

Clover Portugal Unipessoal Lda,
Rua do Galhano 11,
Varziela
4480-089 Vila do Conde,
Portugal
Vila do Conde, 09/07/2014

ISO (19752 & 19798) Standards Declaration letter for Clover Cartridges

Dear Customer,

This is a confirmation letter that our products were tested for page yield. Our page yield measuring procedure is in its essential similar to the ISO19752 (for toner monochrome cartridges) and to the ISO19798 (for color cartridges) giving comparable results. We perform our tests both in our own products as in OEM so we can compare results. The noticeable difference between our procedure and the two mentioned ISO standards is that our tests were designed to evaluate print quality through out the life of the cartridges as well as page yield while the mentioned **ISO standards only scope is page yield determination**.

From the ISO19752 abstract below:

*“ISO/IEC 19752:2004 is limited to evaluation of toner cartridge yield **for toner containing cartridges** (i.e. all-in-one toner cartridges and toner cartridges without a photoconductor) for **monochrome** electrophotographic printers.”*

From the ISO19798 abstract below:

*“ISO/IEC 19798:2006 is limited to evaluation of toner cartridge page yield **for toner-containing cartridges** (i.e. all-in-one toner cartridges and toner cartridges without a photoconductor) for **colour** electrophotographic printers. It can also be applied to the printer component of any multifunctional device that has a digital input printing path, including multi-function devices that contain electro-photographic printer components.”*

It is clear that both these standards are only applicable to toner cartridges. Because our list of products also include Drum cartridges (no toner present) the page yields mentioned on these cases stand for similar test method, where the end of life criteria was “noticeable decrease in print quality” or “chip end of life failure”.

There is also some confusion regarding another standard, mentioned in some cases, ISO24712, this standard only defines the content of the pages that have to be printed in order to follow ISO19798 procedure. In the case of ISO19752, the page is defined in the procedure itself and not separately. At Clover we use these same test patterns for our tests, introducing every 1000 pages printed a set of our own pages with the objective of collecting information and data regarding print quality to complement the results obtained by following the ISO procedures.

Melhores Cumprimentos

Yours Sincerely



José Araújo

(Technical Manager)