



VDL Weweler



Strength through co-operation





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IMPROVING TRANSPORTATION THROUGH TECHNOLOGY

COST EFFECTIVENESS, FLEXIBILITY AND RELIABILITY ARE SOME OF THE REQUIREMENTS MADE BY TODAY'S AUTOMOTIVE INDUSTRY SECTOR. THIS IS WHY VDL WEWELER, USING IN HOUSE MODULAR DESIGN CONCEPTS, HAS DESIGNED AND DEVELOPED A COMPLETE RANGE OF PARABOLIC SPRINGS, SEMI TRAILER AIR SUSPENSION SYSTEMS, AUXILIARY MID AND TAG AXLES AND ADVANCED "STATE OF THE ART" ELECTRONIC STEERING SYSTEMS. FLEXIBLE SYSTEM DESIGNS WHICH CAN BE APPLIED TO A FULL RANGE OF COMMERCIAL VEHICLE, PASSENGER COACH AND TRAILER APPLICATIONS. VDL WEWELER SYSTEM SOLUTIONS ARE DESIGNED WITH O.E.M SERIAL PRODUCTION AND SPECIALIST MEDIUM VOLUME APPLICATIONS IN MIND. VDL WEWELER SYSTEMS ARE ROBUST AND DELIVER RELIABILITY AND COST EFFECTIVE OPERATION FOR ON HIGHWAY APPLICATIONS AS WELL AS IN THE MOST DEMANDING OPERATING ENVIRONMENTS.



VDL Weweler is a respected global player in the automotive market sector, traditionally as a manufacturer and supplier of leaf and parabolic springs. Over the past eighty years VDL Weweler has become a technology leader in the design, development and manufacture of systems and components that deliver added value to the road transport and automotive sectors. The ISO certified manufacturing facility in Apeldoorn, the Netherlands, is a highly automated environment in which robotics play an important role in cost effective and reliable production. Advanced logistics enable large Kanban and Just in Time deliveries to the O.E.M manufactures. Many of VDL Weweler's O.E.M customers view VDL Weweler as an important R&D partner for their future technological developments.



A UNIQUE RANGE OF MID AND TAG AXLE SYSTEMS

The VDL Weweler Truck and Bus Division are renowned for their unique and technically advanced range of auxiliary axles, suspensions and steering systems, which are manufactured in Apeldoorn, the Netherlands. The patented cold formed SK design of mid axles offer application flexibility that will accommodate most chassis drive lines and can be designed and shaped to fit all applications and ride heights.

The truck and bus division also produces a complete range of tag axle solutions using the proven concept of modular design. The systems, which are supplied pre-assembled and engineered for specific applications, benefit from a range of fully integrated axle lifting systems. All VDL Weweler solutions can be specified with the manufacturers' O.E.M original wheel end equipment or with proprietary brakes.

ELECTRONIC STEERING SYSTEMS

The VDL Weweler ETS range of steering systems represents technically advanced 'state of the art' heavy duty electronic steering control systems. These systems can be used for steering mid and tag axle solutions as well as semi-trailer applications with axle capacities of up to 11,000 Kg. Suitable for steering one axle or a combination of axles, ETS steering systems offer key benefits such as improved fuel economy, improved tyre life and vehicle manoeuvrability.

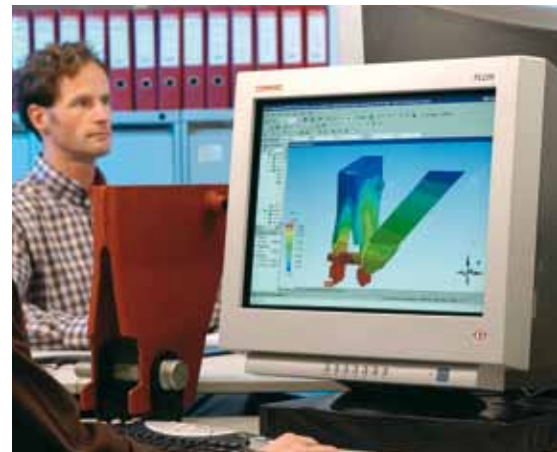
The VDL Weweler ETS systems offer the option of automatic axle centring for tag axle applications, which ensures maximum vehicle safety in any possible failure condition.

The Truck and Bus division is highly customer focused and designs and develops complete auxiliary axle solutions for O.E.M Commercial Vehicle and Bus manufacturers using the latest technologies in axle and brake design, suspension performance and electronic steering systems. This combination of advanced design and product integration make VDL Weweler a market leader and world beater in this market sector!



UNIQUE SEMI TRAILER AIR SUSPENSION SYSTEMS

VDL Weweler's reputation has been built on the production of quality leaf and parabolic springs. This has been further reinforced with the development of several variants of the modular air suspension system principle. These systems have been fully developed and every detail optimised. As a result, the systems require low maintenance and deliver reliability, long life cycles and can be applied to a wide range of semi trailer applications. All VDL Weweler suspension systems are characterised by the parabolic trailing arm, which acts as an integrated roll stabiliser and as a guiding arm for the axle. The parabolic trailing arms are manufactured in-house, which offers the assurance of maximum quality and process control for this essential product and guarantees a long operational life. VDL Weweler is the only European spring manufacturer to develop and manufacture their own range of air suspension system solutions.



MODULAR AND FLEXIBLE SOLUTIONS

The VDL Weweler modular construction of air suspension systems are used by semi trailer manufacturers around the world, ensuring compatibility regardless of axle type, size or brand. This offers cost effective logistical and technical advantages for the vehicle manufacturer. VDL Weweler air suspension systems can be integrated with most leading trailer axles and can be applied to most chassis. By using modular construction methods, VDL Weweler can achieve efficient volume production, while also being flexible in meeting the demands for small and medium volume specialised solutions and applications.



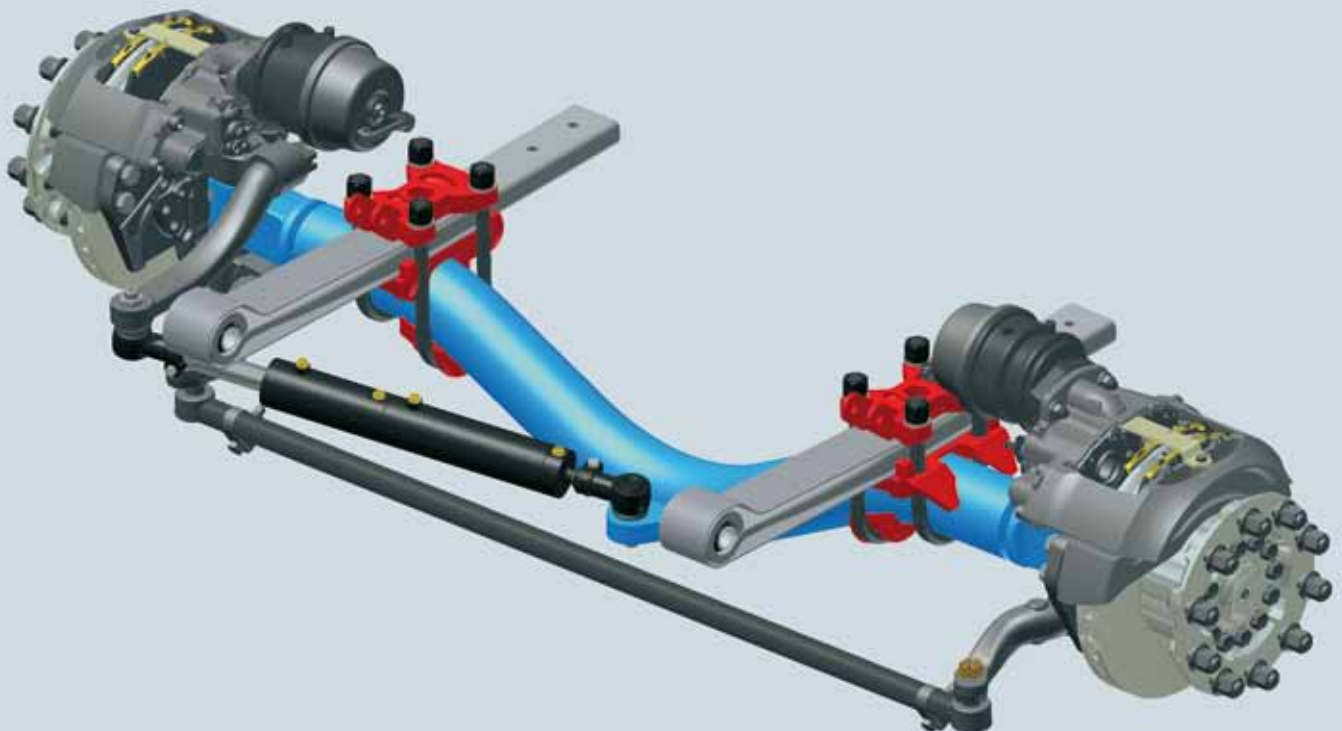


DEVELOPMENT AND INNOVATION

VDL Weweler design engineers always consider simple solutions first. Well known examples in the semi trailer market sectors include the Bolt-on® Axle Lift systems, the Mega trailer Levelfix® system, and the Splitter®. Experienced and innovative product developers utilise the latest software tools, including design and calculation packages. Quality is guaranteed due to simulation, extensive testing and the use of assessment facilities. During the initial design phases, both the customer and VDL Weweler share the common objective: of achieving a product that will deliver maximum efficiency. To enhance this relationship, VDL Weweler exchanges technological knowledge and experience with some of the major technology institutes, such as the TNO, TÜV and RDW.

DEVELOPMENT AND TESTING

VDL Weweler's modern manufacturing process starts during the concept phase, which involves simulations, fatigue analyses and life span calculations. Later, this is followed by actual fatigue life testing of components and the complete systems, including all chassis parts. All the steps in this process are targeted at realising the optimum reliability and service life for your VDL Weweler systems.



VDL Groep

VDL Weweler is part of VDL Groep, an international company with more than 6,800 employees, spread over 97 subsidiaries in 16 countries. The strength of the co-operation within VDL Groep offers added assurance in terms of continuity to customers and suppliers of VDL Weweler alike.

VDL Weweler operates in the finished products division. This division comprises suspension systems for the automotive industry, heating, cooling and air-technical systems, systems for the oil, gas and petrochemical industry, production automation systems, systems for the agricultural sector, sunbeds, roof boxes, container handling equipment, cigar-making and packaging machines, components for bulkhandling and dust extraction installations and systems for explosion and fire protection.

The other divisions are subcontracting and buses & coaches. In subcontracting, VDL specialises in metalworking, mechatronic systems and system supply, plastics processing and surface treatment. The bus & coach division includes chassis modules, coaches, public transport buses, mini & midi buses and second-hand buses.



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