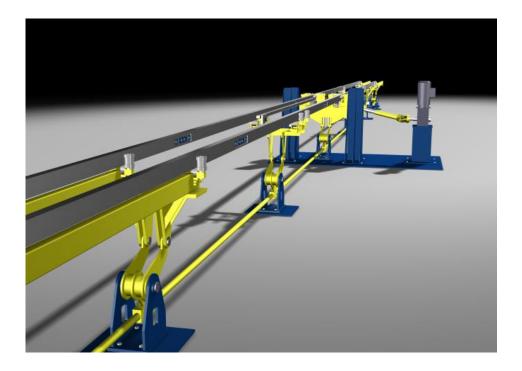


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# **Expert-Tünkers** Lift shuttle systems EHS1000 Pres 0 51 s Ar 9 5 . . 1 -



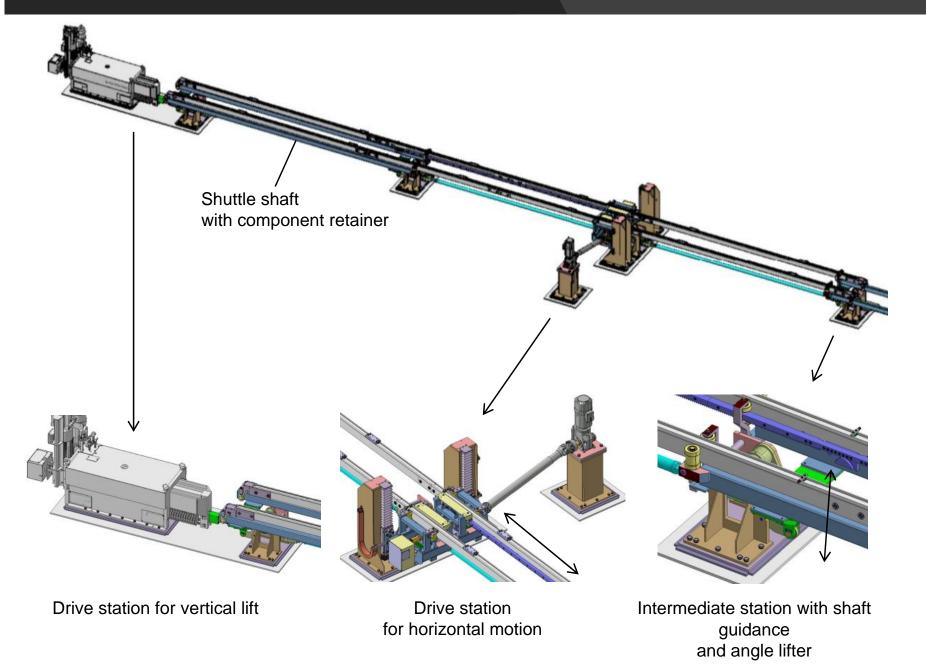
EXPERT-TÜNKERS lift shuttle systems transport several components synchronically, smoothly and shock-free from station to station. The components are lifted off synchronically, transferred horizontally and precisely deposited again at the next station.



## Expert lift shuttle Constructional installation



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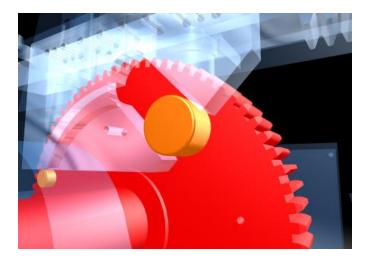
3

## Horizontal drive



The horizontal drive of standard lift shuttle systems is activated by an EXPERT-TÜNKERS link drive.

The acceleration and deceleration movement of the link drive are generated by a roller bolt moving into the link drive. After leaving the motion link the transport of the components in the area V-constant is activated by the spur gear that engages with the gear rack.



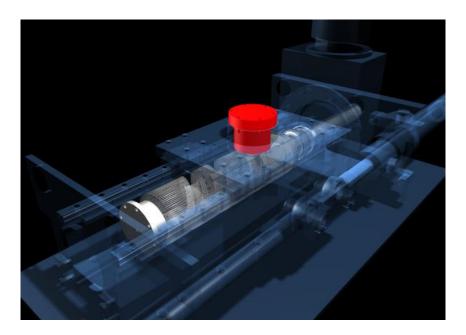
Advantages:

- Most precise, form-closed, mechanically locked end position (no positioning control required)
- Acceleration and deceleration pursuant to optimized laws of motion in accordance with the VDI guideline no. 2143
- Exceeding of the end positions is not possible.



For the vertical motion Expert trusts on roller technology.

- The roller drive is activated by a gear motor.
- Acceleration and deceleration of the customer load is generated via a nut milled into the cylindrical cam.
- The high-performance cam follower transfers the accelerating and deceleration motion form-closed to the linear units.
- The mechanically synchronized connection to the lever mechanism of the lift shuttle is achieved by the traction rod.



## Advantages of roller technology for vertical drives



- Approved drive concept of cylindrical cam and cam followers
- Smooth and shock-free drive movements
- Freely selectable position of component transfer
- Gentle component transfer at V = 0 mm/sec.
- Acceleration and deceleration pursuant to optimized laws of motion in accordance with the VDI guideline no. 2143
- Hydro-pneumatic mass balance system
- Low input power
- Most precise, form-closed, mechanically locked end positions

## **Technical data / construction**



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#### Technical data

Number of stations: 3 to 10 stations as a standard.

Customer load: Max. 250 kg per station, see diagram.

Horizontal lift: Min. 3000 mm, max. 6500 mm, in 100 mm steps.

Lifting time - horizontal lift: see diagram.

Vertical lift: Min. 500 mm, max. 900 mm.

Lifting time of vertical lift: see diagram.

Shaft distance: Min. 550 mm, max. 1000 mm, in 50 mm steps.

Height: 800 mm from floor level to top edge of the clamping piece in the lower shuttle position.

Technical construction

EXPERT standard lift shuttle systems are designed, constructed and manufactured in accordance with the known requirements of the automotive industry.

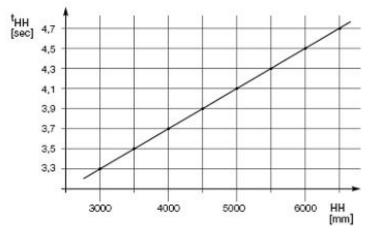
These are for example:

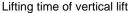
- Bellows with weld-resistant design
- Lifetime lubrication
- Maintainability
- MTTR (Mean Time To Repair)
- MTBF (Mean Time Between Failure)
- FMEA (Failure Mode Effect Analyses)

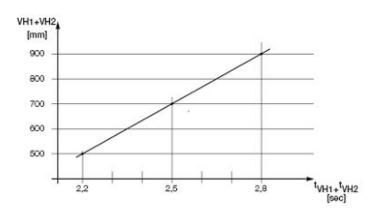
Please feel free to contact us, if you have technical requirements which are not included in the standard program.

#### Travel time of horizontal lift

The lifting times are subject to admissible customer load and station distance. Station distance up to 5,75 m: Max. admissible customer load per station = 250 kg Station distance up to 6,0 m: Max. admissible customer load per station = 220 kg Station distance up to 6,5 m: Max. admissible customer load per station = 175 kg







## Lift shuttle in the build-up phase



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## Reference List Standard Lift Shuttle Systems



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Manufacturer / Plant	Project / Vehicle	Number	Month / Year
Ford (Thailand)	U375	2	2013
Ford Valencia (Spain)	C344	2	2013
GM Shanghai (China)		5	2013
Jaguar (UK)	X760	1	2013
Landrover (UK)	L550	2	2013
GM Shanghai (China)	G60	1	12 / 2011
Ford Otosan (Turkey)	Transit	5	11 / 2011 + 12 / 2011
Peugeot Sochaux / Vigo (France / Spain)	B78 / T9	6	06 / 2011 + 10 / 2011
GM (Brazil)	Pick Up	3	09 / 2010
Opel Bochum	MPV7	1	07 / 2010
Ford (South Africa / Argentina)	Pick up	3	07 / 2010
Peugeot Poissy (France)	207 (successor)	1	06 / 2010
Porsche Zuffenhausen	911er (successor)	1	03 / 2010
VW Argentinia (Argentina)	RPU / Robust Pick Up	1	10 / 2008
Peugeot Sochaux (France)	TBN / T84	1	07 / 2007
DC South Africa (South Africa)	W 203	1	06 / 2007
Seat Martorell (Spain)	SE 250 / Ibiza	6	03 / 2007
Karmax (Canada)	Ford D471 / D385	2	11 / 2006
GM (Mexico)	901 / 902	1	05 / 2006
PSA Sevel Nord (France)	G9 / 807	2	04 / 2006



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#### We are looking forward to your inquiry

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