



# **©** COMPLETE CABS

COMFORTABLE, ERGONOMIC AND SAFE

We combine all our areas of expertise in our range of complete cabs: Electrical equipment, electronics, heating and air conditioning systems, and cab construction. Profit from synergy effects thanks to the seamless interplay of components and systems. We take care of all of the steps necessary for serial production for you, from design and development to prototype construction and fully tested and turnkey-ready driver's cabs.



### AN OVERVIEW OF SAMPLE SOLUTIONS

Our extract of implemented customer solutions will provide you with a brief overview of our range of services in the area of cabs:



### 01

# OPERATOR'S CAB SPECIAL FORESTRY TRACTOR

- > Impact-resistant polycarbonate panes
- > KTL primed and wet coating
- > ROPS and FOPS tested
- > Plug-in expansion



# CREW CAB

- > Lightweight steel construction
- > ECE-R29-3 and R14 tested
- Modular design for high variance
- Proprietary seat design



### OPERATOR'S CAB SURFACE MINER

- Tubular frame construction with highstrength fine-grained steel S690QL
- > KTL primed and wet painting
- > 200 to ROPS tested





# OPERATOR'S CAB UNDERGROUND SCALING MACHINE

- Cost-effective construction without special profiles
- > High corrosion protection
- > Plug-in complete expansion

# **OPERATOR PLATFORM INTERIOR EQUIPMENT**

ERGONOMIC, HIGHLY INTEGRATED AND **VEHICLE-SPECIFIC** 

Solutions from Wölfle offer you the maximum in flexibility when equipping and fitting out your machine and combine first-class technology in the smallest space. Thanks to our many years of experience, we can find a practical and high-quality solution for any segment. Driver platforms are some of the most complicated developments in the vehicle industry. Because a comfortable operator's workplace featuring perfect ergonomics, handling, and functionality must be produced in spite of limited space. The use of CAD software, and the execution of ergonomic studies and mockups for realistic testing result in an optimal design of the cab interior.



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### STEERING COLUMN YARD LOADER

- Integrated HV/AC system
- > Fitting carrier (displays, instruments, rocker switch, function display, etc.)
- Hydraulic steering
- > Integrated central electrical systems





### **CONTROL PANEL MINI EXCAVATOR**

- > Complete operating console
- > Integrated electrical and electronic
- Ergonomic plastic housing



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### **OPERATOR PLATFORM** MOBILE CRANE

- > Cladding parts (GFK, EPP, thermoformed parts, rotation, injectionmoulded parts)
- Encoder levers, electrical and electronic components
- > HMI solutions

# HV/AC, ELECTRONICS AND ELECTRICAL INTERIOR EQUIPMENT

HIGH-POWER, LOW-NOISE AND APPLICATION-OPTIMISED

The development and manufacturing competencies of the electrical, electronics, HV/AC and steel construction sectors are consolidated at Wölfle, resulting in a complete cab from a single mould. Here, it is possible to coordinate the specific requirements from the sectors across all implementation phases. Wölfle possesses the comprehensive competence through which to combine interdisciplinary expertise to produce optimum products; something that can only be achieved if the development teams are all under one roof. The functionality of the space and climate in the cab have a major influence over the well-being and performance of the vehicle occupants.



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# HEATING AND AIR CONDITIONING SYSTEMS

- Standard products or customer-specific developments by Wölfle
- Requirement-oriented design and validation in the Wölfle climatic chamber
- Optimised airflow through CFD analyses





### **CONTROL UNITS**

- Standard products or customer-specific adaptations
- From simple climate control to MATLAB®-based climate automation.
- In-house hardware and software development



### **WIRING HARNESSES**

- > Customised wiring system development
- Simple change management through in-house production





### **CENTRAL ELECTRICAL SYSTEMS**

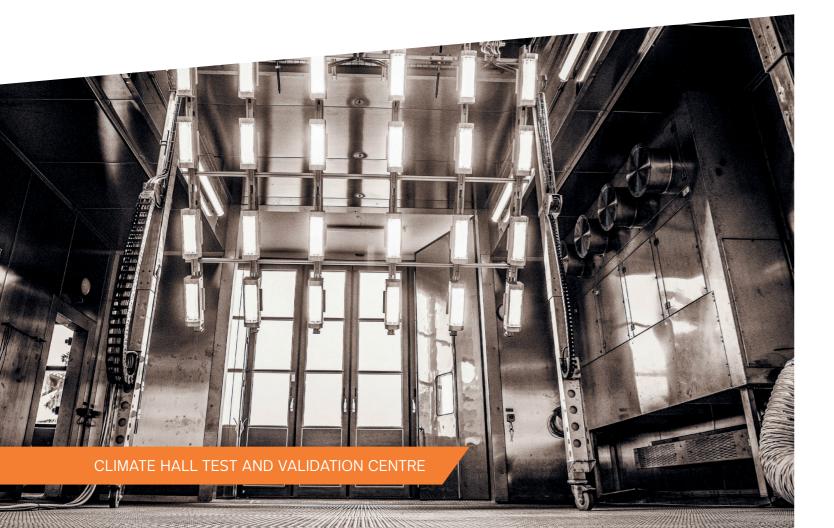
- Central electrical systems designed to meet demand
- In-house production of metal brackets and enclosures
- Straightforward integration of vehicle options

# **EVERYTHING FROM**A SINGLE SOURCE

YOUR SYSTEM PARTNER FOR COMPLETE CABES

### **DEVELOPMENT**

- > Consulting workshops and conception
- Design and development of steel or aluminium construction, heating and air-conditioning systems including air ducts, plastic or composite components for interior and exterior, precision mechanics, hydraulics, wiring system and central electrics
- > Hardware and software development (controls, operating elements, etc.)
- > Design and in-house production of tools, fixtures and test benches
- > Calculations, simulations and analyses (structure/strength, ergonomics, performances, CFD, Moldflow, tolerances, etc.)
- > Prototyping (full-scale prototyping, mockup, etc.)
- Training and documentation



### DEVELOPMENT, PRODUCTION AND TESTING SCOPE

We offer you complete system competence in development and production. Do not compromise.



### **PRODUCTION**

- Metal construction (cutting, bending, welding, surface treatment)
- Processing plastics, composite materials and glazing
- Heating and air-conditioning technology (assembly and testing)
- Wiring harnesses and central electrics (assembly, installation and testing)
- Operating elements, displays and controls (assembly and testing)
- Plug-in steering columns and trims (assembly and testing)



### **TESTING AND VALIDATION**

- Components and vehicle
- Climate chamber, including humidity and solar simulation
- Climate rooms and chambers for climate testing (alternating and shock)
- Salt spray test chamber
- Vibration and shock tester
- > External EMC and ROPS/FOPS test lab
- Component test benches
- Network and bus analyser for CAN and LIN-Bus
- Various electrical lab equipment and measuring instruments



