

Cambridge Museum of Technology

Name of governing body: Cambridge Museum of Technology (CIO)

Date on which this policy was approved by governing body: 12th May 2016

Policy review procedure:

The collections development policy will be published and reviewed from time to time, at least once every five years.

Date at which this policy is due for review: May 2021

Arts Council England will be notified of any changes to the collections development policy, and the implications of any such changes for the future of collections.

1. Relationship to other relevant policies/plans of the organisation:

1.1. The museum's statement of purpose is:

'To preserve and demonstrate the industrial and technological heritage of Cambridge for the inspiration, enjoyment and education of all.'

We will achieve this mission by:

- Collecting and preserving objects and stories relating to the industrial heritage of Cambridge
- Preserving the Museum's historic industrial site, building and associated machinery
- Displaying, interpreting and demonstrating the collections, the historic site, building and machinery plus associated stories for everyone to enjoy, explore and learn from.
- Operating the collections where practicable
- Overcoming as many physical, intellectual and financial barriers as possible to provide the widest possible access to all of our buildings, collections and facilities.
- Marketing the Museum to appeal to a broad range of target audiences.
- Developing the Museum as a friendly and high quality centre and resource for the local community
- Developing, training and supporting the volunteers who help to run the Museum.

- Providing a welcoming and enjoyable experience for visitors.
- Delivering a dynamic programme for formal education and informal learning groups to discover Cambridge's industrial and technological heritage and related STEM* subjects.

(* Science, technology, engineering, mathematics)

- 1.2. The governing body will ensure that both acquisition and disposal are carried out openly and with transparency.**
- 1.3. By definition, the museum has a long-term purpose and holds collections in trust for the benefit of the public in relation to its stated objectives. The governing body therefore accepts the principle that sound curatorial reasons must be established before consideration is given to any acquisition to the collection, or the disposal of any items in the museum's collection.**
- 1.4. Acquisitions outside the current stated policy will only be made in exceptional circumstances.**
- 1.5. The museum recognises its responsibility, when acquiring additions to its collections, to ensure that care of collections, documentation arrangements and use of collections will meet the requirements of the Museum Accreditation Standard. This includes using SPECTRUM primary procedures for collections management. It will take into account limitations on collecting imposed by such factors as staffing, storage and care of collection arrangements.**
- 1.6. The museum will undertake due diligence and make every effort not to acquire, whether by purchase, gift or bequest, any object or specimen unless the governing body or responsible officer is satisfied that the museum can acquire a valid title to the item in question.**
- 1.7. The museum will not undertake disposal motivated principally by financial reasons**

2. History of the collections

The museum's founding trust deed, dated 20th November 1970, permitted the trustees to maintain a public museum of technology which focused on 'inventions and instruments and other items having an industrial and/or technological significance'. Although the deed did not specify a geographical area or time period, in practice the objects were manufactured or used by companies with strong Cambridgeshire

links, even though, as in the case of Cambridge Scientific Instrument Company, production may have taken place elsewhere. In 2014 a Charitable Incorporated Organisation was created to run the museum, by which time the museum had adopted a formal policy for the future development of the collection which was readopted by the trustees of the CIO.

The museum was the result of collaboration between enthusiasts within Cambridge University's Department of Engineering and engineers from Cambridge Scientific Instrument Company. The aims of the founders were to save Cambridge's recently decommissioned 19th century sewage pumping station from demolition, prevent the scrapping of its machinery and to create a museum of technology and industry. The early collections include the pumping station plant, scientific instruments, printing equipment and other pieces of technology which the management team was offered or found and which they thought interesting.

The existence in Cambridge of Pye and Cambridge Scientific Instrument Company has influenced the focus of the collections. These two large technology-based companies, whose operations spanned the globe, produced huge quantities of scientific instruments and communications equipment which were found in schools, universities, businesses and homes across the world. As these items were superseded by newer technology examples were given to the museum. Collecting was for the most part passive therefore there is a relatively large collection of Pye domestic equipment donated by the public and scientific instruments from labs. Don Unwin, one of the founding members, was an engineer at Cambridge Scientific Instrument Company and he helped to assemble a representative collection of its products and also provided advice when the museum was offered objects.

When the museum began to work towards Museum Registration (now Accreditation) in the 1980s it adopted a policy which focused on technology designed, made or used by industries in Cambridge and Cambridgeshire from 1800 to the present date and this has been adhered to ever since.

Before the museum applied to join the Registration Scheme, later known as Accreditation, disposals were made without reference to policy. However, these disposals always seem to have been guided by common sense, as in the case of items which had fallen into a poor state of repair and were destroyed, and objects which were relocated to more appropriate homes. The documentation of early disposals was not consistent and the museum's knowledge of these disposals comes from anecdotal evidence.

3. An overview of current collections

There are in the region of 1200 objects which can be divided into three dimensional artefacts, documents and books (mostly instruction manuals and advertising materials) and iconographic sources (photographs, maps and plans).

A collection review undertaken in 2014 provides an overview of the collections and an assessment of their significance. The collection review matrix was designed with reference to the UCL collections review toolkit. It can be found in Appendix 1 of this policy.

The following themes and significant items were identified:

Cheddar's Lane Pumping Station.

Cambridge's late 19th century pumping station, a Scheduled Monument, provides the museum with its home and much of the original machinery and equipment has been preserved. Objects related to this theme include two Hathorn Davey steam engines with the Davey differential valve gear mechanism which were installed in 1894, a Crompton and Parkinson electricity generator added in 1898, two National Gas Engines installed in 1909, a Gwynnes' centrifugal pump driven by a Crompton Parkinson 114hp electric motor both installed in 1937, a 1923 Babcock and Willcox boiler and two 1894 Babcock and Willcox boilers with destructor cells. There is some archive material relating to the pumping station which is housed in local archives due to conservation requirements. While much of the equipment was common at the time it was installed it is now very rare. The Hathorn Davey engines are believed to be the last of their kind still running and the 1894 boilers are some of the earliest of their type. We understand that the destructor cells are globally unique and therefore highly significant.

Public utilities

This area includes objects relating to the supply of water, gas and electricity in Cambridge. Artefacts include water mains, fittings from the Cambridge University and Town Water Company, sections of a gas holder, a gas main, a gas meter, and domestic electrical installations from Cambridge. We believe some of this material to be unique because of its Cambridge associations although other examples may exist elsewhere. For example, the museum holds part of a gas holder from the town gas works, their local provenance makes them significant, but other similar gas holders and parts are extant elsewhere.

Local manufacturing industries

This area covers a range of products from local industries including 19th century iron foundries, 20th century engineering firms and the companies involved with the early days of the high-tech industry. Significant objects within these collections include a mill engine produced in the 19th century at the Cambridge foundry of J I Headly and pieces of street furniture created in local foundries whose significance is related to their association with Cambridge firms which no longer exist rather than their intrinsic purpose. The collections relating to Pye and Cambridge Instrument Company include objects whose significance rests on the technological innovation which they represent such as an early transistor radio and also includes some items which are unique including one of the first commercially produced scanning electron microprobes. Included in this area are instruction manuals, catalogues and advertising material relating to the objects.

Printing

The museum houses a collection of objects used in the local printing industry. Items include printing presses, letterpress printing equipment and hot metal printing.

Working Items

The museum operates some of its accessioned items as it believes that a technology museum exists to preserve, where possible, not just the object but its purpose and the skills required to make it work. The museum has also acquired a 'working collection' of objects which do not form part of the accessioned collections and it is not the intention of the museum to preserve them forever. They may be used to help support interpretation, to provide tools to service objects in the collection or provide spare parts for exhibits. They are frequently duplicate items and are of no interest to other museums.

The collections clearly relate to the museum's purpose to preserve Cambridge's industrial heritage and the working items are needed to fulfil the aim of demonstrating technology in action.

4. Themes and priorities for future collecting

The museum is about to enter a major redevelopment which includes the reinterpretation of the pumping station and the creation of new displays focusing on Cambridge's 19th and early 20th century industries, Pye and Cambridge Scientific Instrument Company. During this time the museum will only add items considered to be highly significant, focusing on technological innovation initiated in Cambridge rather than commercialisation or diversity of design. Significance in this context is more fully defined in the collection review matrix, designed with reference to the UCL collection review method, to support the museum's 2014 collection review, which is to be found in Appendix 1 of this policy.

The museum is in the process of acquiring the Engineer's House which provided housing for the Engineer in charge of the pumping station and his family. The museum will acquire relevant social history objects to support the interpretation of the house. It is anticipated that much of the material will be arranged as loans or inter-museum transfers as there are two museums geographically close which already have strong social history collections but are not able to display all of their material.

General Criteria

When accepting objects into the collection the following points will be considered:

Sufficient space with the necessary environmental conditions to store or display the object.

Because CMT has no in-house conservation resources it will consider the conservation requirements and associated costs
Security requirements

5. Themes and priorities for rationalisation and disposal

- 5.1 The museum recognises that the principles on which priorities for rationalisation and disposal are determined will be through a formal review process that identifies which collections are included and excluded from the review. The outcome of review and any subsequent rationalisation will not reduce the quality or significance of the collection and will result in a more useable, well managed collection.
- 5.2 The procedures used will meet professional standards. The process will be documented, open and transparent. There will be clear communication with key stakeholders about the outcomes and the process.
- 5.3 Objects from the collection will be considered for disposal on a case by case basis under the following criteria:
 - Poor condition coupled with low significance. Condition assessment will be undertaken with reference to the collection review matrix developed for the 2014 collection review. Appendix 1.
 - Duplicates exist within the collection
 - Not relevant to existing collections and museum's aims
 - Public benefit better served by transfer to another organisation.

6 Legal and ethical framework for acquisition and disposal of items

- 6.1 **The museum recognises its responsibility to work within the parameters of the Museum Association Code of Ethics when considering acquisition and disposal.**

7 Collecting policies of other museums

- 7.1 **The museum will take account of the collecting policies of other museums and other organisations collecting in the same or related areas or subject fields. It will consult with these organisations where conflicts of interest may arise or to define areas of specialism, in order to avoid unnecessary duplication and waste of resources.**

7.2 Specific reference is made to the following museums/organisations:

Museum of Cambridge
The Farmland Museum
The Whipple Museum
Centre for Computing History
Pye History Trust
Cambridgeshire Collection
Cambridgeshire Record Office

8 Archival holdings

As the museum holds archives, including photographs and printed ephemera, it will be guided by the Archive Service Accreditation Standard 2014.

9 Acquisition

9.1 The policy for agreeing acquisitions is:

Curator to decide in accordance with the collections development policy.

9.2 The museum will not acquire any object or specimen unless it is satisfied that the object or specimen has not been acquired in, or exported from, its country of origin (or any intermediate country in which it may have been legally owned) in violation of that country's laws. (For the purposes of this paragraph 'country of origin' includes the United Kingdom).

9.3 In accordance with the provisions of the UNESCO 1970 Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property, which the UK ratified with effect from November 1 2002, and the Dealing in Cultural Objects (Offences) Act 2003, the museum will reject any items that have been illicitly traded. The governing body will be guided by the national guidance on the responsible acquisition of cultural property issued by the Department for Culture, Media and Sport in 2005.

10 Human remains

10.1 The museum does not hold or intend to acquire any human remains.

11 Biological and geological material

11.1 The museum will not acquire any biological or geological material.

12 Archaeological material

12.1 The museum will not acquire any archaeological material.

13 Exceptions

13.1 Any exceptions to the above clauses will only be because the museum is:

- **acting as an externally approved repository of last resort for material of local (UK) origin**
- **acting with the permission of authorities with the requisite jurisdiction in the country of origin**

In these cases the museum will be open and transparent in the way it makes decisions and will act only with the express consent of an appropriate outside authority. The museum will document when these exceptions occur.

14 Spoliation

- 14.1 The museum will use the statement of principles ‘Spoliation of Works of Art during the Nazi, Holocaust and World War II period’, issued for non-national museums in 1999 by the Museums and Galleries Commission.**

15 Disposal procedures

- 15.1 All disposals will be undertaken with reference to the SPECTRUM Primary Procedures on disposal.**
- 15.2 The governing body will confirm that it is legally free to dispose of an item. Agreements on disposal made with donors will also be taken into account.**
- 15.3 When disposal of a museum object is being considered, the museum will establish if it was acquired with the aid of an external funding organisation. In such cases, any conditions attached to the original grant will be followed. This may include repayment of the original grant and a proportion of the proceeds if the item is disposed of by sale.**
- 15.4 When disposal is motivated by curatorial reasons the procedures outlined below will be followed and the method of disposal may be by gift, sale or as a last resort - destruction.**
- 15.5 The decision to dispose of material from the collections will be taken by the governing body only after full consideration of the reasons for disposal. Other factors including public benefit, the implications for the museum’s collections and collections held by museums and other organisations collecting the same material or in related fields will be considered. Expert advice will be obtained and the views of stakeholders such as donors, researchers, local and source communities and others served by the museum will also be sought.**
- 15.6 A decision to dispose of a specimen or object, whether by gift, sale or destruction (in the case of an item too badly damaged or deteriorated to be of any use for the purposes of the collections or for reasons of health and safety), will be the responsibility of the governing body of the museum acting on the advice of professional curatorial staff, if any, and not of the curator or manager of the collection acting alone.**
- 15.7 Once a decision to dispose of material in the collection has been taken, priority will be given to retaining it within the public domain. It will therefore be offered in the first instance, by gift or sale, directly to other Accredited Museums likely to be interested in its acquisition.**

15.8 If the material is not acquired by any Accredited museum to which it was offered as a gift or for sale, then the museum community at large will be advised of the intention to dispose of the material normally through a notice on the MA's Find an Object web listing service, an announcement in the Museums Association's Museums Journal or in other specialist publications and websites.

15.9 The announcement relating to gift or sale will indicate the number and nature of specimens or objects involved, and the basis on which the material will be transferred to another institution. Preference will be given to expressions of interest from other Accredited Museums. A period of at least two months will be allowed for an interest in acquiring the material to be expressed. At the end of this period, if no expressions of interest have been received, the museum may consider disposing of the material to other interested individuals and organisations giving priority to organisations in the public domain.

15.10 Any monies received by the museum governing body from the disposal of items will be applied solely and directly for the benefit of the collections. This normally means the purchase of further acquisitions. In exceptional cases, improvements relating to the care of collections in order to meet or exceed Accreditation requirements relating to the risk of damage to and deterioration of the collections may be justifiable. Any monies received in compensation for the damage, loss or destruction of items will be applied in the same way. Advice on those cases where the monies are intended to be used for the care of collections will be sought from the Arts Council England.

15.11 The proceeds of a sale will be allocated so it can be demonstrated that they are spent in a manner compatible with the requirements of the Accreditation standard. Money must be restricted to the long-term sustainability, use and development of the collection.

15.12 Full records will be kept of all decisions on disposals and the items involved and proper arrangements made for the preservation and/or transfer, as appropriate, of the documentation relating to the items concerned, including photographic records where practicable in accordance with SPECTRUM Procedure on deaccession and disposal.

Disposal by exchange

15.13 The museum will not dispose of items by exchange.

Disposal by destruction

15.14 If it is not possible to dispose of an object through transfer or sale, the governing body may decide to destroy it.

15.15 It is acceptable to destroy material of low intrinsic significance (duplicate mass-produced articles or common specimens which lack significant provenance) where no alternative method of disposal can be found.

15.16 Destruction is also an acceptable method of disposal in cases where an object is in extremely poor condition, has high associated health and safety risks or is part of an approved destructive testing request identified in an organisation's research policy.

15.17 Where necessary, specialist advice will be sought to establish the appropriate method of destruction. Health and safety risk assessments will be carried out by trained staff where required.

15.18 The destruction of objects should be witnessed by an appropriate member of the museum workforce. In circumstances where this is not possible, eg the destruction of controlled substances, a police certificate should be obtained and kept in the relevant object history file.

Appendix 1 Collection Review Matrix 2014

	Historical connection	Uniqueness	Display and Interpretation	Learning	Research	Ownership
	<i>Objects that have particular connection to the history of the museum or locality.</i>	<i>Objects that are of significant importance.</i>	<i>Objects that are/ can be used for display to support core interpretation themes.</i>	<i>Objects that are/can be used for learning programmes e.g. for handling collections.</i>	<i>Objects that are/can be used for research purposes to increase knowledge/understanding.</i>	<i>Indicates status of ownership and if this is known.</i>
A	<ul style="list-style-type: none"> Object has a strong historical connection to the museum and/or Cambridge industries. Of international importance. 	<ul style="list-style-type: none"> Object is one of a kind, unique, rare, unusual. Object has known significance due to uniqueness. 	<ul style="list-style-type: none"> Object permanently on display/accessible to the public. Regularly used in public events. Object has clear interpretation that may involve multiple levels/techniques/approaches. May be a currently working exhibit. 	<ul style="list-style-type: none"> Object regularly used in current learning/outreach programmes. Used in outreach activity eg loan boxes. 	<ul style="list-style-type: none"> Actively used in research activity to further knowledge, by museum staff or the wider community. Objects are used in research innovation. Objects are used for interdisciplinary research. 	<ul style="list-style-type: none"> The museum has ownership of the object and all supporting documentation relating to acquisition i.e. transfer of title.
B	<ul style="list-style-type: none"> Object has a strong historical connection to the museum and/or Cambridge industries. Of national importance 	<ul style="list-style-type: none"> The object is unique to CMT/no other examples held within Cambridge institutions/museums. 	<ul style="list-style-type: none"> Object permanently on display but public access limited. Used in public events on occasion. Some interpretation. May have been working exhibit in past. 	<ul style="list-style-type: none"> Object used for learning/outreach activity on occasion. 	<ul style="list-style-type: none"> Object has potential use for research activity at the museum or in the wider community. Object has potential to be used in interdisciplinary 	<ul style="list-style-type: none"> The museum has ownership that is fully documented no transfer of title certificate.

	.				research.	
C	<ul style="list-style-type: none"> Object has strong historical connection to the museum and/or Cambridge industries. 	<ul style="list-style-type: none"> The object is unique to CMT but other examples held in other Cambridge institutions /museums. 	<ul style="list-style-type: none"> Object has been on display in the past and/or has potential for future display. Potential for working exhibit. 	<ul style="list-style-type: none"> Object has been used for learning/outreach activity in the past and has potential for future use. 	<ul style="list-style-type: none"> Object may have been used for research purposes in the past by the museum and may have potential to a wider research community. 	<ul style="list-style-type: none"> The museum has ownership but limited documentation.
D	<ul style="list-style-type: none"> Object has little historical connection to the museum or Cambridge industries. 	<ul style="list-style-type: none"> There are duplicate examples of this object within CMT and examples held in other museums/institutions. 	<ul style="list-style-type: none"> Object never been used for public display. No interpretation potential. 	<ul style="list-style-type: none"> Object has never been used for learning/outreach activity. 	<ul style="list-style-type: none"> The object may have research potential for the purposes of the museum. 	<ul style="list-style-type: none"> The museum does not have ownership but ownership is known and status is fully documented.
E	<ul style="list-style-type: none"> No historical connection to the museum or Cambridge industries. 	<ul style="list-style-type: none"> Multiple examples of this object held at CMT and other museums and institutions. A common type. 	<ul style="list-style-type: none"> Not suitable for display. 	<ul style="list-style-type: none"> Not suitable for learning/outreach activity. 	<ul style="list-style-type: none"> The object has no/little research relevance or potential. 	<ul style="list-style-type: none"> The museum does not own the object but ownership unknown. Ownership unknown.

	Room security	Storage and display security	Storage and display Environmental condition	Storage/Display space	Condition assessment
	<i>Assesses security for the entire store room and associated systems</i>	<i>Assesses security of individual storage/display units within rooms</i>	<i>Assesses environmental conditions within the room including any housing materials within storage units/display cases.</i>	<i>Assesses suitability of the storage/display eg overcrowding; difficult access to objects; H&S risk.</i>	<i>Assesses condition of objects and flags up risk.</i>
A	<ul style="list-style-type: none"> Secure room Locked/alarmed 24 hour security Strict access controls/limited key access Frequently visited by authorised people. 	<ul style="list-style-type: none"> Secure storage/display. Alarms and/or security glass. Cabinets and drawers locked. Strict access controls to keys. Security camera, patrols during public hours. Open display items fully secure with appropriate protection e.g. regular patrols during public hours; physical barriers; small parts secured; CCTV. 	<ul style="list-style-type: none"> Protection from dust/light. Stable temperature/humidity. Constant environmental monitoring. Regular condition checks. Regular cleaning. Full integrated pest management. Inert furniture/building materials. Conservation grade housing materials used. Objects on display supported/mounted using inert materials. 	<ul style="list-style-type: none"> Dedicated, safe storage area with customised racking/shelves/labelling. Objects easily retrievable/no overcrowding. Easy movement of large/heavy objects. Location plan H&S compliant. 	<ul style="list-style-type: none"> Stable materials Good condition No conservation problems Active conservation management plan in place. Tests for working exhibits up to date.
B	<ul style="list-style-type: none"> Secure room Locked/alarmed Strict access controls/limited 	<ul style="list-style-type: none"> Secure storage displays fitted with alarms or security glass. 	<ul style="list-style-type: none"> Protection from dust/light. Stable temperature/humi 	<ul style="list-style-type: none"> Dedicated safe storage /display area. Adequate racking/shelving/l 	<ul style="list-style-type: none"> Stable materials Minor cleaning might be required.

	<ul style="list-style-type: none"> key access Frequently visited by authorised people. 	<ul style="list-style-type: none"> Cabinets and drawers locked. Strict access controls to keys. Open display items partially secure with appropriate protection during public hours eg physical barrier; intermittent patrols. 	<ul style="list-style-type: none"> dity. Regular condition checks. Regular cleaning. Basic pest management. Objects have conservation grade/housing support. 	<ul style="list-style-type: none"> abels. Objects easily retrievable/no overcrowding. Easy movement of large/heavy objects. H&S compliant. 	<ul style="list-style-type: none"> Not at risk. Active conservation management plan in place. Tests for working exhibits up to date.
C	<ul style="list-style-type: none"> Secure room Locked Strict access controls/limited key access 	<ul style="list-style-type: none"> Room locked. Cabinets and drawers locked. Strict access controls to keys. Open display items have limited active security. Some monitoring during public hours. 	<ul style="list-style-type: none"> Selective dust/light protection. Selective environmental monitoring, condition and pest checks. Conservation-grade materials/housing for selected objects/objects at risk. 	<ul style="list-style-type: none"> Dedicated storage /display area. Adequate racking/shelving/labels. Maybe some overcrowding. H&S compliant. 	<ul style="list-style-type: none"> Stable materials but needs monitoring. Some risk/restoration or repair desirable. Active conservation management plan in place. Tests for working exhibits up to date.
D	<ul style="list-style-type: none"> Doors Locked 	<ul style="list-style-type: none"> Room locked. No active security for open display items. Display cases locked during public hours. 	<ul style="list-style-type: none"> Irregular environmental monitoring/condition checks. Light/dust not excluded. Objects given some support/protection with con- 	<ul style="list-style-type: none"> Dedicated storage/display area. Overcrowding and some inaccessibility. 	<ul style="list-style-type: none"> Unstable materials. High risk: conservation required. Major restoration/additions/loss. No active conservation

			conservation grade materials		management plan. <ul style="list-style-type: none"> Unknown whether tests for working exhibits up to date.
E	<ul style="list-style-type: none"> No Security 	<ul style="list-style-type: none"> No security. Display cases unlocked. No monitoring. 	<ul style="list-style-type: none"> Unstable /unmonitored environment Furniture not inert. No cons. grade housing/packing No object support. Object unprotected. 	<ul style="list-style-type: none"> Unsuitable storage. Risk to staff and public. 	<ul style="list-style-type: none"> Very unstable material. Beyond repair. Immediate risk to objects/people. No active conservation management plan. Tests for working exhibits not up to date.