

LabLine

Ferrania Imaging Technologies Introduces New Films At Photokina

Ferrania Imaging Technologies announced the introduction of two new medium speed films at the Photokina show held this past September in Cologne, Germany. The newly introduced FG100 and FG200 color print films complete the FG family, joining the previously introduced FG400 and FG800 color print films.

Two new Advanced Photo System films in the FG line were also introduced. The Advanced Photo System FG200 and FG400 now make available, from Ferrania Imaging Technologies to consumers, both a

New Films continued on back cover...



Ferrania Imaging Technologies Introduces OptiJet™, an Expanded Line of Photo Quality Inkjet Media

Ferrania Imaging Technologies is offering a greatly expanded line of high-quality color inkjet media under a brand new name, OptiJet™. The new OptiJet line is available in several cut sheet sizes.

OptiJet inkjet media deliver optimum imaging results, and are compatible with most desktop inkjet printers.

The Advanced Multi-Layer Coating Structure features Ink Optimization Technology. The optimizing technology controls the penetration of the inks ensuring brilliant and durable colors while using a minimum amount of ink.

Inkjet Media continued on page 3...





Advanced Photo System Technical Topics

Film Trailer Cracking

During the winter of 1998/1999, the five Advanced Photo System film manufacturers (Agfa, Ferrania, Fuji, Kodak and Konica) received reports from some wholesale photofinishing sites that Advanced Photo System filmstrip trailers were cracking and causing failures during the desplicing operation.

The trailer cracking was observed during a two-month period in some northern parts of Europe and North America. Observed failure rates were in the range of 5% to 20%. The five Advanced Photo System film manufacturers would like to bring this concern to your attention because this winter some photofinishers may experience filmstrip trailer cracking.

Description

During the splicing operation, the filmstrip trailer cracks across the width of the filmstrip. The crack forms in the emulsion layer and then propagates or spreads through the support layer of the filmstrip. It may go part way or completely through the support. The crack is usually located under the splice tape and as a result, the filmstrip survives processing intact.

However, during the desplice operation, the end of the trailer separates from the rest of the filmstrip requiring reshaping before the filmstrip can be reattached to the spool.

Below are examples of filmstrips still spliced together which exhibit trailer cracking. In the two examples on the left, the cracks run across the width of the filmstrips at the upper end of the splice. As

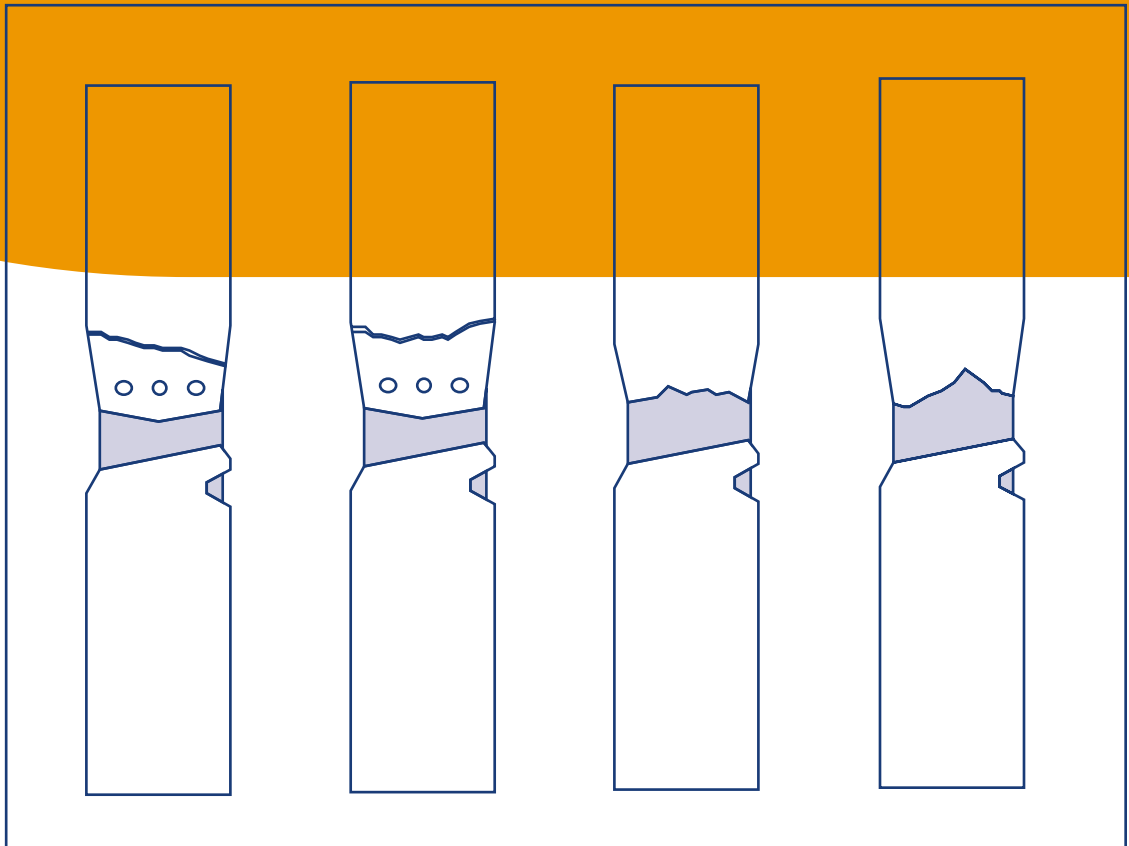
illustrated, the crack did not propagate through the entire thickness of the support and the trailer is still attached to the filmstrip. However, after desplicing the trailer portion may completely separate from the filmstrip.

In the two filmstrips on the right, the crack propagated through the entire thickness of the support, and the trailer separated from the filmstrip before the splicing operation. All four filmstrips illustrated below would need to be reshaped before the filmstrips were reattached to the cartridge spool.

Source of Trailer Cracking

Our analysis of the problem led to the conclusion that two parameters interact with each other to cause the trailer cracking. Those parameters are: 1) low relative humidity during the splicing

Examples of spliced film strips. The two spliced samples on the left are examples of trailer cracking that had not propagated through the entire support structure. The two spliced samples on the right are examples of those in which the cracking did propagate completely through the support structure. All four of the cracked filmstrips would require trailer reshaping before reattaching.



operation, and 2) backbending of the trailer during the splicing operation.

Experiments indicate that filmstrips that have been conditioned at or below 20% relative humidity (RH) exhibit a high failure rate. These experiments also show that filmstrips conditioned at 50% RH do not crack.

Since the only part of the filmstrip that needs conditioning is the emulsion layer on the trailer, the speed at which conditioning occurs, even in the cartridge, can be rapid. For example, cartridges equilibrated to 15% RH can be conditioned to be crack-free in less than one hour in a 50% RH environment.

Some designs of film splicers have incorporated a backbend operation, which is intended to counteract the coreset or curl of the trailer and flatten it to assist the splicing operation. The backbend operation is accomplished in two stages. First, the filmstrip is pulled from the cartridge until tension is placed on the filmstrip. Second,

the spool is further rotated in the thrust direction, which backbends the trailer of the filmstrip. It is at this point that the trailer cracking may occur.

Based on our understanding of the causes of the trailer cracking, the five Advanced Photo System film manufacturers make the following recommendations to eliminate the problem:

1. Ideally, you should avoid backbending the filmstrip trailers in your splicing equipment.
2. If you cannot avoid backbending, as an alternative measure, maintain your splicing environment at a relative humidity level of at least 30%. This will prevent filmstrips in incoming cartridges from drying out, and will help raise the moisture content in filmstrips that are already too dry.

If you are experiencing trailer cracking with Advanced Photo System films and do not know if your particular model of splicer performs a backbending operation, we recommend you contact the manufacturer of your splicing equipment. Should your splicer perform this operation, the manufacturer may have available an equipment modification which eliminates the backbending operation.

OptiJet™ continued...

Included with the mailing of this newsletter is a brochure describing the OptiJet line including; Premium Photo Paper, Ultra Glossy White Film, Adhesive Photo Paper, Canvas Artist Cloth and the economical High Resolution Special Paper. (Please note that the product line is in transition. The brochure and product samples shown illustrate the line finished in the current PhotoJet packaging. OptiJet packaging will appear on the store shelves over the next few months.)

If you are interested in learning more about these fine inkjet media, call us at 1-888-846-2846 or visit us at www.ferraniait.com today. We know we have the right media and technology to match the perfect paper to your specific job.



New Films continued...

medium speed and a high speed film for this most recent of camera and film formats.

The FG generation of color negative films offers dramatic improvements in grain, sharpness, contrast and color saturation. These improvements are the direct result of a multi-million dollar research and development program aimed at producing films of the highest quality. One notable outcome of this program was the breakthrough patented emulsion technology called HSCT (Homogeneous Structured Crystal Technology).

The HSCT technology produces a fine, uniform grain distribution of silver halide throughout the film. Finer, more uniform grain generates sharper, highly detailed photographs at all levels of exposure, particularly those in the underexposed to normal range, making these films a good choice for high quality enlargements. The

FG line also offers excellent overall contrast and color saturation yielding photographs with bright colors and natural skin tones as well as those with superb detail and depth.

The FG family of films has also been designed for superior performance in processing laboratories. FG's improved processing latitude renders good performance in marginal processing conditions. Improved aging and keeping characteristics of both exposed and unexposed films provide faster and more uniform printing. Refined spectral alignment make FG films easier to set-up and print. These film properties enable photofinishers to produce high quality print products while maintaining high levels of productivity.

Photokina attendees were also introduced to Solaris™, Ferrania's new brand name for its film and single-use-camera product lines. Solaris is replacing the Imation brand name for film and camera products sold

through Ferrania's extensive global sales and distribution network servicing the photo retailer market.

A product brochure for the FG100 and FG200 films, as well as one for the Advanced Photo System FG200 and FG400, have been included with the mailing of this newsletter. The brochures contain technical data including film identification, processing and printing recommendations, sensitometry and more.

If you did not receive a copy or would like an additional copy of either of these publications, please call the Ferrania Imaging Technologies Technical Service Helpline at 1-800-233-8579 and make your request. Aperion True Balance or Best Balance printer control negatives are also available by calling the same number.



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