MANUFACTURER QUALIFICATIONS AND CERTIFICATES

Project management and engineering

- Certified quality management ISO 9001
- _ IRIS Certification according to ISO/ TS 22163

Production and system integration

- Certified welding competence according to EN15085-2
- _ Certified bonding competence according to DIN 6701
- _ Certified production control according to EN 1090
- _ Qualified supplier (Q1) of Deutsche Bahn AG for MPV[®] VentuS[®] type DB GAF

Environmental management at the headquarter in Rheine

 Environmental management system according to ISO 14001

Homologation

- Process reliability in the 4th railway package incl. national requirement
- _ approved for your use within Europe

THE FIRST MPV[®] VentuS[®] ARE ALREADY IN THE REALIZATION PHASE!

_ 12 vehicles for the Norwegian National Railway

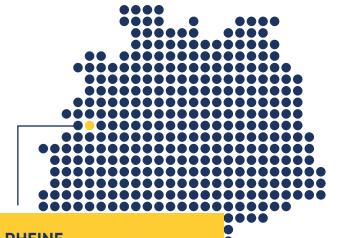
- Framework contract with the DB Bahnbau Group for 10 track work vehicles with two call-offs of
- 8 vehicles

_ Successful realization of the modular

VentuS[®]- construction: crane module, cabin module, platform module and much more

Successful realization of modular built-in components: In particular, the modular drive system, which allows emission-free operation according to the future valid regulations (e.g. electric - overhead line, battery-electric)

PRODUCTION AND COMPANY HEADQUARTER



RHEINE

 City by the river EMS About 80.000 inhabitants North Rhine-Westphalia, Germany 	

CONTACT US

WINDHOFF BAHN- UND ANLAGENTECHNIK GMBH Hovestraße 10 | 48431 Rheine

Martin Kühnhenrich, Manager Sales MKuehnhenrich@windhoff.de | M: +49 173 586 300 2

Lasse Schulte-Farwig, Sales LSchulte-Farwig@windhoff.de | M: +49 151 105 851 25

www.windhoff.de

THE MODULAR SYSTEM THAT MEETS YOUR REQUIREMENTS



Multi Purpose Vehicle (abbrev. MPV®):

MODULAR Modules for cranes, cabins, frames, etc

MULTIFUNCTIONAL Maintenance | Recovery | Measuring | Rail grinding

SUSTAINABLE Solutions for today and for the future



QUALITY – MADE IN GERMANY

Consequent modular vehicle concept

- _ Modular superstructures
- _ Modular cabin
- _ Modular built-in components (100 % underfloor)
- _ Modular frames

Maximum flexibility

- _ Vehicle length and track gauge
- Vehicle concept
- Driven
 - _ Not driven
 - _ Steep section

Multifunctional zone in a 5-foot grid

- Platforms
- Cranes
- _ Containers
- Loading areas
- _ Customised
- superstructures (e.g. workshop containers, personal modules)

WE GO THE Xtra MILE.

WINDHOFF MPV[®] VentuS[®]

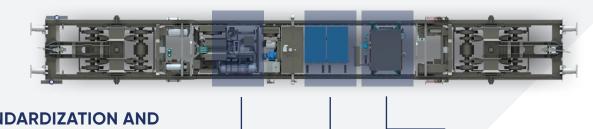
Homologation

- _ TSI + European Standards
- _ Standards of the country of use (NNTRs)

_ Transnational homologation possible

Equipment with ETCS, GSMR

_ National specific train protection system



STANDARDIZATION AND HIGH FLEXIBILITY

Modular drive concept

- _ 3 different bogie types
- _ Traction and running gear bogies
- _ Mechanical or electrical drive
- _ Magnetic track brake possible

Modular cabin concept

- _ 3 different cabin lengths (standard)
- _ Modular construction of the interior
- Capacity for up to 7 people (standard)

Modular drive concepts

L_e.g. electric overhead line

- _____e.g. diesel engine
- _ e.g. hydrogen engine
- $_$ e.g. fuel cell



All information in digital form

