STYLE AND SUBSTANCE

Fine art photographer and expert on darkroom processes Tim Rudman FRPS checks out Ilford's Multigrade Art 300, its first new b/w silver gelatine paper for 13 years

It was in July 2009 that Harman Technology announced its commitment to developing what it called, "a fine art silver gelatine paper suitable for lith printing and toning", which it hoped would be, "every creative printer's dream" - perhaps as a replacement for the much missed Kentmere Art Classic.

It was to be nearly two years, however, before Ilford Multigrade Art 300 would be launched at Focus on Imaging in March, while outside the UK printers have had to wait until May.

So now that it is here, what is it and how does it perform? Perhaps the first thing to say is that technical issues around marrying the initial emulsion with its base necessitated adjustments in the emulsion formulation, so the final version has evolved slightly differently from the original brief.

Multigrade Art 300 is produced in cooperation with Hahnemuehle FineArt GmbH, which has developed a substrate suitable for emulsion coating, a process which brings its own problems.

Hahnemuehle is a name of course more familiar to digital inkjet printmakers than to darkroom workers.

The emulsion is coated onto a heavy double weight 290g/m², 100% cotton rag, acid free paper base, with a textured matt surface, and a slight 'eggshell' sheen, which is said to be, "especially suitable for toning and hand colouring, and is fully compatible with all existing Multigrade filters and equipment", and to have a warm image colour and a cool white base colour.

Out of the box, it is immediately apparent from its extra weight and thickness, and from its texture, that this paper is different to any other on the market. It does not look or feel like a typical silver gelatine paper, more like a thick watercolour paper. A slight curve and very faint sheen give the clue to the emulsion side.

Safelight sensitivity is the same as for the rest of the Multigrade family. In terms of exposure, the tech sheets quote contrast range and paper speeds at all filtrations as being identical to those for Multigrade Warm Tone (MGWT), so Multigrade filters, heads, enlarging exposure meters and other devices already calibrated for MGWT will give similar results. In practice, I found the speeds to be very slightly slower, usually requiring about ¹/10 stop more, and a little more attention to highlights. As usual, cold light heads may give lower contrast.

Choice of developer allows some adjustment of image tone, with Multigrade developer giving a tone on the warm side of neutral. At normal dilution, the emergence time of 15-20secs in this developer is fast, and I preferred slightly extended developments of 2½-3mins at 1+9, although pushing to 5mins is possible without fog, providing the safelights are indeed safe.

Stop and fixing stages are as usual, but be aware that chemical carry-over is higher with this paper, so monitor solutions frequently. Details of processing times and Ilford's optimum permanence sequences can be found on its tech sheet at *http://tinyurl.com/5t8tn74*.

Washing these prints is a little different to other Multigrade fibre based papers. This heavy cotton rag paper requires less washing than conventional fibre based papers, but a little more care. Washing times are reduced from the usual 60mins to 30, with a maximum of 45mins. However, rather like the old

Left: First Light. Multigrade developer. Sepia and gold toned. Above: Tree Silhouettes. Multigrade developer. Selenium, sepia and gold toned. Right: Under Yosemite Point. Multigrade developer. 'Second pass' lith print. Blacks preserved by split bleaching before second development in LD20.

Kentmere Art papers, this paper floats. In a wash sink, the sheets float on top and stick together at the surface, so attention is needed to keep them continuously separated.

In an archival slot washer meanwhile, they float, rather like an iceberg, with most but not all of the print under the water, so thought must be given to ways of keeping them fully under the surface.

For smaller sheets in a large washer, film clips on the lower edge will work well, but for a 20x16ins sheet in a 20x16 washer, something is needed to hold the top edge under the water. I use clips from a Nova slot processor to weigh each print down from above. It isn't necessary to clip into the paper, just to stop it rising above the surface.

Plastic clothespegs can also work but, as they may not have sufficient weight, they can be gently wedged between the slot dividers using them staggered at each end, to avoid 'peg clash' (a new term has just been coined!).

Drying may be undertaken by all the usual techniques. I always air-dry by drip-dry hanging the prints, as I like to avoid squeegee or any other contact with the emulsion before any chemical post-processing stages.

This base holds a lot of water, and these large fully wet prints are heavy, so I hang singly rather than back to back, otherwise they can pull out of the clips.

The robust nature of this heavy cotton rag paper is really appreciated when handling large prints through the wet stages. Kinks and creases, which can easily ruin a large wet print in a moment during the final stages, are greatly reduced - in fact I have yet to have any, and that is a real blessing!

The dry prints feel weighty and substantial, and are commendably devoid of curl and free of any signs of cockling or wrinkling. What small curve there is flattens easily in a press or under weight.

The emulsion side has an obvious but fine texture, and the matt surface has a slight added sheen that really enhances the D-max,

which is commonly low in matt papers.

Although Multigrade Art 300 is described as having, "a warm image on a cool white base", the base does have a very subtle warm tint when compared to the back, or to one of the brilliant white base papers.

The blacks seem quite cool for an emulsion of warm lineage, which should please those who dislike warm-brown blacks.

When I received the pre-release samples for testing, given Harman's originally stated objective to develop, let's remember, "a fine art silver gelatine paper suitable for lith printing and toning", I suspected that Multigrade Art 300 might have been developed from the Kentona formula or from MGWT - to which it appeared to have obvious similarities. I was therefore expecting a positive reaction to direct toners like selenium and gold, and was a bit disappointed when the first response was restrained.

Selenium toner at 1+20 to around 1+10 gives a boost to the already impressive D-max, without shifting image colour significantly. This is a boon for those who want the protection and D-max enhancement selenium gives, but don't want a change in image colour. Longer or stronger toning cools the tones.

Given the initial restraint, the surprise to me was the rich chocolate tones that are achievable in much stronger selenium, and the lovely split toning effects it gave. Mind you, Selenium 1+3 in a 20x16ins dish demands good ventilation, as plenty of ammonia can come off that large surface if freshly mixed.

Gold toning, using a proprietary direct gold toner like Fotospeed or Tetenal, also gave slow and subtle results, hardly noticeable without a wet reference print. Prolonged toning to 20-30mins gave a modest shift towards blue-black.

It is possible that other developers might give different results in gold but, given the results I obtained after lith development (below), I suspect differences would be minimal.

Sepia toning and gold over sepia is delightful as always. I have yet to work with other toners on this paper.

On lith printing this paper, I found little or none of the infectious development 'rush' to the usual snatch point characteristic of this process, and progress of shadow tones was fairly linear in both LD20 and Moersch EasyLith.

This limits the creative interpretation for a lith printer. It does yield an image in typical sandy coloured lith tones, but without the trademark fine versus coarse grain differences between highlights and shadows.

The image has a particular 'old' look, with soft brown shadow tones, rather than the usual lith blacks. Unusually for a print processed in lith, I found toning it in selenium or gold much as described above, rather than the more enthusiastic response which is typical of the process. Notably, gold did not give the typical delicate blues of a lith print.

However, it does respond beautifully to what I call 'second pass lith development' - bleach and lith redevelopment after conventional b/w processing. Here, results are very similar to MGWT, a favourite of mine with this process, and the surface, texture and

Above: Yellowstone Winter. Multigrade developer. '2nd pass' lith print. Blacks preserved by split bleaching before second development in LD20. Right: A Winter Garden. Multigrade developer. Split sepia toned.

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weight of this paper add much to the aesthetic feel of such alternative images.

The cool deep blacks of the b/w print - absent when 'lithed' straight - can easily be preserved here in the final lith print, by stopping the bleach stage before they disappear.

In conclusion, this paper is unlike any other on the market. In some ways, it looks and feels more like a digital print on sumptuous art paper than a silver gelatine print - but with the subtleties, nuances and tonality of silver.

It is gorgeous to work with. The D-max appears excellent when fully processed, and it

benefits from fuller development.

The textured surface appears more subtle in larger prints, accepts pencil for signing or retouching, and apparently also takes hand colouring well. I think it will quickly become a firm favourite with fine art photographer-printers, as it has with me. **Tim Rudman FRPS**

Tim Rudman FRPS conducts workshops on printing, toning and lith printing worldwide. His work is widely held in private and permanent collections. **www.timrudman.com**