



Understanding Page Yields and ISO Standards

When buying or using imaging supplies for your printer, you may have noticed that Original Equipment Manufacturers (OEMs) like OKI refer to Page Yields and ISO Standards.

But why do we do this - and why is it important to you?

Page yield

Page yield is the number of pages that can be printed from a single toner cartridge. It serves as a reference point to help you determine how many pages – and therefore the cost per page – can be achieved from any given toner cartridge.

In principle that's fine. But in reality, the workplace environment has a different set of conditions to the test laboratory of each OEM. And that's why ISO Standards have been introduced.

ISO Standards

Traditionally, printer manufacturers determined their own page yields – typically based on 5% printed coverage of an A4 page. But coinciding with the advent of more advanced printing technologies, OEMs formed a collaboration with the International Organization for Standardization (ISO) that would harmonize and formalize the testing of page yield and publication of data across the industry. Printer manufacturers still undertake the page yield assessment themselves, but under the auspices of ISO each now works to a clearly defined set of attributes. Not only does this create parity and consistency in the measurement of page yield but also it enables the consumer to make informed decisions when purchasing imaging supplies.

How does OKI measure page yield using the ISO standards?

OKI uses a suite of ISO approved test pages to determine the declared yield for its toner cartridges. As the average page coverage is different between monochrome and colour printed pages, there is a benchmark test for each.

For its monochrome toner cartridges, OKI uses the ISO/IEC 19752 test page (Figure 1). The digital PDF file for this page – representing approximately 5% page coverage – is printed continuously until the toner cartridge reaches end-of-life.

With colour printing typically using more toner and increased page coverage than with monochrome, for its colour toner cartridges, OKI uses the ISO/IEC 19798 test methodology (Figure 2).

A standard set of five pages comprising a mix of text and graphics – and representing approximately 20% page coverage on aggregate – are printed continuously. As each of the CMYK cartridges reaches end-of-life, this determines the page yield for each cartridge.

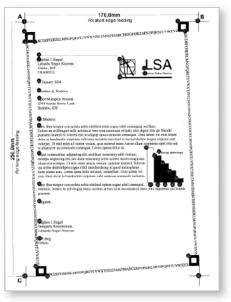
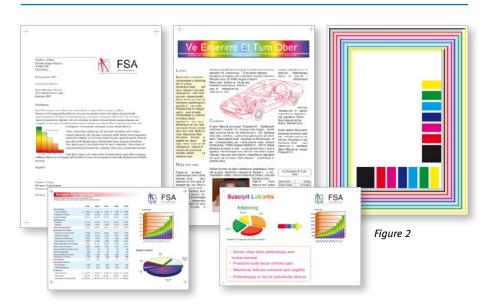


Figure 1

How does OKI measure page yield using the ISO standards? (continued)



The ISO benchmark testing for monochrome and colour cartridges requires that a minimum of nine toner cartridges are tested in a controlled environment with the printer settings at default and within a temperature range of between 21°C and 25°C.

What are the reasons why my OKI toner cartridges might print less or more pages than the "declared yield" published by OKI?

There is a number of factors that can determine this. Above all, it's worth remembering that OKI and other OEMs work to a standard set of ISO test pages under controlled conditions to determine the ISO yield for their respective imaging supplies.

The documents you print in your workplace are likely to vary significantly from these standard test pages: some will have less page coverage and some will have more page coverage than the ISO test pages. Therefore, the actual yield you achieve – plus or minus – is likely to be different.

Other factors such as the environmental conditions, the different types of print jobs and the media you work with can all have a bearing on how your printer and imaging supplies perform against the test data.

For more information about page yields and OKI Original Consumables, please contact your local OKI sales office.

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