

Van den Hul Crimson XGW Stradivarius

Is this special wood-bodied moving-coil merely expensive hi-fi jewellery, or a sublime example of the artisan cartridge builder's art? The answer lies in the listening...

Review: **Nick Tate** Lab: **Paul Miller**

In the great pantheon of hi-fi products, the moving-coil cartridge occupies its own special place. While streamers, amplifiers and loudspeakers may be impressive pieces of audio engineering, there's something especially intimate about a pick-up cartridge – all the more so when it's a hand-built, high-end one.

Indeed, it's hard to talk in terms of 'manufacturing' moving-coils. In the same way that one cannot 'manufacture' a bespoke tailored suit, so the high-end cartridge maker's vocation is more of a craft than a process. Aalt Jouk van den Hul is surely the longest-lived figure in the moving-coil business, and still builds every single transducer that bears his name. Anyone who has visited his house, where the cartridges are constructed, will quickly understand why he is one of hi-fi's favourite sons. AJ appears endlessly fascinated by design, in love with music and as knowledgeable about hi-fi – especially the classic variety – as it's possible to be.

PAINSTAKING BUILD

The staple of the van den Hul company is its interconnect and loudspeaker cables, but its redoubtable reputation for hand-made cartridges is no mere second string. By vdH's own standards the Crimson XGW Stradivarius is a 'mid-price' design costing £3999, and as with so many of its pick-ups, is offered in different guises. The XGW model tested here sports a wooden body, while there's also an XGP polycarbonate-bodied version for the same price.

The Crimson XGW Strad is said to be a crossbreed of The Canary and The Condor – van den Hul

RIGHT: This shot clearly shows the yoke, magnet and pole piece of the exposed generator. Also visible is part of the gold-wired 'X' armature mounted on a (black) compliant suspension

saying it sits above his Grasshopper series of yore, and just under today's ultra high-end Colibri series. The Crimson XGW Strad's wooden body uses what he calls 'the well known Stradivarius lacquer', coated three times. Each coating is said to take two months to harden, 'which takes half a year before I can build the rest of the cartridge', he points out.

The idea is that this particular body creates a hard but resonance-absorbing shell that dispels standing waves that might develop inside the cartridge. 'There is even more diversification in vibration distribution', he says in his charmingly Dutch way. 'This results in an improvement in secondary, lower level detail and audibly superior resolution', he adds.

The new motor assembly is an evolution of that found in the original Colibri from 1995, but

with a higher claimed output of 0.65mV [see PM's Lab Report, p57]. 'There is always a balance between cartridge output and phono stage sensitivity,' he explains. 'High quality phono stages have no problem with lower cartridge outputs but I am more concerned about cheaper, lower quality

units where noise and hum play a prominent role in performance.'

Van den Hul also fears that when people buy expensive moving-coils 'there is not so much budget left for an expensive phono stage,

therefore some extra output helps here to overcome this gap'.

SUPERB TRACKING

The Crimson XGW Strad's healthy output comes courtesy of its gold coils and samarium-cobalt magnet. Extended channel separation and superb tracking

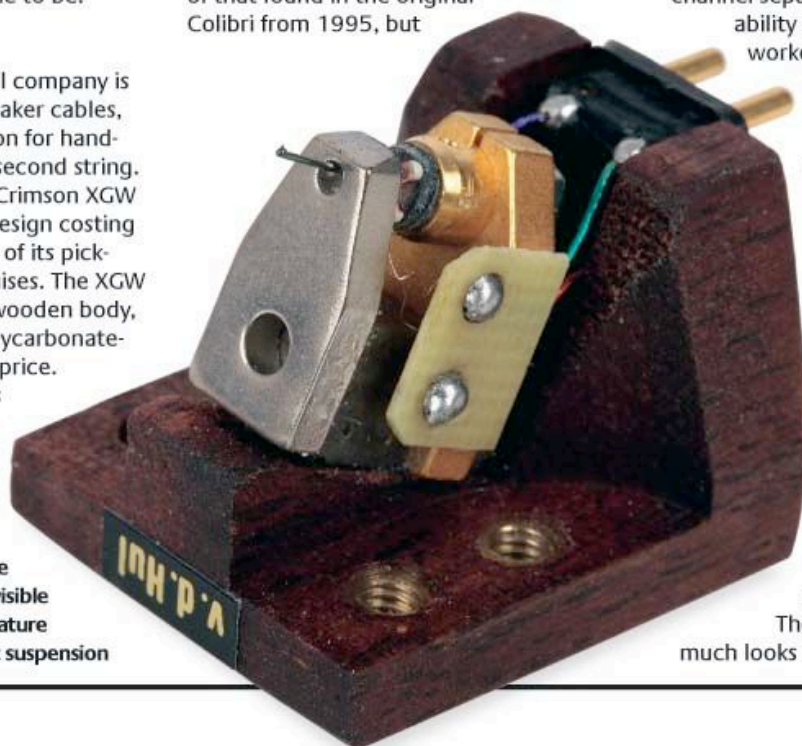
ability are also claimed – I found it

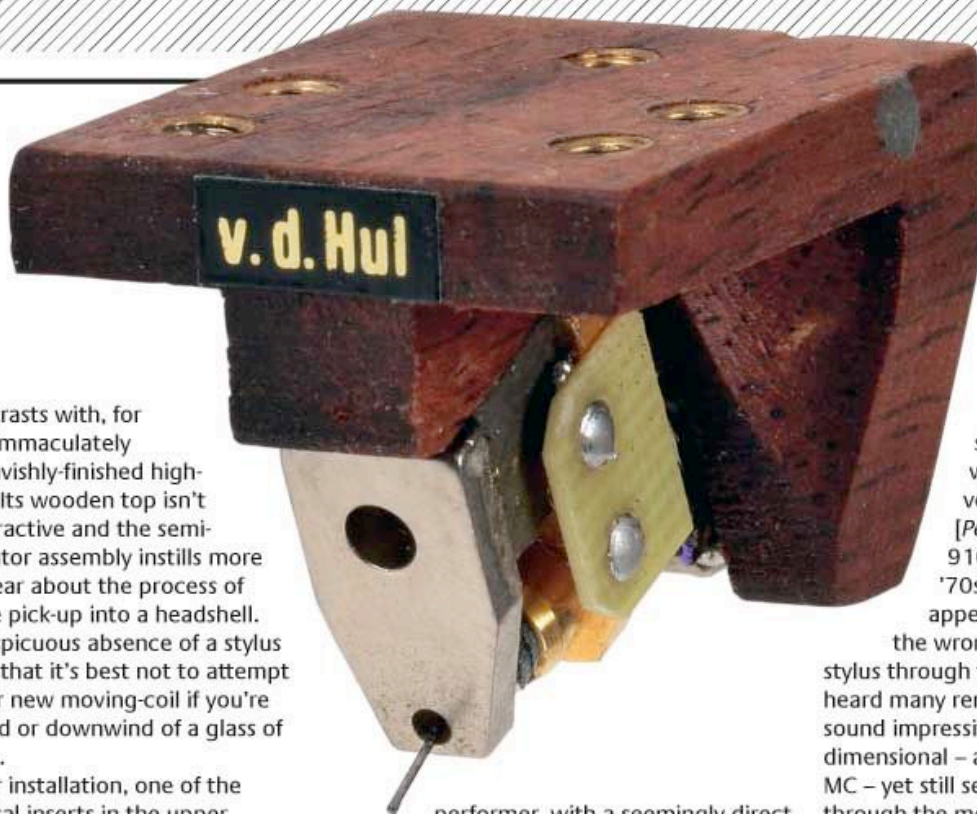
worked bang on at the top of its recommended range of 1.35 to 1.5g, with just over the recommended maximum anti-skating force of 0.4-0.6g.

The stylus specified is the famed vdH 1S, 2x85µm in radius, affixed to a boron cantilever with a relatively soft suspension better suited to medium rather than high mass tonearms. It's worth noting that due to the bespoke, hand-built nature of this cartridge, it takes around three weeks to deliver after ordering. Each example comes with a 200 hour return service, free of charge for the original owner.

The Crimson XGW Strad very much looks the hand-built thing that

'There's a kind of alchemy at work here – almost an "analogue voodoo"'





LEFT: The generator is mounted into a Koa wood bracket, its top surface housing threaded inserts for bolting into a headshell. The 2x85µm diamond is mounted on a solid boron rod cantilever [detail, below]

it is, and contrasts with, for example, an immaculately turned out, lavishly-finished high-end Ortofon. Its wooden top isn't especially attractive and the semi-naked generator assembly instills more than a little fear about the process of mounting the pick-up into a headshell. The very conspicuous absence of a stylus guard means that it's best not to attempt to set up your new moving-coil if you're sleep-deprived or downwind of a glass of wine or three.

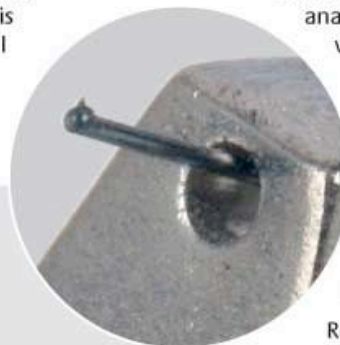
During our installation, one of the threaded metal inserts in the upper body came out, making life even less straightforward. VdH could look to improve the bonding here in addition to the symmetry of its flexible five-point mounting. The crudely affixed name label is not the sort of thing you'd see from rival cartridge makers, either. Still, this is all part of the charm of a hand-built van den Hul – along with its standard-issue wooden box including miniature spirit level and inscribed specifications.

SINGS LIKE A CANARY

Within seconds of its stylus hitting the groove, the Crimson XGW Stradivarius sings like a canary. Sometimes it's difficult to enthuse about pick-up cartridges thanks to their workmanlike, matter-of-fact sound, but the Crimson XGW Strad cannot be further from this. It's a hugely characterful

performer, with a seemingly direct line to the music held within the record groove. It's not a case of 'getting into' this cartridge, or 'coming round to liking it' – rather, it is instantly adorable.

Suddenly, it's your new best friend and you wonder where it has been all your life. The way it presents music is uncannily realistic and yet, strangely, doesn't sound like anyone's normal working definition of a 'transparent' cartridge. It doesn't throw low-level detail out at you, but seems able to teleport the listener right to the time and place of the original musical performance. To talk about it being fast, dynamic, punchy, sweet, warm, euphonic and silky is absolutely correct, but still this van den Hul MC flies far further than the sum of these parts...




It almost as if there's some kind of alchemy at work – a sort of 'analogue voodoo'. Rush's 'Freewill' [Permanent Waves; Mercury 9100 071] is a great mid-'70s classic rock track, but can appear a little plodding with the wrong cartridge dragging its stylus through the record groove. I've heard many renditions of this song which sound impressively clean, detailed and dimensional – all cornerstones of a great MC – yet still seem like they're going through the motions, as if trying to put in a safe final Grand Prix lap to win the title.

SOARING LYRICISM

Not here, as the Crimson XGW Strad poured its heart and soul into the music, and mine too. I was immediately struck by the creamy, velvety tone of what is quite a dry rock recording – but it's a fleeting thought as I found myself transfixed by the musicianship. Suddenly you're marvelling at the almost supernatural tightness of the syncopation between bass guitar and drum kit, and the soaring lyricism of the lead guitar. Singer Geddy Lee's voice – which can seem a little thin and anaemic at times – acquires a wonderful intimacy and body. It's hard to say whether this moving-coil in some way romanticises the music, or if others simply strip it of its emotional pull.

Isaac Hayes' 'Cafe Regios' [Shaft – Original Soundtrack; Stax 2659-007] is a far higher quality offering.

Recorded in the famous Memphis studio where Booker T and The MGs also worked, it has a vast acoustic and a sumptuously full-bodied sound – plus some inspired playing from some of the finest session men around. It's the sort of track that can make a relatively thin and mechanical MC suddenly sound sweet and musical.

The Crimson XGW Strad of course needed no such help, and instead turned in an immensely powerful performance that showcased all its attributes in even 

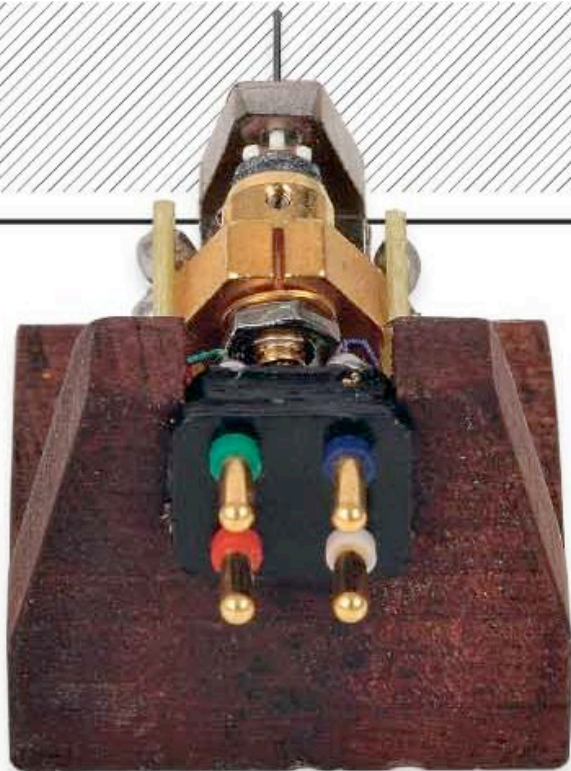
THE MICRO ENGINEER

'Starting with The Frog and all higher class models, I build them all myself without any assistance,' says AJ van den Hul about his unique moving-coils. 'Indeed, on my recent trip to Australia I built five Crimson in public, sometimes with over eighty visitors watching! After the last drip of adhesive was applied, they were installed in tonearms and played. I recently attended the Axpona in Chicago where I also put a Crimson together under the microscope, with a huge display where visitors could see how it works. Twice I got huge applause as a reward!'

Although advanced in years, AJ has a delicacy of touch that you'd expect from a surgeon half his age. Rumour has it that he doesn't drink coffee or alcohol for a day before the build, because he needs totally stable hands. Cartridge building has traditionally been done in his house, which also sports a vast listening room. He's well aware of his unique public profile. 'The quantity of emails I receive from all around the world is amazing. I get plenty of analogue questions related to disappearing knowledge, and lack of knowledge,' he says.

VDH CRIMSON XGW STRAD

LEFT: Another view of vDH's substantial MC generator with pole piece, yoke, X-shaped armature and cantilever all visible. The gold-plated cartridge pins are mounted into a separate black plastic moulding



sharper relief. Central to its genius is the superb spatiality – the cartridge seems able to penetrate further into the inky blackness at the back of the soundstage than practically anything I've heard. This means you feel far more of a participant in the musical event, and less of a mere spectator.

DIVING INTO THE SOUND

Some cartridges sit you quite far back in the auditorium, giving you a distant but panoramic view, whereas The Crimson XGW Strad does the opposite. The result is a consummately spacious feel to the recording, and this is allied to brilliant dynamics and a general 'high energy' feel.

There's no question of the Crimson XGW Strad sitting this one out, for it always dives in with heady abandon. To my ears, it's this combination that marks the Crimson XGW Strad out as so special – it is immersive and emotionally intense at the same time.

It's easy to wax lyrical about the cartridge's delicious handling of the strings, with an almost uncanny timbral accuracy, or the beautifully articulated bass guitar line. In truth though, it's not about the fine tonality and unerring transparency – what really counts is its ability to pull you right into the recording and keep you there, enraptured.

The great thing is that it works across all types of music, whether you're playing a seminal recording or something bashed up in someone's garage. The Sex Pistols' 'Submission' from *Never Mind The Bollocks* – their only studio album [Virgin V2086] – totally fails in audiophile terms,

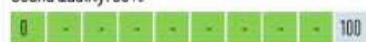
yet the Crimson XGW Strad takes the ball and runs with it. Suddenly that murky mix dissolves and there are five musicians playing together right in front of you, with masses of passion and attitude. Human voices – even John Lydon's rather unlovely snarl – take on an intimacy that you don't expect, alongside an amazing purity of tone.

Spin up an early-'60s Jan and Dean classic, 'Ride The Wild Surf' [from the album of the same name; Liberty LBY1229] and again they're right there in the room, singing just for you. You'll find yourself transfixed by individual elements in the mix – the gloriously tuneful bass guitar playing, for example – and then suddenly the strings kick in giving a vast, Phil Spector-like wall of sound that totally takes you aback. The visceral speed of it is incredible, with so much energy being expended, yet never for a moment does the Crimson XGW Strad shout. 🎧

HI-FI NEWS VERDICT

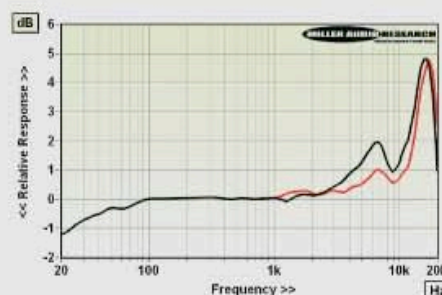
Surely one of the finest pick-up cartridges around, van den Hul's Crimson XGW Stradivarius wears its heart on its sleeve at all times, never failing to whisk the listener right to the centre of the music. Intense, profound and compelling, it doesn't do background music well – but those seeking power and passion need look no further. As such, I'd argue this artisan-made MC surely represents good value too.

Sound Quality: 88%

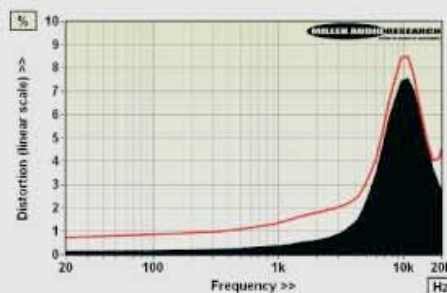


Tested at the upper limit of its 1.35-1.5g downforce range, this meticulously hand-built pick-up proved a very good tracker, surmounting the maximum 80µm groove pitch on the left and very nearly clearing it on the right at up to +18dB (315Hz lateral cut, re. 11.2µm at 1% THD). Moving-coils traditionally have a low compliance suspension and, with a full bodyshell, not uncommonly a 10g+ physical weight. The Crimson XGW Stradivarius bucks this trend with its open body – more akin to a mere mounting platform – weighing-in at just 7.8g coupled with a slightly high dynamic compliance of 25cu. This 'soft' suspension helps explain the secure tracking performance but it also suggests the Crimson XGW Strad is better suited to lower effective mass arms – the Rega RB1000 or Pro-ject 9CC/10CC Evolution rather than the SME V, for example – if too low an arm/cartridge resonance is to be avoided.

The fine line contact (2x85µm VDH 1S) diamond is beautifully finished, although the practical VTA is closer to 28° than 20°. Output is on-specification at 860µV (re. 1kHz/5cm/sec) and despite the slightly disappointing 0.6dB channel imbalance, the generator symmetry is clearly very good, as evidenced by the close match between L+R and L-R responses [see Graph 1, below]. This indicates that centre-stage images (solo vocalists, etc) will be as bright and lively-sounding in the presence/treble as detail at the periphery of the soundstage. Distortion, too, is well matched between lateral and vertical modulations, falling below 1% from 20Hz-3kHz (-8dB re. 5cm/sec) on the right but slightly higher at 0.5-2.5% over the same span on the left [see Graph 2, below]. PM



ABOVE: Frequency response curves (-8dB re. 5cm/sec), lateral (L+R, black) versus vertical (L-R, red)



ABOVE: Lateral (L+R, black infill) and vertical (L-R, red) tracing and generator distortion (2nd-4th harmonics) vs. frequency from 20Hz-20kHz (-8dB re. 5cm/sec)

HI-FI NEWS SPECIFICATIONS

Generator type/weight	Moving-coil / 7.8g
Recommended tracking force	1.35-1.5mN (1.5mN)
Sensitivity/balance (re. 5cm/sec)	0.86mV / 0.6dB
Compliance (vertical/lateral)	25cu / 30cu
Vertical tracking angle	28 degrees
L/R Tracking ability	>80µm / >76µm
L/R Distortion (-8dB, 20Hz-20kHz)	0.5-12.5% / 0.2-7.5%
L/R Frequency resp. (20Hz-20kHz)	-1.2 to +4.8dB / -1.1 to +5.3dB
Stereo separation (1kHz / 20kHz)	33dB / 18dB