## ECO-FRENDLY AND HIGH-QUALITY PAPER MADE FROM STONE IN TAIWAN

The Taiwan Lung Meng Technology Company (TLM), based in Tainan (Taiwan), has pioneered a process converting recycled debris from the construction industry into high-quality Stone Paper.

The Stone Paper, that uses a mixture made for 80 per cent of calcium carbonate and for 20 per cent of a non-toxic resin, is not only 100% recyclable but its manufacturing process is also eco-friendly. This paper, in fact, is manufactured without the need to fell trees, without polluting water and generating harmful gaseous wastes.



The process for creating the Stone Paper was developed and then patented by the Lung Meng Company in Taiwan in 1998. As soon as the export process started, this stone papermaking technology has attracted the attention of customers as an environmentally sustainable solution.

The web page of the Lung Meng Company presents the main features of the Stone Paper and the fabrication process adopted. The great range of products made since 2012 shows the potential of this innovative technology.

In fact, in addition to bringing great environmental benefits, the Stone Paper has other features that make it interesting for its potential uses and for consumers:

- It is flame-resistant, durable and waterproof. Due to the paper's durability, it can be used for making maps, charts, field notebooks, manuals and waterproof journals that will be tear and stain-resistant. It can be used for tags and labels, posters, banners and outdoor signs which will withstand weather, for packaging and wrapping, for shopping and garbage bags that are durable. The Stone Paper is also used to produce durable umbrella protecting grapes from birds, rain and harsh sunlight.
- It is characterized by a lower ink absorption (30% less) during printing, allowing significant savings
- It is lighter, reducing the weight of books or products to be transported.

From the point of view of the <u>protection of the environment</u>, the manufacturing process of Stone Paper presents the following important advantages:

 It allows to reduce the cutting of trees and the growing phenomena of deforestation. By replacing 1 ton of wood pulp







- paper with 1 ton of stone paper it is possible to save 20 trees.
- It profitably reuses waste. Stone Paper is made using scraps recycled from the construction industry (small rock pieces, broken marble and tiles) that are processed into a white powder. With a circular economy approach, it eliminates and gives new life to waste that is harmful to the environment and health.
- Its manufacture does not pollute waterways and rivers with toxic effluents. By replacing 1 ton of wood pulp paper with 1 ton of stone paper it is possible to save 7480 gallons of fresh water
- Its manufacture has a low CO2 emission profile. By replacing 1 ton of wood pulp paper with 1 ton of stone paper it is possible to reduce 900 Kg of CO2 atmospheric emissions.
- Stone Paper Products can be recycled by converting used stone paper into pellets for other recycled applications.
- Stone Paper is also photo-degradable, reverting to calcium carbonate in extended sunshine and the resin is absorbed by the atmosphere without harmful effects.

The Taiwan Lung Meng Technology Company has been the first to be awarded with the <u>Cradle to Cradle</u> (C2C) certification in Taiwan. This standard certifies that a product is sustainable in five categories: material safety, recovery/recycling, energy consumption, water usage and social responsibility. The Manufacture complies to ISO Standards. In 2015 the Stone Paper was recognized by the Global Energy Award.

The Stone Paper produced by the Lung Meng Technology Company has been patented in over 40 countries, including China, Japan, USA, Europe, Australia, and South Africa, where the products are marketed under a variety of other trade names. In New Zealand, for example, the Auckland based Stone Paper Company started its activities in 2009 and branded the product called *Rockstock* for the New Zealand, Australian and Pacific markets. In the Rockstock website it is possible to find interesting information about the manufacturing process and the products.

## To know more

**Lung Meng Company website** 

Stone Paper products

Stone Paper in Wikipedia

Stone Paper Rockstock website

Stone Paper Rockstock in Facebook

Stone Paper brochure in stonagepack.com

Stone-paper.com website

Stone Paper in Alibaba website

Stone Paper in Zeri website

Stone paper en bloglenovo.es

Papel de Piedra en emanagreen.com





Stretching

Coating

Slitting & Cutting

Grindina

Pelletizina







