Double-wall cooler - Prototype of the 'Clean Water in the Glass' product family of ceramic water filters

Ceramics and Glass Collection

Accession Nr.:	2016.8.1.1-4
Artist/Maker:	Varga, Gyöngyvér (1985 -) / designer and manufacturer
Manufacturer:	Moholy-Nagy University of Art and Design (Budapest)
Date of production:	2013
Place of production:	Budapest
Inscription:	jelzetlen
Materials:	unglazed earthenware; wax-coated textile cord
Techniques:	with coiling technique
Dimensions:	height: 40,5 cm height: 22,5 cm opening diameter: 45,4 cm base diameter: 29,5 cm height: 18,9 cm opening diameter: 50,5-51 cm átmérő (alsó): 45 cm height: 34 cm height: 28,7 cm opening diameter: 31 cm base diameter: 20 cm height: 6,7 cm diameter: 28 cm hasznos űrtartalom: 10 l

The Clean Water in the Glass family of water filters are the work of three designers: ceramic designers Virginia Jó and Lujza Kocsis and glass designer Gyöngyvér Varga. The project, which began as a design task at the Moholy-Nagy University of Art and Design (MOME) in the spring of 2013, explores and provides an answer to a set of problems that affects everyone equally: the continual and drastic reduction in accessible sources of drinking water, the rising number of people unable to obtain the daily minimum requirement of clean water for survival and existence, and the small percentage of rainwater and wastewater (so-called greywater) that is reused or recycled.

The basic element in this family of products is a fired clay filter, fired at a low temperature (960°C) and treated with a silver colloid solution. Coffee grounds are mixed into the material to increase its porosity after firing. The resulting porous structure filters liquid passed through it, while the silver disinfects it, thus enhancing its effectiveness.

From the perspective of socially responsible design (SRD), the most important variation on the Clean Water in the Glass series is the socially beneficial filter (inv. no. 2016.9.1.1-3.), which combines the ceramic filter with a commercially available plastic container with lid and spigot so the production cost is as little as possible. This product was designed primarily for those living in extreme poverty, but can be used in catastrophic situations or in settlements where running water in not available. The team designed containers for city and garden use. Both are fitted to the basic ceramic filter and have several other functions: the former is also for decoration and show, and the latter keeps the water cool.

Two more water filter prototypes are the garden filter (inv. no. 2016.7.1.1-4.), designed by Lujza Kocsis, and the kitchen filter (inv. no. 2016.6.1.1-4.), designed by Virginia Jó. The garden version filters rainwater and also cools it through the natural evaporation of the liquid stored in the porous, unglazed ceramic vessel. The kitchen filter has an external container covered in a greyish-white glaze so that it is easy to clean and blends in better with its environment.

The prototype of the double-wall cooler (inv. no. 2016.8.1.1-4.), designed by Gyöngyvér Varga, keeps food fresh for several days or even weeks beyond the expiration date during warm summers, without electricity. The designer relied on her precise knowledge of the characteristics of the material – unglazed, porous earthenware ceramics. Wet sand placed between the walls of the vessels acts as an insulator, while evaporation, a process that absorbs heat, cools the material in the interior. This system of cooling and conserving is based on technology developed by Mohammed Bah Abba of Nigeria. Varga combined this with water filtration by replacing the inner container with the water filter; thus the different pieces can be varied and their functions expanded.

For more information about The Clean Water in the Glass family of water filters, see here.

Literature

- Szerk.: Prékopa Ágnes: New Acquisitions in the Museum's Collection: Clean Water in the Glass - Product Family of Ceramic Water Filters *Ars Decorativa 31*, 2017. Iparművészeti Múzeum, Budapest, 2017. - Nr. 5-6-7. (156-157. p.) (Novák Piroska)
- főszerkesztő: Kiss Éva: Otthonra talál(t) a design. A Design Hét Budapest eseményei az Iparművészeti Múzeumban *Magyar Iparművészet 22. új folyam 9. szám*, 2015 / 9. szám. NMKK Alapítványa, Budapest, 2015. - 2-9. p. (Novák Piroska)
- Szerk.: Halasi Rita: „Tiszta vizet a pohárba!” Vízszűrő *Magyar Design Évkönyv 2013*. MOME, Budapest, 2014. - 75. p.