# **SCHARF**





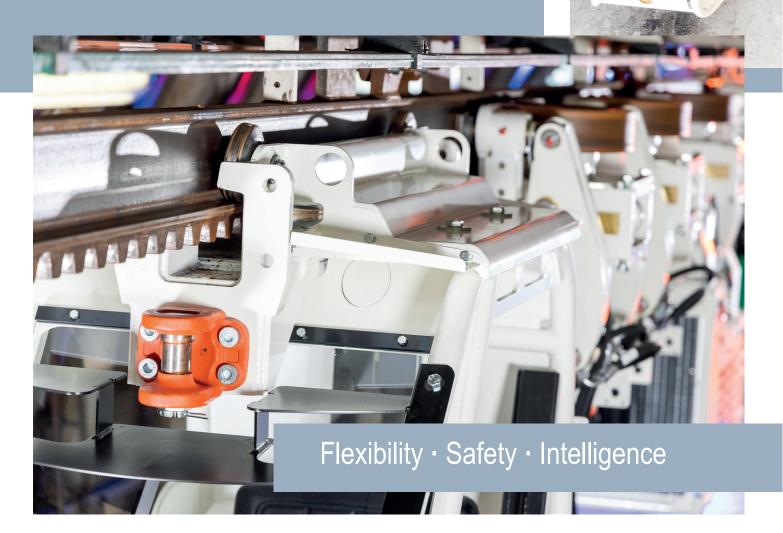




#### **Product features**

- China III MA approved
- Economical 150 kW 4-cylinder turbo diesel engine with intercooler
- + Electric, regulated fuel injection
- + Engine control unit with specially developed SMT-Scharf mapping
- + Dry exhaust gas cooling
- + Traction drive unit with parallel pressing system
- + Powerful generator with 4 separate power supplies (3 of them intrinsically safe)
- + hydraulic engine starter
- + optionally remote controlled
- + Modular design
- + Intrinsically safe control system
- + Data exchange with mine IT infrastructure





With various lifting devices, the hydraulic shield can be transported back from roadways and installed underground, whereby conventional material transport and personnel transport can be realised.

Remote control and unmanned operation is available as an option.

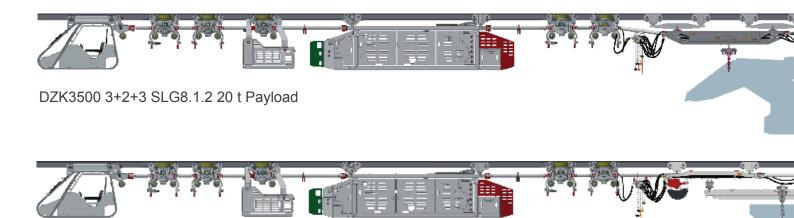




# Product samples



DZK3500 3+2+3 SLG4.2 1 Container 1 Passenger cab 10 Persons



DZK3500 3+2+3 SLG8.2 32 t Payload



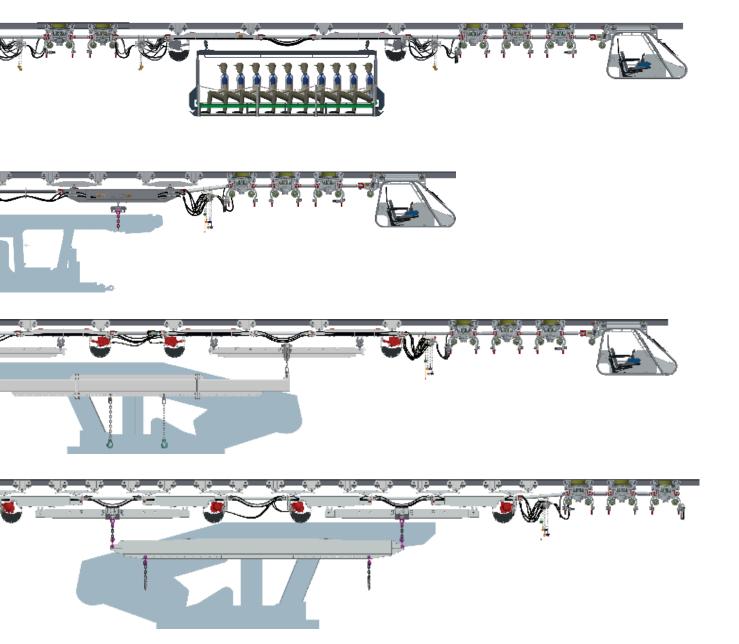
DZK3500 3+2+3 SLG16.5 48 t Payload

## SCHARF engines



In accordance with the requirements of the State Safety
Regulatory Commission for the emission improvement of underground diesel engines, SMT Scharf adopted several latest technologies and has launched a new generation of "National III" standard monorail.

The SCHARF diesel engine is based on a Liebherr engine block and was specially adapted to the application. In this way, we combine the best engine tuning with large-scale production technology. This engine convinces with a balanced weight to power to torque ratio. It has excellent consumptionvalues and is the lowest-emission engine in its class to date.



## Technical Data

Configuration	Minimum	Standard	Maximum
	DZK3500 2+1	DZK3500 3+3	DZK3500 5+5
No. of drives	3	6	10
Traction force	60 kN	120 kN	200 kN
Max. Speed*	3,4 m/s	1,7 m/s	1 m/s
Holding force	90 kN	198 kN	342 kN
Diameter friction wheel	340 mm, optional 450 mm		
Electrical System			
Operating voltage	3 x 12 V / 2 A		
Protection class	SYST IM2 Exib I		
Diesel engine			
Туре	4-Cylinder / Turbo Diesel		
Nominal Power	150 kW at 2.100 min-1		
Starter	Hydraulic		
Protection class	ATEX		
Exhaust gas cooling system	capsuled water circuit		
Operating conditions			
Ambient temperature	-10° C bis +40° C		
Rel. Humidity	90%		
Horizontal curve radius	min. 4 m		
Vertical curve radius	min. 8 m		
Max. Rail inclination	30 Degrees		

#### SMT SCHARF Group

The SMT Scharf Group is the global technology leader for derailment-proof monorails and floor mounted Duorail-vehicles in underground mining and tunneling. Our portfolio expansions and organic growth in the area of tunnel logistics and rubber-tyred vehicles have given us an even broader position as a comprehensive solutions provider, enabling us to offer our global customers individual solutions.

The Scharf brand has been known for high machine quality and reliability for over 70 years. Our solutions are the first choice when it comes to maintaining high safety standards in particularly challenging geological environments.

#### Hidden champion, world leader in the niche!

With our worldwide network of subsidiaries and commercial agencies, we ensure optimum support for our globally active customers. No matter in which time zone and in which national language, our specialists are locally available for you.



