



# Wiedemann

*Deep aeration and removal of compaction up to a depth of 27 cm, central tine adjustment, central depth adjustment, integrated damping system, integrated tine fitting and removal system, wide range of tines and accessories.*



## **TERRA SPIKE® XF/XD**



## TERRA SPIKE® XF/XD

Time is money. This principle applies today more than ever when it comes to professional turf care. It doesn't matter whether you are maintaining sports grounds or golf courses, the time available to you is becoming increasingly limited while the players place ever more exacting demands on the quality of the turf. Regular deep loosening and aeration is one of the most important prerequisites for a healthy root growth. Breaking up the compacting of the ground allows the roots to penetrate deeper into the ground and take better advantage of the water and nutrients. The flow of water and the air balance are improved, turf thatch is removed and the shear strength is increased.

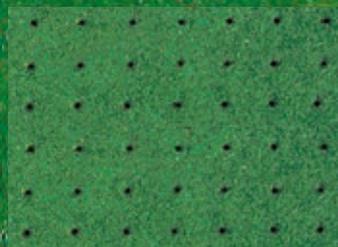
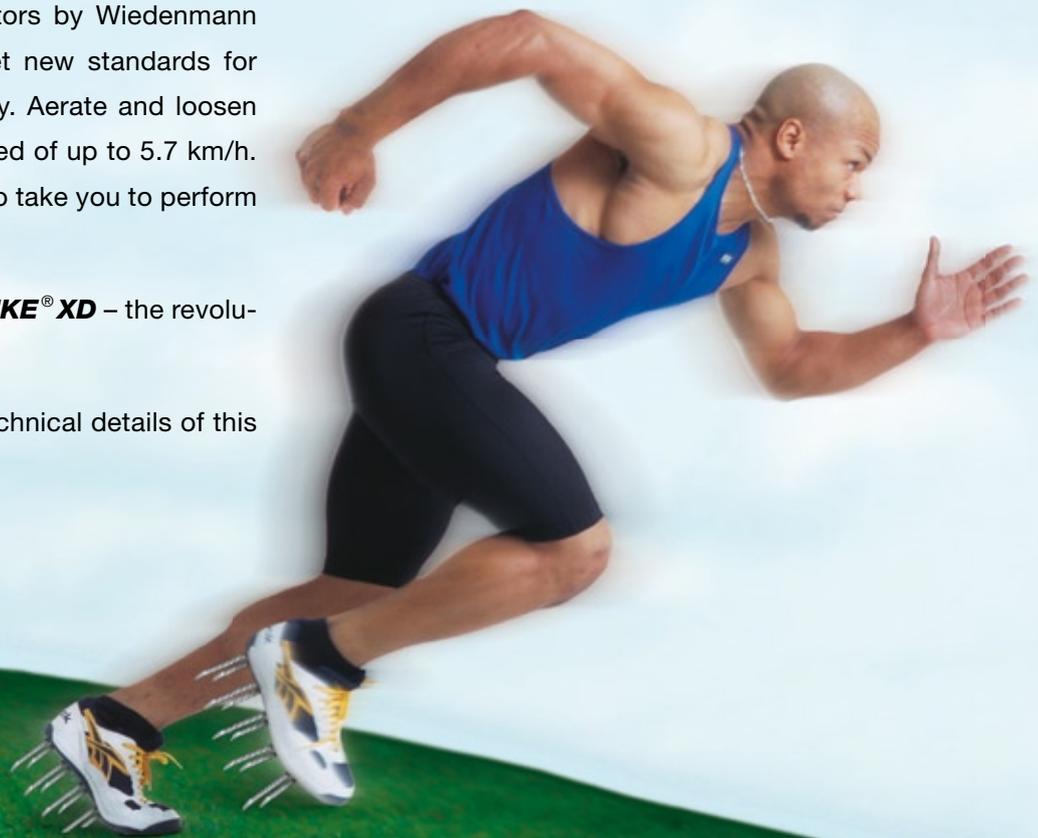
In the past, this maintenance work used to be – in spite of all the technical innovations – time consuming work. Used to be – because the new generation of **TERRA SPIKE® XF** and **TERRA SPIKE® XD** deep aerators by Wiedenmann has revolutionised turf care and set new standards for speed, productivity and work quality. Aerate and loosen your turf up to 27 cm deep at a speed of up to 5.7 km/h. Save up to 60% of the time it used to take you to perform this maintenance job.

**TERRA SPIKE® XF** and **TERRA SPIKE® XD** – the revolution in deep loosening.

This brochure will give you all the technical details of this new generation of deep aerators.



■ TwinDrive



### **TwinDrive**



The continuous crankshaft is driven on both sides by „elastic“ ribbed V belts. The maintenance-free drive is encapsulated and protected against dust and dirt.

### **Crankshaft**



The extremely sturdy, computer-optimised crankshaft runs on large sized ball bearings. Precisely calculated counterweights allow for the TERRA SPIKE® XF/XD unrivalled smooth running.

### **Turf retainer**



The optional turf retainer prevents damage to shallow rooted turf.

### **Depth adjustment**



The working depth of the TERRA SPIKE® XF/XD can be adjusted easily and without tools by using a hand crank.

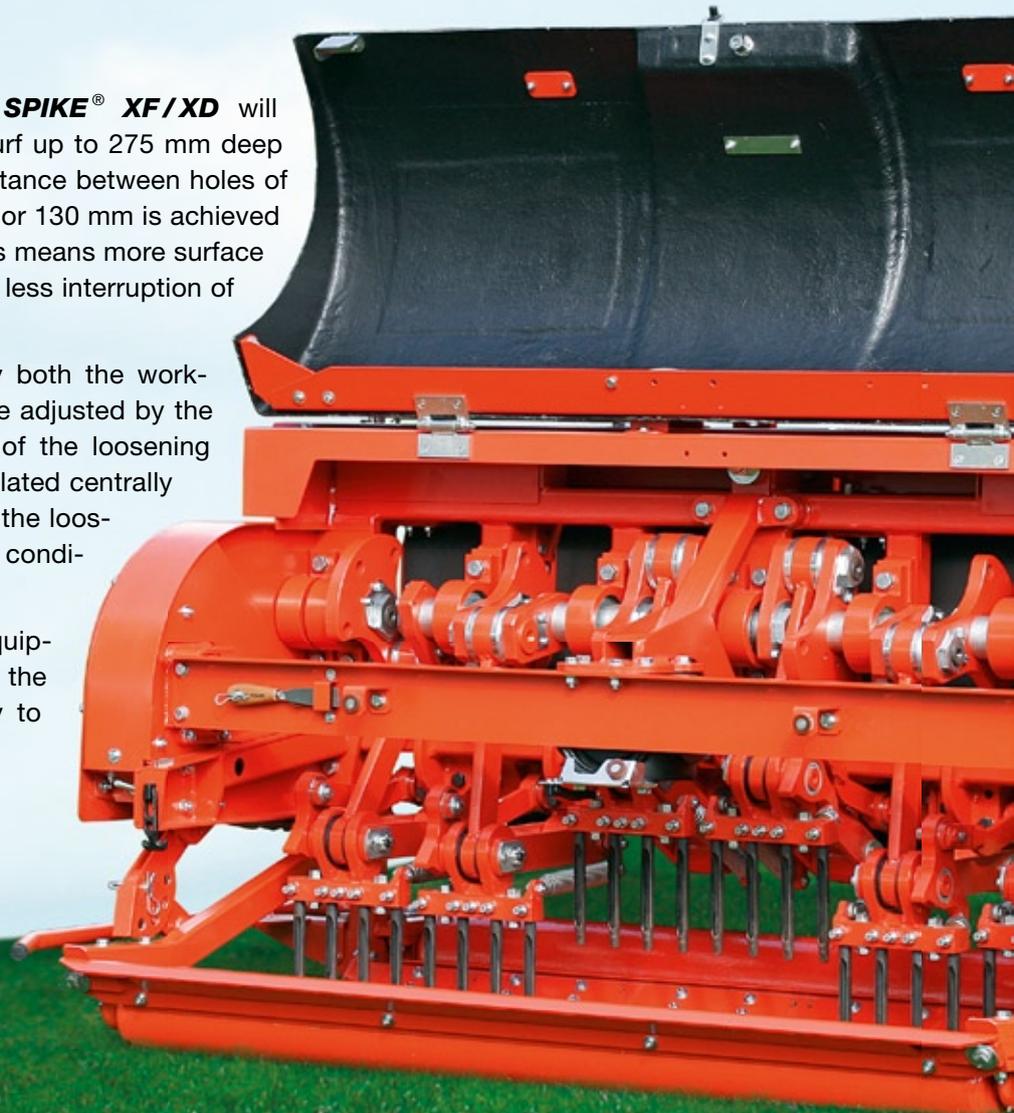
As an option, the working depth can be set hydraulically from the seat of the tractor – even while driving.

## **The revolution**

The high productivity of the **TERRA SPIKE® XF/XD** will convince you. Loosen and aerate your turf up to 275 mm deep at a speed of almost 6 km/h and at a distance between holes of 195 mm. Even square hole spacing of 65 or 130 mm is achieved at forward speeds of 1.9 or 3.8 km/h. This means more surface area coverage per hour and considerably less interruption of play. Your players will thank you.

You'll be surprised how quick and easy both the working depth and the loosening angle can be adjusted by the **QuickSet**. The wide adjustment range of the loosening angle from 90° to 65°, which can be regulated centrally by the crank, allows you to ideally adapt the loosening intensity to the prevailing ground conditions and degree of compaction.

The exclusive **TwinDrive** is available equipped with different gear ratios. This allows the crankshaft speed to be adjusted ideally to the available tractor power.

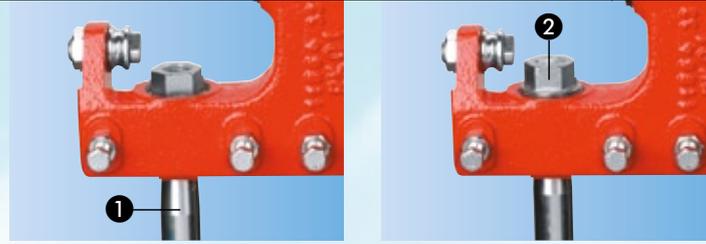


## Tine holders



The robust tine holders with large sized ball bearings are capable of withstanding extreme conditions, such as jolts, dirt and sand.

## QuickFit



The integrated system for fitting and removing tines allows quick and trouble-free fitting of the conical 20 and 25 mm hollow tines.

### Tine fitting

1. Screw tine **1** into the tine holder from below by hand.
2. Tighten the lock nut **2** from above. The tine will now fit securely in the conical tine holder.

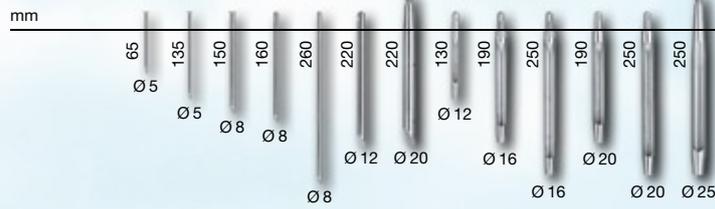
### Tine removal

1. Turn the lock nut **2** in the opposite direction to press the tine out of the cone.
2. Next, unscrew the tine **1** by hand.

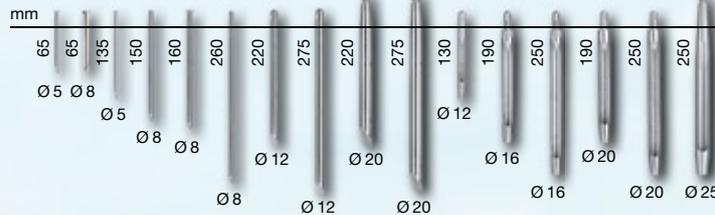
## Range of tines

TERRA SPIKE®XF and TERRA SPIKE®XD can manage any task thanks to a complete range of solid tines with diameters of 5, 8, 12 and 20 mm, as well as hollow tines with diameters of 12, 16, 20 and 25 mm.

### TERRA SPIKE® XF



### TERRA SPIKE® XD



## QuickSet



Central, quick adjustment of the tine entry angle (90 to 65°) and working depth without the need for tools. With only one central crank, you can easily and quickly make these settings which are so important for the quality of the work - regardless of the length of tine you have fitted or whether the tine is new or used.

### 1 Central depth adjustment

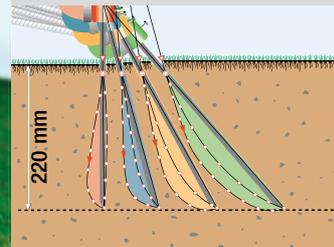
You'll be surprised how quick and easily the working depth of the TERRA SPIKE® XF/XD can be adjusted. First transfer the length of the fitted tine to the moveable pointer. Then set the desired working depth using the central depth adjusting crank. Ready. It can't get any quicker or easier.

### 2 Central angle adjustment

Crank with integrated **Power Pack** for the central, quick and tool-free adjustment of the tine entry angle.

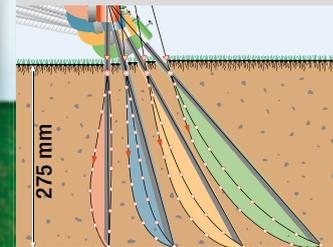
Different loosening intensity by adjusting the entry angle of the tine.

### TERRA SPIKE® XF



Entry angle	Pivot angle	Stroke (mm)	Depth (mm)
90°	3°	12	220
85°	15°	18	190
80°	30°	22	160
75°	40°	25	125

### TERRA SPIKE® XD

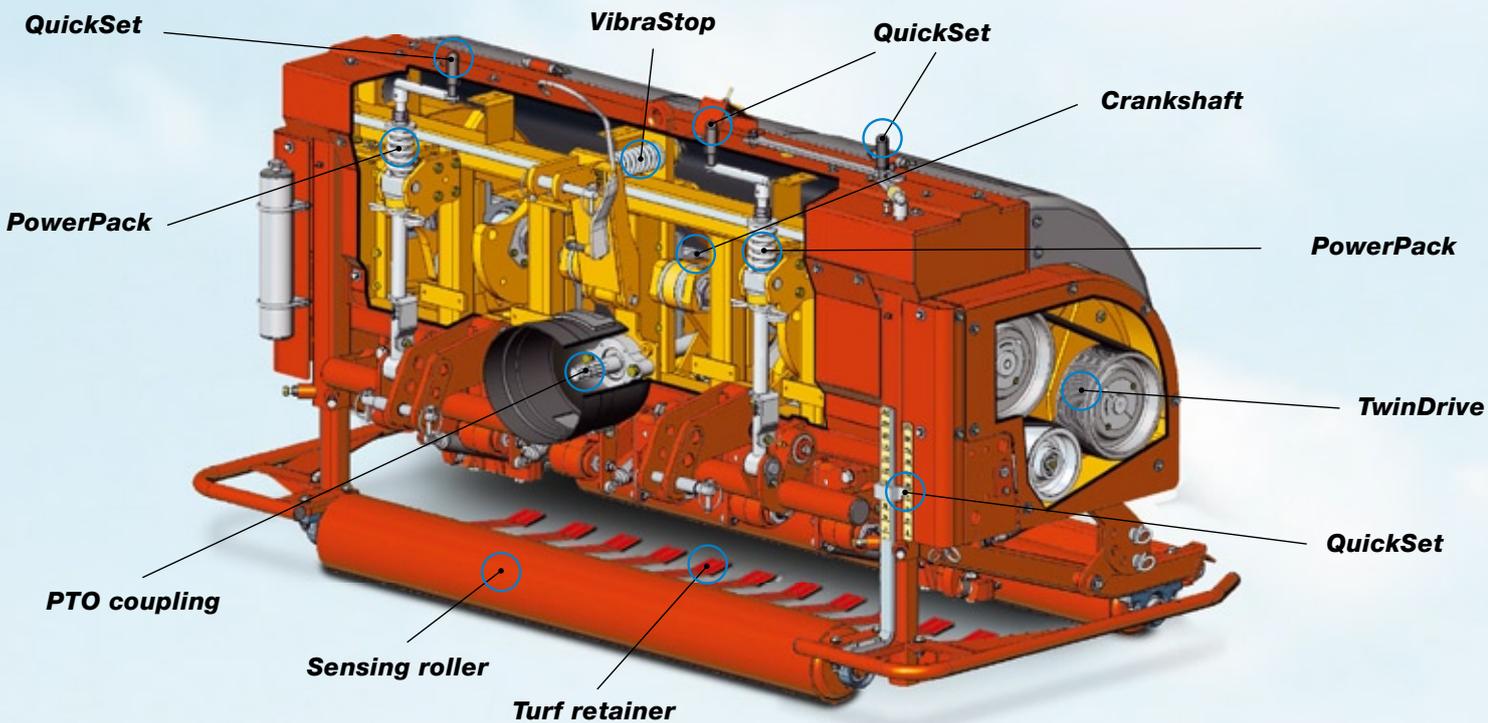


Entry angle	Pivot angle	Stroke (mm)	Depth (mm)
90°	14°	36	264
85°	22°	46	228
80°	28°	46	196
75°	31°	43	160

# VibraStop / PowerPack

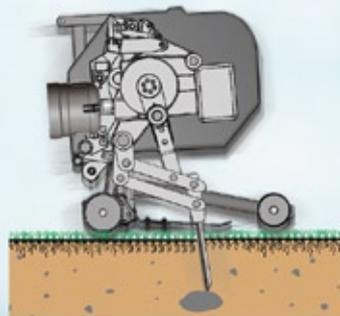
Deep aerification and loosening is tough work, both for man and machine. If, for example, a tine strikes a stone during operation, the tine must lift the entire machine within a fraction of a second in order to overcome this obstacle. The jolts and vibrations that inevitably occur when this happens adversely affect not only the deep aerifier, but also the tractor and the tractor driver in the form of damaging jolts and vibrations. Consequently the quality of work suffers.

To eliminate this fundamental drawback, Wiedenmann has developed two independently operating, exclusive damping systems - **VibraStop** and **PowerPack**. Together, they absorb perfectly jolts and vibrations caused by extreme compaction or stones. The result is unrivalled smoothness of running with a minimum of strain on the driver, tractor, deep aerifier and tools.



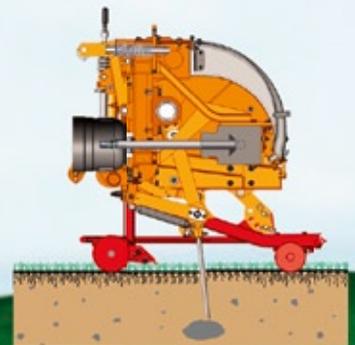
## Other machines on the market

The tine strikes an obstacle in the soil. The resulting jolt is transmitted undampened to the deep aerator, the tractor and the tractor driver with all the negative consequences.



## TERRA SPIKE® XF/XD

The tine strikes the same obstacle in the soil. The VibraStop and PowerPack damping systems are activated instantly, and the resulting jolt is absorbed. This way, the stress on the deep aerator and tractor is reduced almost entirely.



## TERRA SPIKE® XF 6 in action

16 mm hollow tines,  
65 mm square distance between holes,  
1,9 km/h = 3000 m<sup>2</sup>/h

25 mm hollow tines,  
130 mm square distance between holes,  
3,8 km/h = 5900 m<sup>2</sup>/h

12 mm solid tines,  
65 mm square distance between holes,  
1,9 km/h = 3000 m<sup>2</sup>/h

20 mm solid tines,  
195 mm distance between holes,  
5,7 km/h = 8900 m<sup>2</sup>/h



## Tools

### Hydraulic rotary brush Swathboard

### Multi-tine holder

Every time you pass over the grass, it causes compaction and has a negative impact on the growth. Reduce the number of passes by combining the TERRA SPIKE® XF / XD with trailers that can be purchased as an option.

Use the optional "nail board" to increase the number of holes per square metre and to intensify the degree of maintenance.

TERRA SPIKE® XF / XD there isn't any more productive way to care for your turf.



If the optional hydraulic rotary brush is used instead of the rear roller, the turf is first top-dressed and then deep loosened while the top-dress material is brushed into the turf. This reduces the number of passes.



When using hollow tines the cores can be deposited in rows by means of the optional swathboard. This makes the subsequent collection of the cores much easier.



Solid tines 5 x 65, 5 x 135, 8 x 65 or 8 x 150 mm are mounted in the multi-tine holder "nail board". 24, 16 or 8 tines can be mounted, depending on the task and the required hole pattern. The "sandwich construction" of the nail board allows quick and easy tine replacement.

TECHNICAL DATA	TERRA SPIKE® XF		TERRA SPIKE® XD	
Model:	XF 6	XF 8	XD 6	XD 8
Working width in cm:	160	210	160	210
Weight in kg (approx.):	1070	1275	1125	1345
Maximum working depth in mm:	220	220	275	275
Dimensions L / W / H in cm (approx.):	135 / 215 / 120	135 / 264 / 120	139 / 215 / 120	139 / 264 / 120
Mounting:	rear three point cat. I and II		rear three point cat. I and II	
QuickSet / QuickFit / PowerPack / VibraStop:	standard		standard	
Minimum required tractor power (recommended):	24 kW/32 HP	32 kW/42 HP	24 kW/32 HP	32 kW/42 HP
Crankshaft speed:	345 RPM	410 RPM	345 RPM	410 RPM
Maximum admissible tractor power:	45 kW/60 HP	52 kW/70 HP	56 kW/75 HP	63 kW/85 HP
Minimum tractor lifting capacity with standard attachment in N:	13900	16900	13900	16900
Tractor PTO speed:	540 RPM		540 RPM	
Solid tines Ø in mm:	5, 8, 12, 20		5, 8, 12, 20	
Hollow tines Ø in mm:	12, 16, 20, 25		12, 16, 20, 25	
Rear roller:	standard		standard	
Turf retainer:	optional		optional	
Hydraulic depth adjustment:	optional		optional	
Swath board:	optional		optional	
Hydraulic rotary brush:	optional		-	
Multi-tine holder for 5 mm and 8 mm solid tines:	optional		optional	

Area coverage in continuous operation in m <sup>2</sup> per hour at a crankshaft speed of:				
<b>345 RPM</b> ; at 1.3 km/h; square hole spacing 65 mm; (approx.):	2100 m <sup>2</sup> /h	2800 m <sup>2</sup> /h	2100 m <sup>2</sup> /h	2800 m <sup>2</sup> /h
<b>345 RPM</b> ; at 2.7 km/h; square hole spacing 130 mm; (approx.):	4200 m <sup>2</sup> /h	5600 m <sup>2</sup> /h	4200 m <sup>2</sup> /h	5600 m <sup>2</sup> /h
<b>345 RPM</b> ; at 4.0 km/h; square hole spacing 195 mm; (approx.):	6300 m <sup>2</sup> /h	8400 m <sup>2</sup> /h	6300 m <sup>2</sup> /h	8400 m <sup>2</sup> /h
<b>410 RPM</b> ; at 1.6 km/h; square hole spacing 65 mm; (approx.):	2500 m <sup>2</sup> /h	3400 m <sup>2</sup> /h	2500 m <sup>2</sup> /h	3400 m <sup>2</sup> /h
<b>410 RPM</b> ; at 3.2 km/h; square hole spacing 130 mm; (approx.):	5000 m <sup>2</sup> /h	6700 m <sup>2</sup> /h	5000 m <sup>2</sup> /h	6700 m <sup>2</sup> /h
<b>410 RPM</b> ; at 4.8 km/h; square hole spacing 195 mm; (approx.):	7500 m <sup>2</sup> /h	10000 m <sup>2</sup> /h	7500 m <sup>2</sup> /h	10000 m <sup>2</sup> /h
<b>485 RPM</b> ; at 1.9 km/h; square hole spacing 65 mm; (approx.):	3000 m <sup>2</sup> /h	4000 m <sup>2</sup> /h	-	-
<b>485 RPM</b> ; at 3.8 km/h; square hole spacing 130 mm; (approx.):	5900 m <sup>2</sup> /h	7900 m <sup>2</sup> /h	-	-
<b>485 RPM</b> ; at 5.7 km/h; square hole spacing 195 mm; (approx.):	8900 m <sup>2</sup> /h	11800 m <sup>2</sup> /h	-	-

Descriptions and illustrations are non-binding. We reserve the right to modify the construction and design.

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