

North Eastern Council Secretariat, Shillong
Ministry of Development of North Eastern Region
PRESS NOTE

NEC/IPR/Press Release/2008

September 20, 2022

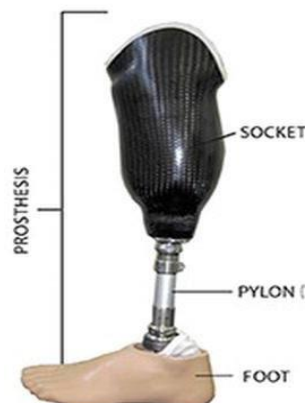
NEC Comes to Help NER Divyangjans with 3D Printing Tech

Shillong, September 20, 2022: The North Eastern Council (NEC) has come forward to add colours in the life of North Eastern Region Divyangjans with the help of digital designing and 3D printing technology for customized prosthesis and orthosis. It is expected that the use of 3D scanner printing technology in the region would help in meeting the challenges of healthcare needs with speed and precision.

Recently, NEC along with Composite Regional Centre (CRC), Shillong selected two Divyangjan beneficiaries from Meghalaya to provide them with the Custom 3D Scanner Printed Prosthetics. The beneficiaries suffering from leg amputation were sent to the National Institute for Empowerment of Persons with Multiple Disabilities (NIEPMD), Chennai under Ministry of Social Justice and Empowerment for the process of fitting the Customized 3D Scanner Printing Prosthetics.

Based on the digital scanning carried out by Assam Electronic Development Corporation Limited (AMTRON), the data was provided to NIEPMD, Chennai for detailed designing of the sockets (includes expert involvement for pressure point markings, weight discharge etc.) for final approved digital design. Thereafter, the sockets for the patients were printed using 3D Scanner Printing Technology. A 3D Scanner Printed prosthetic generally involves 3D Printing of the prosthetic socket and rest of the prosthetic parts like Pylon and Feet are manufactured traditionally. Only the 3D printed socket is fitted into the Pylon as per the image below.

Below Knee Prosthesis



On 5th Sept 2022, both the Amputees were fitted with the customized 3D Printed socket prosthesis and the beneficiaries were amazed to see that the device fitted excellently besides the highly enhanced comfort and much better walk.

K Moses Chalai, Secretary, NEC opines that this initiative has opened a whole new world for the ones suffering from temporary disability and trauma cases. The solution demonstrated enables capturing and generating accurate digital data regarding the geometry or shape of patients stump without the need for them to undertake repeated visits to assessment centres. “This shall not only reduce Out of Pocket Expenses for Divyangjans but the digital repository so created can be used for both trend analysis as well as improving the quality of Continuous Medical Education for Prosthetist or Orthotist as well as other stakeholders. The prosthesis devices can be provided having custom fit within much shorter time”, he adds.

The 3D scanner printing and other related technologies are expected to aid in meeting challenges of healthcare needs with speed, precision and remarkable enhanced solutions not witnessed so far. NEC intends to engage with the concerned Ministry, NER States and suitable Institutions like AMTRON to use the technology for covering persons with disabilities (Divyangjan) beneficiaries all across the North East Region.