

PERFECT TO WORK WITH

TREPEL

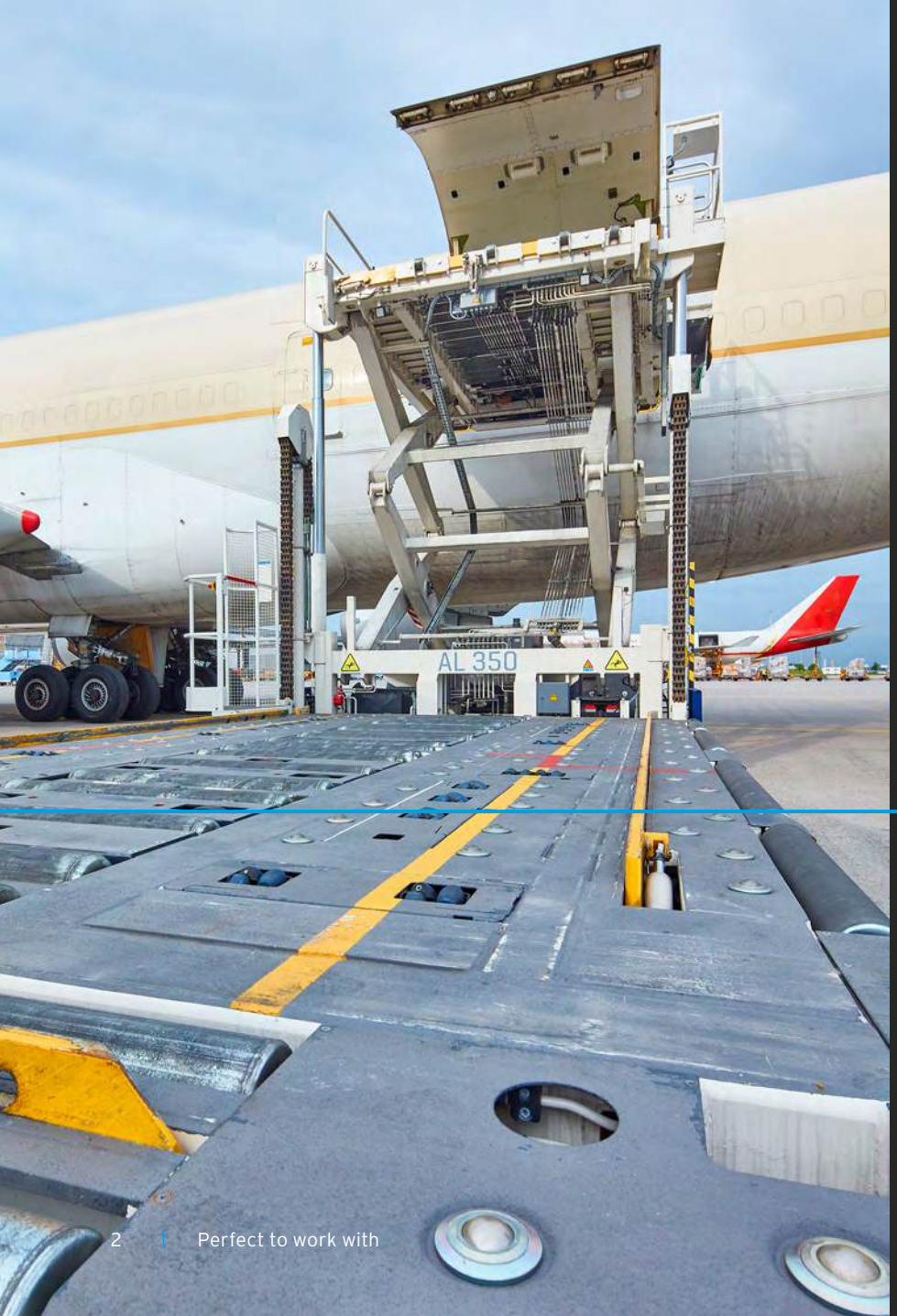


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TREPEL – Perfect to work with

With decades of experience TREPEL has managed to make its equipment a successful brand valued worldwide.

Next to a complete programme of cargo high loaders, TREPEL offers a comprehensive product range, established under the term "Ground Support Equipment" (GSE) which deals with all avenues of freight handling and aircraft movements on the airport apron such as cargo loaders, cargo transporters and aircraft tractors.

With its global organisation consisting of more than 300 people and more than 30 sales and service centres worldwide, TREPEL is fully committed to meet the demanding needs of the current market with its high quality products and outstanding service.

Many customers say today: **"TREPEL – Perfect to work with"**.

They know why!

Success
on the ramp

Reliability, speed and teamwork are the ingredients for success on the ramp – "a contest against time". Innovative technology, certified quality and exceptional service are the foundation of this success.

TREPEL, one of the leading manufacturers in the growing GSE market, aims to provide units with maximum availability and efficiency and, at the same time, having low maintenance costs. This is "TREPEL's" philosophy.

Decades of experience, an abundance of knowledge and ideas are important elements of market leadership, but equally important is the constant intensive dialogue with our partners on the ramp. Worldwide operating sub-suppliers of components are a part of the on-time performance of TREPEL equipment.



User-oriented concept

In the race for more economic efficiency and productivity, TREPEL is the right partner for customers worldwide. Permanent and uncompromising developments of a customer-friendly and user-oriented concept are the foundations of our success.



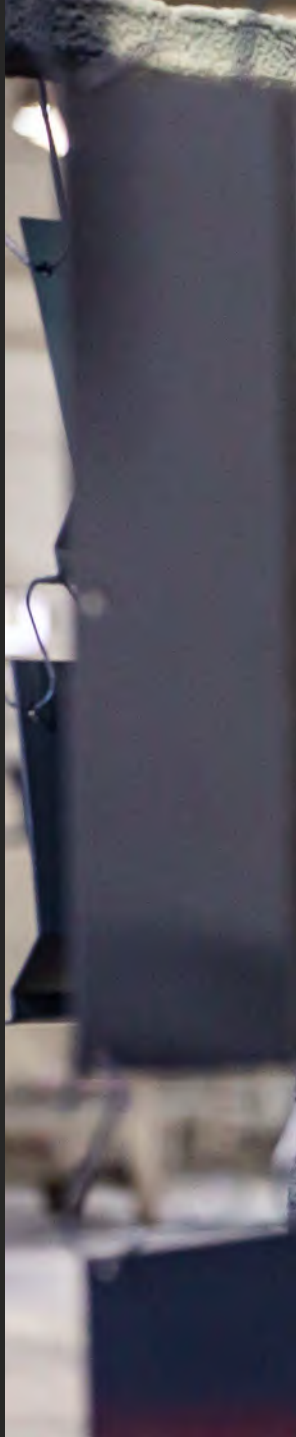


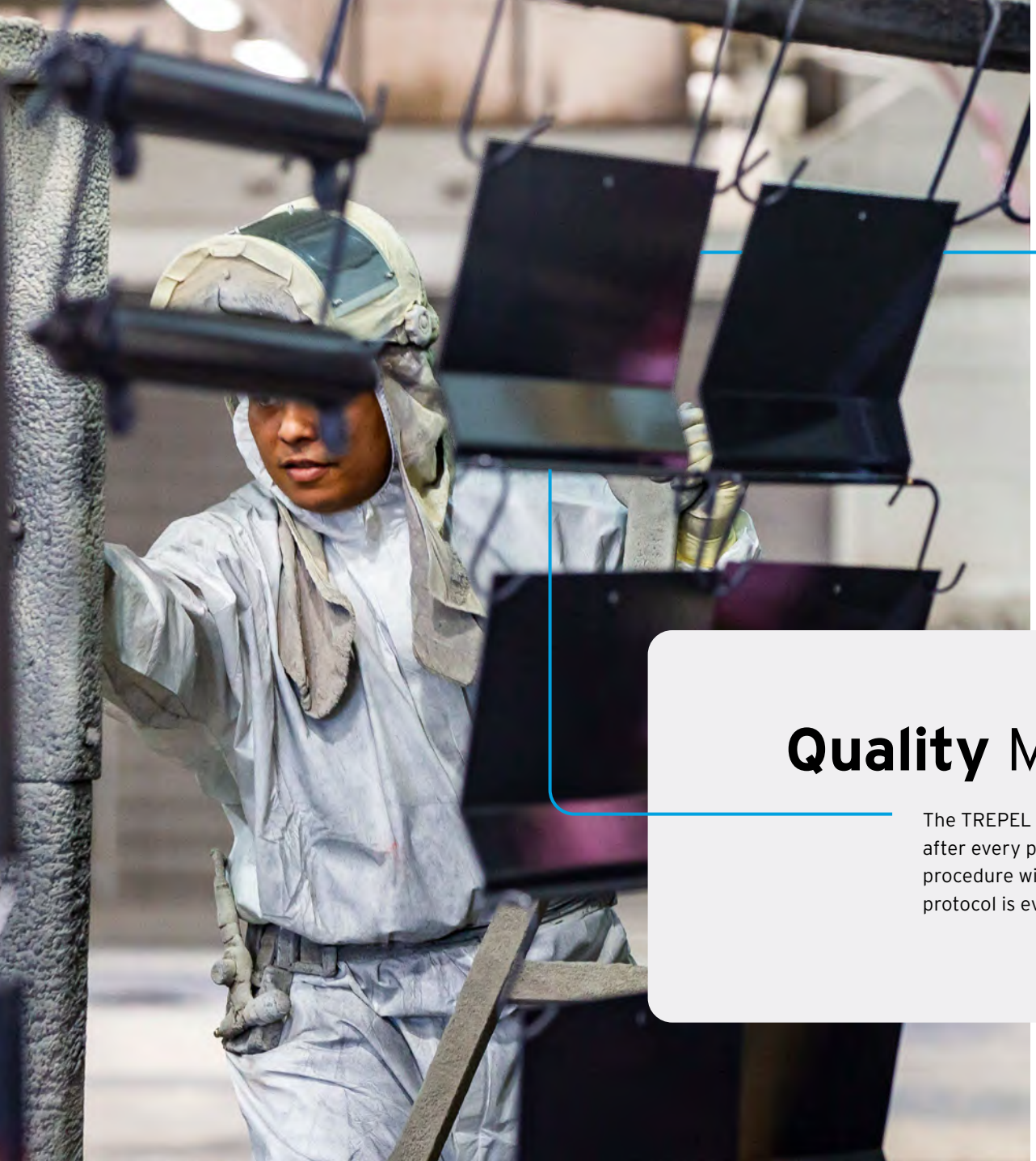
Technology **at higher level**

The entire TREPEL product range is subject to a highly developed Quality Management system that goes far beyond the ISO certification and which calls for strict adherence to its guidelines and standards.

It is self-evident that these high standards also apply to the quality of the products and service. TREPEL is a synonym for high class workmanship and cost-effective products worldwide; not without reason is TREPEL one of the world market leaders for cargo loaders since many years.

Also for the product range of aircraft tractors, the same template: Efficiency and high availability are attributes that result only through top quality. Besides, new methods in engineering and technology are applied. With total 100,000 square metres space, all equipment and newly developed products are built in serial production.







Quality Management

The TREPEL quality management calls for quality insurance. Inspections after every production step! A thorough, painstaking final inspection procedure will make sure that only top quality will be delivered. The test protocol is evidence! Quality is ensured during production process!

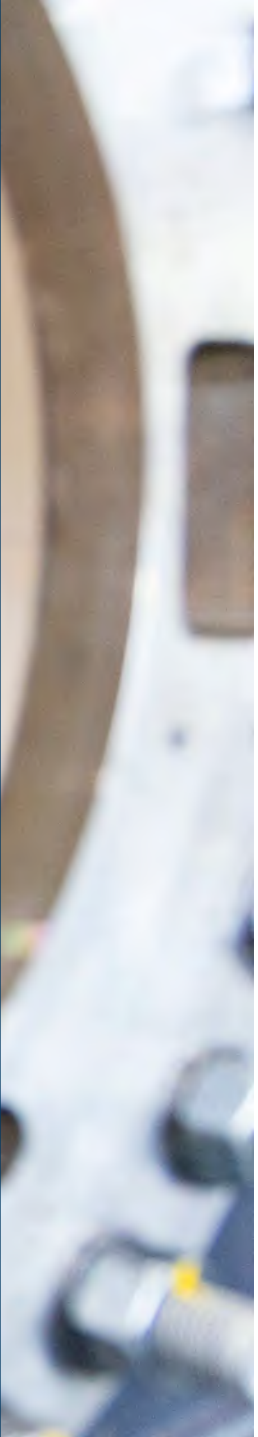


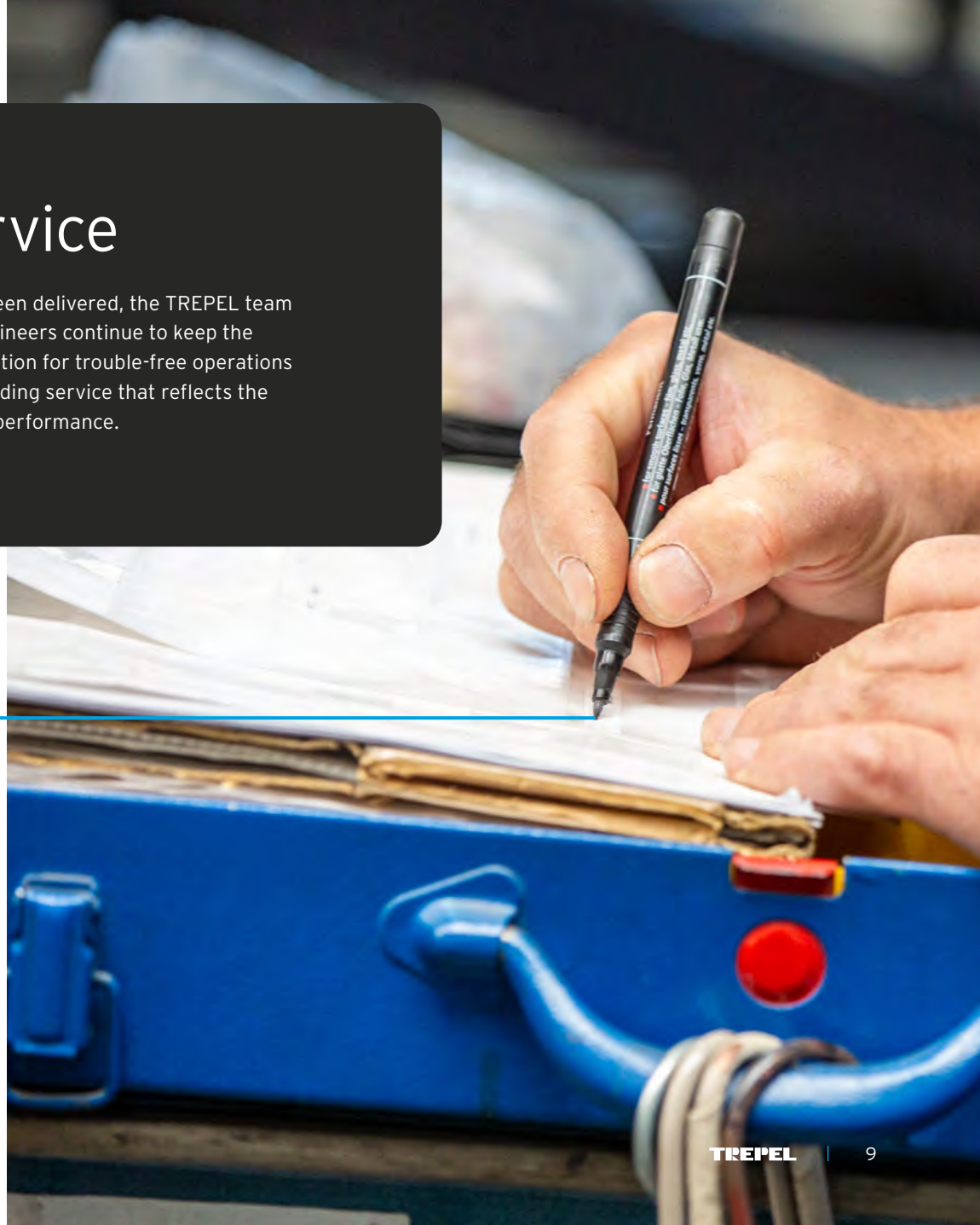
TREPEL teamwork

The TREPEL team: Sales, Service, R&D and Workshop Management work hand in hand with material and production management to achieve the quality standard of a product that will fulfil the ever-changing requirements of today‘s demanding airport operations.

Customer Service

After the equipment has been delivered, the TREPEL team of experienced service engineers continue to keep the equipment in perfect condition for trouble-free operations for many years: an outstanding service that reflects the exceptional TREPEL team performance.





CHARGER 380

Fast-moving power package

The CHARGER 380 towbarless tractor is the most powerful and capable in its class. Ideal to handle the B777 and A340 aircraft types, the CHARGER 380 is perfect for long distance towing as well as inter-gate servicing.

This state-of-the-art tractor includes oversteer protection – with anti-collision and obstacle detection protection options – as well as superior comfort attributable to hydro-pneumatic suspension.



Options

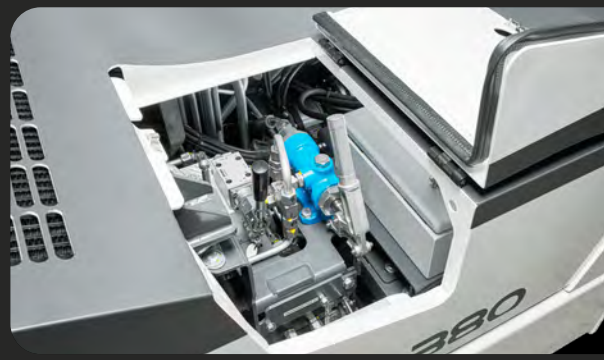
Air conditioning, auxiliary heating system, 90 kVA GPU, central greasing station, overtorque protection system, anti-collision and obstacle detection, Tire Pressure Monitoring System, 3rd seat, LED strobe lights.

Further options on request. Please consult the technical specification for more information. We reserve the right of technical alterations.

Performance	CHARGER 380
Capacity	Towing / Pushing up to 380 tons · Lifting up to 41.2 tons
Dimensions (L x W x H)	7.985 x 4.075 x 1.800 mm (standard configuration)
Drawbar pull	130 kN (calculated theoretical value, dependent on loaded weight and adhesion factor)
Driving speed	32 km/h (depends on aircraft weight)
Turning radius	9.700 mm

Design	
Engine	CUMMINS QSB6.7 diesel, COM IIIA / EPA – TIER 3 · Other engines or emission classes on request
Transmission	Hydrostatic transmission, hydraulic wheelmotors on rear wheels
Axle	Front axle with hydro-pneumatic suspension, rear drive axle rigid
Tyres	Front steering axle: 385/65 R22.5 · Rear drive axle: 325/95 R24 twinwheels
Steering	Hydraulic power steering with emergency steering pump · Steering axle equipped with angle sensor
Braking system	Dual circuit hydraulic brake system, multi-disc brakes at rear, drum brakes at front wheels, safety brake pressure accumulators for emergency braking in case of engine failure, parking brake on rear axle
Electric system	24V DC for vehicle electric system
Driver's cab	Liftable, closed cabin with doors and 2 seats
Safety features	Quick aircraft release, manual emergency operation of each function of the pick-up device, TAPS (TREPEL Aircraft Protection System against oversteering)







CHALLENGER 150

Cost optimized small tractor

The CHALLENGER 150 is the perfect solution for customers who need to handle in particular the B737 and A320 fleets.

What's more is: The fully ballasted CHALLENGER 150 is also able to push out the B767-200/300 at Maximum Ramp Weight. The hydro-pneumatic front axle suspension provides best driving comfort for the operator.



Options

Doors with sliding windows or open driver's cab, air conditioning, central greasing station, park heating system, front axle steering.

With STAGE-IIIB/TIER4i engines the drawbar pull (DBP), the engine power and the top speed may vary.

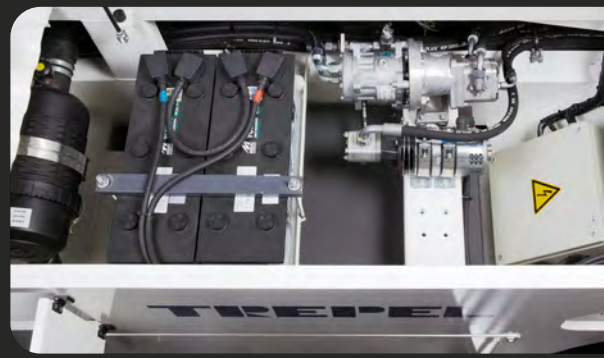
Further options on request. Please consult the technical specification for more information. We reserve the right of technical alterations.

Performance	CHALLENGER 150
Capacity	Aircraft weight up to 160 tons
Dimensions (L x W x H)	5.490 x 2.240 x 2.155 mm (standard configuration w/o couplings)
Drawbar pull	101 kN (calculated theoretical value, dependent on ballasted weight and adhesion factor)
Driving speed	Up to 28 km/h
Turning radius	4.700 mm
Weight	9 tons (without ballast) up to 15 tons (ballasted)

Design	
Engine	Deutz Diesel Engine TD 2.9 L4 (Stage-V), liquid-cooled Power output: 55.4 kW (75 PS / 74 HP)
Transmission	DANA powershift transmission, torque converter, 5 forward-, 3 reverse speeds
Axle	Front axle with hydro-pneumatic suspension, rear axle without suspension
Tyres	275/70 R22.5
Steering	Hydraulic powered steering, direct via Orbitrol · All wheel steering
Braking system	Dual circuit hydraulic multiple wet disc brakes, spring loaded parking brake
Electric system	24V DC for vehicle electric system
Driver's cab	Not liftable, cabin w/o doors with 2 seats







CHALLENGER 150 e

The new, narrow-body aircraft workmate

The CHALLENGER 150e electric tractor is the ideal machine for towing/ pushing narrow-body aircraft such as the B737 and A320.

With simple-to-use controls and a clean, crisp dash panel layout, the CHALLENGER 150e features hydro-pneumatic suspension, LED lighting, comfortable seating and heating/air conditioning options. It is just as easy to operate as the diesel version.



Options

Cabin with doors with sliding windows or open driver´s cab, central lubrication system, air conditioning, front axle steering, solid rubber tires, 2 on-board battery chargers, driving speed 25 km/h.

Further options on request. Please consult the technical specification for more information. We reserve the right of technical alterations.

Performance	CHALLENGER 150 e
Capacity	Aircraft weight up to 160 tons
Dimensions (L x W x H)	5.510 x 2.270 x 2.153 mm (standard configuration without couplings)
Drawbar pull	110 kN (calculated theoretical value, dependent on ballasted weight and adhesion factor)
Driving speed	20 km/h (depends on ballasted weight)
Turning radius	4.700 mm
Weight	11 tons (without ballast, with 3 traction batteries) up to 16 tons (ballasted, with 3 traction batteries)

Design	
Engine	2 electric drive motors each 31 kW · 1 electric motor for steering and braking: 7 kW · Traction batteries: 3 lead acid batteries (each 80 V, 300 Ah)
Transmission	DANA gearbox with 2 gears (only to shift on full stop). Forward/reverse drive in conjunction with the rotation direction of the electric motor
Axle	Front axle with hydro-pneumatic suspension, rear axle without suspension
Tyres	275/70 R22.5
Steering	Hydraulic power steering, direct via Orbitrol · All wheel steering
Braking system	Dual circuit hydraulic brake, disc brakes on each wheel, fail-safe emergency and parking brake at the rear axle
Electric system	24 V DC, combination of common relays and PLC controllers. Where possible, control logic functions are processed by the PLC
Driver's cab	Not liftable, cabin without doors with 2 seats







CHALLENGER 280

The workhorse for B787 and A350

The CHALLENGER 280 is the perfect solution for mid-size pushback operations, also for the upcoming Airbus A350 and Boeing B787 aircraft.

The versatile range of operational applications makes the CHALLENGER 280 the ideal workhorse. The durable quality components built in the drive train ensures low Total Cost of Ownership.



Options

Doors with sliding windows or open driver's cab, air conditioning, central greasing station, park heating system, front axle steering.

With STAGE-IIIB/TIER4i or STAGE-IV/TIER-4F engines the drawbar pull (DBP), the engine power and the top speed may vary.

Further options on request. Please consult the technical specification for more information. We reserve the right of technical alterations.

Performance	CHALLENGER 280
Capacity	Aircraft weight up to 300 tons
Dimensions (L x W x H)	5.930 x 2.400 x 2.110 mm (standard configuration w/o couplings)
Drawbar pull	220 kN (calculated theoretical value, dependent on ballasted weight and adhesion factor)
Driving speed	28 km/h (depends on ballasted weight)
Turning radius	5.600 mm
Weight	24 tons (without ballast) up to 28 tons (ballasted)

Design	
Engine	Deutz Diesel Engine TCD 3.6 (Stage-V), liquid-cooled Power output: 100 kW (136 PS / 134 HP)
Transmission	Power shift transmission, torque converter, 5 speed forward, 3 speed reverse
Axle	Front axle with hydro-pneumatic suspension, rear axle without suspension
Tyres	300/80 R22.5 TL
Steering	Hydraulic powered steering, direct via Orbitrol · All wheel steering
Braking system	Dual circuit hydraulic multiple wet disc brakes, spring loaded parking brake
Electric system	24V DC for vehicle electric system
Driver's cab	Not liftable, cabin w/o doors with 2 seats





CHALLENGER 280 e

The workhorse for the majority of widebody aircrafts

The CHALLENGER 280e electric conventional tractor is designed to handle a wide range of aircraft types up to B787 and A350.

Just like its Diesel brother the CHALLENGER 280e electric is equipped with hydro-pneumatic suspension, comfortable seating and heating / air conditioning options. World-class components ensure low maintenance costs and optimum life-time



Options

Cabin with doors with sliding windows or open driver's cabin, central lubrication system, air conditioning, front axle steering, 2 on-board battery chargers.

Further options on request. Please consult the technical specification for more information. We reserve the right of technical alterations.

Performance	CHALLENGER 280 e
Capacity	Aircraft weight up to 300 tons
Dimensions (L x W x H)	5.940 x 2.440 x 2.135 mm (standard configuration w/o couplings)
Drawbar pull	210 kN (calculated theoretical value, dependent on ballasted weight and adhesion factor)
Driving speed	18 km/h (depends on ballasted weight)
Turning radius	5.600 mm
Weight	24 tons (without ballast, with 2 traction batteries) up to 28 tons (ballasted, with 2 traction batteries)
Design	
Engine	3 electric motors · Motors for drive: 2 motors, each 46 kW · Motor for steering and braking: 11.5 kW Tractions batteries: 2 lead acid batteries (each 96V 875 Ah)
Transmission	DANA gearbox with 2 gears (only to shift on full stop). Forward/reverse drive in conjunction with the rotation direction of the electric motor
Axle	Front axle with hydro-pneumatic suspension, rear axle without suspension
Tyres	300/80 R22.5 TL
Steering	Hydraulic powered steering, direct via Orbitrol · All wheel steering
Braking system	Dual circuit hydraulic brake, disc brakes on each wheel, fail-safe emergency and parking brake at the rear axle
Electric system	24V DC, combination of common relays and PLC controllers. Where possible, control logic functions processed by the PLC
Driver's cab	Not liftable, cabin w/o doors with 2 seats







CHALLENGER 430

Adaptable medium-size aircraft tractor

The CHALLENGER 430 is a conventional aircraft tractor that is capable to handle push-back, repositioning and maintenance towing of aircraft up to a fully loaded Boeing B777.

The hydro-pneumatic front axle suspension provides best possible driving comfort for the operator. The crane-liftable power-pack compartment minimizes downtime of the tractor and reduces maintenance costs.



Options

Integrated hydraulic jacks, open or closed rear driver's stand, air conditioning, park heating system, GPU 90 kVA, central greasing station, PREMIUM cab.

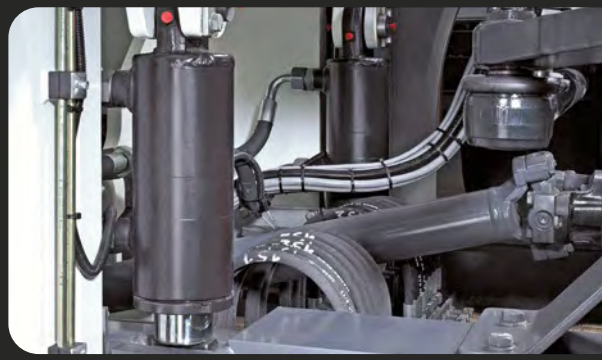
With STAGE-IIIB/TIER4i or STAGE-IV/TIER-4F engines the drawbar pull (DBP), the engine power and the top speed may vary.

Further options on request. Please consult the technical specification for more information. We reserve the right of technical alterations.

Performance	CHALLENGER 430
Capacity	Aircraft weight up to 380 tons
Dimensions (L x W x H)	6.910 x 2.700 x 2.060 mm (standard configuration w/o couplings)
Drawbar pull	335 kN (calculated theoretical value, dependent on ballasted weight and adhesion factor)
Driving speed	30 km/h (depends on ballasted weight)
Turning radius	6.400 mm
Weight	27 tons (without ballast) up to 43 tons (ballasted)

Design	
Engine	Cummins Diesel Engine B6.7 (Stage-V), liquid-cooled Power output: 194 kW (264 PS / 260 HP)
Transmission	ZF-power shift transmission, converter gear, 6 speed forward, 3 speed reverse
Axle	Front axle with hydro-pneumatic suspension, rear axle without suspension
Tyres	14.00-24 ContainerMaster28PR E4 TT
Steering	Hydraulic powered steering, (operational) front axle steering via Orbitrol, (operational) rear axle steered electronically, 4 steering modes: Front axle steering, rear axle steering, diagonal steering, all wheel steering
Braking system	Dual circuit hydraulic disc brakes, spring loaded parking brake
Electric system	24V DC for vehicle electric system
Driver's cab	Standard cab, liftable, closed with 2 seats







CHALLENGER 550

Ideal solution for the new Jumbo

The CHALLENGER 550 has a lot of technical features built in its big brother, the CHALLENGER 700.

With its gross vehicle weight of up to 60 tons, the CHALLENGER 550 is designed in particular for push-back and maintenance towing of aircraft up to the size of a Boeing B747-8. A robust tow tractor at an economic price with low maintenance costs.



Options

Integrated hydraulic jacks, open or closed rear driver's stand, air conditioning, park heating system, GPU 90 kVA, central greasing station, PREMIUM cab.

With STAGE-IIIB/TIER4i or STAGE-IV/TIER-4F engines the drawbar pull (DBP), the engine power and the top speed may vary.

Further options on request. Please consult the technical specification for more information. We reserve the right of technical alterations.

Performance	CHALLENGER 550
Capacity	Aircraft weight up to 450 tons
Dimensions (L x W x H)	7.760 x 3.000 x 2.060 mm (standard configuration w/o couplings)
Drawbar pull	385 kN (calculated theoretical value, dependent on ballasted weight and adhesion factor)
Driving speed	Up to 27 km/h
Turning radius	6.900 mm
Weight	50 tons (without ballast) up to 60 tons (ballasted)

Design	
Engine	Cummins Diesel Engine B6.7 (Stage-V), liquid-cooled Power output: 194 kW (264 PS / 260 HP)
Transmission	ZF-power shift transmission, torque converter, 6 speed forward, 3 speed reverse
Axle	Front axle with hydro-pneumatic suspension, rear axle without suspension
Tyres	16.00 R25
Steering	Hydraulic powered steering, (operational) front axle steering via Orbitrol, (operational) rear axle steered electronically, 4 steering modes: Front axle steering, rear axle steering, diagonal steering, all wheel steering
Braking system	Dual circuit hydraulic disc brakes, spring loaded parking brake
Electric system	24V DC for vehicle electric system
Driver's cab	Standard cab, liftable, closed with 2 seats








CHARGER 380


fast.
strong.
comfortable.

CHAMP 35

The compact solution for handling all 61" ULD containers

The most compact CHAMP 35 with an even more efficient power pack. The CHAMP 35 is especially designed for the handling of small containers like LD2 or LD3.

Its extremely narrow transfer width makes it ideal to handle all 61"cargo doors at lower deck level, also capable to clear the front and rear doors of the A319. Extremely fast lifting, lowering and transporting speeds reflect this lower deck loader's high acceptance with turnaround times at an absolute minimum.



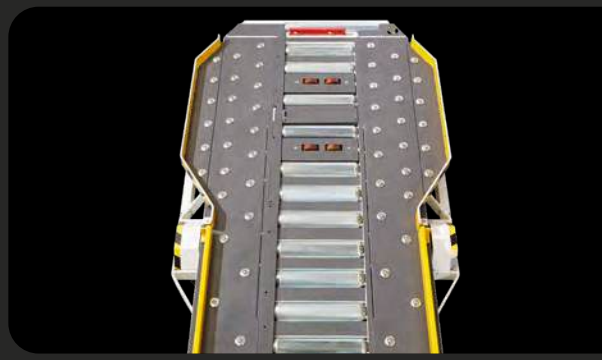
Options

Side loading of LD containers on rear of main platform.

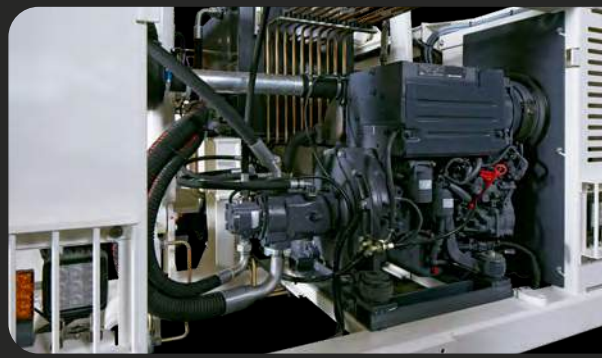
Further options on request. Please consult the technical specification for more information. We reserve the right of technical alterations.

Performance	CHAMP 35
Dimensions (L x W x H)	8.300 x 2.820 x 3.150 mm (standard configuration)
Capacity (both platforms lift and transfer)	3.500 kg
Lifting height front / main platform	1.900 to 3.500 mm / 485 to 3.500 mm
Loading width (between guide rails)	1.620 mm
Driving speed	15 km/h
Gradability	5 %
Turning radius	7.800 mm

Design	
Engine	Deutz 3-cylinder diesel D 2011 L03i (COM IIIA / EPA-TIER3) · Other engines or emission class on request
Transmission / axles	Open circuit hydrostatic drive system on steering front axle
Steering	Hydraulic power steering
Braking system	Dual circuit hydraulic multiple wet disc brake, additional spring-loaded emergency parking brake, dynamic brake system
Stabilisers	5 hydraulically operated stabilisers
Conveying system	Zinc-plated steel rollers for longitudinal transfer, rotating system on rear of main platform, hydraulically adjustable guide rails on front platform
Hydraulic system	Central hydraulic valve block, valves fitted with control light, 70 % of hydraulic lines rigid piping
Electric system	24V, relay controlled







CHAMP 35e

Green 3,5 ton loader

CHAMP 35e, the electric version of the most compact CHAMP 35, offers environmental friendly operation without affecting the performance.

The extremely narrow design is ideal to handle all 61" cargo doors at lower deck level, also capable to clear the forward and rear doors of the A319. The CHAMP 35e can be fitted with a 375 Ah lead / acid battery.



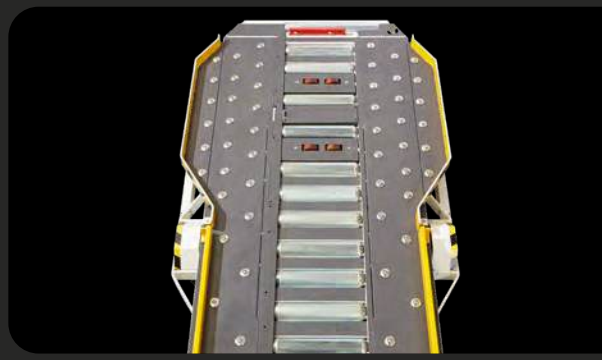
Options

Electrically powered hydraulic emergency system to lower platforms and lift stabilisers, etc.

Further options on request. Please consult the technical specification for more information. We reserve the right of technical alterations.

Performance	CHAMP 35 e
Dimensions (L x W x H)	8.300 x 2.820 x 3.150 mm (standard configuration)
Capacity (both platforms lift and transfer)	3.500 kg
Lifting height front / main platform	1.900 to 3.500 mm / 485 to 3.500 mm
Loading width (between guide rails)	1.620 mm
Driving speed	13 km/h
Gradability	5 %
Turning radius	7.800 mm

Design	
Engine / Propulsion	80V AC, S2 5 min 20 kW, S2 60 min 17 kW · 80V 550 A Inverter, 80V 375 Ah lead battery
Transmission / axles	Open circuit hydrostatic drive system on front axle
Steering	Hydraulic power steering
Braking system	Dual circuit hydraulic multiple wet disc brake, additional spring-loaded emergency parking brake
Stabilisers	5 hydraulically operated stabilisers
Conveying system	Zinc-plated steel rollers for longitudinal transfer, rotating system on rear of main platform, hydraulically adjustable guide rails on front platform
Hydraulic system	Central hydraulic valve block, valves fitted with control light
Electric system	24V, relay controlled







CHAMP 70

Freight handling with outstanding reliability

The CHAMP 70, TREPEL's 7 ton cargo high loader range, combines highest availability with extremely low operation and maintenance costs, making this versatile Pallet and Container high loader a real CHAMP.

Fast lifting speed as well as accurate freight transfer under all climatic conditions are true operational advantages. The design of the CHAMP 70 offers maximum safety for operating personnel, aircraft and loader. These performances bring freight handling to higher level.



Options

Side loading and rotation on rear of main platform (standard on 70W and 70U), electrically powered hydraulic emergency system to lower platforms and lift stabilisers, etc.

Further options on request. Please consult the technical specification for more information. We reserve the right of technical alterations.

Performance	CHAMP 70S	CHAMP 70W	CHAMP 70U
Dimensions (L x W x H)	9.200 x 3.600 x 3.100 mm	9.200 x 4.300 x 3.100 mm	9.200 x 4.300 x 3.200 mm
Capacity (both platforms lift and transfer)	7.000 kg	7.000 kg	7.000 kg
Lifting height front platform	1.800 to 3.700 mm	1.800 to 3.700 mm	1.900 to 5.600 mm
Lifting height main platform	485 to 3.700 mm	485 to 3.700 mm	485 to 3.700 mm
Loading width (between guide rails)	2.520 mm	3.300 mm	3.300 mm
Driving speed	15 km/h	15 km/h	15 km/h
Gradability	5 %	5 %	5 %
Turning radius	8.700 mm	8.700 mm	8.700 mm

Design	
Engine / Propulsion	Deutz 4-cylinder diesel TD 2011 L04 (COM IIIA / EPA-TIER3) · Other engines or emission class on request
Transmission / axles	Open circuit hydrostatic drive system on front axle
Steering	Hydraulic power steering
Braking system	Dual circuit hydraulic multiple disc brake, additional spring-loaded emergency parking brake, dynamic brake system
Stabilisers	6 hydraulically operated stabilisers
Conveying system	Zinc-plated steel rollers for longitudinal transfer, transversal drive units on front platform, hydraulically adjustable guide rails on front platform
Hydraulic system	Central hydraulic valve block, valves fitted with control light
Electric system	24V, relay controlled







CHAMP 70 e NEO

The full-performance 7 ton loader

The CHAMP 70We NEO is based on a new concept of an electro-hydraulically operating power system. This power system is divided into three separate functions - drive, platform lifting and auxiliary hydraulics.

The split system directs energy purposefully to each function, extending battery runtime. Cutting-edge technology makes it possible to recuperate energy when lowering the main platform. The durable electric components of the powertrain ensure low maintenance costs.



Options

Solid tires, on-board charger, spring-driven cable reels, Li-ion battery.

Further options on request. Please consult the technical specification for more information. We reserve the right of technical alterations.

Performance	CHAMP 70S e NEO	CHAMP 70W e NEO
Dimensions (L x W x H)	9.200 x 3.600 x 3.100 mm	9.200 x 4.300 x 3.100 mm
Capacity (both platforms lift and transfer)	7.000 kg	7.000 kg
Lifting height front platform	1.800 to 3.700 mm	1.800 to 3.700 mm
Lifting height main platform	485 to 3.700 mm	485 to 3.700 mm
Loading width (between guide rails)	2.520 mm	3.270 mm
Driving speed	12 km/h	12 km/h
Gradability	6 %	6 %
Turning radius	9.200 mm	9.200 mm

Design	
Engine / Propulsion	3 electric motors · Electric motor for drive 22 kW · Main platform lifting 32 kW · Operating hydraulic system 12 kW · Traction batteries: 3 different 80 V lead batteries · sizes available (625 Ah / 810 Ah / 1.125 Ah)
Transmission / axles	Direct electric drive on front axle
Steering	Hydraulic power steering
Braking system	Dual circuit hydraulic brake system, multiple wet disc brakes
Stabilisers	6 hydraulically operated stabilisers
Conveying system	Zinc-plated steel rollers for longitudinal transfer, transversal drive units on front platform, hydraulically adjustable guide rails on front platform, side loading and ULD rotation on rear of main platform
Hydraulic system	Priority valve for steering and brakes circuit, valves with control light
Electric system	24 V DC, combination of common relays and PLC controllers. Where possible, control logic functions are processed by the PLC







CHAMP 140

Universal main deck loader

The CHAMP 140 combines the advantages of a lower and main deck loader with excellent reliability. Due to its bogie wheel system on its rear axle, the CHAMP 140 is easy and safe to manoeuvre. Additional features and options make sure the CHAMP 140 meets all customers' requirements.

The CHAMP 140 handles all pallets and containers up to a weight of 14 tons and a length of 20 feet at lower and main deck level. With its high performance and availability the CHAMP 140 runs for top handling procedure. Freight handling with higher quality.



Options

Further options on request. Please consult the technical specification for more information. We reserve the right of technical alterations.

Performance	CHAMP 140
Dimensions (L x W x H)	11.400 x 4.400 x 3.900 mm (standard configuration)
Capacity	14.000 kg main platform lift and transfer · 14.000 kg front platform transfer
Lifting height front / main platform	1.900 to 5.600 mm / 485 to 5.600 mm
Loading width (between guide rails)	3.250 mm
Driving speed	15 km/h
Gradability	5 %
Turning radius	13.000 mm

Design	
Engine	Deutz 4-cylinder diesel TCD 2012 L04 2V (COM IIIA / EPA-TIER3) · Other engines or emission class on request
Transmission / axles	Open circuit hydrostatic drive system on steering front axle, bogie wheel system on rear axle
Steering	Hydraulic power steering
Braking system	Dual circuit hydraulic multiple disc brake, additional spring-loaded emergency parking brake, dynamic brake system
Stabilisers	6 hydraulically operated stabilisers
Conveying system	Zinc-plated steel rollers for longitudinal transfer, side loading and rotating on rear of main platform, side loading on front of main platform, hydraulically operated stops and guide rails on main platform
Hydraulic system	Central hydraulic valve block, valves fitted with control light, electrically powered hydraulic emergency system to lower platforms and lift stabilisers
Electric system	24V, relay controlled







CHAMP 140 e

The electric-powered all-rounder

With a total propulsion of around 150 kW distributed over 3 asynchronous electric motors dedicated and dimensioned for specific tasks such as driving or lifting, the CHAMP 140e is one of the most effective and versatile electric-powered main deck loaders on the market.

Equivalent to its Diesel brother regarding handling and operating, the CHAMP 140e is the perfect emission-free complement for your GSE fleet.



Options

Further options on request. Please consult the technical specification for more information. We reserve the right of technical alterations.

Performance	CHAMP 140 e
Dimensions (L x W x H)	11.400 x 4.400 x 3.900 mm (standard configuration)
Capacity	14.000 kg main platform lift and transfer · 14.000 kg front platform transfer
Lifting height front / main platform	1.900 to 5.600 mm / 485 to 5.600 mm
Loading width (between guide rails)	3.272 mm (FPF) / 3.286 mm (MPF)
Driving speed	13 km/h
Gradability	7 %
Turning radius	14.000 mm
Design	
Engine / Propulsion	3 electric motors · Drive 60 kW* · MPF lifting 60 kW* · FPF lifting and operating hydraulic system 36 kW* · Traction battery: 400 V liquid-cooled lithium-ion battery
Transmission / axles	Direct electric drive on front axle
Steering	Hydraulic power steering
Braking system	Dual circuit hydraulic brake system, multiple wet disc brakes
Stabilisers	6 hydraulically operated stabilisers
Conveying system	Zink-plated steel rollers for longitudinal transfer, transversal drive units on front platform, hydraulically adjustable guide rails on front platform, side loading and ULD rotation on rear of main platform
Hydraulic system	Priority valve for steering and brakes circuit, valves with control light
Electric system	24V DC, combination of common relays and PLC controllers. Where possible, control logic functions processed by the PLC

*Effective power





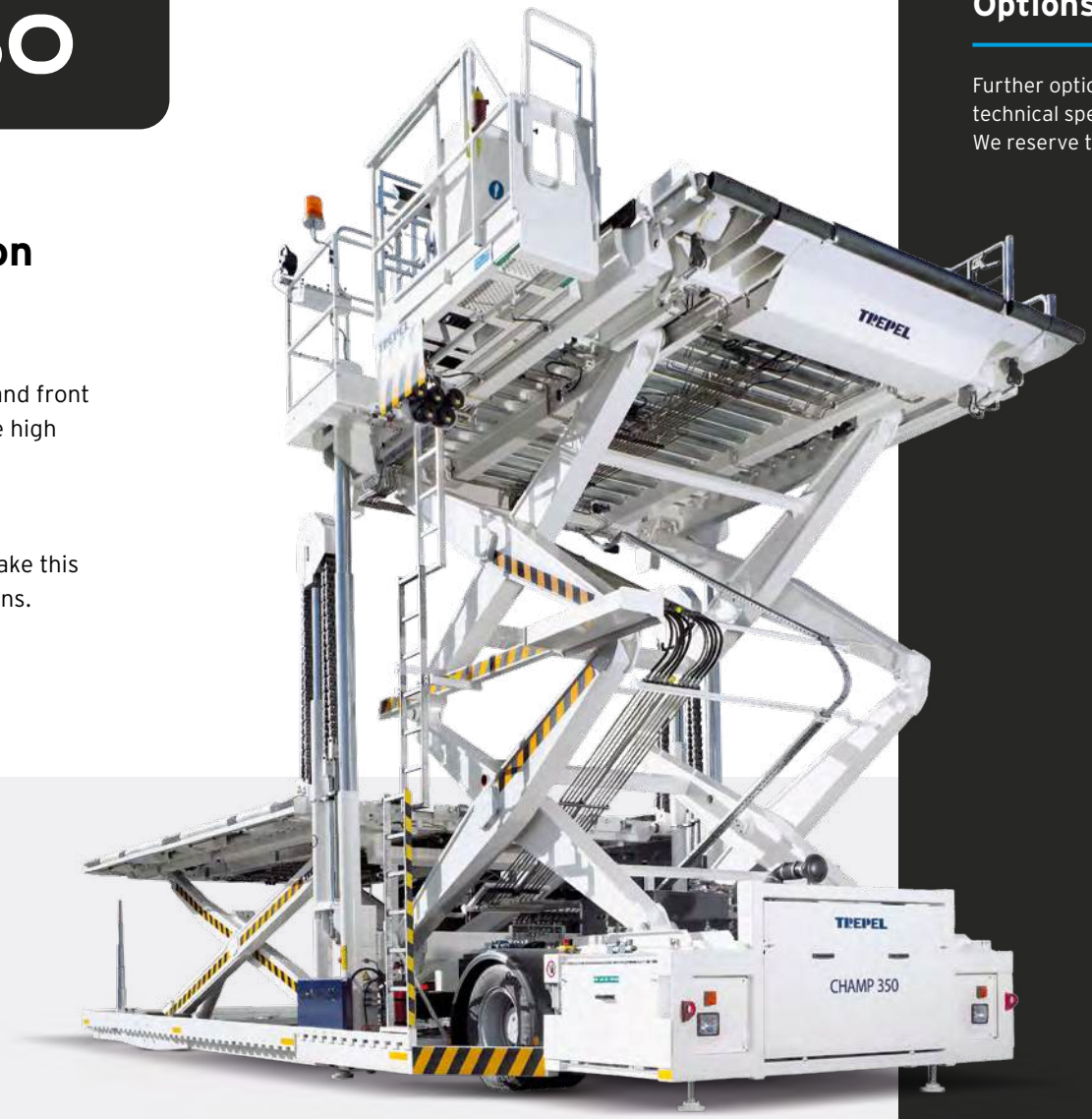


CHAMP 350

The one and only real 35 ton loader in the world

The unique load capacity of 35 tons on the main and front platform makes the CHAMP 350 the most capable high loader in the world.

Its diversity and adaptability to specific market requirements, available tailor-made ex factory, make this model an absolute champion in air cargo operations.



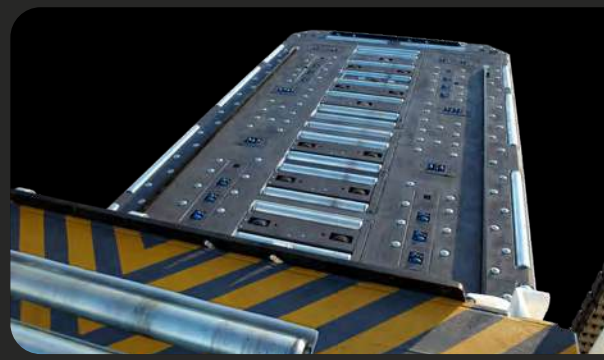
Options

Further options on request. Please consult the technical specification for more information. We reserve the right of technical alterations.

Performance	CHAMP 350
Dimensions (L x W x H)	13.100 x 4.500 x 3.870 mm (standard configuration)
Capacity (both platforms lift and transfer)	35.000 kg
Lifting height front / main platform	2.100 to 5.600 mm / 490 to 5.600 mm
Loading width (between guide rails)	3.310 mm
Driving speed	10–13 km/h
Gradability	5 %
Turning radius	16.000 mm

Design	
Engine	Deutz 4-cylinder diesel TCD 2012 L04 2V (COM IIIA / EPA-TIER3) · Other engines or emission class on request
Transmission / axles	Open circuit hydrostatic drive system on steering front axle, bogie wheel system on rear axle
Steering	Hydraulic power steering
Braking system	Dual circuit hydraulic multiple wet disc brake, additional spring-loaded emergency parking brake, dynamic brake system
Stabilisers	6 hydraulically operated stabilisers
Conveying system	Zinc-plated steel rollers for longitudinal transfer, side loading and rotating on rear of main platform, side loading on front of main platform, hydraulically operated stops and guide rails on main platform
Hydraulic system	Central hydraulic valve block, valves fitted with control light, electrically powered hydraulic emergency system to lower platforms and lift stabilisers
Electric system	24V, relay controlled







CHAMP 350 e

The electric-powered all-rounder

With a total propulsion of around 270 kW distributed over 3 synchronous liquid cooled electric motors dedicated and dimensioned for specific tasks such as driving or lifting, the CHAMP 350e is one of the most powerful and versatile electric-powered main deck loaders on the market.

Equivalent to its Diesel brother regarding handling and operating, the CHAMP 350e is the perfect emission-free complement for your GSE fleet.



Options

On-board charger, wallbox charging station, lithium iron-phosphate (LFP) battery.

Further options on request. Please consult the technical specification for more information. We reserve the right of technical alterations.

Performance	CHAMP 350 e
Dimensions (L x W x H)	13.100 x 4.500 x 3.870 mm (standard configuration)
Capacity (both platforms lift and transfer)	35.000 kg
Lifting height front / main platform	2.100 to 5.600 mm / 490 to 5.600 mm
Loading width (between guide rails)	3.310 mm
Driving speed	10–12 km/h
Gradability	6 %
Turning radius	16.000 mm
Design	
Engine / Propulsion	3 electric motors · Driving motor 94.4 kW* · MPF lifting 108 kW* · FPF lifting and operating hydraulic system 65.9 kW* · Traction battery: 400 V liquid-cooled lithium-ion battery · Inverter liquid cooled, 1 inverter per electric motor · On-board battery charger liquid cooled, 22 kW
Transmission / axles	Direct electric drive on front axle
Steering	Hydraulic power steering
Braking system	Dual circuit hydraulic multiple wet disc brake, additional spring-loaded emergency parking brake
Stabilisers	6 hydraulically operated stabilisers
Conveying system	Zinc-plated steel rollers for longitudinal transfer, rotating system on rear of main platform, hydraulically adjustable guide rails on front platform
Hydraulic system	Priority valve for steering and brakes circuit, valves with control light
Electric system	24V DC, combination of common relays and PLC controllers. Where possible, control logic functions processed by the PLC

*Nominal power







CCL 35 S

An adaptive vehicle as transporter and loader for containers

The CCL 35 S combines two vehicles in one – cargo high loader and transporter. Developed in the nineties for handling the A320 family, the CCL 35 S today is able to handle freight on all lower decks of commercial aircraft. The dolly train with containers can be parked anywhere around the aircraft allowing the CCL 35 S to act as a junction to transfer containers between the dollies and the aircraft.

This is a user-friendly and manoeuvrable loader-transporter allowing quick and economical freight loading and unloading. With several options available, the CCL 35 S is one of the most popular pieces of equipment on the apron today. Freight service on a faster level.



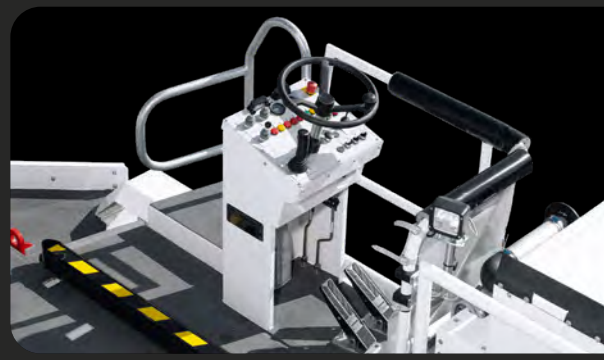
Options

Dolly finger system on rear end, differential lock, etc.

Further options on request. Please consult the technical specification for more information. We reserve the right of technical alterations.

Performance	CCL 35 S
Dimensions (L x W x H)	6.520 x 2.900 x 1.600 mm (standard configuration)
Capacity (both platforms lift and transfer)	3.500 kg
Lifting height platform	485 to 3.500 mm
Loading width (between guide rails)	1.620 mm
Driving speed	15 km/h
Gradability	5 %
Turning radius	8.500 mm

Design	
Engine	Deutz 4-cylinder diesel D 2011 L04 (COM IIIA / EPA-TIER3) · Other engines or emission class on request
Transmission	Closed circuit hydrostatic drive system on rear wheel hub motors
Steering	Hydraulic power steering
Braking system	Dual circuit hydraulic operated drum brakes on rear wheels, additional spring-loaded multiple disk emergency parking brake
Platform system	Single platform with tilting system
Conveying system	Zinc-plated steel rollers for longitudinal transfer, side shift system on front of platform, hydraulically adjustable guide rails
Hydraulic system	Central hydraulic valve block, valves fitted with control light
Electric system	24 V, relay controlled







TRANS 70

Fast, efficient and adaptive

The TRANS 70 is a most versatile Container and Pallet Transporter. The modern concept of the TRANS 70 is designed to encounter all operational modes with the best performance. A dolly finger system can be added to adapt the TRANS 70 to your existing fleet of dollies. The small turning radius allows perfect manoeuvrability on the congested airport apron. The large wheels allow a comfortable drive on all kinds of road surfaces at a high driving speed.

The TRANS 70 is designed in a modular way that allows every customer to configure it according to their specific requirements. For example, the driving station can be fitted on either side of the vehicle.



Options

Driver stand on left or right hand side, dolly finger configuration on front and/or rear end, side shifting of LD containers, solid tyres, three sides closed canopied driver's cabin, etc.

Further options on request. Please consult the technical specification for more information. We reserve the right of technical alterations.

Performance	TRANS 70
Dimensions (L x W x H)	5.560 x 3.890 x 1.500 mm (standard configuration)
Capacity	7.000 kg
Loading height front / rear	450 to 690 mm / 450 to 540 mm
Loading width (between guide rails)	2.500 mm
Loading length (between stops)	3.285 mm
Ground clearance (driving position)	150 mm
Driving speed	32 km/h
Gradability	8 %
Turning radius	6.700 mm

Design	
Engine	Deutz 4-cylinder diesel TD 2011 L04 (COM IIIA / EPA-TIER3) · Other engines or emission class on request
Transmission	On the rear wheels, closed circuit hydrostatic drive system with automotive actuation
Steering	Hydraulic power steering
Braking system	Hydrostatic, dual circuit hydraulically powered disc brake, additional spring-loaded emergency parking brake
Hydraulic system	Central hydraulic valve block, valves fitted with control light
Electric system	24V, relay controlled





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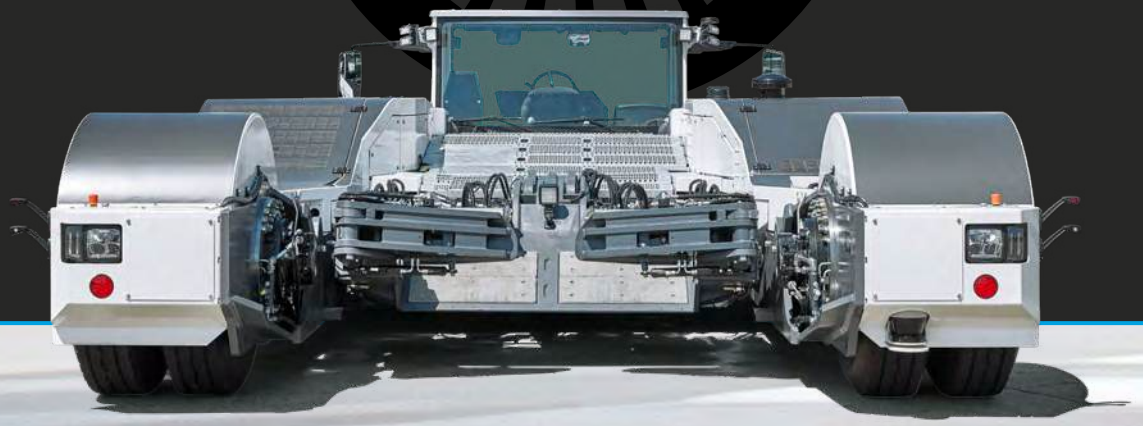
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