

Tender Documents

5. INTERNATIONAL COMPETITION FOR DESIGN IN 3D PRINTING

FUSION

3D PRINTING INTELLIGENTLY

COMBINED

 purmundus challenge 2017

Tender for purmundus challenge 2017

The theme for this year's "purmundus challenge" international competition for 3D printing is

Fusion – 3D printing intelligently combined

Our environment and our surroundings are set to become increasingly hybridised in the years ahead, and so are we – the people living in them. Whether we are using implants or carrying wearables. Whether we no longer simply have one opinion, but rather various different perspectives. It is possible for a person to hold a number of different views. Hipsters who consider „sustainability“ to be their motto for life still carry a smart phone in their pockets. The end of either/or has been reached.

Opposites attract, boundaries are blurring, and a person's opinions can no longer be divided into black or white but are instead becoming increasingly multi-dimensional. Everything is becoming multi-dimensional: Even with respect to realities people are living in more than one. We live, for example, in the analogue ("real") world, in digital, social networks, in augmented reality and in virtual reality.

Considering the development of technology, it is time for it to become more humanoid. The professionalisation of intelligence and the constant encroachment of technology into our everyday lives require new, more human applications. While industry is calling for high tech, users are missing low tech, simplicity, and real, haptic experiences.

The possibilities of additive production are more varied than they have ever been during the last three decades. Whether it's plastic, ceramics or metal, hard or soft, transparent or coloured – there is a broad selection of material properties and methods for building up layers. Only the right selection and combination allow a well-thought-out design to develop its full potential and particular charm.

We are looking for designs that show the opportunities offered by 3D printing if you use it to combine things skilfully and bring opposites together:

- Analogue and digital
- Additive and subtractive
- Natural and artificial
- Hard and soft
- Transparent and opaque
- Monolithic and textile
- Stiff and flexible
- Conductive and insulating
- Mobile and stationary
- Private and commercial
- One-of-a-kind and standard piece

The list could be continued indefinitely. As part of the competition, participants tackle the major challenge of applying all of these polarities - tomorrow and yesterday - to a present day in which the opposites complement each other in a way that is useful rather than competing against each other. The panel is judging the benefits in terms of use, economy and aesthetics as well as the design itself and the innovation.

3D printing should not be used for a product for its own sake. Combining semi-finished products and other production methods with 3D printing is therefore explicitly allowed, and even welcomed. We would also like to once again encourage taking methods and materials into account that have yet to

become widespread, are still in research or even have not been invented yet.

The international panel judges the submitted product ideas and draws up a shortlist. The finalists' entries will be displayed in a special exhibition at the formnext from 14 to 17 November 2017. The panel will select the winners of the purmundus challenge and present them with their award at the exhibition in a ceremony to be held on 16 November 2017. In addition to cash the winners will also receive attractive non-cash prizes. A "people's choice" award, chosen by visitors to the formnext 2017, rounds off the purmundus challenge.



Please send your entries to:

purmundus challenge
Keyword: purmundus challenge 2017
Römerstraße 8
71296 Heimsheim
Germany

Deadline for submissions is on 30 September 2017. Participation is free. The participants will be notified on 24 October 2017. The participants in the competition agree that their submitted designs at formnext 2017 exhibited on 14-17 November 2017 after passing the process of elimination. Award ceremony: 16 November 2017 at formnext in Frankfurt.

Further information concerning the tender documents and GTC on: www.purmundus-challenge.com

If you have any questions about the competition please contact: challenge@purmundus.de

We wish you success,

Dipl.-Ing. Thomas Lück
Head of purmundus challenge

Corinna Ray, M.Sc.
Head of purmundus challenge

Challenge details

Task

The task for the competition is to design a product or implementable market concept that makes full use of the production capabilities offered by 3D printing. Referring to this year's theme "3D printing for people on the go", we are looking for innovative ideas where 3D printing can influence and enter our everyday life in a useful way? In which products does it offer a reasonable addition? Or does it even implement a whole new kind of product?

All common rapid manufacturing processes involving the usual metals, resins and plastics may be used to produce the entries. They mustn't simply be dogmatically produced any old way. Here, they can conceivably merge 3D printing with other semi-finished and other production methods or implement indirect process chains, such as by leveraging metal casting based on lost master forms or on lost molds manufactured using generative processes.

Assessment criteria

- Design
- Degree of innovation
- Relation to announcement
- Appropriateness of design for 3D printing
- Potential in comparison to conventional production
- Economic potential
- Societal potential
- Relevance

The jury is free to decide the weighting given to the individual criteria. Legal recourse is excluded.

Prizes

The purmundus challenge is offering prize money of EUR 6000 for purmundus challenge 2017. The winner receives a prize of EUR 3,000, the runner-up prize money of EUR 2,000 and third place prize money of EUR 1,000.

In addition, the first three winners will be provided an annual license for topology optimization. The first prize winner will receive a „solidThinking Suite“. Such Suite consists of a combination of products EVOLVE and INSPIRE. The second prize winner will receive an annual license of INSPIRE and the third one an annual license of EVOLVE.

The winners also receive the "purmundus challenge trophy". All prizewinners receive a certificate, too. Prizes are awarded at a ceremony held at the formnext on 16 November 2017 in Frankfurt.

Furthermore to receiving both cash and other attractive prizes, they will be entered into the running for an audience prize set to be determined by formnext 2017's visitors over the course of the event. Voucher worth EUR 250 is awarded for audience prize. This can be redeemed directly with cirp GmbH in the form of 3D printing services.

Costs and fees

Participation in the competition is free. The entrants bear the costs of working on the submitted designs as well as for sending the documents and digital files. If needed, purmundus challenge will produce the respective designs in full size for the exhibition or in an appropriate scale dependent on the extent of the exhibition. The cost of the physical model is supported by the purmundus challenge. The participants will not be charged.

In addition, pending or subsequently physical models are returned, data media and documents submitted by entrants will not be returned.

Entry

Each entrant may submit up to three designs. The following documents must be submitted for each entry:

- Registration form
- Entrant's curriculum vitae (DIN A4, PDF)
- Product name, product description and concept (DIN A4, PDF)
- Photograph / rendering of the product (suitable for printing, high-resolution, 300 dpi, JPG, PNG or TIF)
- Product data for producing the draft (file format: STL or STEP, other file formats on request) or a model. Printable, usable data are a requirement for entering if there is no physical model be submitted
- Optionally Video or slide show to illustrate the concept (MPEG, 16:9)

Rights

Participants retain the copyrights to the drafts they submit. For the duration of the competition, the entrants grant purmundus challenge, the cooperation partners and the jury the rights to use and publish the submitted designs for associated publications and exhibitions. Entrants shall indemnify purmundus, the cooperation partners and competition panellists against any third party claims in cases where he/she is culpable. By registering, entrants acknowledge these terms and conditions. The present enrolment has been translated into English from the German. In case of doubt regarding its interpretation, the German version shall be authoritative.

Confidentiality

Confidentiality must be maintained with respect to the competition entries while work is in progress on them and during their assessment by the panel. The entrants, purmundus challenge, cooperation partners and panellists undertake to do so. This agreement shall end upon the opening of the formnext 2017 for submitted designs that are exhibited, presented and receive awards. Please note there is a chance that unauthorised third parties will not comply with this duty of confidentiality during the preparation of the trade fair (setting up, photography, press). The parties are aware of this. Any claims in connection with damages incurred as a result are excluded.

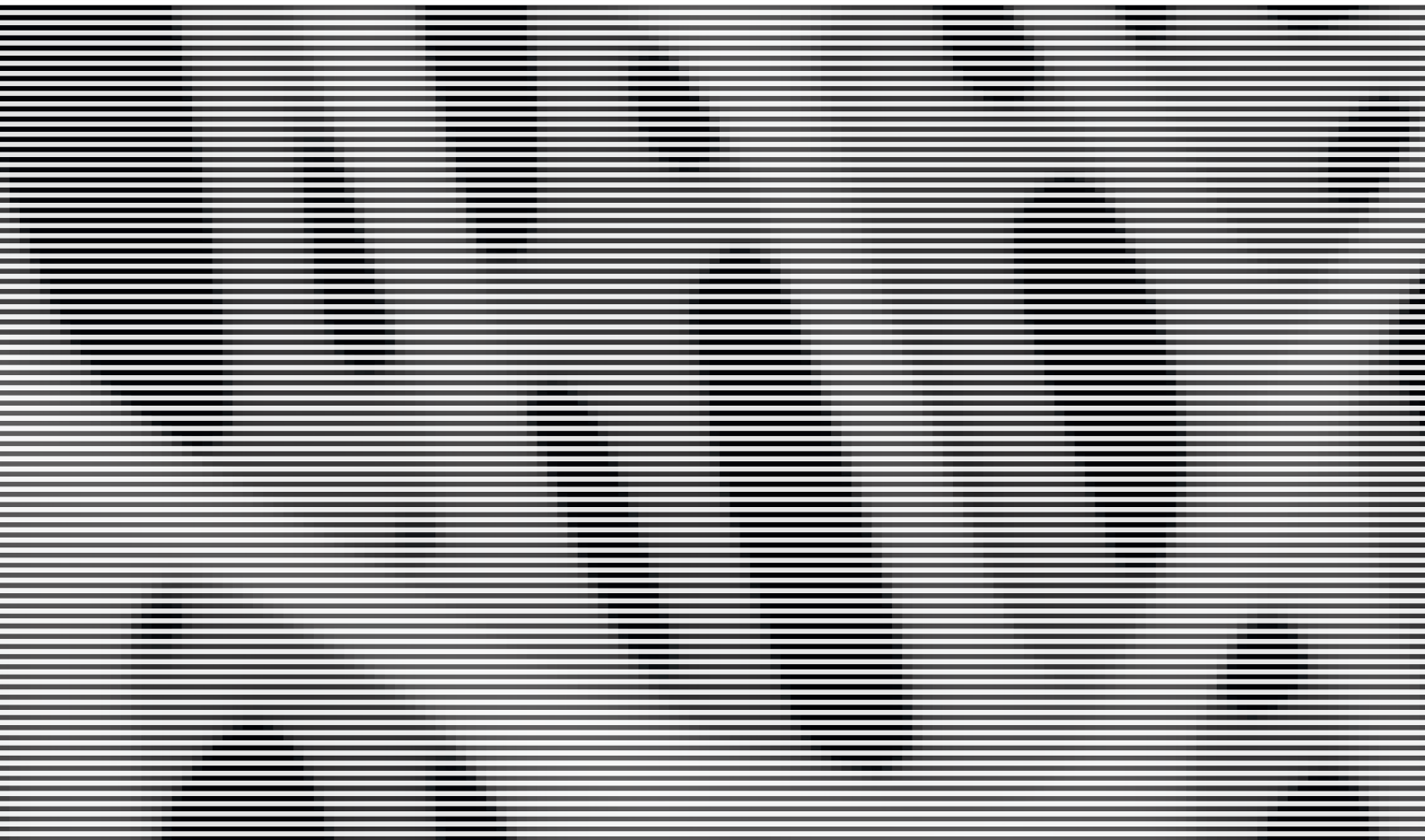
International jury

- Christoph Behling - Christoph Behling Design Ltd.
- Isabelle Fröhlich - Volkswagen AG
- Tilla Goldberg - Ippolito Fleitz Group
- Dr. Alexander Hildebrandt - Festo AG & Co. KG
- Andreas Pany - Ernst Strassacker GmbH & Co. KG
- Prof. Dali Sun - Beijing University of Technology
- Graham Tromans - G P Tromans Associates
- Rainer Zimmermann - Verband Deutscher Industrie Designer e.V.

Cooperation partners

powered by:





purmundus challenge
Keyword: purmundus challenge 2017
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Germany

challenge@purmundus.de
www.purmundus-challenge.com



purmundus

challenge 2017

Entrants

Company/Studio

First name and surname

Street and house number

ZIP/City/Country

Telephone/Fax/Mobile

Homepage

Email

Submission

Name of the product/submission

Dimensions of the product in mm

Declaration:

I agree on the terms and conditions of the international award purmundus challenge 2017. With my signature I commit to mentioned accomplishments and I do ensure that with my participation and my submission, including documents, pictures and datas no third party will be offended.

I indemnify purmundus, co-operation partners and jurors from any claims of third parties. Terms and conditions on www.purmundus-challenge.com

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Short description of the product/submission

I agree on the terms and conditions of purmundus challenge.

Place/Date

Stamp/Signature