

# Concrete technology



**WACKER  
NEUSON**



# These reasons speak for the concrete technology of Wacker Neuson.

## 1. Best quality guaranteed – all elements made in Germany!

In terms of quality, make no compromises with your concrete processing projects. You can rely on concrete technology from Wacker Neuson in any situation: All elements are manufactured in Germany according to sophisticated concepts – and, in addition to their efficiency output, impress with a long service life and the highest quality down to the last detail.

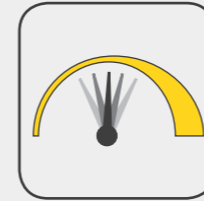
## 2. Uncompromising performance – with powerful drives systems that impress.

Ideally equipped for the varied requirements of concrete processing: The concrete technology equipment from Wacker Neuson is outfitted with powerful drives systems, which are largely from our own design and development and therefore are custom-made to the requirements of the products. So you can master any challenge!

## 3. Concentrated expertise – our concrete specialists are there for you.

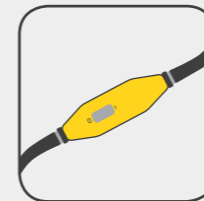
You can rely on our expertise for optimal results when processing your concrete: Because we are well versed in the highly complex field of concrete compaction – and are thus there for you with advice and assistance. So that you always get the best out of your projects.

# Concrete expertise down to the last detail.



### RPM-stable drive systems

Our drives deliver maximum performances - entirely regardless of concrete consistency or current and power fluctuations.



### Integrated converters

For a self-contained application: Some of our models have integrated converters, which make the acquisition of external converters unnecessary.



### Finely tiered model selection

The right solution for every challenge: Choose the model that is right for you from among various, finely-tiered model sizes and different revolutions per minute.



### Concrete Solutions

Our concrete technology experts advise you in all questions about concrete compaction, if necessary, and assist you in the planning of technically and economically ideal solutions.

# All concrete technology products in an overview.

## Internal vibrators:



IE



IEC



IREN



IRSEN



IRFU



IRSE-FU



HMS

> Page 04

> Page 06

> Page 08

## Rebar tier:



DF 16

> Page 12

## Converters:



FU 1.5



FU 1.8



FU 4



FU 5

> Page 13

## External vibrators:



AR 26



AR 34



AR 43



AR 54



AR 64



AR 75

> Page 10



KTU 2



FUE 2



FUE 6



FUE-M/S 75



FUE-M/S 85

> Page 14

# Internal vibrators IE and IEC

A sophisticated equipment concept with an attractive price-performance ratio: Make no compromises in terms of reliability with the IE and IEC model series from Wacker Neuson.

- High frequency technology for good results in concrete compaction
- Sturdy quality with a good price-performance ratio
- 2 model series available: with and without integrated converters
- Each available in 3 vibrator head sizes
- Ideal ergonomics for good handling

**RPM-STABLE MOTOR**  
from our own design and development



IE

Available in 3 vibrator head sizes:  
IE 38, IE 45, IE 58



IEC

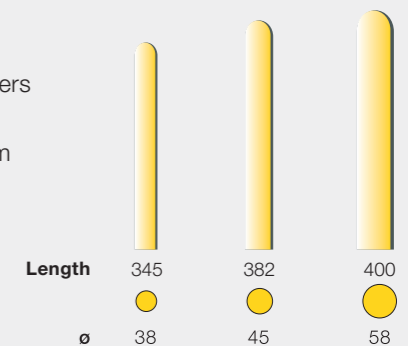
With integrated converters, available in 3 vibrator head sizes:  
IEC 38, IEC 45, IEC 58

The models of the IEC line of products have an integrated converters.



## Vibrator head sizes

3 different diameters available:  
38, 45 and 58 mm



# Internal vibrators IREN, IRSEN and IRFU, IRSE-FU

The right solution for every need – with the two additional model series from Wacker Neuson. Decide for yourself whether you prefer pure efficiency output or the added comfort of converter and Bodyguard™! Both lines are optionally available with and without a handle grip.

- Ideal compaction performance thanks to the RPM-stable and powerful electric motor
- The motor meets the highest quality standards through our own design, development and production
- The integrated thermal overload protection breaker automatically turns the equipment off upon the risk of overheating
- Also works reliably and safely on generators and with fluctuating input voltages.
- High wear resistance due to the induction hardened vibrator heads

**More ergonomic,  
low vibration  
handle grip.**

**High bending resistance** with the protection hose and power cable.



**Practical, safe and self-contained** thanks to the ergonomic handle grip, integrated converter and Bodyguard™.



## 1. Bodyguard™

The integrated personal protection switch Bodyguard™ switches the unit off within 3 milliseconds if necessary and therefore provides comprehensive safety.



## 2. Converters

Self-contained application thanks to the integrated converter for the single phase electrical connection (lighting current). The converter is absolutely wear resistant due to the potted electronic components.



All elements  
**MADE IN GERMANY!**



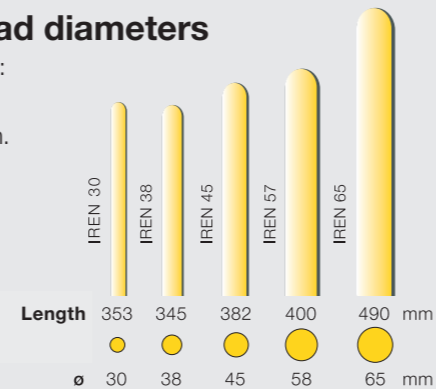
**Integrated converter:** efficient and practical with potted electronic components.

**Practical guide handle grip** for easier compaction of flat elements.



## Vibrator head diameters

from 30 to 65 mm:  
ideal for every type of application.



# Modular internal vibrator system

Flexibility and economic efficiency that will convince you:  
The modular HMS series can be matched to meet your needs exactly. You therefore have the ideal solution to master your next challenge.

- Individually configurable with different combinable flexible shafts, vibrator heads and drive systems
- Quick disconnect coupling for easy handling
- Combustion engines and electric motors in various performance categories provide for flexible drives
- High wear resistance due to the induction hardened vibrator heads

HMS with diesel engine  
L5000/225.



L5000

A5000

HMS with gasoline engine  
A5000/160.



M2000



## The flexible HMS system

- 1. Flexible shaft:** Steel mesh and spiral steel protection provide for a high kink resistance.
- 2. Vibrator head:** Perfect compaction performance with high wear resistance and long service life.
- 3. Drive system:** Powerful combustion engine or electric motor (depending on your choice) with quick disconnect coupling and a special protective filter, which prevents the ingress of foreign bodies.

ALL COMBINATION  
POSSIBILITIES  
can be found online at  
[wackerneuson.com](http://wackerneuson.com)



Choice of three electric  
motors available if the HMS  
is to be operated electrically:  
M1000, M2000,  
M3000.



## External vibrators

Whether for in-situ casting formwork or light to heavy precast element formwork, whether for application in concrete and precast factories or material transport (e.g. at the silo): Wacker Neuson offers you the right external vibrator for every need, which will impress you with its efficiency output and endurance.

- RPM-stable asynchronous motor
- Precisely adjustable centrifugal forces through adjustable eccentric weight discs
- Different voltage and RPM versions
- Made in Germany design, development and production

Perfect for in-situ casting formwork and for light precast element formwork.

AR 26



AR 54



Ideal for applications in concrete and precast factories.

The right choice for heavy precast element formwork and material transport.

AR 43



AR 64



AR 75



AR 34



**Universally and safely deployable:** Fastening clamps from Wacker Neuson.



**RPM-stable and extremely durable:** even in use on formwork.



External vibrators are also ideal for aiding the flowability of bulk material in silos.



**Ideal for construction site applications:** The AR 26 is also available with an integrated converter.



## Rebar tier DF 16

The mechanically functioning rebar tier from Wacker Neuson puts an end to tying reinforcing steel with pliers in a bent position. Perfect for traditional work on reinforcement and for securing plastic pipes.

- The mechanical machine concept effortlessly binds the reinforcement
- Uniformly drilled, fixed knots
- Easy to operate with just one hand and in an anatomically correct, upright posture
- Equally suitable for horizontal applications (ceilings and floor plates) as well as for vertical application (walls, columns)



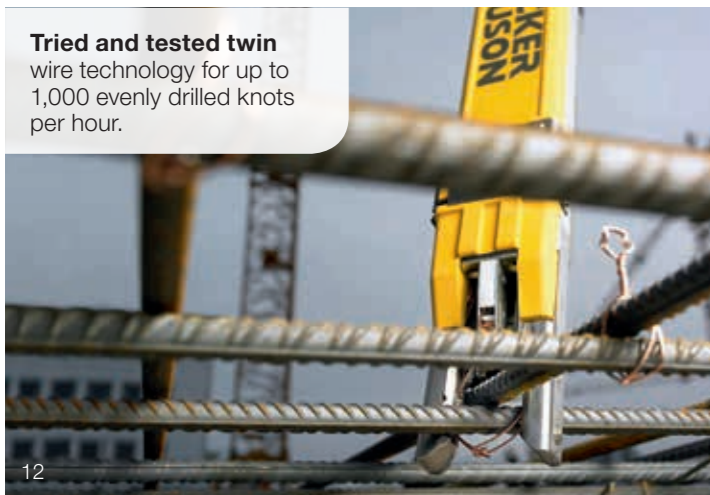
**Rebar tying independent**  
of battery level and charging times and without wire scrap.

\* Awarded for excellent performances in occupational health and safety protection by the Trade Association of the Construction Industry



**The practical holster**  
can be attached to your waistband.

**Tried and tested twin**  
wire technology for up to  
1,000 evenly drilled knots  
per hour.



**Also easily affixes synthetic ma-**  
**terial pipes** to the reinforcement.

## Mechanical frequency converters

The mechanical frequency converters from Wacker Neuson are compact powerhouses and are ideal for long-time applications.

- Mechanical machine concept
- Extremely low-maintenance: These converters work without carbon brushes
- Immune to overheating: The windings are made of heat-resistant Class H material and can withstand temperatures of up to 180 °C
- Very sturdy and long service life

Neither dust nor  
splash water affect  
the performance.



FU 1.5/200W



FU 4/200W

**Uncomplicated design**  
combined with simple  
and safe operation.

	Rated current A	FU 1.5/200W	FU 1.8/200W	FU 4/200W	FU 5z/200W
Rated current A		20.6	27.0	52	69.0
IREN 30	3.5	2	2	3	4
IREN 38	7.5	2	2	3	4
IREN 45	10.0	2	2	3	4
IREN 57	17.3	1	1	3	4
IREN 65	25.0	-	1	2	24
AR26/6/042	9.0	2	2	3	2

# Electronic converters

Impressive performance, even during continuous application: These converters meet the highest demands with their high quality electronics and the active cooling system.

- Light and compact design
- Good handling thanks to the sophisticated aluminum design
- The intelligent load and voltage management compensates for fluctuating mains input voltages, incorrectly sized extensions or consumers with greatly varying uses of power
- Deployable everywhere due to pulse current-sensitive protective ground fault interrupter (GFI or GFCI)
- Maximum safety: galvanic separation by means of isolating transformer
- Maintenance-free



**KTU 2**

**Flexibly deployable** thanks to 25 m cable and low weight.

**FUE-M/S 85A**

**Sturdy and powerful design** for challenging applications.



**Convincing:** the high quality electronics and the active cooling system.



**FUE 6**

**FUE-M/S 75A**

**Intelligent load and voltage management.**



	Rated current A	KTU 2	FUE 1	FUE 2	FUE 6	FUE-M/S 75A	FUE-M/S 85A
Rated current A		35.0	25.0	35.0	52.0	75.0	85.0
Number of plug receptacles (32A)		2	1	2	3/4	4/6	4
<b>IREN 30</b>	3.5	2	1	2	3-4	4-6	4
<b>IREN 38</b>	7.5	2	1	2	3-4	4-6	4
<b>IREN 45</b>	10.0	2	1	2	3-4	4-6	4
<b>IREN 57</b>	17.3	2	1	2	3	4	4
<b>IREN 65</b>	25.0	1	1	1	2	2-3	0
<b>AR 26/6/042</b>	9.0	2	1	2	3-4	4-6	4



# Technical data.

INTERNAL VIBRATORS			IE 38	IE 45	IE 58	with integrated converter			IEN 30	IEN 38	IEN 45	IEN 57	IEN 65
	SPECIFICATION	UNIT											
Vibrator head diameter	mm	38	45	58	38	45	58	30	38	45	57	65	
Effective compaction diameter*	cm	-	-	-	-	-	-	40	50	60	85	100	
Voltage	V	42	42	42	220-240	220-240	220-240	42	42/250	42/250	42/250	42/250	
Current	A	5	8	12	3	4	5	3.5	7/1.4	10/1.85	17.3/3	25/4.2	
Frequency	Hz	200	200	200	50-60	50-60	50-60	200	200	200	200	200	
Protective hose**/power cable	m	5/10 +15	5/10 +15	5/10 +15	5/10 +15	5/10 +15	5/10 +15	5/15	5/15	5/15	5/15	5/15	

INTERNAL VIBRATORS			IRSEN 30	IRSEN 38	IRSEN 45	IRSEN 57	with integrated converter							IRSE-FU 45	IRSE-FU 57
	SPECIFICATION	UNIT													
Vibrator head diameter	mm	30	38	45	57	30	38	45	57	65	45	57			
Effective compaction diameter*	cm	40	50	60	85	40	50	60	85	100	60	85			
Voltage	V	42	42	42	42/250	220-240, 1~	220-240, 1~	220-240, 1~	220-240, 1~	220-240, 1~	220-240, 1~	220-240, 1~			
Current	A	3.5	7	10	17.3/3	2.2	3.5	4.8	6	10	4.8	6			
Frequency	Hz	200	200	200	200	50-60	50-60	50-60	50-60	50-60	50-60	50-60			
Protective hose**/power cable	m	0.8/15	0.8/15	0.8/15	0.8/15	5/15 +0.5	5/15 +0.5	5/15 +0.5	5/15 +0.5	5/15 +0.5	0.8/15 +0.5	0.8/15 +0.5			

\* This is a non-binding specification based on practical experiences of our customers under certain operating conditions. Please note that under specific boundary conditions, these specifications may vary. We recommend always beginning by carrying out a test pour under operating conditions.

\*\* Different protective hose lengths available

FREQUENCY CONVERTERS			FU 1.5	FU 1.8	FU 4	FU 5z	FUE 1	FUE 2	FUE 2	KTU 2	FUE 6	FUE 10	FUE 10	FUE-m/s	FUE-m/s	FUE-m/s
	SPECIFICATION	UNIT	200 W.	200 W.	200 W.	200 W.	42 V/200 W	42 V/200 W	250 V/200 W	250/200 W	42 V/200 W	42 V/200 W	250 V/200 W	75 A	85 A	225 A
Weight	kg	27	26	64	75	25	26.4	26.4	34.4	32.5	87	87	29.5	42	150	
Input/output voltage	V	230, 1~/42, 3~	400, 3~/42, 3~	400, 3~/42, 3~	400, 3~/42, 3~	230, 1~/42, 3~	230, 1~/42, 3~	230, 1~/250, 3~	230, 1~/250~	230, 1~/42, 3~	400/42, 3~	400, 3~/250, 3~	400/42, 3~	400/42, 3~	400/42, 3~	
Input/output frequency	Hz	50-60/200	50-60/200	50-60/200	50-60/200	50-60/200	50-60/200	50-60/200	50-60/200	50-60/200	50-60/200	50-60/0-200	50-60/0-200	50-60/0-200	50-60/0-200	
Input/output current	A	9/20.6	5/27	10/52	13.2/69	9.6/25	13/35	13/6	13/35	14.8/53	24.5/145	24.5/25	13/75	13/85	29/225	
Power cable	m	2	2	2	2	2.5	2.5	2.5	25	2.5	3	3	2.5	2.5	-	
Number of sockets	Pieces	2	2	3	4	1	2	2	2	3	-	-	4	4	-	

\* Version available with 0-200 Hz \*\* Version available with 4 plug receptacles \*\*\* Version available with 2 or 6 plug receptacles

VIBRATOR HEADS			H25	H25S	H25HA	H35	H35S	H35HA	H45	H45S	H45HA	H50HA	H55	H65
	SPECIFICATION	UNIT												
Diameter	mm	25	25	26	35	35	36	45	45	45	50	57	65	
Length	mm	440	295	380	410	310	405	385	305	390	395	410	385	
Weight	kg	1.3	0.8	1.3	2.1	1.6	2.3	3.4	2.8	3.3	3.9	5.3	6.2	

FLEXIBLE SHAFTS			SM1-E	SM2-E	SM4-E	SMO-S	SM1-S	SM2-S	SM3-S	SM4-S	SM5-S	SM7-S	SM9-S
	SPECIFICATION	UNIT											
Length	m	1	2	4	0.5	1	2	3	4	5	7	9	
Weight	kg	1.5	2.5	4.3	1.3	2.7	4.3	5.9	7.1	9.3	12.9	15.1	

DRIVE SYSTEMS			M1000	M2000	M3000	A 5000	L 5000
	SPECIFICATION	UNIT					
Drive system		Double insulated universal motor	Double insulated universal motor	Double insulated universal motor	Air-cooled, single-cylinder, four-cycle, Honda gasoline engine	Air-cooled, single-cylinder, four-cycle, Kohler diesel engine	
Voltage	V	230, 1~	230, 1~	230, 1~	-	-	
Current	A	4.6	7.5	10	-	-	
Power	kW	1.1	1.73	2.13	4	3.3	
Weight	kg	5.4	5.9	8.1	23.7	35.6	

REINFORCEMENT REBAR TIER			DF 16
	SPECIFICATION	UNIT	
Operating weight	kg	2.2	
Number of tie wires per tie wire strip (magazine)	Pieces	77	
Tie speed	Knots/h	approx. 1,000	
Tie speed	sec/knot	approx. 0.8	
Exterior diameter of the round materials to be tied	mm	Minimum 6 + 6/Maximum 16 + 16	
Rebar tier order sizes (copper-coated steel wire)		Box: 7,700 beams/Pallet: 138,600 tie wires	

# Technical data.

EXTERNAL VIBRATORS

		AR 26/3/230 w	AR 26/3/400	AR 26/3.6/230	AR 26/6/042	AR 26/6/042 3.5 kN	AR 26/6/042 cs	AR 26/6/250	ARFU 26/6/115 UK	ARFU 26/6/230	AR 34/3/230 v*	AR 34/3/400
SPECIFICATION	UNIT											
Revolutions per minute (RPM)	RPM	3000	3000	3600	6000	6000	6000	6000	6000	6000	0-5220	3000
Max. centrifugal force	kN	3.00	3.00	3.47	3.47	3.47	6.47	3.47	3.47	3.47	0-6.93	3.47
Voltage	V	230, 3~	400, 3~	230, 3~	42, 3~	42, 3~	42, 3~	250, 3~	110-130, 3~	220-240, 3~	0-400, 3~	400, 3~
Current	A	1.75	0.57	1.1	8.0	8.0	8.0	1.3	12.0	6.0	1.3	0.75
Weight	kg	7.0	6.2	5.5	6.2	6.4	7.5	4.6	11.2	11.2	6.3	7.0
Fastening (Length x width)	mm	90x125	90x125	90x125	90x125	90x125	90x125	90x125	90x125	90x125	120x120	120x120

EXTERNAL VIBRATORS

		AR 34/6/042	AR 34/6/250	AR 43/3/230 v*	AR 43/3/400	AR 43/6/042	AR 43/6/250	AR 52/6/042	AR 52/6/250	AR 52/9/042	AR 53/3/400	
SPECIFICATION	UNIT											
Revolutions per minute (RPM)	RPM	6000	6000	0-5220	3000	6000	6000	6000	6000	9000	3000	
Max. centrifugal force	kN	6.98	6.98	10.52	10.10	10.10	10.10	14.14	14.14	13.77	14.14	
Voltage	V	42, 3~	250, 3~	0-400, 3~	400, 3~	42, 3~	250, 3~	42, 3~	250, 3~	42, 3~	400, 3~	
Current	A	9.0	1.7	1.5	1.5	15.0	15.0	18.2	2.7	14.0	1.7	
Weight	kg	5.9	5.9	8.8	12.1	8.4	8.4	18.6	18.6	17.9	16.8	
Fastening (Length x width)	mm	120x120	120x120	90x154	90x154	90x154	90x154	120x120	120x120	120x120	90x154	

EXTERNAL VIBRATORS

		AR 53/6/042	AR 53/6/250	AR 53/9/042	AR 53/9/250	AR 54/6/250	AR 62/6/042	AR 62/6/250	AR 63/6/250	AR 64/1.5/400	AR 64/3/230	AR 64/3/400
SPECIFICATION	UNIT											
Revolutions per minute (RPM)	RPM	6000	6000	9000	9000	6000	6000	6000	6000	1500	3000	3000
Max. centrifugal force	kN	14.14	14.14	13.77	13.77	14.14	19.03	19.03	19.03	5.05	16.05	16.05
Voltage	V	42, 3~	250, 3~	42, 3~	250	250, 3~	42, 3~	250, 3~	250, 3~	400, 3~	230, 3~	400, 3~
Current	A	18.2	2.7	14	2.4	3.1	21.5	3.1	3.1	1.4	3.0	1.7
Weight	kg	12.3	11.6	11.6	13.6	13.4	20.2	20.2	13.9	21.0	18.7	18.7
Fastening (Length x width)	mm	90x154	90x154	90x154	90x154	120x120	120x120	120x120	90x154	120x120	120x120	120x120

EXTERNAL VIBRATORS

		AR 64/6/042	AR 64/6/250	AR 64/9/042	AR 75/1.5/400	AR 75/3/230 v*	AR 75/3/400	AR 75/6/042	AR 75/6/250	AR 75/9/042	AR 75/9/250	
SPECIFICATION	UNIT											
Revolutions per minute (RPM)	RPM	6000	6000	9000	1500	0-5220	3000	6000	6000	9000	9000	
Max. centrifugal force	kN	19.03	19.03	18.14	10.29	24.12	25.23	26.56	26.56	26.38	26.38	
Voltage	V	42, 3~	250, 3~	42, 3~	400, 3~	0-400, 3~	400, 3~	42, 3~	250, 3~	42, 3~	250, 3~	
Current	A	21.5	3.1	16.0	3.4	3.8	2.4	32.0	7.5	28.0	4.3	
Weight	kg	13.8	13.8	12.9	36.5	30.5	33.0	26.8	26.8	27.5	27.5	
Fastening (Length x width)	mm	120x120	120x120	120x120	95x180	95x180	95x180	95x180	95x180	95x180	95x180	

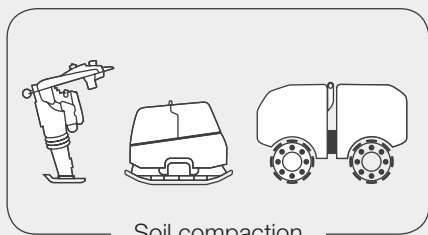
\* The external vibrator has a variable RPM of 0 - 5,220 RPM

# Everything for your project.

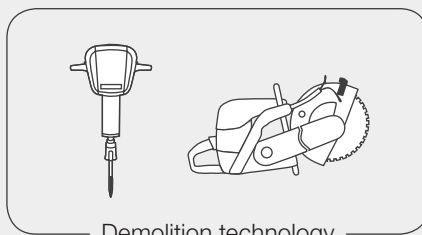


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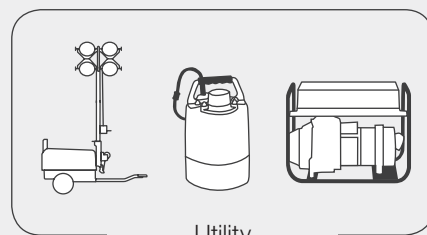
Wacker Neuson offers you the complete range of solutions of powerful quality products combined with services that back you up in any situation.



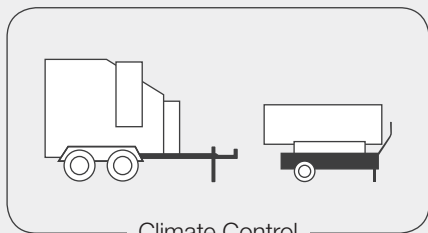
Soil compaction



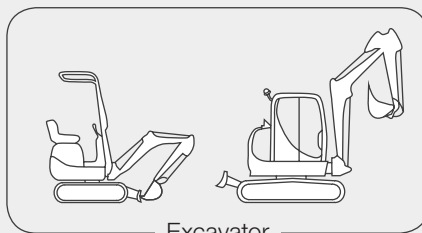
Demolition technology



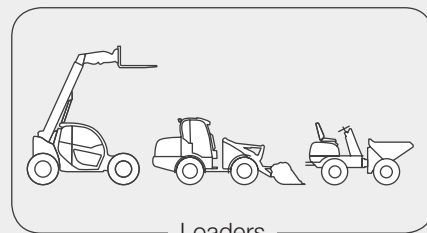
Utility



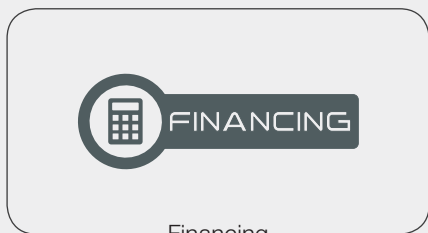
Climate Control



Excavator



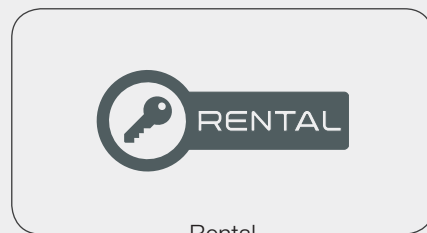
Loaders



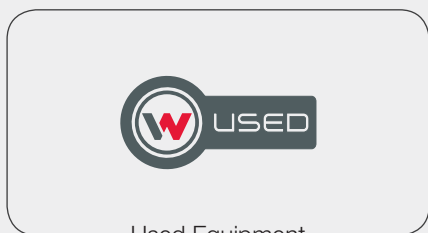
Financing



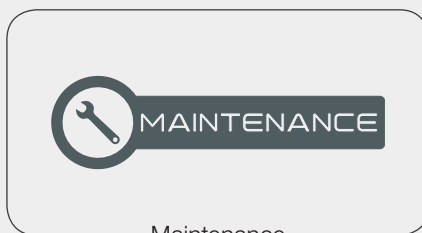
Service and spare parts



Rental



Used Equipment



Maintenance

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