



»In the lab«

SECURITY LOCKS AND CHAINS

Alarms and immobilisers mean little if a crook can simply heave your bike into the back of a van and drive off with it. We've tested a range of locks and chains to see if they'll resist a determined thief

Words **Olly Crick** Pictures **Mark Manning**

How we did it

SECURITY

Locks and chains only have to do one job: attaching your bike to a solid object to stop anyone else taking it away. Bikes are inherently vulnerable, and bike thieves are among the canniest of crooks, with a range of techniques for parting you from your motorcycle.

We've been brutal in our tests because that's exactly how the bike thieves will behave. They'll show no mercy.

We tested for the worst-case scenario: you're away from home and you've found something solid to chain the bike to, but you can't get the chain off the ground. Not ideal - but that's the real world for you. And that's where you want a lock and chain to really shine.

EASE OF USE

Every lock and chain was tried for ease of use. It's not the most important aspect of security testing, but if all else is equal then it makes sense to buy the one that's the least fiddly to use. Each lock and chain was tried on two bikes and we noted if keys were difficult to get in, if the lock was fiddly to open and close, if the chain was flexible enough to be threaded where it was needed and how easy it was to get the chain ends into the lock. We found that chains consisting of large links were generally fiddlier to use.

There's no score for ease of use, because if a lock and chain were fiddly to use but offered fantastic security we'd still buy it.

Chains and locks were weighed, and chains measured end to end. Chain lengths stated are as measured rather than the manufacturer's claims.

THE ATTACK TECHNIQUES

Level one involves the use of DIY hand tools and simple techniques for getting through metal.

Level two is the same as level one but with a cunning twist that many bike thieves will employ.

Level three allows the use of battery-powered hand tools and other easy-to-use picking tools.

Level four gives our locksmith, Martin Newton of Safe Ventures (01444 242271), safe cracker extraordinaire and industry expert, free rein to use any tool or technique in his arsenal to open the lock.

Every attack is timed. We start at the lowest level and if the lock and chain both survive for five minutes, we move up to the next. Five points are awarded for every level passed, giving a maximum of 20 points.

A further 10 points are available for those that exceed the five-minute attack. The longer the chain and/or lock survives the higher they score.

1 Oxford XL Hardcore

Price £50
Contact 01993 862300
or www.oxprod.com

Length 1.5m
Weight 5.3kg

Tester's notes

This has a 12mm square-section chain that withstood most level-one attacks but succumbed to one particular type of attack after three minutes and 20 seconds.

The lock body lacks some security measures we would expect to see, but it still lasted just over five minutes in the hands of security industry expert Martin Newton.

It's one of the least expensive chain and lock combinations on test in its 1.5-metre guise and is also available in 1.2-metre and 2.0-metre lengths.



Score 9/30

2 Oxford Monster

Price £50
Contact 01993 862300
or www.oxprod.com

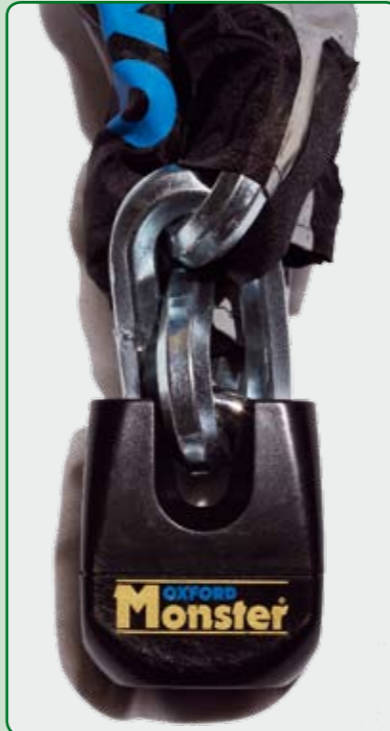
Length 1.5m
Weight 7.1kg

Tester's notes

Despite lacking some anti-attack features we would hope to see, the lock survived three minutes and 18 seconds of a level-one attack.

The tough 14mm hex-section, medium-size link chain almost survived all level-one attacks, falling just 11 seconds short in one particular type of attack.

The chain is also available in 1.2-metre and 2.0-metre versions. Reflective material on the chain sleeve should make it harder for potential thieves to work discreetly.



Score 9/30

5 Xena

Price £172.97
Contact 01384 413841
or www.feridax.com

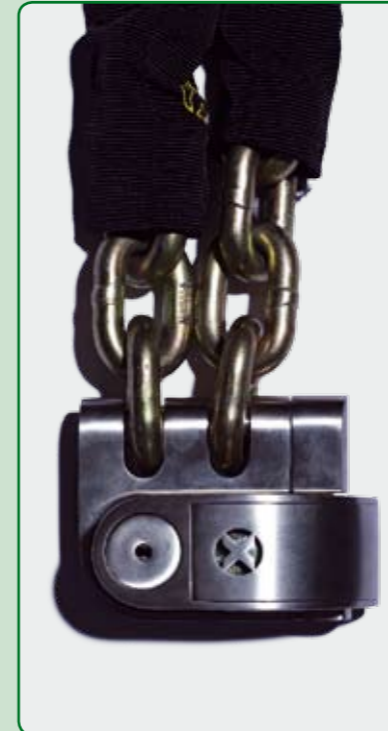
Length 1m
Weight 5.9kg

Tester's notes

The security features are well designed, but the lock is a pain in the backside to use as it's awkward to align the shackle pin, chain ends and lock when securing it all together.

It took one minute and 42 seconds for the chain to fail a level-one attack. The alarmed lock with auto arm/disarm offers a good level of security and doubles as a disc lock that can be used separately.

The alarm is sensitive to movement and loud, but we found it easy to silence, a process that took two seconds.



Score 5/30

6 Squire Stronghold SS50 MC4

Price £89.98
Contact 01256 704909
or www.motohaus.com

Length 1.3m
Weight 5.2kg

Tester's notes

The compact lock is well designed and hard to defeat. The lock shackle is retained in the lock's body and is well protected once locked around a chain.

The set-up is let down by the chain, though. The round 13mm-section medium-size links failed a level-one attack in one minute and 40 seconds.



Score 5/30

3 Oxford Nemesis

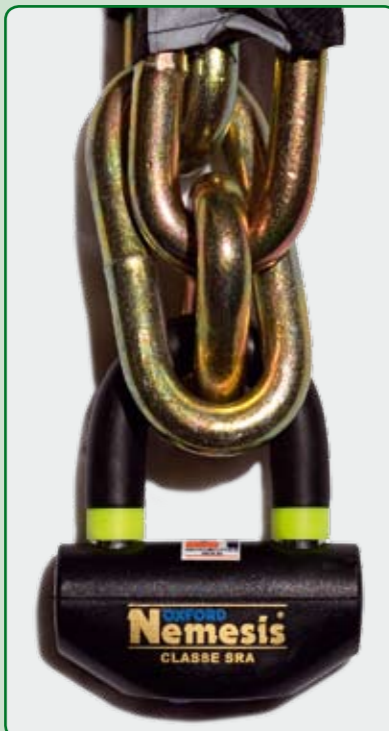
Price £164.99
Contact 01993 862300
or www.oxprod.com

Length 1.5m
Weight 7.2kg

Tester's notes

The extremely tough 16mm round-section, large-link chain survived five minutes of our level-one attacks. Unfortunately the lock part failed a level-one attack in just under two-and-a-half minutes, despite having some good anti-attack features built in.

It's supplied with five keys, although they're awkward to locate into the lock. It has reflective material on the chain sleeve that might deter potential thieves. The chain is also available in 1.2-metre and 2.0-metre versions.



Score 7/30

4 Abus Granit Extreme

Price £209.99
Contact 01782 569800
or www.phoenixnw.co.uk

Length 1.4m
Weight 4.6kg

Tester's notes

A very flexible chain cover and one-piece design make this combination simple and quick to use. It comes with two keys, one of which contains a light to make it easier to find the keyhole. But the chain failed a basic level-one attack in just less than two minutes.

Martin Newton remarked that the lock body was made from fairly soft material, but survived almost four minutes of his expert attack-time.



Score 5/30

7 Abus Granit City

Price £109.99
Contact 01782 569800
or www.phoenixnw.co.uk

Length 1.1m
Weight 2.7kg

Tester's notes

Its 11mm-thick hex-section chain failed a level-one attack in just over a minute.

The lock body survived a level-three attack for four minutes before succumbing. It's a shame the chain isn't tougher, to match the lock's performance.

The set-up is easy and quick to use as the lock is all integrated in one piece and it comes with two keys, one of which has a light to help find the keyhole.



Score 5/30

8 Tech 7

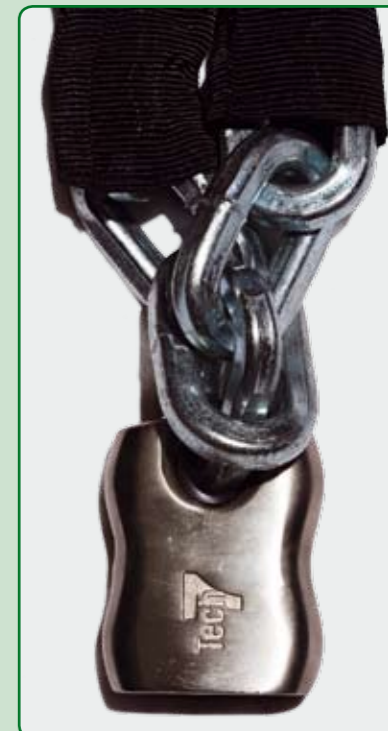
Price £30
Contact 0844 815 6571
or www.mandr.com

Length 1.5m
Weight 5.7kg

Tester's notes

This low-priced combination has a decent-quality compact lock with good security features and was hard to beat - it survived five minutes of a level-three attack.

But it was let down by the square-section 11mm-thick chain, which failed a level-one attack in less than one minute.



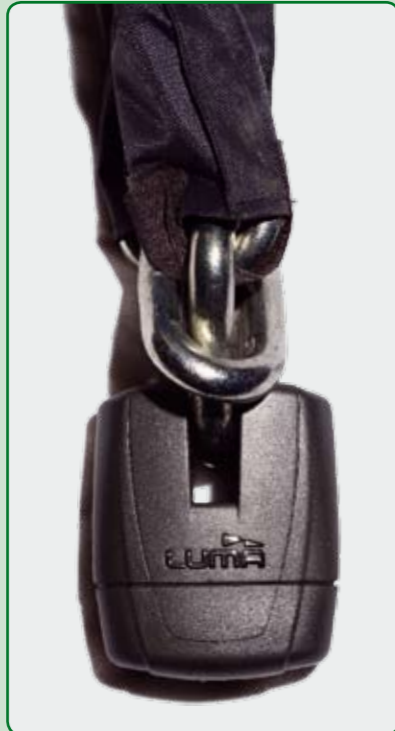
Score 5/30

9 Luma Solido Chain Plus

Price £160 Length 1.2m
Contact 01697 343240 Weight 6.1kg
or www.luma.es

Tester's notes

Luma Solido lock bodies have always proved to be tough in RiDE's tests over the years and this one is no different. Its plastic cover makes it look cheap, but don't be fooled as it's hard underneath and industry expert Martin Newton couldn't beat it in the five minutes available to him. It's a shame the chain doesn't match it for toughness. It failed a level-one attack inside a minute and three-quarters. The chain, with medium-sized links, is the same as the Luma Solido Mini's.



Score 4/30

10 Luma Solido Mini

Price £120 Length 1.2m
Contact 01697 343240 Weight 6.5kg
or www.luma.es

Tester's notes

This has the same chain as the Luma Solido Chain Plus and similarly failed a level-one attack just shy of a minute and three-quarters. Martin Newton found the lock body tough to beat (as we had expected of Luma based on previous performance) and he remarked that any would-be thieves would need specialist kit to beat it. It's just a shame that the chain let the combination down.



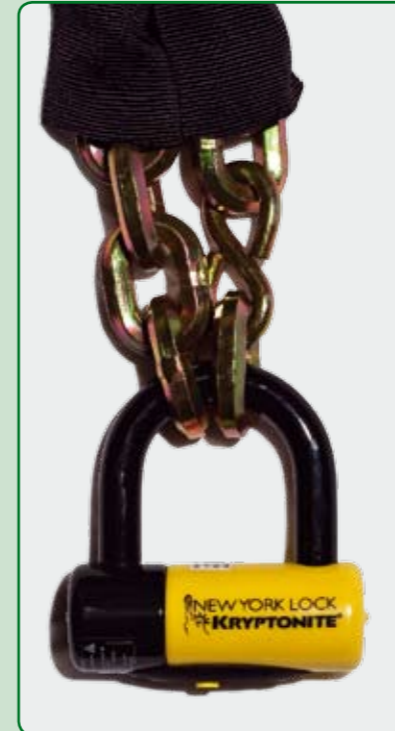
Score 4/30

13 Kryptonite New York

Price £124 Length 1.5m
Contact 0844 815 6571 Weight 5.4kg
or www.mandp.com

Tester's notes

This has a 12mm square-section chain that withstood most level-one attacks but succumbed to one particular type of attack after three minutes and 20 seconds. The lock body lacks some security measures we would expect to see, but it still lasted just over five minutes in the hands of our expert. It's also available in 1.2-metre and 2.0-metre lengths.



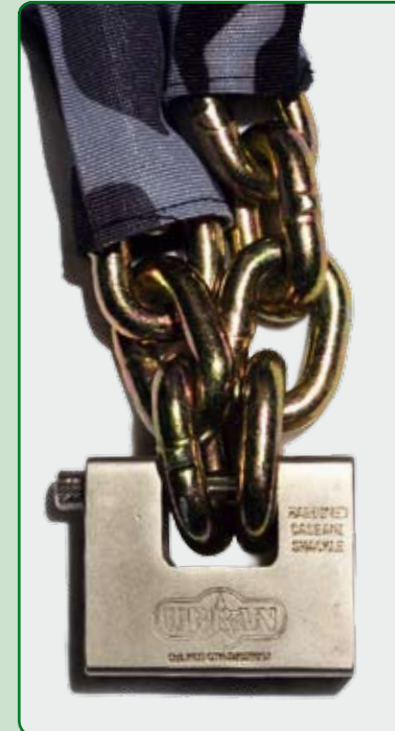
Score 2/30

14 Urban lock and chain

Price £90 Length 1.5m
Contact 01923 772273 Weight 6.6kg
or www.thunderchild.co.uk

Tester's notes

The chain succumbed to a level-one attack in just under 30 seconds, which makes it one of the easiest to defeat of those on test. The lock body is tough and well designed and easily survived the five-minute level-three attack. As for ease of use, the shackle is awkward to get at when secured around a chain. A carry bag to strap to a bike's seat is available for £20 extra.



Score 2/30

11 Luma Solido Chain

Price £90 Length 1.3m
Contact 01697 343240 Weight 4.3kg
or www.luma.es

Tester's notes

The hex-section chain failed a level-one attack in just 19 seconds. This is a shame as a well designed and well protected lock body survived everything that Martin Newton threw at it for more than eight minutes. A hardened steel shackle comes right out of the lock body and is secured in tightly from both sides when locked, but it needs to be used in conjunction with a stronger chain.



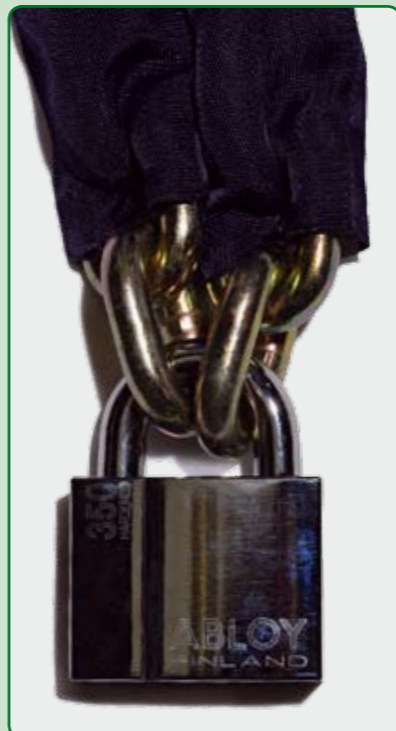
Score 3/30

12 Motrax Hyperlink

Price £120 Length 1.2m
Contact 01933 418414 Weight 5.4kg
or www.motrax.co.uk

Tester's notes

The chain failed a level-one attack in under a minute and a half. It's combined with a lock that lacks some of the design features boasted by others here, a result of having been originally intended for marine use. The lock failed a level-three attack in less than two minutes. It's supplied with three keys, but they're awkward to locate into the lock body. This combination is also available with 1.5-metre and 2.0-metre chains.



Score 2/30

15 Moto Detail

Price £50 Length 1.2m
Contact 0845 017 5007 Weight 3.73kg
or www.getseared.co.uk

Tester's notes

The chain lasted for just 11 seconds of a level-one attack, which was the shortest survival time on test. To check our results we attacked a second chain in case the first was faulty, but we broke the second chain in a matter of seconds as well. The lock body that secures the chain is well designed, tough and durable, easily outlasting the required five minutes of a level-three attack. But the chain is too vulnerable.



Score 1/30

! THE VERDICT

At least one part of every single chain and lock combination failed a level one attack inside five minutes. We were amazed how the standard of lock has dropped since the last RiDE locks test. We did not award any Best Buy or Recommended triangles to the locks here. Their performance suggests even an unskilled thief could be successful. Our lock-breaking expert, Martin Newton of Safe Ventures (01444 242271), found many of the lock bodies to be of good quality, with a high degree of sophistication to their design. The problem in most cases was with the chains. Times quoted for level one attack failure do not have a great bearing on some of the combinations' final scores because some methods we used to break them have a hit-and-miss factor. Scores were finally arrived at by deciding what effort was put into the attack and combining it with

the time it took to defeat them. We tested every lock in a worst case scenario by leaving the chain and lock on the ground, where they're particularly vulnerable to attack. Any chain and lock will provide much more of a challenge to a thief if it's used properly, which involves looping the chain through the frame, or perhaps through the bracing on a swingarm, and around something solid like a lamp-post, leaving nothing dangling on the floor. Most of a thief's attacks will require some purchase against the ground if he's to break the lock or cut through it. Most chains are available in different lengths so work out what you need before purchase so you can get a tight fit between the bike and the object you're locking it to. Turn the page for advice on making the best use of locks, chains and other anti-theft measures. **Next month's product test: tyre pressure gauges**