

# Express

# HORSCH

*Farming with passion*

Express TD

Express KR

## PROFESSIONAL SEED DRILL WITH 3-POINT LINKAGE





# Express TD

## DRIVEN BY THE SOIL

### What are the excelling features of the Express TD?

The **Express TD** combines the advantages of a manoeuvrable 3-point mounted seed drill with the efficiency of a Pronto DC. The compact high speed drill with low horse power requirement guarantees a noticeable increase in productivity.

### Preparation

The well-proven DiscSystem of the **Express TD** guarantees a perfect production of fine soil at an operational speed of 10 to 20 km/h. Due to the intensive tillage it can do without a pto-shaft. Due to the high clearance the 460 mm discs are very efficient even if there are high amounts of organic material. The working depth of the DiscSystem can be adjusted hydraulically and comfortably from the tractor.

### Seed bed preparation

A very even emergence is the prerequisite for an even plant growth. To achieve this aim, the seedbed has to be levelled and consolidated in an optimum way. The packer elements of the FarmFlex packer with a diameter of 54 cm are especially co-ordinated with the seed coulters.



Seed hopper with a capacity of 1 500 litres



FarmFlex packer with a diameter of 54 cm for strip consolidation. It can be used on any soil.



DiscSystem for intensive cultivation. Resistant even to high amounts of organic material.



# Express KR

## 3-POINT SEED DRILL WITH ROTARY HARROW KREDO

### What are the outstanding features of the Express KR?

The **Express KR** is the first pneumatic HORSCH 3-point seed drill with an active tillage tool: the integrated rotary harrow Kredo. Even under difficult conditions it allows for an intensive seedbed preparation. The rotary harrow Kredo has 10 rotating tools on 3 m working width. Its stable design is ideal even on stony soils. With quick-change tines it can be equipped with drag or TerraGrip tines. Tines with carbide coating are available for longest possible service life. The well-proven coating technology from the cultivator tine sector is used. The fine-step adjustment of the working depth of the rotary harrow is easily accessible from the outside and is clearly visible. The adjustment of the levelling bar, too, is very easy.

Three packer versions are available for the **Express KR**. The tooth packer roller with a large 64 cm diameter is ideal for all conditions. Its load-carrying capacity even on light soils is quite high, thus the consequences on horsepower requirement and diesel consumption are very positive. The trapeze ring packer's diameter amounts to 50 cm for heavy soils with a high consolidation in the seeding zone or to 60 cm for changing soils from light to heavy with high requirements on the load-carrying capacity. It forms a perfect seed furrow even in heavy and cohesive conditions.

The FarmFlex packer is ideal for medium soils with little cohesion. The solid rubber roller with a diameter of 54 cm creates a zone consolidation of the soil in the shape of a furrow and reduces the encrusting effect of the soil (only available for Express 3 KR).

For more flexibility the **Express KR** is available with single or double hopper. With the double hopper version two components can be metered into the same seed flow and can be placed together in the seed furrow.

The adjustment of the seed discs is made hydraulically and is marked with the well-known coloured AluClips. The **Express KR** disposes of a frame, so the adjustment of the power harrow does not affect the sowing depth. The TurboDisc seed coulters can be lifted completely hydraulically so you can work solo with the just power harrow. Moreover, the seed unit can easily be uncoupled from the power harrow via only 4 fixing points to be able to use the Kredo solo.



Rotary harrow solo  
with lifted seed coulters

Rotary harrow Kredo crushes  
even rough lumps

Universal tooth packer roller  
with large diameter

TurboDisc precision coulters  
of the second generation for exact seed  
placement even at high operational speed.  
In all Express TD and KR.

Hopper capacity: 1 500 l

Safe and simple calibration test. The farmer stands  
behind the machine and puts the calibration bag  
under the metering unit. The calibration flap opens  
and closes automatically by means of a mechanism.

Simple and easily understandable  
adjustment of the working depth  
of the rotary harrows

Tines with quick-change system



# Express 4 KR

## FOLDABLE



# TURBODISC



### What are the excelling features of the Express 4 KR?

In addition to the rigid version, the **Express 4 KR** now is also available as a folding version. With a transport width of max. 3 metres it can be used very flexibly. The technical equipment is similar to the Express 3 KR and the 4 KR and the machine is equipped with either the trapeze ring roller or the tooth packer. The 14 rotors guarantee a perfect seedbed preparation even in most difficult conditions and with an operational speed of up to 13 km/h.

### Optimum weight distribution with Partner FT

For an optimum weight distribution the folding power harrow with levelling bar has been combined with the **Partner FT** – a hopper with a capacity of 1 600 litres. The compact design of the FT allows for a good visibility towards the front. At the same time the feed opening is rather large for a quick filling with a front loader or a telescopic handler. Additional weights are available as an option to charge the Partner FT (dead weight 700 kg) with an additional weight of 360 kg. Thus, the tractor is balanced in an optimum way even if the front hopper is empty. For an optimum conservation of the soil and consolidation the front hopper can be equipped with an intermediate packer – a RollPack packer with 280 kg or a tyre packer with 230 kg. The double venturi at the metering device allows for an electric half-width shut-off to reduce overlappings. In combination with SectionControl an automatic half-width shut-off via GPS is possible, too.

### TurboDisc – the premium coulters of the second generation for perfect seed placement

A perfect placement of the seed and an immediate seed-soil contact are the prerequisites for a safe and regular emergence. HORSCH perfectly meets the challenge to achieve this aim even at high operational speeds. The solution is called **TurboDisc**. The double-disc seed coulters that HORSCH has been using and developing further for more than 15 years convinces by its precise seed placement. The press-wheel-controlled coulters design allows a quick adaption to the soil at high speeds. This is the only way to keep up the placement depth for every single grain of seed.

The double-disc seed coulters with maintenance-free bearing opens the soil and thus allows for an undisturbed seed placement. The integrated uniformer guarantees a fixing of the seed at the bottom

of the seed furrow even at high operational speeds. A carbide coated scraper keeps the area between the discs clean and prevents blocking even in cohesive and wet conditions. The 5- or 7.5-cm-wide press wheel guarantees optimum seed-soil contact and an exact depth control.

In addition to the excellent adaption to the soil the Turbo Disc seed bar impresses by its easy handling: coulters pressure and sowing depth do not influence each other when being adjusted. The maintenance-free rubber bearing of the seed coulters transfers a coulters pressure of 120 kg and thus guarantees a smooth coulters – at an operational speed of up to 20 km/h. Moreover, the rubber bearing acts as an overload protection and shock absorber for stones.



**Transport position**  
Hydraulic folding with a transport width of under 3 metre



Compact unit consisting of power harrow, packer and seed coulters for a favourable weight distribution



**Express 4 KR with Partner FT** – compact design for excellent visibility to the front



**Stepless coulters pressure adjustment**  
Manual adjustment increases the pre-load of the rubber elements



**Uniformer and scraper**  
Secure seed placement in wet conditions



**DoubleDisc coulters**  
Straight discs with inner maintenance-free bearings



# ELECTRONICS INNOVATIVE AND DIGITAL SOLUTIONS



### HORSCH Intelligence

The future machines think actively and HORSCH Intelligence makes it possible. With intelligent software and electronic solutions HORSCH seed drills work even more efficiently and help you to save both money and increase confidence. HORSCH seed drill are always equipped with the ISOBUS standard. This does not only mean that every HORSCH machine can be controlled with any ISOBUS terminal. Additionally, SectionControl, VariableRate as well as the TaskController for data processing is a standard equipment for every HORSCH seed drill.



HORSCH Terminal



Touch 1200 Terminal



Touch 800 Terminal



TaskController

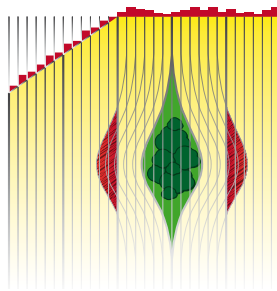
### SectionControl

ISOBUS SectionControl allows for switching off individual sections automatically via GPS. The current position is determined, thus at field boundaries, on the headlands, in case of overlaps or in predefined areas individual sections (half-widths) or the whole working width is shut-off automatically.

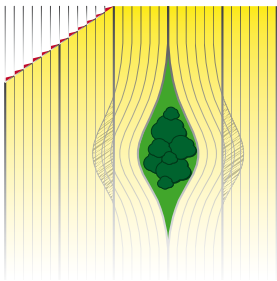
When using a HORSCH Touch 800/1200 Terminal you can additionally use the MultiControl function. This function independently switches on and off the application of fertiliser and seed. Without MultiControl either fertiliser or seed can be switched on and off at the right time.

#### Advantages of SectionControl:

- Saving seed and fertiliser as overlaps on the headlands and at field boundaries are reduced to a minimum
- Constant working quality on the whole field
- Productivity increase under various conditions (day and night, fog)
- Reduced stress for the driver
- Protection of the environment



WITHOUT SectionControl



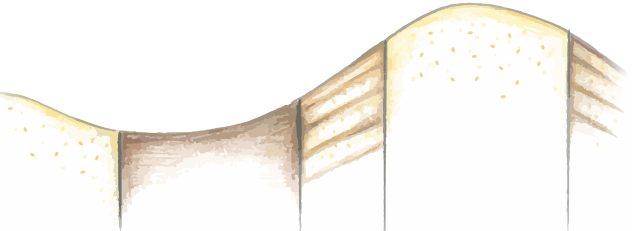
WITH SectionControl

### VariableRate

ISOBUS VariableRate allows for a site-specific application of seed and fertiliser. Thus, with an appropriate application card for every section within a field the optimum quantity of fertiliser and seed can be applied. When using a HORSCH Touch 800/1200 Terminals you can additionally use the MultiControl function. This function allows for independently varying the amount of fertiliser and seed. Without MultiControl the application rate of either fertiliser or seed can be varied.

#### Advantages of VariableRate:

- Saving of seed and fertiliser as only the necessary quantity is applied
- Regular emergence due to optimum number of grains/m<sup>2</sup>
- Simple and quick documentation
  - The different application rates are documented automatically.
  - Uncomplicated transmission to the acreage index
- Reduced stress for the driver
  - The optimum application rate is automatically used on the fields.
- Protection of the environment
  - Only the necessary amount of fertiliser is applied.



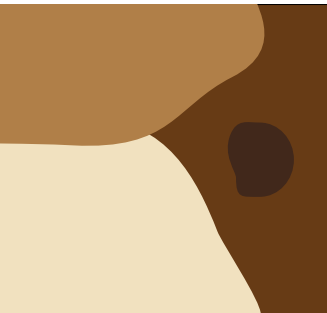
VariableRate takes different types of soil into account.

### TaskController

The ISOBUS TaskController transfers data from the PC to the terminal in an uncomplicated way. It is also possible to transfer application rates, sown area and other data that were recorded while sowing from the terminal to the PC. This facilitates the administration of the acreage index. Via the integrated order management system orders can be created and executed.

#### Advantages of the TaskController:

- Uncomplicated data exchange
- Automatic documentation
- Structured working due to data management
- Simple administration of the acreage index
- Simple accounting and proof for contract services



Soil quality	Seed	Fertiliser
high	300 grains/m <sup>2</sup>	2.8 dt/ha PK
medium high	270 grains/m <sup>2</sup>	2.5 dt/ha PK
medium low	250 grains/m <sup>2</sup>	2.3 dt/ha PK
low	220 grains/m <sup>2</sup>	2.0 dt/ha PK

VariableRate  
Seed OR fertiliser

VariableRate with MultiControl  
Seed AND fertiliser

VariableRate allows for applying adapted quantities of fertiliser and seed on the basis of application cards.





# THE HORSCH SINGULARSYSTEM with the Funck metering device for Express 3/3.5 & 4 KR rigid

## Seed coulter

- The design of the seed coulter and the main characteristics like the coulter pressure of up to 120 kg are identical to the well-proven TurboDisc coulter.
- Depending on the conditions an operational speed of up to 10 km/h is possible.
- The well-proven double discs open the seed furrow. An integrated skid forms the seed furrow and guarantees an exact placement.
- A height-adjustable catching roller allows for a defined placement of the seed and creates the necessary seed-soil contact.
- After the catching roller the well-known press wheel closes the furrow and controls the depth of the seed coulter.



## Seed

- To guarantee an undisturbed and exact mechanical singulation of the grains, the seed has to be even sized and clean.
- The homogeneity of the seed and thus, its suitability for the system can be determined by means of the HORSCH shaker box.
- Generally the grains should be in the second or third chamber of the shaker box.
- If the grains end up in the first or last chamber, this seed is not suitable for singulation (in this case the bypass seeding system can be used).

## Which sieving?

	Rye	Barley	Wheat	Rape
1	> 4.1	> 4.1	> 4.1	> 3
2	3.3–4.1	3.3–4.1	3.3–4.1	2.5–3
3	2.5–3.3	2.5–3.3	2.5–3.3	2–2.5
4	< 2.5	< 2.5	< 2.5	< 2

Sieve gradings in mm for different crops  
(green = good, red = not ok)

## Singulation

- The structure of the central metering unit and the pneumatic system are identical to the conventional seed drills.
- The singulation of the grains is made by the Funck metering device on the seed coulter with up to 100 grains/sec.
- Singulation is carried out mechanically by crop-specific pockets in the singulation disc inside the Funck metering device.
- The desired seed rate in grains/m<sup>2</sup> and the thousand seed weight are entered in the terminal.
- The calibration test is carried out according to the well-known system.
- Every singulation disc is driven by an own electric motor (1 000 – 2 000 rpm), monitored by the software and controlled automatically depending on the operational speed.
- Depending on the seed rate 1, 2 or 4 pockets can easily be put into the singulation disc without any tools.
- Different pockets are available for wheat, rye, barley, rape and peas.
- The seed is transported to the seed furrow via the fall tube.

- From an agricultural point of view the use of the system makes sense up to a seed rate of 250 grains/m<sup>2</sup>. Beyond this limit the singulation effects are only marginal.
- In case of high seed rates, unsuitable seed or if catch crops are to be sown, the delivered bypass seeding system allows for sowing conventionally.



Bypass seeding system for seed rates beyond 250 grains/m<sup>2</sup> or seed that is not suitable for singulation

## Singulation discs



with pocket rape



with pocket wheat



with pocket rye



with pocket barley



Catching roller



Skid



HORSCH shaker box with optimum wheat



HORSCH shaker box with optimum rape



# EQUIPMENT



**Metering unit** (Express TD/Express KR) – Electric drive for metering the seed. Allows for a quick, simple and precise calibration.



**Solid monitoring sensors** for seed and fertiliser



**Tramline system**



**Pre-emergence marker** (optional)



**Spring-loaded track-eradicator tines** (optional Express TD/Express KR)



**Continuous coulter pressure adjustment**  
Manual adjustment increases the pre-stressing of the rubber elements



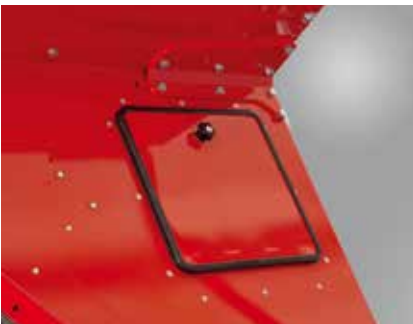
**Hydr. fan**  
direct drive



**Radar sensor** for an exact recording of the speed and to control the seed quantity



**Lighting**  
for safe road transport



**Storage box** – lockable and sealed

From here equipment only  
for Express TD



**Depth adjustment DiscSystem** via two adjusters.  
Optional: can be made while driving via two hydraulic cylinders.



**2-row DiscSystem** – Considerably lower horsepower requirement compared to powered front tools (e. g. power harrow). Excellent seedbed preparation at high working speeds



**Hydraulic depth adjustment DiscSystem** (optional)



**Emptying hopper device**



**Full width FarmFlex packer** – resistant to stones



**3-point linkage Cat. III**



**Maintenance-free oil bath bearing**  
High service life with low wear

From here equipment only  
for Express KR



Optimum arrangement of the **seed coulters** behind the strip packer. One seed coulter runs exactly in the strip that has been consolidated.



**Durable HM+ tine**



**Additional levelling bar** (optional)



**Efficient scraper**



**Simple and safe calibration test** with a slide (opens and closes automatically) without having to reach or climb deeply into the machine



**Hydraulic sowing depth adjustment with clips**



**Double hopper version with the Grain & Fertilizer System** (45:55)



**Trapeze ring roller** for a targeted strip consolidation in heavy and cohesive conditions (50 cm and 60 cm)



# TECHNICAL SPECIFICATIONS



HORSCH Express	3 TD	3.5 TD
Working width (m)	3.00	3.50
Transport width (m)	3.00	3.50
Filling height (m)	2.21	2.21
Length without/Length with PE marker (m)	3.67/4.00	3.67/4.00
Weight (kg)*	2 600	2 965
Hopper capacity single hopper (l)	1 500	1 500
Dimension of feed opening (m)	0.88x2.42	0.88x2.42
Number of seed coulters	20	24
Seed coulter pressure (kg)	5–120	5–120
Seed coulters/press wheels Ø (cm)	34/32	34/32
Row spacing (cm)	15	14,5
Packer Ø (cm) FarmFlex packer	54	54
Operating speed (km/h)	10–20	10–20
Power demand (KW/HP)	90–140/125–190	105–160/145–220
Double-acting control devices	1 (+1 hydr. fan direct drive, +1 hydr. adjust-ment DiscSystem, +1 bout marker a. +1 hydr. coulter pressure adjustment)	1 (+1 hydr. fan direct drive, +1 hydr. adjust-ment DiscSystem, +1 bout marker a. +1 hydr. coulter pressure adjustment)
Depress. return line (max. 5 bar)	1 (only with hydr. fan direct drive)	1 (only with hydr. fan direct drive)
Oil quantity, hydr. fan (l/min)	20–25	20–25
3-point linkage	3-point Cat. III	3-point Cat. III

\* Weights of the machines with minimum equipment



HORSCH Express	3 KR	3.5 KR	4 KR rigid	4 KR
Working width (m)	3.00	3.50	4.00	4.00
Transport width (m)	3.00	3.50	4.00	2.98
Filling height (m)	2.08	2.00	2.00	Partner FT
Length without/Length with PE marker (m)	2.85/3.25	2.85/3.25	2.85/3.25	3.00/3.40
Weight approx. (kg)*	3 200	3 500	3 850	4 200
Hopper capacity single hopper (l)	1 500	1 500	1 500	Partner FT
Dimension of feed opening (m)	0.93x2.40	0.93 x 2.40	0.93x2.40	Partner FT
Hopper capacity double hopper G & F (l)	2 000 (45:55)	2 000 (45:55)	2 000 (45:55)	Partner FT
Dimension of feed opening (m)	0.93x2.40	0.93x2.40	0.93x2.40	Partner FT
Number of seed coulters	20	24	28	28
Seed coulter pressure (kg)	5–120	5–120	5–120	5–120
Seed coulters/press wheels Ø (cm)	34/32	34/32	34/32	34/32
Row spacing (cm)	15	14.50	14.25 (14.50)	14.5
Packer Ø (cm) trapeze ring roller	50	50	50	50/60
Packer Ø (cm) tooth packer	64	64	64	64
Packer Ø (cm) FarmFlex packer	54	---	---	---
Number of rotating tools	10	12	14	14
Operating speed (km/h)	6–13	6–13	6–13	6–13
Power demand (KW/HP)	110–185/150–250	129–185/175–250	147–185/200–250	147–185/200–250
Double-acting control devices	2 (+1 bout marker)	2 (+1 bout marker)	2 (+1 bout marker)	1 (folding), 1 (bout marker), 1 (coulter pressure – SA)
Depress. return line (max. 5 bar)	1	1	1	Partner FT
Oil quantity, hydr. fan (l/min)	20–25	20–25	20–25	Partner FT
3-point linkage	3-point Cat. III	3-point Cat. III	3-point Cat. III	3-point Cat. III

\* Weights of the machines with minimum equipment







[www.horsch.com](http://www.horsch.com)

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