



AT THE END THE RESULT COUNTS.
AT THE BEGINNING **KNOCHE**.

DEEP SOIL LOOSENING – KNOCHE CHISEL CULTIVATORS

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GET TO THE BOTTOM OF THE SOIL!



Best possible soil structure:
By means of the chisel cultivators WISENT and BISON you provide ideal conditions for the root system of the field crops in the soil.

Get the most out of your soil also in the future and give it what it needs – a natural and deep soil tillage. By means of the chisel cultivators WISENT and BISON the easy breaking up of the topsoil below the plough pan is facilitated. Thus, compacted soil layers are arranged and loosened. Therefore, catchment water can drain better and nutrients in the soil are better absorbed due to deeper rooting. This aspect is very important, because the new Fertilizer Ordinance that will be valid from 2018 onwards will present new challenges to farmers.

ROOTED IN THE FACTS

Good soil is becoming more and more important in the fields of agriculture. The harvest is not only endangered by climatic changes, but also by the increasingly poor soil fertility due to compaction because of increasing machine weights.

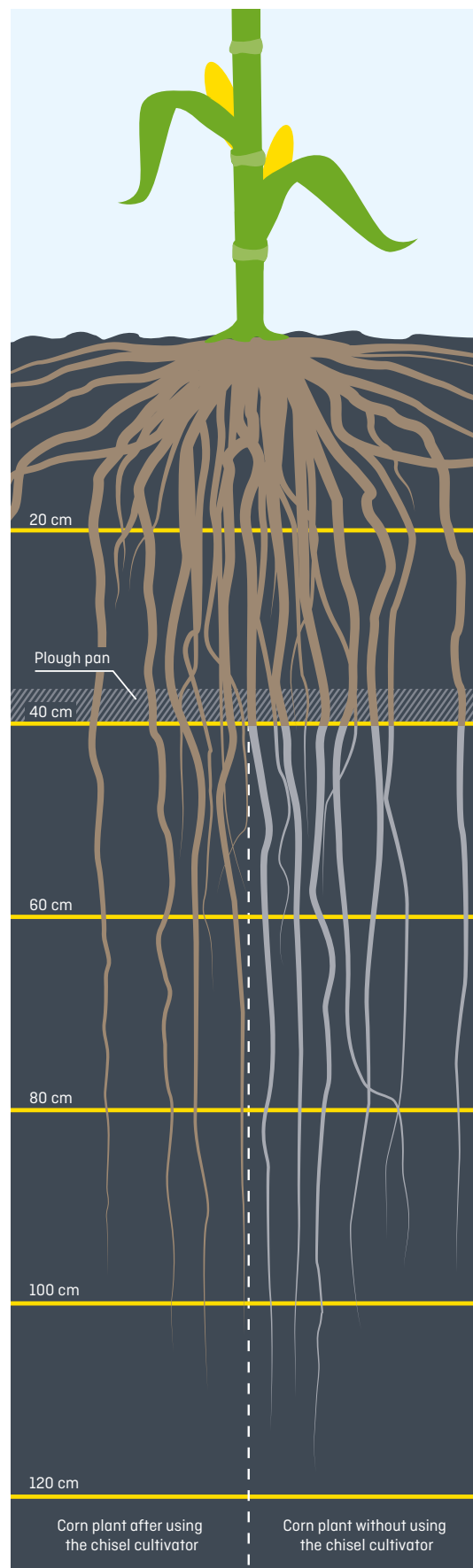
That is what Knoche Maschinenbau has planned to implement by means of its machines: Our chisel cultivators BISON and WISENT ensure a basic nutrient-rich harvest. For example, deep roots of corn or rape plants whose fine root fibres often have to face strong soil resistance can absorb natural nutrients in an easier way due to soil loosening.

THE NEW FERTILIZER ORDINANCE

From 2018 onwards the new Fertilizer Ordinance will be valid. This ordinance contains stronger rules in favour of water protection and air quality management, thus ultimately benefitting the environment. Most of all, the application of fertilisers containing nitrogen and phosphate shall be reduced. Therefore, the admissible amount of nitrogen fertilisers is reduced to 60 kg total nitrogen per hectare. Due to this limitation agriculture focuses more and more on a supply of natural nutrients. Further information can be found on the website www.bmel.de.



The chisel cultivators' tines ensure deep soil tillage even on hard soils.



CHISEL CULTIVATOR WISENT: PATH TO THE FUTURE

The single row chisel cultivator WISENT manufactured by KNOCHE represents the solution for a nutrient-rich soil structure that will get the most out of your field crops.

Whether short disc harrow or other soil tillage tools – the single row chisel cultivator WISENT can be combined with active or passive soil tillage tools so that you can perfectly coordinate the different operations. In case of a working width of 3 m the stable three-point frame picks up 2 to 6 freely movable tines at the bottom spar.

The topsoil is broken up below the plough pan. Thus, optimal conditions for the root system of the field crops are facilitated even at a depth of up to 60 cm. Due to the simple, straight construction a lateral re-compacting and a re-compacting in the topsoil are not possible.





CHISEL CULTIVATOR BISON: FOR GROUND AND SOIL

The double row chisel cultivator BISON manufactured by KNOCHE loosens strong soil resistances and facilitates optimal supply of nutrients to plants in deep soils.

The machine loosens and drains compacted soils at a depth of up to 60 cm: This is very easy for the double row chisel cultivator KNOCHE BISON. Due to small working gaps the lower soil layers remain where they belong. The mechanical breaking up of compacted soil layers improves the supply of water and air to plants, prevents puddling if there is heavy rainfall and counteracts increasing soil erosion. The spikes of the tines of the chisel cultivator BISON are rotating. The chisel cultivator is equipped with a rugged frame made of quality steel and wear plates at the struts. It is suited for loosening tramlines as well as a total area soil tillage.



The plough pan that has been broken up facilitates optimal root growth of the field crops.

TYPES WITH DEPTH GUIDANCE

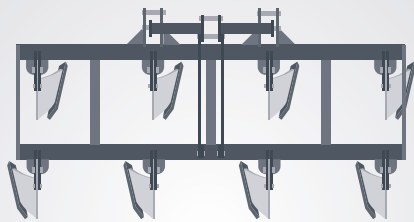
From hard to loosened soil – our chisel cultivators plough every type of soil. Due to the different modes of operation they get to the bottom of the nutrients.

The chisel cultivators BISON and WISENT are characterized by the type of soil tillage – an indigenous and deep soil tillage. The chisel cultivator BISON only operates in double row design due to the tines' curvature and arrangement. The tines are arranged in a row. In case of a double row chisel cultivator it is not possible to use another tool during the operation.

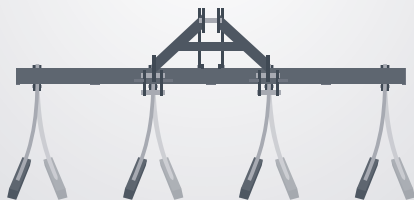
The single row chisel cultivator WISENT manufactured by KNOCHE is responsible for this. In this case the tines' arrangement is different. They are arranged in straight order so that the machine operates in single row design.

CHISEL CULTIVATOR BISON

Top view



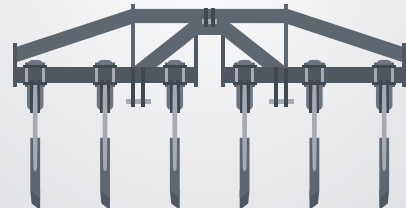
Front view



- working width from 1,70 m to 4,00 m
- 10 tines in case of a working width of 4 m:
5 curved tines on the left and 5 curved tines on the right
- double row

By means of the professional deep soil tillage the soil maintains its full productivity.

CHISEL CULTIVATOR WISENT



- working width of 3 m
- 6 straight tines in case of a clearance of 60 cm
- single row
- equipped with PTO drive shaft and combinable with tools or rollers
- wear protection
- optimised kinematics by means of shear bolts

The freely movable tines provide stability and are particularly energy-saving during the deep working pass.

FACTS AND FIGURES



CHISEL CULTIVATOR

- individually adjustable working widths in case of the chisel cultivator WISENT
- several tines for deep soil tillage
- energy-saving mode of operation
- easy breaking up of the topsoil
- loosens and drains soils at a depth of up to 60 cm
- supply of natural nutrients



CAT III



140–300 HP



1,7–4 m



WISENT 3 m



BISON 3 m



BISON 4 m

CHISEL CULTIVATORS

Designation	Number of tines pcs.	Dimension of the tines mm	Working width cm	Transport width cm	Type of coupling	Power requirement HP	Weight kg
WISENT							
WS-430	4	15	300	300	CAT III	140	900
WS-630	6	15	300	300	CAT III	180	1.050
BISON							
BS 417	4	15	170	200	CAT III	140	740
BS 625	6	15	250	250	CAT III	200	810
BS 830	8	15	300	300	CAT III	250	1.050
BS 1040	10	15	400	400	CAT III	300	1.430

Optional extras

Lightning

Supporting roller from the KNOCHE product range



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