

CONLOK

Traditional. **Upgraded.**



DEMON CAT

A **metpro** Group Brand

Innovations for the **Built Environment**

300
**MIXED
BOXES**

ONE
MINUTE PER
BOX

£708
TOTAL
**LABOUR
SAVING**

SEE APPENDIX A FOR THE FULL CASE STUDY

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What is Conlok?

A fast-fix steel conduit system designed to significantly reduce installation times and increase on-site safety.

With finishes for internal, external and clean room applications, Conlok offers over 75% labour savings through its innovative built-in grub screw, eliminating the need to thread conduit tube whilst offering the same levels of cable protection the industry expects.

The Conlok system consists of the following products:



Steel Tube



Conduit Boxes



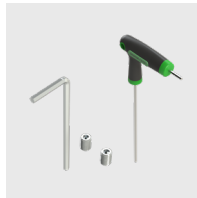
Couplers



Adaptors

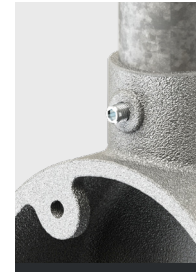


Bends



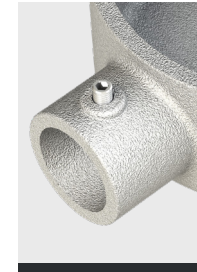
Accessories

Why use Conlok?



No need to thread conduit tube

With Conlok's unique built-in grub screw



Fully galvanised system

Offering greater corrosion resistance



Fast-fix solution

Ideal for major projects where cost & safety are critical



Full range of accessories

Offering all the essential items for quick installations



Increased on-site safety



Compliant to the latest standards



Reduced on-site storage



Used on major UK projects



Conlok offered a safer and cleaner install with no bare threads visible, thus giving a clean finish with no overspray or excess threading showing. The fully galvanised Conlok system was a big plus for our install being in a stadium environment without heating. Another benefit of Conlok was giving the client peace of mind with the extensive testing which has been carried out on vibration, earthing and CE certification. No other conduit accessory system has this level of testing.

John Fox | Contracts Manager, Imtech Engineering Services Ltd



Where can Conlok be installed?

Internal & External Installations

Corrosion resistance is an incredibly important part of any installation. If components with the wrong finish are installed, this effectively places the entire system at risk of failure.

Featuring a more traditional Class 4 Hot Dip Galvanised (HDG) surface coating, this highly corrosion-resistant finish is designed to protect cables from damage and the elements.

External applications are where the self-sacrificing properties of this finish are of significant benefit, ensuring wires and cables are always kept safe from wind, rain, harsh sunlight, sand and other extremes of nature.

Internally, an HDG finish offers all these same benefits, particularly when installed within challenging environments such as the London Underground where cables are subject to potential ingress of dust and water caused by the frequent winds in excess of 200mph.

The Demon Cato Conlok system is fully prepared for both internal and external environments and for full technical information, please see page 7. Full certification is available on request.

.....
Specification | To specify, please state:

Conlok Class 4 HDG Steel Conduit System with built-in grub screw.
As **Demon Cato by Metpro Group.**

Clean Rooms

With more and more computer-chip manufacturers being established and data centre construction seeing significant growth, cable management systems must be prepared to cater for these specialised environments.

A particular concern within these applications is zinc whiskers, the presence of which can cause a wide variety of issues, from short circuits to total equipment failure.

Featuring a highly-specialised protective coating, the Conlok Clean Room system is purposefully designed to offer the expected levels of cable protection, whilst also preventing the dissipation of zinc whiskers and providing an aesthetically-pleasing and hygienic finish.

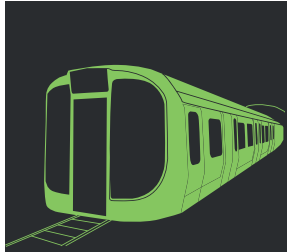
We recommend the use of this finish in the following environments; data centres, laboratories, microelectronics processing plants, biotechnology plants, pharmaceutical manufacturing plants, hospitals, and food processing plants.

Please see page 8 for full technical information.

.....
Specification | To specify, please state:

Conlok Clean Room Steel Conduit System with built-in grub screw.
As **Demon Cato by Metpro Group.**

Where Conlok is installed



London Underground & Crossrail;
Ealing Broadway, Euston,
King's Cross, Farringdon, Liverpool St,
Pudding Mill DLR,
Bond St, Woolwich, Acton Town,
Bank, Turnham Green, Reading

Edinburgh Airport,
Edinburgh

MOD Bicester,
Oxfordshire

**Tottenham Hotspur
FC Stadium,**
White Hart Lane
London



Proctor & Gamble,
Manchester

HMP Aberdeen,
Aberdeen

**Tees Rep Biomass
Power Station,**
Glasgow



Heathrow T2,
Heathrow

**Sir Chris Hoy
Velodrome,**
Glasgow



Kendrew Barracks,
Oakham

Bullring,
Birmingham

**Midland
Metropolitan
Hospital,**
West Midlands



**Earls Gate Energy
Centre,** Grangemouth

**J. Radcliffe
Hospital,** London

**Hilton Food Group
HQ,** Huntingdon

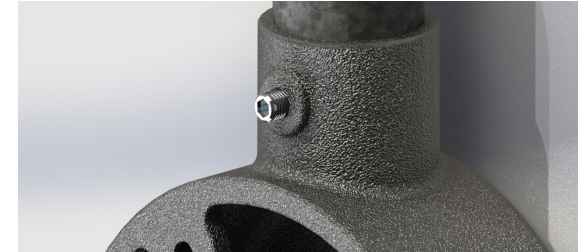
**Isleworth & Syon
School,** Isleworth

HMP Addiewell,
West Lothian

HMP Bedford,
Bedford

**Sugar Island
Project,** London

How Conlok is installed



Insert tube length into required Conlok accessory
(similar to PVC push-fit systems)



**Secure tube length with Conlok's built-in grub
screw using an Allen key** (one supplied in each box)



Job done



DEMON CAT®

STEEL CONDUIT SYSTEM

SEVEN YEAR EXTENDED WARRANTY

SEE APPENDIX B
FOR MORE INFORMATION
PAGES 12-13

Additional Services & Support



Powder Coating

Aesthetics and trends continue to shift with more and more cable management now on show throughout supermarkets, shopping centres and coffee shops.

We can produce & supply product in line with your specifications to any RAL colour to achieve the desired finish.



Availability

Demon Cato products are stocked in-depth and typically available on a next day delivery (conduit tube 3-5 days).

All products are available through our network of Partners, or your preferred local wholesaler, and our team can discuss your requirements directly with a chosen supplier on your behalf if required.



Logistics Support

Working across the globe since 1995, we have been able to tweak and develop a slick logistics operation with an unwavering commitment to stock.

Our team can work directly with your chosen supplier on a logistics schedule that suits your needs, with direct to site deliveries also an option.



Technical Support

With a combined experience of over 250 years across engineering, product design, logistics and application, our team are available Monday to Friday from 8.30am - 5pm to provide any technical advice you may require.



BIM Ready

All Demon Cato products are BIM ready with Revit files available for download on our website:

www.metpro.co.uk



Quality Control

Product quality has always been at the very top of our agenda.

Combining dedicated overseas engineers with our UK quality laboratory, we ensure our products are always fit-for-purpose.



Carbon Neutral

Metpro Group are proud to have offset our domestic operations emissions for 2019, 2020, and 2021, resulting in our business being carbon neutral within the UK. We are now committed to achieving total carbon neutrality by the end of 2024.

We are also compliant with the Environmental Protection Act 1991.



Fully Accredited

Our in-house UK quality laboratory utilises equipment which is fully UKAS Accredited where applicable.

Ensuring quality is not limited to only our products, we are also certified to ISO9001:2015 by ACS Registrars.

Frequently Asked Questions

Does Conlok comply to the British Standard for earth continuity?

Yes. All Conlok products fully comply to the relevant standard and indeed exceeded the test requirements.

Are there any vibration issues with Conlok grub screws coming loose?

No. Demon Cato commissioned a full test with the results being confirmed as 'concluded successfully'. If you would like a copy of the report, please do not hesitate to request this and we will be happy to assist.

Do Demon Cato supply male & female Conlok adaptors?

No. Demon Cato manufactures and supplies female adaptors. However, with the addition of a standard conduit nipple, these can become male adaptors.

I have always used hot dip galvanised products, how will Delta Protekt® 120 compare with this?

Used on our external Rapid Saddle products, Delta Protekt® 120 was originally used on components within offshore wind turbines where product failure could be catastrophic. This specialist finish was designed to offer incredibly high levels of corrosion resistance without clogging up any screw threads and we are happy to supply our certification to 500+ hours of corrosion resistance on request.

Where can I install Rollatray?

Rollatray has been designed for installation in any application with a solid surface. Underfloor applications are particularly ideal along with multi-storey buildings, riser mains, data centres and more.

Are Demon Cato products on Luckins?

Yes. Our full product offering is available to view on the Luckins Database.

Do I need an online account to access data sheets and BIM files?

No. To make things as simple as possible, all our data sheets and BIM Revit files are available for download without the need for an account.

Contact Us & Demon Cato Online

We would welcome the opportunity to discuss how Demon Cato products can be of benefit to your future projects.

Please contact our team using the following information:



Call us: **0121 552 2100**



Email us: **sales@demoncato.co.uk**

Demon Cato Online

If you are looking for immediate information from stock levels to technical data, our website acts as your 24/7 technical portal.

Head over to metpro.co.uk/demoncato or scan the QR code below to access:

Live stock levels | Data sheets | BIM Revit files | SKU information | Pack quantities



Call us: **0121 552 2100**



Email us: **sales@demoncato.co.uk**



Visit us: **metpro.co.uk/demon-cato**

About Demon Cato

Beginning operations in 2008, Demon Cato was devised to understand, address and ultimately answer the call for innovation within the construction industry.

The first product introduction was the hugely successful Conlok system, now a staple product used in large scale commercial and infrastructure projects such as; Heathrow Terminal 2, the Sir Chris Hoy Velodrome and the new Tottenham Hotspur Football Club stadium.

Original Demon Cato products were solely designed for the contractor and are still supplied exclusively through our network of approved distributors and stockists. As well as typically offering significant labour savings, our products also provide key on-site health & safety benefits including reduced manual handling and SKU consolidation (where applicable).

Demon Cato became a Metpro brand in July 2021. With Metpro's 25 years of manufacturing experience and operating from a 61,000 square feet distribution centre, the acquisition of Demon Cato was a natural extension of the existing product offer.

This brand has also enabled us to enhance our manufacturing capabilities as the legacy Metpro service to OEM customers now falls under the Demon Cato banner.

With exceptional levels of service and in-depth stocking policy, the complete range of products are available through a network of supporting Electrical Wholesalers and Distributors. To find out more about our product offering or if you have a product idea you would like to discuss, please contact our team and we will be happy to help.

APPENDIX A

CONLOK LABOUR SAVINGS CASE STUDY

Case Study: Conlok Installation Speed Test

Labour cost vs installation time

Cost savings have always been high on the agenda as Contractors seek new ways to build better, faster and smarter. Conlok exceeds these requirements, as detailed in our case study below and carried out in partnership with a major UK M&E Contractor.

Case study:

Based on the installation of 300 mixed boxes as detailed below and labour costs for a JIB Approved Electrician with own transport – £17.70 per hour / £0.30 per min.

Using the traditional screwed system, the average amount of time to cut, dress, thread and fit a box to a piece of conduit tube is **5 minutes**.

The 600 ends were installed in 60 hours with a labour cost of **£1200**.

Using Conlok, the average amount of time to cut, dress and fit a box to a piece of conduit tube is **1 minute**.

The 600 ends were installed in 10 hours with a labour cost of **£240**.

	Traditional cost	Conlok cost	No. of Boxes/Ends	Traditional total cost	Conlok total cost	Traditional installation time per box (min)	Conlok installation time per box (min)	Traditional cost to install	Conlok cost to install
20mm End Box	£1.13	£2.04	100/100	£113	£204	5	1	£147.50	£29.50
20mm Through Box	£1.14	£2.23	100/200	£114	£223	10	2	£295.00	£59.00
20mm Tee Box	£1.23	£2.32	100/300	£123	£232	15	3	£442.50	£88.50

Please note: all costs are accurate as of October 2021

Total materials cost:

Traditional = **£350**

Conlok = **£659**

Total labour cost:

Traditional = **£885**

Conlok = **£177**

Contract saving:

£399

Labour saving:

£708

80%

APPENDIX B

**CONLOK STEEL CONDUIT
SYSTEM EXTENDED
WARRANTY**

Demon Cato Steel Conduit System | 7 Year Extended Warranty

Demon Cato offers a 7-year warranty against their Conlok System and Rapid Saddle products when used to create a 'Steel Conduit System'.

As the only fully galvanised conduit system available, this extended and limited warranty applies to Demon Cato Conlok Steel Conduit Tube, Conlok Malleable Boxes & Accessories, Rapid Saddle and Metpro branded steel conduit accessories (where applicable), henceforth known as the "System", manufactured by Demon Cato and Metpro.

As detailed in this warranty, the "Conlok Steel Conduit System" means Demon Cato Conlok Steel Conduit Tube, Conlok Malleable Boxes & Accessories that are purchased together and used simultaneously.

Demon Cato (and Metpro) warrants that the System is free from any lawful security interest and that for a seven (7) year period from the original date of shipment, the System will be free of defects in materials and workmanship which arise under proper and normal service.

The Purchaser's exclusive remedy is limited to Demon Cato's replacement of the non-conforming System (or non-conforming products therein) manufactured by Demon Cato (or Metpro where applicable). The Purchaser will be solely responsible for all shipping, disassembly and re-installation expenses associated with the replaced System. Expressly excluded from this warranty are non-conformities arising from:

- (i) improper installation
- (ii) lack of proper inspection or maintenance
- (iii) inclusion of materials by other manufacturers
- (iv) usage not in accordance with the published ratings or standards.

The provisions of this warranty shall be applicable with respect to any product which Demon Cato (or Metpro) replaces pursuant to it. Any System non-conformance must be reported to Demon Cato in reasonable written detail within the warranty period and the Purchaser must comply with Demon Cato's instructions regarding the return or disposal of any non-conforming products.

APPENDIX C

CONLOK TECHNICAL INFORMATION

Technical Information:

Internal & External Conlok

Class 4 HDG Steel Conduit Tube

Conforms to BS EN 61386-1:2008+A1:2019 (Conduit Systems for Cable Management)

Manufactured from sheet steel with HDG coating applied to Class 4 BS EN 61386-1:2008+A1:2019

All lengths are Hot Dip Galvanised internally & externally

All lengths are ink jet marked:
Demon Cato
BSEN61386+A1
5557 - Class 4
(20 or 25mm as required)

Authorised for use on London Underground to LU Standard 1-085 (for use on surface & sub-surface locations)

Minimal wall thickness = 1.37mm & heat treated to ensure no breaking or coating tearing during tube bending

BS EN 61386-1:2008+A1:2019
Achieved the highest Class in all tests as specified

Each length is supplied with plastic thread protection caps on each end

Class 4 HDG Conduit Boxes & Accessories

Manufactured from malleable iron with a hot dip galvanised finish to Class 4 BS EN 61386-1:2008+A1:2019

Conforms to BS EN 61386-21:2021+A11:2021 (Conduit Systems for Cable Management - Rigid Conduit)

Manufactured in accordance with the Low Voltage Directive 2014/35/EU

Conlok grub screws are manufactured from Grade 12.9 Steel

Tensile test:
when a tensile force of 1000N and 500N (heavy & medium grade) was applied for 2 minutes, the samples remained properly assembled to the conduit

Suspended load test:
when a load of 450N was applied for 48 hours, the samples passed due to there being no cracks nor deformation to the conduit

Bonding test:
a current of 25A is passed through a conduit assembly before the voltage drop is measured - the samples passed with a resistance no greater than 0.1 ohm

Corrosion test:
tested both inside & outside using Classification 4 (High Protection), all samples passed with no signs of corrosion

Technical Information:

Clean Room Conlok

Clean Room Steel Conduit Tube

Conforms to
BS EN 61386-
1:2008+A1:2019
(Conduit Systems
for Cable
Management)

Manufactured
from sheet steel in
accordance to
BS EN 61386-1:2008
+A1:2019

Demon Cato
highly specialised
Clean Room finish
applied to both
internal & external
walls of each
length

All lengths are ink
jet marked:
**Demon Cato
Clean Room
5557
BSEN61386-1+A1**
(20 or 25mm as
required)

**BS EN 61386-
1:2008+A1:2019**
Achieved the
highest Class in all
tests as specified

Minimal wall
thickness =
1.37mm & heat
treated to ensure
no breaking or
coating tearing
during tube
bending

Clean Room Conduit Boxes & Accessories

Conforms to
BS EN 61386-
1:2008+A1:2019
(Conduit Systems
for Cable
Management)

Demon Cato
highly specialised
Clean Room finish
applied to both
internal & external
walls of each box
and accessory

Conforms to
BS EN 61386-
21:2021+A11:2021
(Conduit Systems
for Cable
Management
- Rigid Conduit
Systems)

Manufactured in
accordance with
the Low Voltage
Directive
2014/35/EU

Conlok grub
screws are
manufactured
from Grade 12.9
Steel

**Tensile test,
suspended load
test, bonding test;**
please refer to
page 7

APPENDIX D

WHY USE CONLOK STEEL CONDUIT TUBE

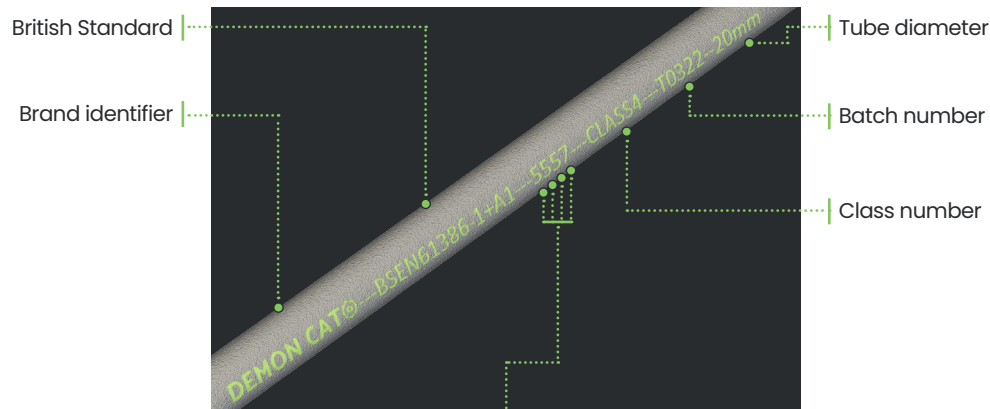
Why Conlok steel tube?

With little regulatory control over the quality of steel conduit tube entering the UK & ROI markets, we sought to address this head on, enhancing our Conlok system with a dedicated product which is only of the highest quality and always compliant.

Our Conlok steel tube offering has enabled us to offer the only complete fast-fix steel conduit system on the market, and one which we are proud to underwrite.

In line with our Conlok conduit boxes & accessories offering, Conlok steel conduit tube is available in both Class 4 HDG and Clean Room finishes. With threaded ends to allow for the extension of existing conduit systems, more information on how our lengths are marked can be found below.

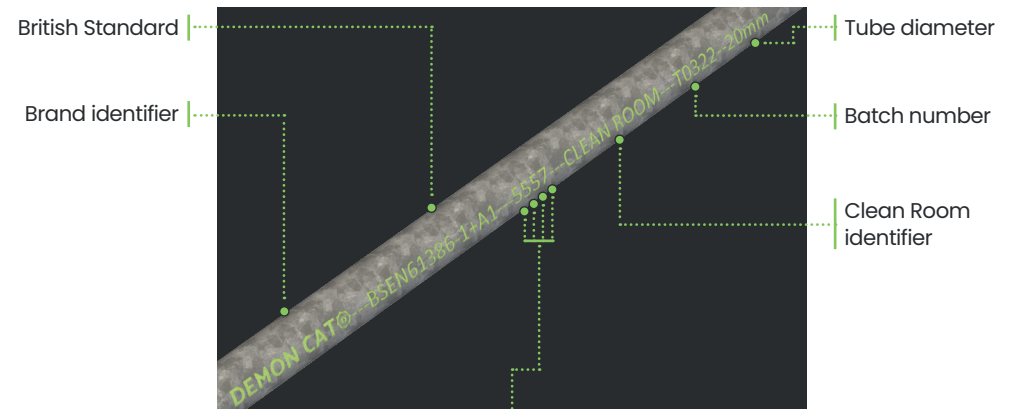
How our Class 4 HDG lengths are marked



BSEN61386-1:2008+A1:2019 Class Grades

5	5	5	7
Compression	Impact	Lower Temp. -45°C	Higher Temp. +400°C

How our Clean Room lengths are marked



BSEN61386-1:2008+A1:2019 Class Grades

5	5	5	7
Compression	Impact	Lower Temp. -45°C	Higher Temp. +400°C

APPENDIX E

CONLOK LUCKINS TSI CODES

Luckins TSI Codes

Conlok Class 4 HDG System

Demon Cato Code	Product Description	TSI Code
CLGCEXTERNAL20	20mm x 3mtr Class 4 HDG	434174353
CLGCEXTERNAL25	25mm x 3mtr Class 4 HDG	434174366
CL1G	20mm Terminal Box	425711149
CL2G	20mm Through Box	425711259
CL3G	20mm Angle Box	425711330
CL4G	20mm Tee Box	425711343
CL5G	20mm Intersection Box	425711356
CL6G	20mm Branch U Box	425711369
CL7G	20mm Branch Y Box	425711372
CL8G	25mm Terminal Box	425711385
CL9G	25mm Through Box	425711398
CL10G	25mm Angle Box	425711152
CL11G	25mm Tee Box	425711165
CL12G	25mm Intersection Box	425711178
CL13G	25mm Branch U Box	425711181
CL14G	25mm Branch Y Box	425711194
CL15G	25mm Terminal Box c/w 25mm Hole in Base	425711204
CL16G	20mm Back Outlet Box c/w screw	425711217

Demon Cato Code	Product Description	TSI Code
CL20FC	20mm Female Coupler	425711246
CL25FC	25mm Female Coupler	425711262
CL20GA	20mm Adaptor	425711275
CL25GA	25mm Adaptor	425711288
CL20GC	20mm Solid Coupler	425711220
CL25GC	25mm Solid Coupler	425711233
CL20MB	20mm Solid Bend	425711291
CL25MB	25mm Solid Bend	425711301
CLKEY	Conlok Allen Key	425711314
CLKIT	Conlok Allen Key c/w 2 x Grub Screws	425711327

Conlok Clean Room System

Demon Cato Code	Product Description	TSI Code
CLGCCLEAN20	20mm x 3mtr Clean Room	434174379
CLGCCLEAN25	25mm x 3tr Clean Room	434174382
CL1GCLEAN	20mm Terminal Box	434164101
CL2GCLEAN	20mm Through Box	434164114
CL3GCLEAN	20mm Angle Box	434164127
CL4GCLEAN	20mm Tee Box	434164130
CL5GCLEAN	20mm Intersection Box	434163908
CL6GCLEAN	20mm Branch U Box	434163911
CL7GCLEAN	20mm Branch Y Box	434163924
CL8GCLEAN	25mm Terminal Box	434163937
CL9GCLEAN	25mm Through Box	434163940
CL10GCLEAN	25mm Angle Box	434163953
CL11GCLEAN	25mm Tee Box	434163966
CL12GCLEAN	25mm Intersection Box	434163979
CL13GCLEAN	25mm Branch U Box	434163982
CL14GCLEAN	25mm Branch Y Box	434163995
CL15GCLEAN	25mm Terminal Box c/w 25mm Hole in Base	434164004
CL16GCLEAN	20mm Back Outlet Box	434164017

Demon Cato Code	Product Description	TSI Code
CL20FCCLEAN	20mm Female Coupler	434164088
CL25FCCLEAN	25mm Female Coupler	434164091
CL20GACLEAN	20mm Adaptor	434164046
CL25GACLEAN	25mm Adaptor	434164059
CL20GCCLEAN	20mm Solid Coupler	434164020
CL25GCCLEAN	25mm Solid Coupler	434164033
CL20MBCLEAN	20mm Solid Bend	434164062
CL25MBCLEAN	25mm Solid Bend	434164075





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