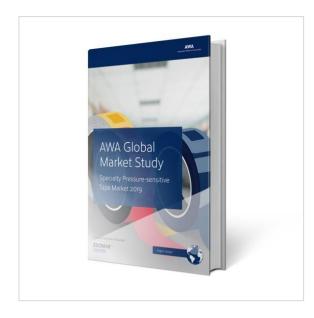
Afera exclusive: AWA Alexander Watson Associates assesses the current pressure-sensitive specialty tapes market

While tracking developments and identifying active market segments during the COVID-19 pandemic, the market intelligence provider offers new data and forecasts through 2021



CAGR of 5.3% for single and double-sided tapes globally

Pressure-sensitive (PS) tapes' projected CAGR of 5.3% is confirmation of an increasing role as a key global enabler across a broad cross-section of industries, in terms of both single and double-coated tapes, for such major applications as carton sealing, masking, transfer and surface protection.

Specialty tape applications still hold 15% of global share

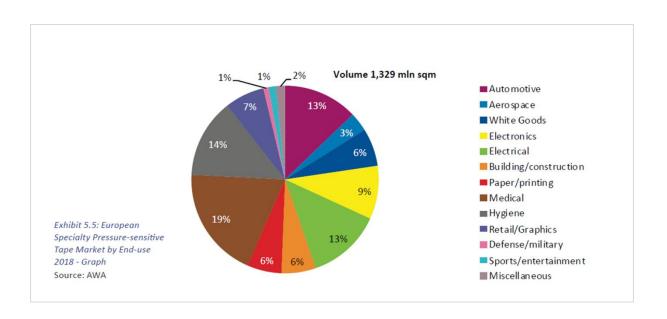
While packaging continues to hold the largest PS tape market share globally at around 67% – and masking and consumer and office product tapes

together take an additional 18% share – there is an increasing and significant focus on specialty tape applications, with a current 15% share of tapes produced globally. These are the application segments in which AWA forecast the highest continuing increase in both volume and value. However, the effects of the COVID-19 pandemic, already visible in terms of its negative ramifications for manufacturing and purchasing around the world, make forecasting a challenge for the short- and medium term. It is still possible though to track developments and identify active market segments.

Specialty tapes are in demand: carrier materials

The medical and hygiene markets are currently strong around the world – but there are many other segments where the need for specialist applied performance, convertability, and physical application properties create demand for innovative, customised PS tapes. As a result, they involve a variety of components in their construction.

The majority of carrier materials used in tape production across the board – some 74% – are PET, PVC, papers, and woven and foam materials. While filmic materials are seeing the highest square meter tapes usage today, AWA are seeing the highest growth in the use of foams, at around 6.1% per annum, primarily in the automotive and electronics market segments for mechanical fastener replacement with enhanced performance. Indeed, today, the electronics, medical and automotive segments together account for 45% of the global market for specialty tapes, with white goods, electrical and hygiene products representing further 13%, 12% and 10% shares, respectively.



European market profile

The European specialty tape market can be considered a mature market, and its established supply chain accounts for 20% of the global market.

Medical

Medical and hygiene tape applications are leading specialty tapes growth in Europe. The medical segment accounts for 19% of the European specialty tapes market – the largest application segment, predominantly driven by an ageing population. Single-coated tapes are typically used for wound care dressings, surgical tapes and electrodes. Double-coated tapes and transfer adhesives are regular components of medical devices such as diagnostic test strips, ostomy devices, surgical tapes, etc.

Investment in product developments across the value chain within the European medical sector is high, since the introduction of new functionalities and variability are valued by the market. However, this is a highly regulated segment, and suppliers of medical-grade tapes must operate to ISO 9001 industry standards as a minimum; supplementary ISO 13485/13488 standards are specific to medical device quality systems; and there are also biocompatibility in vitro and in vivo tests for toxicity, skin irritation and sensitisation, and hypoallergenic properties. Due to such stringent regulations, market change is slow-paced.

Hygiene

Hygiene products account for approximately 14% of specialty PS tape volumes in Europe. Key enduse applications today span closure systems for disposable baby diapers; adult incontinence products and self-fastening strips for incontinence liners; and feminine hygiene products. Total demand in the segment was estimated at 181 million square metres in 2018, with a CAGR to 2021 of 3%, and it is a highly consolidated market dominated by a small number of global manufacturers. PP dominates the market from a tape material perspective, with a 60% share.

Automotive

Single- and double-sided specialty tapes – especially based on foam or PVC – are widely used in the automotive industry, thanks to their fixing, mounting and bonding advantages; and, as electric

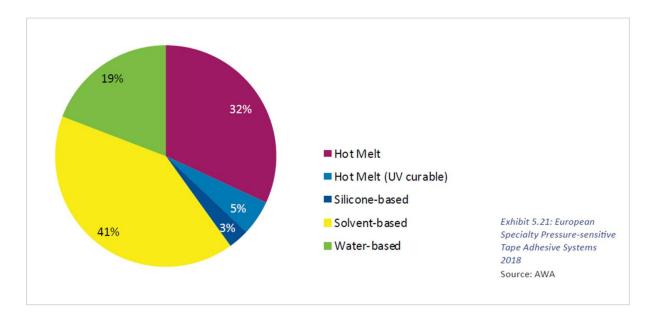
vehicle manufacture increases, their lighter weight than traditional fasteners is an additional benefit which is supporting growth. The automotive industry accounts for 13% of the European specialty tape market, with a CAGR of 3% from 2018-2021.

Electrical

Specialty tapes find use in the European electrical industry to insulate and protect electrical wiring and other materials that conduct electricity, with PVC as the preferred carrier. 2 key applications are cable splicing and wrapping, and the manufacture of electrical components, like motors, transformers and capacitors. In each case, it is important for products to conform to UL/CSA/CE regulations. The market segment is forecast to grow through 2021 at 2%.

Film-based tape carrier materials

Overall, film-based tape carrier materials lead the European specialty tapes market. They are often chosen to provide unique functional properties such as sound-dampening, anti-vibration and high-quality fastening.



Adhesive technologies

In Europe, solvent-based adhesives are forecast to hold their market position, with a current 41% of the market. For some applications, there are limited options to move away from solvents due to demanding functionality requirements and conditions where the tapes are employed. Water-based and hot-melt adhesives, however, are predicted to increase steadily in market share, driven by environmental pressures and regulations, as well as by continuing developments in higher-performing adhesives. The adhesives market sector is nevertheless also challenged today by the need to reduce processing costs, offer competitive products and improve efficiency.

Asia, the largest regional market

Market segment growth differs across the world's regions for tapes, dependent on the key macro drivers of demographics and economics. Asia is not only the largest market, claiming a 48% share of global specialty tape volumes, it is also the fastest-growing, with a CAGR 2019-2021 of 7.4%.

Electronics applications dominate end-use with a 25% market share, with white goods and automotive next in line with 19% and 16% market shares respectively. Driven by recent developments and currently by China, regional growth in Asia is now beginning to focus on India, where GDP is enjoying growth in key end-use markets.

Overall, while the different end-use segments for specialty tapes vary in size and growth rates, electronics represent the largest market, with a CAGR through 2021 of 6.6%, and the automotive, white goods, hygiene and medical markets are all forecast at greater-than-5% growth per annum.

North American regional market

North America claims a 23% share of the global market for specialty PS tapes. While packaging is of course at the top of the applications list, end-use specialty segments are much more fragmented. Medical applications lead with an 18% market share and are forecast to grow at 5% through 2021. Automotive is next at 13% but currently shows no growth. Electrical applications are also enjoying a 13% market share and are forecast to grow at 2% through 2021. Building and construction applications take 10% of the market with a CAGR of 4% through 2021.

South American regional market

South America's difficult economic situation in recent years has curtailed growth. Specialty PS tape usage, representing just 5% of the global market, is focussed on hygiene applications with a 33% share which continues to grow. Other growth markets are medical applications, currently at an 18% share, and automotive and paper/printing.

Africa and the Middle East regional market

Africa and the Middle East is a new region for growth, currently with a 4% share of the global specialty PS tape market and a CAGR through 2021 of 4.4%. A combination of technologically advanced and underdeveloped countries, this diverse region is, even today, a challenge as well as an opportunity. South Africa, North Africa and the Middle East – particularly Israel – are currently the primary areas of regional market activity. Today, market developments are focused on medical and hygiene applications, with a combined share of 55% of volume demand for specialty PS tapes.

Sustainability

Environmental regulations are affecting the specialty PS tapes market in 2 key areas: manufacturing processes and product design. Sustainability concerns — both regulations-driven and individual-company-driven — may create challenges, but they also create opportunities for specialty tape converting and application. Europe is probably the most advanced and developed region in this respect.

The Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH 2018) legislation has challenges for the supply of raw materials, as an increasing number of components are being

banned from use. This puts pressure on all companies operating win the PS tapes industry, especially smaller companies with fewer administrative resources.

Another trend is greater awareness of the Circular Economy and closing the loop of manufacturing, consumption, use and recycling. This factor is providing increased justification to invest in research and the development of more eco-friendly, recyclable and biodegradable solutions.

Tomorrow?

The world's markets are becoming increasingly regionally focussed, and specialty tapes manufacturing is also becoming more of a 'local' focus and is therefore influenced by a region's economic situation, GDP and industrial development status. High raw material costs driven by fewer suppliers and by reduced natural resources, as well as pricing pressures from across the value chain, are compounded today by the adverse effects of the COVID-19 pandemic. While AWA researches forecast growth for specialty PS tape globally through 2021 of a healthy 5.2%, we will just have to wait and see. Depending on the creativity of the industry and its effective and timely product innovations, forecasts will be adjusted accordingly.

For more information, visit <u>www.awa-bv.com</u> or contact AWA Alexander Watson Associates via info@awa-bv.com.