

Asbestos in cultural heritage: presence in antique and vintage objects and protocols for restauration and preservation

Belluso E.*¹⁻², Capella S.¹⁻² & Siviero F.³

¹ Dipartimento di Scienze della Terra, Università di Torino. ² Centro Interdipartimentale per lo Studio degli Amianti e di altri Particolati Nocivi «G. Scansetti», Università di Torino. ³ Area Coordinamento RSPP e attività specifiche sicurezza, Università di Torino.

Corresponding author e-mail: elena.belluso@unito.it

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The numerous physic-chemical properties of asbestos have made it an essential component of many industrial products (asbestos containing material: ACM). Its resistance to fire was known in the ancient East where the fibres were woven to make cloths for the cremation of the dead (Browne, 2003). Its binder property was used as early as 3500 BC in eastern Finland to produce ceramics vessels (Lavento & Hornytzkyj, 1995). Massive use of asbestos was carried out during the Second World War and then in the years between 1960 and 1980, during the period of the rapid economic development. Who does not know, for example, the asbestos-cement roofing and panels installed all over the world?

The harmfulness of asbestos, when its fibres are inhaled, has been known since the twentieth century and now asbestos is classified as a carcinogen. For this reason, asbestos is banned in many countries of the world. To avoid or limit people's exposure to this pollutant, careful checks are carried out to assess whether the ACM's disperse asbestos fibres into the air.

A problem that has not yet been highlighted is that there are many objects that fall within the category of Cultural Heritage in which asbestos is present or even it is a primary constituent.

There are many examples of antique or vintage materials and objects (produced in the 19th and 20th centuries), such as: bikes; musical instruments; radio and movie equipments; supports for oil paintings; mural and wall paintings; artistic installations; safes, raincap style football helmets; decorative ceiling covers; theatre curtains, sculptures, furniture, and vases for garden; lamps and bookcases for interior; advertising flyers, pinball machines; novelty items made by rocks; and many others.

Many of these are actually present in several Museums or in private collections. Sometimes they need to be cleaned or restored. In the case of temporary exhibitions, these objects must be handled for transport and installation and subsequent return. Given that the "asbestos risk" for people is when fibres are air dispersed, the handling of these objects must carry out without causing the fibres air dispersion.

The present research is aimed to show the many different ancient and vintage objects and artworks that contain asbestos.

Regarding their handling, both for the restauration and cleaning works, as well as for their transport, a suitable protocol will be proposed.

Browne C. (2003) - Salamander's Wool: The Historical Evidence for Textiles Woven with Asbestos Fibre. *Text. Hist.*, 34(1), 64-73.

Lavento M. & Hornytzkyj S. (1995) - On asbestos used as temper in Finnish subneolithic, Neolithic and early metal period pottery. *Fennoscandia Archaeol.*, XII, 71-75.