

Columbia produces a range of gloves for use in outdoor activities, many of which now feature Omni-Heat technology for warmth.

Columbia

NTP

Whether ultra lightweight, extra warm or perfectly adapted to a specific sport, developments in gloves over the last year have been interesting and innovation-pushing.

Protecting the extremities

There are many variables that can affect an athlete's performance, and during the winter there is the added necessity of maintaining a comfortable temperature. While much focus is placed on wearing the right performance clothing on the torso, limbs and feet, hands and fingers often have secondary importance when it comes to functional apparel. But fingers can become unworkable in the cold and wearing the right gloves is of paramount importance for many outdoor sports.

The functionality of a glove depends greatly on the fabric it is made from, and new developments in fabrics for clothing often cross over into extremities-apparel. An example of this is UK outdoor brand Terra Nova, which in November last year launched a running glove made of the same material used for its lightweight tent. The Terra Nova Ultra Glo Glove is made using the same technology as the Laser Ultra 1 tent, which holds the Guinness World Record as the lightest double wall shelter ever produced. High-tenacity polyethylene is used for the back of the glove, while the palm is made from high-visibility Coolmax, resulting in "warm, safe handwear" that weighs 19 grams.

Terra Nova's Ultra Glo was developed specifically for winter runners. Andy Utting, managing director at Terra Nova Equipment, said at the launch of the gloves: "As soon as we created the Laser Ultra 1 we realised the material could offer real benefits to runners. They will be looking for clothes that protect them from low temperatures, that improve visibility and that allow them to enhance performance. We're really excited about the potential of the Ultra Glo Glove – we think it's a great addition to the extremities range for runners."

Warmth

For warm gloves to protect against the coldest of conditions, Columbia's Bugalove Max Electric gloves, featuring an Omni-Heat electric warmth system, will be launched for the autumn-winter 2012 season. Although the US company was forced to recall rechargeable batteries sold with 220 of its Omni-Heat jackets due to a defect that could cause them to overheat, the batteries in its gloves were not affected and so the Bugalove Max Electric will hopefully provide ideal protection against the elements.

The gloves feature three heat levels and OutDry waterproof technology. The thermal reflective lining in the gloves retains the wearer's natural warmth, according to Columbia, by dissipating sweat and excess heat to provide thermo-regulation.

Italian outdoor brand C.A.M.P., which was founded in 1889 when it began manufacturing mountaineering equipment in Premana, introduced a new line of gloves in 2011 for skiing and mountaineering. "Full capacity of the hands means wellbeing, performance, and the possibility to hold everything, no matter the circumstances for alpinists, ice climbers, skiers," the company said on announcing the new products in October.

Th company's G Hot Dry gloves are best for mountaineering and skiing, according to the company. The gloves have a waterproof and breathable Hipora membrane from Korean company Kolon, reinforcements on all fingers, cowhide leather reinforcements between the thumb and forefinger, absorbent fabric on the thumb, and a Neoprene wristband with Velcro. Each glove weighs 144 grams. Another featured glove for skiing, in particular ski touring, is the G Tech Dry.



Italian brand C.A.M.P.'s latest gloves are designed specifically for snow sports and feature a waterproof and breathable Hipora membrane from Kolon.

Camp

This also uses Kolon's Hipora membrane technology, reinforcements on the palm, thumb and forefinger. At 126 grams, the glove is slightly lighter in weight.

G Comp Wind is C.A.M.P.'s most lightweight glove, at 92 grams, but has extra built-in protection in the form of a windbreak system called Windmit'N, which is built into a pouch at the wrist.

Technology friendly

In 2009, US-based company GLT Technovations introduced TouchTec, a technology which allows leather and textile gloves to mimic human touch in order to enable use with touch screen devices – such as mobile phones. Last year, the technology was adapted by snowsports companies Burton and Celtek which are now using TouchTec in their collections. The patent-pending TouchTec technology was originally designed for, and tested by, the US military and first responders.

"It can be a significant inconvenience having to take your gloves off every time you want to use a touch screen; in cold climates the inconvenience is even higher as your finger tips quickly freeze," says Jerry Leto, inventor of TouchTec. "Many of us do a lot more texting, emailing and use a variety of applications on our mobile phone and tablet devices these days. When you have to expose you fingers to bitter cold, or have to take your gloves off to make a phone call or use a mobile application, the inconvenience is not only challenging, but distracting and can even be dangerous."

TouchTec employs a nanotechnology process, which, at its most basic, GLT Technovations describe as microscopic "robots" within the leather of the glove that give it the feel of skin when in contact with a touch screen.

In the UK, Manchester-based clothing manufacturer Fordville recently launched iPrints stickers, which are an aftermarket product that the company claims can attach to gloves made from any material and allow wearers to use touch screen technology without exposing their hands to the cold.

At the time of the launch, Fordville's managing director, Mark Press, said: "We've watched the demand for gloves that allow consumers to use touch screen technology increase dramatically through the launch of our Climate and ProClimate touch screen gloves. With iPrints, we've created a product that attaches to any glove, instantly making it touch screen-compatible."

Sports-specific

UK brand SealSkinz produces a range of gloves specifically for cyclists, including the Performance Mountain Bike Glove – a waterproof, breathable and windproof glove with solid knuckle protectors on back of the hand. The glove's textured palm has lightweight padding and is made of an abrasion-resistant Kevlar blend fabric. Sealskinz claims that the leather on the finger ends ensures a sure touch when changing gears or braking.

While keeping the hands warm in cold weather is the most common reason for wearing gloves during sports, some activities are enhanced by wearing gloves. In December last year, Sensosolutions launched a new version of its SensoGlove, a digital training golf glove that it says will help players correct errors in their grip, play better and avoid injury. Having agreed a series of distribution deals earlier in 2011 to ensure the glove will be sold in the US, Japan, Scandinavia, Spain, Korea, Germany, Australia, and New Zealand, the German company said



Left to right: The Performance Mountain Bike Glove by Sealskinz, the Bugalove Electric Max glove by Columbia and Terra Nova's new Ultra Glo Glove.

Sealskinz, Columbia and Terra Nova

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that the new advanced teaching SensoGlove, which has been created based on feedback from international golf professionals, now offers a longer battery life and increased sensitivity. This means a more accurate pressure read to ensure a "consistently smooth and powerful golf swing for greater distance and lower scores" according to the company.

Made from cabretta leather, the gloves have built-in digital sensors that continuously read and display on a "sweat-proof digital monitor" the user's grip pressure to ensure a consistently accurate, smooth and powerful golf swing, which ought to lead to greater distance and lower scores. The sensors will warn players if they exceed their target level of grip pressure, and can even show which fingers are gripping too tightly to make grip adjustment easier.

David Bauer, president of SensoSolutions, said on announcing the distribution agreements: "Instinctively, people try to grip the club harder when they have trouble hitting the ball properly, creating a 'death grip,' with excessive tension in the hands, wrists, arms and shoulders, crippling the swing. SensoGlove stops the 'death grip' by telling you when you are gripping too hard and when it's just right.

"Golfers know that grip pressure is a big issue, but before SensoGlove, they could not get objective feedback, especially not in real time. Many golfers think they are playing with a light grip pressure, but when they start the swing, the grip pressure increases unconsciously. So when a teacher tells the student to keep the pressure below a certain level with SensoGlove's numbered system, the student knows exactly what they mean."



SensoGlove aids golfers in perfecting their grip and swing through a series of inbuilt monitors.

SensoSolutions

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