

TAKE THE PAIN OUT OF PORTRAITS & MUSCLE-IN ON MACRO

Tried & Tested

PANAGOR LENSES

WE usually test lenses on R G Lewis' Modulation Transfer Function equipment at their shop in Holborn, London.

The reason for testing lenses on an electronic analyser is that it does away with the variables of film, camera and shake, poor viewfinders and inconsistent developing.

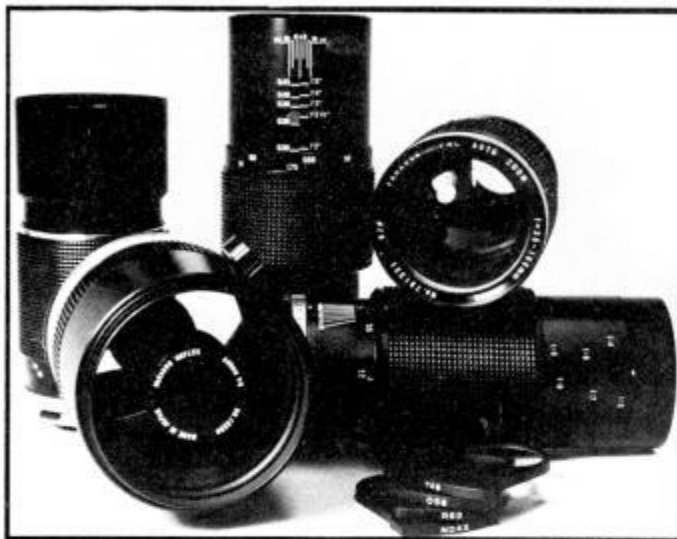
But this month we've had to assess these Panagor lenses by their actual performance on a camera — an Olympus OM-2 — because the MTF equipment was having an overhaul.

We've tested Panagor's unassisted 1:1 90mm macro f/2.8; the 500mm f/8 mirror; the 200mm f/3.5; a 80-200mm macro zoom and the 35-100mm wide-to-tele zoom. And just for good measure we included the 1:1 macro converter — a kind of souped-up extension tube which zooms your pictures up to life-size on the film when used with a standard 50mm lens.

This macro converter is the only one of the Panagors that we found to be a little 'soft'. But there could be half-a-dozen different reasons for this.

One is that the optical design of the 1:1 accessory didn't exactly match the optical construction of the prime lens we had on the front of it. And there's the extra flare that you'll often get when you add extra pieces of glass together.

But what shows up with the lens on a camera — and can't really be identified from an MTF report — is that focusing at a one-to-one reproduction range gives practically no depth-of-field, and so you have to expect a part of your picture to be out of focus



unless you're shooting something absolutely flat like the page of a book. And this unsharpness often looks like the fault of a soft lens.

Camera shake is more noticeable at 1:1 magnification, too. So what looks like trouble with the lens can also just be shaky hands.

An MTF report may give this macro accessory an absolutely excellent bill of health. But in actual *practical* photography you may find, like we did, that unless you stop-down your prime lens for sharpest performance and maximum depth-of-field, your 1:1 macro shots can look a bit fuzzy.

And, of course, when you do stop-down you'll need longer shutter speeds, which can also lead to camera shake.

All photography's a compromise, and this one-to-one adaptor performs adequately within this compromise.

A lens that can't cope with compromises is the Panagor 500mm mirror. Because, like

all mirror lenses, it has a fixed aperture — in this case f/8. So you've got to get your target absolutely dead in focus. You can't allow for poor focusing by increasing the focusing depth with a smaller aperture. There isn't one.

But with good eyesight — and an eyepiece correction lens on the camera if you need one — this lens gives good sharp results, though you must use a shutter speed of at least 1/500 sec, or 1/1000 sec, to be definitely sure of eliminating shake.

The 200mm f/3.5 Panagor is just ten grams lighter than the 500mm mirror lens. And like the 500mm it has a pull-out-and-snap-into-position plush-lined lens hood.

The results are good and contrasty and as sharp as expected.

The two zooms we've tried — the 80-200mm and the 35-100mm — are also quite hefty. But a good deal of the weight fortunately remains towards the back of the lenses, close to the camera body. So they don't feel off balance on a light-weight SLR.

This pair hold their settings very well. The 35-100mm has just over 90° twist to zip from infinity focus to six feet. It's a very good general purpose indoor and outdoor lens.

The 80-200mm macro zoom

is not a true macro lens, but gives a close focus to 1 metre, with 1:3.4 reproduction (about a third life-size) at that setting.

The 90mm is perfect for portraits, but by stopping down to apertures around f/8, it brings in brilliantly biting detail. And you can wind-out the lens to give completely life-size shots — for instance, a picture of a postage stamp 1 inch x 1½ inches, five inches from the front of the lens.

With its aperture of f/2.8, you can certainly use a 2x converter with it for more distant shots which demand a 180mm lens. The definition is certainly good enough to tolerate a converter without a noticeable drop in quality.

The Panagor lenses are good value for money, if a trifle on the heavy side. And that 90mm certainly deserves a place in your camera bag!

David Babsky

LENS PERFORMANCE

maximum rating	●●●●●●
Auto macro converter	
overall performance	●●●●●●
Centre	●●●●●●
Edge	●●●●●●
500mm f/8 Reflex	
overall performance	●●●●●●
Centre	●●●●●●
Edge	●●●●●●
200mm f/3.5 PMC	
overall performance	●●●●●●
Centre	●●●●●●
Edge	●●●●●●
f/3.5	●●●●●●
f/11	●●●●●●
f/22	●●●●●●
35-100mm f/3.5 PMC Zoom	
overall performance	●●●●●●
Centre	●●●●●●
Edge	●●●●●●
f/3.5	●●●●●●
f/8	●●●●●●
f/16	●●●●●●
80-200mm f/ PMC Zoom	
overall performance	●●●●●●
Centre	●●●●●●
Edge	●●●●●●
f/3.8	●●●●●●
f/11	●●●●●●
f/22	●●●●●●
Auto Macro 90mm f/2.8 PMC	
overall performance	●●●●●●
Centre	●●●●●●
Edge	●●●●●●
f/2.8	●●●●●●
f/8	●●●●●●
f/22	●●●●●●

R G Lewis' MTF equipment was unavailable this month, and so these assessments are the result of tests shot on Ilford FP4 film developed in Promierol.

Panagor zooming 1:1 macro converter, with reproduction ratio scale from 1:10 to 1:1; £45 ■ 500mm f/8 mirror lens, complete with skylight, red, orange, yellow and ND filters; £199 ■ 200mm f/3.5 telephoto; £75 ■ 80-200mm f/3.8 macro zoom, engraved with reproduction ratio scales 1:10 to 1:3.4; £124 ■ 35-100mm f/3.5 zoom; £144 ■ 90mm f/2.8 1:1 macro lens; £123 ■ all prices are approximate ■ Panagor lenses are distributed by Aico, Aico House, Faraday Road, London Road Industrial Estate, Newbury, Berks.