

# Master Key System Data Protection

A **dhf** Best Practice Guide to **CEN/TS 17814:2022**

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# dhf Best Practice Guide: Master Key Systems to CEN/TS 17814:2022

## dhf Best Practice Guides

This publication is one in a series of guides addressing the major issues that should be considered when specifying, ordering or using the products it describes. It aims to provide the reader with a concise document which includes a summary of relevant sections from the European product standard or specification. The reader will then be in a position to seek further specialist advice where necessary and recognise GENUINE conformity to the new standard.

This document is supported by the Guild of Architectural Ironmongers, Master Locksmiths Association and Secured by Design.

**NOTE:** Unless stated otherwise, references in this document to TS 17814 refer to CEN TS 17814:2022.

Information in this guide is correct at time of publication and intended for guidance only. Information may since have changed and readers should consult the appropriate standards and authorities to confirm its veracity.

## TS 17814 is a new Technical Specification that has been issued by CEN

The specification provides guidance relating to data that is used in the design and manufacture of new mechanical Master Key Systems and how best to keep that data safe and secure.

### Scope

The scope of TS 17814 relates to mechanical key systems only; requirements relating to the security of information of key based and non-key based electronic cylinders are not covered.

The data used to design, manufacture and maintain a Master Key System can be complex. Processes are required to ensure that this data is not only held securely but also held accurately, as future reference will be required when sourcing additional system keys and system cylinders. Appropriate resource is required to ensure the integrity of the data and information that will be needed to service and support a Master Key System for many years after the initial setup.

TS 17814 is a voluntary specification that interested parties may wish to implement. Some Master Key Systems are provided with the main focus being convenience rather than security and as such may not require the further levels of security provided by TS 17814. It is not a mandatory requirement to supply Master Key Systems in accordance with TS 17814.

Some companies may choose to provide all of their new Master Key Systems in accordance with TS 17814 on a commercial basis, or perhaps the adoption of the technical specification may be considered channel or client specific.

Data and data security is becoming increasingly important. End user clients that are conscious of the security of their data may instruct suppliers to provide a Master Key System that is designed, manufactured, and supplied in accordance with TS 17814. Alternatively, manufacturers and distributors - once given the nature and understanding of a project - may advise an end user client that it may be in their interests to consider the provision of a Master Key System supplied to the requirements of TS 17814.

### Why provide Master Key Systems to TS 17814

Standards governing Master Key Systems are limited to their manufacture in accordance with EN 1303:2015 Building Hardware - Cylinders for locks - Requirements and test methods. However, ensuring the security of a Master Key System is more complex than simple system construction. The security of a Master Key System begins before a cylinder lock is pinned or a key is cut and finishes long after the system is supplied and installed. By implementing TS 17814 alongside EN 1303:2015, additional layers of protocols are introduced that help improve the security of a mechanical Master Key System.

### Who is affected by TS 17814

The supply of a Master Key System may include a number of 3rd party companies - the manufacturer, distributor, installer, maintenance provider and end user client. TS 17814 draws together acknowledged industry best practice to provide guidance on the security of Master Key System data - the information needed to design and produce a Master Key System - and how this information should be handled throughout the process from manufacturer to end user client and all parties in between. Furthermore, the technical specification provides guidance on how the Master Key data and the Master Key

System can be secured during the supply, installation and maintenance procedures.

If TS 17814 is adopted for a Master Key System project, for it to remain effective, each sub section within Section 4 of TS 17814 must be adhered to on a continuous basis. For this reason, it is important that all parties provide a clear indication to which section of the Master Key System project process they are involved.

**Accreditation** - Compliance to Technical Specification 17814 can be in the form of self-declaration or via a 3rd party audit.

A suggested example of a Master Key System Project Declaration of Compliance is included below. Individual companies and/or organisations may construct their own documentation to record and collate information relating to the design, manufacture, supply, installation and maintenance of a Master Key System to TS 17814.

## Master Key System Project Declaration of Compliance

The supply chain process of a Master Key System may be provided by multiple parties. Therefore, as required by TS 17814 and to maintain system integrity, companies should clearly indicate to which area of Master Key System project their compliance is declared. It is recommended that a completed copy of this document is retained by all parties and the original issued to the client end user.

### Project details

Project name and address
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### Company A - Manufacturer

Company Name & Address:			
Company Compliance* Please confirm that your processes for this project as indicated in Table 1 below, comply with the requirements of TS 17184 Section 4 and verified in accordance with TS 17814 Section 5	YES		
Responsible Person:			
Name	Signature	Date	Company Stamp

### Company B - Distributor

Company Name & Address:			
Company Compliance* Please confirm that your processes for this project as indicated in Table 1, comply with the requirements of TS 17184 Section 4 and verified in accordance with TS 17814 Section 5	YES		
Responsible Person:			
Name	Signature	Date	Company Stamp

**Company C - Installer**

Company Name & Address:			
Company Compliance* Please confirm that your processes for this project as indicated in Table 1, comply with the requirements of TS 17184 Section 4 and verified in accordance with TS 17814 Section 5		YES	
Responsible Person:			
Name	Signature	Date	Company Stamp

**Company D - System Service & Maintenance Provider**

Company Name & Address:			
Company Compliance* Please confirm that your processes for this project as indicated in Table 1, comply with the requirements of TS 17184 Section 4 and verified in accordance with TS 17814 Section 5		YES	
Responsible Person:			
Name	Signature	Date	Company Stamp

**Company E - Client End User**

Company Name & Address:			
Company Compliance* Please confirm that your processes for this project as indicated in Table 1, comply with the requirements of TS 17184 Section 4 and verified in accordance with TS 17814 Section 5		YES	
Responsible Person:			
Name	Signature	Date	Company Stamp

\*Declaration of compliance can either be done by self-declaration or 3rd party audit

Companies A to E shall indicate in Table 1 below their area(s) of TS 17814 compliance relating to the Master Key System project process. Each section 4.1 to 4.9 must be completed by at least one Company A to E, to ensure the integrity of the Master Key System project to TS 17814.

**Table 1**

Process	TS 17814 Section 4 Characteristics & Requirements	Company A	Company B	Company C	Company D	Company E
Design	4.1 Planning and ordering of Master Key Systems					
Design	4.2 Transmission of Master Key Systems lock charts					
Design	4.3 General data handling requirements					
Design	4.4 Calculation of Master Key Systems					
Manufacture	4.5 Manufacturing of Master Key Systems					
Manufacture	4.6 Preparation of keys belonging to Master Key Systems					
Supply	4.7 Shipment of Master Key System cylinders and keys					
Installation	4.8 Installation of Master Key Systems					
Maintenance	4.9 Management of Master Key System related data during system's lifetime					

## FAQs

**Does every Master Key System need to comply with TS 17814?**

No

TS 17814 is project specific. It is a technical specification for use on Master Key System projects where the protection of Master Key System data has a high level of importance. This may be due to the nature of the project, at the request of the client end user, or indeed any member involved within the process of supplying a Master Key System.

**Must I comply with TS 17814?**

No

TS 17814 is a voluntary technical specification.

**I am involved in a project to TS 17814. Must I comply with all the requirements of TS 17814?**

No

You only need to comply with the relevant sub section of TS 17814 Section 4, for the specific area of the project in which you are involved. For example, a company providing the installation of the cylinders need only to comply with sub-section 4.8 - Installation.

However, where a project is supplied in accordance with TS 17814 it is essential that all requirements of TS 17814 Section 4 are covered by the parties involved in the project.

**A project has been designed in accordance with TS 17814. Must I comply if I am involved?**

Yes

If a project has been designed to meet the requirements of TS 17814 and you would like to be part of, or have been asked to be part of the supply of the master Key System, the processes that you provide (design, manufacture, installation, maintenance must comply with the relevant sub sections of TS 17814 Section 4. This process compliance only needs to apply to the TS 17814 project(s for which you are involved. Verification of processes is included in TS 17814 Section 5.

## FAQs

### I would like to supply projects to TS 17814. Do I require a 3rd party audit?

No

When providing a Master Key System project to the requirements of TS 17814, any of the processes that you provide (design, manufacture, installation, maintenance) must comply with TS 17814 Section 4. Self-declaration of process compliance is acceptable. However, as TS 17814 concerns the secure protection of Master Key System data, having an independent 3rd party audit of your TS 17814 processes may be considered by some preferable to a self-declaration. Verification of processes is included in TS 17814 Section 5.

### Can any type of key system meet the requirements of TS 17814?

No

TS 17814 includes the protection of Master Key System data throughout the whole process of supply. Part of this process is the security of keys and key blanks. For a system to be supplied in accordance with TS 17814, key blanks (key profiles) must be held in a secure, access-controlled environment. Therefore, key systems such as open profile systems - where blanks are freely available on the open market, or key systems with no patent protection of the key profile, should not be considered suitable for use on a Master Key System to TS 17814.

Further guidance is available in **dhf's** Best Practice Guide: How to obtain Key Copy Protection. The guide provides security and protection advice regarding copying of keys and offers information on minimising the risk of a security breach by preventing the unauthorised copying of keys. A copy of this can be found via the following link [www.dhfonline.org.uk/publications/best-practice-guides/2.htm](http://www.dhfonline.org.uk/publications/best-practice-guides/2.htm)

### Can an existing Master Key System be included within TS 17814?

No

Due to some of the security requirements of TS 17814 (for example the handling of data, calculation tools, security screening of persons, security throughout installation etc...), it would not be possible to retrospectively confirm that these processes had been completed in accordance with the technical specification. However, it may be possible to supply future extensions and sub-suites to existing systems within the requirements of TS 17814.

### Does TS 17814 give me Master Key System Data protection for the life of my Master Key System?

Yes

Any Master Key System supplied under the guidance of TS 17814 is protected whilst the processes involved are compliant with the requirements of TS 17814 Section 4.

### Once installed, how is the integrity of a Master Key System provided by TS 17814 assured?

It is the responsibility of the owner of any Master Key System supplied under the guidance of TS 17814 to ensure that all parties involved in the supply of their Master Key System are operating in accordance with TS 17814.

## Comment

Any party entering into an agreement to supply a Master Key System in accordance with TS 17814, by doing so will be entering into a contractual agreement with one or more of the other parties involved.

Each party will acknowledge that self-declaration or a 3rd party audit is an essential requirement of the process and underpins the integrity of the Master Key System project.

Each party will accept that by breaking or failing to comply with the obligations to which they have agreed (as per the project requirements and that of the sub-sections within Section 4 of TS 17814), may result in the compromise of the entire Master Key System and any liability that may result.

## dhf Profile

dhf is a not-for-profit trade association dedicated to raising standards and advancing safety in the industries it represents. It provides technical information and guidance for companies associated with:

- Locks & Building Hardware
- Doorsets
- Industrial Doors & Shutters
- Domestic Garage Doors
- Automated Gates

dhf was formed in 1897 and has become the industry 'go to' for training and technical advice from experts in their field who sit on UK and European committees creating relevant standards.

Through its commitment to educating the market, dhf has created a comprehensive training programme that befits the industry. It is an assessment centre for the Awarding Body in the Built Environment (ABBE) providing accredited courses, forms part of an NOCN assessment centre for the industry specific NVQ, as well as offering a plethora of fire and non-fire doorset courses in collaboration with BRE.

dhf was instrumental in the creation of DHF TS 007:2011 and DHF TS 007:2014 + A2:2018.

## Guild of Architectural Ironmongers (GAI)

The Guild of Architectural Ironmongers (GAI) is the professional and trade association which supports, assures and represents architectural ironmongers, wholesalers and manufacturers around the world. Formed in 1961, the GAI is internationally recognised and respected as the authority on architectural hardware, building its reputation on the three core pillars of education, technical support, and community.



## Master Locksmiths Association (MLA)

The MLA is the leading trade association for the locksmithing industry. It is recognised as the authoritative body by the police, government, insurers and other such groups. MLA licenced companies can provide customers with peace of mind regarding the security of their property. Its members undergo strict vetting and regular inspections.



## Secured by Design (SBD)

SBD is the UK's official police security initiative with the specific aim of reducing crime and helping people live more safely. SBD seek to improve the physical security of buildings using products such as doors, windows, locks and walling systems that meet the rigorous SBD security requirements. SBD is the only way for companies to obtain police recognition for security-related products in the UK.

### Secured by Design



Official Police Security Initiative





## Contact us for more information



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