

How Latex is Made

MAKING LATEX – MANUFACTURING PROCESSES

Latex Manufacturing Processes

The terms “Talalay” and “Dunlop” refer to the two different methods of manufacturing Latex Rubber for sleep products. The Dunlop process was developed in 1929. It was the first method used to produce latex material for bedding.

As technology progressed, the Talalay process was developed by the Talalay family during World War II. The Talalay process for producing latex is significantly more complex and costly, resulting in softer, more buoyant and luxurious finished products.

MAKING LATEX - LATEX FORMULAS

Both Talalay and Dunlop processes start with a formula mixture of liquid latex. These formulas can be any of the following:

100% natural latex rubber (harvested from rubber tree plants) 100% synthetic latex rubber (a man-made molecular copy of natural latex rubber) Blended natural & synthetic latex rubbers (specific blend ratios are proprietary)

Note: there are small amounts of other materials required for processing liquid latex into solid form which are necessary for all latex production. (Ingredients & amounts are proprietary)

Latex International Talalay is produced using only 100% Natural or Blended formulations to meet optimum quality standards.

LATEX PROCESSES

TALALAY

1. Liquid latex formulation is poured into a mold and sealed closed

2. Vacuum is created to disperse liquid latex throughout mold
3. Liquid latex is flash frozen
4. Frozen latex is flash heated to “gel” into permanent solid form
5. Cooled solid latex is removed from mold

DUNLOP

1. Liquid latex formulation is poured onto a long conveyor belt
2. Liquid latex is slowly heated to “gel” into permanent solid form
3. Cooled solid latex is removed from conveyor belt

THE DIFFERENCE IN PROCESSING ARE THE TWO ADDITIONAL STEPS THAT OCCUR WITH TALALAY PROCESS - #2 VACUUM & #3 FREEZE.

#2 Vacuum – This allows any amount of latex to be evenly distributed throughout the mold creating precise and varied firmness with the finished latex. The more liquid latex that’s poured into the mold the firmer the resulting solid latex. Therefore, if less liquid latex is used, a softer more supple piece of latex results.

This differs from Dunlop in that Dunlop process has very little ability to vary the firmness or feel of the finished solid product while maintaining its structural integrity. The liquid formula is poured onto a belt and you get the same, dense piece of latex every time. The only way to soften the feel of Dunlop latex is to add “fillers” into the liquid latex formula which result in solid latex that is flaky and breaks down quickly.

#3 Flash Freeze – This provides Talalay with its uniquely consistent characteristic. Liquid latex is a suspension of rubber particles in water, like a shaken snow globe. Flash freezing prevents the latex particles from settling to the bottom while gelling into a solid product. This means that the resulting piece of solid Talalay latex has the same consistent feel from top to bottom.

This differs from Dunlop because Dunlop process does not utilize a freeze step. Therefore, the rubber particles settle to the bottom while the liquid latex is gelling into a solid form, like a snow globe, resulting in a variation of feel from top to bottom. This is not recognizable if the Dunlop latex is used as a bottom layer of a mattress but can cause problems if Dunlop pieces are used for pillows or as top layers of a mattress.

CONCLUSION

The Talalay process takes four times longer than Dunlop with two additional process steps that improve the consistency, quality and feel of the finished latex.

A simple analogy: Talalay latex is like a chocolate soufflé; although the process is long, your end product is a buoyant, airy, complex delight. Dunlop latex is more like a tray of brownies; tasty, but dense and flat in comparison.

DUNLOP VS. TALALAY LATEX FOAM

THE DUNLOP PROCESS

The Dunlop production process is the more eco – and economically friendly way to produce or manufacture latex foam. The manufacture of latex foam through the Dunlop process requires less fabrication with fewer variables and more consistency (no seams, very consistent quality), compared to the Talalay production process.

The compound, a mixture of natural and / or synthetic latex is foamed. Gelling, the solidifying of the foam is achieved by adding a gelling agent into the mixer. The foam then is poured on the stainless steel conveyor belt and passes on into the vulcanization oven OR the foam is poured into molds that close and enter the vulcanization oven. Vulcanization is the chemical reaction that gives the latex its final fixed and elastic shape. After vulcanization, the molds are opened and the foam rubber cores are removed and passed on to the washing station. If the foam is poured, latex topper roll comes out of the oven and also passes into the washing station. The washing removes from the foam rubber the natural soaps and the products that have not reacted, in order to ensure that elasticity is retained and to counter ageing. The moisture remaining after washing and pressing is removed in a drying tunnel, using hot air at 240°C.

Natural latex not only enhances the elasticity of the final product, its use is also beneficial to the environment. Natural latex is a natural and inexhaustible raw material. The rubber trees used to produce natural latex pull over 90 million tons of carbon dioxide from the atmosphere every year.

THE TALALAY PROCESS

The Talalay production process, named after its inventor, a Russian engineer, produces molded pieces of latex foam rubber. A measured amount of foamed latex is poured into a large stand-alone mold. The mold is only partially filled. The lid of the mold is sealed and the latex is expanded by vacuum to fill the mold and is frozen. At this point, carbon dioxide gas is passed

through the latex causing it to gel. The temperature is raised to 220°F which vulcanizes the latex. The Talalay production process does not produce toppers and has a limited mold size. Talalay latex has a nice structure and a plush springy feel to it, but it also has many disadvantages... All Talalay products are fabricated from molded cores. This brings along various problems such lack of zoning, different density and comfort between the various toppers cut out of 1 core or laminated cores, there is a need to laminate two twin cores of identical comfort to create a king size, etc.

The talalay production process consumes more energy than the Dunlop production process. High energy consumption negatively impacts our environment by increasing our carbon footprint. It should also be noted that 100% natural talalay foam does not really exist. Foam produced using the talalay process contains materials other than latex.

As for the comfort of the two types of foam, talalay has a springier more elastic feel than Dunlop. To some this feel is preferable, while some prefer the slightly less elastic, "bouncy" feel that Dunlop provides. The Dunlop process creates a heavier, denser foam. Both types of foam come in in a large variety firmness.

Difference between Talalay Latex and Dunlop Latex

The Talalay process is a highly controlled, sophisticated latex manufacturing process that produces the highest quality and most consistent latex available in the world. The Dunlop process is the most commonly used production method globally. It creates a firmer product that is used more as base core component.

TALALAY PROCESS

The major difference between the two processes is what happens in the mold just prior to the initial latex curing stage. In the Talalay process only a small amount of latex compound is poured into the mold. Air is extracted to perfectly distribute the foamed liquid inside the mold and to create a consistent round, open cell structure. The mattress core is flash frozen to lock the cell structure in place and to prevent the particles from settling.



DUNLOP PROCESS



In the Dunlop process, the molds are filled to the rim, air is not extracted, and there is no freeze stage. Therefore, the latex cell structure is less "airy". Gravity takes over and particles settle creating a denser product than Talalay latex.

Luxurious mattress moves to organized retail

Branded Mattress Market in India is approximately 900 crores out of which luxury mattress making brands account for 2% of the total Market. The luxury mattress making market is growing rapidly where brands like TEMPUR play an integral role. With the boom, well-known brands make their seats in the minds of the consumers depending upon the consumer outlook towards them. In a developing economy like India, there are a bouquet of mattress making brands and every brand caters to the different bunch of audience.

In the term, TEMPUR, No.1 International Premium mattress making brand, arrived in India in collaboration with Springwel, India's premium mattress making brand, has redefined the elegant lifestyle. Harinder Singh, Director, Marketing, Springwel said, "Springwel, working jointly with Tempur has given the mattress retail market all together a different touch. I hope to see this turn a major advantage for this industry to grow and perform better providing high-end beds, mattresses and pillows for the comfort and luxury seekers." Springwel, working in coaction with TEMPUR has a new vision towards the mattress retail market. Bed-accessories include mattresses, pillows and bed sheets at large where it is very important to get people indulge in so that they can get involved at large. The well-known brand in India, Springwel has added up a new flavor to TEMPUR in order to handle the retail chain perfectly.

The unique brand, TEMPUR believes in being an innovator to give refined edges to the new era of bed and bed accessories. The luxurious and high-end brand entered in India in 2009. Performing with a fresh idea, it has made its footsteps in terms of Exclusive Retail Outlets. With an upcoming store in Gurgaon, the vogueish brand is now very much active in the Indian market as it is located in New Delhi, Mumbai, Chennai, Ahmedabad, Bangalore, Chandigarh and Hyderabad. Puneet Verma, Country Manager for TEMPUR in India said, "Brand's performance and acceptability is beyond our expectations. We already have 7 stand alone TEMPUR stores catering to the clients across all the major cities of India. We shall have 3 more stores by the end of this year".

Springwel has also launched the retail stores of international repute & standards with the name of "Springwel Planet Bliss", 4 stores, out of which two are located in Mumbai, one in Kolkata and one in Delhi NCR, are in operation. The Exclusive Retail Stores provide a salient range of TEMPUR products. The flamboyant stores enable to browse the fantastic range of Mattresses incorporating The Royal, The Celebrity, The Sensation and The Deluxe Mattresses. Pillows range from Original Pillows and Millenium Pillows. Supreme and Superflex Beds along with the travelling accessories cater to the luxury and comfort seekers. On the adjacent hand, Springwel offers the entire range of Spring, coir , bonded , latex and PUF mattresses along with Micro Fiber , Fiber and latex Pillows. There are many small and big retail outlets offering a variety of brands, making it disorganized and difficult for the customer to make a choice. TEMPUR's retail chain, with Springwel is outstanding in terms of operations. Customers need to get involved with the product they are getting informed about and that is what TEMPUR serves the best when it comes to mattress retail market. Moreover, there is a 12 minute experience zone in a few Exclusive stores, where one can experience the finest blend of comfort and luxury. Hence, this unique theme gives another field to play on as it attracts customers and gift them with an opportunity to learn and know much more about the mattress they should actually use.

ABOUT TEMPUR AND SPRINGWEL

About TEMPUR

TEMPUR Pedic International, Inc. is a manufacturer and distributor of mattresses and pillows made of open celled visco-elastic, pressure relieving and temperature sensitive material. The company's headquarters are in Lexington, Kentucky. It has partnered with Springwel Mattresses Pvt. Ltd. as its sole distributor in India. TEMPUR material was originally based on NASA's research to develop a material that would cushion aircraft seats and improve survivability in the event of an accident. It is the most highly recommended bed in America and is the only brand of mattresses to earn the Arthritis Foundation's Ease-of-Use Commendation, which recognizes comfort and ease of use for people with arthritis.

About Springwel

Springwel Mattresses Private Limited is the pioneer of Spring Mattress technology in India. Springwel Mattresses are much more "Sleeper Friendly" combining comfort with deep down support. At Springwel, innovation, up-gradation and coming up with better sleep solutions are part of our work culture. Springwel wish to create an identity, wherein, whenever people think of high-end sleep products, they won't look beyond Springwel. Due to its excellent quality and prompt services, Springwel mattresses are not only used but are repeatedly ordered by leading hotels, prominent personalities, corporate houses and several government & private institutions in India.

Indian mattress market lagging behind: Sealy

HOW IS THE INDIAN MATTRESS MARKET EVOLVING?

The mattress industry in India is dominated by small-scale and unorganized firms. These businesses specialize in coir, cotton and foam mattresses, which constitute over 90 per cent of the country's total mattress requirement. Currently, there are no quality manufacturers in the spring mattress category, due to which growth in this segment is very slow. Globally, the mattress industry has advanced, with several multinational brands in operation and technologically superior products available in the market.

If we talk about the Indian mattress industry, it does lag far behind. This is primarily because the importance of a good mattress is unknown to Indian consumers. Most of them are ignorant of the fact that buying a good mattress is making an investment for one's good health. Customers need to be educated in the importance of a good mattress in enhancing healthy sleep by maintaining spinal alignment, reducing surface pressure, regulating body temperature, and resisting allergens.

Sealy has expanded business in the Indian market and brought in the trend of luxurious mattresses in spring and coil formation, so that people do not suffer from any kind of health problems after buying them, which could happen in case of cheap mattresses.

WHAT TRENDS DO YOU SEE PREVAILING IN THE INDIAN MATTRESS SEGMENT?

Throughout 2013, the mattress industry in India is expected to go down the road of innovation, and become more health and environment conscious.

HOW IS CONSUMER BEHAVIOUR CHANGING?

Studies show that awareness among Indian consumers about the link between good sleep and good mattresses is gradually evolving, especially among the younger generation. However, changes in actual consumer behavior are slow to catch up. What is clear is that there are plenty of opportunities for mattress manufacturers and retailers to work together to propel change.

Globally, people are more aware of the importance of good sleep than ever before, and also of the link between good mattresses, good sleep and better overall health. However, people's expectations of how long a mattress should last remain virtually unchanged. Consumers are well aware of mattress prices increasing in recent years, and many see them as an 'expensive' household item. However, many also believe in the value that a good mattress has to offer.

WHAT ARE THE KEY CHALLENGES IN THIS SPACE?

Choosing a new mattress that is comfortable, supportive, and high in quality is important to help people with low back pain get a sound night's sleep. However, marketing messages and promotional offers often confuse consumers, making them choose the wrong kind of mattress.

Latex Processing: Talalay Vs Dunlop (Vs Continuous)

DUNLOP AND TALALAY PROCESSING

Dunlop and talalay are the predominant types of latex processing. The Dunlop process has existed for many decades, while talalay is newer. 100% natural latex and blended latex can be made using either process.

Based on our collected owner experience data, talalay and Dunlop latex mattresses overall rate virtually the same in owner satisfaction. Dunlop is often better suited for those seeking a more firm and supportive mattress, while talalay is often better suited for those seeking a softer and more conforming mattress.

Another difference is that the Dunlop method produces one piece of latex while the talalay method (for sizes other than twin) produces latex in sections which then must be glued together. Some owners complain that lying on the glued seams is uncomfortable.

How they are made: For the talalay process, a tiny amount of latex is poured into the mold. Air is extracted to evenly distribute the foam liquid inside the mold which creates a consistent round, open cell structure. The mattress core is flash frozen to lock the cell structure in place and to prevent the particles from settling. For the Dunlop process, the molds are fully filled, air is not extracted, and there is no flash freezing.

CONTINUOUS PROCESSING

The continuous latex processing method uses a continuous moving conveyor to shape the latex before vulcanizing it as opposed to using a traditional mold. This process produces latex with consistency similar to talalay but without the glued seams. Latex produced by this method is currently limited in availability.

LATEX COMPARISON: DUNLOP VS TALALAY VS CONTINUOUS

The below comparison shows what *tends* to be true for Dunlop-, talalay- and continuous-processed latex.

	Dunlop	Talalay	Continuous
Availability	good	good	limited
Firmness	more firm than soft	soft to firm	soft to firm
Consistency of firmness throughout core	fair	good	good
Supportive	good	good to fair	na*
Price	less	more	more
Conforming to body	fair	good	good to fair
Won't Compress / Form Body Impressions	fair to good	good	na*
Glued seams	no	yes	no

Analysis of Exports of latex foam

India exported latex foam worth USD 5,713,875 with total quantity of 70,022. United Kingdom is the largest buyer of latex foam accounting for exports worth USD 2,179,549 followed by United States and Germany which imported latex foam worth USD 2,083,351 and USD 641,837 respectively.

Cochin Sea accounted for 97.5% of exports followed by Tughlakabad and Ludhiana which account for 1.3% and 0.4% of exports respectively.

Average price of latex foam per unit is USD 81.60 and average value per shipment is 2,563

Latex (rubber) Foam Product

Latex foam rubber derives its physical performance properties from the vulcanization process that creates long molecular chains with strong cross linked bonds. The ability of NR latex foam to recover from deformation opens up a possibility for new applications of latex foam based on products made from this NR latex foam type. For example, this NR latex foam can be employed in orthopedic applications, which usually utilize synthetic memory foam, for which this memory characteristic will allow the release of surface pressure by contouring to the shape of the body. Latex foam rubber generally has a relatively high density and is soft, thus latex foam rubber can only be used in limited amounts in the production of bonded carpet cushion. Latex Foam Producers has a high level of grip, some others are designed to offer maximum durability.

Uses and Applications

The rubber latex pillows, mattresses, cushions, bedding etc. are used in luxury purposes. The latex foam mattresses are used for manufacturing of sheets in automobiles, cars, tempos, buses, jeeps, aero plane, etc. In hotel some time the floor mat are also used. The market for latex foam materials has grown tremendously in recent years. Foam rubber has had wide application in the bedding, furniture, and automotive fields especially. In Bed Pillows this item has been widely accepted. They are produced by a large number of the accepted shape used for feather or down pillows, they are generally very soft, but not flabby, retain their shape without "fluffing," and are particularly advantageous for allergy sufferers. The cushion of foam rubber are used in chairs, pillows, beddings, automobile, furniture etc. Decorative Pillows are comparatively new application for foam, but is being received enthusiastically by the buying public. Decorative pillows have the same characteristics as bed pillows, but are made in a wide variety of sizes and shapes including square, round, rectangular, and triangular. Market Survey In India major consumers of foams are automobile industries for seat cushioning furniture, bedding pillow, cycle seat manufacturers and industrial insulation making industries. Therefore around 40-50 indigenous manufacturer of polyurethane foams in the country. It is observed that out of all products, demand of polyurethane flexible foam is around 84 % of the total

demand. Polymerization of urethane and foaming is done indigenously where as major raw material is polyols and isocyanate and to some extent urethane are being imported. Major demand for (flexible) is from furniture and automobile industries. Besides these sectors, there is demand for flexible foam for footwear lining, packaging, carpet backing etc. There is no data available for sector wise demand. However, a total estimated demand of main raw material consumption on end use pattern is available. Present Manufactureres Duroflex Exports Pvt. Ltd. Karnataka Consumer Products Ltd. Kurlon Ltd. Shroff Textiles Ltd. Tirupati Foam Ltd.

Plant capacity: 1 MT/ day

Plant & machinery: Rs.80 Lakhs

Working capital: -

T.C.I: Rs.343 Lakhs

Return: 43.00%

Break even: 38.00%

Latex Foam Rubber – Rubber technology and Manufacture

The largest use of latex is for cellular products. The basic latex foam rubber process (Dunlop Rubber Co., 1929) consists of three stages. The first is the foaming of the latex containing a surface-active agent by whipping it and/or blowing air through it; considerable research has gone into the technique of achieving a fine-textured uniform froth. The second stage is the gelling of the foam by adding a delayed-action gelling agent. The third stage is the filling of the molds, usually of light aluminum construction, which are heated to bring about vulcanization of the rubber. After cooling, the product is removed from the mold, washed to dispose of undesirable soluble materials and dried.

In the Talalay process, the partially formed latex is poured into a mold which is sealed and evacuated so that the foam expands to fill the mold completely. The next stage is to cool the mold to -35°C in order to freeze the foam. Carbon dioxide is admitted; this penetrates the structure and, owing to the pH change, causes gelling. The final stage is heating of the mold to vulcanizing temperature to complete the cure. In spite of the high capital cost of the equipment needed to produce the low and high temperatures and the vacuum, this process is currently used because of their excellent quality of the product and the low rejection rate.

THE DUNLOP PROCESS

The process may be carried out either batch wise or continuously.

Batch wise process for manufacture of latex foam rubber by Dunlop Process

In this process ambient air is introduced into the compounded latex by whipping or foaming. The first stage of all batch wise latex foaming process is the compounding of the latex with colloid stabilizers, foam promoters and the remainder of the formulation ingredients. After a period of maturation at warm ambient temperature, the compounded latex is rapidly foamed with the whip rotating at high speeds. As the whipping proceeds the volume of the foamed latex initially increases and then passes through a maximum. The whipping rate is reduced to refine the foamed latex when the desired degree of expansion of the latex compound has been

achieved. At this point, the foam stabilizer may be added. At the conclusion of the refining period the Zinc Oxide and delayed action gelling agent are added. Now the foam is transferred to the mold which is treated with mold-release agents and warmed to 40°C. After filling, the mold lids are placed and the mold left to allow gelation to be completed. The molds are then heated either in hot-air ovens, steam ovens or hot water so that the rubber component of the foam becomes vulcanized. After this the molds are cooled and the product removed by stripping and subjected to various processes such as washing, drying, trimming etc.

Advantages:

- Well suited for finished products having complex or odd shapes.
- Well suited for finished products in combination with other materials (such as seats and chairs with steel tube and spring interiors).
- Well suited for small-scale production.
- Flexible production (formulation can be changed from one block to the next).
- Limited investment.
- Well suited for special production and tests.
- Molds can be customized in size and shape.
- Block cutting machine not required

Disadvantages:

- Highly controlled processing is required.
- Labor- and time-consuming production procedure.
- Skins on all faces of the block (increased block trimming work).
- Higher chemical consumption (waste after each shot).
- Not well suited for large-scale production.

Continuous process for manufacture of latex foam rubber by Dunlop Process

Also known as "Slabstock Foaming" is characterized by the use of a moving conveyor onto which the chemical mixture is being dispensed, thereby forming a continuous block, which can then be cut off in required lengths.

Compounded latex and air are introduced into the base of a long vertical chamber and beaten to a foam. The foamed latex flows continuously from the chamber down a chute into a second chamber, also provided with a beater, where the dispersion of Zinc oxide and gelling agent are metered in as the foamed latex passes down to an aperture in the base. The foam is then deposited onto the continuous line plates which passes through the oven where the vulcanization process takes place. After the latex exits the oven it is released from the continuous plates used and is washed and dried. Exiting the dryer, the continuous latex foam is cooled and cut according to requirement.

Advantage:

- Continuous method, i.e. large production on same machine settings, thus ensuring
- Consistent quality throughout the production.
- Well suited for large-scale production.
- Time- and labor-saving production procedure.
- Different block-size obtainable, since block width is adjustable.
- Built-in extra capacity to be utilized inexpensively.
- Production costs low.

Disadvantage:

- Not suited for products having very complex or odd shapes, nor together with other materials.
- Not well suited for very small productions.
- Requires a block cut-off machine (extra cost).
- Usually higher investment than Block Molding.
- High start and stop costs when limited production volume is required.
- High cost in case of production failure.

Global Mattress and Latex Mattress Market 2014 – 2018 Research Report

About one-third of a person's life is spent in sleeping; therefore consumers prefer a comfortable mattress. Moreover, lack of sleep can affect a person's job performance. To overcome this, consumers are going for large-surface mattresses where they can relax properly and be comfortable and have a sound sleep. This is expected to increase the demand for mattresses, which will contribute revenue to the Global Mattress market.

Analysts forecast the Global Mattress market will grow at a CAGR of 9.99 percent over the period 2013-2018. According to the report, many drivers influence the growth of the Global Mattress market. The rising number of health conscious people is one of the major drivers of market growth. Modern mattresses such as latex mattresses are free from chemicals, which reduce health risks, and memory foam mattresses are soft and comfortable which helps a person to sleep soundly.

The report covers the present scenario and the growth prospects of the Global Mattress market for the period 2014-2018. To calculate the market size, the report considers revenue generated from the sales of the following mattresses: innerspring mattresses and specialty mattresses (latex, memory foam, and other mattresses).

The Global Mattress Market 2014-2018 has been prepared based on an in-depth market analysis with inputs from industry experts. The report covers the APAC region, North America, Europe, and the ROW; it also covers the Global Mattress market landscape and its growth prospects in the coming years. The report also includes a discussion of the key vendors operating in this market.

The report recognizes the following companies as the key players in the Global Mattress Market: Select Comfort Corp., Serta Inc., Simmons Bedding Co., Tempur Sealy International Inc., Kingsdown Inc., Laggett and Platt Inc., Restonic Mattress Corp., Sleep Inc., Southerland Bedding Co., Spring Air International LLC.

Purchase report @ <http://www.sandlerresearch.org/purchase?rname=19635>.

KEY MARKET DRIVER

- Rising Number of Health Conscious People Key Market Challenge
- Increased Competition Due to Entry of New Vendors Key Market Trend
- Consumer Preference for a Larger Sleeping Surface

Further, the report states that the growth of the Global Mattress market is affected by certain challenges. Increased competition because of the entry of new vendors is one of the main challenges in the market. Competition among the existing vendors is increasing and new vendors are entering the market with improved products and gaining market share.

Global Latex Mattress Market 2014 – 2018: Analysts forecast the Global Latex Mattress market to grow at a CAGR of 14.87 percent over the period 2014-2018. One of the key factors contributing to this market growth is the need for environment-friendly products. The Global Latex Mattress market has also been witnessing the product innovation through R&D activities. However, the high cost of latex mattresses could pose a challenge to the growth of this market.

Global Latex Mattress Market 2014-2018 has been prepared based on an in-depth market analysis with inputs from industry experts. The report covers the Americas, the APAC and the EMEA region; it also covers the Global Latex Mattress market landscape and its growth

prospects in the coming years. The report also includes a discussion of the key vendors operating in this market.

Key vendors dominating this space include Astrabeds LLC, Organic Mattress Inc., Pure LatexBliss LLC, Royal-Pedic Mattress Manufacturing LLC.

Other vendors mentioned in the report are Boyd Specialty Sleep, Comfort Solutions, FloBeds, Sealy Corp., Simmons Bedding Co.

Global Mattresses Market to Reach \$24.65 Billion by 2017

Global Industry Analysts released the results of their comprehensive global report projecting the global mattress market will reach \$24.65 billion by 2017. They attribute this outstanding to growing home ownership, huge pent-up demand from premium customers, and rising opportunities from niche markets.

Over recent years the mattress industry has metamorphosed from a dull, predictable and slow growth market into an aggressive, dynamic and lucrative marketplace with celebrity brand partnerships, innovation and high style. The market has experienced numerous product innovations and introductions resulting in a wide array of choices for consumers. There is something for everyone –ranging from general-purpose and specialized products to high priced/luxury bedding and economical products.

Sleep, as a measure of health and wellbeing, is being increasingly looked upon as one of the most crucial necessities. Particularly in the present day harried and hectic life putting emphasis on the quality of a mattress. With the value of a good night's sleep at a premium, consumers are more than willing to pay a higher price for quality mattress. After years of steady growth, the global mattresses market experienced a decrease in overall sales in 2008 and 2009 mostly due to economic pressures, decline in consumers' wealth and weak housing market. The decline was largely the result of the collapse of the construction industry, especially the fall in construction starts.

However, with economic conditions improving in 2010, the market staged a remarkable comeback and is now expected to experience healthy growth in the upcoming years. Increased discretionary spending, GDP growth, improvement in liquidity situation, softening of interest rates, continued urbanization, pent-up consumer demand, increased infrastructure spends, and expected recovery in the construction space by 2012 are key factors expected to put the growth momentum back on track. The mattresses industry will be a key beneficiary of rising

home ownership, larger homes with more bedrooms, as well as various governmental initiatives such as the Home Improvements Revitalize the Economy (HIRE) Act of 2009. As the economy improves further in the short to medium term period, the global mattresses market will regain lost momentum, encouraged by the fact that good night's sleep will continue to remain key factor in hospitality, residential retail, institutional and healthcare sectors.

A major portion of new mattress demand will come from premium bedding customers that deferred big ticket purchases during economic woes, as a result of which non-innerspring (specialty) segment is forecast to be the fastest growing segment in the post-recession years. In the post-recession period, mattress dealers are expected to focus on niche markets to remain competitive. As consumer returns to the trend for enhanced sleep experience and quality of life enhancement, demand for will continue to accelerate, adding more value and convenience with advanced technologies.

As stated by the market research report, the US continues to remain the largest regional market worldwide and Asia-Pacific the fastest growing regional market. Growth in the Asia Pacific market will be especially driven by rapid expansion in building and residential units in key developing nations such as China and India, increasing spending power among people, and presence of large relatively untapped regional markets.

Major players in this area include International Bedding, Comfort Solutions, Kingsdown Inc, Relyon Limited, Sealy Corporation, Simmons Bedding Company, Serta International, Spring Air International, Select Comfort Corporation, and Tempur-Pedic.

Research and Markets: Global Latex Mattress Market 2014-2018

One of the major drivers in the market is the growing concern about the environment and the demand for environment-friendly products. Environment-friendly products reduce the risk of allergies and other contaminant-related diseases for end-users.

The need for vendors to produce innovative latex mattresses is leading to increased expenditure on R&D activities. Latex mattresses, though natural, are heavy, costly, and considered to be less comfortable than memory foam mattresses. In an effort to address these issues, vendors are increasing their R&D investment and introducing innovative latex mattresses such as the Split Firmness Latex Mattress and Natural Latex Crib Mattresses into the market. Some manufacturers are also experimenting with natural latex by mixing it with innovative technologies. For instance, Latex International uses its patented phase-change material in latex mattresses which enables the sleeper to maintain a consistent body temperature. These innovations are expected to lead to the increased adoption of latex mattresses during the forecast period.

Further, the report states that the high cost of latex mattresses is proving to be a major challenge for the market. The high price of latex mattresses reduces their adoption and the number of potential consumers as most individuals, especially those in the lower- and middle-income groups, would prefer to purchase cheaper mattresses.

KEY VENDORS DOMINATING THIS SPACE INCLUDE:

- Astrabeds LLC
- Organic Mattress Inc
- Pure LatexBliss LLC
- Royal-Pedic Mattress Manufacturing LLC.