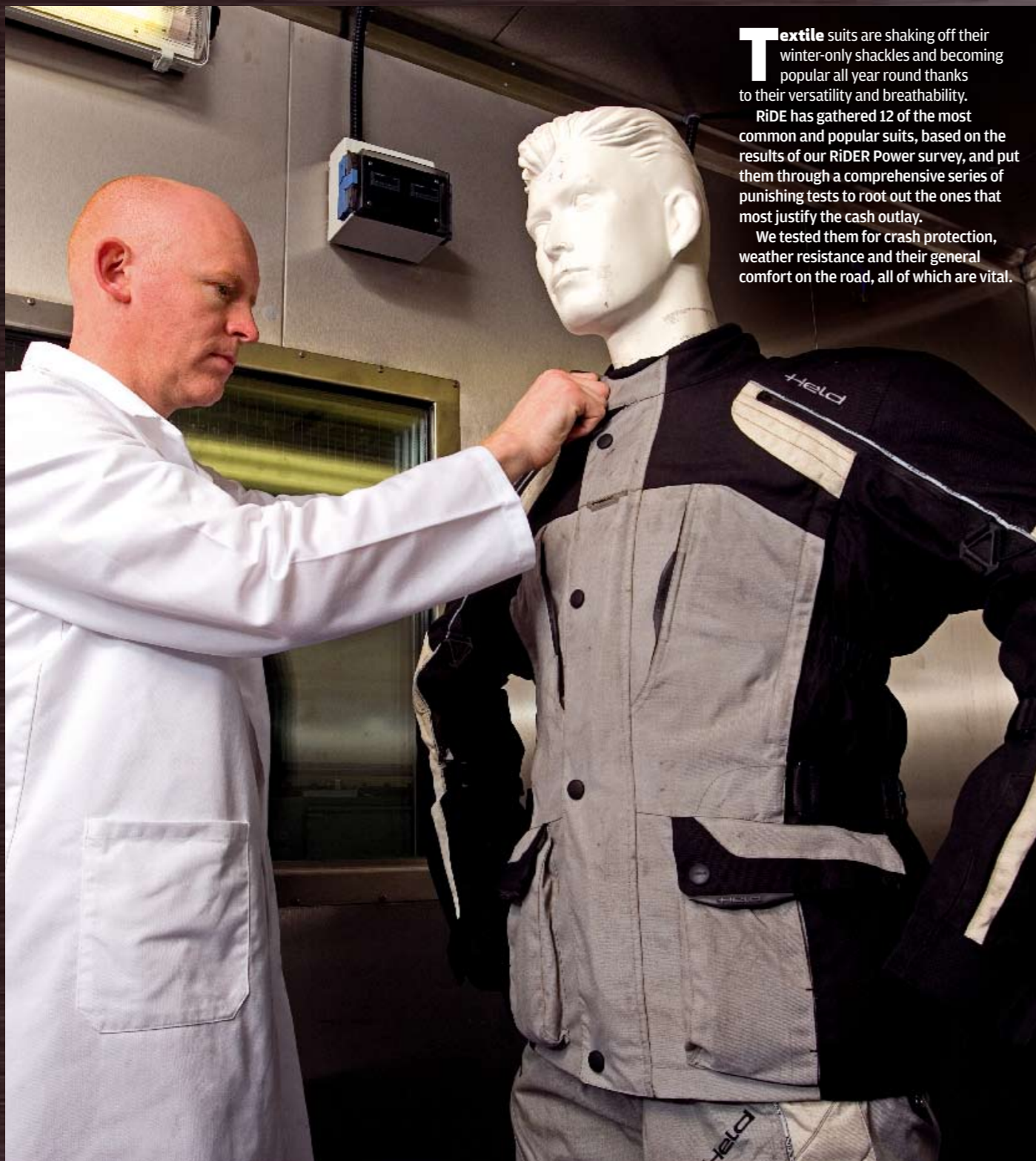


»In the lab«

TEXTILE SUITS

We expect year-round protection from the elements and the unexpected. The search is on...

Words Tony Hoare Pictures Mark Manning



Textile suits are shaking off their winter-only shackles and becoming popular all year round thanks to their versatility and breathability. RiDE has gathered 12 of the most common and popular suits, based on the results of our RiDER Power survey, and put them through a comprehensive series of punishing tests to root out the ones that most justify the cash outlay. We tested them for crash protection, weather resistance and their general comfort on the road, all of which are vital.

How we did it



Crash protection: This is split into three categories - resistance to abrasion, burst and impact. The abrasion test involves dropping a sample of the suit material onto a moving abrasion belt (pictured below) at a controlled speed and timing how long it takes to wear through the material. This test was conducted on three samples, one each from the shoulder, elbow and hip.

The burst test involves securing a material sample over a diaphragm (right) and inflating it until the suit sample either bursts or the machine is in danger of breaking. The pressure required to burst the seam or material creates the suit's score. Two tests were carried out, on samples from the hip and elbow.

For the impact test (above), the testing house places a piece of armour on an anvil and drops a striker onto it from a controlled height. A sensor in the anvil works out how much force was transmitted through the armour. We carried out five impacts - at the shoulder, elbow, hip, knee and



shin - and awarded up to three points per test based on the force transmitted. One mark shows the armour meets the CE standard (35kN or less transmitted), two marks go to armour transmitting 25kN or less and three marks go to protectors that transmit 15kN or less. The last two scores are in line with proposals to change the

CE standard to reflect improvements in armour technology and give you greater power when choosing protection.



Weather resistance: We tested suits for their ability to keep the rider dry and warm. The trusty RiDE waterproofing test involves dressing a rider in the suits, as well as gloves (cuffs placed under the sleeves), boots, a neckwarmer and a helmet, sitting him on a bike and spraying him all over with a pressure washer. After five minutes the suits are removed to check for patches of water on light-coloured clothing worn underneath. Points are awarded based on how much gets through.

In addition, we placed printed sheets of paper in the suits' external pockets to see how effective they were at keeping out water. Smudged sheets revealed leaky pockets, sodden sheets revealed seriously leaky pockets.

To test warmth, suits were fitted to mannequins warmed in a 20°C room and then placed in a room with a temperature of -20°C. Thermocouples measured the amount of heat loss over a 90-minute period. Percentage of heat loss creates the score.

Road testing: Suits were worn by RiDE staff over two months to assess practicality in use. Points scores from 10 are based on general impression, comfort, warmth and breathability.

1 Hein Gericke Master V GTX ProShell

Price £850 (€500/€350)
Contact 0800 165165 or
www.hein-gericke.com/uk

Tester's notes

Above average performances in all bar one category put this range-topping suit at the head of our chart. The only disappointment is a burst score that's on the low side, but few textile suits perform well in this test. The abrasion resistance is impressive and the armour is the best on test for impact absorption. The road tester marvelled at its practicality on the road, while warmth and waterproofing were acceptable. A small amount of water crept under the removable neckwarmer and inside the jacket, but testing with a separate warmer cured that. The external waist pockets were waterproof. The suit is wholeheartedly recommended, but the price tag prevents it getting the Best Buy triangle.



Abrasion	12/15
Burst	4/10
Impact	12/15
Waterproofing	7/10
Warmth	6/10
Road test	10/10
Total	51/60

2 Aerostich Roadrafter two-piece

Price £400 (€387) plus
£120 shipping/import tax
Contact 001 218 722 1927
or www.aerostich.com

Tester's notes

A great performance in most categories for this mail order suit from the US, but our road tester found it awkward to wear and it also leaked. Aerostich admit the suit leaks in extreme circumstances, which is backed up by the results of our test. Main pockets stayed dry, except for those at the chest. It takes excellent scores in crash protection, with abrasion resistance figures in excess of any rival, second-best performance for burst and very good impact absorption. Our road tester felt there were too many zips for it to be practical. This, added to poor waterproofing, means we can't award a triangle - but it's a brilliant, very protective option for those happy to compromise.



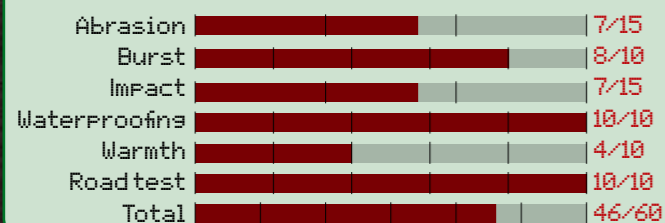
Abrasion	15/15
Burst	8/10
Impact	9/15
Waterproofing	5/10
Warmth	4/10
Road test	6/10
Total	47/60

3 Weise Dynastar II/Psycho

Price £310 (<£200/£110>
Contact 0117 971 9200 or
www.weise-clothing.co.uk

Tester's notes

Good scores across the board make this our best combination of performance and low price. Its abrasion resistance is acceptable, burst resistance is the highest of all the suits on test and the impact results are all comfortably within the safety standard laid down in Europe. Add a good waterproofing score, where the suit and main pockets were completely leak-free, and a glowing road test report, and this combination collects the Best Buy triangle. The road tester described the trousers as brilliant and said the only problem with the jacket was a slight bunching at the waist. The warmth score is below average for those on test, but the road tester found it warm in general use.

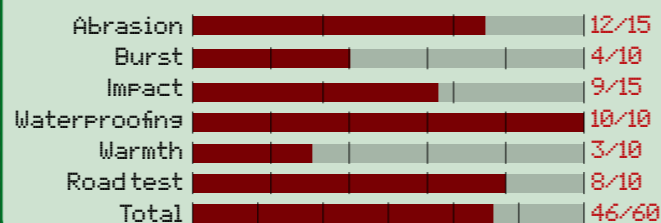


4 BMW Streetguard 2

Price £690 (<£355/£335>
Contact 0800 777155

Tester's notes

Good scores for abrasion and waterproofing stand out from the list for the Streetguard 2, which also impressed our road tester with its performance on the bike. Two of the abrasion tests picked up maximum marks, while the other was just short of the standard required. Armour all made it to the level required for two points, except for the hip, which still absorbed as much impact as the CE standard demands. The burst score was low, as it was with many suits in the test. In waterproofing it scored top marks, including main pockets, and our road tester commented on how it repelled rain rather than absorbing it. The warmth score is low compared to other suits on test, but the tester found it acceptable for road use.

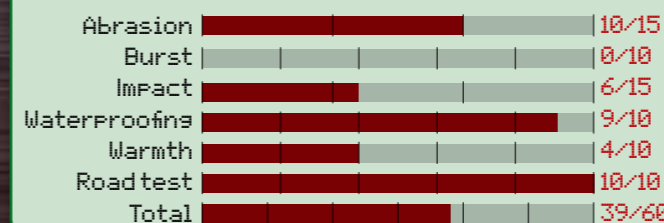


7 Rukka Armax

Price £1400 (<£800/£600>
Contact 01425 620580 or
www.tranam.co.uk

Tester's notes

Our road tester raved about this suit in general usage, which backs up Rukka's consistently good performances in the RiDER Power survey, but the lab testing was not so positive. Abrasion was fine and all five pieces of armour were above CE-approval impact absorption levels, with one exceeding our level two requirement. But the burst score was very low, so low that we were unable to award any points for its performance in that test. Warmth was below average, but waterproofing was fine other than dampness in the external pockets. The road tester described the suit as having an "amazing quality feel" and said it was perfectly warm on the road. A reasonable burst resistance score would have put this suit among the front-runners.

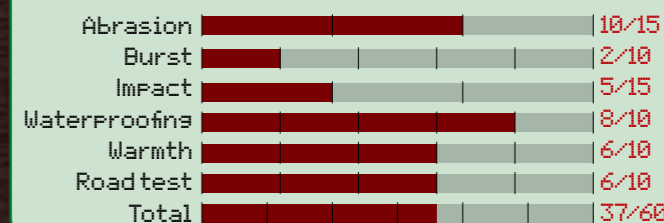


8 Dainese Panama/Hooper

Price £520 (<£320/£200>
Contact www.dainese.com

Tester's notes

The burst test takes another victim, with the Dainese suit taking a very low score in this area. It's also hit by a lack of proper armour at the hip, which knocks its impact score quite hard. The other protectors meet the minimum for CE approval, but only one exceeds the level set in our tougher scoring system. The abrasion resistance score was fine, with a particularly impressive survival time at the hip. Waterproofing was only let down by leaky pockets and warmth was acceptable from our laboratory testing, but the road tester complained about a lack of breathability, saying the suit left him feeling sticky.

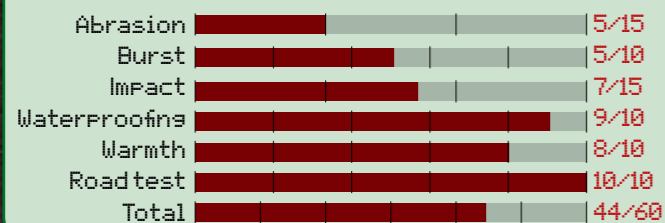


5 Held Oasis/Dakar

Price £314 (<£172/£142>
Contact 01283 820508 or
www.held-biker-fashion.de

Tester's notes

This off-road style suit is average in virtually every department, except for an excellent performance in the warmth test and top marks on the road. Both jacket and trousers finished top of the pile in the lab test for warmth, retaining 32 and 25 per cent of 'body heat' respectively. Its abrasion score was slightly below average, with the knee and elbow areas wearing through quickest. The road tester described the suit as comfortable and well fitting, although the main zip was awkward to use at first and the suit's grey colour picked up a grimy appearance very quickly. In waterproofing the suit only loses one mark for slight leaks at the pockets.



6 Halvarssons Medusa/Cobra

Price £370 (<£200/£170>
Contact www.iofama.se

Tester's notes

Poor burst results, like many suits on test, and in the warmth category stop this suit doing better. It's the warmth performance, both in the lab and on the road, that is the main barrier between the suit and a triangle. As with the Aerostich suit (2), this is a good option for those who leave the bike at home on really cold days. The abrasion and impact scores are fine and the suit itself was waterproof, but soaking wet pockets knocked off two marks. The road tester loved the comfort, but said it was breezy around the chest on an unfaired bike. For the ultimate protective textile suit, Halvarssons have the Safety, which was RiDE Recommended in 2005 and is still on the market. It is CE-approved for crash protection so we saw no need to retest this suit, which retains its triangle.

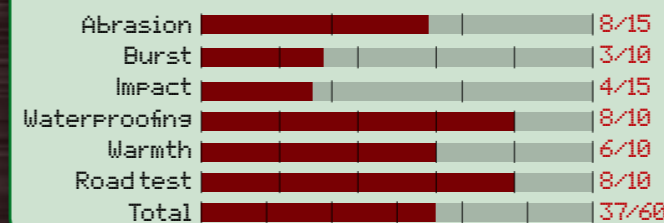


9 Alpinestars Jet Road Gore-Tex

Price £560 (<£330/£230>
Contact www.alpinestars.com

Tester's notes

It's a lack of proper hip armour and another low burst resistance score that puts the Alpinestars suit further down the finishing order. The abrasion resistance was good in two of the three tests, while the area at the knee lasted a very short time on the test belt. Only three suits score lower in the burst test. Four of the five protectors tested for impact resistance were above the minimum CE standard, but padding at the hip failed to absorb enough force by a large margin. Waterproofing of the suit itself is fine, but points are lost for leaks in the external pockets. The lab warmth test was backed up by the road tester's experience on the road. The tester criticised the suit for poor fit around the neck and calves.

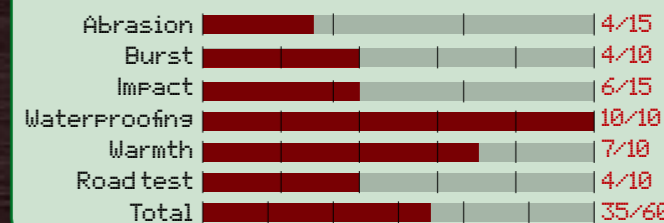
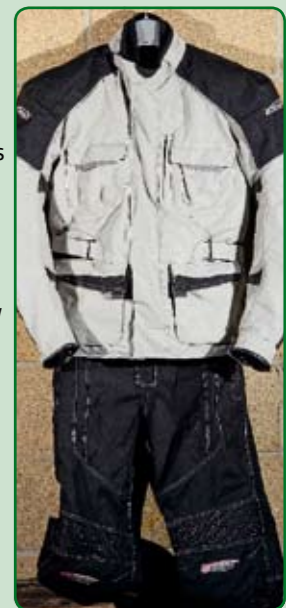


10 Spada Highland/Milan

Price £180 (<£140/£40>
Contact 01384 413841 or
www.feridax.com

Tester's notes

Inconsistent test results put former winners Spada in the basement area this time. The jacket performs acceptably in the lab, but the trousers are no match. The abrasion test on the elbow was good, but the same test on the hip and knee area was very poor, burst resistance was fine at the elbow but too low at the hip - and a lack of proper hip armour knocks the score further. Waterproof testing resulted in a perfect 10, including dry pockets, and the suit was in the top three for warmth in the lab. The road tester agreed with the lab findings of inconsistency, saying the jacket was fine, but the trousers were lacking in quality and left him feeling clammy after riding.

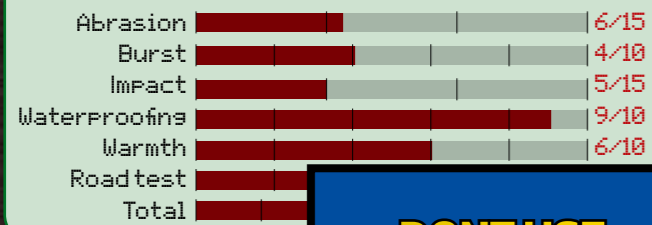
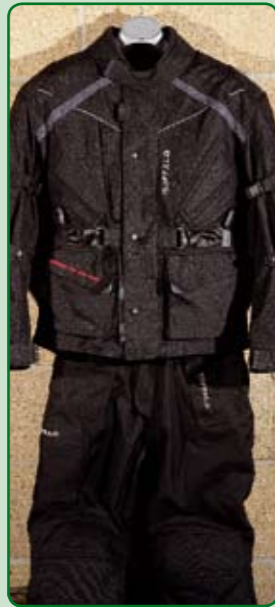


11 Buffalo Rocket/Imola

Price £150 (£100/£50
Contact www.bifax.co.uk

Tester's notes

The cheapest suit on test was very consistent in our lab examinations and was described by our road tester as a good option for the low price, but with some reservations about fit and breathability. The abrasion results are acceptable, the burst is a little low, although it matches many more expensive suits, and it's a shame there's a lack of proper hip armour as that knocks the impact resistance score. Waterproofing is fine other than slightly leaky pockets and warmth is acceptable. The road tester was concerned about ineffective securing adjusters at the cuff, which allowed drafts in. He described the suit as very warm, but lacking breathability.



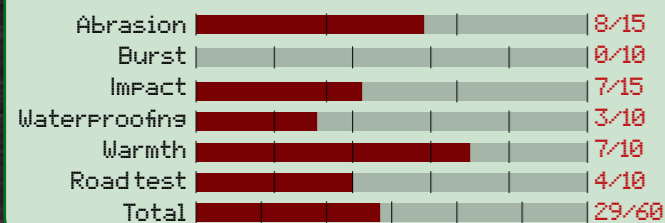
DONT USE - NOW PAGE 67

12 Frank Thomas Force Aqua Advance

Price £190 (£100/£90
Contact 01933 410272 or
 www.frank-thomas.co.uk

Tester's notes

The second suit on test to collect zero points for burst resistance, with very low pressures required to burst both samples. Only 18kPa (2.6psi) of pressure was applied to the rig to burst the FT sample, while the best samples on test were still intact at 968kPa (140psi). Abrasion and impact scores are fine, although this is another suit with no proper hip protection (the fifth of the 12 on test). Waterproofing was another disaster area for the FT suit as it was by far the leakiest of the 12 suits, letting through a significant amount of water around the rider's abdomen. One bright point was a decent performance in the warmth test, but the road tester described the suit as leaving him very sticky.



! THE VERDICT



There's a clear winner of the test, but your buying decision will depend on whether you want the best suit or the best value.

The best suit on test is the Hein Gericke Master V, which takes solid scores in every test except the burst strength, which is the weak point for virtually every suit here. But its £850 price tag is too high to justify the Best Buy triangle so instead it collects a well-deserved Recommended tag.

For that money you can buy two Weise Dynastar II/Psycho combinations and still have enough change to buy a third jacket should you want to. The Weise suit scores well in the vast majority of tests, including the burst test that undid so many others, and is well priced

at £310 for the jacket and trousers. This is what the Best Buy triangle was designed for - highlighting products that do a good job at a great price.

The £690 BMW Streetguard 2 suit also collects a Recommended for good performance in all tests.

The Aerostich suit scores brilliantly in everything except waterproofing and many riders will accept the compromise of reduced protection in that area. It's a RiDER Power favourite, but we can't award a triangle to a textile suit that's vulnerable to leaks.

The Halvarssons suit is another that's worth considering if you won't be riding through the deepest winter, as poor warmth test performance is its main weakness.

➔ NEXT MONTH

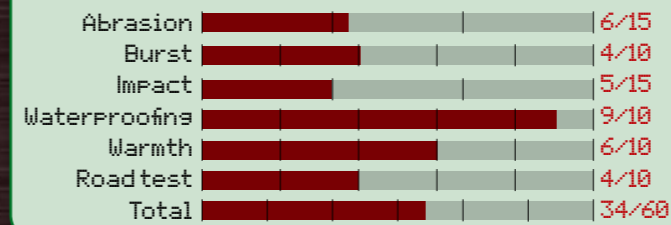
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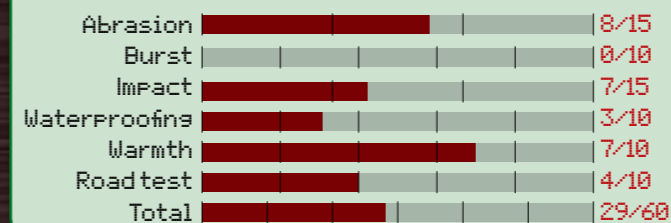
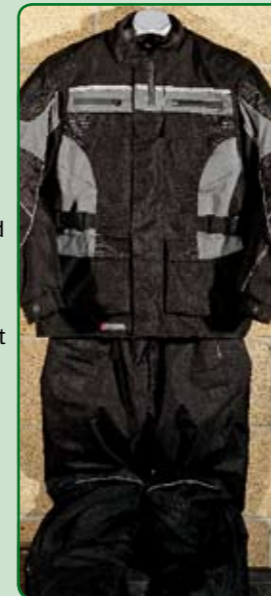


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