

**Goldhofer**



**»BISON« FAMILY**  
**THE FUTURE PROOF**  
**PUSHBACK**

CONVENTIONAL TRACTORS

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**MADE FOR YOUR MISSION**



# »BISON« FAMILY

## FUTURE-PROOF AIRCRAFT TRACTORS

The »BISON« family consists of a comprehensive range of aircraft tow tractors capable of handling passenger and cargo aircraft of 50 t to 600 t MTOW.

Because the product family is modular, customers can choose between diesel and electric power trains. In addition, a wide range of options allows for customization for your operating conditions.

With minimal maintenance and a wide range of components that are identical across the entire product family, you benefit from low inventory requirements and low TCO.

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GOLDHOFER »SAFETY«

8



MODULAR PLATFORM

10



INDIVIDUAL VALUE



# ALWAYS AHEAD.

Goldhofer has established itself as a leading provider of sustainable and highly efficient aircraft and cargo towing solutions, aligning with global "Green Initiatives" and "Blue Sky Policies" adopted by airports worldwide. However nowadays, aircraft belong to the most secure means of travel due to extremely high safety standards, extensive staff training, advanced engineering and strict maintenance procedures. To ensure that these high standards are met, as part of the "airport machinery" vehicles and employees on the apron must also contribute to making air travel and cargo movements safe and sustainable. This is where Goldhofer is always one step ahead and synonymous with »SAFETY« on the apron. With a history

of building aircraft tractors dating back to the 1960s and electric vehicles in the 1980s, Goldhofer has established itself as one of the pioneers within the industry. During this time, Goldhofer has amassed extensive expertise and unrivaled experience. Today, among others, this is reflected in an extremely high ratio of employees in R&D. This continuous competence build-up has led to numerous ground-breaking products, such as the »PHOENIX« series or the »IonMaster« high-voltage technology for E-vehicles. For Goldhofer, »SAFETY« is not just a theoretical concept but a culture that is deeply rooted in the company.

## GOLDHOFER SAFETY

EXPERIENCE, COMPETENCE, CONTINUITY

## EXCEPTIONAL SERVICE

- + Goldhofer provides maintenance plans, general overhauls and modifications
- + Spare parts: 15-year supply at least or provisioning of alternatives (equivalent parts, overhaul, etc.)
- + High-quality components from long-term partnerships with suppliers
- + Remote error detection enables fast, time- and resource-saving help for minimum TCO

## EXTRAORDINARY EXPERIENCE

- + Highest experience for both, towbarless and conventional tractors in the market
- + One of the pioneers in E-vehicles starting 1986 with the Schopf F356
- + Pioneer in high voltage technology with the »IonMaster« Technology
- + Long standing employees with outstanding advisory competence

## GOLDHOFER »LINK«

- + The tool for digitization on the apron
- + Enables continuous monitoring and condition-based maintenance
- + With »LINK«, long-term investments are more likely to pay off: Higher efficiency due to reduced downtime.
- + Tracking and evaluation of operating and usage data enables optimal consulting and optimization of the fleet



# »BISON« SERIES: THE SAFEST CONVENTIONAL TOW TRACTOR IN THE MARKET



## »SAFETY« AT ITS BEST

- + ERGONOMICS AND OPERATOR SAFETY
- + UNBEATABLE RELIABILITY
- + SOPHISTICATED TECHNOLOGY

With thousands of conventional aircraft tow tractors, millions of aircraft have been moved safely and reliably all over the globe. Well thought-out technology helps prevent damage on both humans and machines. Constant optimization, innovation, research and development improve Goldhofer tractors in an ongoing process to make them the most reliable tugs. The human interface provides relevant information for the respective operation and an extremely good 360° visibility makes the »BISON« a safe and ergonomic working place while the uniform operating concept makes it easy to operate any type of the series once trained.





# MODULAR PLATFORM OVERVIEW

Adapt your vehicles to your individual needs!

Different sizes, power trains, performance classes, and cabin variants make the »BISON« family a sophisticated overall package that promises maximum safety and operating comfort.

- + Uniform operating system with high operating comfort
- + Find the perfect size and performance for your applications
- + The flexible ballasting enables custom configuration



CABLESS



OPEN CAB



CLOSED CAB

CABINS



≤ 275,000lbs

23,600lbf | 101hp

»BISON« D 370

»BISON« E 370

101hp | 23,600lbf

≤ 275,000lbs

70kWh | 105kWh | 140kWh



≤ 550,000lbs

46,000lbf | 156hp

»BISON« D 620

»BISON« E 620

156hp | 46,000lbf

≤ 550,000lbs

70kWh | 105kWh | 140kWh



≤ 880,000lbs

68,500lbf | 268hp

»BISON« D 1000



≤ 1,320,000lbs

103,400lbf | 400hp

»BISON« D 1500





# INDIVIDUAL VALUE THE »BISON« D



## DIAGNOSTICS AND MAINTENANCE

- + Information and error messages as plain text in the multifunction display
- + Sophisticated maintenance access
- + Time-saving operations and 1,000h maintenance intervals
- + Optimized hydraulic system with reliable gear pumps for long-term use
- + Lubrication-free drive shaft
- + Minimal-effort fluid change
- + Separate hydraulic oil tanks for steering and brakes



## CONCEPT FOR SUCCESS

- + In use on every continent and in all environmental conditions, from -22 °F to +125,6°F <sup>[1]</sup>
- + Three cabin variants:  
Cabless, open cab, closed cab
- + Uniform operation through a consistent vehicle concept with carry-over parts strategy
- + Environmentally friendly and cost-effective



## VEHICLE-SPECIFIC BENEFITS

- + Various engine power classes
- + Suspension concept specially optimized for the »BISON«
- + 360° view from the hoist cabin
- + No lubrication necessary



**»BISON« D 370**  
101 hp | 23,600 lbf | MTOW ≤ 275,000 lbs  
US EPA TIER 3 | US EPA TIER 4



**»BISON« D 620**  
156 hp | 46,000 lbf | MTOW ≤ 550,000 lbs  
US EPA TIER 3 | US EPA TIER 4



**»BISON« D 1000**  
268 hp | 68,500 lbf | MTOW ≤ 880,000 lbs  
US EPA TIER 3 | US EPA TIER 4



**»BISON« D 1500**  
400 hp | 103,400 lbf <sup>[2]</sup> | MTOW ≤ 1,320,000 lbs  
US EPA TIER 4



VARIETY OF  
DIESEL ENGINES



CABIN OPTIONS  
FOR FLEXIBLE  
CONFIGURATION



CARRY-OVER  
PART STRATEGY

<sup>[1]</sup> Standard version from -4°F to +107°F, other temperature range with Arctic- and Tropical-Kit  
<sup>[2]</sup> Depending on tire variation





# INDIVIDUAL VALUE THE »BISON« E



MODULAR  
EXPANDABLE  
BATTERY SYSTEM



CABIN OPTIONS  
FOR FLEXIBLE  
CONFIGURATION



GOLDHOFER  
»IONMASTER«  
TECHNOLOGY



## »IONMASTER« TECHNOLOGY

- + Active thermal management for cabins and all high-voltage components:  
Heating and cooling for optimal temperature conditions, even during charging, for long battery life
- + Modularly expandable battery system, configurable for individual deployment requirements
- + Commercial vehicle industry tried-and-tested lithium-ion batteries for certified, maximum safety, ultimate performance, and service life
- + Electric power train, electric engine, battery, inverter and thermo module are maintenance-free
- + Second-life applications for battery systems possible, e.g. as stationary storage systems



## CHARGING AND INFRASTRUCTURE

- + All standard charging plugs available: CCS Typ 1, CCS Typ 2 and GB/T
- + Infrastructure consulting on charging points
- + Intermediate charging enables multi-shift operation
- + Rapid DC charging and intermediate charging at up to 70kW
- + Optional AC charging at up to 22 kW



## VEHICLE-SPECIFIC ADVANTAGES

- + Three cabin designs:  
Cableless, open cab, closed cab
- + Can be used in all climate conditions in temperatures ranging between -22°F and +125,6°F <sup>[1]</sup>
- + 360° view for the driver
- + High-voltage components cooled by environmentally sustainable water glycol mixture:  
Consistent performance, even under extreme environmental conditions



**»BISON« E 370**  
101 hp | 23,600 lbf | MTOW ≤ 275,000 lbs  
70 kWh | 105 kWh | 140 kWh



**»BISON« E 620**  
156 hp | 46,000 lbf | MTOW ≤ 550,000 lbs  
70 kWh | 105 kWh | 140 kWh

<sup>[1]</sup> Standard version from -4°F to +107°F, other temperature range with Arctic- and Tropical-Kit









## »BISON« FAMILY GET IN TOUCH WITH US!

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### TECHNICAL DATA SHEETS

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»BISON« D 370



»BISON« E 370



»BISON« D 620



»BISON« E 620



»BISON« D 1000



»BISON« D 1500

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