

▶ Berry



# Key Milestones

Established in 1967;

- Now have 48,000+ employees
- Generated \$12.6 billion of pro forma net sales in FY2019.
- In 1972, the injection molding company entered the container market
- In 1983, Imperial Plastics was purchased by Jack Berry, Sr. and renamed Berry Plastics.
- Beginning in 1988, Berry Plastics completed over 40 acquisitions and began trading on the New York Stock Exchange in October 2012 under the ticker symbol BERY.
- In 2017, changed company name from Berry Plastics to Berry Global to better reflect business.
- Through the acquisition of RPC Group, Berry expanded its footprint to become a truly global company

# A leading global supply, design, and engineering company for value-added packaging and protective solutions



Low cost manufacturer of thousands of products in stable end markets



Strong, growing, dependable, and predictable cash flows



Proven growth platform

**\$12.6 B**

Annual Revenues

**293**

Facilities

**~49,000**

Employees

**39**

Countries

**100,000+**

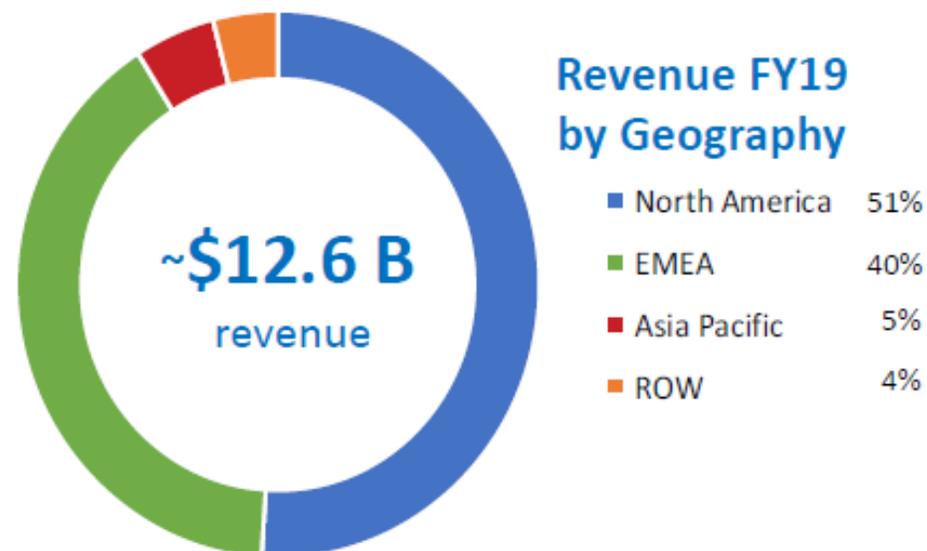
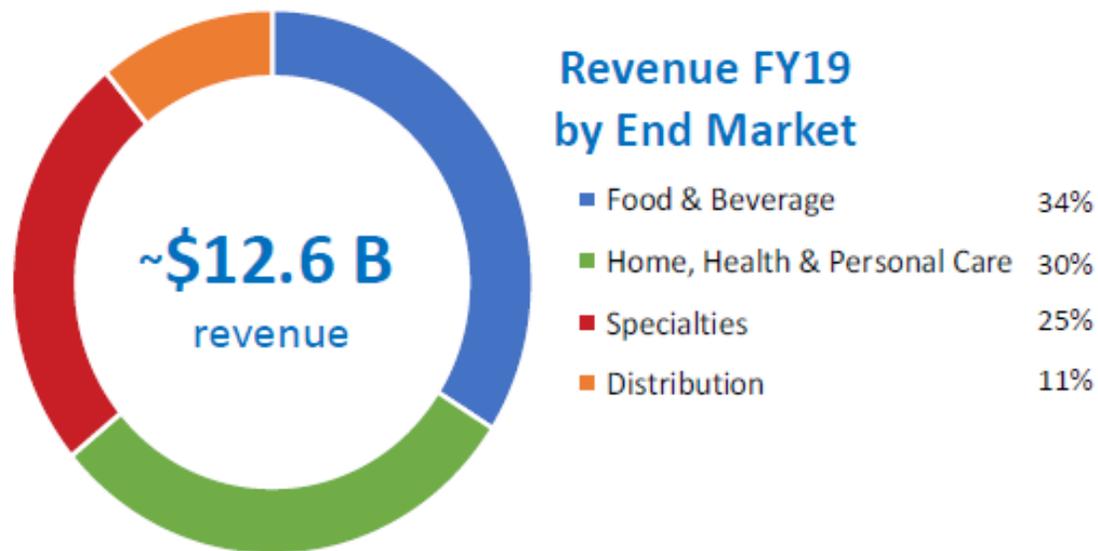
Items Manufactured





# Berry Overview

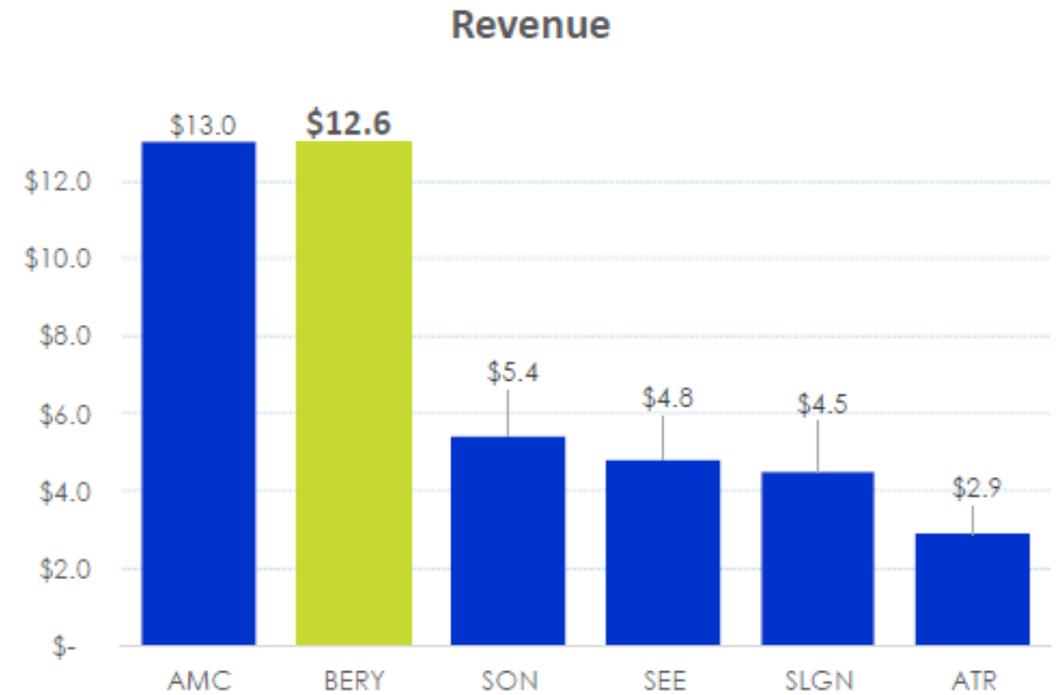
~70% of sales are in stable, consumer-oriented end markets





# 1 Global Leadership Position with Scale

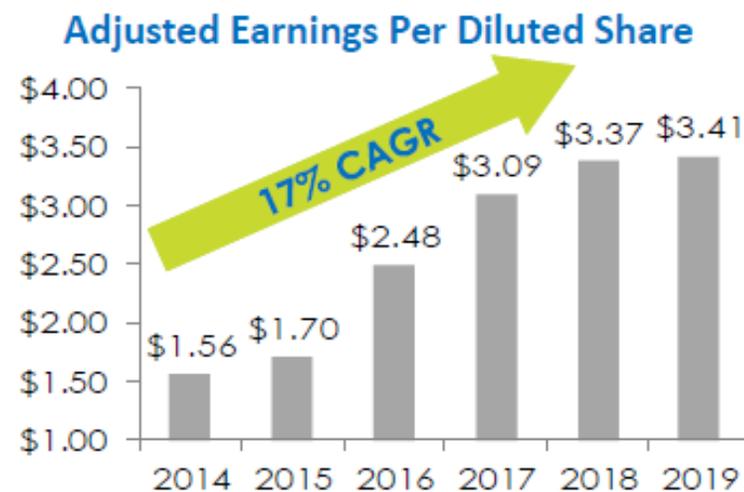
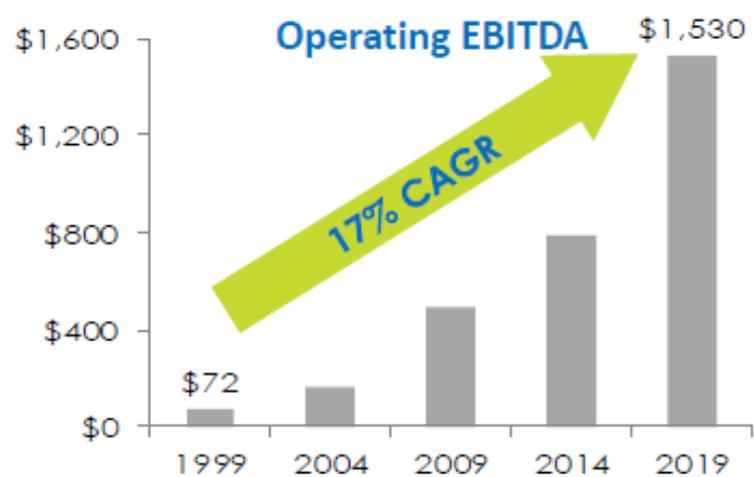
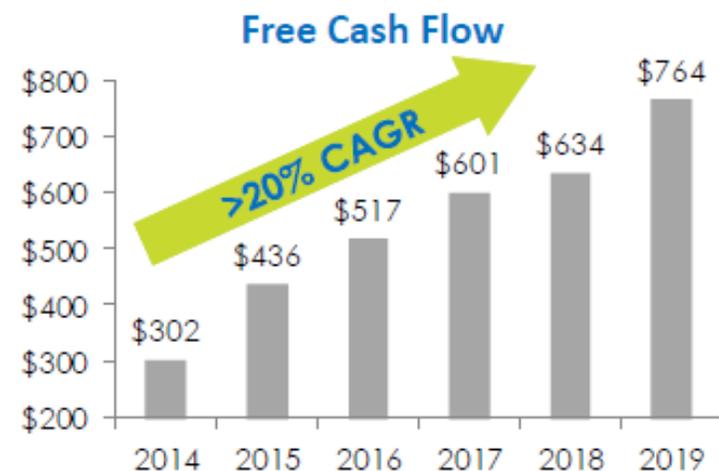
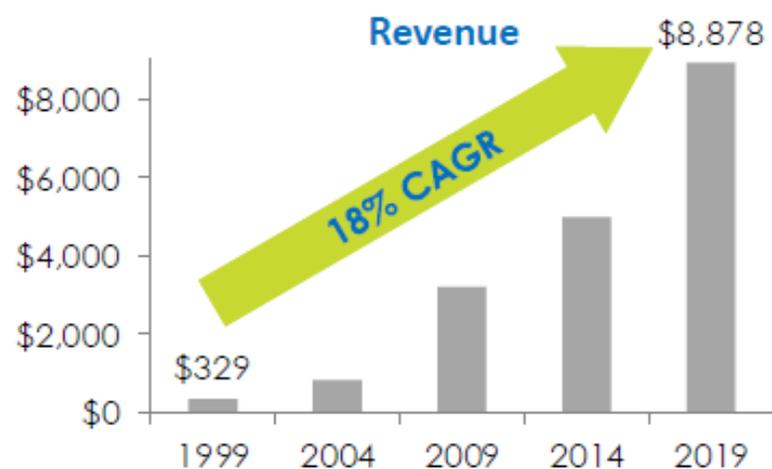
- Largest resin buyer with ~7 billion lbs procured annually
- Leadership position across the majority of our product portfolio
- The most expansive product offering and global footprint



**Low Cost Manufacturer – Sustainable Competitive Advantage**



### 3 Strong Financial Performance Track Record

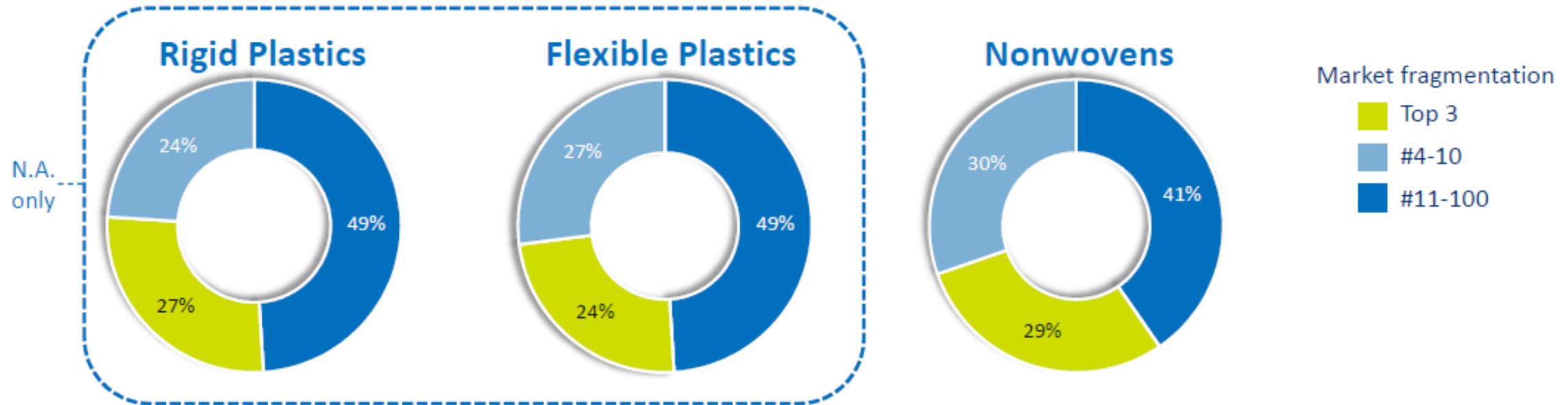


**Proven Track Record of Growth**



## 6 Long-term consolidation opportunities - drive future inorganic growth and shareholder returns

- Top priority is to de-lever to 3.X
- Completed 46 acquisitions to date
- Average ~5% cost synergies of acquired targets revenue



**We Believe There Will be Decades of Consolidation Opportunities in a Growing Substrate**

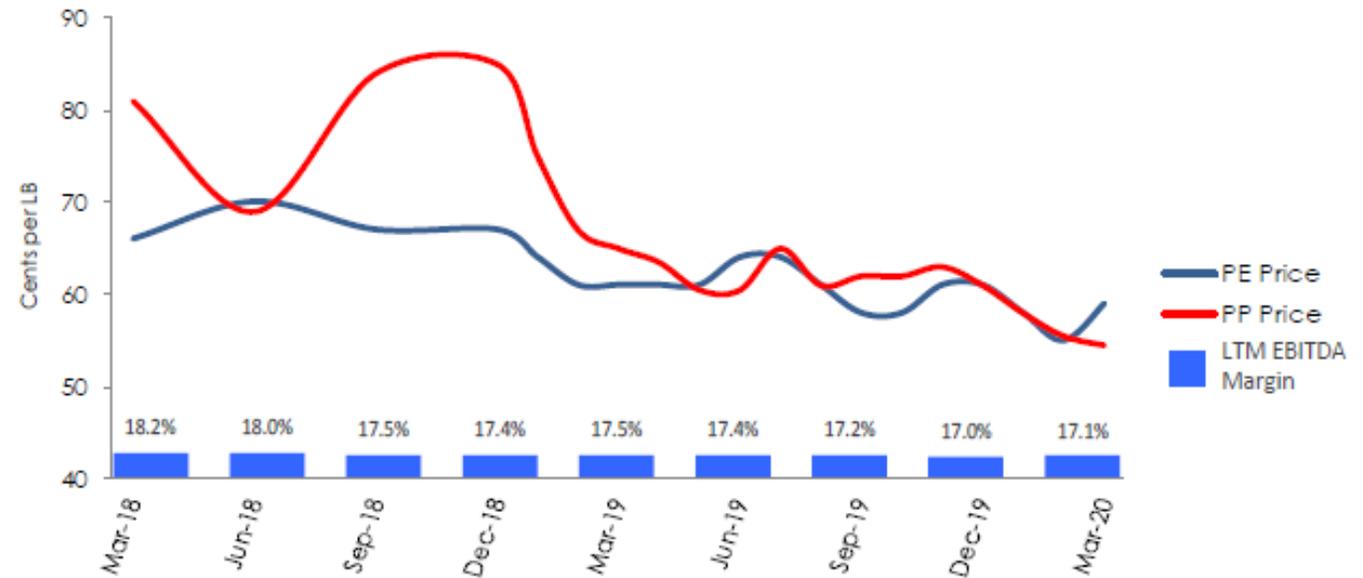


## 7 Margin stability - resin is a pass-through

### Resin – Primary raw material

- Resin comprises approximately 50% of COGS
- ~70% of resin pounds sold are on contractual pass through
- Approximately 55% of our buy is polyethylene and 40% is polypropylene

Over the past 8 quarters resin volatility was ~40%;  
Berry margins remained in a small range



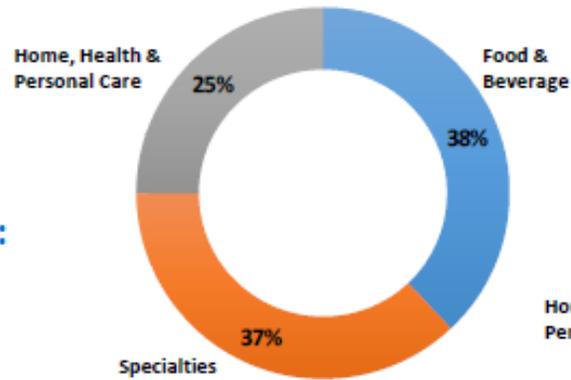
~7 Billion Pounds Purchased Annually



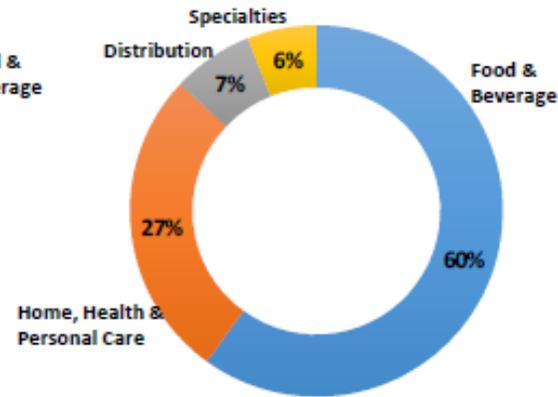
# Segment Breakdown – End Market and Geography

Revenue by  
End Market:

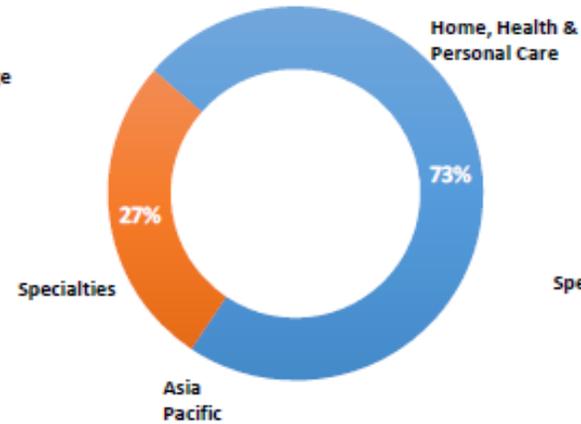
### Consumer Packaging - International



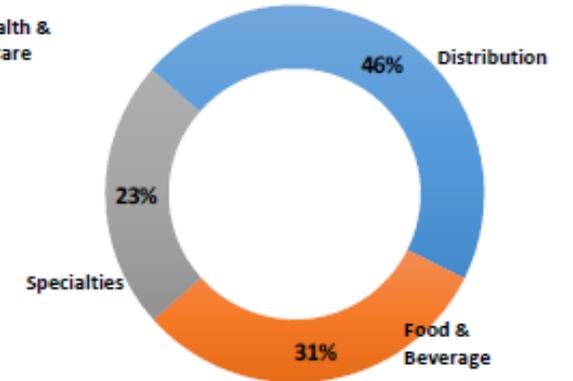
### Consumer Packaging- North America



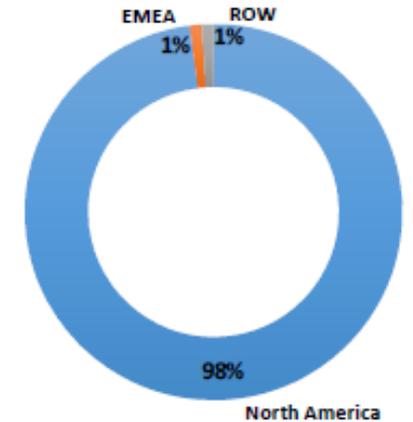
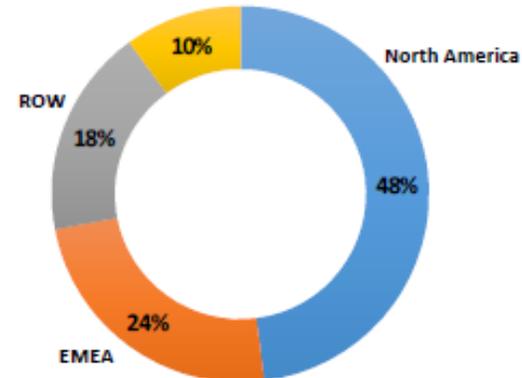
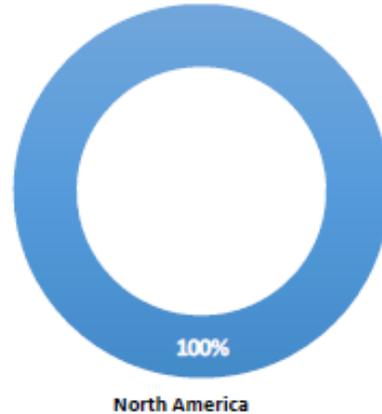
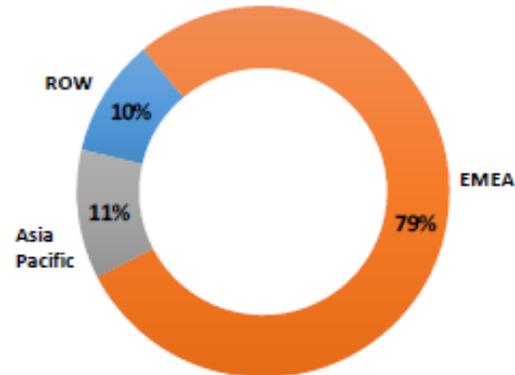
### Health, Hygiene, & Specialties



### Engineered Materials



Revenue by  
Geography:





# Health, Hygiene, & Specialties

	Diapers	Feminine Care	Adult Incontinence	Surgical Products & Medical Packaging	Pharmaceutical & Rigid Medical
<b>Product Examples</b>					
<b>Competitors</b>	<ul style="list-style-type: none"> <li>Avgol</li> <li>Fitesa</li> <li>Gulsan</li> <li>Toray</li> </ul>	<ul style="list-style-type: none"> <li>Avgol</li> <li>Fitesa</li> <li>Pegas</li> <li>RKW</li> </ul>	<ul style="list-style-type: none"> <li>Avgol</li> <li>Fitesa</li> <li>Gulsan</li> <li>Pegas</li> </ul>	<ul style="list-style-type: none"> <li>Ahlstrom-Munksjö</li> <li>Amcor</li> <li>Fitesa</li> <li>SAAF</li> </ul>	<ul style="list-style-type: none"> <li>Gerresheimer</li> <li>Nypro</li> <li>West Pharmaceutical</li> </ul>
	Wipes	Filtration	Geosynthetics	Ag & Other	Building Wraps
<b>Product Examples</b>					
<b>Competitors</b>	<ul style="list-style-type: none"> <li>Jacob Holm</li> <li>Sandler</li> <li>Spuntech</li> <li>Suominen</li> </ul>	<ul style="list-style-type: none"> <li>Freudenberg</li> <li>John Mansville</li> <li>Mogul</li> </ul>	<ul style="list-style-type: none"> <li>Low &amp; Bonar</li> <li>Naue</li> <li>TenCate</li> <li>Thrace</li> </ul>	<ul style="list-style-type: none"> <li>Fitesa</li> <li>Mogul</li> <li>Owens Corning</li> <li>TenCate</li> </ul>	<ul style="list-style-type: none"> <li>Barricade</li> <li>DuPont</li> <li>Kingspan</li> </ul>

## Air Filtration

High efficiency HVAC applications can be served with Everist™ nanofiber media, delivering low pressure drop and sustained mechanical efficiency.

Carded Merv 8 media offers an economical choice for less critical air applications. Meltex meltblown materials serve a wide variety of air applications from room air purifier to facemasks to cabin air filtration. Optional durable electret charge assures sustained performance throughout the filter's useful life.

## Blood Filtration

Meltex polyester meltblown media is capable of removing white blood cells to decrease leukocytes that cause infection. The media acts based on size exclusion, to remove white blood cells, so the red blood cells can be used in transfusions.



## Liquid Filtration

Their Reemay® and Typar® spunbond materials are chosen by liquid filter manufacturers worldwide for their high strength, uniformity, and pleatability for support in pleated filter cartridges. The choice of polyester or polypropylene allows for a wide range of temperature and chemical compatibility.

Their Everist™ and Arium™ nanofiber materials provide fine filtration rivalling finer meltblown and membrane materials.

Reemay® Elite delivers the highest uniformity in a spunbond polyester material to serve critical membrane applications for pleat support or casting scrim.

Meltex™ polypropylene and polyester (PBT) meltblown media serve a range of liquid filter applications.

## Pool & Spa

Industry leading Reemay® media can be found in the many of the world's pool and spa filters. With high dirt holding capacity, easy cleaning, and excellent capture efficiency, pool owners rely on Reemay for sparkling clean pool water. Also available with antimicrobial treatment. Reemay with Microban is a top choice for spa filtration.



## Wipes

### Key cleaning solutions for COVID-19 prevention

At Chicopee, a brand of Berry global, they are actively increasing stocks on all wipes - products that can help in the fight against Coronavirus (COVID-19). They have identified these products as key solutions to be used in conjunction with cleaning chemicals to help reduce the spread of infections;

#### Short term Microfibre Cloths – Economy & Light

- 99.99 bacteria removal
- Designed for short term use and disposal - No laundry fears
- Available in color coding (Light)
- Compatible with all leading chemicals - Quats, Chlorines & Peroxides

#### Washable Microfibre Cloth – Plus

- Machine washable at 90°C
- Quick-drying capability is combined with the additional antibacterial activity in the cloth dramatically reduces bacterial growth on the cloth
- Microfibre Plus is manufactured from 100% microfibre but is much lighter and more supple than traditional cloths, making it great for everyday cleaning

# Cleanroom Wipes

Problems • Critical and regulated environments require the most strict and reliable wipes. Using unsuitable wipes can add an increased level of risk into your certified process. Products not engineered for cleanroom environments could pose a risk of high bacteria levels and cross contamination.

- Linting of fibres can cause contamination in critical environments where reliable cleaning is essential
- VeraClean Cleanroom wipes provide an innovative and reliable cleaning solutions for all critical and regulated environments. The wipes contain low levels of ions and organic extractables, in addition the product is gamma-irradiated to eliminate bacteria and sterilize the product
- The wipes are also very low linting and provide the ideal solution for low lint cleaning in critical environments, they are also highly absorbent for effective cleaning.

# Meltblown Expansions



## Berry is Expanding Meltblown Capacity in France

Berry Global Group is adding a fabric machine to its Biesheim, France factory. The machine will spin out 720 metric tons of filtration fabric per year. That is enough for 480 million masks, which is good, but it would be better for U.S. hospitals if there were five more installations in the works and all were in the U.S.

How quickly can more machines be built, and who will pay for those machines? There isn't much discussion of that topic in White House announcements. This is a tricky business. A production line for nonwoven fabric can run to \$50 million. If it is destined to sit idle at the end of the pandemic, it's not a good investment.

Both Berry and 3M are making heroic efforts to redirect their factories to medical needs. In normal times 3M's mask output is aimed primarily at the industrial and construction markets; now it's almost all going into the virus fight. Berry had originally planned its new Biesheim machinery to supply manufacturers of air filters; now the fabric will be made for masks. Berry also announced this week that it would use factories in Indiana and Kentucky to make face shields, a business it was not in before. They'll crank out 300,000 shields a month.

Curt Begle, who oversees the \$2.5 billion (sales) medical and specialties division of Berry, says the assembly time for the Biesheim equipment was accelerated from five months to three and a half, and the additional production line will be producing fabric by the end of June.

The centerpiece of the Biesheim operation is a "meltblown" machine engineered by the German firm Reifenhäuser Reicofil.

Biesheim's filtration fabric will supply the European market. Berry has converted a pilot fabric line in Virginia to making the filter layer, but its output is only enough for 150 million masks a year. The company has a big plant in China, but the output of that plant goes to Chinese mask factories.

<https://www.forbes.com/sites/baldwin/2020/04/03/480-million-masks-for-europe-where-are-ours/#2f4144824d85>

## Berry Installing New Meltblown Line in Berlin

Berry Global Group, Inc. announced the continued expansion of its global Meltex™ meltblown capacity, with the addition of another asset to support the growing global face mask demand.

This announcement comes as demand surges due to COVID-19 and the increased need for nonwoven protection materials. The new asset is expected to be operational in October 2020 and will be placed in Europe at Berry's existing production facility in Berlin, Germany and will incorporate Berry's patented charging technology post installation. The new line will focus on the production of highly efficient filter material for premium FFP2 (N95) and FFP3 (N99) grade filter media.

“We are now beginning to see the localization of varying forms of equipment that produce materials for PPE, as countries and governments look to be able to react with speed to any future outbreaks,” said Cedric Ballay EVP & GM for Europe in Health, Hygiene, and Specialties at Berry. “We continue to provide timely solutions to those looking for assistance fighting the spread of COVID-19.” As the largest manufacturer of nonwoven fabrics, Berry makes materials for the world's leading and emerging brands. These products range in use from materials for face masks, respirators and protective healthcare apparel to packaging, many of which have been deemed essential in the efforts to fight the spread of COVID-19.

## Berry Global has New Material for Surgical Masks

Berry Global will increase production of face mask materials. The initiatives include additional capacity for the production of face mask materials in North America and a new material for face masks in Europe. With demand outpacing current supply for face mask filter media, the product development team at Berry has responded to deliver innovative solutions in a matter of weeks to support the demand. These solutions include pivoting existing manufacturing assets and creating alternative materials for face masks.

Berry has expanded its proprietary Meltex platform to add meltblown capacity in Waynesboro, VA. The line will make meltblown materials which will ultimately be used in surgical-grade face masks along with N95 and N99 respirators. This added capacity will support the manufacturing of approximately 200 million face masks annually.

Berry is also launching an extension to its Synergex range of products, Synergex ONE, a new media for face mask applications. Developed to initially meet the new face mask categories for general population, the aim is to quickly bring the media up to EN 14683:2019 standards for surgical masks. The newly introduced Synergex ONE provides a multilayer nonwoven composite product in a single sheet, as an alternative to traditional face mask layer structures. This new material will be manufactured in Europe and serve the European market and is available immediately.

“This was something that was of paramount importance in the short term development,” says Cedric Ballay EVP & GM for Europe in Health, Hygiene, and Specialties for Berry. “Given the array of materials currently being offered to the market, we are proud to offer an alternative solution to the traditional charged meltblown. We are now continuing to push on with the development to be able to pass BFE Type I and Type II testing with this media.”