

PORTFOLIO



INDUSTRIAL DESIGN

From Sketch to Prototype Building | Transportation-/ Product Design
Graphic Design | Ergonomics and Human Factor Studies/Tests
1:1 Scaled Experimental Mock Up | 1:1 Sales Mock Up (with partners)



2D/3D VISUALIZATION, ANIMATION & VIDEO

Photorealistic Renderings | 2D/3D Animation
Product Video | Corporate Video | Explanation Video



VR APPLICATION

Interactive Application for 3D VR Goggles and / or Website

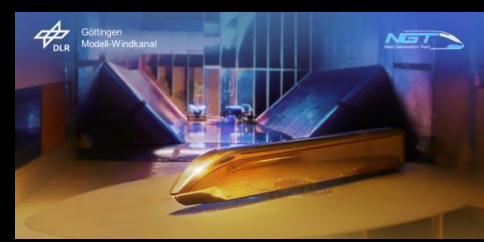
LIGHTING SIMULATION & LIGHTING DESIGN

Physically Correct Lighting Simulation | Lighting Scenarios Analysis
Lighting Ergonomics, Optimization | Lighting Concept



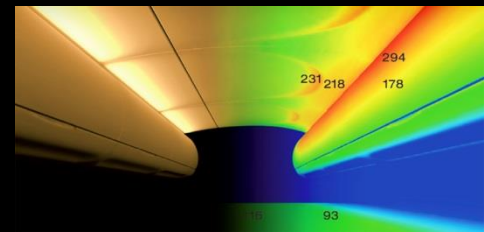
RESEARCH & DEVELOPMENT

Research Projects | Future Projects | Analysis and Verifications
Innovative Technologies | Case Scenario



3D CAD & DATA MANAGEMENT SERVICE

Splines- / Polygon Modelling | 3D CAD Assemblies | Digital Mock
Up Package | Construction Support | Feasibility Studies



AIRBUS

ALTRAN

bertrandt

BOMBARDIER



DIEHL



eurodomo®
einfach mehr Küche.



FERCHAU
ENGINEERING



Fischer + Entwicklungen



H⁴Aerospace

HOCHBAHN

Lufthansa

Lufthansa Technik
More mobility for the world



p3 group

Relation
ENGINEERING TEAM



spaceapplications

STEMME

ZODIAC
AEROSPACE

Bauhaus-
Universität
Weimar

BDLI



HAW
HAMBURG

LZ^N
LASER ZENTRUM NORD

Möbius

TUHH
Technische Universität Hamburg



ZAL

Membership:



HANSE
AEROSPACE



SCIENCE R & T

Science R & T

Ergonomic Research | Interior Layout | Graphic Design | Exterior

DLR Spaceliner Prof. Werner Granzeier and iDS support the DLR Spaceliner concept development, with interior layouts and exterior design concept studies. Project lead: Dr.-Ing. Martin Sippel, DLR, German Aerospace Center, Bremen/Germany.

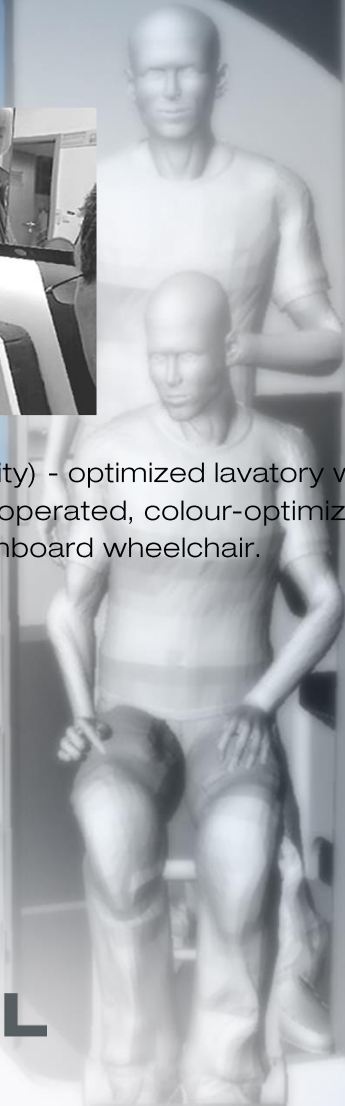




AC20.40 Cabin Design The project is supported by iDS with layout concepts, ergonomic research, graphic design/exterior and visualization. An airworthy model has already been developed by Prof. Werner Granzeier, HAW Professors and their students (Scale 1:30, Wing Span 2,70m). Various exterior, interior and research projects are in progress.

Science R & T

Ergonomic Research | Eco-Efficient Lavatory



ECOLAV PRM (person with reduced mobility) - optimized lavatory with standard footprint, sensor-controlled, voice-operated, colour-optimized for visual impaired people, accessible with onboard wheelchair.

Supported by:

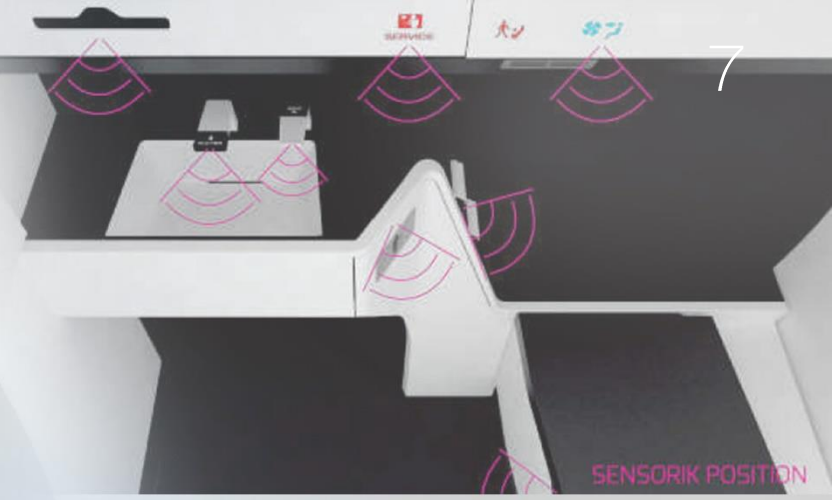


Bundesministerium
für Wirtschaft
und Energie

Research Project together with

AIRBUS

DIEHL
Aviation





TRANSPORTATION

Transportation DESIGN

Advanced Design Concept | Interior | Sketching

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Future Design concepts Concept sketch

Transportation DESIGN

Lavatory Design | First Ideas | Concept | Sketches

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C919 Lavatory In an early stage of the design process sketches of design impressions provide first information as well as create an emotional link between the customer and his new products.

Transportation DESIGN

Layout | 2D Visualization | 3D Visualization

SUKHOI SUPER JET 100



CREW REST COMPARTMENT

GALLEY & BUFFET
3 HALFSIZE TROLLEYS

DINING /
CONFERENCE AREA

COMMUNICATION CENTER

QUESTROOM

STOWAGE

LAV

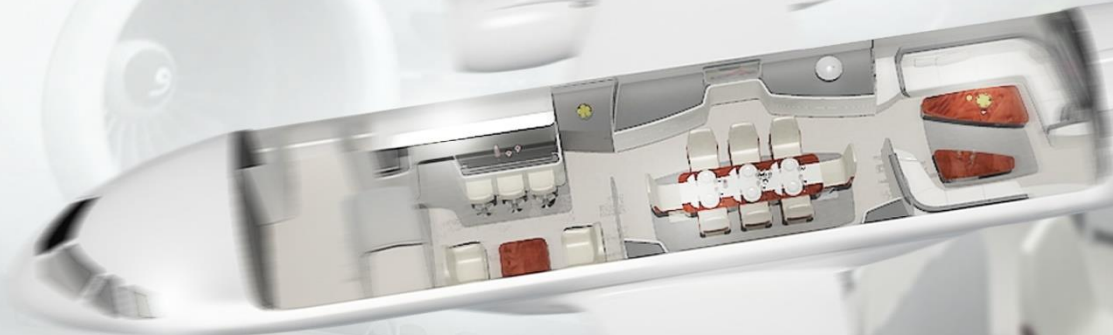
CONFERENCE LOUNGE

STOWAGE AND
IFE

VIP BEDROOM

VIP BATHROOM

GALLEY



BEDROOM

BOARDING & OFFICE

COMMUNICATION CENTER

CONFERENCE LOUNGE

CREW REST COMPARTMENT

DINING / CONFERENCE AREA

CONFERENCE LOUNGE

IFE COMPARTMENT

STOWAGE

Interior Layout First layout concepts in 2D, and cabin development in 3D CAD

Cabin REFURBISHMENT

Cabin Design | Lighting Design

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CRJ 900 Cabin Refurbishment with new hatracks, ceiling and LED-lighting

Transportation DESIGN

B/C Seat Concept | Layout Optimization

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Lufthansa

B/C Concept and Layout Study

The analysis, work-out and the evaluation of different layout concepts for B747 resulted into a B/C layout with one more seat row in the front.



Transportation DESIGN

Cabin Design | Lighting Design

B717 Interior Design Interior Design of the entire cabin including cabin lining, hatracks, monuments, placarding, colour and trim and lighting design.
Design Lead: Prof. Werner Granzeier



Transportation DESIGN

Cockpit Design | Ergonomics | Lighting Design | Mock Up

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728JET Cockpit Design from the first sketch, ergonomic studies with pilots, optimized lighting design and preconstruction CAD data to the 1:1 sales mock up.

Transportation DESIGN

Cabin Design | Ergonomics | Lighting Design | Mock Up

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728JET Cabin Interior Design of the entire 728JET including cockpit, cabin, lavatories, monuments, placarding, colour and trim. Amongst other things IDS optimized the ceilingpanel to achieve a well-balanced cabin illumination with a ceilinglight installed only on one side.

Transportation DESIGN

Lavatory Design | Ergonomics | Mock Up

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The High Integrated Flexible Lavatory (HILA) offers more space, convenience, comfort and hygiene because of its flexible concept. The development group, AIRBUS, DASELL / DIEHL and iDS Hamburg received the international design award Crystal Cabin Award 2010.



Let your ideas take off.

in cooperation with:

AIRBUS **DIEHL**
Aviation

Transportation DESIGN

Cabin and Cockpit | Ergonomics | Exterior | Graphic Design

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Sports Utility Jet Interior Inspired by automotive design: An integrated interior solution for Sports Utility Jets for a private customer - a cabin for four passengers and two pilots. The design of the cabin has been carried out with a closer look for details as well for the overall picture. The overall impression bears witness to a timeless and premium design.

Transportation DESIGN

Cabin and Cockpit | Ergonomics | Exterior | Graphic Design



inspired by automotive design: **Sports Utility Jet Interior**

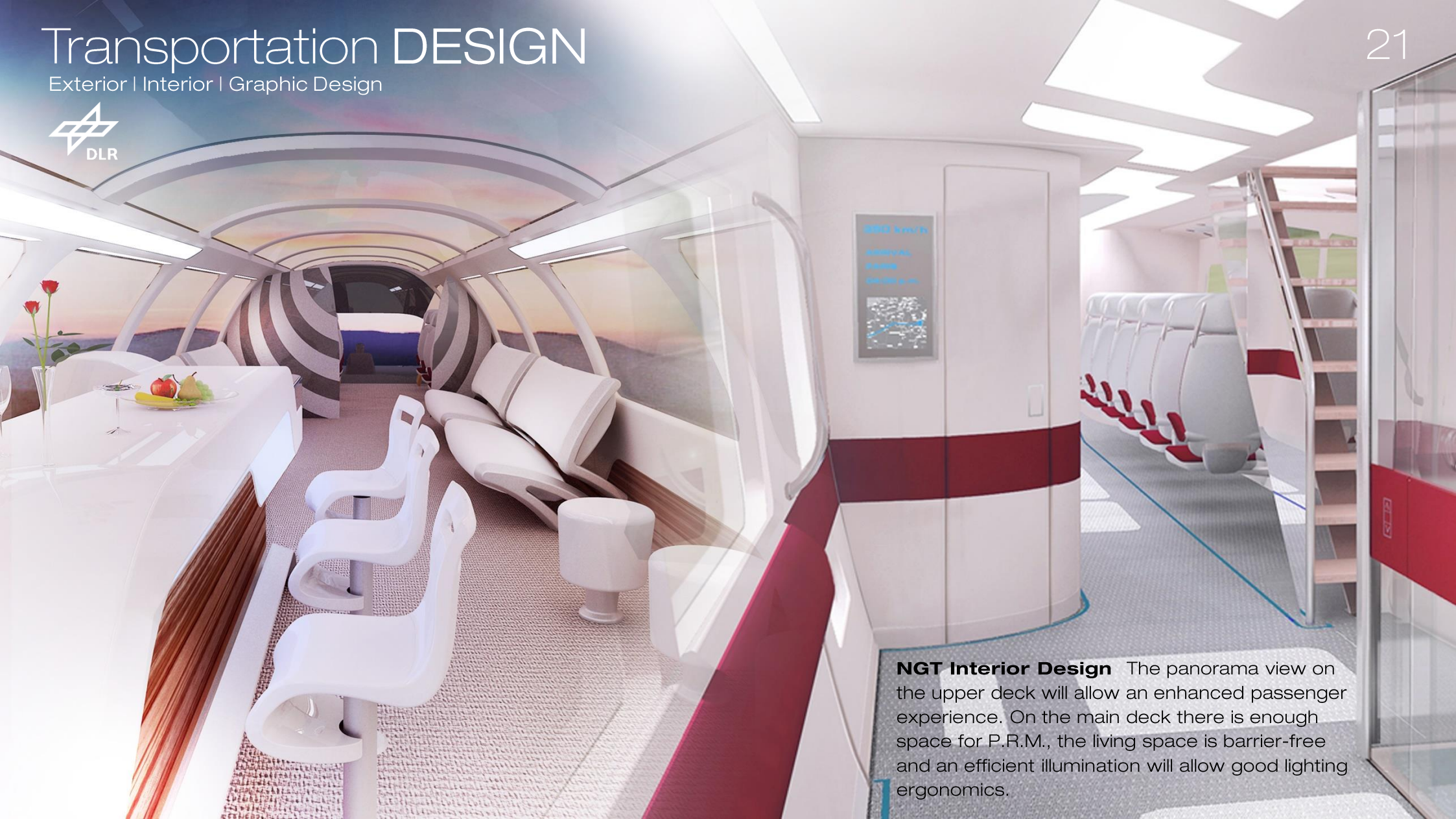


Next Generation Train NGT With the DLR Göttingen, iDS industrial Design Studio has developed a new double decker high speed train: The leading criteria are an outstanding passenger comfort and the improvement of aerodynamics for high-speed.



Transportation DESIGN

Exterior | Interior | Graphic Design

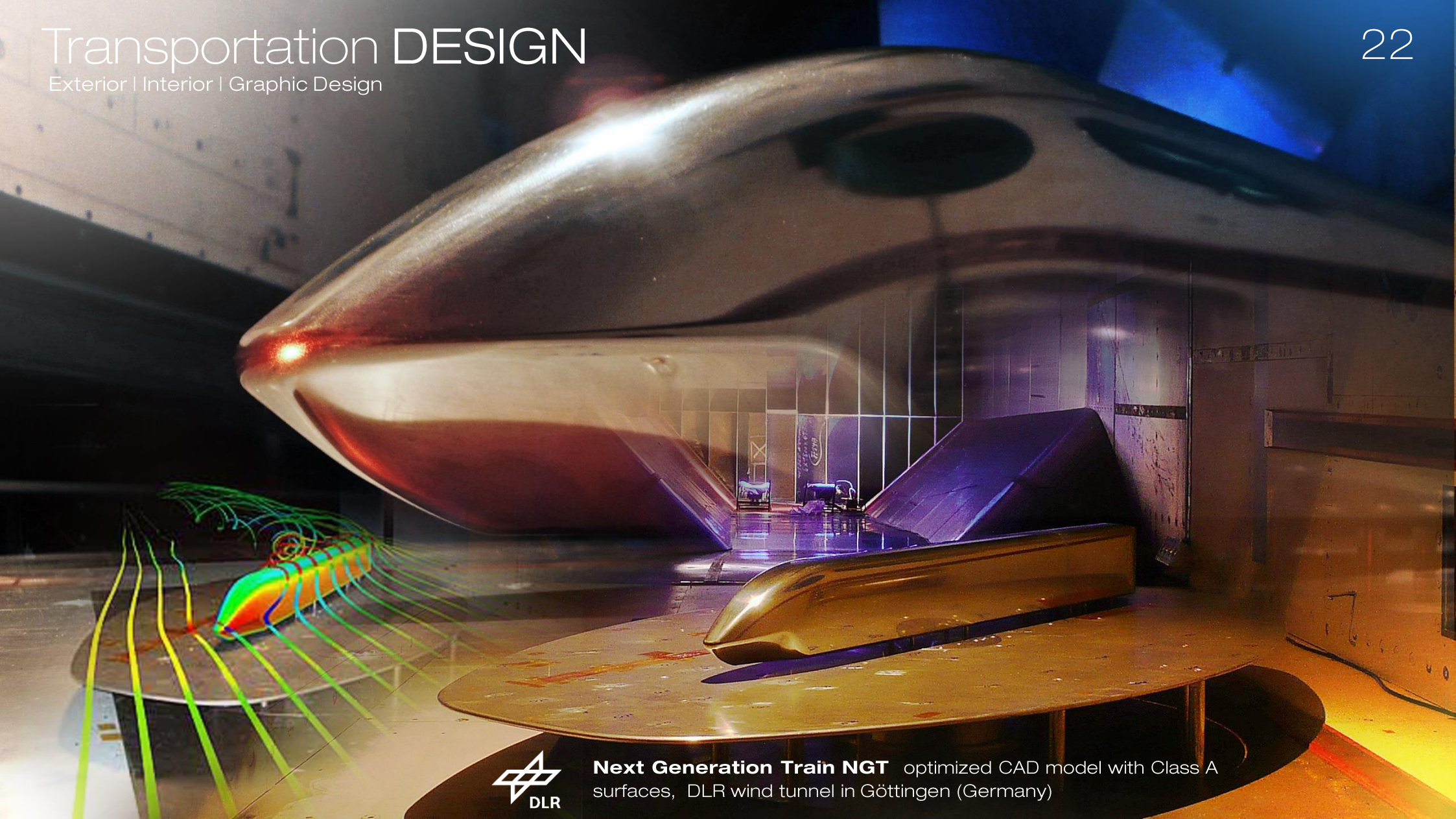


NGT Interior Design The panorama view on the upper deck will allow an enhanced passenger experience. On the main deck there is enough space for P.R.M., the living space is barrier-free and an efficient illumination will allow good lighting ergonomics.

Transportation DESIGN

Exterior | Interior | Graphic Design

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Next Generation Train NGT optimized CAD model with Class A surfaces, DLR wind tunnel in Göttingen (Germany)

Transportation DESIGN

Exterior | Ergonomics



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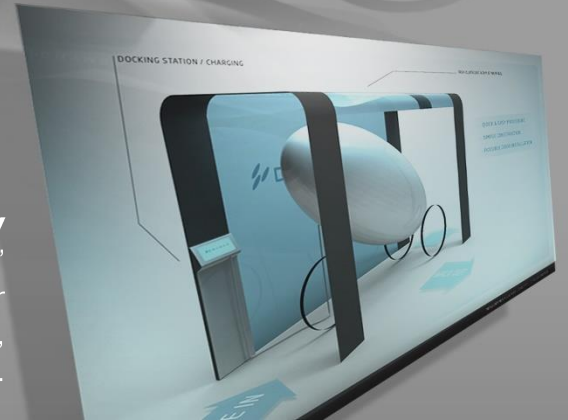


GT Racing Car An exterior design (body) of a GT Racing Car for a private customer as a concept study. Because it has been an individual development, it all had to begin with the analysis of the ergonomic dimensioning which led to a common package and finally to the construction of the car body surface data.



DRYMER Concept Study

“Sportive like a bicycle, comfortable as a car” is the philosophy of this innovative concept study for DRYMER. Significant characteristics are comfort, design, durability and simplicity for different users like young- and older people.



A dark, blue-tinted photograph of a person sitting in a chair, possibly in a laboratory or office setting. The person is wearing a white lab coat or uniform. The word "PRODUCT" is overlaid in large, glowing blue letters across the center of the image. The background is dark and out of focus, with some faint light sources creating a moody atmosphere.

PRODUCT

Industrial DESIGN

Seat Design | Ergonomics



Fischer + Entwicklungen

Pilot Seat Helicopter seats have to fulfil highly demanding requirements, especially corresponding to lightweight construction, ergonomics, emergency landing conditions and crash scenarios. The design of the pilot seat reflects the ambitious technological demand. The prototype has successfully been showcased at various exhibitions. Customer: F&E, Fischer and Developments from Landshut / Germany





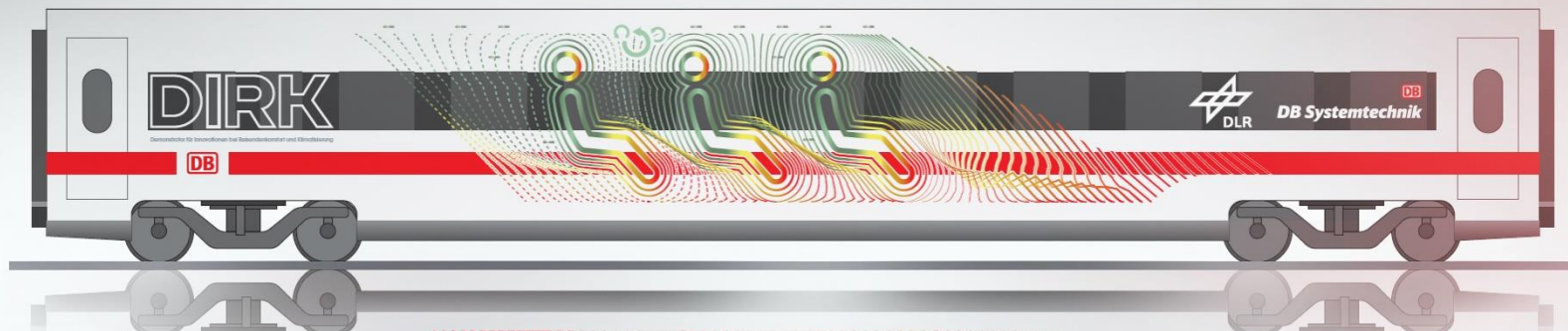
EcoStar 500 A moulding for the products of MHG Heiztechnik (former MAN Heiztechnik), a leading premium manufacturer of oil-heating value technology, which consequently covers the entire product line-up. EcoStar 500 does not only reflect accuracy and quality of the products but also adds its own identity which corresponds to its high-grade appearance. We continuously used a special blue color accent for the MHG corporate design. The products are currently being sold successfully, specifically within the European markets.

Industrial DESIGN

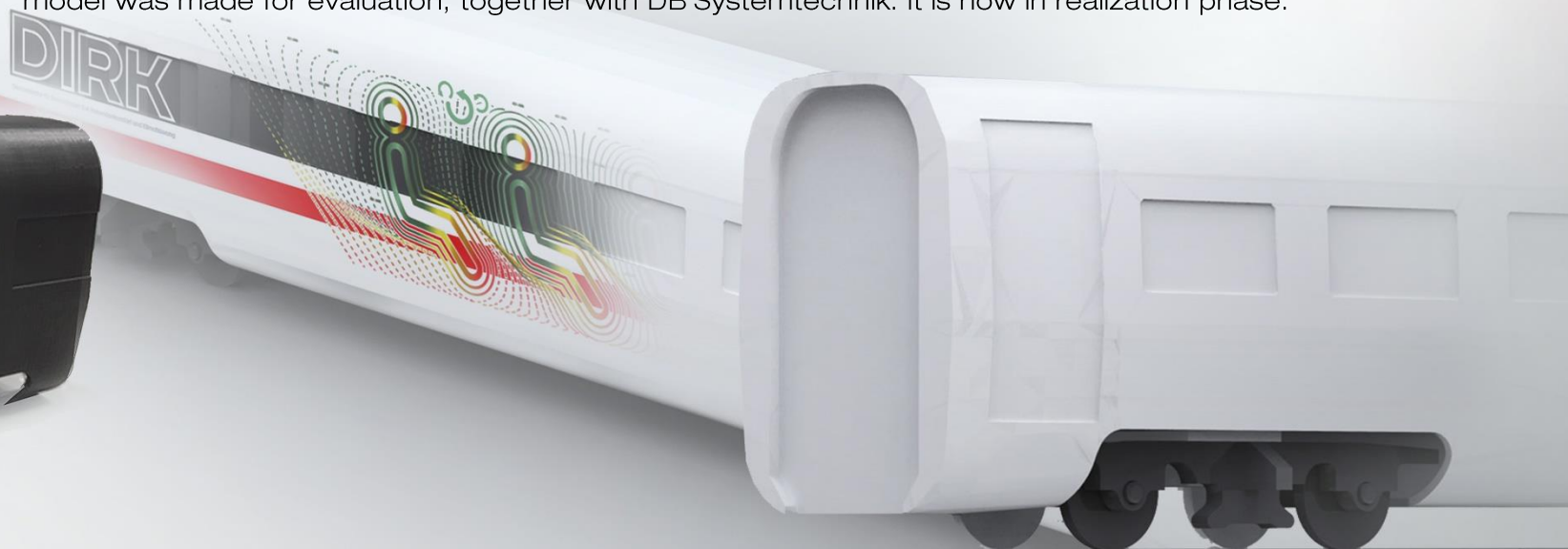
Interior | Ergonomics | Functional Model

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Insert Sink PRIMA 45 The design for the sink included an 1:1 scaled functional model. It was made for Eurodomo Haustechnik GmbH in 2006 and has a very scratch-resistant surface which is also easy to clean. Currently the sink is offered within many european markets as a very successful serial product.



DLR Labor Wagon D I R K ,Demonstrator für Innovationen im Reisendenkomfort und Klimatisierung'
Exterior graphics for the new laboratory wagon DIRK for the German Aerospace Center (DLR). A 3D-printing model was made for evaluation, together with DB Systemtechnik. It is now in realization phase.

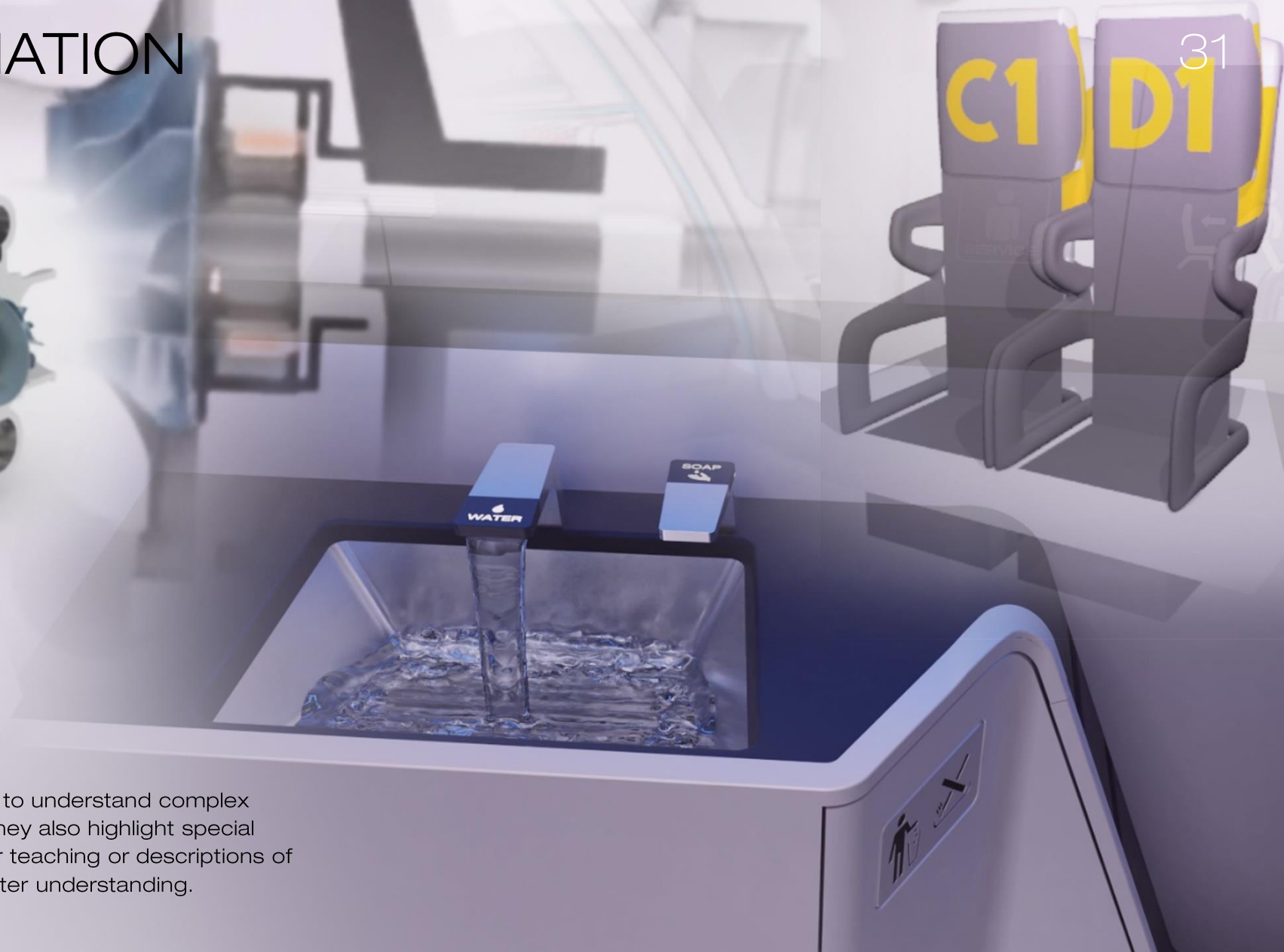
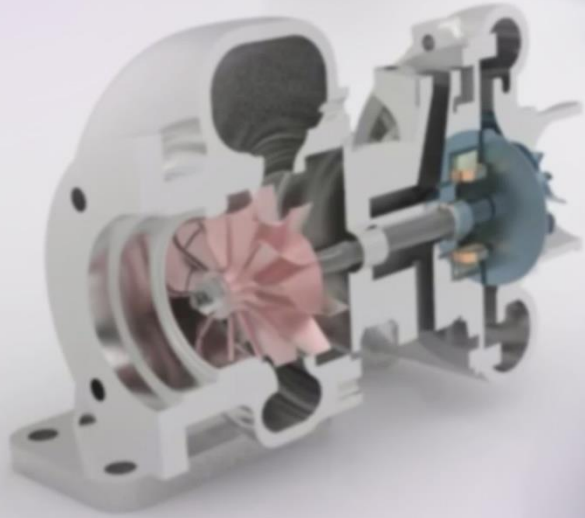


3D ANIMATION VIDEO & VR



2D/ 3D ANIMATION

Visualization | 360° Panorama



3D Animation Animations help to understand complex correlations quicker and better. They also highlight special functionalities of your product. For teaching or descriptions of processes they can support a better understanding.

Corporate VIDEO

Storyboard | Filming | Film Editing | Post Production | VFX



Video We develop sophisticated storyboards together with our customers. A combination of real video and 3D animations might be useful to transport the philosophy, soft- and hard factors with the individual corporate design. The video can describe design quality, functionalities and benefits of an idea or product in an efficient way.



VR APPLICATION

Interactive | Ergonomics | Visualization

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Virtual Reality

VR Applications Interactive VR applications with high-immersive perception help to assess the design quality of future products before building them. Show your customers different solutions, designs, functions, colors and trim. With VR goggles it is possible to enter a designed room, to develop best ergonomics and HMI human-machine interface solutions. You can use the interactive VR platform as well for your website to let your customers get part of your immersive vision.



VISUALIZATION

SIMULATION

3D VISUALIZATION

Visualization | 360° Panorama



High End Visualization Presentations in 2D or 3D for the VIP and VVIP Interior cabin market extend and complement the expertise of providers, completion centers, OEMs and planning teams. High quality 3D visualizations of the entire cabin support the developing process of a VIP-cabin significantly with well-founded image information (also available as 360° panorama).

3D VISUALIZATION

Visualization | 360° Panorama



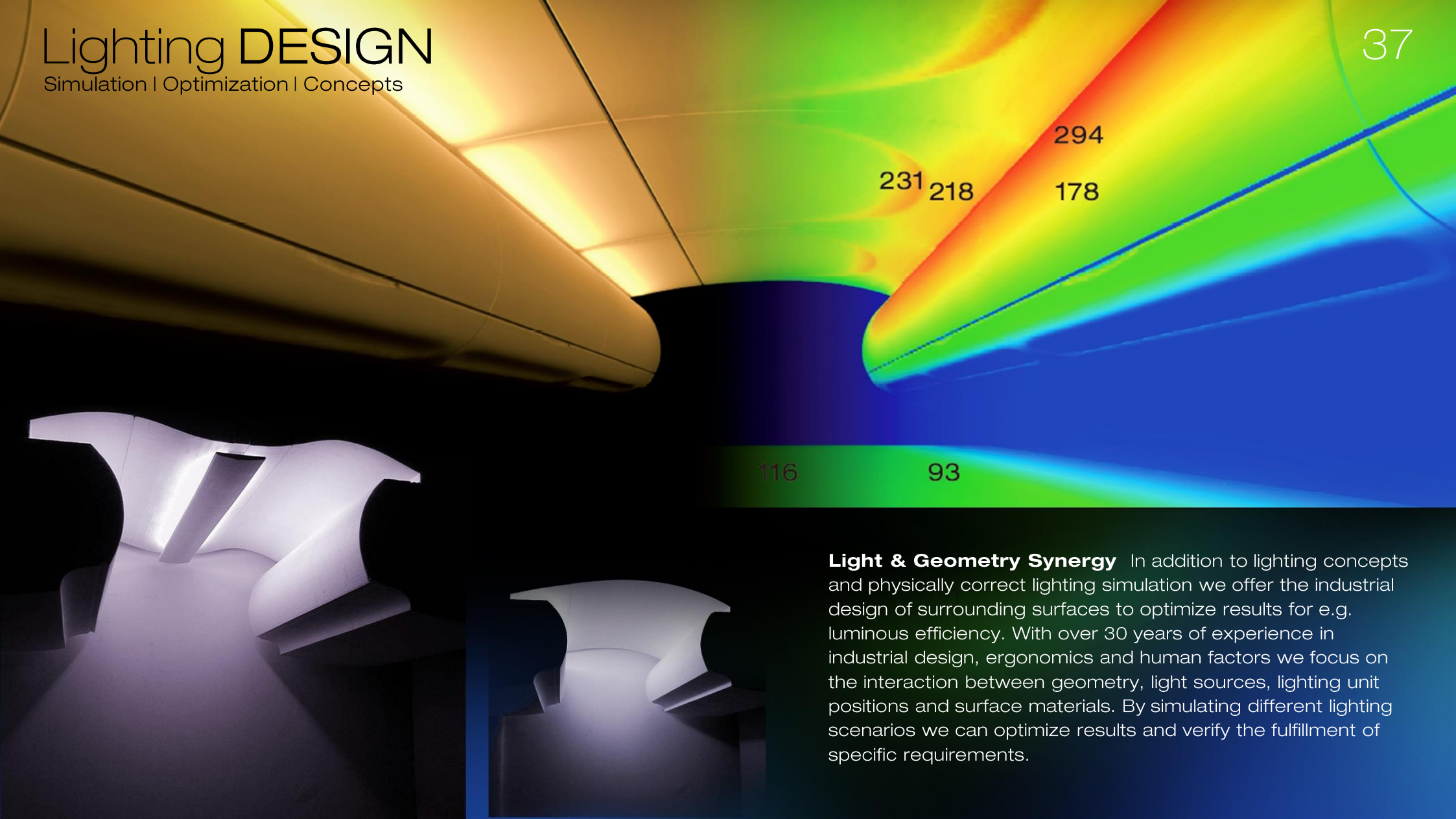
High End Visualization Detail

RUAG

Lighting DESIGN

Simulation | Optimization | Concepts

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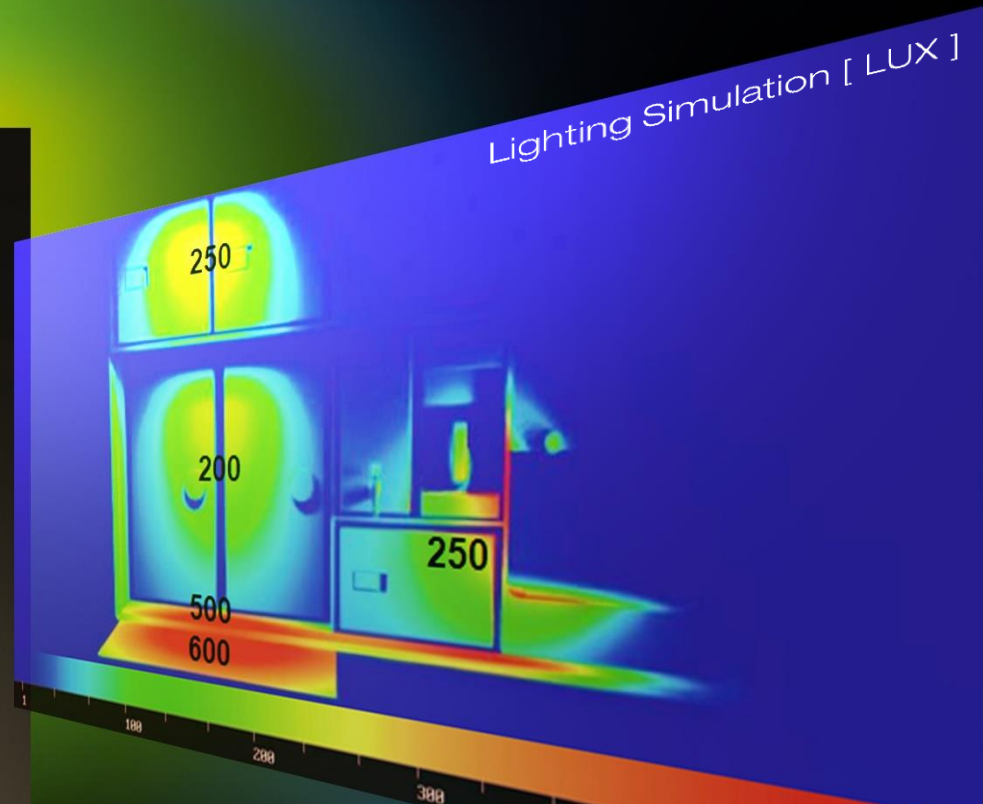
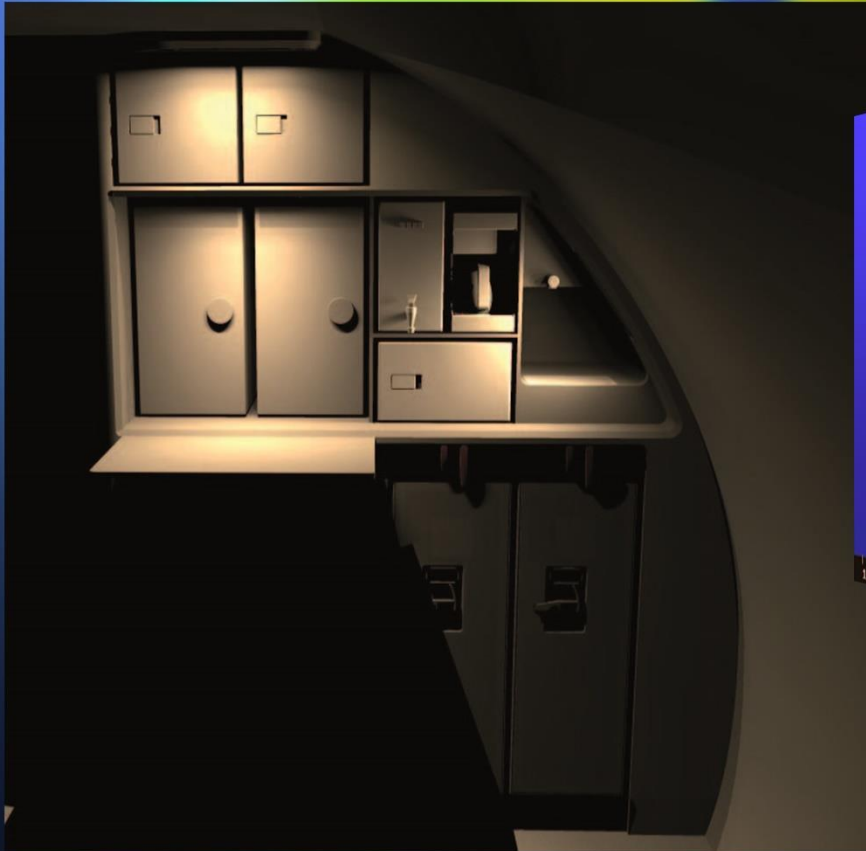


Light & Geometry Synergy In addition to lighting concepts and physically correct lighting simulation we offer the industrial design of surrounding surfaces to optimize results for e.g. luminous efficiency. With over 30 years of experience in industrial design, ergonomics and human factors we focus on the interaction between geometry, light sources, lighting unit positions and surface materials. By simulating different lighting scenarios we can optimize results and verify the fulfillment of specific requirements.

Lighting DESIGN

Simulation | Optimization | Concepts

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Lighting Optimization We offer physically correct lighting simulation and lighting optimization in aircraft cabins, for monuments as well as other transportation interiors and architecture projects. Ergonomic design and analysis of illumination level on e.g. work spaces that can also be represented in false colour renderings (e.g. for illuminance [LUX]) can support the design process in an early stage and can validate the fulfillment of specific requirements or customer needs.

AIRBUS

HALL PLANNING

HALL PLANNING

CORPORATE DESIGN

CORPORATE DESIGN

Industrial DESIGN

Hall Planning | Colour Definition | Visualization

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Hall Planning Visualization and realization of the definitions of C.I. colors for the Airbus A380 production hall for Diehl Aerospace.

Industrial DESIGN

Hall Planning | Colour Definition | Visualization

Hall Planning Visualization of hall planning process of the wind tunnel for models for the DLR Institute in Göttingen/ Germany. Different layout concepts were discussed, and the corporate design language of DLR was realized with RAL definitions and documentation.

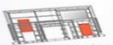


TUNNELVERSUCHSANLAGE

Fachwerk
Gehäusebleche
Rolltor
Türen

Weißaluminiumsilber
Weiß/Grau
Weißaluminiumsilber
Verkehrsrot

RAL 9006 (seidenmatt)
RAL 9006 (seidenmatt)
RAL 9006 (seidenmatt)
RAL 3020 (seidenmatt)



Farbabstufung
Farbabstufung
Farbabstufung
(Für alle Farbtöne gilt eine weiße Grundierung)

Hellblau
Mittelblau
Dunkelblau

RAL DESIGN 240 80 20 (seidenmatt)
RAL DESIGN 240 70 30 (seidenmatt)
RAL DESIGN 240 60 35 (seidenmatt)



Farbkonzept:
Zur näheren optischen Approximierung der Farben
und der Farbdarstellung werden hier nur Farbnummern
als Referenz angegeben.





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