BRONICA is a much respected name in the world of roll film camera systems, and machines such as the SQ-A/SQ-AM and GS1 are widely used all over the world by professionals and keen amateurs alike. But the biggest selling Bronica has to be the ETRS, a versatile fellow which can take backs for 35mm, 35mm panoramic, 6×4.5cm and Polaroid film, gives the user a choice of five finders, three focusing screens and 11 lenses (from the Zenzanon 40mm f/4 to 500mm f/8, including two zooms 70-140mm f/4.5 and 125-250mm f/5.6).

And it's affordable too: an ETRS with standard 120 film back, standard 75mm f/2.8 lens and waist-level prism finder should cost around £440. Handling is, however, much enhanced with the addition of a speed grip for right-handed use and the AE Prism Finder E, which includes auto TTL metering.

The 6×4.5 format has a meaty frame size—about 2.7 times larger than 35mm—and Zenzanon lenses are well known for image quality, as well as having the advantage of leaf shutters which allow flash synchronisation at all speeds from 8 to 1/500sec. The ETRS system also incorporates a newly-developed lens shutter with increased precision thanks to electronics in the design. Among a wide range of accessories are an automatic bellows attachment for close-up work, 70mm film back and a 1.5fps motordrive. And if you want a second body for your 6×4.5 work, there is the ETR-C which is compatible with the ETRS in everything apart from the ability to take Polaroid or 70mm bulk film backs.

Body

The large angled reflex mirror takes up most of the inner space of the Bronica's body. Above sits the focusing screen which can be speedily removed by unclipping it front and rear. In the lens mount end are 10 gold contacts in two groups of five for passing metering information between prism finder and body. On the left is the shutter speed dial with speeds from 8 to 1sec in red, and 1/2 to 1/500sec in white in a large Perspex window above. You grip the dial knob on the left-hand edge and dial in numerals as required, where they click-stop firmly into position.

Basic Bronica ETRS with waist-level finder, 75mm f/2.8 lens and simple manual crank.

On the right is the film transport spindle for a removable crank which latches onto the Speed Grip—this includes thumb crank, hot shoe and shutter button (unthreaded). Just above the spindle is the multi-exposure lever: move this downwards to reveal a red dot on the body which indicates your film will stay in position for each exposure as the shutter is cocked and mirror cranked back down, which happens with each complete turn of the spindle. Releases for the backs and lenses are on the lower left-hand side and on the upper right-hand edge is a release catch for prisms. Behind the shutter dial is a battery check button. A 6-volt metering/power battery is housed in a special compartment in the base next to a tripod bush.

A flash sync socket sits on the front edge by the lens mount housing and the body's shutter release is on the right front edge—this is for use when using the Bronica with the spindle crank, and includes a shutter lock collar. There is a cable release socket on the left-hand edge by the lens release catch, threaded to take a specialised Bronica lead.

Lens

Standard lens with the ETRS is the Zenzanon 75mm f/2.8 with built-in leaf shutter, which means it will sync with flash at all shutter speeds. We also tested the 150mm f/3.5 portrait lens with this camera. Front element of the 75mm is well recessed to prevent flare and the aperture control ring click-stops very firmly at each full stop through the range from f/2.8 to f/22. However, half stops can still be selected and held in with care for fine tuning exposure.

Focusing action is a very smooth half turn from 0.6m to infinity, centre to right. A small stop-down/depth of field lever is located to the left and a red bubble near the mount end is aligned to a red dot on the body mount for attaching the lens to the camera. All you do now is twist the lens firmly a short distance to the right to secure it firmly into place. To remove the lens, press in the release catch on the left side of the body and twist the lens back to the left until the dots realign.

On the lens, depth of field markings are shown at all apertures except f/4 and f/8. Front element takes 62mm filters. Gold contacts in the mount have a 'wipe' connection with similar contacts in the body: this means they self-clean as they are attached and detached, rubbing against each other. An imaginative idea.

Backs

The Bronica will accept 35mm, 35mm panoramic (36×54mm), 6×4.5cm (standard) and Polaroid backs. All these will only detach

DATA PANEL

Camera: Bronica ETRS
Country of origin: Japan
Format: 35mm, 35mm panoramic, 6×4.5 and Polaroid

SHUTTER
Type: Seiko electronic
Electronic speeds: 8 to 1/500sec plus T
Mechanical speeds: 1/500sec
Shutter lock: Yes
Flash sync: At all speeds

EXPOSURE CONTROL
Type: TTL, centre-weighted
Cell(s): 2× silicon photocells
Auto/Manual: Aperture priority auto plus normal
Film speed range: ISO 25 - 3200
Meter EV range: 4-17 (ISO 100)

VIEWFINDER
Interchangeable: Yes, choice of five available
Field of view: 96 per cent (AE prism)
Focusing screen: Microprism collar with split image (standard)
Information: Colour-coded shutter speeds below screen (prism finders). Metered speed blinks on manual

STANDARD LENS
Fitting: Bronica bayonet
Focal length: 75mm
Aperture range: f/2.8-f/22
Diaphragm: FAD
Closest focus: 0.6m
Filter size: 62mm

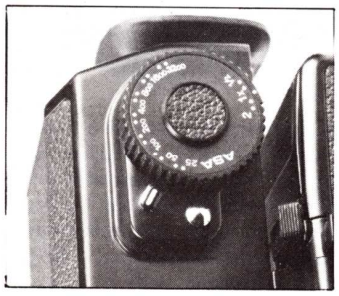
FACILITIES
Self-timer: No
Cable release socket: No
Exposure lock: No
Depth of field preview: Yes, on lens
Multiple exposure device: Yes
Mirror lock-up: No
Dedicated flash: No
Autowinder (2/3 fps): Yes
Motordrive (5+ fps): No
Databack: No
Interchangeable screens: Yes, choice of seven
Power supply: 1 × 6v alkaline cell
Size: 91 × 107 × 165mm (with 75mm Zenzanon lens)
Weight: 1280g with 75mm lens, 120 film back and waist-level finder E
Selling price (approx): £655 (with AE prism, 75mm lens and 120 back). £440 (with waist-level prism, 75mm lens and 120 back)
Distributor: Bronica (UK) Ltd, (Introphoto), Priors Way, Maidenhead, Berkshire SL6 2HR

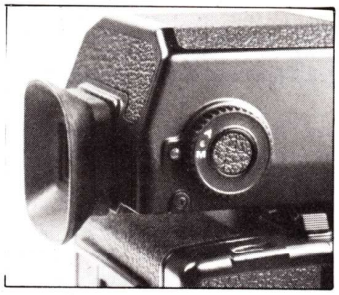
Left: Detached 75mm lens showing gold 'wipe' contacts.

Right: Top view with finder detached showing focusing screen with 35mm frame area in centre.

Right: Film speed index on AE II prism finder.

Far right: Metering mode dial on AE II prism. Central setting turns off the power.





from the camera when the darkslide is firmly in place—and, as a safety measure, the darkslide also locks the shutter mechanism. To detach a back, all you do is press in the release button on the lower left-hand side and lift the back out.

The standard 120 back is loaded conventionally by moving the take-up spool to the lower position, taking the leader tab out over a pressure plate and into the take-up spool and then threading it until an arrow symbol appears. It can then be placed into the opened back (it opens from above via two catches), which is snapped shut firmly and re-attached to the camera body. The film is wound to start position by a serrated thumb-wheel on the lower right-hand edge. Film speeds are set on the AE II eye-level prism, as this includes the TTL meter. If using the waist-level or manual eye-level finder, the appropriate film speed should be selected on a hand-held meter. A small window on the right upper edge shows the frame numbers (you get 15 exposures on a standard 120 roll using the 6×4.5 back).

AE II prism finder

The most sophisticated of five prisms in the Bronica system, the AE II eye-level finder allows TTL metering in aperture priority auto and manual modes. For this purpose, it has a film speed index from ISO 25 to 3200 and gives shutter speeds in digital form along the bottom of the focusing screen. This information glows in the finder as long as the shutter button is gently depressed. There is no aperture indication.

Business end of the prism has a rubber eyecup and eyepiece lens into which the user squints to gain a clear view of the scene ahead when the prism is clipped onto the camera's focusing screen. On the right-hand side is the mode dial, with three settings—marked 'A', a red dot and 'M'. Power is switched off when the dial is indexed to the dot. On A for Auto, shutter speeds are taken care of automatically, governed by the selected aperture. Only one metered speed glows in the finder, according to the light level. This changes as you move the aperture ring. Speeds are colour coded: Orange from 8-1/30sec, green 1/60-1/500sec and red as under and over-exposure warnings. When the battery check button on the camera body is pressed, a red lamp flashes in the lower right-hand corner to indicate battery power is okay. This also doubles as a shutter signal to show the shutter action is completed—handy for slow speeds, to show the camera must not be moved while the mirror is up.

On M for manual you are on your own, free to select any aperture and speed combination while a metered speed flickers in the finder on first depression of the shutter release. Power comes from the 6-volt cell in the baseplate and information flows through the gold contacts. The ETRS will also take a rotary finder, manual prism finder (no metering), sports and waist-level finder.

The mode dial is released by pressing in the centre and aligning A or M to an AE dial index. Film speeds on the left-hand side are selected by swinging the outer dial through increments as a small metal release button is held in. When your chosen speed aligns with a white index line above the release button, the setting locks when pressure is taken off the button. Settings are shown as 25, 50, 100, 200, 400, 800, 1600 and 3200 with dots in between for intermediate settings (ISO 64, 80, 640, 1000 and so on). Metering system is the reliable TTL, centre-weighted average.

Operation

In use, the camera is readied by pulling out the darkslide, lens focused on the subject, and meter reading taken by gentle pressure on the shutter release. If the

THE COMPETITION

ROLLEIFLEX 6002

Latest German roll film camera which can take 6×4.5, 6×6 and Polaroid backs but these cannot be changed mid-roll. Built-in winder, shutter speeds from 30-1/500sec and electronic leaf shutter in lenses allowing flash sync through the range. Standard lens is Rolleigon 80mm f/2.8, ISO range 25-6400. Meters on auto only but has dedicated flash and exposure memory lock. Retails for £899 including battery charger.

PENTAX 645

Most sophisticated metering machine yet in larger format photography, but limited to 6×4.5cm only. Options are Program, TTL and Programmed Flash aperture and shutter priority plus manual with full viewfinder information in LED form with LCD top-plate readout. Built in 1.5fps winder and good range of KA mount lenses. Eye-level finder only, speeds from 15-1/1000sec (1/50sec mechanical) on focal plane shutter (1/60sec flash). ISO range 6-6400. Price: around £900 with standard 75mm f/2.8.

MAMIYA M645 SUPER

Exciting new Mamiya machine which offers average or spot metering with auto shift function on one of three interchangeable finders. Takes 6×4.5, 35mm and Polaroid backs, five focusing screens, autowinder and range of 20 lenses. Electronic speeds 4-1/1000sec + B with 1/60sec mechanical/flash (no dedication). ISO range: 25-6400. Standard lens is Mamiya Sekor 80mm f/2.8. Retails for £992 with AE prism and autowinder.

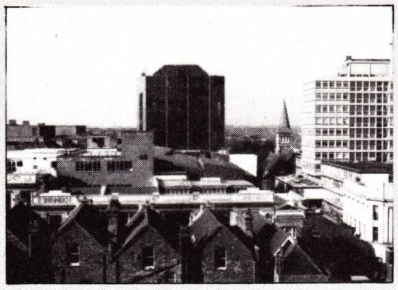
LENS PERFORMANCE

ZENZANON 75mm f/2.8	Poor	Fair	Average	Good	Very good	Excellent
Overall performance					●	
Central definition					●	
Edge definition				●		
Image contrast					●	
Optical balance				●		

Notes: Best central definition f/11
Best overall definition f/11-16
Best edge definition f/16

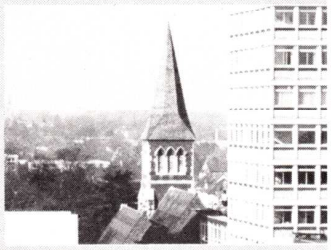
Comments on lens performance:

Slightly soft image detail opened up at f/2.8 and f/4 at both centre and edge, but coming in well thereafter. Image contrast close to excellent.



The top picture shows the whole of the negative area, while the two below are sections from 20in enlargements. These show lens performance at its best and worst. Ilford Pan F film, Acutol developer 5min, 20degC.

Best: f/11 centre



Worst: f/2.8 edge

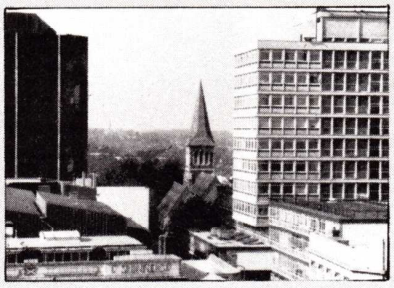
LENS PERFORMANCE

ZENZANON 150mm f/3.5	Poor	Fair	Average	Good	Very good	Excellent
Overall performance					●	
Central definition						●
Edge definition					●	
Image contrast						●
Optical balance					●	

Notes: Best central definition f/5.6
Best overall definition f/5.6-8
Best edge definition f/8

Comments on lens performance:

Impressive performer. Central definition and image contrast were so good we had to rate them both excellent. Optical balance let down only by slight softness at f/22.



The top picture shows the whole of the negative area, while the two below are sections from 20in enlargements. These show lens performance at its best and worst. Ilford Pan F film, Acutol developer 5min, 20degC.

Best: f/5.6 centre

Worst: f/22 edge

speed indicated is acceptable for hand-held work, you simply press the shutter all the way down and make the exposure. The subject disappears from view in the finder as the mirror locks with a clunk. Crank the thumb lever on the speed dial twice and you are ready for the next shot. If you are not using the Speed Grip, make a complete turn of the right-hand spindle to cock the shutter and wind down the mirror.

A slow speed (under 1/60sec) is best effected by putting the machine on a tripod. On Auto, speeds alter as you change aperture settings and a flickering metered speed shows while you are on manual, irrespective of any settings being made on shutter dial and aperture ring. You can match that speed in the finder on the aperture scale by taking a meter reading with a hand-held instrument close to the subject. With the waist-level finder, the viewed scene is reversed and there is of course no metering.

Handling

With AEII prism finder and Speed grip fitted, the ETRS handles almost as well as an agile 35mm SLR. Shutter speed information glows in the finder on gentle depression of the shutter release which is a big advantage over cameras that have separate 'meter on' buttons. I would like an indication of apertures in the viewfinder as well, but full viewfinder information is rare in larger format machines. On auto and manual, best method of metering is to preselect a shutter speed and then juggle apertures and focusing with the left hand while holding the camera via the Speed Grip with the right. A sturdy strap linked to the body via lugs allows the system to be carried around with ease, slung around the neck. For long exposures, a mirror lock and self-timer would be very handy, though a special remote shutter release is just one of the many optional extras to the system.

The big rival to this machine, the Mamiya M645 Super, scores in having Auto exposure lock and a clever exposure shift function (automatically shifting between spot and average metering) built into its metering prism; but the ETRS can boast flash sync at all speeds throughout the extensive Bronica lens system. (Only one 75mm lens in the Mamiya system has a leaf shutter).

Used indoors and out with waist-level finder plus a hand-held meter, the Bronica delivered spot-on exposures every time. Standard lens proved a highly competent performer, while the 150mm f/3.5 portrait optic yielded results close to excellent in all categories.

We can only confirm what most photographers knew—the ETRS deserves to be one of the best-selling medium format machines around because it is part of a versatile, quality system at an affordable price.

David Cocksedge