therefore avoided. Consequently, the Kubota Auto-line system ensures an efficient ploughing with less fuel consumption.



### Minimum wear:

The heat-treated mainframe together with the bolt, distance tube, two cones and bushes ensure a unique non-wearing pivot joint between the beams and the mainframe.

### Two different systems

Kubota Variomat® is available in two variants – with hydraulic or mechanical adjustment of the furrow width. The hydraulic variant allows adjustments of the furrow width from the driver's seat 'on the move'. The practicality of being able to determine not only the depth, but also the width of the furrows is crucial if the best results are to be achieved. The pulling line adjusts automatically thanks to the auto-line.

### Save time and fuel

By changing the ploughing width from 35 to 45 cm, the output increases by 30% with the same plough. This higher performance is actually achieved at a lesser cost. It induces a 18% reduction in fuel consumption partly due to the low pulling requirements of Kubota bodies.

The Variomat® is also the solution to the demanding spring ploughing season when weather conditions are so unpredictable. Efficiency and quality ploughing can then be combined.



*Furrow width indicator*

# EFFICIENT IN STONY CO

## NON-STOP



### **A reliable System**

The simple multi-leaf spring system allows the plough legs to release over stones and other solid objects in the ground in a smooth and efficient manner. This avoids sudden jolts and possible damage.

### **Quality ploughing**

Kubota Non-stop system guarantees a quality ploughing. The legs release independently one from another. Once the obstruction is passed, the plough body automatically returns to the correct ploughing depth.

### **Simple and easy**

Kubota's Non-stop system is a very simple construction and yet is able to withstand these punishing forces year in, year out, with a minimum of maintenance.

### **Quicker than ever**

With today's demands for higher output, both tractor and plough are expected to perform quicker than ever before.

# CONDITIONS

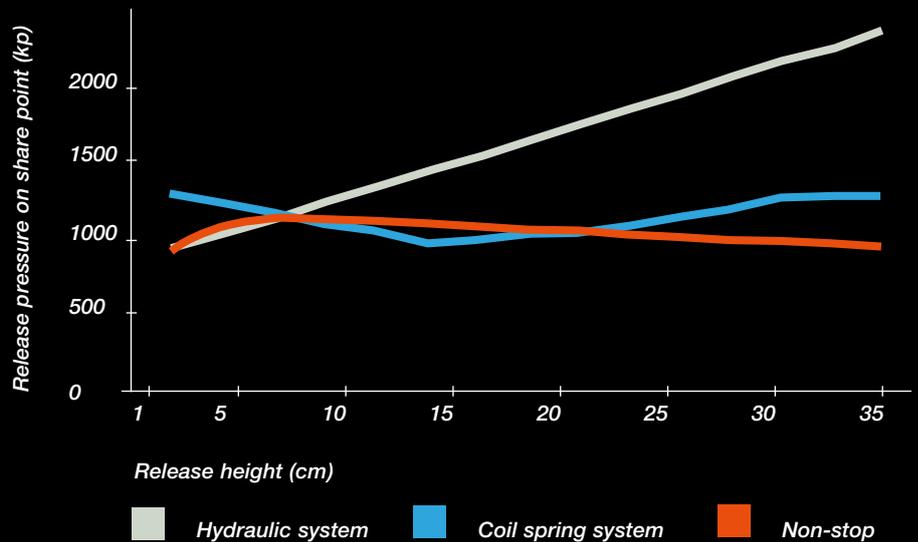
## Release characteristics

The diagram shows the differences between three different Non-stop systems, (Hydraulic system, Coil spring system and the Unique Kubota leaf spring system) and how the pressure varies as the body rises (1 cm).

## Benefits

The Kubota leaf spring Non-stop system is highly recommended. When hitting an obstacle, the pressure on the point, frame, plough parts, decreases.

The stress on the plough is therefore reduced which guarantees a longer life to the plough and ensures a better ploughing.



## Extra leaves when needed

The standard Non-stop system includes 7 Kubota heat treated springs (640 kp). For heavier to extreme soil conditions, extra leaf springs are added for up to 1400 kp.



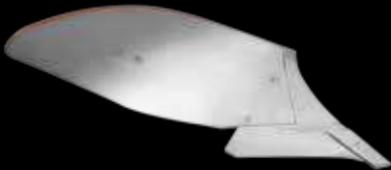
HD package with 9 leaves (900 kp)



Double spring package: with 14 leaves (1400 kp)

# DESIGNED FOR HIGH PERFORMANCE

## PLOUGH BODIES



### Body No. 8

- general purpose body
- for light to heavy soils
- working depth: 15-28 cm
- working width: 30-50 cm
- landside / mouldboard: 40°



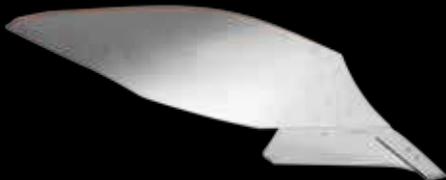
### Body No. 9

- universal body
- for light and medium soil
- easy to pull
- working depth: 18-30 cm
- working width: 30-50 cm
- landside / mouldboard: 40°



### Body No. 30

- finger mouldboard with 4 exchangeable strips
- plastic spacers
- for any soil conditions
- intensive crumbling
- working depth: 18-35 cm
- working width: 30-55 cm
- landside / mouldboard: 46°



### Body No. 28

- universal body – easy to pull
- for any soil conditions
- recommended for tractors with large tyres
- creates a flatter profile for improved tilth
- perfect turning of the furrow slice
- working depth: 15-30 cm
- working width: 35-50 cm
- landside / mouldboard: 40°



### Body No. 34

- plastic mouldboard
- long and slim shape (similar to Body 28)
- for soils with high humus content without stones
- advised for tractors with large tyres
- easy pulling
- working depth: 12-35 cm
- working width: 30-55 cm
- Landside / mouldboard: 40°

### Designed for high performance

Kubota bodies benefit from an outstanding design: for high agronomic performance and for low wearing.

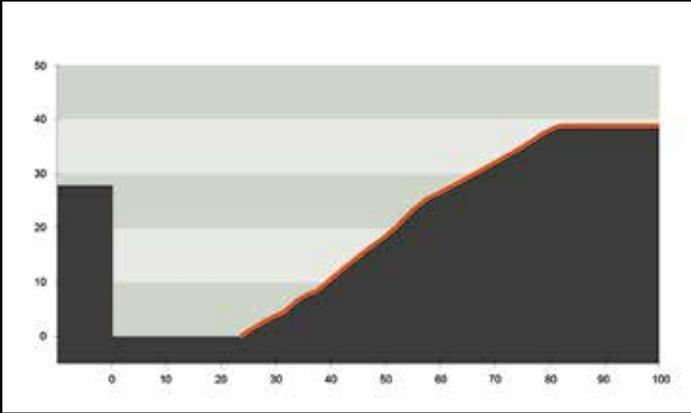
### Low pull requirement

Recent university studies, FH Cologne and Wilsmann 2012, have revealed that the design of Kubota bodies offer some of the lowest pulling forces on the market: from -20% to -42% when ploughing at 20 cm working depth and -11% to -24% at 30 cm. It is therefore possible to plough with 1 extra Kubota body and gain in output compared to competition. As regard to fuel consumption, it is reduced by 19% to 28% when using a Kubota plough.

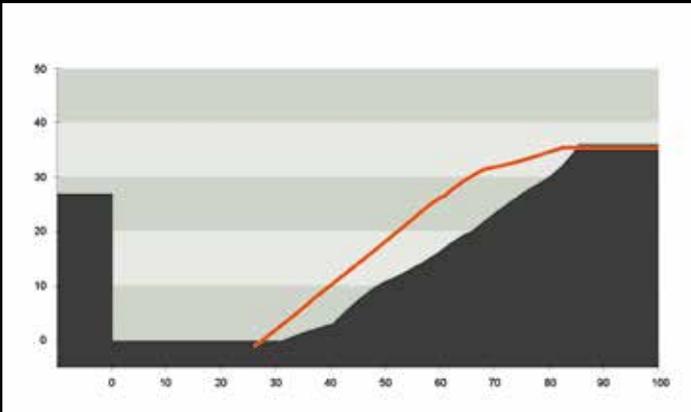
### Wide choice of bodies

Kubota has designed bodies which are adapted to any soils conditions.

# PERFORMANCE



Furrow profil body No. 9  
Working depth 28 cm, buttom 23 cm, width 62 cm



Furrow profile body No. 28  
working depth: 26 cm, buttom: 30 cm, width 73 cm



Body 28

## Body No. 28: The answer for ploughing with wide tyres

### Wide empty furrow

Body No.28 shape and action moves the soil further away from the landside, increases the furrow bottom width by as much as 25% compared to Body No.9. This allows wide tractor tyres like a 710 serie type, to work in the furrow without rolling down the previous furrow.

### Low pulling forces

Body No.28 is suitable for depths from 15 to 30 cm (6 to 12 inches) and widths from 35 to 50 cm (14 to 20 inches). Longer than body No.8, it creates a flatter profile for improved tilth. The furrow is well turned and packed. Body No.28 clever design will require as little pulling force as Body No. 8 or 9.

### Benefits:

- very wide empty furrow – ground preserving tyres
- easy pulling and therefore low fuel consumption
- good turning and well packed
- good trash burial
- perfect universal body for all soils

# PERFECT FOR LIGHT TO

## RM2000/RM2005



**Kubota RM2005**  
designed for stony conditions.  
Step-wise working width adjustments.



*RM2005/RM2005V efficient Non-stop system*

### **Kubota RM2000 serie**

Robust, easy to lift and to pull.  
Consequently, the RM2000 serie is  
economic to run.

These ploughs are designed for high  
performance in light to medium soil  
conditions.

The RM2000 serie specific design  
guarantees low lift requirements and  
an easy pulling. The latter can also be  
explained by the low weight of the plough  
due to its compact design, hollow but  
robust legs, heat treated steels requiring  
less steel width than competitors. The low

weight of the plough and ideal design of  
the mouldboards contribute to the easy  
pulling and ensure a low wearing of parts.

### **Differences between models:**

The RM2000-RM2000V feature the reliable  
shear bolt leg protection (3.400 kp).  
The RM2005-RM2005V are equipped with  
the remarkable Non-stop leg protection  
system for stony conditions.

### **Legs for the RM2000**

The shape of the heat treated hollow  
square tube and the high under beam  
clearance enable the plough to handle big  
amounts of straw and residues.

# MEDIUM SOILS



*Light and robust hollow beam with shear bolt protection*



*Robust headstock 150*

It is very robust but also flexible. Invisible vibrations of the plough beam result in an improvement of crumbling.

### **Robust frame section**

The main frame is an induction heat treated one box section 150 x 150 mm. Hence, the necessary strength and support is achieved for the toughest conditions. No welding in order to avoid weaknesses.

### **Headstock 150**

Headstock 150 designed for tractors up to 150 hp "One piece concept" with a specially heat treated 110 Ø main shaft for maximum strength. Choice of cross shaft, category II and III or optional quick coupling.

# ADAPTABLE

## RM2000V/RM2005V



Kubota RM2000V (V = Variomat®)



### The Variomat® RM2000 serie ploughs

The models RM2000V-RM2005V offer the same design as for the RM2000-RM2005 ploughs. The only difference is the Variomat®. This system offers easy working width adjustments "On the Move".

Several possibilities are offered to easily change the working width:

- manual adjustment of the working width and of the front furrow with a turnbuckle
- hydraulic adjustment of the working width and manual adjustment of the front furrow with a turnbuckle
- hydraulic adjustment of the working width and automatic hydraulic adjustment of the front furrow

# Easy to use



Easy manual working width adjustment for RM2000-RM2005. Only 1 bolt to reposition.



Variomat® for RM2000V-RM2005V  
Parallel linkage with memory cylinder and hydraulic front furrow adjustment

## Easy to operate

The furrow width adjustment not only increases the ploughing output but reduces the fuel consumption in relation to output.

For RM2000-RM2005: simple step-wise ploughing width adjustments. Only 1 bolt to reposition.

- 30,35,40,45 cm (12,14,16,18") for 85cm interbody clearance.
- 35,40,45,50 cm (14,16,18,20") for 100cm interbody clearance

For the Variomat® models RM2000V-RM2005V, easy adjustments on the move from 30 to 50cm (12-20")

## Easy adjustment

The front furrow can easily be adapted to different tractor brands and wheel width settings. This is done via a parallelogram, manually adjusted by a turnbuckle or optional with a hydraulic cylinder. A memory or a hydraulic alignment of the frame is available.

The Kubota auto-line system always provides the correct pull line.

All models are available with an interbody clearance of 85 cm or 100 cm. The RM2000 serie offers 3-5 furrow ploughs with the exception of RM2005-RM2005V, 100cm interbody clearance, which are available as 3-4 furrow ploughs. Most models are extendable by 1 body to the limits above mentioned.

# FOR TOUGHER CONDITI

## RM3000V/RM3005V

Variomat® Ploughs



### **Kubota RM3000 serie**

These are compact ploughs, easy to lift, equipped with the Variomat® system to work in any soil conditions.

### **Variomat® ploughs**

The RM3000V-RM3005V are fitted with the Variomat® for easy furrow width adjustments. This system helps you save time, optimise the output to the field conditions and save fuel consumption per Ha.

For instance, you can vary the working width from 30 to 50 cm (12-20") on the RM3005V with 85 cm interbody clearance. 20-40% extra performance

can then be achieved with even lesser fuel consumption per Ha. An interbody clearance of 100 cm is also available.

### **Variations "on the move"**

The Variomat® is simply operated via a turnbuckle or a hydraulic cylinder. The front furrow is adjusted separately in the same manner. With the hydraulic version, the working width can be adjusted on the move.

For extra comfort while reversing the RM3000V-RM3005V can be fitted with a sequence hydraulic automatically bringing the plough to the narrowest working width before turning

### **Model differences**

The RM3005V model is fitted with a well proven Kubota Non-stop system for stony conditions, whilst the RM3000V has shearbolt protections (4.200 kg release pressure).

# ONS



RM3000V: Shearbolt plough, Variomat®



Indicator of working width

## Low lift requirements & more stability

The first assembly mounted to the main support allows the plough to be as close as possible to the tractor. Therefore the lift requirements are significantly reduced compared to other brands. This smart design also contributes to a greater tractor and plough stability, particularly appreciated on hilly grounds.

## Constructed for year in, year out performance

For maximum strength and durability, the mainframe of the plough is constructed from only one induction heat-treated box

section 150 x 150 mm (no welding that would weaken the frame robustness).

The reliability and service life of a reversible plough largely depends on the headstock. During both work and transport, this critical part of the plough is exposed to enormous stresses. The RM3000V-RM3005V are therefore fitted with the robust Kubota headstock 200.

## Suits all tractor models

The smart design of the headstock 200 allows easy adaptations to suit any tractors irrespectively of wheel widths or linkage geometry constraints.

## Add-on system

Any 3, 4 and 5 furrow models can be extended by one body, max. 6 furrow plough.

The RM3000 serie features a rear or a frame mounted wheel.

# PLOUGHING WITH KUBOTA



# OTA



# FOR SMALLER FARMS

## CM1005V

Variomat® Ploughs



### **Kubota CM1000 serie**

These conventional mounted ploughs are the alternative for smaller farms and tractors. Fitted with the Variomat® for stepless width adjustments, the CM1005V is easy to operate, efficient and not least, robust.

### **Robust construction**

The simple design of the Kubota CM1005V makes it very reliable. In addition, all steel parts are heat treated for extra robustness. The 100 x 200 mm square frame, induction heat treated, is a guaranty for the plough longevity. The heavy duty legs fitted with the mechanical Non-stop system enable ploughing in any conditions.

### **Easy to operate**

The CM1005V adapts easily to all types of tractors. After a few adjustments, the plough is ready for work. This Kubota plough is available from 3 to 4 furrows. The 3 furrow version can be extended by 1 body.

### **Efficient Variomat®**

The Kubota Variomat® allows infinite furrow width adjustments; either from 30 to 50 cm (12" to 20") for 85 cm interbody clearance or from 30 to 55 cm for 100 cm interbody clearance. Hence, you can adapt the working width to any soil conditions or tractor capacity for the optimal result.

### **Economic ploughing**

The heat treatment of the Kubota steel parts allows using less steel than competition, therefore less weight to pull and hence less fuel consumption. The same result is achieved with the low draft Kubota bodies. Less weight and low draft induce low wearing of parts. The latter get changed less often, which saves you time and money.

The Variomat® helps reduce costs too. Experience has proved that the working capacity and the fuel consumption do not increase equally. When increasing the working width by 30%, the fuel



*Kubota bodies  
for any conditions*



*Variomat®: simple and efficient*



consumption does not increase by 30%. You actually save 20% on the fuel. The Variomat® makes ploughing more cost efficient.

The Variomat® is simply operated via a turnbuckle. The front furrow is adjusted separately in the same manner.

Mechanical front furrow width adjustment is standard.

**Efficient Non-stop system**

To ensure trouble free work in stony conditions, the Kubota Non-stop system is ideal: simple, reliable, maintenance free.



# QUICK & EASY



## **Smart**

The Knock-on® system consists of only 2 parts: a holder fixed to a regular Kubota share and a Knock-on® point.

## **Clever**

Kubota's Knock-on® is a universal system. Plough Knock-on® points can also be used for cultivators.

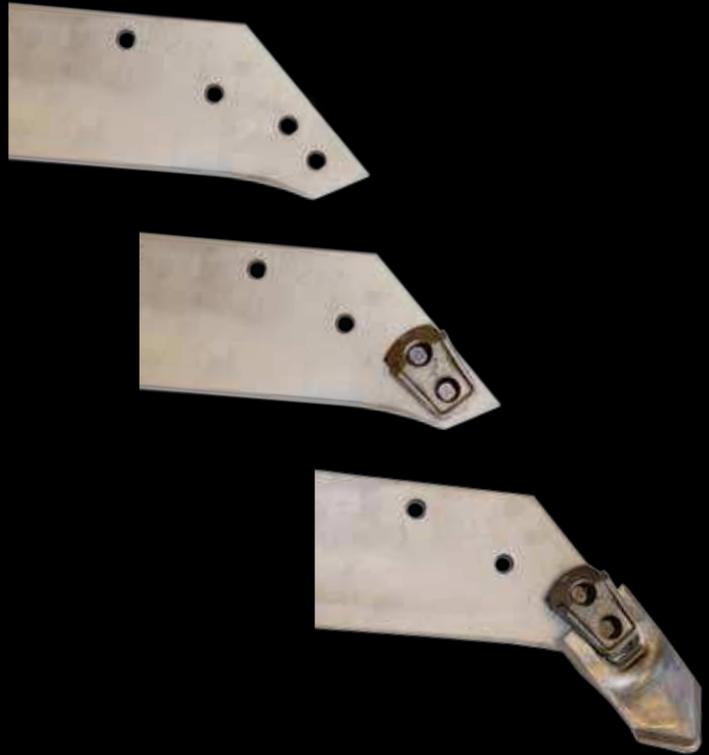
## **Long lasting**

Knock-on® benefits from the Kubota steel technology for low wear. The quality of the steel combined with a clever design ensure a long life to the Knock-on® system. Therefore, Knock-on® points can be used in any soil conditions.

## **Quick**

Knock-on® points are changed in a few seconds. It makes sense to save 90% of your time in changing points when working in abrasive soils (points wear quicker) or when having a 5+ furrow plough.

# ACCESSORIES: KUBOTA KNOCK-ON®



## Easy

The only tools needed are a chisel and a hammer (2 kg). Field tests reveal that, as an average, 3 points can be mounted on the same Knock-on® holder. No bolt to unscrew helps save time. In addition, when the holder is worn out, it is normally also time to change the share, without unscrewing the holder. Very handy!

## Agronomic benefits

Knock-on® has been tested in several soil conditions. Even in the hardest soils, the points ensure a good penetration. Hence, the plough stays stable in work which ensures quality ploughing results.

## Low pulling forces

Kubota bodies generate very low pulling forces. With Knock-on® points, the pulling forces remain low and hence the fuel consumption.

## Soil flow protection

The clever design of Knock-on® actually protects the other parts of the body while allowing an efficient soil flow.



# ACCESSORIES

## Leg protection



RM2000-RM2000V



RM3000V

### Shear bolt leg

Release pressure of:

- 3400 kp for models RM2000-RM2000V
- 4200 kp for model RM3000V



### Non-stop leg protection

- 640 to 1400 kp release pressure
- Models: RM2005-RM2005V and RM3005V



### Hydraulic stone protection

- adjustable release pressure from 600 to 2100 kp
- models: RM2005V and RM3005V



Maize skimmer

Manure skimmer

## Easy adjustable skimmer

To ensure optimum positioning of the skimmer, a quick adjusting system is incorporated on all plough models.

The skimmer is very easy to adjust and can be moved in all directions to suit field conditions. Special indentations on the skimmer arm provide correct location and depth setting. Since the fixing bracket and stalk are fixed to the plough's leg assembly, the skimmer is easily adjusted up or down by loosening only one bolt. Once adjusted the bolt is tightened and locked to ensure a correct and rigid assembly.

The skimmer are available in two versions: standard manure and maize skimmer for those difficult conditions with large amounts of trash.

Skimmers are recommended for efficient burial of stubble, grass, straw and weeds to provide a trash free finish prior to seed bed preparation.



**Shares with Reversible Points**

The most cost effective 'share' system for ploughing hard and abrasive soils and generally, difficult conditions.



**Trashboards**

Particularly useful for large quantities of surface trash: manure, straw, etc. are present.



**Sword Share Knives**

These are an alternative to disc coulters, either to reduce weight or to avoid blockage from trash or stones. Can only be used on ploughs fitted with reversible points.



**Furrow Splitter**

Bolted to any parts of the mouldboard or share, the furrow splitter is designed to cut through heavy soils making it easier for following operations.



**Landside Knives**

A very good alternative to disc coulters, either to reduce weight, or to avoid blockage from trash or stones. A good combination with skimmers.



**Quick Release coupling**

For quick and easy hitching and unhitching.



**Disc Coulters: plain or notched**

Disc coulters are available in sizes of 45, 50 and 55 cm (18, 20 or 22") diameter. They are mounted on single arms. Easy to adjust to suit all conditions.

# WHEELS



*Rear mounted depth and transport wheel*



6.00 x 9



6.00 x 9



200 x 14,5



320/60 x 12



- Rear mounted depth wheel telescopic arm**
- also available as frame mounted depth wheel
  - 6.00 x 9, 200 x 14,5 or 320/60 x 12
  - option: scrapers



- Rear mounted depth wheel**
- rubber wheel 200 x 14,5 or 320/60 x 12
  - hydraulic shock absorber included
  - option: scrapers



- Frame mounted depth and transport wheel**
- rubber wheel 200 x 14,5 or 320/60 x 12
  - option: scrapers



- Rear mounted depth wheel**
- rubber wheel 6.00 x 9
  - designed for small plough models



- Rear mounted depth and transport wheel**
- rubber wheel dimensions: 200 x 14,5 or 320/60 x 12
  - option: scrapers



- Rear mounted depth and transport wheel with hydraulic depth adjustment**
- rubber wheel 200 x 14,5 or 320/60 x 12
  - ideal for a shallow finish on headlands
  - option: scrapers



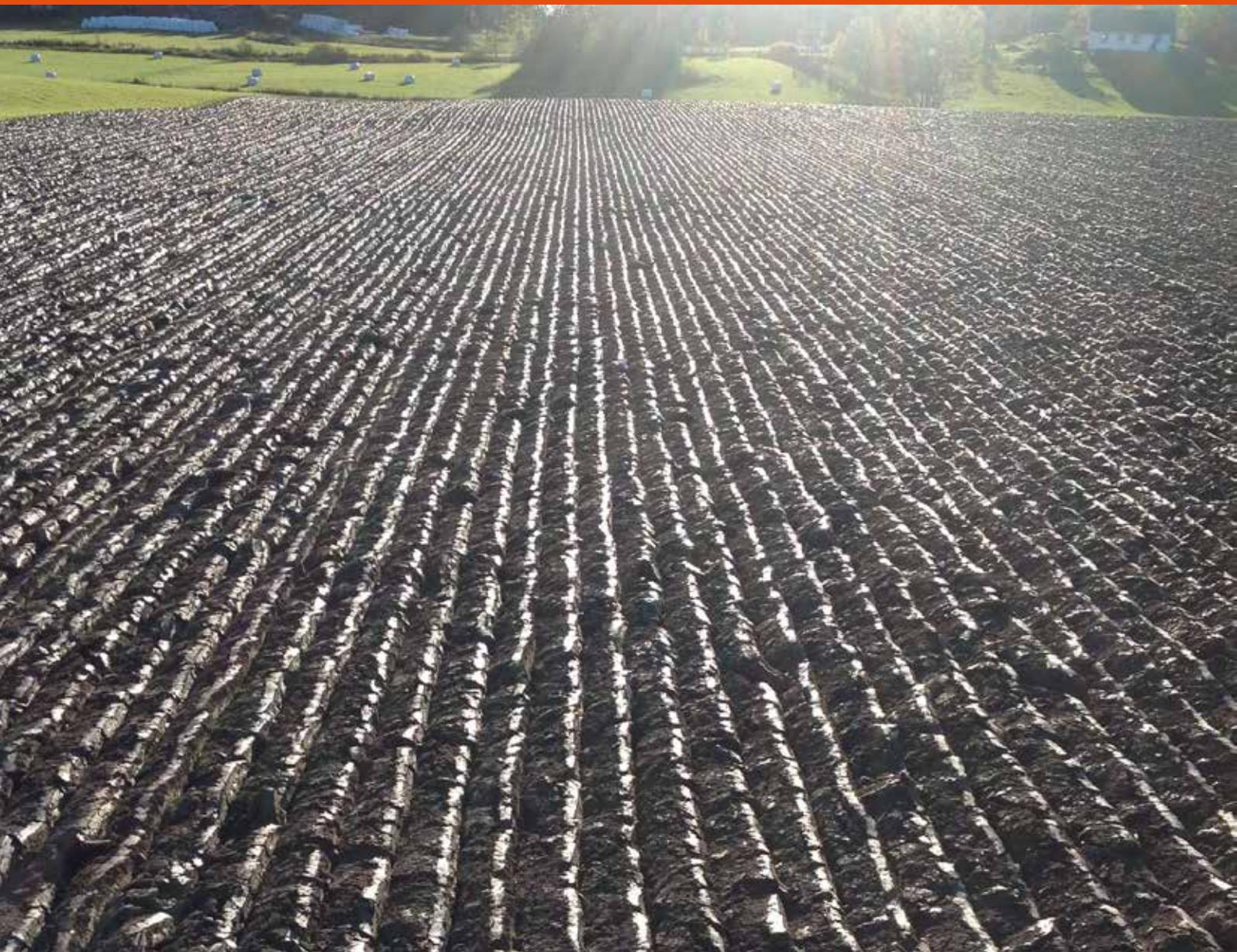
- Frame mounted double wheel**
- steel wheel 400 x 250 or rubber wheel 18 x 8.50-8
  - available for RM2000, RM2000V, RM2005, RM3000V and RM3005V
  - higher output, from 40 cm (16") onwards



- Easy and fast adjustment of the working depth with Y-screws**



# PERFECTION



*RM2000/RM2000V*

# SPECIFICATIONS

Kubota Model	CM1005V	RM2000	RM2005	RM2000V	RM2005V	RM3000V	RM3005V
<b>Interbody clearance (cm)</b>	85/100	85/100	85/100	85/100	85/100	85/100	85/100
<b>Headstock</b>	–	150	150	150	150	200	200
<b>Type of beam</b>	Non-stop	Shearbolt	Non-stop	Shearbolt	Non-stop	Shearbolt	Non-stop
<b>Underbeam clearance (cm)</b>	70	80	70/75	80	70/75	70/80	70/75
<b>Working width (cm)</b>	30-50/30-55	30-45/35-50	30-45/35-50	30-50	30-50	30-50	30-50
<b>No. of furrows</b>	3-4	3-5	3-5/3-4*	3-5	3-5/3-4*	3-6	3-6
<b>Weight (kg)</b>							
3-furrow	580	820	990	890	1050	1060	1200
4-furrow	750	1050	1185	1120	1275	1200	1360
5-furrow	–	1165	1390**	1235	1500**	1570	1700
6-furrow	–	–	–	–	–	1800	1950
<b>Lift requirement (kg)</b>							
3-furrow	1400	1700	1850	1800	2800	2260	2700
4-furrow	2260	3100	3250	3250	3650	3300	3900
5-furrow	–	3700	3900	3850	4200	4200	5200
6-furrow	–	–	–	–	–	6000	6500

Most models can be extended by one body. All weights are given without optional equipment (net weights).

The lift-requirements are given with the following equipment: depth wheel, one coulter and skimmers for all furrows.

Weights and lifting requirements are given for ploughs with 85 cm 'interbody clearance'.

For ploughs with 100 cm clearance, please adjust according to the following: Weight + 15 kg/body, lifting requirement + 50 kg/body.

Most ploughs with stepless ploughing width and interbody clearance of 85 cm have a working width between 30-45 cm, while ploughs with 100 cm have a working width between 35-50 cm.

\* for 100 cm interbody clearance only  
\*\* only 85 cm Interbody clearance



RM2005/RM2005V



RM3000V



RM3005V

*The company reserves the right to change the above specifications without notice. This brochure is for descriptive purpose only. Some of the items pictured in this brochure are optional and not standard equipment. Please consult your local Kubota dealer for warranty, safety or product information. For your safety, Kubota strongly recommend the use of a seat belt in all applications.*

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