

Technology Development Board (TDB) has entered into an agreement on 24th March, 2018 with M/s Shree Coratomic Limited, Pithampur (M.P.) for financial assistance for the project “Manufacturing of 50 IRS units (critical component of Cochlear Implant system) for supplying to DEBEL, DRDO for clinical trials” using their current facility and arrangements, while procuring few additional machineries as necessary. Company will provide these units to DEBEL, DRDO for conducting human clinical trials. Shree Coratomic Ltd. intends to commence commercial scale production post success of human clinical trials for Cochlear Implants.

A Cochlear Implant is an electronic medical device that replaces the function of the damaged inner ear. Unlike hearing aids, which make sounds louder, cochlear implants bypass the damaged hair cells of the inner ear (cochlea) to provide sound signals to the brain. Cochlear implant is the only way of rehabilitating persons with profound sensory neural hearing loss due to damaged inner hair cells. This device is capable of bringing back a profound deaf person to normal hearing. If this implant is done at an early stage (1 year to two years of age), it would be possible to integrate a totally deaf child into the mainstream. Majority of people who belong to the lower economic strata are currently deprived of this facility due to the unaffordable cost of the currently available products and the higher cost is mainly due to non-availability of indigenous implants.

Shree Coratomic Limited (SCL), Pithampur, (M.P.) was formed as a subsidiary of Shree Pacetronix Limited (SPL) in the year 1995 for the manufacturing of indigenous Cochlear Implants. Through its parent company, SCL has been associated with DEBEL, DRDO in the development of Cochlear Implant since inception of the project. The Cochlear Implant technology is completely indigenous and has been developed by DRDO with their technical arm NSTL, Visakhapatnam along with their Biomedical Research Lab DEBEL, Bangalore. The product at its current stage has the following features: (a) It has got 8 channels which is sufficient for the system to be functional (b) It has 12 electrodes of which 4 to 8 are programmable which also satisfies the functional requirements (c) Thickness of the implants is less than 2.5 mm which is adequate to be implanted in infants (d) Speech coding strategy used is continuous interleaved sampling which will take care of the basic requirements (e) It has MRI compatibility (f) The battery used is Li-ion rechargeable type which will reduce the recurring cost incurred by the user. SCL had manufactured and supplied to DEBEL ~35 Implantable Receiver Stimulator (IRS) units with their existing pacemaker facility for animal and cadaver testing, which has been successfully completed. DEBEL, DRDO has recognized SCL as the only Indian company that possesses the capability to manufacture and supply the indigenous electro-medical device. SCL shall be the first company in India to manufacture Cochlear Implants.



Exchanging the Loan Agreement with M/s Shree Coratomic Limited, Pithampur (M.P.)