

# Cable Ties, Adhesives and Clamps: The Different Ways for Fastening

## Cable Ties

The size of the global cable ties market is expected to grow by USD 1.4 billion during 2019-2023. This market consists of seven major segments which include Releasable Cable Tie, Non-Releasable Cable Tie, Beaded Cable Tie, Push Mount Cable Tie, Mounting Hole Cable Tie, Identification Cable Tie, and Heat Stabilized Cable Tie. The non-releasable cable tie is the leading segment of the market, followed by heat stabilized and mounting hole cable ties which are high in demand. North America is the largest market for cable ties and APAC is known as the fastest growing market for cable ties. The cable ties market is predicted to register a CAGR of over 5% by 2023, and the market appears to be moderately fragmented.

Cable ties have a variety of applications in several industries such as electrical and electronics, retail goods, construction, food and beverages. For instance, heat stabilized cable ties are used in applications where resistance to higher temperatures is required as a cost-effective and durable way of fastening, such as construction and consumer goods. There are several types of cable ties in terms of materials. Those cables made of materials such as nylon, when combined with heat stabilizing materials, provide better resistance to heat both in high temperature and outdoor areas. Additionally, the materials give a better tensioning range to the cables while providing them the smooth look. Interestingly, the nylon ties are used as alternatives to metal ties supported by their lower cost and less installation time compared with the metal ties. This boosts the demand for heat-stabilized cable ties in the market and consequently to encourage suppliers for considering those cable ties as part of their product offerings.



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Another good example is the metal detectable cable tie designed for use in the food and beverages and pharmaceuticals processing industries. In these industries, the detectable cable ties, either using polypropylene material or nylon, support businesses to meet industry regulations.

Although cable ties are increasingly being adopted and used in several industries and therefore encourage numerous suppliers to produce these new fastening products, there are a number of challenges which have significant impacts on cable ties' market growth. Cable ties are produced using stainless steel and polypropylene. The prices of raw materials such as stainless steel used in the manufacturing of cable ties are highly unpredictable. Substantial fluctuations in stainless steel are caused by a systemic demand-supply imbalance in the global steel market. Instabilities in raw material prices cause volatility to the market and unfavourably impact the manufacturing costs and shrink the profit margins of vendors in the global cable ties market. In addition to price fluctuations, there are major environmental concerns about plastic products used in cable ties.

## Adhesives

The size of the global adhesives and sealants market is projected to register a CAGR of 5.6% from 2018 to 2025. The main factor driving the growth of the market is the increasing demand from automotive, construction, packaging, furniture, footwear, and pressure sensitive applications. This year, the market size is expected to reach USD 60 billion. Interestingly, the growth in the Asia Pacific region is anticipated to overtake both the US and Europe. Within the same period, from 2018 to 2025, research shows that Asia Pacific growth is estimated to be about 6.2%, backed by moving more manufacturing to that region.

Looking at the global sales, pressure sensitive applications of adhesives have seized a substantial market share in recent years. In this application, adhesives form a bond with the adherent on application of pressure. Automotive, construction and furniture are the major industries where in fasteners are being replaced by adhesives.

The automotive industry, for instance, is one of the key drivers of the global adhesives market. Increasing production of lightweight vehicles with higher fuel economy and

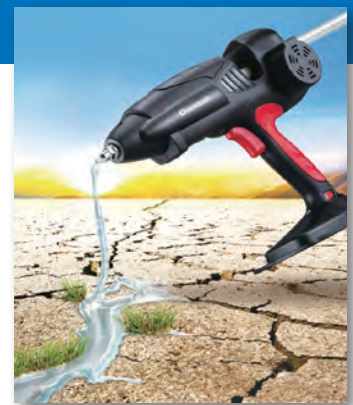


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lower emissions has driven sales of high-performance adhesives across the global automotive industry. These adhesives have various usage in both interior and exterior automotive applications. Adhesives can be used in vehicles instead of nuts and bolts to reduce weight and therefore reduce fuel consumption. The traditional welding and industrial fasteners are expected to be substituted by superior adhesives with higher fastening capabilities in the future. Besides, there are several studies that show welds, rivets and screws, the classic fastening methods for automotive assembly, don't certainly work well with composites and may damage their laminar structure and destroy their strength and stability.

The similar challenge is faced by adhesives producers and suppliers as explained earlier about the cable ties market. Crude oil and petrochemicals are the key raw materials used for manufacturing adhesives. Unstable prices of these products impact the cost of production and profitability of finished products. Environmental concerns are also valid in this industry, as there are several policies imposed against traditional adhesives and new regulations formulated on the utilization of bio-based adhesives. Therefore, the manufacturers should initiate strategic planning with broad R&D activities in order to transform towards producing environmental friendly adhesive to comply with regulations by the environmental authorities.

## Clamps


The automotive industry has been amongst the fastest growing industries utilizing clamps more specifically in recent years. Clamps come in a few main types like barrel, worm gear, T-bolt, pinch, ear, constant tension, with different materials. Car clamp, for instance, is a device used to attach and seal a hose onto a fitting, widely used in the automotive industry. Those clamps at high pressures, especially with large hose sizes, are able to tolerate the forces expanding them without allowing the hose to move, slide or leak.

Other than automotive, clamps are highly used in agriculture, construction, heavy machine manufacturing, mining, railways and marine. Strength, durability, ease of installation, corrosion-resistant, and adjustability are the key specifications of majority of clamps which enable clamping solutions to be used in several industries.

The clamp market is experiencing an evolution from producing standard metal products to producing superior quality plastic and specialty clamps to meet the growing demand for application-specific products. However, like many other types of fasteners, instable raw material prices, intense market competition against standard fastening products, and the subsequent price war are the challenges faced by clamp manufacturers. ■



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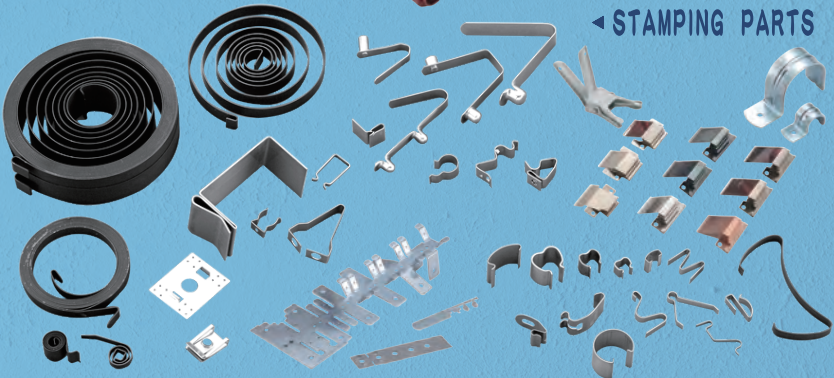
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