

THE SUBMINIATURE TIMES

The Subminiature Times is published monthly by Doylejet, P.O. Box 60311, Houston, TX. 77205 (713) 443-3409

Supporting 110, 17.5mm, 16mm, 9.5mm, 8mm, 6mm, 1mm, Microdot, and Electronic Still Photography.



Emulsions

A good general-purpose black and white negative film is hard to find. The ISO 25 microfilms make great enlargements from subminiature negatives, but are weak for indoor flash photography. Faces more than 12 feet away tend to drop off into the shadows.

The current crop of movie films have the speed but leave a lot to be desired in terms of scratch resistance. Splitting 35mm emulsions improves the selection but tend to be, well, pricey.

Mr. James Pfeiffer, of Sewaren, NJ., recently sent us a sample of 16mm Fuji HS-U Microfilm, and there's joy in Subminiature-land.

The film is so well behaved it's doubtful we'll consider using anything else as a 'walk around' emulsion any time soon.

To be specific, HS-U is an unperforated 16mm copying film. Fuji rates it at ISO 250. The tonality of the print above came without the need for prefog or special development. It was derated to EI 100 and processed normally. (Rodinal 1:200, 16 mins. @ 75°F.)

An added bonus is that it's only 2.5 mil thick. You can load 3 times more film into a cassette without the scratches you'd normally expect with force feeding.

You'll have to put a fresh set of blades in your Minox film splitter or ring film circle punch because this polyester film base is **TOUGH**.

The absence of perforations means that you can't use the Mec-16, Whittaker Micro, or other cameras which require the perforations to engage a winding mechanism. But you can certainly use your quarter-frame subminiatures to maximum advantage. A Minolta-16 MG-S was used for the photo above.

APPLICATION	For microfilming checks, invoices and other records in rotary (flow type) high speed cameras.		
EXPOSURE INDEX	250 This is a copying speed which can be used with ASA exposure meters for direct, incident light readings. The exposure index is based on the formula $45/E$ (M.C.S.) at a density of 1.2 above gross fog.		
COLOR SENSITIVITY	Panchromatic		
SAFELIGHT	Total darkness required.		
BASE USED	HS-U	Polyester clear base	4.9 mils (0.125mm)
	HS-U Thin-Pak	Polyester clear base	2.5 mils (0.063mm)
THICKNESS BEFORE PROCESSING	HS-U	0.130mm (5.1 mils)	
	HS-U Thin-Pak	0.068mm (2.7 mils)	

RESOLVING POWER

Test Object Contrast	Lines/mm
1:1000	530
1:30	250

Measured on a Fujifilm Resolution Tester Model FRE-1

PROCESSING

FUJI HS-U and HS-U Thin-Pak films have been designed for full compatibility with most standard processing equipment and will produce uniformly excellent results with all high quality microfilm developers.

They may be safely processed in high speed-normal temperature processors as well as in table top high temperature processors.

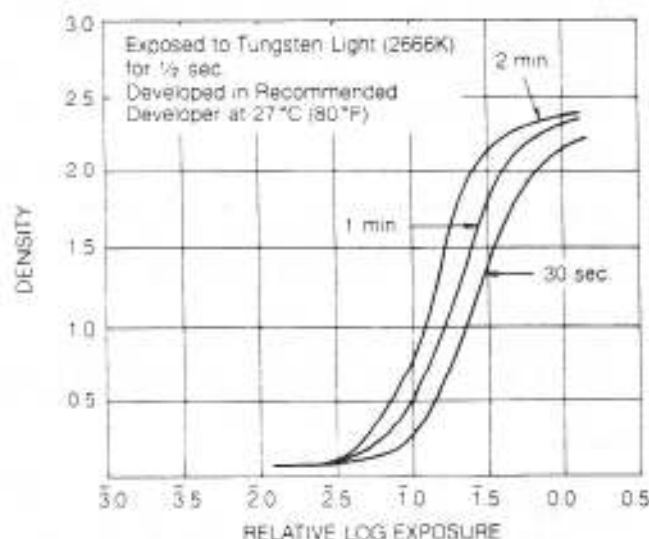
In view of the great variety in basic processor design, rigid statements on development times tend to be misleading. Optimum development times should be established for a particular process on the basis of equipment design and desired end results.

Only developers specifically designed for microfilm should be used. At 20 degrees Celsius (68 degrees Fahrenheit) the development immersion time is normally 4 - 6 minutes. Standard fixation practice should be followed by a sufficient enough wash to reduce thiosulphate to levels that are in compliance with ANSI standards for archival film.

60 exposures per roll tends to be a good working limit for the Minolta and Mamiya-16 cassettes. With 110 and Minox cassettes you could probably get 150 exposures.

The one problem encountered came while unloading a cassette. Adhesive tape won't want to come off HS-U. There's a little tussle involved. It's faster to cut the tape rather than peel it; a small inconvenience considering the benefits. And we haven't begun to explore the faster side of HS-U with darkroom magic.

Fuji will supply two pages of specifications for HS-U on request. Shown above is Page One, the general information. For info on specific spectral response, reciprocity, and current prices, contact Fuji Photo Film, 1-800-442-FUJI.



letters

16 June 1992

Subminiature Times
PO Box 60311
Houston, Texas 77205

Attn. Al Doyle

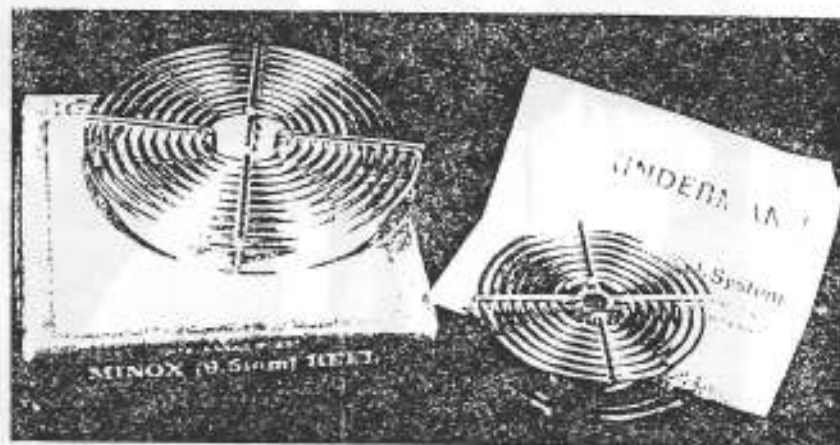
Dear Al,

In our discussion yesterday you indicated you had never heard of the Minox metal developing reels. I've taken the liberty of copying some pictures of two that were produced some time ago. ('50's ?) I don't know if they are still available or not as I have not checked with Ninkor. If there are any of the Sub-times readers that have any of these reels or know where they may be found, I would sure like to know.

Thanks much,

A. R. Garrard

A. R. Garrard
8203 E. 134th Terrace
Grandview, Missouri 64030

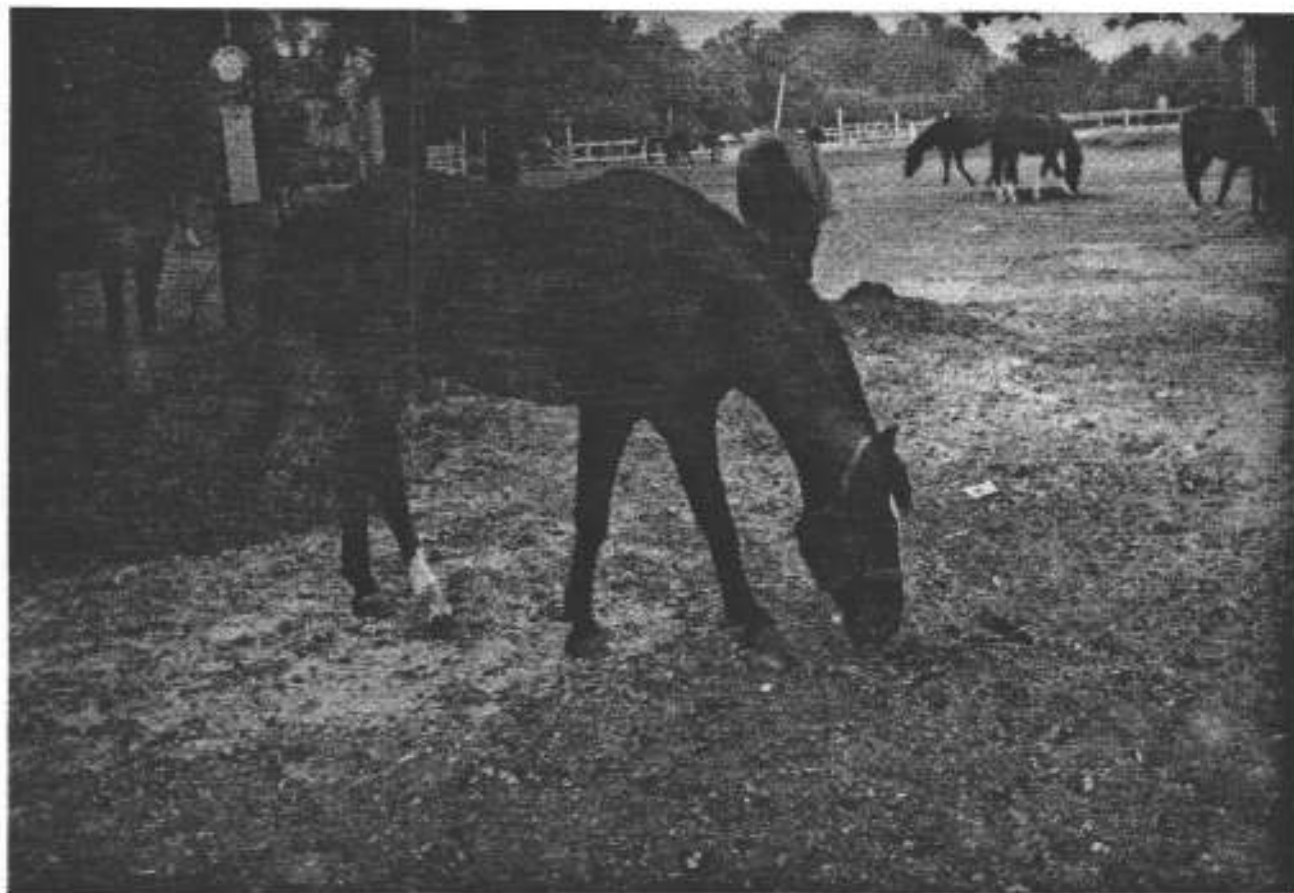


Nikor and Kindermann stainless steel open-type, darkroom-loading reels.



Nikor tank and 16mm reel. Kindermann line of stainless steel tanks and reels is similar.

In addition to Minox design daylight-loading tanks, Kindermann of Germany, and Nikor of the U.S. offered stainless steel open loading reels for 9.5mm Minox film. These reels had to be loaded in a darkroom or changing bag. The major advantages claimed for the open-type reel was better contact on all sides of the film, and more uniform development. The price paid for this, as compared to the daylight tank, was more patience and practice in loading skills.



Dear Al,

I want to try right angle photography with my Minolta-16 MG. Are right angle viewfinders available for it?

Larry Green
Tacoma, WA.

Dear Larry,

To my knowledge no right angle viewfinders were made for the MG. You can be effective without it, but it takes a lot of practice. The photo above is proof.

The horses shied away every time I put a camera to my face. So I had to shoot from waist level.

With all the time in the world, I carefully lined up my camera and shot a whole 20 exposure roll. Not once did I get a level horizon!

Al



Demonstrating the waist-level and right-angle viewfinders for the Minox. At right is a close-up of the right-angle viewfinder.





Dear Al,

How do you determine the maximum amount of pre fogging to give a microfilm?

Dennis Heisler
Harlan, IA.

Dear Dennis,

If I can't get a white highlight in the print, I've gone too far.

The photo above was made with Plus-X ISO 100, prefogged for 10 seconds with an amber safelight at 78". The film speed went up to about 300, but since I couldn't pull up a brilliant highlight I dropped the experiment and went to a faster film combined with a fine grain developer.

In a pinch I'd try longer development, which would give me the contrast, but then the highlights might block up (using Rodinal). HC-110 should be better at this. I haven't tried it yet. And judging from the scarcity of developing info I've received lately, you and I may be the last two people still processing our own film.

Al



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THIS LITTLE 110 CAMERA

PUZZLE: The Vivitar 110EF went on sale at Walgreens on August 23rd. The camera has a different case from the Vivitar currently on sale at Eckerd (Sub' Times #41), which is also being sold as the Vivitar 110 EF. All of this would be confusing to most people. The 110 collectors seem to be able to sort it out.

SWAP LIST 10/92

"MOVIE METHODS" Article by Leendert Druker describes methods for making prints from 8mm movie frames. 3 pages.

"DAY LAB 600" RA-4 instructions. Make 25 8 x 10" color prints without a darkroom. 2 pages.

(To swap, send anything similar that would be of interest to our readers. Please include a stamped self-addressed legal envelope.)



"Ah, chef, about that secret ingredient in your sauce.."

THE SUBMINIATURE TIMES QUICKFINDER 10/92

Bolsey-8	149	B	Minox C	229	W	Petal	275	W
Micro-16	75	W	C	219	W	Rubix-16	169	W
Minolta-16 P	79	W	C	199	W	Steky I	109	W
16 P	49	W	EC w/flash	199	W	Steky I	89	W
16 II	69	W	Minute-16	59	W	Tessina	599	W
110 Z	89	W	Pentax + 3 + Wndr	449	W	Tone	355	W
110 Z MKII	229	W	+ 3 Lenses	279	B	Vestkam	179	W
Minox B	179	W	+ 3 Lenses	249	B	Yashica Atoron	79	B
B	169	W	+ 3 Lenses	229	W	Yashica Atoron	79	F



B Brooklyn Camera Exch., 549 E 26th St., Bklyn, NY 11210 (718) 462-2892
 F Foto Cell, 49 W 23rd St., NYC, NY 10010 (212) 924-7474
 W Woodmere Camera, 337 Merrick Rd., Lynbrook, NY 11563 (516) 599-6013

THE 1992 GUIDE TO POPULAR SUBMINIATURE CAMERAS.....\$10

THE SUBMINIATURE TIMES #1 to #5, and #32 to current.....\$2 ea.

CASSETTES: GaMi-16 \$15, Yashica-Y16 \$10, 17.5mm rolls....\$5 ea.

Waiting list, Mamiya, Rollei, Edixa, Steky....No charge

Please include 10% S & H Domestic, 20% International.

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