



Final Year Project Showcase for Batch-2019

Department of Textile Engineering Textile Engineering Programme		
1	Project Idea	A washing machine which can be used for efficient washing of tubular and/or stiff articles such as rugs and floor mats
2	Process	The washing machine consists of a 'water jetting disk' which rotates on a motor driven shaft. Water is supplied axially into the disk and jetted out onto the articles to be washed in the radial direction due to the rotation of disk. The disk also traverses up and down on the shaft to cover the entire extent of the articles to be washed
3	Outcome	Tubular and/or stiff articles are washed without creasing
4	Evidences (Theoretical Basis)	Centrifugal forces acting on the stream of water entering axially into the disk create a jet of water that is directed radially outward from the disk. The articles to be washed are suspended in open form along the periphery of the machine and thus washed by the help of water jet
5	Competitive Advantage or Unique Selling Proposition (Cost Reduction, Process improvement, Attainment of any SDG (Sustainable Development Goal), increase of market share or capturing new market or having superior performance over competitor. In summary, any striking aspect of the project which compels industry to invest in FYP or purchase it. Some detail description is required in terms of how, why when what. You can select one or more from following dropdown and delete rest of them)	
a	Cost reduction of existing Product	A similar product does not exist
b	Process Improvement which leads to superior product or cost reduction, efficiency improvement of whole process (e.g. What is issue is current process and what improvement you suggests)	The proposed machine design is expected to offer savings in terms of cost of utilities and water consumption
c	Attainment of any SDG (e.g. How it is achieved and why it is necessary for the region)	Indirectly achieved in form of water saving due to potential recycling of washing water in the machine.
d	Expanding of Market share (e.g. how it expand and what is problem with current market)	There are no comparable products on offer in the market currently
e	Any Environmental Aspect (e.g. carbon reduction, energy efficient etc.)	Reduction in water consumption
6	Target Market (Industries, Groups, Individuals, Families, Students, etc)	Domestic users
7	Team Members (Names & Roll No.)	Hamna Iqbal, Arooba Shiekh, Ummul Baneen, Ramsha Zafar
8	Supervisor Name	Dr. Muhammad Ali (alimughal@neduet.edu.pk)