

Low cost spinneret as an import substitute for production of hollow fibres for haemodialysis application

Title of Product/Design/Equipment	Low cost spinneret as an import substitute for production of hollow fibres for haemodialysis application
IPR Status Patent/Copyright/Trademark Secured in India/Abroad IPR Details	--
Application/Uses	Production of polymeric hollow fibre membranes with different sizes for surface water purification and haemodialysis
Salient Technical Features including Competing Features	<p>The spinneret is capable of manufacturing hollow fibres of different sizes 100μ-800μ inner diameter and 150μ-900μ outer diameter suitable for a variety of applications: haemodialysis, water treatment, effluent treatment etc., where as the commercially available spinnerets produce hollow fibres of single dimensions.</p> <p>The spinneret is completely indigenously designed and developed wherein the commercially available haemodialysis spinnerets are imported. This shall significantly reduce the production cost of fibres.</p> <p>The spinneret is flexible and is easy to operate.</p> <p>The spinneret has a provision to alter the diameter of fiber using an inbuilt detachable needle arrangement.</p> <p>The device has high commercial value in terms of replacement of imported dialysis membrane modules</p>
Level/Scale of Development	Pilot Scale
Environmental Considerations	No environmental issues in the design of a spinneret
Status of Commercialization	Product not commercialized yet
Major Raw Materials to be Utilized	Stainless steel cylindrical rod, detachable needle or pin
Major Plant Equipment and Machinery Required	CNC machine
Techno-Economics	Viable
Technology Package	Available

For further information please contact

CSIR-Indian Institute of Chemical Technology
Uppal Road, Tarnaka, Hyderabad - 500 007 Telangana
E-mail: director@iict.res.in