





Ihagee of Dresden was the first and only camera company during the 1930s to build reflex cameras with interchangeable lens for the horizontal 4x6.5cm Vest Pocket format using 127 roll film. From the first black models produced in 1933 to the late chrome ones in 1938, and from the simplified A model and even more simplified Junior, on up to the sophisticated B model and prestigious Nacht, Exakta VP output extended over a short period of time but in an extensive array of models and variations that was even further enhanced by a very great number of lenses and accessories-to the joy of collectors everywhere! Exakta VPs are not that rare (excepting some particular versions) or even that expensive and almost never break records under the auctioneer's gavel, but they do offer their own niche of collecting interest and for years have remained firmly at the center of camera collecting. The direct offspring of the Exakta 35mm and indirectly of the mechanical 35mm reflex, Exakta VPs are not only appreciated for their place in photographic history, but also for their elaborate design, precise construction and wide range of models offered.

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CLASSIC CAMERA

NOVEMBER 2002



Leica M lenses: fifty years of optical changes



Werra I camera, first version dated 1955 with olive-green finish and reversible lens hood.



Christie's Auctions: Photo Revolver Enjalbert. Auction price £ 69.750

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THE COLLECTOR'S BOOKSHELF - THE COLLECTOR'S BOOKSHELF - THE COLLECTOR

TERENCE SHEEHY JAPANESE CAMERA ADVERTISING CLASSIC CAMERA COLLECTOR PUBLICATION

A collection of Japanese camera ads from the post-war period to the 1990s is the most recent published offering from the tireless Terence, produced as always using top-quality A4 format photocopies, elegantly laid-out, printed and bound. Japanese camera output in the last half-century has been impressive in terms of brand names, types and models, and some sort of selection was necessary to fit it all into a hundred pages where two thousand would be required to show everything. The brands have been pared down to thirteen from over fifty and selected by type with reflex cameras in the fore. The ads themselves have also been selected, preference given to those that appeared at the time in English or American publications. The basic theme could be summarized by the double title: "How the Japanese presented themselves to the West" or "How the West preferred seeing the Japanese". Each of the brands selected (Petri, Canon, Minolta, Miranda, Topcon, Yashica, Fuji, Ricoh, Nikon, Konica, Pentax, Bronica and Mamiya) is presented with a brief historical description, rounded out by a short essay by Derek White on the exposure meter systems

utilized by Asahi Pentax over the years. For each of the chosen brands. Terence presents the best ads from the 1960s, '70s and '80s, as well as the best-known products of each era. For some of the cameras, there is also an illustrated technical spec sheet. But the volume seems to place less emphasis on the performance and technical features, than on the aesthetic appeal of the cameras from years gone-by, an appeal that has, in part, been lost with the advance of globalizing technologies, casings in polycarbonate, pre-cast shells filled with microchips and sensors to detect light, distance, movement, color, contrast and perhaps even temperature and pressure. There is a special appeal in the clean and somewhat sharp lines of the pointy pentaprism reflex, the interchangeable finders of the Miranda, the amusing and angular shape of the Photomic, the various styles of winding levers, the rewind knobs that jut out, the spare, square-shaped top plates without display, the heavy, mystery-filled motors and even the soap-bar shaped casings of the first compacts, with and without range finder. The way these cameras were presented is also fascinating, placed in the middle of the page with little comment, promises or chit-chat, all attention being drawn to their basic appeal, brand name and underlying quality which was taken for granted. The reflex cameras of the Sixties and Seventies-but even many of those from the early Eighties-did not require special explanations. They did not include multiple circuits, customizable functions, unusual options, poly-functional centers, variable programs, interfaced lenses, alternate cadence motors, hidden flash or instructions booklets that could be an encyclopedia volume. The image of the camera is simple, direct, clear, unmistakable. What the camera offers is evident, indisputable, straight-forward. Speeds up to 1/1000, or on rare occasions up to 1/2000, sometimes with auto-exposure. Plus a legible speed dial, lever, button and diaphragm ring. Everything is visible, up-front, no tricks. Only the exposure meter was hidden after 1965, but the ads from the period that followed often showed the inside of the finder to demonstrate that the exposure meter was present and functioning, the proof being in the indicator needle, and later the LED that would blink like a traffic light before signaling "all systems go". It seems a century ago, and yet only twenty years have passed. But even if our memories should fade, Terence's books are designed to refresh them and keep alive that era which, although it might not have been better than the current one, is one to which we are deeply tied.

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LEITZ THAMBAR, NINETY MILLIMETERS OF SOFTNESS

The Thambar portrait telephoto stands quite apart from other Leitz lenses



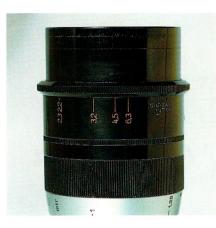
Leitz Thambar complete with box, filter, lens hood and cap

From the very beginning, Leitz lenses for Leica have always stood out for their sharpness and special tonal performance, features that have made them popular with amateurs and professionals the world over and have helped to establish the Leica legend.

A different lens

Because of its performance characteristics, the 9cm f/2.2 portrait tele lens called the Thambar occupies a place of its own in Leitz lens output. In fact, it is the only soft focus lens produced by Wetzlar, soft focus referring to the fact that even the areas of the image that are perfectly in-focus appear softened and diffused. Designed at the beginning of the 1930s by Max Berek, the Thambar was Leitz's answer to some of the criticism it had been receiving. Some had accused Leitz lenses of producing an image that was too hard and high-contrast to be utilized for portrait work. In fact, from the nineteenth century, all sorts of tricks had been used to soften portrait images, especially those of the "fair sex", in order to obtain photographs that had a soft, "dreamy" effect.

With the Thambar, Leitz presented an absolute first for 35mm cameras, opening up a new, highly-specialized sector. The name Thambar was derived from Greek, meanning "something that inspires wonder", wonderful. The lens formula was comprised of four elements in three groups, with two cemented



Detail of the double aperture scale on the Thambar. The red scale was used when the filter was inserted.



Thambar with lens hood mounted on a Leica IIIc with special filter on right



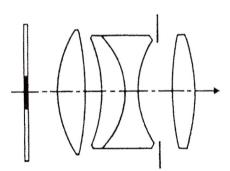
Front view of the Thambar TOODY

central elements. A very similar lens formula would be used twenty years later for the 125mm f/2.5 Hektor for Visoflex. In the Thambar, the soft-focus effect was obtained by allowing a certain percentage of spherical aberration at the edges to pass in order to lower contrast. The effect was further accentuated by the addition of a special filter equipped with a silver bubble in the center, one centimeter in diameter, that neutralized the influence of the central part of the lens, notorious for being the sharpest zone.

Thambar features included a focal length that was ideal for portrait-taking, a noteworthy maximum aperture of f/2.2 that became f/2.3 with the special filter, a minimum focusing

distance of one meter and the ability to control the soft-focus effect through the aperture. The minimum aperture was f/25, the lens weighed 520 grams and it used E48 diameter filters. Using the lens without the special filter and at apertures above f/9 produced sharp, high-contrast images like those of a normal 90mm telephoto lens; alternatively, using the filter with smaller apertures than f/9, the central circle created an area of shadow on the frame. To create a soft image, the special filter had to be used and the aperture not closed more than one or two stops.

The Thambar was equipped with two aperture scales, the one in white gave the f/stops without the filter, while that in red gave



Thambar lens formula, 4 elements in 3 groups, drawing of special filter on left

aperture values with the filter inserted. The red scale went from f/2.3 to 6.3 because above this value, use of the filter became useless and counterproductive. The maximum effect was obtained using the filter and with an aperture setting of f/2.3 or 3.2, the soft-focus effect lessening with values from f/3.2 to f/4.5. Without the filter and with the same f/stops, the soft effect existed, but was much less accentuated. Photographing with backor flare lighting increased the Thambar's soft focus effect, and the distance of the subject also had significant effect on the softness. However, it was a difficult lens to use and required considerable practical experience. Having been designed for rangefinder



Thambar with filter inserted on Leica IIIc equipped with VIDOM multi-focal finder



LEITZ CODES FOR THE THAMBAR LENS

TOODY, 9cm f/2.2 Thambar THAMBARSHADE, Thambar reversible lens hood ORZHO, Thambar lens cap EQOOT, special order leather case COOTL, short mount to use lens head on Visoflex The filter did not have a special code. cameras, the Thambar's soft-focus could not be controlled through the viewfinder as in modern reflexes and required a significant amount of experience.

Production of the Thambar began in 1935 and ended in 1949 and, according to Leitz production logs, 3151 lenses were produced, with only 200 of these made in the later period from 1942 to 1949. Rogliatti and Laney, on the other hand, give a total of 2984 pieces. It is likely, but not totally confirmed, that those produced after the war had antireflection coating.

Today, the 9cm Thambar is one of the most sought after pieces by Leica collectors, even if, with approx. 3000 having been produced, it is not all that rare. However, it is often difficult to find one complete with the original filter that was sometimes replaced with other filters, adapted as best as possible. Its special position within the Leitz universe, its filter accessory and last, but perhaps not least, the allure of its name, have made the Thambar a legendary object among Leica enthusiasts who disburse huge sums for the honor of owning one.

Thambar brochure, produced by E. Leitz Inc.

LEICA M LENSES

Fifty years of optical changes

It is common knowledge that lenses for rangefinder cameras manifest none of the compromises in optical construction that characterize that of lenses made for reflex cameras with a higher shooting range. Perhaps this is the reason for the return of cameras without mirrors and with interchangeable lenses while, at the same time, production has been halted on the Leica M6, bequeathing its array of lenses to the Leica M7.

In its nearly 50 years of existence, the Leica M has undergone numerous modifications, replacements, enhancements and changes. A brief history of its evolution and transformation could provide useful insight into the manufacturing philosophy of the Solms company.

STANDARD LENSES

The unveiling in 1954 of the new Leica M with bayonet mount threatened to create an internal problem within Leitz, placing the Leica M system at odds with the traditional interchangeable screw mount lenses. In actuality, because the diameter of the 39x1mm screw is smaller than the bayonet diameter, the screw mount lenses could be mounted on the Leica M using an adapter ring, but continuity between the two systems was, in fact, precluded. The M system was destined to develop around new lenses and accessories, while the screw system would remain alive for a few more years, but with slight prospects. For the Leica M3, some of the pre-existing lenses were adapted and other new ones designed, starting with the standard lenses with 50mm focal length. The transition from the old, classic lenses to the new, increasingly-sophisticated lens constructions are proof of the immense effort Leitz dedicated to making the Leica M system a success, during the Fifties and Sixties.

f/3.5 and f/2.8 Elmar

At its birth in 1954, the Leica M3 was equipped with a wide array of standard 50mm focal length lenses with a range of speeds and performance levels, made in both rigid or collapsible mount. More tradition-bound Leica photographers could still choose the old collapsible mount 50mm f/3.5 Elmar, Leitz's classic lens par excellence. The 50mm f/3.5 Elmar for Leica M3 was very similar in appearance to the standard Leica screw mount lenses of the day. The lens had been available on the market as early as 1925 when it was mounted on the fixed lens Leica A and B. Later, the same lens was offered as a standard interchangeable lens with screw mount on the Leica C cameras manufactured after 1930. In 1954, the 50mm f/3.5 Elmar was still offered as a standard lens for the Leica IIIf as yet in production and was destined to remain in production with screw mount until 1959 without undergoing any changes worthy of mention from the 1930s, except for the new aperture scale adopted after the war with stops up to f/16 or f/22 instead of f/18. In adapting the 50mm f/3.5 Elmar to the new bayonet mount, the lens barrel changed slightly, but was still collapsible. In place of the external ribbing for pressure-mount filters, an E39 screw mount was utilized and in place of the front notch for diaphragm adjustment that could not be used with a filter inserted, an external front ring with settings up to f/22 was used.

Alongside the f/3.5 Elmar that remained in production until 1961, in 1957 the f/2.8 Elmar was unveiled that copied its technical and aesthetic features, including the collapsible mount and filter mount, but not its faster speed and minimum aperture limited to f/16. Production of the f/2.8 Elmar continued without change until 1974 and was mounted as the standard lens on the Leica M3, M2, M1 and even the Leica M4.

f/2 Summicron and f/1.5 Summarit

In addition to the traditional, 4-element f/3.5 Elmar, until 1954 the 7-element f/2.0 Summicron with bayonet and collapsible mount was also manufactured. The Summicron, only recently offered in a screw mount version to replace the old Summitar, was destined to be the mostesteemed and -famous of Leica-dedicated lenses. The bayonet mount f/2.0 Summicron, like the Elmar, offered the possibility of aperture adjustment using a front ring on the outside and utilized E39 screw filters, but only stopped-down to f/16. The third standard lens available for the Leica M3 starting in 1954 was the rigid mount f/1.5 Summarit. It was the bayonet mount version of the 7-element screw Summarit dating from 1949, of which it kept the E41 filter screw mount. The three lenses were only offered with silver chrome finish. In 1956, the barrel structure of the f/2.0 Summicron was modified and made available only in the rigid mount version, while its lens formula, filter mount and chrome finish remained unchanged. It was only after 1963 that some black finish pieces were produced. In 1969, the f/2.0 Summicron was recomputed with the use of new glasses and was brought up to six elements and the minimum focusing distance



50mm f/2.8 Elmar, collapsible

50mm f/2 Summicron, collapsible



50mm f/2 Summicron, rigid

dropped from a meter to 70 centimeters. The new Summicron was produced only in black finish until 1979.

f/1.4 Summilux

Although the f/2.0 Summicron did not undergo variation throughout the entire 1960s, the f/1.5 Summarit was replaced in 1960 by the new rigid mount, 7-element 50mm f/1.4 Summilux lens. This new lens stopped down to f/16, mounted E43 filters and was manufactured with chrome or black paint finish. In 1962, the lens formula of the f/1.4 Summilux was modified, remaining seven elements in five groups. The appearance of the Summilux was modified in 1968 with the elimination of the silver chrome and black paint finish, in favor of a black anodized finish. The f/1.4 Summilux was on its way to becoming the no. 1 standard Leica M lens and in 1979, one thousand gold-finish pieces were made to be mounted on the Leica M4-2 commemorative cameras. In

1989, 1,200 f/1.4 Summilux lenses were made in platinum finish to be mounted on the Leica M6 commemoratives.

f/1.2 Noctilux

In 1966, in addition to the f/2.8 Elmar, f/2.0 Summicron and f/1.4 Summilux lenses, an even faster lens using new, high-refraction glasses and aspherical lenses was offered. Despite its high-performance characteristics, only 2,000 black finish f/1.2 Noctilux lenses were made up until 1975.

In 1975, production of the Leica M4 and Leica M5 ceased, even if the production of the lenses was only slowed and not definitively halted. Following a brief hiatus and with the renewed start-up of production of the Leica M4-2 in 1977 and later in 1980 of the Leica M4-P, production of lenses for the Leica M took off again, with the exception of the f/2.8 Elmar that was not put back into production.

In 1976 the f/1.2 Noctilux was replaced

by a new, even faster lens comprised of seven elements and computed for the extraordinary speed of f/1.0 without making use of aspherical lenses. The early f/1.0 Noctilux mounted E58 filters, but the diameter was later raised to E60. Following current trends, the f/1.0 Noctilux was only produced in a black finish.

New evolutions

With the start of production on the Leica M4-2 and M4-P, interest was rekindled in standard lenses. The f/2.0 Summicron was recomputed in 1979, once again using six elements, but arranged in four groups instead of five. The minimum aperture was still f/16 and it was still black finish, but some were produced in chrome, for example those that were part of the Leica M6 Columbus commemorative outfit. Output of the f/2.0 Summicron, f/1.4 Summilix and f/1.0 Noctilux continued during production of the Leica M6 without



50mm f/2 Summicron, rigid



black and chrome finish as standard. The

f/1.0 Noctilux was modified with built-in

hood, but only in black finish. Although

the presence of the hood increased lens

weight, this modification was also made

in 1995 to the f/1.4 Summilux in which

50mm f/1.4 Summilux, chrome

50mm f/1.4 Summilux, black

let-up or significant changes until the first half of the '90s. In 1994, the casing of standard Leica M6 lenses was modified to incorporate a folding lens hood. The f/2.0 Summicron was released in its new mounting with built-in hood and both

LEICA M STANDARD LENSES

LEICA M STANDARD LEINSES										
Period	Name	I	Elements	Filters	Finish					
1954-1961	Elmar	50mm f/3.5	4-3	E39	Collapsible/chrome					
1954-1957	Summicron	50mm f/2.0	7-6	E39	Collapsible/chrome					
1954-1960	Summarit	50mm f/1.5	7-5		Rigid/chrome					
1956-1968	Summicron	50mm f/2.0	7-6	E39	Rigid/chrome-black					
1957-1974	Elmar	50mm f/2.8	4-3	E39	Collapsible/chrome					
1959-1961	Summilux	50mm f/1.4	7-5	E43	Rigid/chrome-black					
1962-1994	Summilix	50mm f/1.4	7-5	E43	Rigid/black					
1966-1975	Noctilux	50mm f/1.2	6-4	VIII	Rigid/black					
1969-1979	Summicron	50mm f/2.0	6-5	E39	Rigid/black					
1976	Noctilux	50mm f/1.0	7-6	E58/E60	Rigid/black					
1979-1994	Summicron	50mm f/2.0	6-4	E39	Rigid/black-chrome					
1994	Summicron	50mm f/2.0	6-4	E39	Rigid/black-chrome hood					
1994	Noctilux	50mm f/1.0	7-6	E60	Rigid/black hood					
1995	Summilux	50mm f/1.4	7-5	E46	Rigid/black-chrome-titanium hood					
1995	Elmar	50mm f/2.8	4-3	E39	Collapsible/chrome-black					

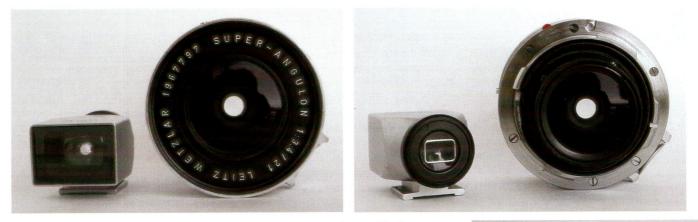
the minimum focusing distance was reduced from a meter to 70 cm (as in the f/2.0 Summicron) and three choices of finish were offered: black chrome, silver chrome and titanium.

New series f/.28 Elmar

Production was unexpectedly started again on the f/2.8 Elmar collapsible mount lens, previously included as part of the Leica commemorative M6J outfit. Recomputed using new glasses and with re-designed barrel with a protruding ribbed focusing ring, the new f/2.8 Elmar somewhat renewed the by-gone splendor of this historic lens; it was produced in both chrome and black finish.

Wide angle lenses

When production on the Leica M3 started in 1954, the only wide angle available with bayonet mount was the 35mm f/3.5 Summaron wide angle, new-mount version of the old 1946 Summaron screw mount comprised of six elements. To use



21mm f/3.4 Super Angulon and finder

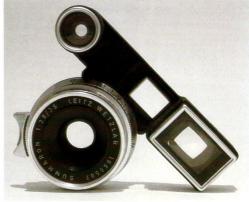


35mm f/3.5 Summaron

the Summaron on the Leica M3, a viewfinder attachment was required because the Leica M3 finder did not have a frameline for lenses less than 50mm. To get around this problem, after having built approximately 20,000 of these lenses, Leitz began producing them with an additional finder to be attached on the front of the camera to enlarge the frameline. This "eyes" attachment was also included in the subsequent 35mm Summaron wide angle that started being produced in 1958 with six elements and speed of f/2.8. The two 35mm Summaron wide angles with chrome finish mount E39 filters, stop-down to f/22 and focus starting at a meter for the former and 70cm for the latter. In 1958, alongside these Summarons, there appeared the 35mm Summicron wide angle with eight elements and the same speed (f/2.0) as the 50mm Summicron. The f/2.0 Summicron focuses starting from 70cm, uses E39 filters and has an "eyes" viewfinder attachment to mount on the Leica M3. Naturally, if the Summaron and Summicron lenses are used on the Leica M2 with the finder with 35mm viewing field, the "eyes" are not required. The f/3.5 Summaron was taken out of production in 1960 while the f/2.8 Summaron survived through to the end of Leica M4



35mm f/2.8 Summaron



35mm f/2.8 Summaron with "eyes"



35mm f/2 Summicron M

production without undergoing changes. In 1969, however, the f/2.0 Summicron was recomputed to six elements and given a black finish, while the minimum aperture was changed from f/16 to f/32.

In 1958, the first high-performance Leica screw mount wide angle lens was built and the same lens was adapted with a mount for the Leica M. While for screw Leicas screw mount lenses for a 28mm focal length were produced both before and after the war, for the Leica M3, the short focal length available between 1954 and 1958 for the Leica M3 was 35mm. The extreme wide angle made by Leitz on license from Schneider was the 21mm f/4 Super Angulon with nine elements and an angle of field greater than 90°. Preceded by the 21 mm Biogon Zeiss and followed



35mm f/2 Summicron M

by the 21mm Super Angulon, it qualifies as the most powerful wide angle lens of its day. Built only in chrome finish, the 21mm Super Angulon focuses starting at 40cm and stops-down to 22. Despite the wide angle it covers, the 21mm Super Angulon still mounts E39 filters. In 1963 the Super Angulon was recomputed, reduced to just eight elements with a speed of f/3.4, while filter diameter was increased to E48. The Super Angulon is a special lens, and using it on a Leica requires a special viewfinder. Coupling with the range finder also requires special measures and only functions from 70cm to infinity, and with the Leica M3 from just a meter to infinity. The Super Angulon remained in production until 1980, first in chrome finish and from 1968 on in

black finish.

In 1961, a new wide angle took its place alongside the 35mm f/2.8 Summaron and f/2.0 Summicron. Called the Summilux, this 35mm f/1.4 has seven elements computed with the use of lanthanum glasses. The f/1.4 Summilux existed for a long while with only minor changes to its casing and without undergoing major changes to its lens formula. It utilizes E41 filters, stops down to f/16 and focuses down to 65cm. Over the years 1961 to 1995, it was finished in silver chrome and in black, but in 1992 it was also produced with titanium finish to be mounted on the titanium-covered Leica M6.

In 1965, the gap between lenses with 35mm focal length and the 21mm Super Angulon was filled by the new 28mm f/2.8 Elmarit with nine elements. Made only in black finish, the 28mm Elmarit mounts E48 filters, focuses down to 70cm and stops down to f/22. The rear element of the 28mm Elmarit, like that of the Super Angulon, recesses into the camera body until it almost touches the shutter curtain and using it requires a viewfinder attachment. In 1972, the lens formula was changed, using new glasses and reducing the number of elements to eight, thus gaining space between the rear element and the shutter curtain.

Also in 1972, a very special lens was made available for the Leica M—the Hologon made by Carl Zeiss. With a fixed f/8 aperture and comprising just three, highlycurved elements of which the central one is almost spherical, the Hologon's nominal focal length is 15mm and covers an angle measured on the diagonal of 110°. Subject

to a strong drop-off in luminosity at the edges, the Hologon lens can be used with a grey graduated density filter that reduces the nominal speed of the f/8 lens by more than a stop. The Hologon lens must be used with a special viewfinder with builtin spirit bubble level. In black finish only, a very limited number (less than 500) of Hologon lenses were made during the four short years it was in production, and it is. perhaps the rarest of all Leica M lenses. At the end of the 1970s, with the resumption of production of rangefinder Leicas, some of the Leica M wide angle lenses were improved. In 1970, updated versions of the 35mm f/2.0 Summicron and 28mm f/2.8 Elmarit were put into production, and in 1980 the 21mm Super Angulon was replaced by the 21mm Elmarit. The new Summicron was redesigned to use seven elements and its mount was also renewed, and it appeared in a predominantly black finish, to be joined in 1992 also by a chrome finish. The new 28mm Elmarit had eight elements and was only produced with black finish with E49 filter mount. On the Leica M6 equipped with 28mm frame finder, no finder attachment was required. But the overly small image provided by the finder convinced the manufacturer to change the Leica M6 viewfinder with the 1997 model 0.85 that included only the 35mm frame with a larger and more legible image. The 21mm Elmarit is made up of eight elements with the rear section close to the shutter curtains. Its maximum aperture is f/2.8. The 21mm Elmarit has a black finish and filter diameter is E49. Following the halt on production of the

Elements Filters Finish

	1 (Gentle				
1954-1960	Summaron	35mm f/3.5	6-4	E39	Chrome
1958-1963	Super Angulon	21mm f/4.0	9-4	E39	Chrome
1958-1974	Summaron	35mm f/2.8	6-4	E39	Chrome
1958-1969	Summicron	35mm f/2.0	8-6	E39	Chrome-black
1961-1995	Summilux	35mm f/1.4	7-5	E41	Chrome-black-titanium
1963-1980	Super Angulon	21mm f/3.4	8-4	E48	Chrome
1965-1972	Elmarit	28mm f/2.8	9-6	E48	Black
1969-1979	Summicron	35mm f/2.0	6-4	E39	Black
1972-1976	Hologon	15mm f/8	3-3		Black
1972-1979	Elmarit	28mm f/2.8	8-6	E48	Black
1979-1993	Elmarit	28mm f/2.8	6- <mark>6</mark>	E49	Black
1979-1997	Summicron	35mm f/2.0	7-5	E39	Black-chrome
1980-1997	Elmarit	21mm f/2.8	8-6	E49	Black
1990-1994	Summilux Aspherical	35mm f/1.4	9-5	E46	Black
1993	Elmarit	28mm f/2.8	8-7	E46	Black
1994	Summilux Aspherical	35mm f/1.4	9-5	E46	Black-chrome-titanium
1996	Elmarit Aspherical	24mm f/2.8	7-5	E55	Black-chrome
1997	Elmarit Aspherical	21mm f/2.8	9-7	E55	Black-chrome
1997	Summicron Aspherical	35mm f/2.0	7-5	E39	Black-chrome
1998	Tri Elmar Aspherical	28-35-50mm f/4	8-6	E55	Black-chrome

Hologon, the 21mm Elmarit became the most powerful wide angle in the Leica rangefinder system, returning to the situation that had existed in 1958.

In 1990, flanking the 35mm f/1.4 Summilux, a new lens with the same focal length and same speed of f/1.4 was released, comprised of nine elements, two of which aspherical. With excellent lens performance, the f/1.4 aspherical Summilux was recomputed in 1994 to include nine elements, one of which aspherical. Unchanged in terms of its features, minimum focusing distances, minimum aperture and E46 filter diameters, the new Aspherical Summilux came with a chrome or titanium finish, as well as the black finish of its predecessor. In 1993, the 28mm f/2.8 Elmarit was recomputed once again, becoming more compact, with eight elements, E46 filter diameter and with black finish only. The 21mm Elmarit and 35mm f/2.0 Summicron were recomputed in 1997 and both made use of aspherical lenses. The formula of the 21mm aspherical Elmarit had nine elements, E55 diameter filters and either black or chrome finish. The formula of the 25mm f/2.0 aspherical Summicrion retained 7 elements, of which one aspherical, and all other features, including the black or chrome finish, remained unchanged.

In 1966, a new lens was inserted between the 21mm Elmarit and 28mm Elmarit the 24mm f/2.8 aspherical Elmarit with seven elements and E55 filters. As with the other wide angle lenses, the 24mm aspherical Elmarit requires the use of a view finder attachment. In line with contemporary trends, the 24mm was made with both black and chrome finish.

With a range of wide angle lenses including 21mm, 24mm, 28mm and 35mm focal lengths, the Leica M system seemed to have found a perfect balance with not too large gaps between one focal length and the next and with a wide range of choice. But in 1998, Leica unexpectedly released a tri-focal lens called the Tri-Elmar ASPH which offered the choice of three focal lengths: 28mm, 35mm and 50mm. Comprised of eight elements and maximum speed of f/4.0, the Tri-Elmar-weighing in at just 340 grams-took the place of three lenses, following a strategy that perhaps went against Leica's original philosophy. Minimum focusing distance was one meter, filter diameter E55 and it came finished in either black or chrome.

The telephoto lenses

In 1954, the Leica M3 outfit had just two

LEICA M WIDE ANGLE LENSES Period Name

lenses longer than the standard 50mm, both part of the screw Leica outfit from the early 1930s. They were the 90mm f/4.0 Elmar and 135mm f/4.5 Hektor, both with four elements. Both of the Leica M3 bayonet mount telephotos retained the same basic features of the corresponding screw Leicas, including the rigid mount, E39 filter diameter and minimum focus of one meter for the 90mm Elmar and oneand-one-half meters for the 135mm Hektor. Both telephotos were produced in a chrome finish with a black ring at the rear. Over the course of 1954, a version of the 90mm f/.40 Elmar with collapsible mount similar to that on the 50mm Elmar lenses was released. The goal was to make the Leica M3 with 90mm telephoto just as portable as the Leica M3 with standard or wide angle lens. In order to be inserted into the camera body, the collapsible mount 90mm Elmar telephoto had to be set to infinity. The two 90mm f/4.0 Elmar lenses with rigid and collapsible mount remained in production until 1968, but were joined in 1964 by a third recomputed 90mm f/.40 Elmar with the number of lens elements reduced to three. This third 90mm f/4.0 Elmar was also made with chrome finish and black ring at its base, and remained in production until 1968.

In 1957 a 90mm f/2.0 telephoto comprised of six elements was released, bearing the name Summicron like all the other 50mm and 35mm f/2.0 lenses. The original 90mm Summicron with chrome finish and E48 filters had aperture selection and focusing rings that were closely and uniformly ribbed. After less than 400 of these were produced, the 90mm Summicron mounting was changed in 1959 to include rings that had alternating smooth and ribbed segments and built-in lens hood. With this mount, the 90mm Summicron was manufactured with chrome or black finish until 1979.

In 1959, a new lens with 90mm focal length was issued—a medium-range focal length especially useful for portrait photography. The new lens was called the Elmarit and its maximum speed was f/2.8, placing it between the f/4.0 Elmar and f/2.0 Summicron. The Elmarit mount was very similar to that of the 90mm Elmar with its rigid mount and it also utilized the same E39 filters and chrome finish with black ring. A fully anodized finish only became available at the end of its production life in the early 1970s. In an excess of perfectionist zeal, in 1964 Leitz offered another 90mm lens, bringing to five the number of lenses with this focal length offered at the same time. The latest arrival was called the Tele Elmarit with



75mm f/1.4 Summilux M, black



90mm f/4 Elmar C, black



90mm f/4 Elmar, collapsible



90mm f/4 Elmar, rigid



five elements, a speed of f/2.8, compact size and all-chrome finish, to which an anodized black finish was added later. But the 90mm was not the only focal length to offer a fairly wide range of lens choices. The 135mm also underwent significant development and expansion. In 1960, the 135mm f/4.5 Hektor gave way to the 135mm f/4.0 Elmar that was comprised of 4 elements, used E39 filters and had a minimum focusing distance of one-and-a-half meters, like its predecessor, offering a half stop more. The Elmar also looked very much like the Hektor and had the same chrome finish with a wide band at the rear finished in black vulcanite. In 1965, the 135mm f/4.0 Elmar was replaced by the Tele Elmar with the same focal length and speed, redesigned with 5 elements, more compact formula and more streamlined, modern appearance finished in black. Destined to enjoy a long life, the 135mm f/4.0 Tele Elmar underwent slight changes in appearance over the years and, starting in 1993, included a built-in folding lens hood as standard equipment.

Alongside the 135mm f/4.0 Elmar, in 1963 production began on the 135mm f/2.8 Elmarit with five elements. The 135mm Elmarit stopped-down to f/32, compared to f/22 of the Elmar. It was supplied in a black finish complete with an "eyes" viewfinder attachment to enlarge the overly-small image that appeared in the Leica finder. The 135mm Elmarit used VII-series filters and had a built-in two part lens hood. In 1973 the 135mm f/2.8 Elmarit was modified and recomputed. It retained its 5 elements, minimum focusing distance of one-and-a-half meters and "eyes" finder attachment. However, the lens hood became a single piece and filter diameter was increased to E55. Production of the fastest 135mm Leica M continued for over twenty years, ceasing in 1997.

Between Noctilux and Summicron Apo

The year 1980 saw the release of a new member of the Leica rangefinder Summilux lens family that had as its maximum speed an aperture of f/1.4,



90mm f/2 Summicron



90mm f/2 Summicron

previously seen on the 1959 50mm Summilux and 1961 35mm Summilux. The new Summilux lens had a focal length of 75mm, all-black finish and 7 elements. Filter diameter was E60 and the lens stopped down to f/16. With a speed equal to that of the standard lens and a focal length that fell between 50mm and 90mm, the 75mm Summilux is the perfect lens to use in ambient lighting for portraits and theater shooting. In 1982, the mount of the 75mm Summilux was modified, increasing in weight and gaining a builtin lens hood, but it was still available only with black finish.

LEICA MI IELEPHOIO LENSES											
Period	Name	E	lements	Filters	Finish						
1954-1968	Elmar	90mm f/4.0	4-3	E39	Rigid/chrome						
1954-1968	Elmar	90mm f/4.0	4-3	E39	Collapsible/chrome						
1954-1960	Hektor	135mm f/4.5	4-3	E39	Chrome						
1957-1958	Summicron	90mm f/2.0	6-5	E48	Rigid/chrome						
1959-1974	Elmarit	90mm f/2.8	5-3	E39	Rigid/chrome-black						
1959-1979	Summicron	90mm f/2.0	6-5	E48	Rigid/chrome-black						
1960-1965	Elmar	135mm f/4.0	4-4	E39	Chrome						
1963-1973	Elmarit	135mm f/2.8	5-4	S7	Black/hood						
1964-1968	Elmar	90mm f/4.0	3-3	E39	Rigid/chrome						
1964-1974	Tele Elmarit	90mm f/2.8	5-5	E39	Rigid/chrome-black						
1965	Tel Elmarit	180mm f/2.8	5-3	S7	Black (300 pcs.)						
1965-1992	Tele Elmar	135mm f/4.0	5-3	E39	Black						
1973-1989	Tele Elmarit	90mm f/2.8	4-4	E39	Rigid/black						
1973-1997	Elmarit	135mm f/2.8	5-4	E55	Black/hood						
1980	Summicron	90mm f/2.0	5-4	E55	Rigid/black-chrome						
1980-1982	Summilux	75mm f/1.4	7-5	E60	Rigid/black						
1982	Summilux	75mm f/1.4	7-5	E60	Black/hood						
1989	Elmarit	90mm f/2.8	4-4	E46	Black-chrome-titanium						
1992-1998	Tele Elmar	135mm f/4.0	5-3	E46	Black/hood						
1998	Apo Telyt	135mm f/3.4	5-4	E49	Black/hood						
1999	Apo Summicron Asph	90mm f/2.0	5-5	E55	Black/hood						
	1 1										

Again in 1980, alongside the 75mm Summilux was presented the new version of the 90mm f/2.0 Summicron comprised of 5 elements and new black or chrome mount with built-in lens hood. E49 and later E55 filters were used, the minimum focus length was 90cm and minimum aperture f/16. The 90mm f/2.0 Summicron was only replaced after 20 years in 1999 by the new 90mm f/2 Summicron Apo aspherical made up of 5 elements with E55 filters and superior lens features. Available in black finish, the 90mm Summicron Apo had a built-in lens hood, one meter minimum focus and stopped down to f/16.

In 1989 the 90mm f/2.8 Tele Elmarit was replaced by the 90mm f/2.8 Elmarit that utilized four elements and new mount with built-in lens hood and mount for E46 filters. At the beginning available only in black finish, starting in 1997 the 90mm f/2.8 Elmarit was also made available in chrome and titanium finish.

In 1998, 135mm telephoto lenses for Leica M were replaced by a new lens formula called the 135mm f/3.4 Apo Telyt with five elements, E49 filters, built-in hood and black finish. The release of the new 90mm Apo Summicron and 135mm Apo Telyt lenses means that the search for evermore advanced solutions has not ceased and that the Leica M system—after almost a half century of existence—is ready to take on the third millennium.

Long telephoto lenses for Leica M on Visoflex

With the birth of the Leica M3, the

LEICA M TELEPHOTO LENSES



35mm f/4 Elmar



135mm f/4 Tele Elmar



135mm f/4.5 Hektor



135mm f/2.8 Elmarit

135mm f/4 Tele Elmar

problem of the use of long focal length, non-rangefinder coupled lenses was solved without trauma and without having to fall back on any new products. The wellknown Visoflex reflex system that had been in production since 1952 was offered for the Leica M3 by simply equipping it with the new bayonet mount. With the Visoflex, starting in 1954 the five-element screw mount 200mm and 400mm Telyt lenses, dating respectively from 1935 and 1937, could be used. In 1955, the 400mm Telyt was recomputed to four elements and in 1960 the 200mm Telyt also underwent a similar change, switching to four elements in the new version with speed upped to f/4.

In 1960, the Visoflex II was released, a new mirror adapter that only protruded 41mm from the camera body making it much shorter than the existing Visoflex. The Visoflex II was made both with screw and bayonet mount. The new telephoto lenses could be mounted on the Visoflex, as could the older telephotos, thanks to a simple adapter ring. The new 4-element 280mm f/4.8 Telyt, dated 1961, was built with screw mount for the Visoflex I and to be mounted on the Visoflex II, an OUBIO adapter ring had to be used. The 200mm f/4.0 Telyt could be mounted directly on the Leica M body without the mirror box, by using a TXBOO adapter tube and separate viewfinder not coupled to the rangefinder. Alternately, the lens unit of 90mm and 135mm telephoto lenses



Visoflex III



65mm f/3.5 Elmar, black



65mm f/3.5 Elmar, chrome

200mm f/4 Telyt

could be removed from their rigid mount to be mounted on the Visoflex II using adapter rings.

The use of the Visoflex, which was inserted between the long focal length lenses and the camera body, in a certain way cancelled out the differences that existed between the bayonet and screw Leicas, creating a bridge between the two systems.

Following the end of Leica screw

production in 1960, the manufacture of long telephotos to be used with the Visoflex continued for a number of years, and it was only in 1965 that a long telephoto with M bayonet not for use on the Visoflex I was manufactured. In 1962, the mirror mechanism was modified on the Visoflex II to provide instant mirror return, and in 1963 the Visoflex III for Leica M was released. The Visoflex III can be mounted and dismounted from the

LEICA M LONG TELEPHOTO LENSES ON VISOFLEX											
Period	Name		Elements	Filters							
1935-1959	Telyt	200/4.5	5	E48	Visoflex I						
1937-1956	Telyt	400/5.0	5	E85	Visoflex I						
1956-1967	Telyt	400/5.0	4	E85	Visoflex I						
1960-1984	Telyt	200/4.0	4	E58	Visoflex I						
1960-1970	Telyt	280/4.8	4	E58	Visoflex I						
1965	TeleElmarit	180/2.8	5	S7	Visoflex II-III						
1966-1970	Telyt	400/5.6	2	S7	Visoflex II-III -Televit						
1966-1970	Telyt	560/5.6	2	S7	Visoflex II-III -Televit						
1970-1984	Telyt	280/4.8	4	E58	Visoflex II-III						
1971-1984	Telyt	400/6.8	2	S7	Visoflex II-III -Televit						
1971-1974	Telyt	560/6.8	2	S7	Visoflex II-III -Televit						

camera without having to first remove the pentaprism finder.

In 1964 Leitz presented the Leicaflex, the first Leica with reflex finder, but despite this, production of long telephotos for the Leica M was not called into question and the Visoflex mirror system continued to be used for the next twenty years. After 1965, a number of long focal length lenses designed exclusively for use on Visoflex Leica M cameras, as well as a number of telephoto lenses for the Leicaflex, were manufactured.

In 1965, just 300 of the 180mm f/2.8 Tele Elmarit lens were built, comprised of five elements and with black finish. The 180mm Tele Elmarit focused down to 180 cm, had a built-in hood and series 7 filters. The 180mm Tele Elmarit is a very rare lens, of which only a very few were produced and over such a short period of time that it never appeared in any of the Leitz Wetzlar catalogs, just those of Leitz New York. The bayonet mount of the 180mm f/2.8 Tele Elmarit made it possible to mount it directly on the Visoflex II and

				Ι	JEI	CA	M	[L]	EN	S (R()N	OL	0	GY									
YEAR	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	00	01
Elmar 50/3.5	X	X	X	Х																					
Summicron 50/2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Х	X	X	X	X	X
Summarit 50/1.5	X	X	X	X																					
Elmar 50/2.8			X	X	X	X	X	X	X	Х	X										X	X	X		X
Summilux 50/1.4				X	X		X	X	X	X	X	X	X	X	X	X	X	X	·X	X	X	X	X	X	X
Noctilux 50/1.2							X	X	X	X	X														
Noctilux 50/1.0												X	X	X	X	X	X	X	X	X	X	X	X	X	X
Summaron 35/3.5	Х	X	Х	X																					
Summaron 35/2.8			X	X	X	Х	X	X	X	X	X														
Summicron 35/2			X	X	X	X	X	X	X	X	X	Х	X	X	X	X	Х	Х	X	X	X		X		Х
Summilux 35/1.4					X	X	X	X	X	X		X		X		X				X					
Super Angulon 21/4			X	X	X																				
Super Angulon 21/3.4						X	X	X	X	X	X	X	X	X											
Elmarit 28/2.8							X	X	X	X		X			X	X	X	X	X	X	X	X	X	X	X
Hologon 15/8					X	X	X																		
Elmarit 21/2.8														X	X	X	X	Х	X	X	X		X		
Summilux Asph 35/1.4																					X	X	X	X	X
Elmarit Asph 24/2.8																						X		X	X
Elmarit Asph 21/2.8																							X	X	X
Summicron Asph 35/2																							X	X	X
Tri Elmar 28-35-50/4																							X	X	X
Elmar 90/4	X	X	X	X	X	X	X	X																	
Hektor 135/4.5	X	X	X	X																					
Summicron 90/2			X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		
Elmarit 90/2.8				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Elmar 135/4				X	X	X																			
Elmarit 135/2.8						X	X	X	Х	X	X	X	X	X	X	X	X	X	X	X	X		X		
Tele Elmarit 90/2.8						X	X	X	X	Χ				Х			X								
Tele Elmarit 180/2.8							X																		
Tele Elmar 135/4							X	Х	Х	X	X	X	X	Х	X	X	X	X	X	Х	X		X		X
Summilux 75/1.4															X		X			X		X	X	X	
Apo Telyt 135/3.4																						X		X	X
Telyt 200/4.5	X	X	X																						
Telyt 400/5	X	Х	Х	X	X	X	X																		
Telyt 200/4				X	X	X	X	X	X	X	X	X	X	X	X	X									
Telyt 280/4.8				X	X	X		X		X		X			X	X									
Telyt 400/5.6								X	X																
Telyt 560/5.6								X	X																
Telyt 400/6.8									_	X	X	X	Х	X	X	X									
Telyt 560/6.8										X					X										

FIGA MI ENG CHIDONOLOGY

Visoflex III, but not on the Visoflex I. There followed in 1966 the introduction of the 400mm and 560mm Telyt telephotos, production of which continued until 1985. This indicates the special attention Leitz dedicated to Leica M telephotography, despite the development of a number of Telyt and Apo Telyt telephoto lenses with R bayonet mount for the Leicaflex. Leitz continued production of the Telyt line for Leica M with Visoflex for at least two decades, apparently flying in the face of all logic. The 400mm f/5.6 Telyt and the 560mm f/5.6 Telyt were presented at the 1966

Photokina and were designed for use with

the Visoflex II and III, and with the rapid focus Televit with pistol grip and quick focusing button. The two telephoto lenses were comprised of just two elements combined into a single unit, and used series 7 filters.

In 1970, these two lenses were joined and later replaced—by the 400mm f/6.8 Telyt and 560mm f/6.8 Telyt that utilize achromat lenses. The focusing distance of the two lenses is comparable to that of the first series Telyt lenses—360cm for the 400mm and 640cm for the 560mm, but thanks to an extension ring the distances can be reduced to 226cm for the 400mm and 386cm for the 560mm. In 1970, the 280mm f/4.8 Telyt was also introduced, with direct mount to the Visoflex II and Visoflex III and usable with the Televit quick focus device.

Production of the 200mm, 280mm, 400mm and 560mm telephoto lenses was halted in 1985, as was production of the Visoflex system. It marked an indelible sign of the coming of age of the Leica R system in this sector, and the realization by Leitz management of the futility of continuing production of two overlapping lines.

Danilo Cecchi

CONTAREX SYSTEM: THE 450-FRAME BACK



Contarex Super Electronic with motor and 450-frame back

With its Contarex system Zeiss Ikon decided to offer the "ultimate system", that is, a group of cameras, lenses and accessories that would represent the very top in terms of construction and design. This was done despite market prices, in search of a level of quality that would be second-to-none. This project would ultimately be the company's ruin, but it has left collectors one of the most coveted camera systems, especially for its lenses.

Perhaps one of the lesser-known aspects of the Contarex system is its range of accessories which, except for the filters and lens hood, are only known through catalog illustrations.

High-capacity magazine back

We have the pleasure of presenting here an exceptional accessory—the 450-frame back complete with original box. This accessory is a true rarity even for the most devoted Zeiss collector. This special back, catalog number 20.0310, could hold 17 meters of film with a capacity of 450 frames. It was designed for use with the Contarex SE, preferably together with its corresponding film advance motor. With the back, weighing 1.250 kg, the overall weight of

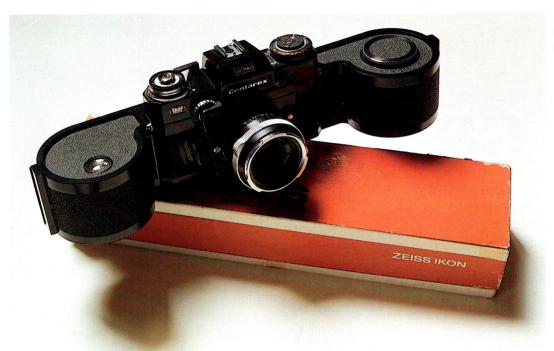
the camera, back, motor with battery pack and normal lenses was a full 3.1 kg.

If desired, the Telesensor could also be added to make use of the SE's electronic shutter for aperture-priority automatic exposure control, bringing the total weight to 3.25 kilograms. Thus equipped, the "monster" Contarex could take on any situation, as long, of course, as one was ready to pay the stratospheric prices for the camera body and its costly accessories.

A rare accessory

With its high-capacity back, the Zeiss Ikon wanted to outdo its competitors, offering

Back applied to the Contarex SE with frame counter window on upper surface







Back and components

450-frame back with original box

this "super back" instead of a merely "simple" 250-frame back. This 450-frame back was produced in the early 1970s. The back shown here bears serial number 1127 and it is possible that not many more than this number were produced given the fact that only slightly more than 3000 Contarex SE cameras were ever made.

This accessory fits in perfectly with the rest of the Contarex system. It is made entirely of metal and all detailing is superbly finished with high-quality painting.

The back is equipped with a double frame counter visible from both above and below. The two film cassettes with catalog number 20.0311 are masterfully made, fit together perfectly and the three individual components that make up the film roll holder are of very high quality. Next to the frame counter is the film speed indicator.

If there was still any doubt in anyone's

mind, this accessory is the concrete proof of the superiority of Zeiss photographic technology, but it is also evidence of the delusions of grandeur that infected German engineers at the beginning of the 1970s, enticing them to follow paths that, from a commercial standpoint, would prove to be dead ends.

Text and photos by Pierpaolo Cancarini

THE GREAT WERRA

The most original family of cameras from the DDR



Werra I camera, first version dated 1955 with olive-green finish and reversible lens hood.

Cameras produced in the DDR are famous for the lack of imagination they exhibit and virtually across-the-board conformity with pre-war models. This situation continued for many years-from immediately after the war up to the first half of the Sixties-and saw the re-release of cameras such as the Reflex Korelle and Primarflex medium-format single reflex cameras, the 24x24mm Tenax (redubbed Taxona), the folding 6x9 Ikonta (renamed Ercona), the 35mm Praktiflex and Exakta reflexes, and many other cameras that differed only very slightly from pre-war models. Naturally there were noteworthy exceptions in this humdrum array, cameras that were new and original. Among these were the Contax S that appeared in 1949,

based on an existing project developed before the war in which major changes were made. Among the all-new offerings were the single reflex Praktina which, as early as 1952, offered features such as a modular approach and motor drive, and the 6x6 Exakta dated 1950 with its innovative styling. Alongside the reflex cameras that formed the major part of camera production in the DDR, in 1954 output began of a totally original 35mm camera—the Werra.

Werra, nobody's child

The 6x6 reflex and 35mm cameras built in Dresden in the post-war period were the offspring of such famous names as Kochmann, Bentzin, Zeiss Ikon, KW and

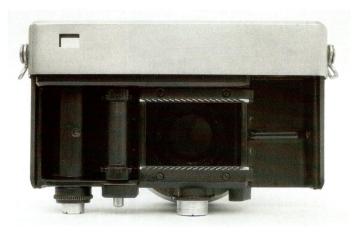
Ihagee, but the Werra was not derived from any pre-war project or model and a brand name had to be found for it. In addition, the Werra was not even built in Dresden. but in Eisfeld where the Sonnar Jena lenses were also manufactured. With total nonchalance, the Werra was given the Carl Zeiss Jena name, completely ignoring the fact that Carl Zeiss, Jena was an optics, not a mechanical engineering firm and had never produced cameras and-to complicate matters-was in the midst of an international legal dispute over the use of the name. The camera itself was given the name Werra after the river that flows near Eisfeld before joining the Fulda at Munden to form the Weser. Many years later Ihagee, deprived of the name Exakta



Werra I with green finish and flat top plate



Base plate of Werra I



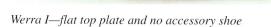
Werra with back open



Werra with back removed



Detail of the Werra I with synch terminal, covered winder ring and Synchro Compur shutter



thanks to the heirs of Steenbergen and in search of another name for its most recent reflexes, would look to another river to create the name Elbaflex.

An innovative project

The body of the Werra camera is completely smooth without any protruding controls that give it a square, compact profile, the only outwardly-extending element being the lens barrel. For its lens, early cameras mounted a modest 50 mm f/3.5 Novonar that was immediately replaced by a 50mm f/2.8 Tessar that could be stopped-down to f/16 with focusing from 90cm to infinity. The upper casing of the Werra was totally smooth without accessory shoes or controls and at first was almost flat to later take on a slightly humpbacked shape with a built-in shutter release flush with the top plate itself. The front part of the casing was high and smooth with, on the left, the large window of the optical finder. To wind the shutter and advance the film, the Werra had no knob, lever, crank or button. To wind the Werra, the large ring around lens mount itself had to be turned clockwise. This motion simultaneously advanced the film one frame and wound-on the shutter. The



Werra II with exposure meter door lifted



Werra III with rangefinder and interchangeable lens in first version, equipped with standard 50mm f/2.8 Tessar lens



Werra IV with exposure meter and rangefinder, and with lens hood mounted to protect standard lens



Werra IV equipped with 100mm f/4 Cardinar telephoto lens



Werra IV with standard 50mm f/2.8 Tessar lens, hood and 100mm f/4 Cardinar lens



Upper casing of the Werra IV with exposure meter needle highlighted



Two 100mm f/4 Cardinar telephoto lenses; black finish on left, green finish on right



Cardinaro 100mm f/4 and 35mm f/2.8 lenses for Werra



Werramatic, first type, without finder mask



Werra IE, last type, with flash socket, rounded top plate and different front finishing

Werra used a Compur Rapid shutter with speeds of one second to 1/500 of a second. A cone-shaped lens hood completed the camera. When the camera was not in use, the hood reverse-mounted became the cap for the lens and shutter. The base plate of the Werra could be removed together with the back and contained the opening latch, the reversing clutch, frame counter and film rewind crank. The synch terminal was on the right side.

So equipped with its olive green finish, the Werra caught the public's attention thanks to its smooth soap-bar shape, its clever reversible lens hood and unusual winding system. Simple and precise, the Werra took its place alongside cameras being produced in West Germany and took on markets beyond the Iron Curtain, undergoing continuous modification and refinement.

Variants and new models

In models built after 1956, the color finish chosen was generally black, in line with mainstream camera production and perhaps because green was seen as too military. But the original green finish was never completely abandoned and can still be found on later cameras. The Tessar lens was brought to a minimum focusing range of 80cm with minimum aperture f/22 and, in addition to the Compur Rapid, the Synchro Compur shutter also began to be utilized. The unfinished aluminum winding ring was replaced with a similar ring covered in leather of the same type as that used on the camera body. On some pieces a modest Vebur 1/250 sec. shutter

was mounted, but the majority of second generation Werra's had the Prestor 1/500 sec. On higher-class models a new type of Prestor shutter with a maximum speed of 1/750 sec was mounted. The 1/750 sec speed placed the Werra in that select group of cameras equipped with a between-thelens shutter with speeds over 1/500 sec. Starting in 1957, other Werra models were created alongside the basic model, subsequently named the Werra I. In addition to the Werra I with normal viewfinder without rangefinder or exposure meter, production was begun of the Werra II with built-in selenium meter that did not change the camera's overall profile. The photocell, protected by a small moving door, was positioned on the front exactly opposite that of the viewfinder. The needle on the top plate showed light values on a scale of 1 to 7 and the disk on the back of the camera set coupling speeds. 1958 saw the start of production of more ambitious Werra models with interchangeable lenses. The Werra III offered the same performance levels as the base model, but was also equipped with a short-base rangefinder coupled to the finder and a 50mm f/2.8 Tessar removable lens with bayonet mount. Instead of the Tessar, a six-element 35mm f/2.8 Flektogon with 80cm minimum focus or a 5-element Cardinar 100mm f/4.0 with 150cm minimum focus, could be mounted. Neither of these two lenses required an auxiliary finder because the finder on the Werra III covered the shooting of the Flektogon and incorporated the frames for the other two focals. In addition to the

Werra III, a fourth model, the Werra IV, was placed on the market that had both a rangefinder and exposure meter as well as interchangeable lens. In 1960, the Werra V was presented that re-offered the features of the Werra IV but with the exposure meter coupled to the aperture range.

From the Werra to the Werramatic

The early 1960s saw the proliferation of Werra models, but the basic features remained the same as those in the models already described. The feature that distinguished these new models was a built-in exposure meter coupled to shutter speed with the needle and meter readings displayed in the finder. The cameras equipped with the new type of exposure meter were called Werramat, off-spring of the Werra II. They did not have a rangefinder and mounted a noninterchangeable Tessar lens. Accompanying the Werramat was the Werramatic, derived from the Werra V, with a completely interchangeable lens, multi-focal frame finder and coupled meter. The Werramat and Werramatic only replaced the Werra IV and Werra V, while the Werra I and Werra III without exposure meter, and even the Werra II with uncoupled meter, remained in regular production.

Werra E, the last act

In 1964, the visual design of the Werra was changed slightly: an accessory shoe was added to the top plate, a flash coupling system with automatic guide number was



Werra IIIE, last type, with flash socket, rounded top plate and different front finishing



Werramat E with lens hood that protects the lens and inscription "Carl Zeiss Jena" on the finder mask



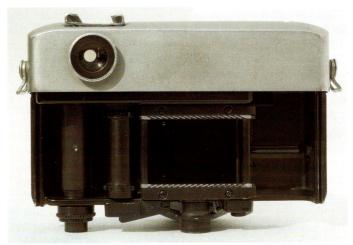
Werra IE with black finish and new finder mask



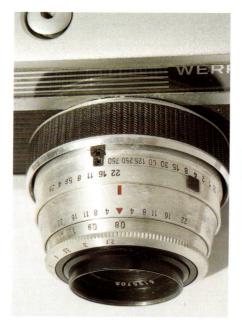
Werra IE—rounded top plate and with accessory shoe



Werra IE baseplate with pull-out rewind crank



Werra IE with back open





Detail of the Werra IE with synch terminal, covered winder ring and Restor RVS shutter

Detail of lens mount with 1/750





Werra III with rangefinder and interchangeable lens in first version, equipped with standard 50mm f/2.8 Tessar lens

Werra without finder and mount for microscope



Werralux exposure meter in original box

used and a logo with horizontal stripes was added to the front. These changes were made in all models then in production and the name changed to Werra E. As a result, there was the Werra IE with viewfinder, the Werra IIE with viewfinder and exposure meter, the Werra IIIE with rangefinder, multi-focal frame finder and interchangeable lenses, the Werramat E with coupled meter and Werramatic E with coupled meter, rangefinder, multi-focal frame finder and interchangeable lenses. A number of strange accessories were also made for the Werra that did not expand its operational capacity, but were an indication of the interest in this small photographic universe. In line with the trends of the day, a pair of stereo accessories to be mounted



Werra I and Werra IE base plates compared

Werra I and Werra IE backs compared

in front of the 50mm Tessar to obtain two identical frames were produced, as well as an intriguing shoe to be mounted on the base plate to hold caps or filters when not in use on the lens. However, the most ingenious accessory was a plate with drilled holes that made it possible to mount two Werra cameras on a single base plate to take two simultaneous shots with different types of film or lenses, or for stereo shots in 24x36mm format using the same lens and film on the twin cameras. A scientific version of the Werra was also manufactured to be attached to a microscope. Information also exists of an experimental version with automatic aperture selection, called the Werra Supermat or Werramat Super, of which only a few dozen were made. Production of the Werra cameras was abruptly halted in 1966, thus bringing to a close the story of this original and unusual camera from the East.

Werra and the collecting market

The Werra is a typical product of East Germany, collected by few, disparaged by many of which a high number of units

WERRA PROD	UCT	TON HIST	OPV	
WERRA		1954-1956	Tessar 50mm f/2.8	optical finder
WERRA	IA	1956-1960	Tessar 50mm f/2.8	optical finder
WERRA	IB	1960-1962	Tessar 50mm f/2.8	optical finder
WERRA	Π	1957-1964	Tessar 50mm f/2.8	exposure meter
WERRA	Ш	1958-1964	Tessar interchangeable	rangefinder
WERRA	IV	1958-1962	Tessar interchangeable	rangefinder and exposure meter
WERRA	V	1960	Tessar interchangeable	rangefinder and exposure meter
WERRAMAT		1961-1964	Tessar 50mm f/2.8	exposure meter
WERRAMATIC		1961-1964	Tessar interchangeable	rangefinder and exposure meter
WERRA	IC	1962-1964	Tessar 50mm f/2.8	normal finder
WERRA	IE	1964-1966	Tessar 50mm f/2.8	normal finder
WERRA	IIE	1964	Tessar 50mm f/2.8	exposure meter
WERRA	IIE	1964-1966	Tessar interchangeable	rangefinder
WERRAMAT	Е	1964-1966	Tessar 50mm f/2.8	exposure meter
WERRAMATIC	Е	1964-1966	Tessar interchangeable	rangefinder and exposure meter

were produced that, overall, are undervalued by most collectors. Nonetheless, it is a fairly interesting family of cameras from the standpoint of the technical innovations utilized and whose evolution over time is documented by a healthy succession of new models. A Werra in good condition can bring about one hundred dollars on the used-camera market in the US, while in Europe the price rises to over 100 marks only for models with interchangeable lens. The model for microscope-of interest only to scientific camera collectors—can bring prices more than double those of regular Werra cameras.

Danilo Cecchi Photos by Pierpaolo Cancarini

References

Fotofiche - Le Werra - Fotosaga Kadubleks Kamera Katalog Mc Keown Price Guide to Cameras Otto and Juttner, Zeiss Cameras 1945-1975 Hartmut Thiele, Werra. Die Geschichte der Kamera von Carl Zeiss Jena. Munich, 2002





Akarette I with f/3.5 Xenar lens (front view); note the double viewfinder and focal selector knob

The drive to rebuild in immediate postwar Germany was overwhelming and the photographic industry was no exception to this. In the East, just as in the West, there were strong signs of recovery and there was a determined desire to conquer the market at all costs. In addition to sector leaders who set their production plans to take up where they had left off with their pre-war output, making just slight technical and cosmetic changes, a number of new companies emerged characterized by enormous courage, innovation and tenacity. Sometimes these proved to be just passing phenomena, other times they persisted for a decade or two.

Among these lesser-known enterprises, yet significant for their place in history and productive output, was the Apparate und

Kamerabau company of Friedrichshafen, better known by the initials AKA. The Apparate und Kamerabau company was founded in 1946 in the French-controlled zone of Germany and later transferred to Friedrichshafen on the Lake of Costanza in 1951.

The first 35mm film camera designed and built by AKA was called the Akarette. It had a Prontor leaf shutter with speeds up to 1/200 or 1/300, 24x32mm format, interchangeable screw mount lens and viewfinder without rangefinder that protruded from the top plate.

Akarette

The innovative features offered by the Akarette were its interchangeable lens, something fairly rare in a camera with only modest performance levels, and the decision to equip the camera with a double viewfinder for both standard and medium-long focal lengths. The double constraint of the leaf shutter and tight width of the mount made it impossible to use wide angle and very fast lenses, but there was nothing that prevented the use of moderate portrait telephoto lenses as an alternative to standard focal lengths.

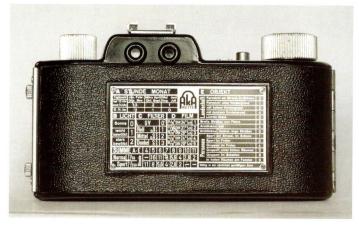
The Akarette's standard finder allowed framing of the field covered by 45 or 50mm lenses, while the second finder was used for medium focal lengths of 75mm. The finder's two rectangular windows were located side-by-side on the front, with the one for longer focal lengths closer to the optical center of the lens, and the focal length marked next to each window. The



Akarette I with f/3.5 Xenar lens (right front)



Akarette I seen from top plate; note the flash shoe, frame counter with scale to 40, DIN/Scheiner dial and 1/300 Gauthier shutter



Akarette I seen from back with double eyepiece and exposure guide Hinged back of



Hinged back of Akarette I with double eyepiece

two round eyepieces are separate and sit next to each other on the back of the camera. To avoid confusion, the eyepiece corresponding to the focal length not in use is darkened by a red filter. Compared with the choice of a double finder, the choice of a simple frame inserted into a standard viewfinder would have been humdrum, while a brilliant-frame finder, such as a Von Albada with automatic activation, would have been unthinkable in immediate post-war Germany.

The body of the original Akarette was rounded with black paint finish and crowned by the "hump" of the double viewfinder and chrome wind-on and rewind knobs. The frame counter had a maximum of 40 poses. The latched back opened like a clam shell and on the reverse was a guide to correct exposure based on film speed, season of the year, weather conditions and filter tints. The flat front of the camera, held in place by four screws, was in polished aluminum alloy and bore the AKA company logo, plus the suffix "rette".

The original Akarette was replaced by a second camera, identical in appearance, but with 24x36 format that remained in production until 1949. The Akarette was released on the market in 1949 at a price tag which, depending on the standard lens mounted, ranged from 156 to 326 DM—at a time when the hourly wage for a factory worker was 1-1/2 to 2 DM. Purchasing an Akarette with the plainest 50mm f/3.5 Radionar lens required the equivalent of 100 hours of work. The model with the more prestigious 50mm f/2 Xenon lens required almost double that.

Akarette Zero

In 1949, a more modest and economic model appeared to accompany the original Akarette. It was also named Akarette and still had the double viewfinder, but was

simplified thanks to the elimination of the focal length selector. The simplified model was called the Akarette 0 (Zero) to distinguish it from the previous model which became known as the Akarette I (One).

In appearance, the Akarette Zero copied the Akarette One, using the same casing, but with a black finish front with silver border and "AKA-rette" in silver against the black background. From an operational standpoint, the Akarette Zero had a neutral color standard finder and yellow telephoto finder. The shutter on the Akarette Zero was a Vario with three speeds from 1/25 to 1/200 plus B pose, but the Zero was also made with the Prontor shutter with speeds ranging from one second to 1/300.

The price of the simpler Akarette Zero model equipped with the Radionar lens was 98 DM, as opposed to 128 DM for the more sophisticated model with the same lens. In 1951 the price of the two models



Akarette 0 with f/3.5 Radionar lens, black front, double finder without selector



Akarette 0 with f/3.5 Radionar lens (right front)





Akarelle 0 seen from closed back with double experiece

Akarette 0 seen from top plate



Akarelle 0 seen from open back; serial number 26094 is visible



Hinged back of Akarette 0 with yellow eyepiece of telephoto finder

was raised respectively to 128 and 148 DM. The serial numbers of the Akarette Zero ranged from 20,000 to 30,000, while the serial numbers of the Akarette One were under 20,000.

Akarette Two

In 1950, the Akarette I (One) was replaced by the Akarette II (Two) model that still utilized the double viewfinder, but with a single eyepiece. A lever on the front controlled the selection of the two frames. In appearance, the Akarette II continued to utilize a casing like that of previous models, but was differentiated by its chrome top plate and chrome front underscored by two vertical black bands on either side and "AKA-rette" inscribed in black on the chrome background. The Akarette II utilized the Prontor S shutter with speeds up to 1/300 and was

made up until 1954 with just a few minor cosmetic alterations or in the controls; its serial numbers ranged from 30,000 to 115,000.

The price of the Akarette II ranged from 165 DM if equipped with the f/3.5 Radionar and 270 DM if equipped with the f/2 Xenon.

From Akarette to Akarelle

In 1954, the name was changed from Akarette to Akarelle and the film advance button was replaced by a short advance lever. The Akarelle casing remained virtually unchanged and was very similar to that of the Akarette, except for the name engraved on the front. Manufactured under the name Akarelle were the Akarelle Zero—identical to the Akarette Zero but with viewfinders for 50mm and 90mm focal lengths instead of 50mm and 75mm—and the Akarelle One that was identical to the Akarette II but with modified viewfinder which, although it had the same two windows on the front, was equipped with brilliant-frame finders for 35, 50, 75 and 90mm focal lengths.

The Akarelle Zero continued to be manufactured until 1957 and its serial numbers fell between 115,000 and 123,500, while the Akarelle I was also produced during the same period of time but with serial numbers between 123,500 and



Akarelle I with original lenses and cap with AKA logo





Hinged back of Akarelle I with single eyepiece



Akarelle I with 35mm f/3.5 Isco Westron wide

angle

Akarelle I seen



Akarelle opened "clam shell"-style

THE LENSES

For the Akarette/Akarelle family, over the course of the 1950s a range of lenses with screw mount and focal lengths from 35 to 135mm were made available, as well as a number of accessories that widened the field of application of these cameras. For lenses with a focal length other than that indicated in the double viewfinder, special finders were supplied and supplementary lenses, rangefinders and even a 39mm screw mount adapter ring for use with AKA lenses such as magnifying lenses. Lenses for AKA cameras were supplied by German lens manufacturers including Enna, Isco, Staeble and Schneider.

For the 35mm wide angle focal range the AKA outfit included the Schneider f/3.5 and f/4 Xenagon, the f/3.5 Xenar and f/3.5 and f/4.5 Isco Westron, as well as the f/3.5 Staeble Lineogon. Among the standard lenses with 45mm focal length were the f/2.8 and f/3.5 Xenar and among the 50mm the choice ranged from the Schneider Radionar and Xenar, to the f/3.5 Isco Westar and the f/2.8 Xenar and Westar to the faster f/2 Xenon. Among the 75mm telephoto lenses were the f/3.8 Xenar Tele and the f/4.5 Radionar Tele, among the 90mm telephotos the f/3.5 Xenar Tele and f/5.6 Staeble Telexon, and among the 135mm telephotos the Ennalyt Tele and Westanar Tele, both with a speed of f/3.5. There was not a tremendous choice of focal lengths, but it was comparable to what was being offered without having to resort to the reflex systems produced by the top German manufacturers of the day such as Zeiss Ikon, Voigtländer and Leitz. The Akarette/Akarelle lens outfit was not huge, but it did make it possible to achieve respectable results at reasonable prices.

149,000. After 1959, the name Akarelle came to identify a new line of cameras with non-interchangeable lens. At the same time, production began on the Arette camera that was manufactured in a range of models, some of which were equipped with the same interchangeable lenses as the old generation.

Akarex

In 1951, alongside the Akarette with double viewfinder but without a precision rangefinder, a new camera equipped with coupled rangefinder and a non-interchangeable 45mm f/3.5 Westar lens began to be manufactured. It was called the Akarex and was sold with a price tag of 126 DM with a Pronto shutter, or 146 DM with a Prontor SVS shutter with self timer. However, even the Akarex did not represent a completely satisfactory solution and Aka designers returned to the drawing board to



Akarex with f/2 Xenon lens and coupled rangefinder



Akarex seen from top plate with connection between lens and rangefinder



Akarex without lens, viewfinder and rangefinder



Akarex seen from top plate with rangefinder lens unit disassembled



Akarex seen from open back; serial number 70611 is visible



Akarex seen from base plate

create a second Akarex equipped with coupled rangefinder as well as a system of interchangeable lenses. To avoid complex connections between the rangefinder and the interchangeable lenses, a clever and 100% original system was developed. Each Schneider lens destined for the Akarex was sold with its own viewfinder and short base built-in rangefinder. The Akarex with interchangeable lens utilized an exclusive bayonet mount and was equipped with a Synchro Compur shutter with speeds up to 1/500. Although this technical solution was highly original, the casing and controls layout of the Akarex were fairly traditional, with a short advance lever and shutter release button located on the top plate and frame counter and film speed disk on the

base plate. Between the years 1951 and 1958 fewer than 20,000 numbered Akarex cameras were produced, bearing numbers between 70,000 and 89,000. They were sold at a price of 294 DM with the 50mm f/3.5 Xenar lens and at 366 DM with the 50mm f/2 Xenon lens. Other alternate lenses included the wide angle 35 mm f/3.5Xenagon and the 90mm f/3.5 Xenar telephoto. The significant difference in price and performance levels that did not really justify the higher cost, relegated the Akarex to a fairly small market niche and only lukewarm commercial success, especially if considered in comparison with the better-selling Akarette and Akarelle cameras.

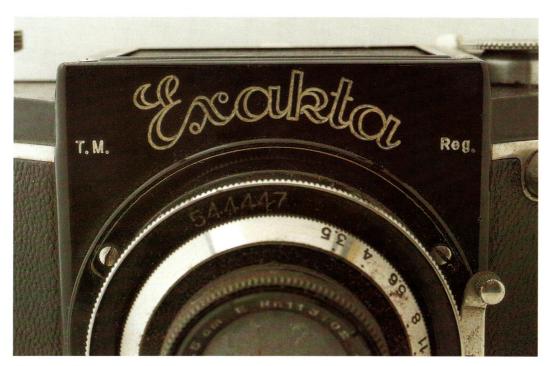
AKA collecting

Currently, there is no major collecting activity for Akarette, Akarelle and Akarex cameras. There are no clubs dedicated to this brand and prices for them range within fairly low limits, between 50 and 100 Euros or just slightly higher for faster lenses or those with less common focal lengths. Like much middle-level output during the Fifties, AKA cameras enjoy a sleepy existence out of the limelight and are only prized by more assiduous and curious collectors, but they seem to be there, slyly awaiting to be rediscovered at sometime in the future.

> Danilo Cecchi Massimo Bertacchi

EXAKTA VEST POCKET

The mother of all Exaktas



Exakta B, fifth type, with T.M. and Reg. (Trade Mark, Registered) inscriptions

In 1932, the same year it was celebrating its twentieth year of activity in its headquarters in Marcolini Strasse in Dresden, Johan Steenbergen's Ihagee company began production on an extraordinary reflex camera for 127 roll film in the then-popular 6.5x4cm format known as Vest Pocket.

The camera was officially presented to the public at the LeipzigerMesse in 1933 with the name Exakta and was equipped with a folding waist level finder, focal plane shutter, speeds up to 1/1000 sec and removable lens. The Exakta offered a number of new and interesting structural features, both from a technical/functional point of view as well as in its appearance.

An original-concept reflex

The Exakta was designed by Karl Nuchterlein for Ihagee on the basis of a number of very original ideas that took root quite independently from the roll and plate reflex cameras available on the market in the late 1920s. The Exakta was different from the ungainly Ensign Roll Film Reflex made by the English firm Houghton, and was very different from the twin-lens reflexes so tremendously popular at the time. Compared with Ihagee's traditional reflex output-the folding Klappreflex for 6.5x9cm to 10x15cm plates, the Nachtreflex for 4.5x6cm or 6.5x9cm plates and the economical 6x6cm Roll Paff-the Exakta represented a major leap in quality. Exakta's original features included the

choice of roll film instead of plates and, above all, 127 film which was much narrower than 120 roll film. Even the choice of the long, narrow 4x6.5cm Vest Pocket format that did not correspond with any print paper size was something new compared with the traditional square format of the Rolleiflex and perhaps drew on the success of the similar Leica format. The Exakta was designed without taking into consideration the problems of taking vertical shots and the paper wastage already evident in the Leica 24x26mm format. Finally, the Exakta was original for the layout of its main controls, such as the wind button and shutter speed dial on the left side of the top plate instead of the right. The shutter release button was placed in



Exakta A, first type, with f/3.5 Tessar lens. Old mount, release on right, wind knob and without synch socket



Exakta A, first type, (top plate)



Exakta A, second type, with f/3.5 Tessar lens. New mount, release on right, wind knob and added synch socket



Exakta A, third type, with f/3.5 Xenar lens. New mount, release on left, wind knob and without synch socket



Exakta A, third type, with infinity locking lever on left



Exakta A, fourth type, with advance lever and Vacublitz synch socket

the unusual position on the front of the camera, but always on the left. Seemingly designed for left-handed photographers, the Exakta was particularly flat and elongated in shape with the two sides of the front sharply slanted towards the front lens panel. The camera had an unusual trapezoid prism shape with the shorter base towards the front. This shape was never imitated by any other camera and, in the end, was what distinguished the entire line of Exakta reflex cameras, whether Vest Pocket or 35mm format. The same shape was firmly adhered to for the Exakta 35mm cameras produced in the post-war period up to the early '70s.

Light and manageable, the Exakta was equipped with a large folding waist level finder, focal plane shutter in rubberized silk and a lens equipped with a large focusing helical with infinity locking lever. The lens mount thread size was 39.5mm with a pitch of 0.5mm, fairly similar to that used on the Leica. At time of purchase, the buyer could choose from five different 75mm focal length lenses: an Exaktar, a Primotar or a Tessar with a speed of f/3.5, or a f/2.8 Xenar or Tessar. The lens was removable but not interchangeable due to the lack of alternative focal lengths, and the possibility of mounting lenses by other manufacturers or with different speeds, was more of an advantage for the manufacturer or dealer



Exakta A, fifth type, chrome

Exakta B, second type, with f/3.5 Exaktar lens,

old mount, modified

with advance lever and

synch socket



Exakta A, fifth type, chrome, with modified back for 127 or 828 film







Exakta B, second type, detail of advance lever and speed dial



Exakta B, third type, with f/2.9 Xenar lens but with release lever on right





Exakta B, fourth type, with f/2.8 Tessar lens and Vacublitz synch socket



Exakta B, fourth type, with distance scale in yards





Exakta B, fifth type with f/3.5 Exaktar lens and modified Vacublitz synch socket



Exakta B, sixth type, chrome, with f/2.8 Tessar lens

Chrome-finish front of Exakta B, sixth type, with screws and T.M./Reg. inscriptions



Exakta B, fifth type, with T.M. and Reg. (Trade Mark, Registered) inscriptions





Exakta B, seventh type, identical to the sixth but with black finish

Exakta B, seventh type, detail of front with screws

than the photographer. The back of the Exakta could be opened from the side with a latch on the right and had the classic red window to check film advance and frame count. The camera body, like most cameras of the era, had a black paint finish.

Two parallel versions

Over the course of 1933, two versions of the Exakta VP were produced simultaneously that were identical in appearance but with different features and price tag. The first Exakta was identified as the Exakta A with seven shutter speeds (25 50 100 200 300 600 and 1000 plus B and time exposure settings) and with the right side of its top plate completely smooth, without any controls. The second Exakta was called the Exakta B and had the same shutter speed dial, but on the opposite side of the top plate it had a large knob used to select slow speeds from 1/10, 1/2 and 1 2 3 4 5 6 9 10 12 seconds. The same knob was used to load the self timer with up to a 6 second delay. These two Exaktas were manufactured in parallel for all of 1933, but the next year both were replaced by two cameras that offered the same shutter speeds, but with a fast wind lever instead of the clumsy knob. Above all, the 1934 Exaktas were equipped with a new screw mount for lenses just slightly wider than before, 39.8mm, and more solid with a pitch of 0.75mm. The new mount made it possible to interchange lenses and mount an entire series of fast lenses and





Night Exakta with f/2.0 Biotar lens on Exakta B body, third type, with release on right

Night Exakta with f/2.0 Biotar lens (*top plate*)

Night Exakta with f/2.0 Biotar lens on Exakta B body, third type, with release on left

Night Exakta with f/1.9 Primoplan lens on Exakta B body, fourth type, with modified Vacublitz synch socket (top plate)







Night Exakta with f/1.9 Primoplan lens on Exakta B body, fourth type, with Vacublitz synch socket

Contraction of the second seco

Night Exakta with f/1.9 Primoplan lens on Exakta B body, fourth type, with modified Vacublitz synch socket

telephoto lenses on the Exakta. In addition to these technical changes, there were also some styling modifications. Although the controls remained on the left front, the infinity locking lever was moved to the left of the lens changing catch. On the finder cover next to the Ihagee name, the company logo—a small sun inside of a half-moon was engraved. At virtually the same time, the back was modified with a sliding door to protect the red window that was only opened to check the film advance. These changes were not made at the same time or all together, so it is possible to find Exakta cameras with the old wind knob

and new lens mount, or with the release lever on the right and new type of back, or vice versa. Collectors have identified various versions of the Exakta A and B manufactured over the years 1933 and 1934, all characterized by the lack of the synch sockets on the front.

Big eyes for the night Exaktas

In the wake of its Nachtkamera and Nachtreflex in 1929—plate cameras equipped with Hugo Meyer Plasmat lenses with speeds of f/2.0 and f/1.5—in 1934 Ihagee started to equip some of its Exaktas in production with especially fast standard lenses. These cameras were given the name Nacht Exakta for the German market and Night Exakta for the English-language markets and in the United States. The reason for this was to indicate that these cameras were particularly suited for night photography, or for shooting in very lowlight situations, Ihagee's desire being to repeat the success of the Ermanox ten years earlier. At time of purchase, the Night Exakta could be equipped with an 80mm f/1.9 Meyer Primoplan with five elements, a f/2.0 Schneider Xenon with 6 elements or a f/2.0 Carl Zeiss Biotar also with six elements. The English lens company,



Night Exakta without lens (top plate) with Vacublitz synch socket and serial number on top plate

Night Exakta without lens



Night Exakta with f/1.9 Primoplan lens on Exakta B body, fourth type, with Vacublitz synch socket and serial number on top plate (detail)

Night Exakta chrome finish, detail of lever and speed dial with altered scale 1000 400 200 150, instead of 1000 600 300 200 100



Night Exakta with f/2.0 Biotar lens on Exakta B body, fifth type, chrome, with Vacublitz synch socket

Dallmeyer also provided a fast lens-the 6-element Super Six and maximum aperture of f/1.9-with Exakta mount. The Night Exakta was derived directly from the standard production Exaktas, almost always from the Exakta B, which provided slow shutter speeds in addition to the fast lens. The cameras produced to be sold as Night Exaktas are clearly identified because the serial number is engraved on the viewing hood instead of on the lens flange where it would have been covered and hidden by the wider diameter of this version's extrafast lenses. Because the Night Exakta has exactly the same mount as the Exakta A and B, it is possible to mount a Biotar,

Xenon or Primoplan on an Exakta, thus transforming it into a Night Exakta.

Vacublitz synch sockets

In 1935, Exakta output was updated with the addition of a two pin socket on the front for use with a Vacublitz flash. This was something entirely new in the camera field and the Vacublitz company released a series of reflectors with flash bulbs designed and created expressly for use with the Exakta Vest Pocket. The Exakta A, Exakta B and Exakta Night made use of this attractive feature in the new models built between 1935 and 1936. The two pin socket was modified in 1937 with the addition of a third hole aligned vertically with the synch sockets, but, unlike the latter, was not an electrical contact, merely a mechanical connection for the flash arm. Beneficiaries of this feature were the Exakta B and Exakta Night, but the same type of contact can also appear on the more economical Exakta A and was even used on some Exaktas made before 1935.

Exakta Vest Pocket for plates

In the 1930s, despite the major impact roll film had on the market, there were still some strong pockets of resistance among photographers, especially for professional use. Therefore, for their medium-format

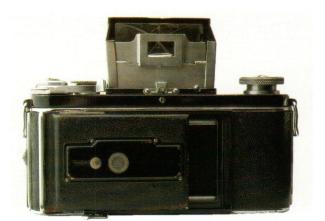


Exakta C, first type, analogous to model B, fourth type, black finish





Exakta C, second type, analogous to model B, sixth type, chrome finish





Exakta C, third type, analogous to Exakta A, fifth type, chrome finish, back closed

Exakta C with back open



Plateholder back for Exakta C





.

Plateholder for Exakta C



Long lens hood on Exakta B



Black extension tubes on black Exakta B



Chrome extension tubes on chrome Exakta B

cameras, many manufacturers continued to offer alternate backs for the use of plates or flat film. Even Rolleiflex offered a back for plates among the accessories for its twin-lens reflex. Ihagee, on the other hand, decided to flank its roll film Exakta with a model called the Exakta C, starting production on it 1935. The Exakta C was derived from the Exakta B currently in production, maintaining all its technical features unchanged, but some also derived from the Exakta A without the slow speed dial and self timer. The back of the Exakta C was replaced by a special panel that could either house a sliding ground glass screen on guides or a plateholder. Because the focusing plane of the Exaktas converted for plate use was not the same as that of roll film Exaktas, the focusing helical was modified. To allow for normal use of roll film, the Exakta C came equipped with a spacer ring that was inserted between the lens and the camera body to correct the distance. Just as with the other Exakta Vest Pocket cameras, the Exakta C was first produced with a black paint finish and later, from 1938, with a chrome finish.

Chrome finish

In 1937, following Zeiss Ikon's unveiling of the Contax II and Contax III in chrome finish, the fad for chrome as the ultimate in elegance swept Germany.

Ihagee also switched over to this finish, presenting in 1938 the Exakta B and Night Exakta with top plate, front lens panel and metallic parts of the finder hood in satinfinish chrome.

This chrome finish is a further element of diversification among Exakta models for collectors and is a sign of distinction.



Exakta Junior, first type, with non-interchangeable Anastigmat lens





Exakta Junior, first type, with hood open

Exakta Junior, first type, with wind knob



Exakta Junior, second type, advance lever and speed to 1/500



Exakta Junior, second type with Anastigmat lens, advance lever and synch socket





Exakta Junior, second type, non-standard, advance lever and speed up to 1/1000

Exakta Junior, second type, non-standard 1/1000 setting

The least expensive Exakta VP

By 1936 Ihagee was well aware of the commercial success of the Exakta VP, but total sales were still limited. The price tag of the Exakta was still too high for it to become popular on a mass level, so Ihagee decided to put an economical version of the Exakta VP on the market: the Exakta Junior. The Exakta Junior incorporated many of the features of the Exakta A while foregoing speeds slower than 1/25 and further limiting shutter speed to a maximum of 1/500 sec. The Exakta Junior also gave up the option of interchangeable lenses and mounted a modest 75mm, nonremovable lens. While none of the other Exakta Vest Pockets were engraved with their model ID, the Exakta Junior had the logo "Exakta Jr." engraved on the lens panel. The lens of the Junior was a commonplace f/4.5 Anastigmat or, more rarely, a f/3.5 Boyer. Like the other Exakta VPs, the Junior was also produced first with black finish and without lever advance and synch sockets, and later still with black finish but including lever advance and synch sockets. The last version of the Exakta Junior also had the same chrome finish as the more expensive models.





Exakta Junior

(top plate)

modified back for flat film

with

Exakta Junior with modified back for flat film



Exakta Junior, back for 127 film



Exakta Junior with modified back for flat film (front)





Exakta Junior, third type, chrome



Exakta Junior with Ihagee marking (front detail)

J 13- – Manca dida-

scalia.



Exakta Junior with Ihagee marking

End of a dynasty

The rapid proliferation of its models and variants was symptomatic of a period characterized by rigorous experimentation and technical progress and the Exakta Vest Pocket left its mark on a short but intenselyactive era that, unfortunately, was interrupted by the tragedy of the war. The Exakta Vest Pocket remained in production for just eight years, perhaps until 1940,

handing over its legacy in full to the small Kine Exakta for 35mm film. With war imminent, production of the Exakta Vest Pocket was halted, never to be restarted. Despite the fact that the Exakta VP offered performance levels that, in terms of lens speed, were equal to the Ermanox, in terms of versatility to the Leica and for precision to the Rolleiflex, in the post-war period there was no one willing to continue their

production or imitate them, either in Germany or elsewhere. During the 1930s, the Exakta VP was flanked on the market by just a few reflex cameras with larger format, such as the Primarflex and the Reflex Korelle, characterized by a 6x6cm square negative, not to mention the twin reflexes such as the Rolleiflex, Ikoflex and Superb, also with 6x6cm square format. Even if this competition made things



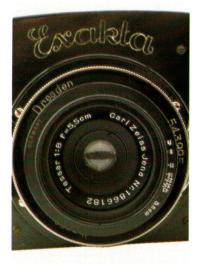
Lens with old mount 39.5 x 0.50



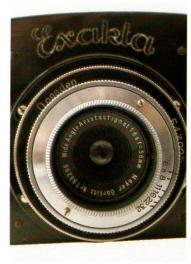
Lens with new mount 39.5 x 0.75



Lenses with old and new mount compared



5.5cm f/8 Tessar wide angle lens





2 in. and 3/8 f/6.5 Dallmeyer wide angle lens

56mm f/6.8 Aristogmat wide angle lens

		F THE EXAKT		
EXAKTA A JUNIOR	EXAKTA B	NIGHT EXAKTA	EXAKTAC	EXAKTA
fast speeds lens	slow speeds	fast lens	roll and plate	1/500 fixed
1933	1933			
black finish	black finish			
wind knob	wind knob			
old mount	old mount			
1934	1934	1934 A B		
black finish	black finish	black finish		
lever advance	lever advance	lever advance		
new mount	new mount	new mount		
1935	1935	1935	1935	
black finish	black finish	black finish	black finish	
lever advance	lever advance	lever advance	lever advance	
Vacublitz synch	Vacublitz synch	Vacublitz synch	Vacublitz synch	
				1936
				black finish
				wind knob

1937 chrome finish 1937 chrome finish

1937 chrome finish 1936 black finish wind knob 1937 black finish lever advance 1938 chrome finish difficult for the Exakta Vest Pocket, it should not be forgotten that, towards the end of the Thirties, Ihagee heard the siren call of the 6x6cm format, offering a giant, 6x6cm format Exakta that competed with its own Exakta Vest Pocket.

However, with the close of the 1930s, it seemed that the Exakta Vest Pocket had exhausted all its potential while the life cycles of the single lens and 6x6cm twinlens reflexes continued to develop after the war. The Rolleiflex and Ikoflex survived, as did the Primaflex and Korelle, and even Ihagee allowed itself to be seduced a second time by the 6x6cm format, presenting in the early 1950s an ill-fated 6x6 reflex named Exakta, but completely different from either the Exakta Vest Pocket or the pre-war 6x6 Exakta. In fact, after the war, Ihagee concentrated its efforts primarily on the Exakta 35mm while completely (and definitively) leaving aside the larger formats, above all the 4x6.5cm Vest Pocket format.

Original, imaginative and versatile, the Exakta Vest Pocket remained the symbol of a courageous and diversified approach to camera production, despite its relative lack of success. Thanks to the numerous and complex variations in its output, the Exakta Vest Pocket models have become splendid and much sought-after pieces for collectors.

REFERENCES

chrome finish

Aguila and Rouah, *Exakta Cameras 1933-1978*. Hove. Ivor Matanle, *Classic SLR*. Thames and Hudson.

1939

Exakta Vest Pocket lenses

For the Exakta Vest Pockets manufactured between 1934 and the end of the 1930s, the major German and foreign lens companies got to work to supply good-quality interchangeable lenses making use of the optical technology of the day. On one side, the spread of Exaktas with interchangeable lenses was a boost to lens sales and on the other, the use of prestigious-name lenses helped to build the fame and prestige of Exakta cameras. In addition to the standard lenses of the Exakta A and B, the modestlevel fixed lenses of the Exakta Junior and the fast lenses of the Night Exakta, the outfit of lenses compatible with the Exakta Vest Pocket was truly vast and rich with just some limitations in the wide angle range. The wide angle lenses available at the time for medium format reflexes were few and fast wide angles even fewer, for example the 55mm f/8.0 Tessar by Carl ZeissJena, or the corresponding 56mm f/6.8 produced by Hugo Meyer of Goerlitz. Even the French Berthiot and the English Dallmeyer companies offered 60mm focal length lenses. On the other hand, there were numerous medium and long telephoto lenses and often even quite fast ones. For the 105mm focal length there was the Berthiot f/2.8 Flor and the f/3.8 Primotar from Meyer, whereas for longer focal lengths one could choose between the Zeiss Tessar, Meyer Megor and Schneider Xenar telephoto lenses. The Tessar telephotos covered focal lengths of 120, 180 and 250mm, all with a maximum aperture of f/6.3. The Mego telephotos covered focal lengths of 150, 180 and 250mm with a maximum aperture of f/5.5, and the Xenar telephotos had a wide range of focal lengths-150, 240, 300 and 360mm-all at f/5.5. There was also a 240mm f/4.5 Xenar Tele lens. For the Exakta, the English firm of Dallmeyer offered two Dallon, telephotos, 152 and 177mm with respective speeds of f/5.6 and f/6.3. In order to take full advantage of the characteristics of the reflex finder, a series of extension tubes was offered for the Exakta Vest Pocket for close-up and macro photography and for microscope work. A folding hood placed over the standard finder ensured complete protection from bright light.

Collecting the Exakta VP

Exakta Vest Pocket cameras are mentioned in all major camera collecting guides and in all major camera history books. For quotations for the various models, the major guides provide a base of reference. According to McKeown, the value of an Exakta A, B or C is somewhere between \$250 and \$350. For an Exakta Junior, prices could rise up to \$450 and for a Night Exakta to between \$450 and \$650. Kadlubek



6 in. f/5.6 Dallmeyer Dallon lens



15cm f/5.5 Megor telephoto lens

provides more detailed information and distinguishes between the various models and types. For an Exakta A body alone, the range is 320 to 500 DM, up to 700 DM for the chrome finish model. The Exakta B is valued at between 320 and 450 DM up to a maximum of 550 DM for the chrome model, while the Exakta C is quoted at 480 DM. The Exakta Junior is valued at between 500 and 600 DM, peaking at 1000 DM for the chrome finish. The Night Exakta is quoted between 650 and 950 DM. In recent auctions, there have been quite a few Exakta Vest Pockets bringing prices generally a bit higher than those given by the authorities above, but often the presence of special lenses or the inclusion in the same lot of a number of cameras or lenses and accessories has made estimating the values of individual cameras a bit imprecise.

Rare models

Because during the course of its production from 1933 to 1939 numerous changes and improvements were made in the Exakta



6 in. f/5.5 Megor telephoto lens

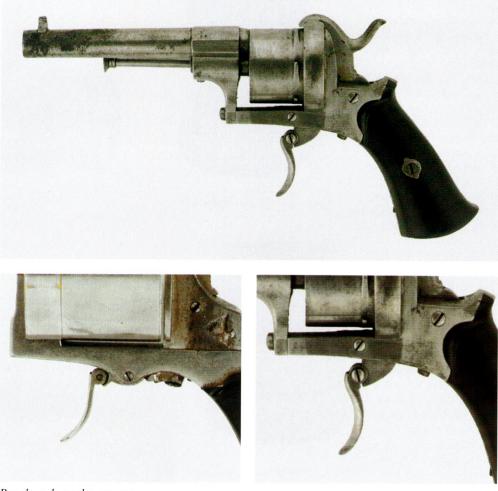


12 in. Meyer telephoto lens

Vest Pocket without any strict planning strategy, it is possible to run across some pieces with characteristics that are a combination of those described. It is also possible to find pieces with unique and individual features that are, perhaps, experimental factory prototypes or cameras modified on the basis of custom requests. There are even models in which the only thing different about them are special engravings or lettering. This is the case of a Junior model which, in place of the Exakta logo, only has Ihagee inscribed on its front. Sometimes the infinity locking lever is on the right when it should be on the left, or vice versa. Sometimes there is a synch socket on models dating from before 1935. In other cases, a fast lens is found on a normal Exakta body, while in others still, the shutter speed dial has something unusual about it. And so it goes on, and on...

> Danilo Cecchi With special help from Maurizio Frizziero

Christie's



Revolver de poche camera.

The camera: Enjalbert, France; 20 x 20mm, nickelled-brass body, the lens tube with sighting pin and holding lens elements, the removable rear hammer section marked 8 and PHOTOREVOLVER. BTE S.G.D.G. E.ENJALBERT, fixed metal cylindrical shutter section, engine-turned revolver-style handgrip mounted on a shaped-metal bar with sprung hammer-section lock, release trigger and shutter coupling. Removable cylindrical centre plate-holding section with plate-release catch and internal sprung compartments stamped A and B holding five single-metal plate holders. The revolver: a decommissioned metal-body six-shot revolver. Stamped 9047, with folding trigger Metal plate holder: comprising a 4 1/2 x 6cm single metal plate holder, the back stamped BREVETE SGDG

Estimated price £ 80,000-120,000 *Auction price:* £ 69,750

It is well known that the golden age of camera collecting was characterized by prices constantly on the rise, pushed higher by a general widening of interest in collecting and a growing enthusiasm for all types of cameras as long as they were antique or old, rare or believed to be such. This period of intense activity was followed by one of widespread disorientation that saw a number of key players abandon a field that had become too popular and over-crowded and lacked any rules or sense of certainty. A number of negative signs began to appear and there was a general fear of crisis and instability. Artificial inflation of prices alternated with sudden drops, the result of trends, popular tastes and prejudices. But the great speculative bubble suddenly burst and, today, the situation seems to have settled once again into the confines of normality. A number of brushfires have been put out and the market has matured. Collectors know what they want and are prepared to pay for it, but only if there are solid guarantees. Many do-it-yourselfers have left the scene and prices are once again stable with some fluctuation, but within limits. This is not just a question of brand name, but also of the condition and features of the pieces being sold.

Ever-dominant Leica

Screw Leicas remained the pivot point of the market and a look at their ups-and-downs

provides the key to understanding developments in other sectors. The Leica I or Leica A with Elmar lens, depending on condition, ranged from a minimum of just over £500 to a maximum of just under £1200. The Leica I or Leica C and Leica Standard varied between £250 and £700, while the Leica II ranged from £300 to £450. The classic Leica C outfit with 35mm, 50mm and 135mm lens neared £1200. The Leica III ranged from £200 to £500, again depending on wear. Of course there were exceptions, such as those cameras with special identifying initials or custom accessories.

The Leica 250 without lens sold for between \pounds 4250 and \pounds 4500, a Leica standard with WEISO finder and 35mm Elmar lens went



Leica M6 Anniversary, commemorative; the top plate engraved 150 JAHRE PHOTOGRAPH IE. 1989.75 JAHRE LEICA PHOTOGRAPH IE, with a matching Leica Summilux-M 50mm f/1.4 lens, in maker's presentation box; strap, instruction booklet and warranty card, in maker's box. Condition: 2B Estimated price £ 2000-2500 Auction price: £ 2232



Leica standard, chrome, with built-in WEISO 3.5cm viewfinder, with a Leitz Elmar 3.5cm f/3.5 lens, in maker's ever ready case. Condition: 3B Estimated price £ 1000-1500 Auction price: £ 1527

Leica IIIB, grey-body, grey-painted top and chrome baseplates, fittings, the top plate engraved DANA, with a Leitz Summitar 5cm f/2 lens, the barrel engraved DANA, in maker's ever ready case stamped DEUTSCH AMERIKANISH NACHRICHTEN. Condition: 4B Estimated price £ 2500-3500 Auction price: £ 2937

Leica, black, the top plate with black rewind lever, the shutter speed dial scaled z, 20, 30, 40, 60, 100, 200, 500, original body leather, 'crossbar' baseplate latch, and a Leitz Anastigmat 50mm f/3.5 lens, the barrel with datum line; with accompanying second-hand bill of sale from R. G. Lewis Ltd dated 31/3/1956

Estimated price £ *12,000 – 18,000 Auction price:* £ *14,100*

for over £1500 and a grey Leica with DANA marking grazed the £3000 mark.

The inscriptions and initials on Leica military models increased their value and close to £1300 was paid for the initials PATT8665 on the camera and PATT8668 on the lens, over £1500 for the Nazi eagle with the initials "Artl", close to £1200 for the Heer chromefinish Leica IIICK and, finally, £2000 for the chrome-finish Luftwaffen and almost £3300 for the grey finish.

Even the prices of the Leica screw mounts from the 1950s floated within a wide margin, ranging from £300 to £700 sterling for the IIIf models and from £700 to £1200 for the more prestigious IIIG models. Again here, special initials raised prices considerably,







Leica IIICK, grey-vulcanite, grey-painted top and baseplates, chrome-fittings, white-painted K shutter blind, and a Leitz Elmar 5cm f/3.5 lens; a pocket-book with titled page SS Kalendar 1945. Lommebog for Danske SS Frivillige. Condition: 4B Estimated price £ 3000-4000 Auction price: £ 3290

for example the close to £5900 paid for a Leica IF marked AP8886.

Prices of truly rare and original items were still very high. A Leica Anastigmat estimated at between £12,000 and £18,000, went under the gavel for just over £14,000. But even a replica of the Leica Zero, complete with original box, instruction booklets and warranty, sold for more than £1100.

Of note among the Leica M cameras was an experimental, incomplete Leica M3 body without initials or serial number that went for over £1500 and an M3 body in not very good condition with black finish that touched £3300, while a second, half-destroyed black Leica M3 still managed to bring £700. Prices for the chrome-finish Leica M were relatively

stable between £500 and £800 and for bodies alone on a variety of finishes prices rose proportionately. A Leica M1 with grey-green finish neared £2600, as did a black Leica M4, a black Leica M2 body went for over £3000 and a Leica M2 with grey metallic hammered finish—a one-of-a-kind piece estimated at between £10,000 and £15,000 went for as high as £16,450.

Current-day Leica M6 cameras occupied a space somewhere between collector's items and simple used cameras with prices that ranged from $\pounds750$ to $\pounds1000$ for bodies alone, and from $\pounds1200$ to $\pounds2000$ for bodies with one or more lenses. Cameras with special finishes peaked a bit higher with just over $\pounds1500$ paid for an almost-new M6 Lucky

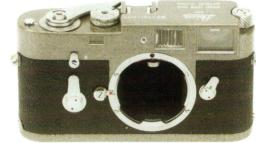




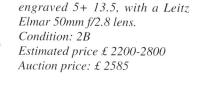
Leica M3, black-paint. Condition: 4B Estimated price £ 3000-5000 Auction price: £ 3290



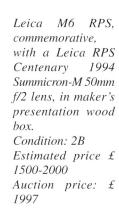
Leica M2, black. Condition: 2B Estimated price £ 2600-3000 Auction price: £ 3055



Leica M2, black body, grey-hammered paint top and baseplates, chrome fittings. Condition: 3B Estimated price \pounds 10,000-15,000 Auction price: \pounds 16,450



Leica M1, green paint, the top-plate





with 50mm Summicron and for an almostnew Titanium paired with a 50mm Summilux. An almost-new Ein Stuck with 35mm Summilux sold for £1750, an almostnew RPS with 50mm Summicron for close to £2000 and almost £2250 was paid for a platinum-finish, almost-new Anniversary 150 Jahre with paired 50mm Summilux. For a Titanium M6, also virtually new and equipped with two Summilux lenses (50mm and 35mm), both with titanium finish, close to £2600 was paid.

Leica Copies

The ranks of Leica copies—once overpraised and over-priced—has been thinned and only the more successful or original models have remained on the market, the result being that appraised prices have remained high and interesting.

Among the more famous and prized Leica copies were the English Reid cameras. A Reid prototype with rangefinder but without engravings or serial number was sold for £2350. A second Reid without rangefinder and modified to include a fold-away periscopic reflex finder plus f/2 Sonnar lens again went for £2350. And, on a third experimental Reid without rangefinder and modified back with a large rear screw mount to hold a red filter, complete with 35mm f/3.5 lens, bidding stopped at just under £2250.

An English Ilford rangefinder Witness



Leica M6 Titanium, with instruction booklets, in maker's box; ever ready case; a Leica Titanium Summilux-M 50mm f/l.4 lens in maker's case; a Leica Titanium Summilux-M ASPH 35mm f/l.4 lens in maker's case, lenshood, in maker's box; four filters in keepers. Condition: 2B Estimated price £ 1800-2500 Auction price: £ 2582

complete with f/1.9 Dallmeyer lens and original instruction booklet went for over $\pounds 2100$, while a second Witness with f/1.9 Dallmeyer lens brought just under $\pounds 1900$. A Look rangefinder camera, a little-known Leica copy of which very few were produced in Japan before 1950 and equipped with a 40mm f/3.5 Rokkor lens, sold for over $\pounds 1400$.

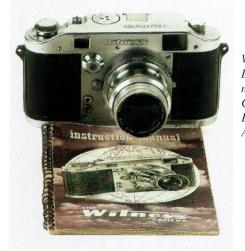
A Chinese Red Flag with f/1.4 lens, a very



Reid III prototype Camera. Reid & Sigrist, Leicester; chrome, the top plate unengraved, the camera body with non-standard features, with a Taylor-Hobson 2 inch f/2 lens with unengraved lens rim and lens cap, in maker's ever ready case. Condition: 2B Estimated price £ 2000-3000 Auction price: £ 2350



Reid I Reflex. Reid & Sigrist, Leicester; the top plate with factory periscope reflex viewing lens, the camera back marked, with a Carl Zeiss Jena Sonnar 5cm f/2 lens in a Cook & Perkins Ltd Leicascrew mount Condition: 2B Estimated price £ 1500-2000 Auction price: £ 2350



Look Camera model. Look Camera Co., Japan; the baseplate engraved MADE IN OCCUPIED JAPAN, with a Look Rokkor 45mm f/3.5 lens and a Look yellow filter, in maker's ever ready case. Estimated price £ 1000-1500 Auction price: £ 1410

rare camera although quite famous thanks to its appearance in books and magazines, went for over £4000. Perhaps instead of churning out copies of electronic Pentax and Minolta cameras, the Chinese should go back to producing mechanical rangefinder cameras. Recent examples of this in Japan are certainly not lacking. A modern rangefinder Bessa R, 100% Japanese and equipped with Ultron, Nokton, Color Heliar and Super Wide Heliar lenses, again all 100% Japanese and currently in production, sold for £880.

Non-Leicas

Although Leica cameras continue to monopolize in monotonous fashion almost half of the market, many other names fill what remains of the auction tables, catalogs and prices lists. Alongside such European classics as Zeiss, Rollei, Robot, Exakta and Japanese classics such as Nikon and Canon, are names that are less-known but famous nonetheless for their more limited output

Witness. Ilford / Peto Scott Ltd., chrome, with a Dallmeyer Super-Six Anastigmat f/l.9 2in., in maker's ever ready case with instruction manual. Condition: 4C Estimated price £ 1500-2500 Auction price: £ 2115



and sometimes unique market niche. Among well-known names was a first model Contax with the letters AV before the serial number that neared £300. A German army Contax III with imperial eagle and artillery insignia with just an f/2 Sonnar lens, neared £600, while a second army Contax III with standard lens and 135mm telephoto, all with the same military insignia, neared £1000.

A pair of Peggy Krauss cameras, the delightful 35mm German model from the Thirties, went for £400 each. A 1924 4.5x6cm Ermanox with the fast f/2 Ernostar lens neared £1000, exactly the same price paid for a 1975 black-finish Hasselblad SWC with 38mm Biogon. A Tessina Automatic neared £200 while a Tessina L with black finish went for over £350.

A mini Swiss Biflex complete with wooden box and accessories neared the ± 3000 mark. A mini Spanish Frica with rounded black Bakelite body, went for over ± 750 , while a metal French 16mm XYZ sold for close to ± 950 . An anonymous and rare 16mm

Red Flag, China, with a Red Flag 50mm f/l.4 lens and lenshood Condition: 3B Estimated price £ 3000-5000 Auction price £ 4112

German minicamera housed in a matchbox and dating from the 1930s went for as high as £5875.

Other original and rare cameras included an English half-plate for multiple shots with twelve lenses that sold for more than $\pounds7000$. An Enjalbert photo revolver with 20x20mm format, made at the end of the nineteenth century by Albert Posso and part of his personal estate, went for almost $\pounds70,000$, but its estimated price had been even higher—between $\pounds80,000$ and $\pounds120,000$.

35mm and 6x6 Reflexes

Although there is no question about the appeal of rangefinder, mini and historic cameras, reflex cameras with their moving mirror and image projected onto the ground glass still command significant interest. But, following their over-valuation of several years ago, almost all (with few exceptions) have experienced a realignment of prices. A Contarex bullseye with just a standard f/2 Planar lens went for just over £250 and a



Biflex Outfit. E. Schmid, Switzerland; comprising a 35mm olive-green crackle-finish Biflex camera with a Meyer Trioplan 20mm f/2.8 lens; a Biflex film mounting jig and slide mounts, in maker's box; two wood Biflex slide storage boxes; a Biflex projector with Biflex 5cm projection lens and a Biflex 3.5cm projection lens, in maker's fitted box; advertising leaflet and price list Biflex 35. Estimated price £ 2000-2500 Auction price: £ 2937



Independence Matchbox camera. 16mm, the bright-nickel body concealed within an Independence Safety Match box, the top-plate with sliding focus lever marked 0.7, 0.9, 1.2, 2,5, the side plate shutter control marked 25, 50, 100, 250, 500 and engraved 598, hinged lens cover, the outer match box with internal metal plate to activate the shutter. Estimated price £ 4000-6000 Auction price: £ 5875



Multiple lens camera. C. Jabez Hughes, London; half-plate, polished mahogany body, inset lacquered-brass binding, the top with label C.Jabez Hughes, 379 Oxford Street, London, rack and pinion front-focusing internal box, removable focusing screen stamped 428 with silver staining, the interior stamped 379 and matt-black painted internal twelvesection divider, with twelve lacqueredbrass lenses mounted on three matching brass panels; a wet-collodion single plate holder (damaged). Estimated price £ 2000-4000 Auction price: £ 7050

Wrayflex. Wray, London; 24x 32mm, with a Wray Unilite 50mm f/2 lens, in maker's ever ready case; spare ever ready case; two Wray Lustrar 90mm f/4 lenses, a Wray Universal optical finder; a Wray Prismscope and camera mounting ring, in maker's box; a Wray Acmade Special 4 inch f/3.5 lens in mount Condition: 3B Estimated price £ 700-1000 Auction price: £ 1175





Exakta 6x6. Ihagee, Germany; 120-rollfilm, prewar model, with a Carl Zeiss, Jena Tessar 8cm f/2.8 lens, in maker's ever ready case; a Carl Zeiss Jena Tessar 6.5cm f/6.3 lens, a Carl Zeiss Jena Tele-Tessar 18cm f/6.3 lens in maker's box; a Carl Zeiss Jena Tele-Tessar 25cm f/6.3 lens in maker's box; a Carl Zeiss Jena Triotar 13.5cm f/4 lens in maker's box

Estimated price £ 2000-3000 Auction price: £ 2350

second Contarex bullseye with the same lens but in better condition for over £300, while a lovely Contarex outfit with four lenses, macro bellows, filters and original instruction booklet sold for more than £700. Chromefinish Leicaflex cameras with 50mm Summicron did not even reach £200, while the body only of an Olympic model Leicaflex went for £350 and an SL2 with black finish and 135mm telephoto lens brought over £450. Prices of the Nikon F with or without Photomic in normal condition of wear, ranged between £200 and £300 and only an almost-new piece went for over £900. A classic Swiss Alpa 9d with two lenses sold for more than £800.

An original English 35mm reflex, the Wrayflex with three lenses, stopped just short

of £500 and a second Wrayflex complete with standard f/2 lens and instruction booklet sold for over £750. A third Wrayflex with three lenses in original period box just hit £1200.

A pre-war 6x6 Exakta with a lovely 5-lens outfit reached £2350. The classic twin-lens Rolleiflex brought between £200 and £500, depending on the condition and lens mounted.

Collector lenses

The value of a lens only seems to have marginal impact on the price of a camera body when they are the first to have been sold with a given camera, but it becomes much more critical when individual lenses including standard ones—are sold separately. Once again, distinction must be made between true collectors' items of historical importance and other lenses which may even be costly and rare but which are generally of interest only to photographers. However, the distinction between these two categories is often subtle.

Among classic pieces, a 105mm screw Mountain Elmar was sold for over £400, a screw 50mm Summicron with retractable mount neared £190, while the 90mm f/4 screw Elmar ranged for between £400 and £500 and the chrome-finish 125mm Hektor for Visoflex reached, and in some cases exceeded, £400. The 28mm f/6.3 Hektor sold for more than £500 and, in one case, came close to £600. Prices of the 85mm f/1.5 Summarex were over £800 and in one case



f/6.3, screw-fit, black, with caps. Condition: 4 Estimated price £ 400-600 Auction price: £ 411



Summicron 35mm f/2, screw-fit, in keeper. Condition: 3 Estimated price £ 200-400 Auction price: £ 881



Visoflex II with a Viso-fit unmarked prototype 180mm f/2.8 lens. Condition: 4 Estimated price £ 600-800 Auction price: £ 1292



Cooke Portrait 229 mm f/4.5 lens. Cooke Optics Ltd., Leicester; with front and back caps engraved Cooke set into a Copal N.3 shutter and contextual CD-Rom, in a fitted mahogany box, the lid with gilt transfer Cooke; technical paper showing the lens and signed by the optical designers, mechanical designer, assembler and quality checker, the reverse certifying the lens signed by Dave Stevens, Managing Director, Cooke Optics Limited.

Estimated price £ 2500-3000 Auction price: £ 4112



Consecutively-numbered Taylor Hobson lenses, Leica screw-fit; comprising Anastigmat 2 inch f/2 Condition: 2 Estimated price £ 600-900 Auction price: £ 1527



Ross consecutively-numbered lenses, Leica screw-fit, black and nickel; comprising two Teleros 4 inch f/5.5. Condition: 3 Estimated price £ 1000-1500 Auction price: £ 2820

reached £1000, while the 50mm f/1.5 Summarit ranged between £150 and £200 and an f/1.5 Xenon neared £300. A chromefinish 35mm f/2 Summicron with screw mount neared £900, the same price also reached by a 21mm screw Super Angulon. A 180mm f/2.8 prototype with no name or serial number but with Visoflex II attachment neared £1300. The chrome-finish 90mm f/2Summicron with bayonet mount went for between £250 and £400, depending on appearance, the chrome-finish 90mm f/2.8 Tele Elmarit with bayonet mount neared £500 and in one case went for over £750, while the 90mm f/4 Elmar held to under £300.

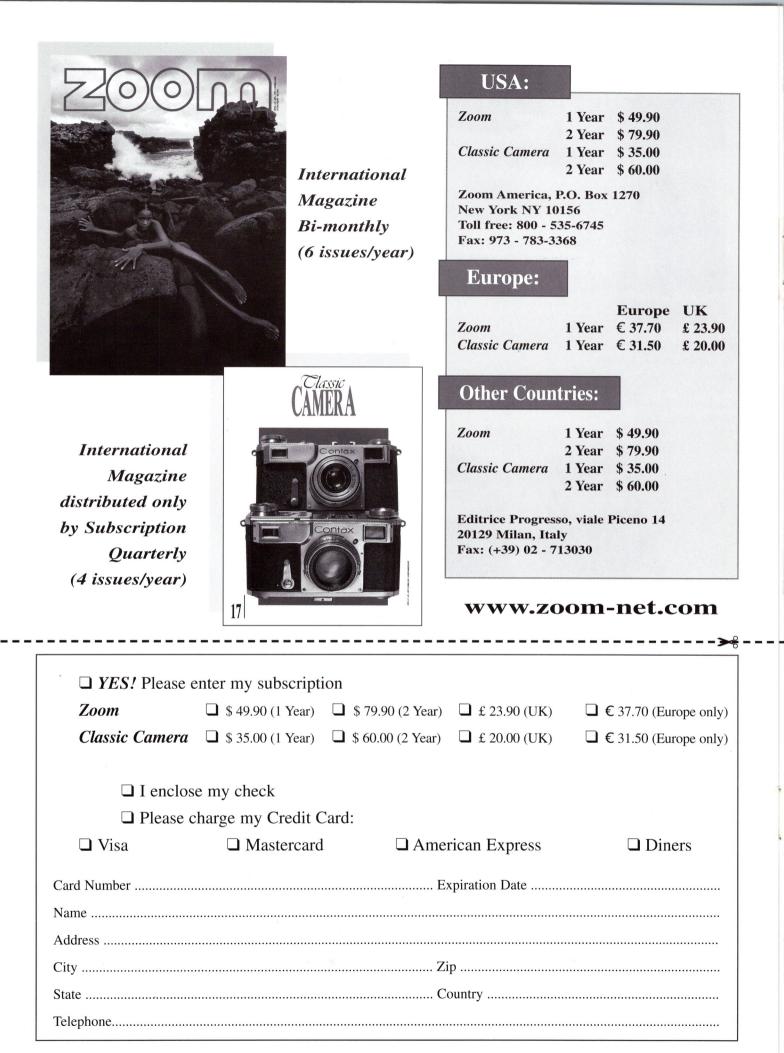
Among so-called standard lenses sold separately from the camera body, the chrome bayonet-mount 50mm f/2 Summicron with eyeglasses in one case reached \pounds 235 and

over £350 in another. The chrome 50mm f/1.4 Summilux neared £300 and a newgeneration, bayonet mount 50mm f/2.8 Elmar neared £450. A bayonet mount 50mm f/2.8 Elmar of the previous generation sold for just over £150, but another lens, just slightly older but inscribed "Bundeseigentum", sold for £1175. Alongside original lenses were also skillfullymade adaptations, such as a 50 mm f/1.2Canon modified with Leica M bayonet mount which brought £200, a 85mm f/1.2 Sonnar also modified with Leica M mount which brought £500 and an 85mm f/2 Sonnar with screw mount that sold for over £1500. A pair of standard Leica screw mount lenses made by Taylor Hobson with a speed of f/2 and with consecutive serial numbers, was sold for over £1500. A second pair of Leica screw mount lenses-4-in. Teleross with

consecutive serial numbers—went for over £2800.

An 85mm f/2 Nikkor screw mount sold for more than £300 and a 105mm f/2.5 Nikkor, also screw mount, for close to £400. A wide angle 35mm f/1.5 Canon screw mount sold for over £200. An 18mm f/4 Distagon for Contarex of which less than 1700 were ever made, brought over £500. A very modern 300mm f/2.8 Nikkor ED AF telephoto sold for more than £1600.

A modern replica of the 229mm f/4.5 Cooke portrait lens, mounted on a 1/125 sec Copal shutter, marked as series PS945 (PS for Pinkham&Smith, 945 for 9 in. focal and 4x5 in. format) with serial number 0001, complete with mahogany box, certificates, lens cap and accessories, from an estimated maximum value of £3000 rose to sell finally for over £4000.





Il Progresso Fotografico, 1938



II Progresso Fotografico, 1935