

# TECHNOLOGIES TRANSFERRED FROM ISRO

TT / 02 / VSSC

## POLYURETHANE FOOT

(Technology Transferred to Bhagwan Mahavir Jain Viklang Sahayak Samithi , Jaipur .)

Polyurethane systems are mainly used as microcellular elastomers and foams. The development of PU foams for rocket motor applications has resulted in an important spin off in the form of artificial foot prosthesis. ISRO has developed the moulding technique to produce integral skin polyurethane foot possessing required mobility, gait dorsiflexion, planar flexion properties etc. The PU foot developed by ISRO has a numerous advantages over the traditional Jaipur foot. The prostheses were made of variable density microcellular elastomer. It has natural look, lightweight, more durable, cosmetic, comfortable, slip resistant and easy to manufacture. The average weight of the foot is about 500 g. ISRO has transferred the technology of making PU foot to a social organization viz. Bhagwan Mahavir Viklang Sahayta Samithi (BMVSS), Jaipur. The license was given free of charges and is targeted to provide more than 20,000 foot per year for non commercial purposes. Field trials and rehabilitation camps have been organized by BMVSS at various places. Amputees especially among the poor and needy in the country will benefit from free prostheses replacement.

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