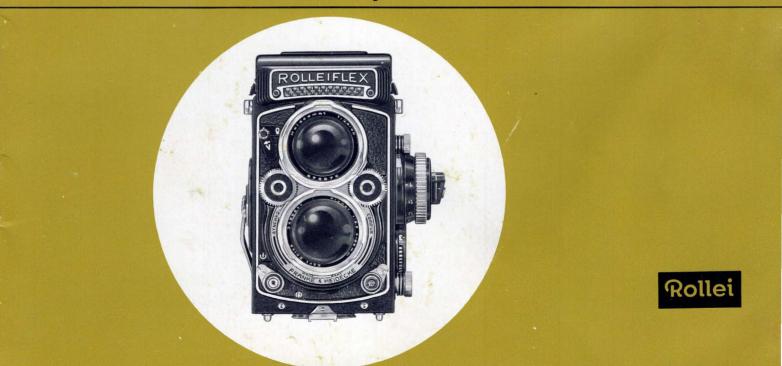
# ROLLEI 21/4×21/4"

### its assets - and yours!

ROLLEI 21/4×21/4"



Is it worth spending a little more for a really good camera?

Many ask and – significantly – many agree that it is. They do their reckoning sensibly. They judge a camera by its quality and performance. They will gladly spend more on it – because it is worth it.

#### Why?

See for yourself. Read on and check what you must have in a good camera – to satisfy your requirements.



#### The Free Preview

If you are in a hurry, you go straight to the point. In picture taking the most urgent question is: What will the shot be like?

Shooting a picture starts with the view through the finder. That is where you decide whether the camera is set to the right distance. The lens translates different distances into sharpness and unsharpness. A good finder must show this directly – without figures or auxiliary scales.

Look into the ROLLEI finder. Here you see for the first time the live picture. The finder itself is already a camera. It has its own lens to project the picture via a mirror onto the finder screen. You get a preview of the photograph, in full size – a proof without charge.

Focusing the ROLLEI correctly is almost a subconscious action. You merely adjust the image for maximum sharpness. You see like the camera sees, and do the right thing without having to think about it.

The finder lens is always at full aperture. So the finder image remains at its maximum brilliance even when the camera lens is stopped down. This image appears on a special micro-grained screen consisting of millions of tiny light-gathering prisms which ensure that the picture is evenly bright right into the corners. This is one of many ROLLEI patents. You never get such a bright picture with an orthodox ground-glass screen. You can check the definition of the finest detail even in dim light conditions. And if you wear spectacles, you still view this finder image comfortably with both eyes. If necessary, check it with the magnifier at over twice natural size for maximum accuracy. The magnifier is interchangeable and you can select alternative ones to compensate for eyesight defects (up to ± 3 dioptres).

The finder image appears like a luminous colour transparency in the depth of the focusing hood. You can assess every colour subject within the picture frame – isolated from your surroundings. You learn to see photographically. You compare different view-points and choose the best. The ROLLEI cuts short aimless trial-and-error experiments and waste of film. The camera virtually trains you to see and to select.

The finder image at waist level also has other advantages. You look at it from above, down into the camera. That makes for more natural, less selfconscious pictures. People are less aware of the camera pointing at them. Also, this waist-level system is remarkably versatile. You can change the viewpoint in any way you like, get the camera down to floor level without having to lie down behind it, or shoot from high above your head or even "round the corner". And with all these new views and aspects you constantly see the result as it will be, exactly framed and with automatic parallax correction.

So at a glance you control the subject, sharpness and framing. And you still see the view during the exposure. This is the principle of twin-lens photography, with the fully open finder lens and fixed mirror. You follow your subject during and after the moment of exposure. You notice any sudden movement or somebody rushing into the picture at the last moment – then you can straightaway repeat the shot. With the slow shutter speeds in particular, you can guard against such misadventures. On the other hand, with picture series and sequences you can shoot faster because the finder image is always there to check.

Yes, it is true - you see what you get.

The finder mirrors the finished result of every picture like an open album. You get the overall view of the subject, its colour and sharpness.

Photo: Fritz Prenzel

Looking into the finder from above frees the camera from the humdrum eye-level view. Even with low camera angles near the floor you look comfortably into the finder. For unobtrusive shooting the downward view hides the photographer's intentions.

3

The ROLLEI sees like you do – a broad view in full sharpness. The square shape makes the most of the picture space in both directions. The shot is as sharp as you see it in the finder.

Left: Paul Sinclair, Giovanni Poggiali. Right: Dieder Renner, Wolfgang Speckmann.









The ROLLEI finder isolates reality. The eye learns to see in terms of shape and colour. No wonder the ROLLEI is famous as the ideal colour camera.



Photo: Marcella Pedone

#### The Importance of the Large Format

6

The final picture is rarely as small as it is on the film. But if you are going to enlarge the negative, what does the film size matter?

It does matter when you project your pictures. How high is your room? You have that much space for your screen, and can project your colour slides to this super size for really impressive effects. Why shouldn't you?

It is a little like painting a wall. A given amount of paint covers a certain stretch of wall – it won't do for twice the area. For that you need a bigger paint pot – or fewer coats. When you project colour slides, you can blow up the image size as much as you like. But you cannot replenish colours or detail – you are limited to what you have in the film frame to start with. So the larger the picture size, the more detail and the more colour it can hold.

That is why the picture size matters. And that is why the ROLLEI is so ideal for colour photography.

The  $2\frac{1}{4} \times 2\frac{1}{4}$ -inch format is a spacious picture size. It is already one jump ahead on the way to the final big enlargement. So you can utilize the maximum film speed of any black-and-white film and get large prints without visible grain. And for brilliant colour enlargements a  $2\frac{1}{4} \times 2\frac{1}{4}$ -inch negative is virtually essential. A further point also counts in projection: you still need a square screen for rectangular formats, but you waste part of the screen area when you project the picture upright or horizontally. The square  $2\frac{1}{4} \times 2\frac{1}{4}$ -inch slide gets the full light of the projector and completely fills the square projection screen. That yields more brilliant images with a wider viewing angle. Check for yourself by observing a ROLLEI slide projected really big in a large hall. You notice the difference already when you start shooting. For many subjects a rectangular frame is distinctly cramped. You cannot add on what is missing. The square shape has no narrow side. That is why you always shoot with a camera in the same position, without worrying about upright or horizontal compositions, and without waste of time. The final cropping you can decide later when the film is processed. And here, too, you have to wait less with the ROLLEI. The roll film holds twelve exposures  $2\frac{1}{4} \times 2\frac{1}{4}$  inches (6 x 6 cm) – just handy for a leisurely weekend. Then you can send your colour films for processing straight-away while they are fresh. And you can look forward immediately to seeing the finished pictures.

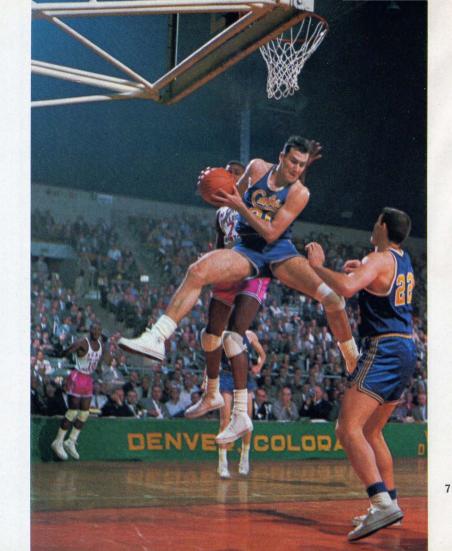
The  $2\frac{1}{4} \times 2\frac{1}{4}$ -inch size of course takes in any smaller format. You can use a cropped section when evaluating your negatives, but you can also utilize a smaller image size. It would never work the other way round, but with the ROLLEI you always have the possibility of conversion to a miniature camera. According to the model, special masks and accessories are available for this purpose. The roll film can vield several horizontal image sizes:  $1^{5}/_{8} \times 2^{1}/_{8}$  inches (4 x 5.5 cm) which also takes in the 15/8 x 15/8-inch or 4 x 4cm super slide format - or 28 x 40 mm, which includes 24 x 36 mm. Alternatively you can load the camera with perforated 35mm miniature film. This has various advantages with certain subjects, as well as in sequence shooting. There you make the best possible use of the film, and you have the extra capacity of 16, 24 or 36 exposures without reloading.

Whichever way you look at it - you get more out of a  $2\frac{1}{4} \times 2\frac{1}{4}$ -inch picture!

Two pictures in one! The  $2^{1}/_{4} \times 2^{1}/_{4}$  inch format is big enough to pick out pictures within pictures with effective impact. The normal shot becomes a tele-photograph; the large ROLLEI negative permits really big part-enlargements. You can gain this new pictorial effect even by duplicating colour transparencies.

Photo: John F. Urwiller





#### Alternative ROLLEI Picture Sizes

You have plenty of latitude with the standard ROLLEI format, too. With some models masks cut down the normal roll film picture size. This is what you get: The large horizontal picture, taking in the  $1^{5/8} \times 1^{5/8}$  inch (4×4 cm) Super Slide size. You gain 4 exposures on every roll.







Alternatively, the small horizontal format, covering both miniature sizes. This time a 12-exposure film yields even 24 shots.



You can even convert the ROLLEI to 35 mm film. With the  $24 \times 36 \text{ mm}$  frame the normal focal length becomes a tele lens. And you can shoot up to 36 pictures without reloading.

Photos: Erich Bauer (2) Goetz Sobek

But the principal ROLLEI picture size is  $2^{1}/_{4} \times 2^{1}/_{4}$  inches  $(6 \times 6 \text{ cm})$ . It masters every subject in width, depth and height.

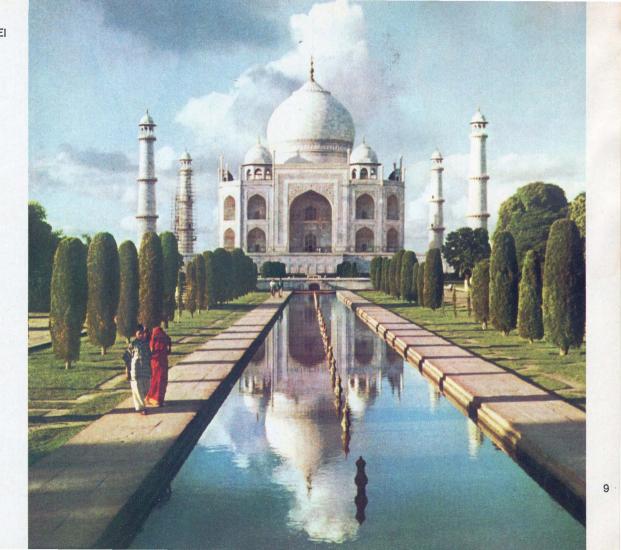


Photo: Fritz Römer

#### With or Without an Exposure Meter?

10

You don't walk up the stairs where there is a lift. It is far more convenient to press a button and get there quickly and reliably.

In picture taking something else, however, matters too: the pleasure of creating something. That is why you will get on better with a ROLLEI than with a camera which is designed just for button pushing and little else.

Exposing by instinct is risky. Colour film especially calls for great accuracy in exposure. And on special and unique picture-taking occasions an exposure meter is worth far more than the film you expend on getting experience. The meter inevitably belongs to the camera.

It is most convenient when the meter is built right into the ROLLEI. Then you can never leave it behind. It is always there when you need it. And it takes in the same view as the lens, neither more nor less. You can aim it precisely with the aid of the finder, and can watch the pointer without losing sight of the subject. The finder and the meter needle are close alongside each other as you look down on the camera. By sighting through the finder you can also take any kind of special reading, with or without the incident-light diffuser. With its wide measuring range, the meter covers the trickiest lighting conditions. Nor do you have to worry about the effect of strong light on the meter cell; even when constantly exposed to light, the instrument remains indefinitely precise and reliable.

There are ROLLEI cameras with and without exposure meters. Where the meter is not built in already, you can fit it yourself afterwards or attach it together with a lens hood. The ways of doing it vary according to the camera model. You can take your choice.

1. The uncoupled exposure meter always indicates an exposure value. You transfer this to the camera and immediately select the appropriate depth of field for the required exposure time – or vice versa. Shutter speeds and apertures are cross-coupled, but can be set individually.

2. As an improvement on this idea you can switch over the uncoupled exposure meter to automatic exposure control. The "magic" ROLLEI is unique in offering these two possibilities: free choice of camera settings, or complete automation. You let the camera get on with it: it selects on its own the best possible compromise between exposure time and depth of field. That is the quickest and most up-to-date way of snapshooting there is.

3. Finally, the coupled exposure meter by-passes exposure-value settings. The meter directly controls the correct settings of the ROLLEI. The shutter speed, aperture and depth-of-field adjustments are coupled constantly with the setting pointer, but can be adjusted individually. You take your pictures with a pre-selected exposure time or depth of field – and have an exposure aid which, however, gives you free scope to arrange things your own way.

A special refinement of the models with automatic exposure control and coupled exposure meters is the fact that you do not even have to worry about exposure corrections when using filters.

The ROLLEI really looks after everything.



From brilliant sun to shady dusk the measuring range of the exposure meter covers every lighting level. It gives reliable exposures for the most difficult subject.

> Photo: Ludwig Windstosser

The tele system increases the focal length of the ROLLEI. It bridges distances and brings far away objects close to fill the frame.

Pictures without and with the ROLLEI-Mutar 1.5×: Uwe Schultheiss

The wide-angle system reduces the focal length. The increased angle covers the whole field at short range, particularly in confined quarters.

Pictures without and with the ROLLEI-Mutar 0.7×: Erich Kramell









#### The Universal Lens

How much luggage you carry indicates what you know, about the art of living.

Let other people run around weighed down by holdall cases – for the ROLLEI, the ever-ready case is enough. Possibly you can carry the case with the lens hood or one or two filters on the camera strap. But then you are equipped for 90% of all subjects. You can travel around and are more free, more mobile and quicker off the mark than anyone else. You will never miss a picture through having to change accessories. And it is the fleeting moments that yield the most live subjects.

The ROLLEI lens is always right. The names of worldfamous optical manufacturers guarantee its proverbial sharpness and colour reproduction. Every lens is specially computed for the ROLLEI. Its design and number of elements achieve the utmost in optical performance in every ROLLEI model. You have one lens to cope with every subject.

Whether you take sports shots at  $1_{500}$  second or action shots at night, you will always be concerned with adequate depth of field. Most shots, therefore, call for small lens apertures. Fast films and flash provide the necessary exposure level in poor light. With the ROLLEI format in particular you can safely use the latest high-speed films. But even at full aperture the f/3.5 and f/2.8 lenses of the ROLLEI still offer a useful depth of field.

Consider other borderline cases. You cannot get close enough to every subject to fill the frame completely. So even parts of the negative must stand up to a sufficient degree of enlargement. And in a landscape picture distant details must still appear large and clearly recognisable. With the large image scale of the focal length of the ROLLEI lens you have just this virtually unlimited scope for enlargement.

Or you may want to shoot indoors or in narrow streets where you have to cover a wide and high field of view. The ROLLEI lens does that, too. Its sharp circular image field – as round as the lens itself – takes in a square as the largest single subject frame. This fits exactly into the width of the  $2\frac{1}{4} \times 2\frac{1}{4}$ -inch roll film. So the ROLLEI covers the largest picture area in height as well as in width – with that extra gain in space missing from the rectangular image frame.

Occasionally you may perhaps be attracted to special fields. You may come across photographic subjects calling for a still larger scale of reproduction, or an extended angle of view. That is where the ROLLEI Mutar lenses score. These optical systems effectively increase or shorten the focal length of the camera lens with virtually no loss of speed – and without changing the lens or interfering with the camera mechanism. According to the subject conditions you can increase the scale of the image to a 1.5x telephoto effect, or again extend the normal 56° angle of view to a wide angle of 72°. You still keep a check on the result on the finder screen. You have three focal lengths instead of one, but still:

One lens for every subject.

## Converting the ROLLEI

14

Like a car, a camera has certain accessories.

These are items for individual extra requirements – convenient, useful or necessary, as the case may be. For example, you may want to use filters to give the film a hand in coping with colour values – or the softfocus attachment for flattering portraits or special lighting effects. Even more important are the supplementary lenses for extending your scope to close-ups between 36 and  $91/_2$  inches (90 and 24 cm). Look into the finder to see the surprising effects of scale and pictorial possibilities at close range. For the usual system of focusing remains unchanged with the supplementary lenses.

There are also further fields beyond the normal range of photography. You may meet applications really calling for a specialist camera. Even there you do not have to give up the convenient ROLLEI features. The practical accessories extend the scope of the ROLLEI to a comprehensive photographic system of equipment. By simple adaptation the standard camera becomes a specialist instrument for specific purposes. Are you interested in –

Press-style feature shots? The focusing hood with built-in frame finder is interchangeable – you can replace it by the pentaprism finder. That brings the finder image up to eye level. The pistol grip gives a secure camera hold. With the flash gun you are independent of the prevailing light.

Single exposures? When the occasion demands immediate results or special sensitive materials, just remove the camera back and replace it by the plate and sheetfilm adapter back. Instead of roll film you then use single film or plate holders. Large-scale close-ups? Photomicrography? We have already mentioned the supplementary lenses. The micro-adapter joins the ROLLEI to a microscope. So any microscope specimen becomes a ROLLEI subject.

Underwater photography? The Rolleimarin housing is a tailor-made diving suit for the main ROLLEIFLEX model. You operate the camera under water as you would on dry land, and you can still work with supplementary lenses, filters, and a special flash gun.

And did you know that you can use the finder lens of your camera to project your colour transparencies? The ROLLEI for projection is another example of the scope of this amazingly versatile camera.

This is an outline of the possibilities of combination and conversion with the ROLLEI. They extend the application of photography as a hobby as well as in professional work. After all, a photographic illustration is today the most compact yet comprehensive record. The ROLLEI combines the scope of many cameras – to cover the whole field of photography with one camera.



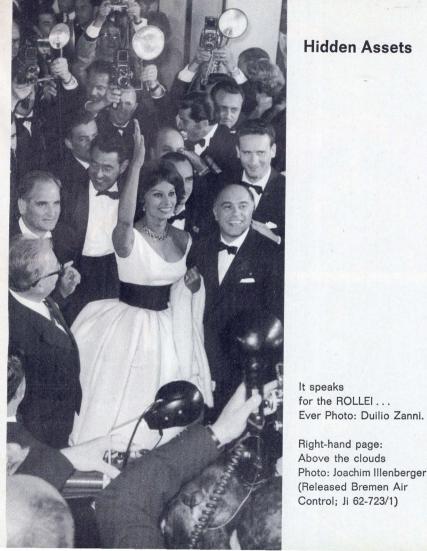




Under-water picture: André F. De Bloos. Photomicrograph (larva of mosquito, 65x): Dr. Werner Faasch. Sports shot with tele lens unit: Carlheinz Albrand. Close-up with supplementary lens set: Fritz Prenzel







16

#### Hidden Assets

Photography Sure and Simple.

The ROLLEI makes specially sure of positive sharpness and reliable operation. The lenses are selected in pairs and carefully checked for matching definition. A pressure-free film guide keeps the film precisely in the plane of maximum sharpness. The adjustable film track is indeed designed to allow for the different thicknesses of roll and 35mm film. For utmost accuracy of sharpness the top models of the ROLLEI hold the roll film as flat as a plate with the aid of a glass film plane. And the ROLLEI already had a feeler mechanism for automatic film transport when other cameras still advanced the film by the numbers on the backing paper. Other automatic safety features include the self-resetting film counter, the locking system for the exposure-value setting, the lock of the flash plug, of the removable camera back and of the detachable front of the everready case.

The ROLLEI accessories also have their own special features. The focusing screen with rangefinder wedge provides an additional check on exact image sharpness. All optical lens attachments are coated just like the lens itself. The filters have a special multiple coating which not only cuts down reflections, but also reinforces the effect of the filter itself. To compensate optically for the required focusing difference, the infra-red filter is ground to act as a weak lens. The air-tight metal everready case keeps the camera afloat in water. With the underwater housing the pressure of the water-tight seals automatically increases at greater diving depths up to a limit of 55 fathoms.

They go without saying - because it is the ROLLEI.



#### It Speaks for the ROLLEI –

- that the ROLLEI was the first twin-lens reflex camera, achieving a world-wide success with this concept;

- that the ROLLEI principle needed no modification in the course of technical improvements;

- that the Rollei-Werke still service models built nearly forty years ago;

- that the ROLLEI is highly popular with many world-famous photographers;

that ROLLEI pictures keep on being responsible for an appreciable proportion of cover shots and illustrations in magazines, picture books and photo annuals;
that the ROLLEI year after year gains a lion's share of the prizes in competitions and exhibitions;

- that these successes still include pictures taken with some of the earliest ROLLEI models;

- that the ROLLEI is the most imitated camera;

 that nearly all ROLLEI copies have since dropped out of the running;

- that ROLLEI cameras command high second-hand values;

- that the ROLLEI is a favourite among press photographers;

- that for this reason the ROLLEI is so often seen in the hands of press men and fashion photographers in news reels, magazines and on television;

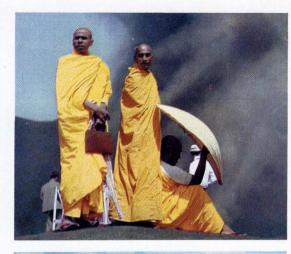
 that the ROLLEI has proved its worth on expeditions in the tropics, in the Himalayas and in the Arctic, as well as in aerial and underwater photography;

- that sections of ROLLEI shots have been used to make colour enlargements up to 15 feet long - at some 90 times magnification!





Photos: Left: Eugen Gary Gruber, Rudi Herzog. Right: Eiji Miyazawa, Loren G. Snook.





So: Is it Worth it? Glass, sheet metal, castings and screws are common enough. Envisaged as a camera, they become valuable. This first takes shape on the drawing-board. After that the cost starts mounting – because performance and long life of the camera depend on proper selection of the raw materials. Then comes production with its 5,632 manufacturing steps, interspersed by 2,069 quality checks. These figures give already some idea of the value of a ROLLEI.

The ROLLEI idea and system have often been imitated – so they must be sound. But why have the imitations never reached the ROLLEI standard? Possibly false economy – but the real reason goes deeper: The originator of an idea puts everything into it. He cannot help trying to surpass himself: he backs the original concept with his name. No imitation can compete with this aspect of uniqueness.

So is it worthwhile choosing a ROLLEI?

Now you know the idea and its advantages. Now you can compare – and arrive at the answer yourself.

The wide world, the big adventure always thrill the first time. They are familiar to the ROLLEI with its experience gathered over more than a generation.

#### Further ROLLEI literature:

Camera leaflets for each ROLLEI clearly and concisely describe the technical features of the individual models. "The Practical Accessories" is the title of a detailed and illustrated catalogue of the entire range of ROLLEI accessories.

Now that you have read about the "free preview" – why not try it yourself? Look into the ROLLEI hood – you can do it any time you like at your photo dealer. He will gladly show you the ROLLEI – without obligation.

Rollei Werke Franke & Heidecke · Braunschweig (Germany)

E 1163 · Printed in Germany · Text: C. Albrand · Layout: E. Griessel