



# Ajay Desai

## Technical Principal

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 Cleveland, OH

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### SUMMARY



Motivated and results-driven professional with a strong background in materials science and innovation. Extensive experience in pressure sensitive adhesive components, formulation, new product development, operations, technical marketing, and technical services

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### WORK EXPERIENCE



#### Technical Principal

##### **Durables Group. Avery Dennison Materials Group NA | Mentor, OH | 2020 – Present**

- Technical link between R & D and Marketing on segment technical support, VOC coordination, new product development. and market introductions
- Provide technical input and guidance on application requirements for NPD projects and stage gate process
- Provide input on cost out opportunities through downgauging adhesive and film caliper without impacting product performance negatively
- Conduct Gap analysis on multiple Durables product portfolios, and provide strategy to provide a robust offering based on in depth knowledge of direct customer and OEM requirements
- Design and coordinate lab testing to understand product performance relative to end use requirements ( automotive, chemical drum, security, industrial, outdoor, medical device, and HVAC/Appliances segments)
- Provide input on development and enhancement of testing lab capability
- Collaborate with MarComm and product management teams to establish product technical data sheets, literature, and web content for all Durables market segments
- Cross functional team member with Performance Tapes Division on growth opportunities in the Electric Vehicle battery space.
- Primary Sponsor and member on SAE committee for EV battery Tape and Label standard

#### Technical Marketing Manager

##### **Durables Group. Avery Dennison Materials Group NA | Mentor, OH | 2015-2019**

- Manage Global Avery Dennison ( NA, EU, AP. LA) projects for UL applications through AD Mentor UL DAP lab
- Customer and internal training on UL applications, categories, certification, file maintenance, and file adoptions
- Coordinate annual UL DAP lab audits with Lab manager and dedicated UL certified technicians
- Participate in all Durables related R & D new product development projects ( new adhesive development, water based ink jet technology, POP and auto dispense tire application, and long life outdoor weathering films development)
- Liaise with AD Performance Polymers group on new adhesive technology development and assessment for market use (solvent and emulsion acrylic adhesives, rubber hybrid adhesives, and UV curable adhesives)
- Coordinate competitive product benchmarking and provide guidance to technical sales and business development managers on product recommendations
- Provide customer and end user technical support ( field trials) for new product launches and initiatives

## Technical Associate

### **Avery Dennison Equipment Center of Excellence | Mentor, OH | 2013-2015**

- Evaluate new technologies for the converting and dispensing of PSA label materials'
- Establish relationships with key equipment OEMS and identify opportunities for collaboration and growth
- Thin film materials development for high speed converting and dispensing
- Global technical support on decoration transfer opportunities
- Customer and internal training on converting and dispensing technologies
- In house equipment design for ultra thin film and liner die cutting, stripping , and high speed dispensing

## Segment Technical Marketing Manager, Beer and Beverage

### **Avery Dennison Product Technology and Innovation | Mentor, OH | 2005-2012**

- Technical support for decoration transfer of beer and beverage bottles from direct print, shrink sleeve, and wet glue to PSA materials
- PS label material scale up at multiple breweries within North America, Mexico, and Europe
- Established total applied cost model for conversion of wet glue paper labels to PSA label material
- Adhesive development to enhance wash-off properties of acrylic based PS adhesives
- Design adhesives with clean removability off PET bottles through caustic washing for a higher R-PET yield.
- Global tech support role for AD Europe and Asia Pacific groups
- Customer training on product portfolio, and emerging trends in product decoration technologies

## Technical Director , R&D, Operations, and Market Technical Support

### **Avery Dennison, South Africa| Johannesburg, South Africa | 2001-2004**

- Responsibility for all AD South Africa manufacturing operations ( 3 coating locations, and 4 distribution centers)
- Responsibility for maintaining global manufacturing metrics for coater and slitter UEE, volume, and new manufacturing technology introductions
- Commissioned 5 roll solventless silicone coating line to bring release liner production in house
- Supervise plant QA, Engineering,, Procurement, and Supply chain departments
- Role of key negotiator with vendors on raw material sourcing, pricing and supply continuity.
- Successfully guided Plant and product rationalization after Avery Dennison's global acquisition of Jacstadt GMBH
- Grow AD South Africa market share through superior technical support and consultancy as a subject matter expert in PSA label applications
- Customer and end user training on product performance, application requirements, and future market trends

## Technical Manager/Technical Marketing Manager

### **Avery Dennison South Africa | Johannesburg, South Africa | 1997-2000**

- Reduced major adhesive and silicone release issues with reformulation and vendor benchmarking
- Established best practice and SOPS for off machine and manufacturing QA processes
- Upgraded lab equipment and training for lab personnel
- Direct customer contact for on press problem solving, and application consultancy
- Member of core team to build brand new coating and slitting facility in Johannesburg
- Upgraded adhesive coating technology form roll to slot die coating
- Reformulated hot melt PSAs to expand application window for local environmental conditions and converting practises
- Process optimization with engineering team for consistency in adhesive drying profiles, coat weight profiles, liner moisturization, and adhesive changeovers
- Host industry technical seminars (wine, beer. beverage, chemical drum, health and beauty, household chemicals, and food segments)

## Research Associate, Topcoats and Adhesive Development

### Fasson Films Division | Painesville, OH | 1994-1996

- Developed crystal clear acrylic topcoat for multiple ink technology receptivity
- Collaborated with AD Research Center to develop a water whitening resistance emulsion adhesive for clear on clear applications.
- Developed water based laser printable topcoat to replace outdated solvent based technology
- Developed water based ink receptive coating for polyolefin and BOPP films.
- Identified overprint varnish technologies and performance characteristics to maximize print protection and minimize film curl and shrinkage

## Senior Research Engineer, Applied Research, Films Development

### Fasson Films Division | Painesville, OH | 1991-1993

- Developed and commercialized industry leading machine direction oriented ( MDO) polyolefin films to replace vinyl based films
- Benchmark emulsion based adhesive prototypes to replace solvent based adhesives
- Coating process DOEs for coating emulsion adhesives on PET liners for clear on clear beer and beverage applications
- Customer field trials and technical support for new product introductions

## Research Engineer, Silicones

### Fasson Specialty Materials Division | Painesville, OH | 1988-1990

- Build expertise in solvent and emulsion silicone release coating technology ( tin and platinum based), vinyl end capped, and multifunctional silicones)
- Evaluate UV and EB radiation cured silicone systems for speed, coating footprint, and substrate flexibility
- Process optimization for silicone coat weight and consistency, coverage, anchorage and high speed misting issues
- Lead projects to qualify multiple pre-siliconized liner vendors
- Lead projects to bring siliconging in-house and reduce dependency and cost from external suppliers

## Research Chemist

### Tuck Industries | New Rochelle, NY | 1985-1987

- Formulation and testing of paper masking tape, electrical tape, silicone adhesive tape, and duct tape
- Vendor qualification and sourcing of chemicals used in tape formulations
- Scale up form lab prototypes to plant production
- Build expertise in rubber compounding, and hotmelt testing
- Develop water based release coating for targeted tape unwinding release targets.

## SKILLS



- Data analysis
- Analytical thinking
- Communication
- Empathic
- Customer focus and VOC
- Six Sigma
- Time & project management
- Problem solving
- Effective Cross functional team collaboration
- Adaptability
- Formulation
- People Management/Supervision

## EDUCATION

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**University of Akron** | Akron,, OH | 1983-1985

*Master of Science, Polymer Science*

**Loughborough University of Technology** | Loughborough, UK | 1977-1981

*Bachelor of Science Polymer Science and Technology*

*1 year Industrial internship at Esso Petroleum Refinery, Fawley, Southampton, UK*

## CERTIFICATIONS/AWARDS

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**Six Sigma, Green Belt - Hot Melt Adhesive Rationalization**

**Technical Directors Award - Topcoat Development**

**Technical Directors Award - MDO Films Development**

**Leadership Excellence Award - New Products and Services ( Beer and Beverage)**

**President's Award - Decoration Transfer and Growth ( Beer and Beverage)**

**Technical Sales Support Award - Durables**