AMAN KALRA

Professional Experience

SCHNEIDER MILLS INC

Process Improvement Intern

- Used lean six sigma methodologies to determine hot ambient conditions in the slashing department were ٠ responsible for defective warps in the weaving room.
- Suggested and implemented ideas to cool the ambient temperature cost- effectively.
- Cooling the slashing department resulted in a 95% reduction in defective warps with negligible capital investment. •

KK NONWOVENS (INDIA)- INTERLINING DIVISION

Team Leader - Quality Control and Product Development

- Supervised the project from inception to implementation and played an instrumental role in streamlining • production and quality.
- Solely set up a high- quality testing lab and imparted operations training to five personnel. •
- Developed Polyamide and HDPE coated microdot fusible interlinings in collaboration with PCC, which could • survive enzyme wash.
- Developed low melt fusible interlinings for domestic manufacturers that did not have standard fusing machines. •

SAK FABRICS

General Manager

- Solely responsible for the entire supply chain from sourcing to sales. •
- Diversified applications of chemical bonded nonwoven fabric from interlinings to medical and insulation tapes, • which resulted in a 100% increase of existing capacities.
- Suggested and implemented Pressure Reduction System and Condensate Recovery System for the steam boiler, ٠ which resulted in 60% saving in, fuel cost.

KK NONWOVENS (INDIA)- PACKAGING DIVISION

Process Engineer and Team Member (Product Development)

- Played a significant role in conceiving and implementing the idea of laminating on spun bond fabric and making the fabric hydrophilic which increased the turnover by 30% and profit margins by 10%.
- Individually conducted pan India field visits and devised marketing strategies for spun bond nonwoven.

Research Experience

The Nonwovens Institute / NC State University

Graduate Project

- Objective: To determine best Solution Blow Spinning process parameters for maximizing production rate and minimizing fiber diameter using PCL, PVDF and their blends as polymers and Acetone and DMF as solvents.
- Prepare a design of experiment (DOE) based on literature review and prepare solution blown samples based on • DOE.
- Characterize samples using scanning electron microscopy (SEM) to determine fiber diameter, X- Ray diffraction to • determine morphology and measure water contact angle to determine wettability of samples.

RV College of Engineering

Final Year Thesis Project

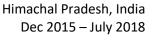
- Investigated vibration response analysis of vertical tail fin for unmanned aerial vehicles.
- Designed and Fabricated vertical tail fins using two different composites and conducted experimental modal • analysis and verified results using finite element analysis.
- Published thesis in IOSR journals as co-author. •

Raleigh, NC

Aug 2019 – Present

Bengaluru, India

Aug 2013 - May 2014



New Delhi, India Nov 2016 – July 2018

Taylorsville, NC, USA

July 2019 - Aug 2019

Raleigh, NC 27606 | linkedin.com/in/aman-kalra-b4b3a2174

Himachal Pradesh, India

Sep 2014– Dec 2015

Education

M.S., Textile Engineering | North Carolina State University B.S., Mechanical Engineering | RV College of Engineering, Bengaluru, India Dec 2019 June 2014

Skills and Interests

Computer: Microsoft Office, Solid Edge, NX Unigraphics, CNC Train, Ansys, C++ Technical: DSC, SEM, Rheology, troubleshooting in textile production, fabric costing, Lean Six Sigma. Languages: English (proficient), Hindi (native), French (intermediate). Interests and Affiliations: Active volunteer at Savera Social Welfare Society, Vice General Secretary-RAAG- Social Club of RVCE, Zonal Level Squash Player