No. 10
Summer 2000

Camera Lens News

Newsletter for all who use, buy, sell, like, report about and are interested in Carl Zeiss lenses

Zeiss at Photokina 2000

Photokina 2000 will see an all new Zeiss appearance at the traditional Zeiss location from September 20. through 25. in Cologne, Germany. On display at this new Zeiss booth will be roundabout ten new lenses, some of them certainly surprising, for the Zeiss equipped systems Arriflex, Contax, Rolleiflex, and Sony. The new lenses span the whole gamut from 35 mm photography, medium format, professional cine, and consumer digital. One highlight will certainly be the new 35 mm SLR system Contax N 1, which will come with 4 new lenses at Photokina 2000.

Dr. Scherle to Lead the Zeiss Camera Lens Division

Dr. Winfried Scherle (45) has recently been appointed Vice President and General Manager Camera Lens Division as of August 1, 2000.

Dr. Scherle, who graduated with a Ph.D. in physics and electron microscopy from the University of Tuebingen south of Stuttgart joined Carl Zeiss in 1984 to work as a lens designer. He soon specialised in designs that particularly meet the needs of optical manufacturing in industrial size operations.

Dr. Scherle then was appointed head of development for high performance aerial cameras, a challenging field where Zeiss has been a leading player supplying both aerial mapping systems and aerial reconnaissance equipment, utilizing either silver halide film or digital image receivers. Dealing for years with these challenging high performance systems, where detail resolutions beyond 100 linepairs per millimeter are the standard requirement and proven reliability under adverse operating conditions is indispensable, Dr. Scherle built a very solid foundation for his next carreer step.

In 1996 Dr. Scherle became head of product development with the Zeiss camera lens division and deputy vice president of the division. Within only four years he ramped up the development capacity of the division to more than twice its former size, enabling Zeiss to engage in a cooperation with Sony and equipping top-of-the-line Sony digital camcorders and technically demanding still cameras with high quality Carl Zeiss lenses. In addition to this the camera lens division was able to develop and introduce a new generation of CFE/CFi lenses for the Hasselblad medium format SLR system, and a new generation of ULTRA PRIME lenses for super 35 mm Arriflex cine cameras, four new lenses for the Rolleiflex medium format SLR system, and the optical arsenal for a completely new Contax medium format autofocus SLR. Now Dr. Winfried Scherle succeeds Ralf Coenen who renewed the Zeiss camera lens division over the course of the past four years and who took on a new role in the photo industry.

Now that the Zeiss camera lens division has stood its ground in many imaging fields like 35 mm photography, medium format, digital still, digital video, and professional cine, Dr. Scherle will lead the division to add more high performance links to the imaging chain and providing demanding users with convincing solutions. He will see that camera lens division's activities are sound businesswise thus securing the health and future of the division. Continuity and an even closer cooperation with Zeiss' partners are particularly important to him.

ZEISS

Contax 645
Outselling the Competition

Market feedback shows that the Contax 645 was the best selling medium format autofocus SLR camera in America in 1999. Major reason for the success of this system is the range of Carl Zeiss lenses, the only lenses in any medium format AF SLR offering robust precision metal housings and advanced all-electric lens mounts with specific autofocus drive motors in each lens, not just a single one in the camera body

The new Contax 645 AF SLR system keeps attracting photographers moving up from 35 mm to medium format, expecting full autofocus capability from their camera.

Another group of new Contax 645 customers are medium format users moving from older medium format gear into this modern high tech system. For them, too, the quality of the Carl Zeiss lenses is an important consideration.

Professional photographers are an inportant group where the Contax 645 system gained particular success. For them the Contax 645 with its classical user interface is an easy-to-use system although rich with modern features. Many professionals find the Contax 645 with its metal housed Zeiss lenses currently is the medium format autofocus SLR with the best built quality.

Tele-Apotessar 4/350 T*
A Powerful New Telephoto Lens for Contax 645

Becoming available as you read this is a new fast autofocus telephoto lens for the Contax 645: Tele-Apotessar 4/350 T*. Being a highly corrected optical tool for the demanding medium format photographer it incorporates 9 lens elements in 8 groups, several elements being made of fluor crown glass to correct chromatic aberrations exceptionally well. Due to elaborate stray light baffling techniques and newly developed absorptive surface treatments, internal suppression of flare is on an extremely advanced level. Stunningly brilliant photos with true-to-life color rendition and vivid saturation are the result.

The Tele-Apotessar 4/350 T* comes with a rotatable tripod collar, and Zeiss recommends to use a good tripod in order to bring the full optical potential of this lens to film. Filter thread is M 95, non-rotating.

Utilizing internal focusing optics and autofocus drive motors in the lens, not in the camera body, the new lens focuses as close as impressive 1.9 meters in front of the film plane, 1.5 meters from the front lens element. This enables the photographer to tightly fill the fame with a child's face at a magnification of 1:4.

The level of correction is so high that the lens can be successfully used wide open. So the photographer can use selective focus in a very pronounced way. The Tele-Apotessar 4/350 comes with the new Mutar 1,4x, building a powerful 5,6/490 mm lens. This new optic expands the capabilities of the Contax 645 system considerably.

Zeiss Mutar T* 1.4x for Contax 645

Also new in the Contax 645 system is the new Mutar 1.4x converter. It is specifically designed to build a high-quality combination with the new Tele-Apotessar 4/350 and incorporates 6 lens elements in 5 groups. Also, it works very well with the other telephoto lenses in the Contax 645 system, the Sonnar 2,8/140 and the Sonnar 4/210. Due to its protruding front element, which enables favourable performance with telephoto lenses, the Mutar 1.4 x for Contax 645 cannot be used with the non-telephoto lenses in the system because collision of lens surfaces would occur. Stray light absorption and image brilliance are excellent. The Mutar 1.4 x for Contax 645 becomes available as you read this. It is included with the Tele-Apotessar 4/350, building a powerful 5,6/490 mm telephoto lens. It is also available as separate item.

Zeiss Lenses for Hasselblad
Sales are Growing by Two-digit Rate

The new CFi/CFE-generation of Zeiss lenses for Hasselblad has enjoyed a healthy growth in sales over the last year and keeps moving fast. Introduced at Photokina 1998, the new lenses offer the high optical performance Hasselblad users have appreciated for decades, plus enhanced stray light suppression based on newly developed absorbing techniques and materials. In addition to this, a new main spring made of NIVAROX extends the service life of the Prontor shutters considerably.

Market evaluations show that Hasselblad users, on average, have tended to be even more quality conscious than most other medium format photographers. This is reflected clearly in their current lens preference: Recently, especially those Zeiss lenses are in rising demand that are known to be extraordinary performers. These include the Superachromat 5,6/250, Tele-Superachromat 5,6/350, Tele-Superachromat 2,8/300 + Apo-Mutar 1,7x within the Telephoto Power Pack, the Planar 3,5/100, and the Biogon 4,5/38 built into the Hasselblad Superwide camera.

Another well sought-after long-term friend of many Hasselblad users is

the Planar 2/110 FE, the fastest lens in 6 x 6 medium format. The rise in demand for this lens can be attributed in large part to the success of the newly introduced Hasselblad 202 FA camera. Quite often this camera is the most appealing model for people who decide to enter the Hasselblad system today. And the Zeiss Planar 2/110 is seen by many to be the optic that complements this new camera better than any other lens.

Also in rising demand are the Distagon 4/40 and the Makro-Planar 4/120. These lenses are especially popular with professionals who use digital backs with their Hasselblad workhorse in their day-to-day activities.

Impressively successful is the Zeiss Sonnar 4/180 in its new CFi version. Attached to a new Hasselblad body with improved stray light suppression and shaded with the Hasselblad ProShade compendium, the combination can handle very challenging lighting situations without suffering the loss of color saturation experienced with previous versions of cameras and lenses. This improvement is found deeply convincing by professional beauty photographers.

Is Rollfilm 220 Better than 120 in Terms of Film Flatness?

Zeiss has recently developed a new measuring system to evaluate film flatness in medium format photography. The new system is based on an computerized microscope that can automatically scan and focus on multiple points of a film frame in a medium format camera magazine. The obtained focusing data are recorded by a computer and evaluated by a propriatory Zeiss software. The result is a mapping of the film topography with an accuracy of one millionth of a meter (1 micron), according to the developer of this system.

The purpose of this new device is to find out how well film magazine mechanics are designed in today's medium format camera systems, how precise they position the film and how well they hold it flat. From these findings Zeiss can draw conclusions about the field flatness required for medium format lenses and Zeiss can also trace causes for lack of sharpness in customer's photos. This is particularly interesting since more than 99% of all customer complaints about lacking sharpness in their photos can be attributed to misalignments of critical components in camera, viewfinder, or magazine, focus errors, camera shake and vibrations, film curvature, and other reasons.

So far, Zeiss has found that film curvature can have a major influence as a source of unsharpness. This has also been known by Zeiss' camera making partners Alpa, Hasselblad, Kyocera (Contax) and Rollei. Since Zeiss' evaluation program is not completed yet, we would like not to draw too many conclusions prematurely. But two things can be stated already as hints to enable sharper photos with medium format cameras at wide open apertures, since exactly those are invited by the high level of aberration correction in Zeiss lenses:

1. 220 type rollfilm usually offers better flatness than 120 type by a factor of almost 2. This is an advantage with fast, motorized cameras like the Contax 645 AF, Hasselblad 555 ELD (and previous motorized Hasselblad cameras) and Rolleiflex 6000 series cameras.

2. Film flatness problems are mainly caused by the combined influence of two factors: the rollers in the camera or magazine that bend the film, and the time a certain part of the film is bent by such a roller. Camera manufacturers usually space the rollers in a way that bent portions of the film will never be positioned near the center of the image. Therefore only marginal regions of the image should be affected by sharpness problems due to film flatness errors.

Since the photographer cannot alter the geometry and mechanics of his camera, he can only influence the other factor: time. A film run through the camera without much time between exposures should result in good flatness and hence sharpness. Five minutes between exposures may be some sort of limit, depending on brand and type of film. 15 minutes are likely to show an influence of bending around rollers. Two hours definitively will.

As a rule of thumb: For best sharpness in medium format, prefer 220 type roll film and run it through the camera rather quickly.

Publisher's Imprint
Camera Lens News
A newsletter for all who use, buy, sell, like, report about and are interested in Carl Zeiss lenses
No. 10
Summer 2000
All information in Camera Lens News is given to the best of our knowledge at the time of going to press. Technical specifications of Carl Zeiss products are subject to change.
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