

#### 

Building with wood provides enormous potential worldwide, which we can only reveal together. The genuine passion for this high-tech material encompasses our team. Out of this passion, we never stand still and redefine the limits of technical feasibility. Only in this way does development take place which also leads to global rethinking - towards building with wood.

– Managing Director Rensteph Thompson –

# INDEX

	0
Values & Customers	4
Economic upswing & urbanization	7
Who we are & how we work	13
References	17
The road to success	34
A MEMBER of HASSLACHER group	36



#### VALUES

HESS Timber assumes responsibility for our environment. With every realised timber construction we contribute to environmental protection as the wood used in construction stores the carbon that the tree has removed from the atmosphere. We are also committed to responsible sourcing of raw materials solely from sustainably managed forests. We guarantee this as a **MEMBER** of **HASSLACHER** group.

Δ

Meeting the client and the architect at the beginning of a project is essential in order to gain a comprehensive understanding of the architectural and technical requirements early on. By doing so, we can use our experience and expertise to offer optimised and cost-reducing solutions in consultation with the client team.

– Managing Director Markus Golinski –

#### CUSTOMERS

- Architects
- Project developers
- General contractors
- Owners
- 🕂 Planners

#### INTERNATIONAL HOUSE SYDNEY

In Sydney, Australia, the International House Sydney was built in 2016. It is Australia's first commercial office building with a wooden structure.

# ECONONIC UPSWING & URBANIZATION

## ECONOMIC UPSWING

Wood has been experiencing a real renaissance as the most natural building material in the world for several years now. As a leading and innovative timber construction company, HESS TIMBER has accompanied this exciting development from the beginning and fostered it through a constant pioneering spirit.

# HISTORY

00

O Company foundation by Peter Hess

S 0

Production of the first glulam beams

S Takeover of Hess Holzleimbau-Technologie GmbH & Co. KG and founding of the company HESSWOHNWERK GmbH & Co.  $\sim$ KG by Mathias Hofmann

C

C Extensive tests at the MPA Stuttgart as a basis for the technical approval of the HESS LIMITLESS jointing system

5 Relocation to  $\sim$ Miltenberg and 5 the construction of a sawmill

Factory is extended, allowing the manufacture of single glulam components up to a maximum 5 length of 42 metres

C

Implementation of Computerised Numerical Control (CNC) production with a 6-axis CNC portal portal



Realisation of the D1 Tower project in Dubai, consisting of 4 free-formed roof structures



Significant investments in new production technologies and the expansion of production halls

Strategic reorientation at our location in Kleinheubach

Investments amounting to 2.5 million euros and the general technical approval for the HESS LIMITLESS ijointing system was obtained



Realisation of the Museum Fondation Louis project in Paris Fondation Louis Vuitton

C

Start of the integration into the HASSLACHER group

-

 $\bigcirc$ 

0

# URBANIZATION

The world population continues to grow by approximately 250 people per minute. At the same time, cities and conurbations are conglomerating at unprecedented rates and the demand for buildings, industrial space, housing and infrastructure is increasing. To benefit from these changes, HESS TIMBER supports its customers and partners in realising construction projects with the most natural building material in the world. **Wood**.



1850

Global Population: 1.26 billion

Estimated Global Population: 9.77 billion 66 % live in towns

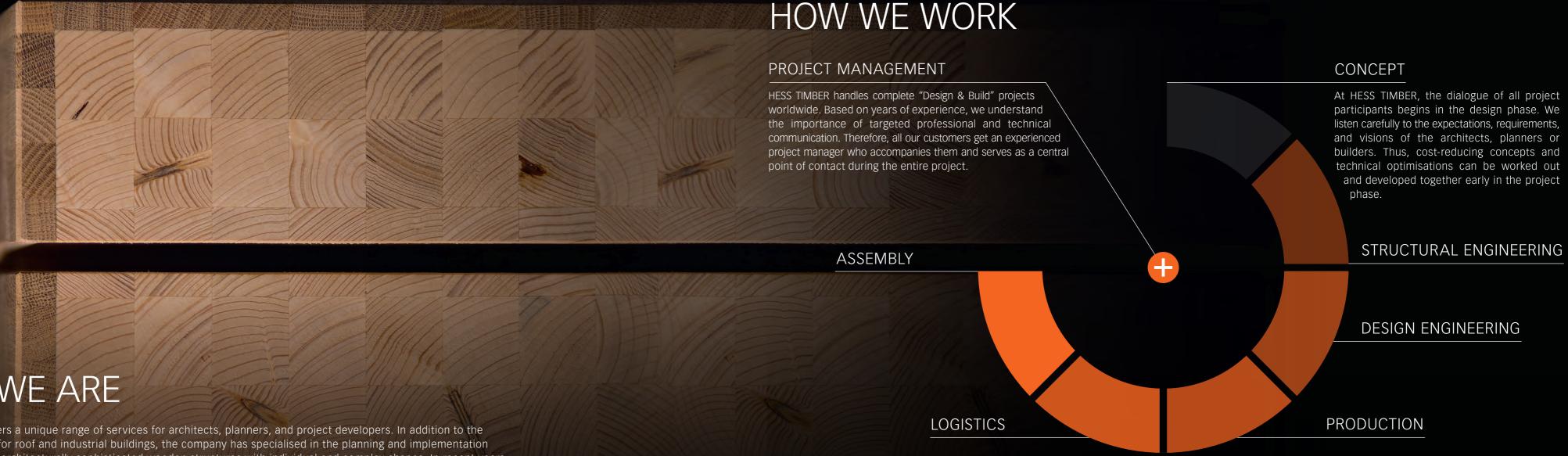


#### HESS LIMITLESS

#### ENDLESS. STRONG. TRANSPORTABLE.

With the patented HESS LIMITLESS system, individual components are pre-fabricated in such a way that they can be assembled by our experienced experts into potentially endless components. This makes HESS LIMITLESS probably the most unique and innovative complete solution in this segment worldwide.

# WHO WE ARE & HOW WE WORK



### WHO WE ARE

HESS TIMBER offers a unique range of services for architects, planners, and project developers. In addition to the standard services for roof and industrial buildings, the company has specialised in the planning and implementation of customised and architecturally sophisticated wooden structures with individual and complex shapes. In recent years, the company has realised some of the world's most spectacular wood construction projects, including the D1 Tower in Dubai, the Louis Vuitton Foundation Museum in Paris, and Europe's longest wooden footbridge in Georgia.

#### HESS FREE FORM

#### TURNED. 3D. SHAPED.

By using HESS FREE FORM, we realise fascinating and limitless free-form structures, sculptures and building envelopes made of glulam. These structures typically consist of many differently formed individual components and require a holistic planning and production approach. HESS TIMBER has specialised in this field in recent years. As a pioneer in this segment, we master every step of the process. HESS TIMBER realises projects worldwide with HESS FREE FORM.

# REFERENCES

REFERE

CLIENT: ARCHITECT: CONSTRUCTION PERIOD: SERVICES:

WOOD SPECIES: VOLUME:

Stadt Würzburg Anett-Maud Joppien and Henne Schönau Architekten Gmb 2017

Structural Engineering | Shop drawing | Manufacturing Component delivery | Assembly Spruce

72 m<sup>3</sup> glued laminated timber





# GRÜNDERLABOR ZDI MAINFRANKEN

WÜRZBURG | GERMANY

The Centre for Digital Innovations (Zentrum für digitale Innovationen) Mainfranken in Würzburg was completed and opened in 2017. It was funded by the Free State of Bavaria. The CDI Mainfranken serves the funding of digital start-ups in the Würzburg region. We are proud to have been involved in this project and contributed to supporting the funding scene in the region.



# BUNJIL PLACE

CITY OF CASEY | AUSTRALIA

Bunjil Place is an inner-city cultural and leisure centre in the metropolitan area of Melbourne. The architectural source of inspiration for the structurally free-formed foyer was the spiritual traditions of Aboriginal tribes of Boon Wurrung and Kulin People. At the centre of the symbolism is the protection of the community under the wings of Bunjil, a god of creation in the form of an eagle. HESS TIMBER was entrusted with the planning, production and delivery of the HESS FREE FORM glulam construction consisting of pre-assembled glulam and steelwork components. The onsite assembly took place under the supervision of a specialist operative from HESS TIMBER. This prestige project of a distinctive glulam construction has already won several national and international awards. At the same time, the project represents a milestone in the Australian construction industry. It is impressive proof of the potential of the building material wood.



20

ARCHITECT: CONSTRUCTION PERIOD: SERVICES:

WOOD SPECIES: VOLUME: FJMT Sydney 2017 Planning | Manufacturing | Component delivery Assembly supervision Spruce | Birch 166 m<sup>3</sup> glued laminated timber

ARCHITECT: CONSTRUCTION PERIOD: SERVICES:

WOOD SPECIES: VOLUME: innovarchi 2012

Planning | Manufacturing Component delivery | Assembly European fir 350 m<sup>3</sup> glued laminated timber





# D1 TOWER DUBAI

DUBAI UNITED ARAB EMIRATES

The four free-formed roofs of the D1 Tower are modelled as the petals of a flower. They serve as shading mediators between the air-conditioned interiors and the hot environment outside. The largest of the four roofs has a surface area of 600 m<sup>2</sup> and is unique due to the 370 different, individually manufactured elements. The other three roofs are identical, each has a total area of 370 m<sup>2</sup>. The D1 Tower itself is 284 metres high and has 80 floors. HESS TIMBER was commissioned with the planning of the free-formed roofs together with the engineering office Knippers Helbig. Following the planning, we were responsible for the complete production and delivery of the components as well as precise assembly on site. This made HESS TIMBER the first glulam company to realise such a project in Dubai.



#### INTERNATIONAL HOUSE SYDNEY

SYDNEY AUSTRALIA

In 2016, the country's first commercial wooden office building was built in Sydney in the district of Barangaroo South. This project marks not only a milestone in the history of HESS TIMBER but also in the Australian construction industry. The foundation for a trend-setting and novel way of building in the urban context was created. To meet the requirements of commercial buildings with complex installation levels, HESS TIMBER has developed a new laminated timber beam solution using a combination of spruce and beech that allows for large service penetrations to be formed within the beam profile, whilst providing impressive load-bearing capacity. In addition to intensive research and development work, HESS TIMBER's services included the manufacture, pre-assembly and delivery of components to various ports within Europe.





GENERAL CONTRACTOR: Lendlease Australia **ARCHITECT:** CONSTRUCTION PERIOD: 2016 SERVICES: WOOD SPECIES: VOLUME:

Tzannes Architects

- R&D | Manufacturing | Pre-assembly | Component Delivery Spruce | Beech
- 950 m<sup>3</sup> glued laminated timber



# LA SEINE MUSICALE

ILE SEGUIN FRANCE

The Île Seguin has had a new landmark since 2016. On the banks of the Seine in Boulogne-Billancourt, west of Paris, a ship-like building complex was built: "La Seine Musicale". This cultural centre was designed by Japanese architect Shigeru Ban and Frenchman Jean de Gastines and opened in spring 2017. The auditorium is the highlight. The building envelope is supported by a free-form and geometrically networked glulam timber structure and has a rotating photovoltaic sail. The sail follows the course of the sun and, in this way, maximises energy production. In this architectural jewel, HESS TIMBER was responsible for the design, manufacture, and assembly of the free-formed glulam structure.



## LORD'S CRICKET GROUND WARNER STAND

LONDON | GREAT BRITAIN

Throughout history, the world's premier cricket address has undergone several renovations, refurbishments, and modernisations. This was also the case in 2016. In this renovation of the sports complex on St. John's Wood Road in London, the Warner Stand received an upgrade with the introduction of a new canopy of unique architectural design. Many different support systems and materials were studied to design the roof structure. It soon became clear that only wood could do justice to the architectural idea and the sustainability concept to which all those involved in the project aspired. Extensive material testing and widespread research and development work enabled HESS TIMBER to use American White Oak.



ARCHITECT: CONSTRUCTION PERIOD: SERVICES:

WOOD SPECIES: VOLUME: Populous | London

2016

R&D | Structural Engineering | Shop drawing Manufacturing | Component Delivery American white oak 50 m<sup>3</sup> glued laminated timber

GENERAL CONTRACTOR: ARCHITECT: CONSTRUCTION PERIOD: SERVICES:

WOOD SPECIES: VOLUME: Joint Venture CNIM/Clugston Jean Robert Mazaud | S'pace Architects 2014/2015 Design & Engineering | Development | Manufacturing Component delivery | Assembly Spruce 2600 m<sup>3</sup> glued laminated timber



# RECYCLING AND ENERGY RECOVERY FACILITY LEEDS

LEEDS GREAT BRITAIN

With a height of 42 metres, the incinerator in Leeds is the largest glulam project in the UK. The assembly was divided into a total of eight construction phases and lasted from April 2014 to May 2015. To deliver all the timber and steel to Leeds, 72 trucks were needed. Usually, recycling and energy recovery facilities are built far from city centres, but not in this case. With this design, the internationally renowned French architect Jean Robert Mazaud demonstrated the functionality of wood as an ideal mediator in the context of sustainable resource management.



# KING'S COLLEGE SCHOOL

WIMBLEDON | GREAT BRITAIN

King's College School Wimbledon was founded in 1829 and is one of the UK's leading academic schools. In 2013, British architectural office Hopkins Architects began drafting a development plan to improve facilities at the school. The aim was to express the importance of music at King's College School Wimbledon. In the resulting concert hall, HESS TIMBER's expertise was in demand. The HESS HYBRID system was used to manufacture beams made up of spruce with a top layer of American White Oak to create the warm and aesthetically pleasing look desired by the architect. The auditorium can accommodate up to 200 people and there is also a stage for a 70-piece orchestra.



Pareth loar In open

ARCHITECT: CONSTRUCTION PERIOD: SERVICES:

WOOD SPECIES: VOLUME: Hopkins Architects | London

Implementation planning | Production Component Delivery | Assembly Spruce | American White Oak 51 m<sup>3</sup> glued laminated timber

# THE ROAD TO SUCCESS

#### PARTNERSHIPS

Together with our business partners, we develop timber construction solutions worldwide for requirements of the most varied complexity. Our experienced and well-integrated team and access to the entire product range of HASSLACHER group puts us in a position to realise high-quality and innovative wood construction projects from planning to assembly.

#### TRANSPARENCY

We stand for clarity, honesty and appreciation. We pride ourselves on being responsible and reliable in our daily dealings with customers, partners and colleagues.

#### COMMUNICATION

From many years of experience, we know that, for the successful completion of a project, the quality of communication and technical collaboration with the participants of different parties and trades is paramount. For this reason, a project manager serves as the central contact person, accompanying a project over its entire course. This ensures a smooth and efficient project.

#### KNOW-HOW

In the realisation of our projects, we use a variety of application and combination options of various types of wood and wood-based materials. In doing so, we act outside tradition, detached from familiar, stereotyped thinking. In the spirit of TIMBER LIMITLESS, we overcome boundaries. HESS TIMBER's state-of-the-art and innovative manufacturing capabilities, as well as the many years of experience of our engineers, allow us to create this limitless building and creative thinking.



#### AWARDS

- O TTJ ACHIEVEMENT IN ENGINEERED TIMBER AWARD 2017
- O WINNER OF THE STRUCTURAL TIMBER AWARD 2015
- O TTJ INNOVATIVE PRODUCT DEVELOPMENT AWARD 2014
- O TTJ ACHIEVEMENT IN ENGINEERED TIMBER AWARD 2014
- O TTJ INNOVATION AWARDS 2013 SECOND PLACE
- O SCHWEIGHOFER PRIZE 2011 HESS LIMITLESS
- O TIMBER CONSTRUCTION OUTFITTER OF THE YEAR 2011

# A MEMBER of HASSLACHER group



760,000 m<sup>3</sup> SAWN TIMBER



160,000 m<sup>3</sup> SURFACED TIMBER



STRUCTURAL FINGER-JOINTED SOLID TIMBER & GLT®



380,000 m<sup>3</sup> GLUED LAMINATED TIMBER

60,000 m<sup>3</sup> CROSS-LAMINATED TIMBER





Provide75 GWhELECTRICITY

+ 180 GWh

1,500,000 m<sup>2</sup> SHUTTERING BOARDS

1,250,000 items LETS & PACKAGING SOLUTIONS



4 COUNTRIES 8 LOCATIONS 1600 EMPLOYEES 450 MILLION EURO TURNOVER / YEAR



#### MUSEUM FONDATION LOUIS VUITTON

Based on designs by Frank Gehry, an architectural jewel was created in Paris in 2013. The Museum Fondation Louis Vuitton is covered by 12 single roofs with 222 single and double-curved European larch glulam beams. The total volume of glulam is around 800 m<sup>3</sup>.

#### IMPRINT

Published by: HESS TIMBER GmbH Am Hundsrück 2 | 63924 Kleinheubach | Germany T +49 9371 40 03-100 info@hess-timber.com hess-timber.com

Editors: Corvin Ölschläger, Ruth M. Büchlmann, UPPERCUT group Photo credits: HESS TIMBER, Rensteph Thompson, John Gollings, Ben Guthrie | The Guthrie Project, nakanimamasakhlisi, Mitch Duncan, Jon Cardwell, Janie Airey, Laurent Blossier, AdobeStock Concept and design: UPPERCUT group Editing: onlinelektorat.at, Baumann-Cox Printing: Petz Druck Gesellschaft m.b.H.

Note: For the sake of readability, the simultaneous use of male and female language forms is omitted. All nouns/pronouns relating to persons apply equally to both sexes. The HASSLACHER group has taken the utmost care to faithfully cite the image rights. If, contrary to expectations, copyright also exists, please contact us. From wood to wonders.

HESS TIMBER GmbH Am Hundsrück 2 | 63924 Kleinheubach | Germany T +49 9371 40 03-100 | F +49 9371 40 03-360 info@hess-timber.com | hess-timber.com

