

# A BIG FAMILY

**Ovlac's Mini** shallow plough has been conceived to combine the advantages of traditional and minimum tillage; in other words, it gathers both output and efficiency for the sake of of profitability.

Traditional ploughing is, without any doubt, the most ecological and sustainable method of plague and disease control. In organic farming, ploughing is almost the only possible soil management system, as chemical products are forbidden.

The **Mini** shallow plough is an **Ovlac** innovative development, offering unequal performance. It has specifically been designed as a shallow plough able to cope with large amounts of stubble at limited depths (8-20 cm). This superficial turning over of the soil favours the formation of cavities where air and water adequately decompose and transform stubble, creating humus which increases soil natural fertility and, in turn, long-term productivity. Furthermore, plough-shares break soil capilarity, thus contributing to lessen evaporation and keep moisture in the deep layers, especially in dry periods.

Another advantage of the **Mini** shallow plough is that it works on-land, thus totally preventing soil compaction on the furrow bottom. Also, the superficial work of the **Mini** implies a more than proportionate decrease in the tractor power consumption. Ploughing 15 cm deep

requires less than half the power needed to plough 30 cm. This means that the same tractor will be able to plough up to 40% wider with a **Mini** as compared to a traditional plough. All things considered, the Mini combines traditional ploughing with working widths characteristic of minimum till techniques.

Finally, we must add to this cutting down of operational costs the **Mini's** own conception: simple and light, but (or because of it) robust. All are advantages.

#### **QUALITY MANUFACTURING**

The **Mini** undergoes a manufacturing process with plenty of controls, starting with the use of top quality raw materials and the most modern and accurate production means in order to get a perfect finish. All critical parts are made in HEL (High Elastic Limit ) steel. And frame, headstock and beams are totally welded by robots. The final output: a solid and reliable **Mini**.

As regards wearing parts, all of them are equal to none: both reversible points and shares are dropforged for maximum strength and endurance; mouldboards are 8 mm thick borochrome steel. All pieces are hardened and tempered in order to attain the best possible compromise between tenacity and wearability.

# novlac genuine

The quality of the original. Forged shares, 8mm mouldboards,... and always the leader's backup. Do not feel tempted by imitations.













# Why MINI? Advantages

#### ADVANTAGES OVER SHALLOW PLOUGHING (AGAINST MULCH BODY/CHISEL BODY)



Bigger incorporation of trash, improving the microbiological activity of the soil



Better plague and weeds control



Bigger humidity conservation due to the breakage of capillarity



Ease the works on second labor

#### ADVANTAGES OVER TRADITIONAL PLOUGHING



Increase of the organic material on the surface layer of the soil



More air and water circullating in order to ease the decomposition of the plant debris



More working width, that can be translated into 40% more performance



The power request is reduced more than proportionally by diminishing the working depth Therefore less fuel consume and less waste of the equipment



There's not deconstruction of the soil layers in depth

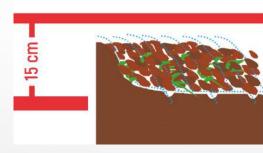


Less compression when working Off-Furrow



Air and water circulation

Vegetal debris



## Interest of the "Off-Furrow"

The "Off-Furrow" option presents technical and agronomic arguments such as:

- Valid for working with tractors with wide wheels or twin wheels.
- Plough adjustments are now simpler.
- Working inside the furrow with a tractor with 650 mm wide wheels and a 5-bodies plough adjusted to 16" (2.03 m working width), the wheels' compaction represents 32% of the working width.
- Working off-furrow there's no compacted area left that hasn't been worked over.



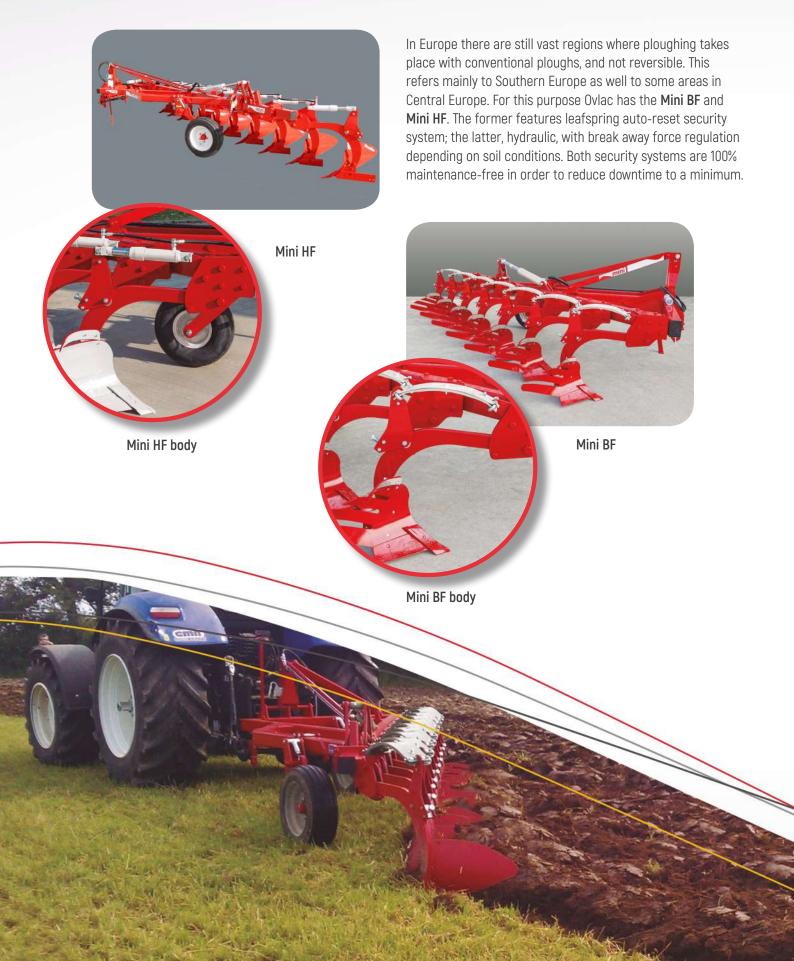
## 2 Labors, 1 Machine

In the same machine we can gather 2 kinds of labor (shallow ploughing and conventional ploughing) in the same work, showing off important improvements on each of this kinds of labor.



#### **CONVENTIONAL MINI**

Mini BF / HF





Optional hydraulic folding of rear bodies in order to reduce weight during transport or, when necessary, to work with fewer bodies

Just like the reversible **Mini** range, the conventional one covers three frame sizes: 6, 8 and 10 bodies. Each of these frames can be extended with the addition of one or two extra bodies, which can just be just bolted-on to the main frame, or hydraulically foldable, so as to reduce the total plough length and weight while road transport.



Mini HF 8+2



Plan view of Mini-6, Mini-8 and Mini-10 ploughs. In shaded colour, position of optional bolted-on rear wheel in contrast with the standard rear wheel



#### REVERSIBLE MINI

Mini NF / NH



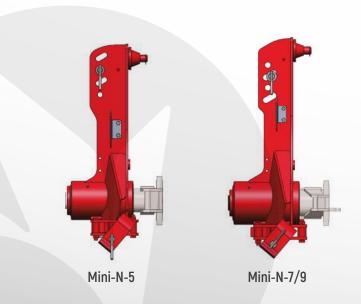


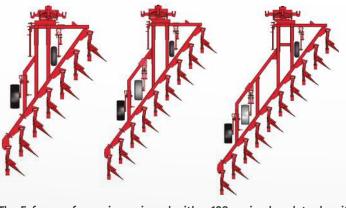
Headstock and frame support

In terms of farm machinery, experience is certainly an asset. With over 15 years of experience, we can openly state that Ovlac's Mini is a reference in vast areas in Europe.

Ever since the first machines were produced back in 2003, successive improvements and innovations have been steadily implemented thanks to the feedback from farmers from more than 15 countries as well as to gathered experience. At Ovlac we listen to our customers who, as professionals, can revert with interesting remarks in order to further optimize our machines.

Nowadays, the **Mini** is a shallow plough with an undisputable reputation as regards both reliability and efficiency. Proven.





The 5-furrow frame is equipped with a 120 series headstock, with a 110mm diameter shaft. 7 and 9-furrow frames come with an oversized 150 series headstock, with a 140 mm diameter shaft



Mini NF body



Mini NH body

The last version of the reversible Mini, the Mini-N, is available with shear bolt security for not too stony soils (Mini NF) or with hydraulic auto-reset system (Mini NH), with adjustable breakaway force depending on soil conditions. Thus, in hard or compacted soil, pressure can be increased in order to make the plough penetrate easier as well as to keep the working position of the bodies. On the contrary, under stony conditions we will decrease pressure so as not to bring out stones up to the surface. This possibility to adjust the working pressure provides great flexibility when adapting the Mini to different soil types.

The Mini-N range is based on 3 main frames, Mini-N-5, Mini-N-7 and Mini-N-9, which can be extended with one or two additional bolt-on bodies each.

The 5-furrow frame is equipped with a 120 series headstock, with a 110 mm diameter shaft. 7 and 9-furrow frames come with an oversized 150 series headstock, with a solid 140 mm diameter shaft.





**Transport position** 

# REVERSIBLE MINI (CONTINUED)

#### Mini NF / NH

#### **QUALITY MANUFACTURING**

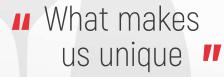
The **Mini-N** comes as standard with our oscillating drawbar for automatic self-alignment.

The oscillating hitch makes it possible for the plough to move freely around a central pivoting point in the cross shaft and to find by itself the perfect balance between the side pressure exerted on the mouldboards and the landsides. Correction varies a maximum of  $+10^{\circ}$  to  $-10^{\circ}$ .

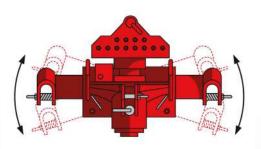
Therefore, it is no longer necessary to adopt complicated adjustments in order to regulate the draw line so as to make the plough work perfectly aligned. Alignment is automatically achieved with no need of intervention from the operator.



Oscillating cross shaft







Correction from +10° to -10°





#### HYDRAULIC ADJUSTMENT OF FIRST FURROW WIDTH:

The first furrow width adjustment of the Mini-N, be it mechanical or hydraulic, makes it possible to set the first furrow at the desired spot depending on the tractor width. Once set, this width can be easily varied any time in order to get closer or further away from the furrow if the working conditions, like hills for instance, make it necessary.

The mechanical adjustment can be made using the spanner being furnished with each machine whereas the hydraulic system is adjusted be means of a double-effect hydraulic cylinder.

The sliding plates are made in 500 HEL steel to guarantee many hectares of trouble-free work even with the most demanding use.

#### AUTO REST PROTECTION FOR THE MOST EXTREME CONDITIONS:



## SEMIMOUNED MINI

Mini S



The semimounted **Mini** has been specifically developed for big states and high-power tractors. Available up to 13 furrows, the Mini S grants a working width of no less than 5 m. In other words, 3 ha/h can be ploughed at ease, which says a lot about its performance.

The  $\mathbf{Mini}\ \mathbf{S}$  is based upon the same frame base being used for our traditional on-land semimounted ploughs.

In order to ease the turnover of the plough at the headland, the **Mini S** features an articulation at the front which folds in the front bodies thus reducing the turnover radius and minimizing the effort on the tractor arms and headstock.



In transport







Exactly like in the mounted range, the **Mini S** is available either with shear bolt stone protection or with hydraulic auto reset system with adjustable breakaway force depending on the working conditions.

Unrivalled performance: more than 3 ha/h



# MINI Options



1st furrow hydraulic width adjustment (extra wide version available for 9-furrow range)



Slatted mouldboards for sticky conditions-Trashboards to improve burial of trash



Additional bolted bodies



Hydraulically foldable rear bodies (for Mini BF and HF)



In-the-furrow version (only for Mini-N-5 and 5+1)



Landside extension, for better plough stability



Rear depth control wheel. Available as 6.00\*9", 200/60 14,5", 250/65 14,5", 340/55 16" and 380/55 17"



Transport wheel available as 200/60 14,5", 250/65 14,5", 340/55 16" and 380/55 17"



Front depth control wheel available as 6.00\*9", 200/60 14,5"



Inner depth control wheel (available for Mini-N 7 and 9 frames)



Lights kit



Extra large forged share. 12 more cm longer that standard share



Headstock lock for transport



"Pan- Cracker"



# MINI

## Technical Features

MODEL	Working width (cm)	Power (HP)	Point to point (cm)	Underbeam clearance (cm)	Working width per furrow (cm)	Weight (kg) BF/HF	
Mini 6 Mini 6+1 Mini 6+2	192 231 269	85-105 100-120 120-140	66	70	38,3	900 980 1.075	
Mini 8 Mini 8+1 Mini 8+2	269 308 346	120-140 135-160 150-180	66	70	38,3	1.216 1.303 1.390	
Mini 10 Mini 10+1 Mini 10+2	346 385 421	150-180 170-200 190-220	66	70	38,3	1.600 1.688 1.776	
MODEL	Working width (cm)	Power (HP)	Point to point (cm)	Underbeam clearance (cm)	Working width per furrow	Weight (kg) NF	Weight (kg) NH
Mini N 5 Mini N 5+1 Mini N 5+2	192 230 268	85-105 100-120 120-140	66	70	38,3	1.200 1.340 1.480	1.400 1.560 1.720
Mini N 7 Mini N 7+1 Mini N 7+2	268 306 345	120-140 135-160 150-180	66	70	38,3	1.600 1.740 1.880	1.830 1.990 2.150
Mini N 9 Mini N 9+1 Mini N 9+2	345 383 422	150-180 170-200 190-220	66	70	38,3	1.915 2.055 2.195	2.265 2.425 -
MODEL	Working width (cm)	Power (HP)	Point to point (cm)	Underbeam clearance (cm)	Working width per furrow	Weight (kg) SF	Weight (kg) SH
Mini NS 12 Mini NS 12+1	460 498	200-250 220-290	66	70	38,3	4.286 4.436	4.680 4.865



#### A SOLUTION FOR ANY FIELD







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