

General Catalogue

Quality Made in Germany



For professionals worldwide

Diamond
Core Drills



Diamond
Saws

25 years committed to quality and location

Putting ideas and visions into action was the aim of Wilhelm Wurster when he founded WEKA Electric Tools in 1988.

Since then we produce high-quality diamond core drill, electrical wall saws and drill rigs as our core products. Further more we develop and produce electric tools according to customer-specific requirements.

Our aim is to be ahead of “machines off the shelf” with always new machines and to offer more advantages to the operator.

This succeeded very often:

1988 - the first 3-speed diamond core drill with overload clutch, start current limiting and oil lubrication.

1989 - the first 3-speed handheld diamond core drill with oil lubrication. A success model which is not only in Europe, but also in the USA, Australia and New Zealand reckoned among the most famous handheld core drills.

1992 - the first water-cooled diamond core drill of the world with a patented water-flow.

1997 - the first wet-dry diamond core drill of the world with a protected shaft sealing.

2002 - the worldwide first diamond core drill with a switch reluctance motor as drive with the highest active power of 3700 W on 230 V.

2004 - Development of the intellitronic, a motor management which offers besides a soft start a system that does not switch off the machine on overload, but shows the operator by pulsation the load limit tangibly.

2007 - the first diamond core drill with a switch reluctance motor as drive with a nominal torque of 680 Nm at 400 V.

2013 - all SR-machines are fitted with a comfortable display. The drilling diameter is entered via a keypad. The operator does not have to calculate the suitable speed. Speed and torque are set by the electronic.

All products are exclusively manufactured at our location in Neubulach and thus are in either case “Made in Germany”.

80% of all vendor parts are manufactured within a radius of 50 km.

We are as a Swabian enterprise closely connected to the Black Forest nature, traditionally economical, also on consumption of resources. We heat our company via a heat pump with geothermal energy, solar collectors generate the energy for our hot water and the photovoltaik system on our roof generates approx. 32 MWh electrical energy from the sun per year.

Our products consist mainly of steel and aluminium. Plastics are only used where indispensable. Compounds are renounced widely. WEKA electric tools are very long-living. Ready for scrap heap machines are disassembled completely and divided substantially. Thus they are more than 90% recyclable.

WEKA is since many years a synonym for technical and qualitative high-grade products which are exclusively offered to the professional operator via our sales partners, who possess large expert knowledge in concrete cutting techniques.

In the focus of our efforts to improve our products and to develop new products, is the operator. The direct communication with him, his experience and appraisal is an important element of our action.

WEKA Elektrowerkzeuge

Wilhelm Wurster

Diamond Core Drill DK 11

*high speed - 6500 1/min
motor protection and softstart
by means of Intellitronic*



*special spindle arrest
flexible water connection
oil-bath lubrication*

Technical Data:	Type	DK 11	
	Nominal power	W	1600
	Output power	W	1100
	Rated speed	1/min	6500
	Total length (with handle)	mm	400
	Weight without cable	kg	5,5
	Drilling Ø in concrete c.	mm	15 - 30
	Tool fixture		M33/3
	Mounting neck Ø	mm	60
	Drill guide with water collecting ring	WR 10	
	Total length	mm	480
	Drilling tool length	mm	200
	Drilling tool Ø	mm	35

The DK11 is a diamond core drill which is preferably used in the fixing technique. Besides the high efficiency which is accustomed with WEKA, the DK11 shows following features:

Tool fixture - The DK11 is mainly used with the M33/3 tool fixture. This new three-way thread enables the user the easy loosening of the tool. As a rule in doing so, no tools are required. Most of all in drilling small diameters the core breaks very often and can therefore be removed over the jut out of the segments only very hardly. A drill bit with M 33/3 can be screwed off in shortest time, since the aperture is thread sides 30 mm wide. Cores up to a diameter of 29 mm can easily be toppled over. After that the drill bit is screwed on again.

However, the new thread is a relatively simple to manufacture solution which is more cost-effective than special quick-change tool fixtures and which can be offered by leading manufacturers.

Special spindle arrest - by a lateral button (opposite of the water connection) in the gear box the spindle can be arrested without any tools. Therefore an easy loosening of the drill bit without any further tools is guaranteed.

Springy water collecting ring (accessories) - The water collecting ring is preferably used in combination with a usual water vacuum cleaner for sucking and draining the rinsing water. Moreover it also serves as a start drilling aid since by the lateral fixed buffer in combination with the gas spring a stable fixation on the surface which is to be drilled is possible.



High spindle speed - Especially for small diameters of 10 - 30 mm, like they occur in the general fixing technique.

Oil bath lubrication - Optimal gear lubrication for high efficiency and durability.

Overload clutch - protects operator, machine and tool against high mechanical overloads. An indispensable safety element for hand operated core drills.

Intellitronic - the new electronic system starts the motor by means of a microcontroller softly and thus avoids a too high start current.

When exceeding the overcurrent threshold the electronic is showing this by a pulsating of the motor. If the operator now decreases the feed power, the motor works normal again. If the operator does not decrease the feed power the electronic switches the motor off after some seconds. After this action the motor can be started immediately. It is not required to wait a time period before starting again like on a thermal motor overload switch.

Thus the Intellitronic avoids overload conditions and increases safety, the operators comfort and the motors life time.

Levelling assistance - By two integrated levels an exact horizontal and vertical working positioning is possible.

Metal Casing - WEKA motor and gear cases are not made of plastics, but of aluminum. Therefore they are mechanical and thermal very stable.

WEKA and Environment - WEKA electric tools are mainly made of steel and aluminum. Plastics are only used if it is unavoidable. WEKA electric tools are very durable. Scrap-mature machines will be taken to pieces completely and separated materially.

Moreover the machines are up to 90% recyclable.

The DK11 is supplied with a complete tool set in a practical suitcase in which there is still room for a few drill bits.

Electrical Safety - WEKA diamond core drills correspond to the newest European regulations. The most important features are double insulation with an additional ground wire, that protects most of all against external voltage - drilling into a live line - and a residual-current-operated protective device (RCD) in the cord.

Threefold electrical protection - safety insulation + earth wire + protective switch

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Diamond Core Drill DK 116

*For socket drilling up to 82 mm
Adapter for dust exhausting
Integrated springy Centering Spike*



*Overload clutch
Motor protection and soft start
by means of Intellitronic*

Technical Data:	Type		DK 116
	Nominal Power	W	1600
	Output Power	W	1100
	Rated Speed	1/min	1500
	Total Length	mm	420
	Weight without cord	kg	5,0
	Drilling Ø in masonry (dry) approx.	mm	50 - 82
	Tool Fixture		M 16
	Mounting Neck Ø	mm	60

The diamond core drill DK 116 is a dry drilling machine for creating drill holes for installation sockets in the electrical industry.

The machine distinguishes itself especially by the practical design. The DK 116 can be fixed very easily on the surface by the springy centering spike, which is integrated in the spindle, thereby the start drilling can be done safely and exactly.

An additional power expense, which occurs on centering with a centering drill, is on the DK 116 not required. Further more the centering spike pushes the core, if it breaks, out of the cored bit while this jams in the core bit on design with center drills and can only be removed very hardly.

The centering spike is hardened and can be exchanged separately when worn out. The center sleeve is tempered and thus fulfills the demands for a long life cycle.

The adapting sleeve for the dust exhausting can be moved axially for a few millimeters, so that an air gap to the drill bit, as small as possible, arises. Radially the sleeve can be moved 300°. The sleeve is fixed by the clamping ring of the handle.

Standard drill bits, which are not prepared for a dust exhausting, as well as drill bits with axial apertures for the dust exhausting can be used.

Besides the high efficiency which is accustomed with WEKA, this machine shows following features.

Oil bath lubrication - Optimal gear lubrication for high efficiency and durability.

Overload clutch - protects operator, machine and tool against high mechanical overloads.

An indispensable safety element for hand operated core drills.

Intellitronic - the new electronic system starts the motor by means of a micro controller softly and thus avoids a too high start current.

When exceeding the over current threshold the electronic is showing this by a pulsating of the motor. If the operator now decreases the feed power, the motor works normal again. If the operator does not decrease the feed power the electronic switches the motor off after some seconds. After this action the motor can be started immediately. It is not required to wait a time period before starting again like on a thermal motor overload switch.

Thus the Intellitronic avoids overload conditions and increases safety, the operators comfort and the motors life time.

Leveling assistance - By two integrated levels an exact horizontal and vertical working positioning is possible.

WEKA and Environment - WEKA electric tools are mainly made of steel and aluminum. WEKA electric tools are very durable. Scrap-mature machines will be taken to pieces completely and separated materialy. Moreover the machines are up to 90% recyclable.

The DK 116 is supplied with a complete tool set in a practical suitcase in which there is still room for a few drill bits.

Electrical Safety - WEKA diamond core drills correspond to the newest European regulations. The most important features are double insulation with an additional ground wire, that protects most of all against external voltage - drilling into a live line - and a residual-current-operated protective device (RCD) in the cord.

Threefold electrical protection - safety insulation + earth wire + protective switch

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Diamond Core Drills DK 118 / DK 119



*Low Speed for drilling
diameters up to 250 mm
Dust exhausting*

DK 118:
Dry drilling machine

*Overload clutch
Motor protection and soft start
by means of Intellitronic*



DK 119:
Wet drilling machine

Technical Data:	Type		DK 118 / DK 119
	Nominal Power	W	1600
	Output Power	W	1100
	Rated Speed	1/min	430
	Total Length	mm	360
	Weight without cord	kg	5,4
	Drilling Ø approx.	mm	100 - 250
	Tool Fixture		1 1/4"
	Mounting Neck Ø	mm	60

Centering Spike for DK 118 / DK 119 - Length of drill bits 200mm **AS13.200**

The DK 118 is a dry drilling machine for special applications in masonry.
The DK 119 is a drilling machine for wet drilling in concrete.

DK 118 - Core drilling machine for creating big drill holes in masonry, especially in chimney brick und the installed ceramic tubes.

DK 119 - Core drilling machine for creating big holes in concrete, especially in sewer pipes.

The high torque, which is required for big drilling diameters, can be held by the cross handles of the DK 118 and DK 119 - switch handle and the extended handle.

Preferably drill bits with a thin bottom and diminished tube thickness are used for reducing the weight. For reducing the loosening torque, drill bits with a M33/3 thread are recommended.

For safely starting drilling, simply install the centering spike into the spindle, put the hardened spike onto the drilling center and start drilling.

Besides the high efficiency which is accustomed with WEKA, all three machines show following features.

Oil bath lubrication - Optimal gear lubrication for high efficiency and durability.

Overload clutch - protects operator, machine and tool against high mechanical overloads.
An indispensable safety element for hand operated core drills.

Intellitronic - the new electronic system starts the motor by means of a micro controller softly and thus avoids a too high start current.

When exceeding the over current threshold the electronic is showing this by a pulsating of the motor. If the operator now decreases the feed power, the motor works normal again. If the operator does not decrease the feed power the electronic switches the motor off after some seconds. After this action the motor can be started immediately. It is not required to wait a time period before starting again like on a thermal motor overload switch.

Thus the Intellitronic avoids overload conditions and increases safety, the operators comfort and the motors life time.

Leveling assistance - By two integrated levels an exact horizontal and vertical working positioning is possible.

Metal Casing - WEKA motor and gear cases are not made of plastics, but of aluminum. Therefore they are mechanically and thermally very stable.

WEKA and Environment - WEKA electric tools are mainly made of steel and aluminum. Plastics are only used if it is unavoidable. WEKA electric tools are very durable. Scrap-mature machines will be taken to pieces completely and separated materially.

Moreover the machines are up to 90% recyclable.

The DK 118 / DK 119 is supplied with a complete tool set in a practical suitcase in which there is still room for a few drill bits.

Electrical Safety - WEKA diamond core drills correspond to the newest European regulations. The most important features are double insulation with an additional ground wire, that protects most of all against external voltage - drilling into a live line - and a residual-current-operated protective device (RCD) in the cord.

Threefold electrical protection - safety insulation + earth wire + protective switch

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2-Speed Diamond Core Drill

DK08 Wet

DK09 Wet + Dry



DK09: Coupling ball valve for wet drilling



DK09: Coupling exhaust adapter for dry drilling

Technical Data

Type

		DK08	DK09
Nominal power	W	1800	1800
Output power	W	1200	1200
Nominal speed	1/min	540/1700	540/1700
Total length	mm	450	485
Weight	kg	4,9	5,2
Drilling Ø approx.			
rig operated (concrete)	mm	30 - 150	30 - 150
handheld (concrete)	mm	30 - 80	30 - 80
handheld (masonry)	mm	30 - 180	30 - 180
Tool fixture		G 1/2"	1 1/4"
DK0803		G 1/2" + 1 1/4"	
Mounting neck Ø	mm	60	60
suitable drill rig type		KS 18	KS 18

The DK08 is a universal diamond core drill for drilling reinforced concrete.

The DK09 can further more be used for dry drilling in masonry, without any involved changing of the accessories or attachments. Simply couple ball valve or exhaust adapter, and the machine is ready for use. By an especially developed sealing system with superposed protection sleeves it was possible to include both systems in one machine.

The DK08/09 distinguishes itself by a high power and thus a wide drilling range of up to 200 mm and by the universal use. Further more it shows following features.

Universal use and high flexibility - The DK09 is a real all-round machine. With *one* machine it is possible to produce core boreholes in concrete (water supply) as well as masonry (dry with dust exhausting). The DK08/09 is used as a hand held drilling machine. For bigger drilling diameters from 80 mm on, it is recommended to use a drill rig (KS18) to gather the higher drilling forces.

The DK08/09 is supplied completely with wrenches in a very handy carrying case where there is space enough for some core bits.

Tool fixture - The DK09 is fitted with a 1 1/4" UNC tool fixture. Thus you can use competitive standard rill bits which also offer a corresponding outlet for the dust exhausting on dry drilling. An adapter for G 1/2" bits is available as an accessory.

The DK08 is fitted with a G 1/2" thread, as DK0803 however it is available with a combi-spindle with both thread G 1/2" and 1 1/4".

Elastic bore piercer (accessory) - For easily starting to drill, simply put the centering spike into the spindle, put the hardened peak onto the drilling center and start to drill.
A practical support for drilling exactly into the center.

2 - Speed gear - Wide drilling range (see technical data) by mechanical adaption of speed and torque on the corresponding drilling diameter.

Oil bath lubrication - Optimal gear lubrication guarantees a long lifetime and high efficiency.

Overload clutch - protects operator, machine and tool against high mechanical overloads. An inevitable safety feature for handheld core drills.

Intellitronic - The new electronic system starts the motor by means of a microcontroller softly and thus avoids a too high start current.

When exceeding the over current threshold the electronic is showing this by a pulsating of the motor. If the operator now decreases the feed power, the motor works normal again. If the operator does not decrease the feed power the electronic switches the motor off after some seconds. After this action the motor can be started immediately. It is not required to wait a time period before starting again like on a thermal motor overload switch.

Thus the Intellitronic avoids overload conditions and increases safety, the operators comfort and the motors life time.

Leveling aid - Two integrated levels enable exact horizontal and vertical working positioning.

Casing - The gear box is made from aluminium and is thus mechanically and thermally extremely stable. For saving weight the motor case is produced of a impact-proof plastic.

WEKA and Environment - WEKA electric tools are very long-living. Scrap-mature machines will be taken to pieces completely and separated materialy. Thereby the machines are 90% recyclable.

Electrical Safety - WEKA diamond core drills correspond to the newest European regulations. The most important features are double insulation with an additional ground wire, that protects most of all against external voltage - drilling into a live line - and a residual-current-operated protective device (RCD) in the cord.

Threefold electrical protection - safety insulation + earth wire + protective switch

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3-Speed Diamond Core Drill DK16 / DK18

*Oil-bath lubrication
Safety Clutch
Levelling device*

DK16



DK18



*Especially powerful motor
Motor protection and softstart
by means of Intellitronic*

Technical Data

Type		DK16 / DK18
Nominal power	W	2000
Output power	W	1340
Load speed	1/min	540/1200/2520
Length	mm	350
Weight	kg	5,9
Drilling Ø in concrete c.		
in drill stand	mm	20 - 160
hand held	mm	20 - 100
Tool fixture		G 1/2"
Typ 1603/1803		1 1/4" + G1/2"
Mounting neck Ø	mm	60

WEKA professional electric drills offer a high quality standard combined with a maximum in efficiency. They are designed for permanent and professional operation. They are designed for steady and professional use and achieve a high quality level.

The DK16 is a well approved and from professionals worldwide appreciated core drill. In Europe, USA and Asia it is used from drilling and sawing companies, but also from craftsmen, who prefer a high-quality product.

DK16 - universal diamond core drilling machine which can be fixed in a drill stand or used as a hand held drill.

DK18 - standard diamond core drilling machine for operation in the drill stand.

The DK16 and DK18 are characterized by their enormous drilling capacity and thus the wide drilling range of up to 160 mm.

All versions offer the following features.

3 - speed gear

Large drilling range (see tech. Data) with easy speed adjustment to each hole diameter.

Oil-bath lubrication

Optimal gear lubrication for high efficiency and durability.

Overload clutch

Protection for operator as well as for machine and tools against mechanical overloads. An indispensable safety element for hand operated core drills.

Motor protection switch

Protects the motor against electrical overload.

Intellitronic - the new electronic system starts the motor by means of a micro controller softly and thus avoids a too high start current.

When exceeding the over current threshold the electronic is showing this by a pulsating of the motor. If the operator now decreases the feed power, the motor works normal again. If the operator does not decrease the feed power the electronic switches the motor off after some seconds. After this action the motor can be started immediately. It is not required to wait a time period before starting again like on a thermal motor overload switch.

Thus the Intellitronic avoids overload conditions and increases safety, the operators comfort and the motors life time.

Leveling aid

Two integrated levels enable exact horizontal and vertical working positioning.

Metal Casing

In relation to plastic cases the aluminum case of WEKA drills is mechanically and thermally more stable and durable.

WEKA and Environment

WEKA electric tools are mainly made of steel and aluminum. Plastics are only used if it is unavoidable. Sandwich material is not used.

WEKA electric tools are durable. Scrap-mature machines will be taken to pieces completely and the material is separated.

Therefore the machines are 90% recyclable.

Electrical Safety

WEKA diamond core drills correspond to the newest European regulations. The most important features are double insulation with an additional ground wire, that protects most of all against external voltage - drilling into a live line - and a residual-current-operated protective device (RCD) in the cord.

Threefold electrical protection - safety insulation + earth wire + protective switch

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3-Speed Diamond Core Drill DK 17 Wet + Dry



*Coupling ball valve
for wet drilling*



*Coupling exhaust adapter
for dry drilling*

Technical Data

Type

DK 17

Nominal power	W	2000
Output power	W	1340
Load speed	1/min	540/1200/2520
Length	mm	420
Weight	kg	6,3
Drilling Ø approx.		
in drill stand (concrete)	mm	20 - 160
hand held (concrete)	mm	20 - 100
hand held (bricks)	mm	20 - 200
Tool fixture		1 1/4" + G1/2"
Mounting neck Ø	mm	60
suitable Drill rig		KS 18

WEKA has combined two machines in one. Without further costly appurtenances or equipments it is possible to drill wet or dry. After simply changing the water- respectively the vacuum-adapter the drill is ready to work.

A special designed sealing system with superposed protective rings allows this combination of water cooling and dust exhausting.

The DK 17 is famous for its special power and a therefore wide drilling range of a diameter up to 200 mm.

In addition to a high efficiency motor and gearing unit, both machines show the following features:

Universal Operation and high flexibility - The DK 17 is a really flexible core drill. With *one* machine it is possible to produce core boreholes in concrete (water supply) or bricks, respectively masonry (dry with dust exhausting). It is a hand held machine and - if it is required to bore bigger holes - a drill, which can be fitted on a appropriate rig, e.g. the WEKA type KS 18.

The DK 17 is supplied completely with wrenches in a very handy carrying case with a special tray. On the upper side the machine is deposited and below there is space enough for some core bits.

Tool fixture and AF- Element - It is possible, to use drill bits with standard tool fixture 1 1/4" UNC. A tool adapter for G 1/2" bits for wet drilling belongs to the delivery unit.

A new designed Antifriction-Element (AF-Element) fitted on the drill spindle provides for an easy sever the drill bit, i.e. sever torque is reduced to 50%..

Elastic bore piercer - For easy put on the drill bit to work, an elastic bore-on piercer is available (special appurtenance). Especially for exact drill positions this device is an indispensable appliance.

The application is very easy. Before starting the drill insert the bore-on piercer, fix the peak exactly in the centre, drill approximately one mm deep, remove the bore-on piercer and go on with the drilling.

3 - speed gear - Large drilling range (s. techn. Data) with easy speed adjustment to each hole diameter.

Oil-bath lubrication - Optimal gear lubrication for high efficiency and durability.

Overload clutch - Protection for operator as well as machine and tools against mechanical overloads. An indispensable safety element for hand operated core drills.

Motor protection switch - Protects the motor against electrical overload.

Intellitronic - The new electronic system starts the motor by means of a microcontroller softly and thus avoids a too high start current.

When exceeding the overcurrent threshold the electronic is showing this by a pulsating of the motor. If the operator now decreases the feed power, the motor works normal again. If the operator does not decrease the feed power the electronic switches the motor off after some seconds. After this action the motor can be started immediately. It is not required to wait a time period before starting again like on a thermal motor overload switch.

Thus the Intellitronic avoids overload conditions and increases safety, the operators comfort and the motors life time.

Levelling aid - Two integrated levels enable exact horizontal and vertical working positioning.

Metal Casing - In proportion to plastic cases the aluminium case of WEKA drills is mechanical and thermal more stable and durable.

WEKA and Environment - WEKA electric tools are mainly made of steel and aluminium. Plastics are only used if it is unavoidable. Sandwich material is not to be used.

WEKA electric tools are solidly designed. Scrap-mature machines will be taken to pieces completely and separated materially. Thereby the machines are 90% recyclable.

Electrical Safety - WEKA diamond core drills correspond to the newest European regulations. The most important features are double insulation with an additional ground wire, that protects most of all against external voltage - drilling into a live line - and a residual-current-operated protective device (RCD) in the cord.

Threefold electrical protection - safety insulation + earth wire + protective switch

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Diamond Core Drill HD16 / HD18



Oil-bath lubrication
Safety Clutch
Levelling device
closed, water cooled high frequency motor
waterproof protection class IP 55

Technical Data

Type		HD16 / HD18
Nominal power	W	3700
Output power	W	2800
Load speed	1/min	630/1400/2900
Length	mm	375
Weight	kg	6,2
Drilling Ø in concrete c.		
in drill stand	mm	20 - 150
hand held	mm	20 - 100
Tool fixture		G1/2"
Type HD1603/1803		1 1/4" + G1/2"
Mounting neck Ø	mm	60

as well as stand operated. My design is splash water proof according to protection class IP55, therefore I can be used to drill overhead. My powerful high-frequency motor with 3700W and a weight of only 6,2 kg offers an excellent power/weight ratio.

Especially following features emphasize my outstanding abilities:

High frequency drive

My small motor after all has a power of 3700 W and all this at a mains voltage of 230 V. It is water cooled with the cooling principle which is patented by WEKA. The cooling system is thereby completely separated from the electrical part of the motor. If on very tough use of the motor my seals should fail, the cooling water will not enter into the interior of the motor, but only to the outside.

Motor control

I am controlled by a very efficient converter, the FU6 U, which is located in a small and stable aluminium box. The water-cooled frequency converter FU6 U can drive and control all devices of the ANNA series as a universal drive unit. It supplies me with the required energy, controls my current input and speed. The integrated (Powerfactor Correction) makes sure that I do not take wattless current from the mains, but only energy which I can convert into mechanical power.

My converter recognizes, if I am connected to 230 V or to 400 V and adapts current and power accordingly. My motor current is controlled according to the requirements and limited to the maximum. Thus I can not be overloaded. The temperature of my motor is checked constantly.

If I am loaded too much or cooled too less, my power electronic switches me off before anything can happen.

Status and error signals are indicated to the user via an LED mounted on the frequency converter.



Frequency converter FU6 U

3 - speed gear

Large drilling range (see tech. data) with easy speed adjustment to each hole diameter.

Oil-bath lubrication

Optimal gear lubrication for high efficiency and durability.

Overload clutch

Protection for operator as well as for machine and tools against mechanical overloads. An indispensable safety element for hand operated core drills.

Leveling aid

Two integrated levels enable exact horizontal and vertical working positioning.

Metal Casing

In relation to plastic cases the aluminum case of WEKA drills is mechanically and thermally more stable and durable.

WEKA and Environment

WEKA electric tools are mainly made of steel and aluminum. Plastics are only used if it is unavoidable. Sandwich material is not used. WEKA electric tools are durable. Scrap-mature machines will be taken to pieces completely and the material is separated. Therefore the machines are 90% recyclable.

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3-Speed Diamond Core Drill DK 26

*Oil bath lubrication with oil pump
High-duty overload clutch*



*Motor protection and soft start
by means of Intellitronic
Antifriction-Element*

Technical Data:

Type		DK 26	DK 26 L	DK 26 S
Nominal Power	W	2600	2600	2600
Output Power	W	1870	1870	1870
Nominal Speed (full load)	1/min	320/630/980	245/480/760	460/910/1420
Total length without handle	mm	490	490	490
Weight without cable	kg	11,6	11,6	11,6
Drilling Ø in concrete approx.	mm	40 - 250	50 - 310	30 - 170
Tool fixture		1 1/4"	1 1/4"	1 1/4"
Foot fastening		Standard 4 x M8 mit Nut 10 x 4,3		

The DK26 from WEKA replaces the already legendary DK22 which is in use since 23 years successfully at professional users, but also at typical craftsmen. With more power and brought down costs by an aluminum die cast, it offers the operator a worthy successor also in price.

The DK26 features a high economic efficiency with a high quality standard and is suitable for steady professional use.

The outstanding degree of efficiency of motor and gear grant an extraordinary drilling performance. The DK26 shows besides the above mentioned features following specialties:

3 - speed change gearing - Large drilling range (s. techn. Data) with favourable adapting of the speed to the respective drilling diameter.

Oil-bath lubrication - Optimal gear lubrication for high efficiency, high durability and less maintenance. The new and high effective oil pump takes care for an optimal lubrication for the first fast step of gear even in vertical operation.

Overload clutch - This novel multiple disk clutch protects operator, machine and tool against high mechanical overload. The bigger number of friction surfaces guarantees a nearly constant release torque even after many hundreds of release cycles of the clutch.

At proper use consequently a readjustment between the usual intervals of maintenance is no longer required.

Intellitronic - the new electronic system starts the motor by means of a micro controller soft and thus avoids a too high start current.

When exceeding the overcurrent threshold the electronic is showing this by a pulsating of the motor. If the operator now decreases the feed power, the motor works normal again. If the operator does not decrease the feed power the electronic switches the motor off after some seconds. After this action the motor can be started immediately. It is not required to wait a time period before starting again like on a thermal motor overload switch.

Moreover the Intellitronic is registering the motor temperature and decreases the overload threshold when exceeding the operating temperature.

Thus the Intellitronic avoids reliable overload conditions and increases safety, the operators comfort and the motors life time.

Shaft protective sleeves - Sleeves on the spindle made from stainless steel take care for a maximum protection against rust and abrasion of the running surface under the rotary shaft seals.

Antifriction-Element - This smart ring fixed on the drill spindle is able to reduce the release torque for loosening the drill bit considerably.

Metal casing - Motor and gearbox are made from aluminum. This makes the DK 32 mechanically and thermally stable and durable contrary to plastics cases.

WEKA and spare parts supply - WEKA electric tools grant the spare parts supply at least for 10 years. For the DK22 e.g. further on spare parts are supplied even after 23 years.

WEKA and environment - WEKA electric tools are mainly made of aluminum and steel. Plastics are only used if it is unavoidable. WEKA electric tools are durable. Scrap-mature machines will be taken apart completely and separated materialy.

Thereby WEKA machines are 90% recyclable.

Electrical safety - The DK26 corresponds to the European safety directives.

According to these documents this machine is constituted with double insulation and an additional earth wire which protects the operator when drilling through an electric lead, as well as a fitted PRCD (portable residual current device) between the cord.

Threefold electrical protection: Double insulation + Earth wire + Ground fault current interrupter (PRCD)

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3-Speed Diamond Core Drill DK 32

*Oil-Bath Lubrication with Oil Pump
High-Duty Overload Clutch*



*Motor Protection and Softstart
By means of Intellitronic
Antifriction-Element*

Technical Data:	Type		DK 32	DK 32 S
Nominal Power	W		3200	3200
Output Power	W		2300	2300
Nominal Speed (Full Load)	1/min		230/480/720	300/590/930
Total Length without handle	mm		488	488
Weight	kg		11,9	11,9
Drilling Ø in Concrete c.	mm		55 - 350	35 - 250
Tool Fixture			1 1/4" UNC	1 1/4" UNC
Foot fastening			Standard 4xM8 with groove 10 x 4,3	

The DK32 from WEKA combines the successful, and in the line of business well known features of the DK22 with an increase of the **output power to 2300 W**, as well as an increase of operators comfort and working safety.

The DK 32 offers a maximum in economy. She corresponds to a high quality standard and is suitable for a continual and professional operation.

The excellent efficiency from motor and gear guarantees an unusual working capacity.

The DK 32 possesses apart from the mentioned characteristics on the whole following features:

3 - speed change gearing - Large drilling range (s. techn. Data) with favourable adapting of the speed to the respective drilling diameter.

Oil-bath lubrication - Optimal gear lubrication for high efficiency, high durability and less maintenance. The new and high effective oil pump takes care for an optimal lubrication for the first fast step of gear even in vertical operation.

Overload clutch - This novel multiple disk clutch protects operator, machine and tool against high mechanical overload. The bigger number of friction surfaces guarantees a nearly constant release torque even after many hundreds of release cycles of the clutch.

At proper use consequently a readjustment between the usual intervalls of maintenance is not longer required.

Intellitronic - the new electronic system starts the motor by means of a microcontroller soft and thus avoids a too high start current.

When exceeding the overcurrent threshold the electronic is showing this by a pulsating of the motor. If the operator now decreases the feed power, the motor works normal again. If the operator does not decrease the feed power the electronic switches the motor off after some seconds. After this action the motor can be started immediately. It is not required to wait a time period before starting again like on a thermal motor overload switch.

Moreover the Intellitronic is registering the motor temperature and decreases the overload threshold when exceeding the operating temperature.

Thus the Intellitronic avoids reliable overload conditions and increases safety, the operators comfort and the motors life time.

Start current limiter - Two-stage start of the motor takes care for a reliable operation even with quick-action main fuses (for 230 V version only).

DC-coated drill spindle with protective sleeves - Sleeves on the spindle made from stainless steel in addition with a high quality surface treatment take care for a maximum protection against rust and abrasion of the running surface under the rotary shaft seals.

Antifriction-Element - This smart ring fixed on the drill spindle is able to reduce the release torque for loosening the drill bit considerably.

Metal casing - Motor and gearbox are made from aluminum. This makes the DK 32 mechanically and thermally stable and durable contrary to plastics cases.

WEKA and environment - WEKA electric tools are mainly made of aluminum and steel. Plastics are only used if it is unavoidable. WEKA electric tools are durable. Scrap-mature machines will be taken apart completely and separated materially.

Thereby WEKA machines are 90% recyclable.

Electrical safety - The DK 32 corresponds to the European safety directives.

According to these documents this machine is constituted with double insulation and an additional earth wire which protects the operator when drilling through an electric lead, as well as a fitted PRCD (portable residual current device) between the cord.

Threefold electrical protection: Double insulation + Earth wire + Ground fault current interrupter (PRCD)

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Diamond Core Drill

SR 25 MAMMUT

Water-cooled SR motor

Splash water proof according IP 55

Soft turn - screwing speed for easy assembling of the bit



*Low in maintenance, due to no carbon brushes and turning windings
6 motor speeds selectable while drilling
Scale of drilling diameter on the display*

Technical Data:

		SR25	SR25 S
Rated Voltage	V	230	230
Rated Current	A	16	16
Nominal Power	W	3700	3700
Output Power	W	2700	2700
Speeds	1/min	230/280/340 410/490/570	300/360/430 530/630/740
Nominal Torque	Nm	110	85
Length	mm	440	440
Weight	kg	14,7	14,7
Drilling Ø in concrete approx.	mm	70 - 370	60 - 300
Tool Fixture		1 1/4"	1 1/4"

* this speed is power reduced

My name is **MAMMUT** SR 25. My motor is a further development of the SR - drive for core drills that is already used in several WEKA machines.

As already the SR35 I have a power of 3,7 kW on 230 Volt with a weight of only 14,7 kg.

Especially following features show my outstanding skills:

SR Motor - my motor is based on the principle of the switched reluctance motor (SR = switched reluctance). My stator is very robust and built simple. My rotor consists of a shaft on which there are strung several single steel laminations. Thus my motor works without any turning windings or short circuit rotor and therefore also without commutator and wear-affected carbon brushes. My motor is saving resources, it consists almost only of steel and copper.

The commutation (alternating current feed of the stator poles) is managed by my power electronic which gets its orders from a microcomputer as my super brain. The speed is over the whole capacity range almost constant, therefore the start drilling is made easier, the wear is reduced and the efficiency of the drill bit is increased.

Keypad and Display - Via my robust keypad with the +/- buttons very easily the desired drilling diameter and thus the suitable speed can be selected in six fine adjusted steps. These are shown in my display clearly readable. By pressing both buttons +/- at the same time, the **soft turn** feature is selected, by which I practically assemble the drill bit on my own. Speed and torque are reduced remarkably for safety reasons.



Motor protection - my motor current is controlled corresponding to the requirements and limited to the maximum. Therefore I cannot be overloaded.

Via thermal protective switches the actual appearing temperature of my motor and the power electronic is registered and depending on that I will be switched off safely. Thus my motor and my power electronic are protected *directly* against thermal overload which may occur on insufficient cooling.

Error display - Via my display I show the operator error messages, e.g. when I get too hot, the voltage is too high or too low or if I am overloaded. Further more the service technician can analyse further information, like operation hours, software version, error memory on the display.

Oil bath lubrication with oil pump - my gear is thus lubricated optimally in all general purposes and thus offers a high efficiency on long lifetime and little maintenance.

Safety Clutch - due to my new motor I am fitted with a novel multi flange clutch which protects my operator, the tools and me against high mechanical overload. The higher number of friction surfaces guarantees a nearly constant releasing torque even after a few hundred overload cycles. Through the limiting of the torque by the motor management the wear out of the clutch is extremely low.

Water Cooling - my motor together with my power electronic is optimally cooled by a water cooling system that is patented by WEKA. It is already used successfully in my colleagues, the DK 42 and DK 52 and my family members SR 38, SR 65 and SR 75.

Hereby the water flows controlled through the interspace between the motor case and the case sleeve. Through this arrangement my electrical part is completely separated from the cooling and thus the electrical safety is guaranteed.

Metal Case - my skin is completely made of aluminum. Thereby I am very robust, thermally stable and thus prepared for the professional use outstandingly. My casing is protected at the sensitive side by a laterally running carrying handle.

Service - The operation hours counter which is integrated in my micro controller lets me work for 300 hours permanently. Then I show my operator that I want to be maintained by only starting, when my start button is pressed three times.

As **MAMMUT** SR25 I am not only very strong and robust, but also water protected according IP 55 regarding EN 60 529, i.e. with proper use water cannot enter my inner life. Thus I am able to drill upwards in a vertical position (overhead drilling) without any further precautions.

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Diamond Core Drill

SR 38 MAMMUT

*water-cooled SR motor
 splash water proof according IP 55
 Soft turn - low speed for easy assembling of the core bit*



*Scale of drilling diameter on the display
 low in maintenance, due to no carbon brushes and no turning windings
 3 gear speeds x 6 motor steps = 18 speeds = extremely wide drilling range*

Technical Data:

Type		SR 38	SR 38 S
Rated Voltage	V	230~230 ~	
Rated Current	A	16	16
Nominal Power	W	3700	3700
Output Power	W	2700	2700
Speeds	1/min		
Gear stage 1		180/220/260/320/380/445	340/410/490/600/715/835
Gear stage 2		360/430/520/630/755/880	680/810/970/1180/1410/1650
Gear stage 3		560/670/810/980/1180/1370	1060/1260/1520/1840/2210/2580
Drilling Ø			
in concrete approx.	mm	40 - 400	20 - 280
Total length w/o handle	mm	500	500
Weight	kg	16,5	16,5
Tool fixture		1 1/4"	1 1/4"

My name is **MAMMUT** SR 38. Through the combination of my powerful SR motor with my 3-speed gear box, I offer an extremely wide speed range together with a drilling range of 40 - 400 mm diameter. Thereby my weight however is only 16,5 kg.

Most of all following features show my outstanding skills:

SR Motor - my motor is based on the principle of the switched reluctance motor (SR = switched reluctance). My stator is very robust and built simple. My rotor consists of a shaft on which there are strung several single steel laminations. Thus my motor works without any turning windings or short circuit rotor and therefore also without commutator and wear-affected carbon brushes. My motor is saving resources, it consists almost only of steel and copper.

The commutation (alternating current feed of the stator poles) is managed by my power electronic which gets its orders from a microcomputer as my super brain. The speed is over the whole capacity range almost constant, therefore the start drilling is made easier, the wear is reduced and the efficiency of the drill bit is increased.

Keypad and Display - Via my robust keypad the desired drilling diameter and thus the suitable speed can be simply selected by the +/- buttons in six steps. These are then shown legibly on my display in the three different gear speeds. By pressing both +/- buttons at the same time, the **soft turn** feature is selected by which I virtually assemble the drill bit on my own. Speed and torque are thereby reduced remarkably for safety reasons.



Motor protection - my motor current is controlled corresponding to the requirements and limited to the maximum. Therefore I cannot be overloaded.

Via thermal protective switches the actual appearing temperature of my motor and the power electronic is registered and depending on that I will be switched off safely. Thus my motor and my power electronic are protected *directly* against thermal overload which may occur on insufficient cooling.

Error display - Via my display I show the operator error messages, e.g. when I get too hot, the voltage is too high or too low or if I am overloaded. Further more the service technician can analyse further information, like operation hours, software version, error memory on the display.

3-Speed Gearing Unit - like all members of WEKA I possess a very solid gear with wide drilling range (see technical data) on favorable adaption of speed and torque to the respective drilling diameter. By the shift gear box in connection with the six motor steps, I have an extreme wide speed-torque-range and thus can drill deep holes in the range of 40 - 400 mm diameter.

Oil bath lubrication with oil pump - my gear is lubricated optimally in all general purposes and thus offers a high efficiency on long lifetime and low maintenance.

Safety Clutch - due to my new motor I am fitted with a novel multi flange clutch which protects my operator, the tools and me against high mechanical overload. The higher number of friction surfaces guarantees a nearly constant releasing torque even after a few hundred overload cycles. Through the limiting of the torque by the motor management the wear out of the clutch is extremely low.

Water Cooling - my motor together with my power electronic is optimally cooled by a water cooling system that is patented by WEKA. It is already used successfully in my colleagues, the DK 42 and DK 52 and my family members SR 35 and SR 75. Hereby the water flows controlled through the interspace between the motor case and the case sleeve. Through this arrangement my electrical part is completely separated from the cooling and thus the electrical safety is guaranteed.

Metal Case - my skin is completely made of aluminum. Thereby I am very robust, thermally stable and thus prepared for the professional use outstandingly. My casing is protected at the sensitive side by a laterally running carrying handle.

Service - The operating hours counter which is integrated in my micro controller lets me work for 250 hours permanently. Then I show my operator that I want to be maintained by only starting, when my start button is pressed three times.

As **MAMMUT** SR 38 I am not only very strong and robust, but also water protected according IP 55 regarding EN 60 529, i.e. with proper use water cannot enter my inner life. Thus I am able to drill upwards in a vertical position (overhead drilling) without any further precautions.

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3-Speed Diamond Core Drill DK 42 E

400 V (230 V) / 3 ~

*Motor protection and soft start
Keyboard and LED display
Very powerful*



*Oil-Bath Lubrication
Safety Clutch
Water Protection Class IP 55*

Technical Data:

Type		DK 42 E	DK 42 ES	DK 42 EL
Nominal Power	W	3900	3900	3900
Output Power	W	3000	3000	3000
Load Speed	1/min	160/310/490	230/460/720	130/260/410
Length	mm	540	540	540
Weight	kg	19	19	19
Drilling Ø in Concrete c.	mm	70 - 400	50 - 300	90 - 450
Tool Fixture		1 1/4" male	1 1/4" male	1 1/4" male
Water Protection Class		IP 55	IP 55	IP 55
Foot Fastening Standard			4 x M8 / groove 10 x 4,3	

With the DK 42 E, WEKA has further developed the successful predecessor model DK 42 and equipped it with a refined motor electronics. This made the DK 42 E much more user-friendly and an improved motor protection could be achieved. The core features of the DK42 have been retained: in addition to an extremely high **spindle output of 3000 W**, the DK 42 E offers a particularly favorable performance weight at 19 kg as well as high operating safety.

In addition to the features already mentioned, the DK 42 E mainly has the following features:

Keyboard and LED display - robust keypad for starting and stopping the machine. The following information is displayed to the user via LEDs:

Phase direction - that means the machine only runs in the direction of rotation provided. In this way, disturbances and accidents are avoided by a wrong direction of rotation and thus unintended loosening of the tool.

Phase failure - if a phase fails, the machine can no longer be switched on, or switches off when a phase fails during operation.

Load - by means of three LEDs the load on the machine is displayed to the user. If all three LEDs light up red, full load is reached. If the three LEDs are flashing the machine is operated in the overload range. It will now switch off depending on the amount of overload.

Soft start - jerky start of the three-phase motor is prevented. As a result, the mechanical components of the core drilling machine as well as of the core drill stand are protected during starting.

Motor protection - Thanks to the newly developed motor electronics, overloading of the machine and thus excessive wear as well as damage to the engine and gearbox can be avoided.

Change of direction of rotation - The direction of rotation of the spindle can be changed with the new model DK42 E by switching in the phase reversing plug, if this is confirmed by the combination of the START and STOP button together. This makes it possible to remove the spindle from the drill bit by means of the motor.

3 - speed gear box - Large drilling range with favourable adapting the speed to the respective drilling diameter.

Oil-bath lubrication - Optimal gear lubrication for high efficiency, high durability and less maintenance.

Overload clutch - Multiple disk clutch protects operator, machine and tool against high mechanical overload.

Antifriction-Element - This smart ring fixed on the drill spindle is able to reduce the release torque for loosening the drill bit considerably.

Three-Phase Motor - Extremely durable, robust, sealed (IP55) and low maintenance motor, without brushes and rotating windings. The very low speed causes only low motor noise. The speed drop at full load is minimal.

Motor Cooling - The DK 42 E motor is cooled optimally by a patented water cooling. The cooling water flows controlled through the interspace between the case sleeve and the motor case.

Due to this intensive cooling an excellent output power by low weight is achieved, yet by this design the electric parts are separated from the cooling and thus the electric safety is guaranteed.

Metal casing - Motor and gearbox are made from aluminum. This makes the DK 42 E mechanically and thermally stable and durable contrary to plastics cases.

Safety - The DK42 E corresponds to the water protection class IP 55 according to EN60529, i.e. on proper use no water can enter the machine. Therefore it is possible to drill overhead without any further precautions. Further more the DK42 E corresponds to the European regulations.

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3-Speed Diamond Core Drill DK 52 E

400 V (230 V) / 3 ~

Motor protection and soft start
Keyboard and LED display
Very powerful



Oil-Bath Lubrication with Oilpump
High-Duty Overload Clutch
Water-Proof Protection Class IP 55

Technical Data:	Type	DK 52 E	DK 52 ES
Nominal Power	W	5200	5200
Output Power	W	4000	4000
Nominal Speed (Full Load)	1/min	130/260/410	160/310/490
Total Length	mm	580	580
Weight	kg	22,9	22,9
Drilling Ø in Concrete c.	mm	110 - 500	80 - 450
Tool Fixture		1 1/4"	1 1/4"
Foot fastening Standard		4 x M8 with groove	10 x 4,3

With the DK 52 E, WEKA has further developed the successful predecessor model DK 52 and equipped it with a refined motor electronics. This made the DK 52 E much more user-friendly and an improved motor protection could be achieved. The core features of the DK52 have been retained: in addition to an extremely high **spindle output of 4000 W**, the DK 52 E offers a particularly favorable performance weight at 22.9 kg as well as high operating safety.

In addition to the features already mentioned, the DK 52 E mainly has the following features:

Keyboard and LED display - robust keypad for starting and stopping the machine. The following information is displayed to the user via LEDs:

Phase direction - that means the machine only runs in the direction of rotation provided. In this way, disturbances and accidents are avoided by a wrong direction of rotation and thus unintended loosening of the tool.

Phase failure - if a phase fails, the machine can no longer be switched on, or switches off when a phase fails during operation.

Load - by means of three LEDs the load on the machine is displayed to the user. If all three LEDs light up red, full load is reached. If the three LEDs are flashing the machine is operated in the overload range. It will now switch off depending on the amount of overload.

Soft start - jerky start of the three-phase motor is prevented. As a result, the mechanical components of the core drilling machine as well as of the core drill stand are protected during starting.

Motor protection - Thanks to the newly developed motor electronics, overloading of the machine and thus excessive wear as well as damage to the engine and gearbox can be avoided.

Change of direction of rotation - The direction of rotation of the spindle can be changed with the new model DK52 E by switching in the phase reversing plug, if this is confirmed by the combination of the START and STOP button together. This makes it possible to remove the spindle from the drill bit by means of the motor.

3 - speed gear box - Large drilling range with favourable adapting the speed to the respective drilling diameter.

Oil-bath lubrication - Optimal gear lubrication for high efficiency, high durability and less maintenance.

Overload clutch - Multiple disk clutch protects operator, machine and tool against high mechanical overload.

Antifriction-Element - This smart ring fixed on the drill spindle is able to reduce the release torque for loosening the drill bit considerably.

Three-Phase Motor - Extremely durable, robust, sealed (IP55) and low maintenance motor, without brushes and rotating windings. The very low speed causes only low motor noise. The speed drop at full load is minimal.

Motor Cooling - The DK 52 E motor is cooled optimally by a patented water cooling. The cooling water flows controlled through the interspace between the case sleeve and the motor case.

Due to this intensive cooling an excellent output power by low weight is achieved, yet by this design the electric parts are separated from the cooling and thus the electric safety is guaranteed.

Metal casing - Motor and gearbox are made from aluminum. This makes the DK 52 E mechanically and thermally stable and durable contrary to plastics cases.

Safety - The DK52 E corresponds to the water protection class IP 55 according to EN60529, i.e. on proper use no water can enter the machine. Therefore it is possible to drill overhead without any further precautions. Further more the DK52 E corresponds to the European regulations.

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Subject to change without notice 0217

Diamond Core Drill

SR 65 JUMBO

*new water-cooled SR-motor
 splash water proof according IP 55
 Soft turn - screwing speed for easy assembling of the bit*



*very low in maintenance, due to no carbon brushes and no turning windings
 6 motor speeds changeable while drilling
 Scale of drilling diameter on the display*

Technical data:

Type		SR 65 / SR 6508	SR65 S
Rated Voltage	V	400 3~	400 3~
Rated Current	A	15	15
Nominal Power	W	7500	7500
Output Power	W	5700	5700
Speeds	1/min	140/175/205 240/270/305	260/320/380 440/500/560
Nominal Torque	Nm	187-250	121-162
Length	mm	515	440
Weight	kg	18,3	14,7
Drilling Ø in concrete approx.	mm	120 - 500	80 - 350
Tool Fixture		1 1/4" or M33/3	1 1/4"

My name is **JUMBO** SR 65. My motor is a further development of the new SR-drive for diamond core drills that is already used by WEKA on the SR38 and SR75.

Like already the SR75 I bring a power of 7,5 kW at 400 Volt with only a weight of 18,3 kg.

Most of all following features show my outstanding skills:

SR-Motor - my motor is based on the principle of the switched reluctance motor (SR = switched reluctance). My stator is very robust and built simple. My rotor consists of a shaft on which there are strung several single steel laminations. Thus my motor works without any turning windings or short circuit rotor and therefore also without commutator and wear-affected carbon brushes. My motor is saving resources, it consists almost only of steel and copper.

The commutation (alternating current feed of the stator poles) is managed by my power electronic which gets its orders from a microcomputer as my super brain. The speed is over the whole capacity range almost constant, therefore the start drilling is made easier, the wear is reduced and the efficiency of the drill bit is increased.

Keypad and Display - Via my robust keypad with the +/- buttons very easily the desired drilling diameter and thus the suitable speed can be selected in six fine adjusted steps. These are shown in my display clearly readable. By pressing both buttons +/- at the same time, the **soft turn** feature is selected, by which I practically assemble the drill bit on my own. Speed and torque are reduced remarkably for safety reasons.



Motor protection - my motor current is controlled corresponding to the requirements and limited to the maximum. Therefore I cannot be overloaded.

Via thermal protective switches the actual appearing temperature of my motor and the power electronic is registered and depending on that I will be switched off safely. Thus my motor and my power electronic are protected *directly* against thermal overload which may occur on insufficient cooling.

Error display - Via my display I show the operator error messages, e.g. when I get too hot, the voltage is too high or too low or if I am overloaded. Further more the service technician can analyse further information, like operation hours, software version, error memory on the display.

Oil bath lubrication with oil pump - my gear is thus lubricated optimally in all general purposes and thus offers a high efficiency on long lifetime and little maintenance.

Safety Clutch - due to my new motor I am fitted with a novel multi flange clutch which protects my operator, the tools and me against high mechanical overload. The higher number of friction surfaces guarantees a nearly constant releasing torque even after a few hundred overload cycles. Through the limiting of the torque by the motor management the wear out of the clutch is extremely low.

Water Cooling - my motor together with my power electronic is optimally cooled by a water cooling system that is patented by WEKA. It is already used successfully in my colleagues, the DK 42 and DK 52 and my family members SR 35 and SR 75. Hereby the water flows controlled through the interspace between the motor case and the case sleeve. Through this arrangement my electrical part is completely separated from the cooling and thus the electrical safety is guaranteed.

Metal Case - my skin is completely made of aluminum. Thereby I am very robust, thermally stable and thus prepared for the professional use outstandingly. My casing is protected at the sensitive side by a laterally running carrying handle.

Service - The operating hours counter which is integrated in my micro controller lets me work for 250 hours permanently. Then I show my operator that I want to be maintained by only starting, when my start button is pressed three times.

As **JUMBO** SR 65 I am not only very strong and robust, but also water protected according IP 55 regarding EN 60 529, i.e. with proper use water cannot enter my inner life. Thus I am able to drill upwards in a vertical position (overhead drilling) without any further precautions.

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Diamond Core Drill

SR 68 JUMBO

water-cooled SR motor
splash water proof according IP 55
Soft turn - low speed for easy assembling of the core bit



Scale of drilling diameter on the display
for deep holes at small and medium size drilling diameters
low in maintenance, due to no carbon brushes and no turning windings
3 gear speeds x 6 motor steps = 18 speeds = extremely wide drilling range

Technical Data:	Type		SR 68
	Rated Voltage	V	400 3~
	Rated Current	A	15
	Nominal Power	W	7500
	Output Power	W	5700
	Speeds (in 18 steps)	1/min	205 - 1370
	Drilling Ø in concrete approx.	mm	50 - 350
	Total length w/o handle	mm	500
	Weight	kg	16,5
	Tool fixture		1 1/4"

My name is **JUMBO** SR 68. As a model of the SR 65 I have especially been developed for deep holes at small and medium size drilling diameters. I am driven by the already well approved and very powerful SR65 motor, and this with only 16,5 kg weight.

Most of all following features show my outstanding skills:

SR Motor - my motor is based on the principle of the switched reluctance motor (SR = switched reluctance). My stator is very robust and built simple. My rotor consists of a shaft on which there are strung several single steel laminations. Thus my motor works without any turning windings or short circuit rotor and therefore also without commutator and wear-affected carbon brushes. My motor is saving resources, it consists almost only of steel and copper.

The commutation (alternating current feed of the stator poles) is managed by my power electronic which gets its orders from a microcomputer as my super brain. The speed is over the whole capacity range almost constant, therefore the start drilling is made easier, the wear is reduced and the efficiency of the drill bit is increased.

Keypad and Display - Via my robust keypad the desired drilling diameter and thus the suitable speed can be simply selected by the +/- buttons in six steps. These are then shown legibly on my display in the three different gear speeds. By pressing both +/- buttons at the same time, the **soft turn** feature is selected by which I virtually assemble the drill bit on my own. Speed and torque are thereby reduced remarkably for safety reasons.



Motor protection - my motor current is controlled corresponding to the requirements and limited to the maximum. Therefore I cannot be overloaded. Via thermal protective switches the actual appearing temperature of my motor and the power electronic is registered and depending on that I will be switched off safely. Thus my motor and my power electronic are protected *directly* against thermal overload which may occur on insufficient cooling.

Error display - Via my display I show the operator error messages, e.g. when I get too hot, the voltage is too high or too low or if I am overloaded. Further more the service technician can analyse further information, like operation hours, software version, error memory on the display.

3-Speed Gearing Unit - like all members of WEKA I possess a very solid gear with wide drilling range (see technical data) on favorable adaption of speed and torque to the respective drilling diameter. By the shift gear box in connection with the six motor steps, I have an extreme wide speed-torque-range and thus can drill deep holes in the range of 50 - 350 mm diameter.

Oil bath lubrication with oil pump - my gear is lubricated optimally in all general purposes and thus offers a high efficiency on long lifetime and low maintenance.

Safety Clutch - due to my new motor I am fitted with a novel multi flange clutch which protects my operator, the tools and me against high mechanical overload. The higher number of friction surfaces guarantees a nearly constant releasing torque even after a few hundred overload cycles. Through the limiting of the torque by the motor management the wear out of the clutch is extremely low.

Water Cooling - my motor together with my power electronic is optimally cooled by a water cooling system that is patented by WEKA. It is already used successfully in my colleagues, the DK 42 and DK 52 and my family members SR 35 and SR 75. Hereby the water flows controlled through the interspace between the motor case and the case sleeve. Through this arrangement my electrical part is completely separated from the cooling and thus the electrical safety is guaranteed.

Metal Case - my skin is completely made of aluminum. Thereby I am very robust, thermally stable and thus prepared for the professional use outstandingly. My casing is protected at the sensitive side by a laterally running carrying handle.

Service - The operating hours counter which is integrated in my micro controller lets me work for 250 hours permanently. Then I show my operator that I want to be maintained by only starting, when my start button is pressed three times.

As **JUMBO** SR 68 I am not only very strong and robust, but also water protected according IP 55 regarding EN 60 529, i.e. with proper use water cannot enter my inner life. Thus I am able to drill upwards in a vertical position (overhead drilling) without any further precautions.

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Diamond Core Drill

SR 75 JUMBO

New water-cooled SR Motor
Waterproof protection class IP 55
Soft turn - low speed for easy assembling of the core bit



Low in maintenance, due to no carbon brushes and turning windings
3 gear speeds x 5 motor speeds = 15 regular speeds
Scale of drilling diameter on the display

Technical Data:

Type		SR 7508	SR 75 S / SR 7508 S
Rated Voltage	V	400 3~	400 3~
Rated Current	A	15	15
Nominal Power	W	7500	7500
Output Power	W	5700	5700
Speed	1/min		
Gear step 1		60*/70*/85/100/115	75*/90*/105/130/150
Gear step 2		115*/140*/165/200/230	150*/175*/210/250/290
Gear step 3		180*/215*/260/310/360	230*/280*/330/390/460
Length	mm	620	620
Weight	kg	19,5	19,5
Drilling Ø in concrete approx.	mm	150 - 900	120 - 800
Tool Fixture		M33/3	1 1/4" UNC / M33/3

* These gears are power-reduced

My name is **JUMBO SR 75**. My motor is an advancement of the SR drive for core drills which was already introduced as a worldwide novelty by WEKA three years ago. Adjusted to the 400 V three-phase mains I offer a Mammut power of 7,5 kW with a weight of only 19,5 kg. Especially for professional users this drive sets standards that can not be reached with conventional motors. Above all following features shows my superlative abilities:

SR Motor - my complete novel motor is based on the principle of the switched reluctance motor (SR = switched reluctance). My stator is very robust built simple. My rotor exists of a shaft on which there are strung several single steel laminations. Thus my motor works without any turning windings or short circuit rotor and therefore also without commutator and wear-affected carbon brushes. My motor is saving resources, it consists almost only of steel and copper.

The commutation (alternating currenting of the stator poles) is managed by my power electronic which gets its orders from a microcomputer as my super brain. The speed is over the whole capacity range almost constant, therefore the start drilling is made easier, the wear is reduced and the efficiency of the drill bit is increased.

Keypad and Display - Via my robust keypad with the +/- buttons very easily the desired drilling diameter and thus the suitable speed can be selected in six fine adjusted steps. These are shown in my display clearly readable. By pressing both buttons +/- at the same time, the **soft turn** feature is selected, by which I practically assemble the drill bit on my own. Speed and torque are reduced remarkably for safety reasons.



Motor protection - my motor current is controlled corresponding to the requirements and limited to the maximum. Therefore I cannot be overloaded.

Via thermal protective switches the actual appearing temperature of my motor and the power electronic is registered and depending on that I will be switched off safely.

Thus my motor and my power electronic are protected *directly* against thermal overload which may occur on insufficient cooling.

Error display - Via my display I show the operator error messages, e.g. when I get too hot, the voltage is too high or too low or if I am overloaded. Further more the service technician can analyse further information, like operation hours, software version, error memory on the display.

3-Speed Gearing Unit - like all members of WEKA I posses a very solid gear with wide drilling range (see technical data) on favorable adaption of speed and torque to the respective drilling diameter. Especially mentionable is here my very high torque of 628 Nm in the first gear.

Oil Bath Lubrication with Oil Pump - optimal gear lubrication on high efficiency, long lifetime and low maintenance expense. My very efficient oil pump that is already used in the DK 32 and DK 52 is responsible for an optimal lubrication in all positions of use.

Safety Clutch - due to my new motor I am fitted with a novel multi flange coupling which protects my operator, the tools and me against high mechanical overload. The higher number of friction surfaces guarantees a nearly constant releasing torque even after a few hundred overload cycles. Through the limiting of the torque by the motor management the wear out of the clutch is extremely low.

Water Cooling - my motor and my power electronic is optimally cooled by a water cooling system that is patented by WEKA and already used successfully in my colleagues, the DK 42 and DK 52 and my family member SR 35. At this the water flows controlled through the interspace between the motor case and the case sleeve. Through this arrangement my electrical part is completely separated from the cooling and thus the electrical safety is guaranteed.

Metal Case - my skin is completely made of aluminum. Thereby I am very robust, thermally stable and thus prepared for the professional use outstandingly.

Service - The operating hours counter which is integrated in my micro controller lets me work for 300 hours permanently. Then I show my operator that I want to be maintained by only starting, when my start button is pressed three times.

As **JUMBO SR 75** I am not only very strong and robust, but also water protected according IP 55 regarding EN 60 529, i.e. with proper use water cannot enter my inner life. Thus I am able to drill upwards in a vertical position (overhead drilling) without any further precautions.

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Diamond Drill Rig KS 18



Technical Data:

Type		KS18
Length	mm	770
Feed way	mm	514
Drill Bit length max.	mm	530
Drill Bit Diameter max.	mm	180
Inclination	degree	80
Mounting Neck Diameter	mm	60
Weight	kg	9,5

At first sight a drill rig like any other.

However, the new diamond core drill rig KS 18 has certain features which distinguish it from standard rigs.

Here are some of the special features:

Guides and bearings - Slip guides, slideways and bearings are made of a new compound material, i.e. extremely abrasion resistant, low in maintenance and extremely smooth gearing.

Thus, the slip guides can be prestressed easily. The feed carriage now slides absolutely free from backlash, yet running free on the drilling column.

For the drill bit this means:

less pipe friction, less vibration especially at the opening, but **much higher endurance**.

Operating - The KS 18 drill feed is operated by an ergonomically designed hand wheel which simply be placed on to the feed pinion either on the left- or right-hand side.

The rig pedestal can be fixed with dowel screws or vakuum. Only Vakuum fittings and a gasket are required for the vakuum fixture.

A water collecting ring (accessory) is available for the KS18 and can be fixed very easy by a spring system.

The drill column can, of course, be adjusted to an angle of more than 80°.

Corrosion Protection - All essential parts are rustproof. Drill column, struts, levelling screws, feed carriage levers and feed pinion are made of stainless steel. Feed carriage casing and pedestal are made of corrosion resistant aluminium alloy.

The KS 18 is recommended for all hand-held WEKA diamond core drilling machines, such as Type DK 09, DK 16, DK 17 and DK 18. The drilling machine is fixed into the rig at the collar. The spread diameter is 60 mm.

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Diamond Drill Rig KS 30



KS30



KS30 E

Technical Data:

Type	KS30	KS30 E	KS30 S
Total Length	mm	950	
Lifting	mm	580	
Drill bit length max.	mm	560	
Drill bit diameter max.	mm	300 - with distance plate 350	
Inclination	degree	over 45	
Machine fixture		Quick Connect Adapter	
Base plate (L x B)	mm	340 x 223	
Weight (without feed wheel)	kg	11,5	14,5
Guidance		Plastic Rolls	Stainless Steel Rail and Rolls
Base plate		Aluminium	Steel

The new diamond drill rig KS30 joins advantageous handling with a high bending and vibrational stability together with a very low weight of 13 kg.

Like all machines and drills from WEKA the KS30 is designed for professional use as well.

Following special features point its abilities:

Feed Carriage

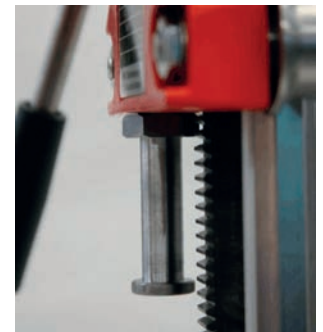
Stable design with ball bearing supported roll guidance. The rolls are made from stainless steel for the KS30 and from plastic for the KS30 E. The stainless steel rolls together with the stainless steel guidance are running very precisely.

A circular level fixed at the carriage alleviates the exact vertical position. A tube level at the column allows an exact horizontal working position of the rig.

A stop bolt at the carriage to apply the wrench for unfastening the tool, avoids damages at the column. Of course the carriage is fitted with a bracket.



Steel rolls



Stop Bolt

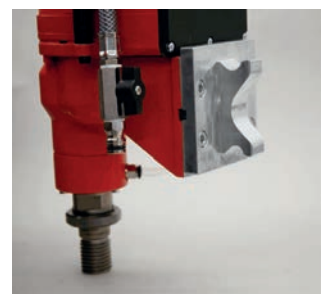
Quick Connect Adapter

The drilling machine can be fixed very fast via a quick connect adapter and an eccentric shaft to the carriage. For this procedure only the feed wheel is needed.

Handling and Operation

The feed is carried out by an ergonomic designed feed wheel, which allows the operation dexter or sinistral. This feature also allows an operation in areas which are difficult to access.

The bend- and vibrational stability is supported by two angular fixed braces, which are clamped via a clamp claw to the column. For clamping only the feed wheel is needed - no more tools.



Quick Connect Adapter

Rig Base

The base made from aluminium can be fixed with dowel screws or vacuum. For vacuum fixation a seal and a vacuum adapter (accessory) is required.

The version KS30 S is fitted with a robust steel base especially designed for professionals.

KS30 and KS30 S are fitted with two swivel feet, which avoid a tipping of the rig, even with assembled machine.

Of course a water collecting ring (accessory) is available and can be fixed very easy by a spring system.



Swivel feet



Steel base KS30S

Even though the KS30 is a lightweight rig, it is fitted with two wheels to alleviate the transport.

The well-priced KS30 E is equipped with solid plastic rolls - therefore a stainless steel guidance is not necessary for this version. Swivel feet, stop bolt as well as the tube level at the column have been removed.

Corrosion Protection

All essential parts are corrosion resistant. Drill column, braces, feed carriage and base (KS30) are made from an aluminum alloy. Leveling screws, levers and feed pinion are made of stainless steel. The steel foot of the KS 30 S is zinc-phosphated.

The KS 30 is recommended for WEKA Diamond Cored Drills Type DK 26, DK32, SR25 and SR38.

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Diamond Drill Rig KS 50 / KS 50 S



Technical Data:

Type		KS 50	KS 50 S
Total length	mm	1070	1070
Stroke	mm	630	630
Drill bit diameter max.	mm	500	500
Inclination	degree	45	45
Machine fixture		Quick change plate	Quick change plate
Foot plate (l x b)	mm	425 x 280	475 x 387
Weight (without feed wheel)	kg	19,5	21

Designed according to the approved principle of the KS 18 the KS 50 is optimally suitable for all professional tasks.

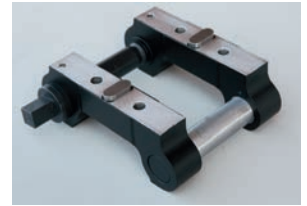
Following specialities emphasize his abilities:

Feed Case

Stable design which surrounds the column completely and thus shows also stiffness against twists.

The front side is closed with the quick change plate for fastening the drilling machine, thus there can also be used a different fastening plate if required.

An eccentric fixing brake avoids unintentional feed movements.



Quick change plate

Guides and bearings

Slide ways and bearings in the feed case are made of the approved compound material that is also used in the KS 18 since years, i.e. extremely abrasion resistant, low in maintenance and very smooth-running. Thus, the slip guides can be prestressed easily. The feed carriage now slides absolutely free from backlash, yet running free on the drilling column.

For the drill bit this means: **less pipe friction, less vibration** especially at the opening, but **much higher endurance**.

Operating

The KS 50 drill feed is operated by an ergonomically designed hand wheel which is simply placed onto the feed pinion either on the left- or right-hand side.

Also included in the standard design is a fine feed which is fitted on the side and shows his effect especially when drilling big holes as it triplicates the feed power that is applied by the operator. Of course an inclined adjustment of the column is possible for more than 45°. The truss is applied in that way that a fixing of the drill rig with a bracing column is unobstructed possible.

Rig foot

The rig foot made of aluminum can be fixed with dowel screws or vacuum.

Only vacuum fittings and a gasket are required for the vacuum fixture.

By two adjustable swing feet the KS 50 shows an exemplary stability.

Of course also several water collecting rings are available which can simply be fixed at the foot plate by a spring tension. A circular level guarantees an exact leveling. Although the KS 50 is a lightweight, it has two wheels to make the transport easier.

As the version KS 50 S, the drill rig is fitted with an exceedingly stable and robust steel foot.

Stability and weight

For the stability has been taken special care due to the light weight of only 19 kg. Critical nodes have been calculated numerically (FEM).

Corrosion Protection

All essential parts are rustproof. Drill column, struts, leveling screws, feed carriage levers and feed pinion are made of stainless steel. Feed case, feed plate, heading section and traverses are made of corrosion resistant aluminum alloy.

The steel foot of the KS 50 S is zinc-phosphated.



The KS 50 is recommended for WEKA diamond core drilling machines DK32, SR25, SR38, DK42, DK52, SR65 and SR68.

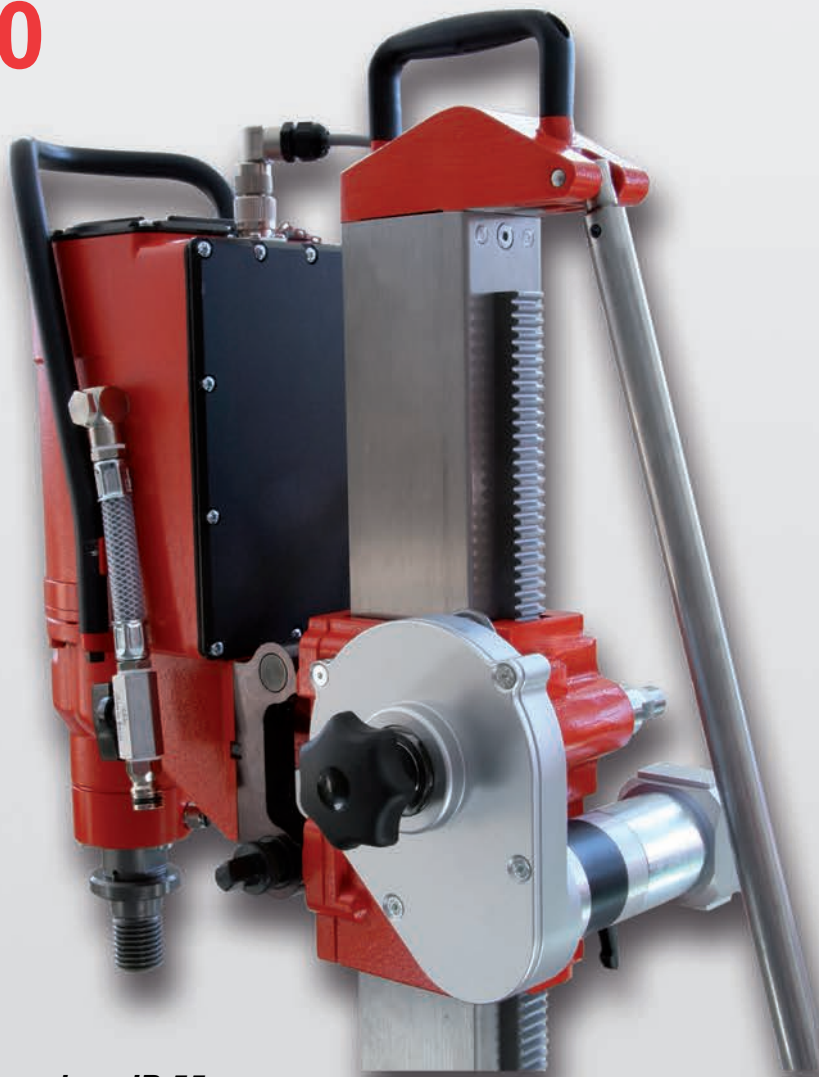
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Automatic drill system BA 50



*easy assembly with
adapter plate and
tension spring*

water protection class IP 55

Technical Data:	Type	BA 50
Rated Voltage	V	48
Feed Force	N	5000
Feed Rate	m/min	0 - 0,4
Weight	kg	3,5
Mode of operation		automatic/manual

My name is **BA 50**, I am the new automatic drill system of WEKA.

My job is to relieve the operator of work which I do highly efficient and very comfortable. The adapter flange can be easily installed at the respective drill rig (image 2). For this the feed case of the drill rig will be modified slightly which is indicated by the additional marking BA (e.g. KS50BA). In just a few steps my motor (image 1) is attached to the drill rig within seconds (image 3 and 4). Now I have to be connected to my friend, the Mammut SR25BA/38BA or the Jumbo SR65BA/68BA/75BA via a plug connector. These machines manage my control - now I'm ready.



Image 1

Because my friends manage me, I do not need any additional controls in a separate casing. This is why there is no additional tangled mess of cables. I also do not have additional operating elements because I am intelligently controlled by my friends.

Core Drill

As already mentioned I work together with the SR25/38 and the SR65/68/75. My control system will be integrated in these machines and a small connector will be attached. The implementation of these features is indicated on the name plate by the additional marking BA (e.g. SR25BA).

I only work together with these machines, because they are intelligent enough in order to meet my needs. As an option these machines are available with integrated water stop. In addition to the manually adjustable ball valve the machine starts / stops water flow automatically when you start and stop the machine.

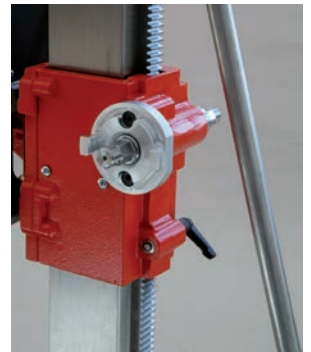


Image 2

Drilling process

After my motor has been attached to the drill rig and I was connected to the SR machine the operator positions the drill bit a few millimeters above the surface to be drilled in by means of the hand wheel, mechanically engages the feed unit and presses the start button of the SR machine for two seconds and I begin to work.

The feed rate is chosen automatically together with my friends. In the initial setup I run with 90% drilling performance. If the operator does not want to drill under full load he can easily reduce the drilling performance to 70% by pressing the start button once again.



Image 3

I gently start drilling and carefully increase the feed rate until the load limit is reached. Of course I sense every concrete reinforcement and adapt my feed rate to the performance of the machine. If my friends are overloaded my feed rate is automatically reduced. I also feel if the drill bit has gone through the material when drilling a clearance hole and switch off. If only a blind hole shall be drilled my operator adjusts a stop according to the required drilling depth. As soon as I recognize the stop I switch off.

I also sense excessive vibrations, for example if the drill bit does not cut properly and switch of the machine.

As discussed I switch off when I'm finished. I do not automatically pull out the drill bit because it takes longer than by hand and often harms the drill bit and diamond segments. My operator simply uncouples the feed unit with one movement and I can be moved backwards manually.

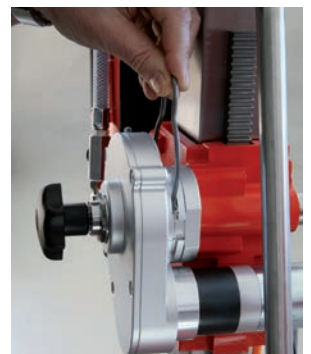


Image 4

Advantages

- ◆ I am very easy to handle as I am thoroughly regulated and controlled by my intelligent electronic.
- ◆ While I am working my operator can do other jobs, or of course relax and watch me working.
- ◆ Because of my super quick assembly I am quickly ready for use.
- ◆ Both drill rig and SR machine can be operated manually or automatically by means of my mechanical coupling without disassembling me.

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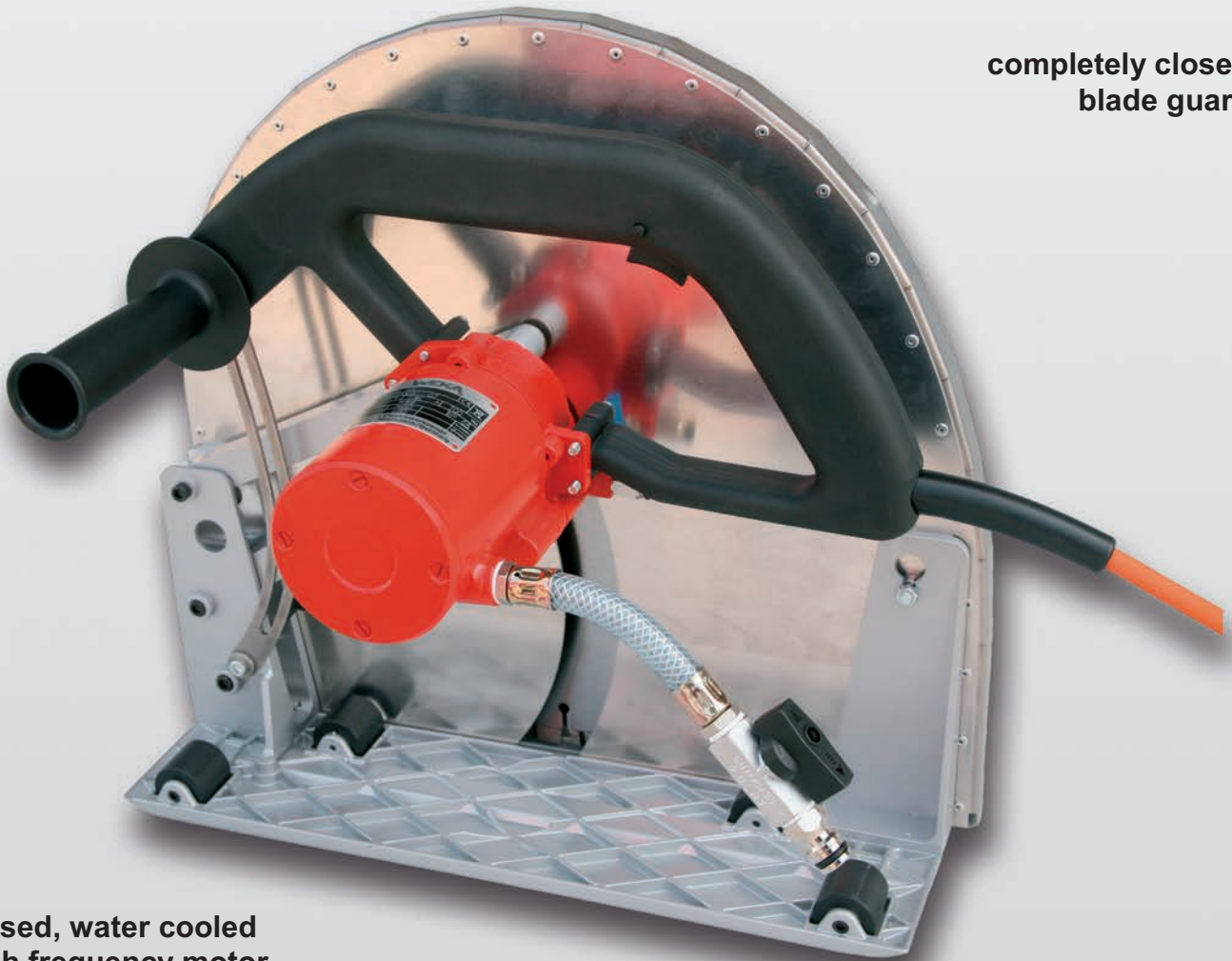
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HS 40 Emma Diamond Hand Saw

completely closed
blade guard



closed, water cooled
high frequency motor
waterproof protection class IP 55

Technical Data:	Type	HS 40
Rated Voltage	V	230
Nominal Power	W	3700
Output Power	W	2800
Cutting Depth	mm	165
Saw Blade Ø	mm	400
Mounting Hole	mm	20 / 15,85 (5/8")
Speed	1/min	2600
Weight	kg	8,5

Diamond
Core Drills

WEKA

Diamond
Saws

Hello, I am Emma, the diamond hand saw from WEKA.

I cut with my diamond saw blade with 400 mm diameter concrete walls and masonry up to 165 mm deep and all this manually operated. If required I can be mounted on a very simple profile rail, so that my operator can hold and guide me even easier.



High frequency drive

My small motor after all has a power of 3700 W and all this at a mains voltage of 230 V. It is water cooled with the cooling principle which is patented by WEKA. The cooling system is thereby completely separated from the electrical part of the motor. If on very tough use of the motor my seals should fail, the cooling water will not enter into the interior of the motor, but only to the outside.

Motor control

I am controlled by a very efficient converter, the FU6 U, which is located in a small and stable aluminium box. The water-cooled frequency converter FU6 U can drive and control all devices of the ANNA series as a universal drive unit. It supplies me with the required energy, controls my current input and speed. The integrated (Powerfactor Correction) makes sure that I do not take wattless current from the mains, but only energy which I can convert into mechanical power.



Frequency converter FU6 U

My converter recognizes, if I am connected to 230 V or to 400 V and adapts current and power accordingly. My motor current is controlled according to the requirements and limited to the maximum. Thus I can not be overloaded.

The temperature of my motor is checked constantly. If I am loaded too much or cooled too less, my power electronic switches me off before anything can happen. Status and error signals are indicated to the user via an LED mounted on the frequency converter.

Handling and operation

Via the converter FU6 U I am connected to the 230V/400V mains. By turning the handle my dip feed is released. The diamond saw blade is now dipped to the requested cutting depth manually and my dip feed is now locked again via the handle. If my handle is released and no dip feed is applied the saw blade returns again into the blade guard completely by a gas spring. By this design my operation safety is increased. By the adjustment of the parallel rockers the ergonomic position of my handhold arrangement is changed only insignificantly. If I am supposed to cut dry, my motor can still be water cooled, while the water flow is deflected by a by-pass valve.

Stability and weight

Due to the favorable arrangement of the parallel rockers I am very stable and can be easily moved linearly by the four guide rollers.

As measured by the high nominal power of 3700 W I am with 8,5 kg light and handy.

Corrosion and water protection

All considerable parts on myself are rust-proof. My casing and my guide bars are made of aluminum and all significant operating elements are made of stainless steel.

My converter and myself are not only very powerful and robust, but also splash water proof according to protection class IP 55 according EN 60 529, i.e. on conventional use no water can enter into my interior.

Oil lubrication

Of course my gear is - like all gears from the WEKA family - provided with an oil bath lubrication. And thus efficient, low in maintenance and long-living.

Lifetime

The operation hours counter which is integrated in my micro controller allows myself to work for 300 hours permanently. Then I show my operator that I want to be maintained by only switching on when my ON button is pressed three times.

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TS 40 ANNA Diamond Disc Saw



*ergonomic handle design
adjustable handle
adjustable blade guard*

*closed water-cooled high frequency motor
splash water proof according IP55
operation with 230 V and 400 V*

Technical data:	Type	TS 40	TS 40
Nominal voltage	V	230	400
Nominal power	W	3700	6500
Output power	W	2700	4800
Nominal current	A	16	13,5
Cutting depth	mm	165	165
Saw blade Ø	mm	400	400
Fixture hole	mm	25,4 (1")	25,4 (1")
Speed	1/min	2500	2500
Weight	kg	9,4	9,4

Hello, I am Anna, the new diamond disc saw from WEKA.

I am the powerful disc saw for the multi-purpose use in stone, asphalt, concrete and masonry. With my diamond saw blade of 400mm diameter, I cut concrete walls and masonry up to 165mm deep, and this manually.

High frequency drive

My nominal power at 230 Volt is the maximum possible 3700 W and at 400 Volt 3 AC even 6500 W. My motor is water-cooled with the cooling principle patented by WEKA. The cooling circuit is hereby completely separated from the electrical part of the motor. If in case of very robust handling my seals fail, the cooling water does not enter the inner of the motor, but only leaks to the outside.

Motor control

I am controlled by a very efficient converter, the FU6 U, which is located in a small and stable aluminium box. The water-cooled frequency converter FU6 U can drive and control all devices of the ANNA series as a universal drive unit. It supplies me with the required energy, controls my current input and speed. The integrated (Powerfactor Correction) makes sure that I do not take wattless current from the mains, but only energy which I can convert into mechanical power.

My converter recognizes, if I am connected to 230 V or to 400 V and adapts current and power accordingly. My motor current is controlled according to the requirements and limited to the maximum. Thus I can not be overloaded. The temperature of my motor is checked constantly. If I am loaded too much or cooled too less, my power electronic switches me off before anything can happen.

Status and error signals are indicated to the user via an LED mounted on the frequency converter.



Frequency converter FU6 U

Handling and operation

Via my converter I am connected to the 400 V mains. For use at 230 V mains my adapter cable is used. By the adjustable handle and the variable position of my blade guard I can be adapted to every sawing job optimal. My integrated safety switch prevents an unintended start of the motors as far as possible. The diamond saw blade is dipped into the basic material to be cut manually. By slow forward and backward movements the desired cut is made. If I am supposed to cut dry my motor can further on be cooled by water, by changing the water flow through the bypass outlet.

My blade change is very easy, as the fixing screw is accessible without hindrance by a blade guard cover in the blade guard which is fitted with a bayonet cap and thus can be removed easily.

Of course the water cooling happens indirectly via the saw spindle and thus cools the diamond tool perfectly. The ball valve is thereby attached under the switch handle in the way that it can be easily operated with the forefinger without letting the saw loose.

Stability and weight

My aluminium case makes me stable and light at the same time - as measured by the high nominal power of 6500 W I am with 9,4 kg very handy.

Corrosion and water protection

My case and blade guard are made from aluminium, all main parts of me are rustproof. My converter is not only very powerful and robust, but also splash water proof according protection class IP 55 referring to EN 60 529, i.e. on proper use no water can enter into my internal.

Oil bath lubrication

Of course my gear - like all gears of the WEKA family - is fitted with an oil bath lubrication and thus efficient, low in maintenance and long-living.

Life time

The operation hours counter which is integrated in my micro controller allows myself to work to 300 h permanently. After that I show my operator that I want to be maintained by starting only when my start button is pushed three times.

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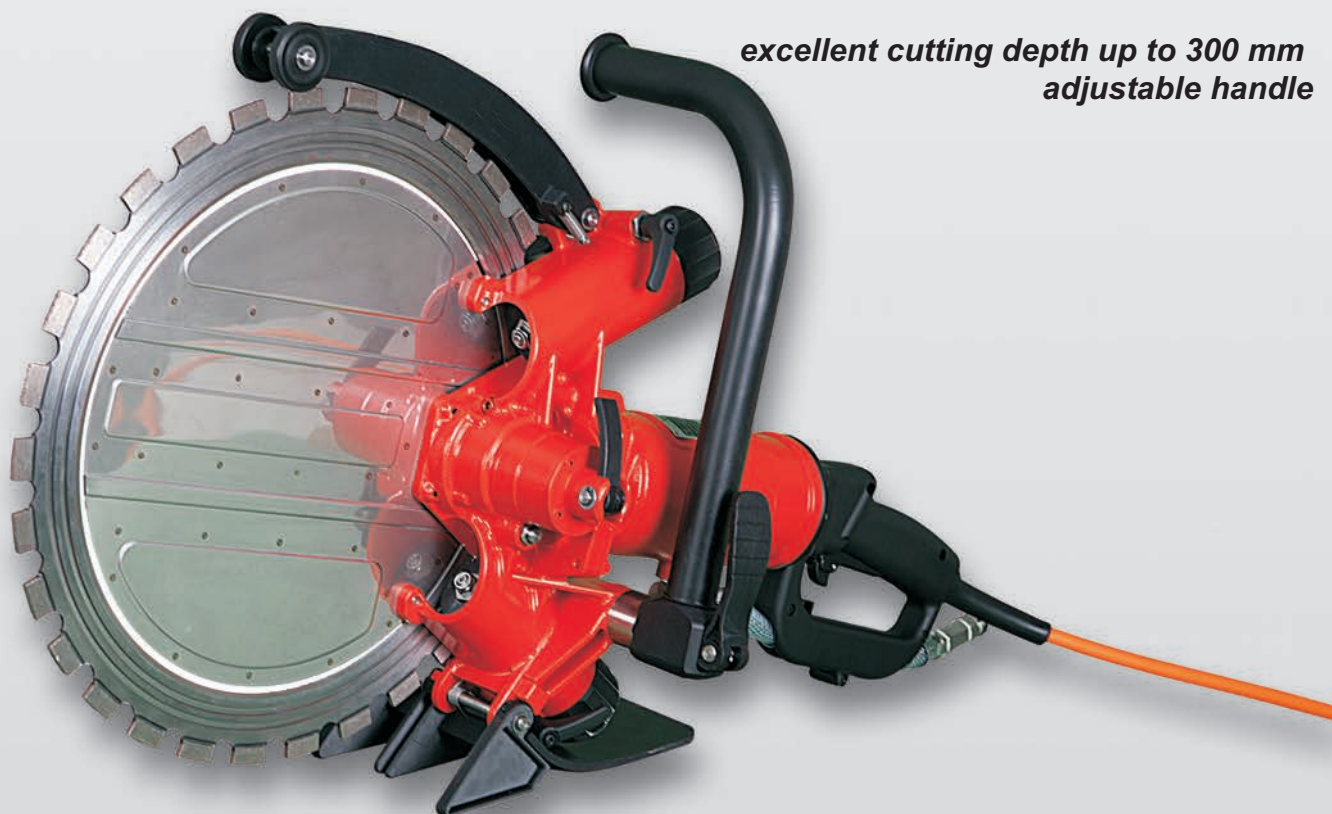
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Subject to change without notice 0316

TR40 ANNA Diamond Ring Saw



*excellent cutting depth up to 300 mm
adjustable handle*

*closed water-cooled high frequency motor
splash water proof according IP55
operation with 230 V and 400 V*

Technical data:	Type	TR40	TR40
Nominal voltage	V	230	400
Nominal power	W	3700	6500
Output power	W	2700	4800
Nominal current	A	16	13,5
Cutting depth	mm	300	300
Saw blade Ø	mm	400	400
Speed	1/min	2400	2400
Weight (without cutting equipment)	kg	13,5	13,5

Hello, I am TR40 ANNA, the new diamond chain saw from WEKA.

I am the powerful diamond chain saw for the multi-purpose use in concrete, masonry, stone and for iron pipes. With my diamond ring blade of 400mm diameter, I cut concrete walls and masonry up to 300mm deep, and this manually.

High frequency drive

My nominal power at 230 Volt is the maximum possible 3700 W and at 400 Volt 3 AC even 6500 W. My motor is water-cooled with the cooling principle patented by WEKA. The cooling circuit is hereby completely separated from the electrical part of the motor. If in case of very robust handling my seals fail, the cooling water does not enter the inner of the motor, but only leaks to the outside.

Motor control

I am controlled by a very efficient converter, the FU6 U, which is located in a small and stable aluminium box. The water-cooled frequency converter FU6 U can drive and control all devices of the ANNA series as a universal drive unit. It supplies me with the required energy, controls my current input and speed. The integrated (Powerfactor Correction) makes sure that I do not take wattless current from the mains, but only energy which I can convert into mechanical power.

My converter recognizes, if I am connected to 230 V or to 400 V and adapts current and power accordingly. My motor current is controlled according to the requirements and limited to the maximum. Thus I can not be overloaded. The temperature of my motor is checked constantly. If I am loaded too much or cooled too less, my power electronic switches me off before anything can happen. Status and error signals are indicated to the user via an LED mounted on the frequency converter.



Frequency converter FU6 U

Handling and operation

Via my converter I am connected to the 400 V mains. For use at 230 V mains my adapter cable is used. By the adjustable handle I can be adapted to every sawing job optimal. My integrated safety switch prevents an unintended start of the motors as far as possible. The diamond ring saw blade is dipped manually into the basic material to be cut. By slow forward and backward movements the desired cut is made.

Changing my ring saw blade and the drive wheel can be done without the need for any tools. By means of an innovative clamping system the drive wheel can be connected to the shaft firmly and can be easily removed alike.

Cutting equipment

The ring saw blade has two grooves in order to reduce the wearout of the guide rollers. The drive wheel as well as all wheels that are in contact with the ring saw blade are made of wear resistant, hardened steel.

Corrosion and water protection

My case and blade guard are made from aluminium, all main parts of me are rustproof. My converter is not only very powerful and robust, but also splash water proof according protection class IP 55 referring to EN 60 529, i.e. on proper use no water can enter into my internal.

Oil bath lubrication

Of course my gear - like all gears of the WEKA family - is fitted with an oil bath lubrication and thus efficient, low in maintenance and long-living.

Life time

The operation hours counter which is integrated in my micro controller allows myself to work to 300 h permanently. After that I show my operator that I want to be maintained by starting only when my start button is pushed three times.

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TK40 ANNA

Diamond Chain Saw

*excellent cutting depth up to 430 mm
adjustable handle*



*closed water-cooled high frequency motor
splash water proof according IP55
operation with 230 V and 400 V*

Technical data:	Type	TK 40	TK 40	
	Nominal voltage	V	230	400
	Nominal power	W	3700	6500
	Output power	W	2700	4800
	Nominal current	A	16	13,5
	Bar length	cm	30-40	30-40
	Cutting depth	mm	430	430
	Drive Sprocket		8 teeth 3/8" and F4	
	Speed	1/min	5500	5500
	Weight	kg	9,8	9,8
	(without cutting equipment)			

Hello, I am TK40 ANNA, the new diamond chain saw from WEKA.

I am the powerful diamond chain saw for the multi-purpose use in concrete, masonry, stone and for iron pipes. With my large chain and guide selection I cut concrete walls and masonry up to 430mm deep and can be used ideal for small openings, corner cuts and very deep cuts - a cutting close to the wall is also possible.

High frequency drive

My nominal power at 230 Volt is the maximum possible 3700 W and at 400 Volt 3 AC even 6500 W. My motor is water-cooled with the cooling principle patented by WEKA. The cooling circuit is hereby completely separated from the electrical part of the motor. If in case of very robust handling my seals fail, the cooling water does not enter the inner of the motor, but only leaks to the outside.

Motor control

I am controlled by a very efficient converter, the FU6 U, which is located in a small and stable aluminium box. The water-cooled frequency converter FU6 U can drive and control all devices of the ANNA series as a universal drive unit. It supplies me with the required energy, controls my current input and speed. The integrated (Powerfactor Correction) makes sure that I do not take wattless current from the mains, but only energy which I can convert into mechanical power.

My converter recognizes, if I am connected to 230 V or to 400 V and adapts current and power accordingly. My motor current is controlled according to the requirements and limited to the maximum. Thus I can not be overloaded. The temperature of my motor is checked constantly. If I am loaded too much or cooled too less, my power electronic switches me off before anything can happen. Status and error signals are indicated to the user via an LED mounted on the frequency converter.



Frequency converter FU6 U

Handling and operation

Via my converter I am connected to the 400 V mains. For use at 230 V mains my adapter cable is used. By the adjustable handle I can be adapted to every sawing job optimal. My integrated safety switch prevents an unintended start of the motors as far as possible. The guide bar is dipped into the basic material to be cut manually. With my wall claw cuts can be done efficient by means of leverage effect. My chain can be changed easily by opening my clamping lever and removal of my casing lid without without the need for any tools. Tensioning of the chain can also be done without the need of any tools by means of my adjusting screw.

Cutting equipment

The large chain and guide selection allows the selection of the optimal chain technology depending on the application.

Corrosion and water protection

My case is made from aluminium, all main parts of me are rustproof. My converter is not only very powerful and robust, but also splash water proof according protection class IP 55 referring to EN 60 529, i.e. on proper use no water can enter into my internal.

Oil bath lubrication

Of course my gear - like all gears of the WEKA family - is fitted with an oil bath lubrication and thus efficient, low in maintenance and long-living.

Life time

The operation hours counter which is integrated in my micro controller allows myself to work to 300 h permanently. After that I show my operator that I want to be maintained by starting only when my start button is pushed three times.

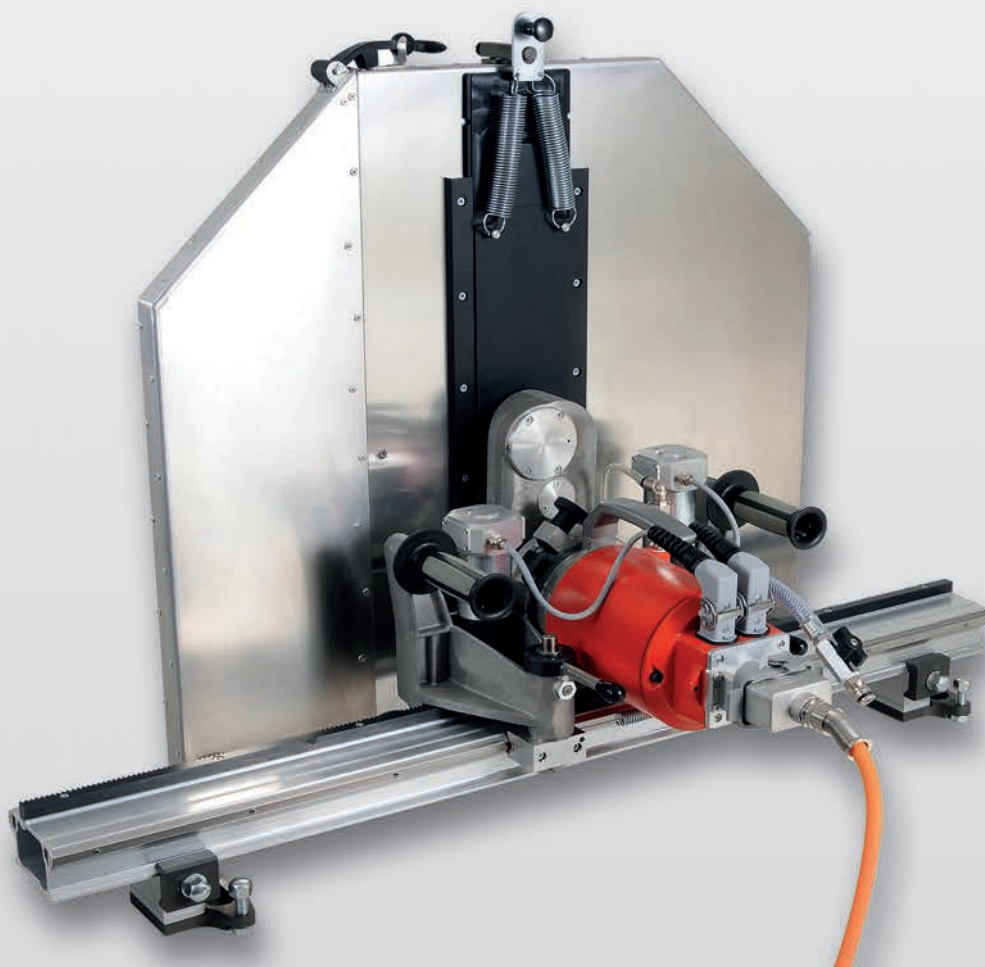
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Electric Rotation Arm Wall Saw WS 75 FRIDA



Technical Data

Type		WS 75	WS 75H(F)
Rated power of the saw motor:	W	6000	11000
Output power of the saw motor:	W	4800	9000
Rated speed of the sawing spindle:	1/min	1400	1000-2000
max. saw blade diameter:	mm	750	750
max. cutting depth (saw blade Ø 75cm):	mm	320	320
feed power - longitudinal and dip feed:	N	2000	2000
Speed - longitudinal feed:	m/min	0-3	0-3
Speed - dip feed:	1/min	0-1	0-1
Weight - saw motor:	kg	17	13,5
Weight - basis without saw motor:	kg	19	19
Blade fixture		1" (25,4)	1" (25,4)
Saw flange for flush cut		TK90, 6xM8	TK90, 6xM8

My name is FRIDA and I am the powerful electric wall saw of the WEKA family. I am available in three versions:

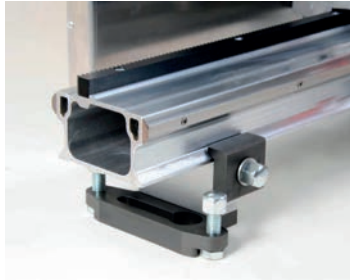
- WS 75** - with a water-cooled, robust 6 kW three phase motor.
- WS 75 H** - with a water-cooled 11 kW high frequency motor, with wired hand control unit
- WS 75 HF** - WS 75 H with wireless remote control



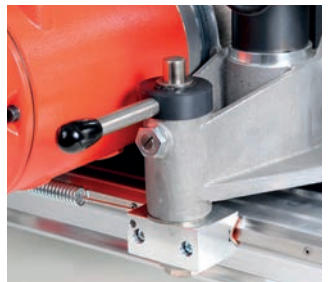
With my saw blade of 750 mm diameter I cut concrete walls and masonry up to 320 mm deep without taking care of reinforcement.

For not being too heavy for you, my motor can be disconnected from the machine basis without any tools within only a few seconds. Now I am so light, that even weak men can take me on their arms.

My track is composed of a torsion rigid aluminum profile with taper gibs of stainless steel. I'm guiding on this track with vibration dumping sideways, composed of a special but proofed wear-resistant material compound.



The power transmission is done by an oil lubricated gear with an integrated overload clutch in my rotation arm. An integrated safety clutch prevents in case of emergency gear and tool damages. The output spindle is arranged very solid and nearly free from clearance between two taper roller bearings.



My feed drive are robust and powerful. Longitudinal as well as dip feed perform a feed power of 2000N.

My movements are coordinated by an easily to handle control. An intelligent regulation is responsible for a nearly constant feed power which is automatically adapted depending on the current of the saw motor.



Control WS 75

A red LED is indicating an overload. Is this light disregarded, the electronic switches the saw completely off.

If the saw blade is jammed the overload clutch absorbs the appearing top load before the motor electronic shuts down the saw.

An integrated phase detector permits the start of the saw motor only if the phase direction is correct. The correct direction is indicated by a green LED.

The control box of the WS 75 can be carried by a belly belt. The control unit of the WS 75 H is put into a hand control box and can easily be operated with one hand. The control of the WS75 HF is



Control WS75 HF

designed as a wireless remote control.

Driving Motor

My 6 kW three-phase motor as well as my 11 kW high-cycle motor are water-cooled and correspond to the degree of water protection IP 55. The cooling principle, patented by my boss, separates the cooling circulation totally from the electrical part of the motor. If my seals should fail in very rough handling, the cooling water doesn't get into the inside of my motor but only outwards.

So in this motor design a dangerous contact between cooling water and motor winding is avoided.

Both motors are electrically, mechanically and thermally protected against overload. This method can be seen as a total overload protection.

WS 75 H(F) - frequency controlled driving motor

In this design I am most powerful and therefore for professionals even more attractive.

I'm supplied by a high power frequency converter that delivers me the needed energy. This power generator is placed with the necessary control system in a stable box that also corresponds to the degree of water protection IP 55.

Of course I am radio interference suppressed as advised in EN 55011-limiting value class B and can therefore work on public mains.

This is very important in order that no interferences on computers, radios or televisions arise.

You can also start and operate me via a fault current protective switch with a rate current of 30mA because my filter is producing a low leakage current.



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