

Indian startup advances design of prosthetics with Autodesk Fusion 360 Tools

Indian startup Social Hardware recently unveiled their modular assistive device connector, named the Avocado Wrist Connector for its resemblance to the fruit. Autodesk helped the team to apply generative design to the connector, focusing on minimizing weight while ensuring strength and durability – a problem often faced with a typical single prosthetic hand and socket device. The connector was launched at Autodesk's first Design Night in India, the opening event of Hyderabad Design Week.

A key benefit of generative design, a technology exclusively available in Autodesk Fusion 360, is

the ability to make lighter-weight parts, minimizing mass and material use while maintaining high performance standards and respecting engineering constraints. Generative design enabled the Social Hardware team to achieve a weight reduction for the connector from 300g to just 96g, a result that would have taken months through traditional design methods, but instead took less than a week.

“The development of assistive devices includes many rounds of ideation and a lot of prototyping and testing for engineering design. Fusion 360 has made it incredibly easy for us to prepare designs for

rapid prototyping, speeding up the process of development and getting the connector ready to meet the needs of amputees across the country.” said Abhit Kumar, Co-Founder, Social Hardware.

“The Avocado Wrist Connector has the potential to improve the lives of over half a million upper limb amputees in India, providing equal opportunity to people with disabilities,” said Haresh Khoobchandani, Vice President of Asia Pacific at Autodesk. “With its ability to explore options for reducing product weight through part consolidation and dramatically speed up the product development process, gen-

erative design is the future of manufacturing.”

While the Avocado Wrist Connector is currently in the testing stage, Social Hardware is making it available as part of a STEM education kit to hobbyists, students, and education institutions to gather more feedback. The team has also partnered with rehabilitation centres across the country, including the Association of People with Disability, Karnataka and Nevedac Prosthetic Centre, Punjab to make their assistive devices available to users free of charge.



For more information
Web: www.autodesk.com

FADZ Lichtenfels launches master's programme in 3D printing

The FADZ Research and Application Centre for Digital Future Technologies has launched a new master's programme “Additive Manufacturing and

Lightweight Engineering” at the Coburg University of Applied Sciences and Arts in Lichtenfels.

For the launch of the programme, politicians

of the region and from the Free State of Bavaria, representatives of the Coburg University, and entrepreneurs got together in Lichtenfels. Some 170 guests of the new FADZ met to discuss education and opportunities of digital transformation.

At a promotional event on 26 September 2019 in Lichtenfels, the FADZ Research and Application Centre for Digital Future Technologies demonstrated its affirmation of the importance of basic and



advanced vocational training for digital industrial strategies.

The challenges of the digital transformation affect enterprises of any size, as well as employees in the occupational segments that are subjected to constant change.

Following the principle “Think global, act local”, the FADZ positions itself as a bridge builder and ambassador of new digital strategies in the era of



Industry 4.0. It encompasses academic education and research, approaches students and citizens, and strives to offer assistance to small / medium-sized enterprises and crafts on their way towards digital transformation. The FADZ receives support from regional politics, the Free State of Bavaria and the German federal government, and it builds a bridge from the Coburg University to the regional

businesses with practical application support and consulting.

“The next step of the digital transformation is the human being. Education and further training now need to be strengthened. The tools are in place, now we need to ensure broad-scale implementation by means of knowledge transfer for new ideas,” said Frank Carsten Herzog, founder and Managing Partner of the pioneering

company Concept Laser.

Thanks to the laser melting process for metals, Herzog created excellent conditions for the “Generation 3D” at the Lichtenfels site. Sharing these competences of the company and the Coburg University with the general public is the mission that the FADZ is now willing to face. “If traditional technologies such as mould-related methods are disruptively replaced by additive processes, we

need to involve people and get them on board,” added Herzog.

“With the help of a training campaign, today’s 3D tools can dramatically reshape our concept of processes and products. Basic and advanced vocational training is fundamental to the design of the digital future,” asserted Herzog.

*For more information
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FPT INDUSTRIAL expands footprints in Bangladesh

Industrial powertrain provider FPT Industrial took a major step towards establishing its presence in Bangladesh with the appointment of BANGLAMARK Corporation as its new distributor in the market and the opening of its new premises in Dhaka.

The official ribbon-cutting ceremony was conducted in the presence of the national and local press as well as more than 200 customers and business partners at the new BANGLAMARK premises.

In the afternoon, the inaugural signing ceremony continued at the Radisson Water Blue Garden (Utshab Hall) in Dhaka. Speakers at the event included Michelangelo Amelia, FPT Industrial General Manager South East Asia (SEA); Rob Steven, CEO



at BANGLAMARK; senior officials from both companies as well as high-ranking officials from the Bangladeshi Government. Distinguished guests also included the Italian Ambassador to Bangladesh, His Excellency Enrico Nunziata.

With headquarters in Dhaka, BANGLAMARK is one of the leading Bangladeshi company with 20 years’ experience in engineering and construction, information and financial technolo-

gies, heavy equipment, marine solutions, trading, energy and power industries.

The new distributorship agreement will enable FPT Industrial customers to equip their boats with higher horsepower engines and will help supplying the energy demand in Bangladesh.

“The appointment of BANGLAMARK is our first step to establish a strong footprint for FPT Industrial in Bangladesh,” said Michelangelo Amelia,

FPT Industrial Country Manager SEA. “The FPT Industrial range of premium Cursor and NEF engines, offers the perfect answer for the durability and reliability needs of our Bangladeshi customers.”

Rob Steven, CEO at BANGLAMARK, added: “We are introducing 150 years’ experience and quality product into Bangladesh market. Together with FPT Industrial we look forward to Powering the Future.”

In Bangladesh, FPT Industrial’s offering includes Power Generator form 30 KVA to 600 KVA from the S, NEF and Cursor family; NEF 67 and Cursor 13 for Marine Application; and NEF45 and NEF 67 for Off Road Application.

*For more information
Web: www.fptindustrial.com*