

# THE BEST CHOICE FOR CUTTING – SHORT DISC HARROWS BY KNOCHE



## SHORT DISC HARROWS

# SHALLOW STUBBLE WORKING – PERFECTLY CUT WITH EACH CUT



For many years, short disc harrows manufactured by KNOCHE are a decisive factor in the area of passive soil tillage.

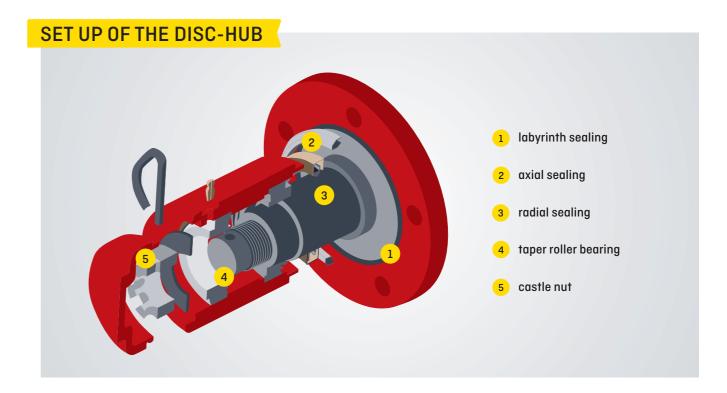
No matter whether large or small – KNOCHE Maschinenbau offers the right machine for any size of company. Short disc harrows manufactured by KNOCHE are the ideal agricultural machines for shallow stubble working as the first step after harvest. The short disc harrows' big, serrated discs facilitate a sufficient breaking up of clods. The soil is moved across the full working area. Thus, the capillarity is interrupted so that the soils do not dry up. Crop residues are worked in near the surface into the soil. This ensures a rapid rotting of plant residues and provides optimal germination conditions for volunteer plants and weeds – the best preparation for your field crops.



By means of the geometry of the disc-hub in combination with the appropriate grease lubrication KNOCHE Maschinenbau guarantees a high level of protection as well as a long shelf life of the products.

The bearing is sealed by four sealing systems: On the one hand the rubber rings of the sealing system are arranged in axial direction in the housing; on the other hand they are arranged radially, thus running from the centre outwards, in the housing. A third sealing system consists of the labyrinth sealing through which weeds or stubble residues

can't penetrate the bearing during the operation. The fourth system consists of the grease sealing. In this case KNOCHE Maschinenbau focuses on grease instead of oil. This application has always proven effective in the agricultural sector. The construction of the disc-hub is unique and exclusively available at KNOCHE Maschinenbau.



#### Properties of grease lubrication:

- low friction torque
- good protection against corrosion
- good protection against moisture penetration and impurities
- long service life and low-maintenance lubrication system
- easy replacement of grease and cleaning of the bearing unit
- simple and reliable solution

Conclusion: KNOCHE Maschinenbau focuses on a thorough grease lubrication because it facilitates an optimal adaption to the maintenance requirement that varies strongly due to weather conditions and operation as well as long downtimes in winter in the fields of soil tillage. In case of extreme dust incidence during the stubble working the labyrinth sealing can ensure a very good protection by means of the grease outside that can easily be replaced as required, the guarantee for a long lifetime.

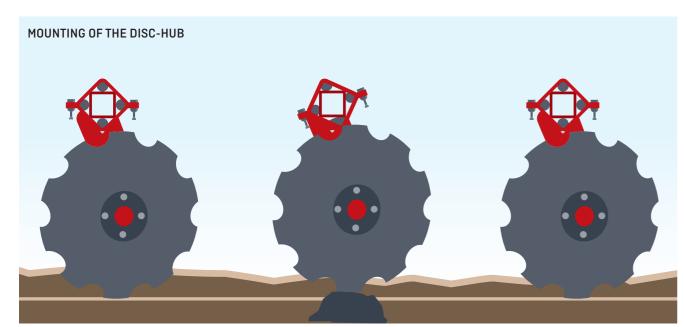
### TAPER ROLLER BEARING

#### **BENEFITS**

- capable of supporting high loads in radial direction as well as in axial direction
- resistant to shocks even at low speeds
- easy assembly
- adjustable
- steep angle of contact
- high dynamic load ratings
- low maintenance







The disc-hub is mounted in the four round cords made of rubber. This enables the disc to avoid obstacles by compressing the rubber. By means of the resilient and

dampening effect of the special-purpose rubber chosen by KNOCHE a safe and even running of the disc during the stubble working is guaranteed.



## TYPES, FACTS AND FIGURES

Shock power and flexibility: The short disc harrows KNOCHE DISCMAX DIM and DIM-S facilitate an improved soil tillage.

The short disc harrow KNOCHE DISCMAX DIM is the ideal machine for shallow stubble working. As this machine is available in four types, KNOCHE Maschinenbau offers the right machine for any company. The high-performance double taper roller bearing with radial and axial sealing placed in the proven labyrinth system especially

developed by us is used in all machines. Double row discs are placed on a square spar with a diameter of 80 mm. free. Due to the above-average size of the disc-hub the short disc harrow KNOCHE DISCMAX DIM-S is the perfect

They are mounted in rubber springs and are maintenancemachine for professional use and contractors.





Among the short disc harrows the mounted type DISCMAX DIM is the ideal machine for shallow stubble working.

- working width from 2,5 m to 6 m
- discs with a diameter of 510 mm
- working depth from 3 cm to 12 cm
- 95-200 HP
- foldable to three sides





The short disc harrow DISCMAX DIM-E is the low-cost alternative to the short disc harrow DIM. Its frame has been optimised in order to meet the requirements of small companies. Thus, it cuts perfectly with each cut.

- working width from 2,5 m to 4 m
- discs with a diameter of 510 mm
- working depth from 3 cm to 12 cm
- 75-135 HP

The mounted short disc harrow DISCMAX DIM-S is powerful. Therefore it is suited for high-performance companies.

- working width from 3 m to 6 m
- discs with a diameter of 560 mm
- working depth from 3 cm to 15 cm
- 110-200 HP
- foldable to three sides



DIM-S-FW/H



The semi-mounted short disc harrow DIM-S-FW/H is particularly suited for large fields and ideal for professional use and contractors.

- working width from 7,5 m to 9 m
- discs with a diameter of 560 mm
- working depth from 3 cm to 15 cm
- 275-350 HP
- foldable to both sides

The short disc harrow KSE-2 is the latest model in the series of the short disc harrows manufactured by KNOCHE. It works efficiently and is available in working widths up to 6 m.

- working width from 4,5 m to 6 m
- discs with a diameter of 510 mm
- working depth from 3 cm to 12 cm
- 150-225 HP





## **FACTS AND FIGURES**



## Short disc harrows DIM, DIM-E, DIM-S, DIM-S-FW/H and KSE-2

- double row discs placed on a square spar with a diameter of 80 mm
- mounted in rubber springs
- low-maintenance double taper roller bearings with grease lubrication
- radial and axial sealing placed in the labyrinth system



CAT II-III
Coupling to the trailer drawbar
(DIM-S-FW/H)



2,5-9 m



75-350 F

SHORT DISC HAP	RROWS						
Designation	Disc-ø	Dimension of the discs	Number of discs	Transport width	Working width	Power requirement	Weight
	mm	mm	pcs.	cm	cm	HP	kg
DIM							
DIM 25	510	5	18	250	250	95	920
DIM 30	510	5	22	300	300	100	1.100
DIM 35	510	5	26	350	350	115	1.180
DIM 40	510	5	30	400	400	125	1.250
DIM/H							
DIM/H 40	510	5	30	280	400	120	1.800
DIM/H 45	510	5	34	280	450	145	1.900
DIM/H 50	510	5	38	300	500	150	2.100
DIM/H 60	510	5	46	300	600	200	2.700
DIM-E							
DIM-E 25	510	5	18	250	250	75	800
DIM-E 30	510	5	22	300	300	100	900
DIM-E 35	510	5	26	350	350	115	1.050
DIM-E 40	510	5	30	400	400	135	1.260



SHORT DISC HARR	ows						
Designation	Disc-ø	Dimension of the discs	Number of discs	Transport width	Working width	Power requirement	Weigh
	mm	mm	pcs.	cm	cm	HP	kg
DIM-S							
DIM-S 30	560	6	22	300	300	110	1.150
DIM-S 35	560	6	26	350	350	120	1.660
DIM-S 40	560	6	30	400	400	130	1.300
DIM-S/H 45	560	6	34	280	450	150	2.510
DIM-S/H 50	560	6	38	300	500	150	2.750
DIM-S/H 60	560	6	46	300	600	200	3.500
DIM-S-FW/H							
DIM-S-FW/H 75	560	6	58	300	750	275	5.330
DIM-S-FW/H 80	560	6	62	300	800	320	6.200
DIM-S-FW/H 90	560	6	70	300	900	350	7.600
KSE-2							
KSE-2 45	510	5	34	265	450	150	1.800
KSE-2 50	510	5	38	265	500	175	2.000
KSE-2 55	510	5	42	265	550	200	2.300
KSE-2 60	510	5	46	265	600	225	2.500

#### Combinable with a variety of rollers from the KNOCHE product range











# HIGH AREA EFFICIENCY AND VERSA-TILITY: COMPACT DISC HARROWS SEM

More shallow stubble working and larger working depth: The compact disc harrows SEM work in huge quantities of crop residues, catch crops and organic fertiliser near the surface into hard and dry soils.

The compact disc harrows SEM-61 and SEM/H-61 are a symbiosis of short disc harrow and conventional disc harrow. The soil is moved across the full working area. Thus, the capillarity is interrupted so that the soil does not dry up. The low pull power requirements save fuel and guarantee

a high area efficiency. The user-friendly machines are equipped with a rugged frame and a low-maintenance double taper roller bearing developed by us. They are also characterized by a good manoeuvrability by means of their middle chassis.



The rigid compact disc harrow SEM-61 is available in the following working widths: 3 m and 4 m.

- discs with a diameter of 610 mm
- working depth from 3 cm to 17 cm
- 100-140 HP



The compact disc harrow SEM/H-61 is fully hydraulically foldable. With a working width up to 6 m this machine has been designed for maximum efficiency.

- working width from 4,5 m to 6 m
- discs with a diameter of 610 mm
- working depth from 3 cm to 17 cm
- 135–180 HP
- foldable to three sides



## **FACTS AND FIGURES**



#### Compact disc harrows SEM-61 and SEM/H-61

- double row discs placed on a square spar with a diameter of 100 mm
- mounted in rubber springs
- low-maintenance double taper roller bearings with grease lubrication
- radial and axial sealing placed in the labyrinth system



CATIII

100-180 HP



3-6 m

COMPACT DISC HARROWS							
Designation	Disc-ø	Dimension of the discs	Number of discs	Transport width	Working width	Power requirement	Weight
	mm	mm	pcs.	cm	cm	HP	kg
SEM-61							
SEM-61 22	610	6	22	300	300	100	1.940
SEM-6130	610	6	30	400	400	140	2.600

SEM/H-61							
SEM/H-61 3445	610	6	34	300	450	135	3.300
SEM/H-61 3850	610	6	38	300	500	150	3.600
SEM/H-61 4255	610	6	42	300	550	160	3.900
SEM/H-61 4660	610	6	46	300	600	180	4.200

Combinable with a variety of rollers from the KNOCHE product range













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