

# ELECTRIC DRIVES

## GEARLESS MACHINES



# F-PACK

The right drive for any  
elevator application



The F-PACK is a perfectly fine-tuned system that includes Wittur WSG-S elevator machines and the WLD, a customized inverter with built-in database of our WSG-S machines.

## F-PACK highlights:

- ▶ Elevate comfort and reliability to the next level
- ▶ Benefit from getting exactly the drive you need
- ▶ Optimize performance and grid protection
- ▶ Built to last
- ▶ Easy plug&play installation (no line choke, no EMC filter, no motor contactors required)
- ▶ All rope-directions for the elevator machines allowed
- ▶ Installation in shaft without cabinet possible
- ▶ No inverter derating at low speeds
- ▶ Longer motor lifetime
- ▶ Rated loads 320 ... 3000 kg
- ▶ Elevator-set-up tool in local language available
- ▶ Output current: 10 ... 110 A
- ▶ Overload current: 16 ... 198 A
- ▶ Power range: 4 ... 55 kW
- ▶ EMC standards EN 61800-3:2012+A1:2012
- ▶ EN 81-20:2014 & EN 81-50:2014 & Lift Directive LD 2014/33/EU



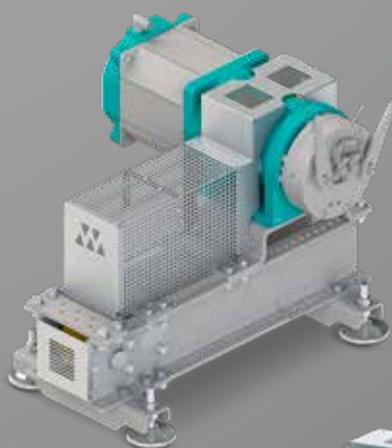
# Bed Plates

The tailor made solution  
for your project

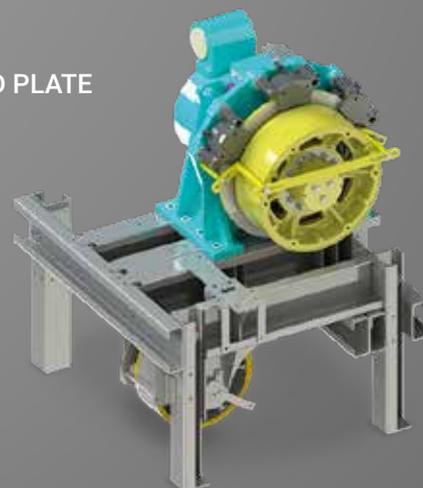
Our tailor-made solutions exceed in terms of easiest installation, flexibility, safety, design and transport  
Wittur can supply the best bed plate solution for each application.

## Bed Plates advantages:

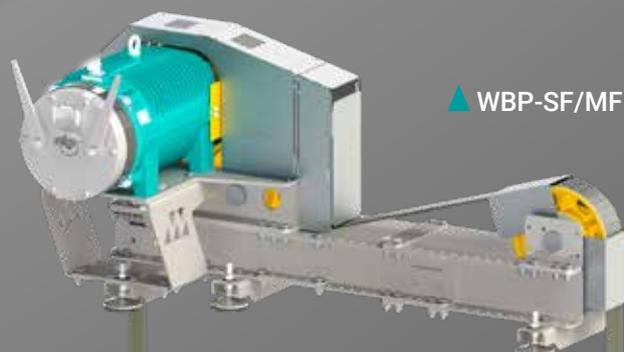
- ▶ Tailored solutions for the whole range of Wittur drives
- ▶ Optimized design for longest rope life cycle
- ▶ Position of pulleys can be easily adapted to the existing rope downfall
- ▶ Millimetric fine-tuning of the roping
- ▶ Available for different suspensions
- ▶ Different pulley sizes available
- ▶ Optional damping devices to reduce operating noise and vibrations
- ▶ Availability of optional safety covers for all moving parts (optional)
- ▶ Flexible pre-assembly status either for easy handling or fast installation



▲ WBP-TR



▲ BED PLATE



▲ WBP-SF/MF

# Servogearless range



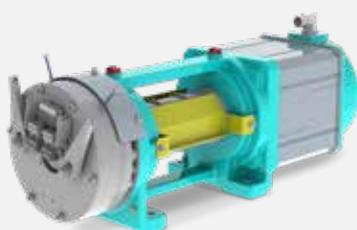
## WSG-RF

Gearless synchronous lift machine, especially developed for MRL



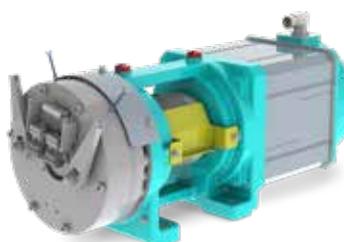
## WSG-TS

Gearless synchronous lift machine especially developed for standard steel ropes.



## WSG-TB

Especially developed for Polyropes/belts



## WSG-TR

Especially developed for ropes with plastic sheathing



## WSG-SF

Especially developed for machine-roomless (MRL) solutions



## WSG-MF

Especially developed for machine-roomless (MRL) solutions



## WSG-LF

Heavy-Duty machine for energy-efficient applications



# Comparison chart



**WSG-RF**

**WSG-TS**

**WSG-TB**

**WSG-TR**

**WSG-SF**

**WSG-MF**

**WSG-LF**

	WSG-RF	WSG-TS	WSG-TB	WSG-TR	WSG-SF	WSG-MF	WSG-LF
<b>Rated load up to [kg] for suspension 2:1</b>	1050	1150	2000	1150	1500	1800	3000
<b>Rated speed [m/s] for suspension 2:1</b>	0,63 ... 1,6	0,5 ... 1,0	0,5 ... 1,6	0,5 ... 1,6	0,5 ... 2,0	0,5 ... 2,0	0,63 ... 3,5
<b>Shaft load up to [kN]</b>	24	35	24 ... 35	24 ... 35	26	45	63 ... 100
<b>Traction sheave diameter [mm]</b>	120, 160	(160), 180	100	120	160, 210, 240, 320, 400, 480	210, 240, 270, 320, 400, 480, 520	320, 400, 480, 520, 600, 650, 686
<b>EU type examination cert.</b>	EU-BD 1051 / 1093	EU-BD 1056 / 1055	EU-BD 1051 / 1056 / 1093 / 1055	EU-BD 1051 / 1056 / 1055	EU-BD 1034, 1051, 1056	EU-BD 1052, 1053, 1054	EU-BD 1077, EU-BD 1014/1
<b>Motor</b>	synchronous, 14 poles	synchronous, 16 poles	synchronous, 14/16 poles	synchronous, 14/16 poles	synchronous, 16 poles	synchronous, 20 poles	synchronous, 20 poles
<b>Dimension (approx.) [mm]</b>	210 x 313 x 518	262 x 331 x 722	262 x 331 x 931	262 x 331 x 722	313 x 320 x 660	360 x 438 x 804	475 x 586 x 1055
<b>Weight (approx.) [kg]</b>	110 ... 130	150 ... 183	100 ... 225	95 ... 171	121... 167	266 ... 368	570 ... 825

**Key Characteristics**

<ul style="list-style-type: none"> <li>▶ Developer for MRL solutions for ropes with plastic sheathing</li> <li>▶ Compact design for reduced headroom</li> </ul>	<ul style="list-style-type: none"> <li>▶ Developer for MRL solutions for standard steel ropes</li> <li>▶ Compact design for reduced headroom</li> </ul>	<ul style="list-style-type: none"> <li>▶ Compact design for reduced headroom Especially developed for Polyropes/belts</li> <li>▶ Central traction sheave for smooth ride</li> </ul>	<ul style="list-style-type: none"> <li>▶ Compact design for reduced headroom Especially developed for ropes with plastic sheathing</li> <li>▶ Dust cover for brake air gap</li> </ul>	<ul style="list-style-type: none"> <li>▶ Modular design</li> <li>▶ Customized traction sheaves available</li> <li>▶ Integrated encoder</li> <li>▶ Rope tension in all directions</li> <li>▶ Drive package F-Pack available</li> </ul>	<ul style="list-style-type: none"> <li>▶ Many customization options</li> <li>▶ Rope tension in all directions</li> <li>▶ Dust cover for brake air gap</li> </ul>	<ul style="list-style-type: none"> <li>▶ Heavy duty version for applications with machine room (MR)</li> <li>▶ Drive package F-Pack</li> </ul>
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# Beamer 2

With a nominal torque of 9200 Nm in the WSG-52.3 execution, this machine is designed to elevator as much as 9800 kg rated load in 2:1 roping. The travelling speed goes up to a breath-taking 12 m/s (in 1:1 application) which places Wittur in a unique position as independent component manufacturer.

## Beamer Range



### WSG-08

Flat design for MRL and MR solutions



### WSG-21

Intensive use elevators and health-care elevators



### WSG-25

Mid- and High-Rise applications



### WSG-29

Mid- and High-Rise applications



### WGG-29

Patented split housing gearless for High-Rise mod



### WSG-52

The top of the range, heavy-duty, high-rise gearless traction machine



# Comparison chart



**WSG-08**



**WSG-21**



**WSG-25**



**WSG-29**



**WGG-29**



**WSG-52**

	WSG-08	WSG-21	WSG-25	WSG-29	WGG-29	WSG-52
<b>Rated load up to [kg] for suspension 2:1</b>	1600	3000	4000	5000	5000	9800
<b>Rated speed [m/s] for suspension 2:1</b>	0,6 ... 2,5	1,0 ... 5,0	1,0 ... 5,0	1,0 ... 5,0	1,0 ... 5,0	1,0 ... 6,0
<b>Shaft load up to [kN]</b>	55	140	200	300	300	520
<b>Traction sheave diameter [mm]</b>	340, 400	530, 610, 650, 686	530, 610, 650, 686, 750	650, 750	650, 750	650, 800
<b>EU type examination cert.</b>	EU-BD 715	Inspecta 15656/1	EU-BD 908	EU-BD 1030	EU-BD 1030	EU-BD 1030
<b>UL/CSA approved</b>	yes	yes	yes	yes	yes	no
<b>Motor</b>	synchronous	synchronous	synchronous	synchronous	synchronous	synchronous
<b>Dimension (approx.) [mm]</b>	836 x 720 x 404	893 x 942 x 1054	1000 x 1092 x 1275	1220 x 1110 x 1380	1220 x 1110 x 1380	1350 x 1355 x 2392
<b>Weight (approx.) [kg]</b>	298 ... 420	1126 ... 1398	1775 ... 1925	2610 ... 2825	2800 ... 3000	7920 ... 8351
<b>Machine room required</b>	yes / no	yes	yes	yes	yes	yes

**Key Characteristics**

- ▶ 2 or 3 brakes possible
- ▶ Flat design

- ▶ Smooth ride comfort
- ▶ 2 or 3 brakes
- ▶ Rope tension in all directions

- ▶ High speed, smooth ride
- ▶ Customized winding design, e.g. for regenerative use

- ▶ Brakes monitored for wear
- ▶ Customized groove profiles
- ▶ Frame, diverter pulley available
- ▶ Double-wrap possible

- ▶ Ideal for modernization
- ▶ Max width 800 mm
- ▶ Max weight of the biggest part 1500 kg

- ▶ Voltage variant for regenerative drive available
- ▶ Digital communication interface via encoder and smart machine solutions available



WITTUR

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