

## 50 INNOVATIONS MADE IN VERMONT - 2013

These products and companies were chosen (in no order) for their intrinsic innovation or innovation in the manufacturing process, as well as their overall excellence and global recognition. They are just a small sample of many innovations that make Vermont proud.

1. Solar-powered street lamp, Mack Molding, Arlington

You don't see typical large flat panels on this solar-powered street lamp. Instead, it uses a thin-film solar collector that wraps around the pole making for a streamlined design.

2. K-Cup coffee packets, Green Mountain Coffee Roasters, Waterbury

Their K-Cup single-cup brewing system has revolutionized how we make coffee.

3. LED fluorescent replacement tube, LED Dynamics, Randolph

Popular Science magazine awarded LED Dynamics the 2007 Innovation Award in the Green Tech category for the EverLED-TR tube replacement product, the standard for low voltage, high output LED replacement lighting.

4. Mobile medical facilities, Mobile Medical, St. Johnsbury

Imagine a pop-up hospital, complete with surgical suites and operating rooms. That's what Mobile Medical brings to disaster areas around the world, providing rapid response in challenging conditions.

5. Animatronic motion systems, Advanced Animations, Stockbridge

Chances are if you visit a Universal Studios theme park you'll see one of Advance Animation's life-sized moving, talking creatures such as a dinosaur from Jurassic Park or a creature from ET.

6. Organ transplant transport device case, Kaman Composites, Bennington

No more Arctic Cooler – the outer case for this cutting-edge organ transplant transport case is made in Bennington.

7. Wireless sensors to monitor shock, Lord/Microstrain, Williston

Their wireless sensor networks gauge structural degradation on everything from rockets on NASA launch pads to bridges.

8. Bullet-proof eyewear for combat troops, Revision, Essex Junction

"Your eyewear saved my life" is a message delivered many times by military, special forces, law enforcement and other personnel who use these revolutionary safety glasses.

9. Microelectronics, IBM, Essex Junction

If you carry a smart phone or use a tablet device, thank IBM/Essex Junction which is likely to have designed and made the components it relies on.

10. Snowboards, Burton, Burlington

Burton pioneered snowboarding, bringing the sport to where it is today with its innovative designs and technology.

11. Furniture, Ethan Allen, Orleans

Started in Beecher Falls more than 80 years ago, Ethan Allen Furniture has evolved into a global company, now headquartered out of state, with hundreds of retail outlets. In its Orleans plant, though it still innovates, having moved from mass production to a custom order model of making its same classic pieces.

12. Glass and tableware, Simon Pearce, Windsor

Simon Pearce brought elegant hand-blown glass designs to Vermont from Ireland and then figured out how to mass market them around the country.

13. Spill Buster water remediation System, Clean Earth Technology, Ferrisburg When there's an oil spill, Spill Buster goes to work to electronically clean up the contamination from leaking underground storage tanks.

14. Energy-saving cooling systems, Freeaire, Waitsfield

"Why pay for cold air when it's right outside?" Freeaire's Polar Power allows energyefficient commercial and industrial cooling in colder climates.

15. Drug-dispensing transdermal patches, Mylan Technologies, St. Albans

Mylan's patches worn on the skin accurately dispense many types of medicines, including Fentanyl which has a high potential for abuse and risk of overdose.

16. Wood stoves, Vermont Castings, Bethel

Classically-styled wood-burning stoves made with an innovative green manufacturing process certified by the Environmental Protection Agency.

17. Digital night vision and surveillance technology, Diffraction, Ltd., Waitsfield The company develops next generation technology for night vision devices used for intelligence, surveillance, and reconnaissance by military and law enforcement worldwide.

18. Indoor rowing machines, Concept2, Morrisville

They started making indoor rowers which led to lightweight rowing oars used by Olympic teams and in competitions around the world.

19. Custom filters for microscopy and astronomy. Chroma Technology, Bellows Falls  
Durable coated filters for microscopes and telescopes that continue to win international awards including the 2011 Prism Award from the International Society for Optics and Photonics.

20. Intricate hand-carved jigsaw puzzles, Stave Puzzles, Wilder  
Called the “Rolls-Royce of puzzles” by Smithsonian Magazine, these diabolical and beautiful custom wood puzzles that have been purchased by everyone from Barbara Bush to British royalty.

21. 3D tracking technology for medical applications, Ascension Technology, Milton  
Their sensors and tracking devices are used for minimally invasive surgery and give doctors an edge for image-guided procedures.

22. Solar performance management technology, Draker, Burlington  
Draker systems monitor photo-voltaics to maximize performance in solar farms and backyard installations.

23. Plasma proteins and antibodies, Haematologic Technologies, Essex Junction  
Their plasma proteins and antibodies are used in a broad line of services for the medical research community including in vitro and coagulation processes.

24. Reconnaissance robots, Applied Research Associates, Randolph  
ARA’s robots have helped clear land mines and protect troops in Afghanistan.

25. Electric vehicle capacitors, SB Electronics, Barre  
The SB Power Ring makes the hybrid electric car hum with energy-conserving innovation.

26. Wrought-iron light fixtures, Hubbardton Forge, Castleton  
One of the oldest commercial forges in America, Hubbardton makes lighting fixtures that win national design awards year after year.

27. Sensors for windmills and solar panels, NRG Systems, Hinesburg  
Before many large solar or wind energy systems are installed, NRG’s sensor machines go to work to help optimize performance. The company also developed the “brains” behind many alternative energy systems.

28. Intravenous micro-infusion pumps, Numia, Newport  
Their IV medical pumps can deliver undiluted dosages of medication at very slow rates.

29. Wooden toys, Maple Landmark, Middlebury  
Their iconic name train is a traditional toy favorite around the world and Maple Landmark is a pioneer in non-toxic natural wooden toy design and manufacturing.
30. Nanotube water filtration technology, Seldon Technologies, Windsor  
Every 15 seconds a child dies from water-borne disease. Seldon's technology is cleaning water in Africa, Haiti and disaster relief venues around the world.
31. Titanium bicycles, Budnitz, Burlington  
Their bikes have brought lightweight, functional titanium design to the street bicycle as well as racing bikes for customers around the world.
32. Darn Tough socks, Cabot Hosiery, Northfield  
This 34-year-old company reinvented itself with its Darn Tough brand as the only American manufacturer of premium performance socks with an unconditional lifetime guarantee.
33. Composite fly fishing rods, Orvis, Manchester  
These lightweight fly fishing rods feature simple and elegant designs and have won awards for quality and excellence.
34. Armored troop vehicles, Plasan North America, Bennington  
Armored MRAP vehicles have saved countless lives from IED explosions in Afghanistan and Iraq.
35. Gourmet ice cream, Ben & Jerry's, Waterbury  
If it's not fun, why do it? If it's not Ben & Jerry's, why eat it? B&J brought innovation to ice cream by adding not just ingredients (everything from cookie dough to candy pieces) but attitude and a social mission.
36. Cyber security device, Pwnie Express, Berlin  
It looks like an AC-power plug in, but it's really a sophisticated cyber-security protection device for computer networks.
37. Aircraft refrigeration system, Concepts NREC, Wilder  
The "DeepChill" air cycle refrigeration system used in aircraft as an environmentally friendly replacement to traditional carbon-emitting technology is but one innovative product made by Concepts NREC.
38. Eco-safe aerosol propellant technology, Ultramotive, Bethel  
That shave cream can just may have been made by Ultramotive.
39. Aftermarket automotive transmission parts, Sonnax, Bellows Falls

When the transmission needs repair, the industry turns to Sonnax for their aftermarket kits. Their innovative product design process leads the industry in new product development.

40. Commercial ovens, Blodgett, Burlington

Since 1848 the company has designed and made heavy duty ovens for commercial use around the world.

41. Microplate instrumentation products, BioTek, Winooski

Scientists and labs rely on BioTek analysis technology for blood testing and other medical applications.

42. Teddy bears, Vermont Teddy Bear, Shelburne

Teddy bears were just teddy bears until Vermont Teddy Bear gave them “personas” along with clothing and fashion designs that brought them to a new level of popularity.

43. Corporate furniture systems, Wall Goldfinger, Randolph

Their board room creations feature custom tables that contain everything from pop-up monitors to USB connections. WG was chosen to design and install their creation in the top-secret Situation Room in the White House.

44. Nut-free chocolates, Vermont Nut Free Chocolates, Grand Isle

Begun by a mother who couldn't find chocolates made in nut-free environments for her children with allergies, the company now serves customers around the world.

45. Industrial mini-computers, Logic Supply, South Burlington

Their computers are used in dozens of ways including in cars and trucks to monitor weight and travel time, tracking the vehicles route and distance via GPS.

46. Robots that service nuclear reactors, ROV Technologies, Brattleboro

When nuclear reactors undergo mandatory shut downs for servicing, ROV's robots are used in cooling tower pools for testing and documentation.

47. Audio/video and photography custom cases, PortaBrace, N. Bennington

Thousands of news organization in the world choose PortaBrace for custom cases for cameras, lighting and audio equipment.

48. Cheese, Cabot, Montpelier

In 2013, Cabot took first place awards for their Clothbound, Tuscan, Sharp Extra Light, and Jalapeno Light cheddars from the American Cheese Society.

49. Granite, Rock of Ages, Barre

The quarries of Vermont yield a unique grey granite used in monuments and buildings in Washington, Arlington National Cemetery, and installations around the world .

50. F'Real automated milk shake machine, Mack Molding, Arlington Put your money in, get a milkshake made to order out.