Linhof

# PRECISION CAMERAS



### LINHOF SERVICE - PROMISE AND ORLIGATION

LINHOF precision products are sold and serviced all over the world through a network of qualified importers and dealers. A few of our major foreign distributors are listed below, for a complete list of LINHOF sales outlets contact the factory.

#### GREAT BRITAIN

LINHOF & STUDIO Professional Sales 56 Marchmont Street GB-London WC1N 1AB Tel.: (071) 837 90 95

Fax: (071) 837 12 87

#### JAPAN

SHRIRO TRADING CO. Ltd. ES Building 7-25-9 Nishi-Gotanda Shinagawa-ku Tokyo 141

Tel.: 03 5434 5751 Fax: 03 5434 5741

#### SINGAPORE

SHRIRO (SINGAPORE) Pte. Ltd. Shriro House 39 MacTaggart Road Singapore 1336 Tel: 284 00 58 Fax: 280 93 23

#### ISRAFI

A. BERNER & SONS Ltd. 15. Rothschild Blvd P.O.Box 447 Tel-Aviv Tel.: (03) 517 34 21

### **REP. OF SOUTH AFRICA**

Fax: 972 3 65 84 64

CAS CAMERA CENTRE (PTY.) Ltd. P.O.Box 50132 Randburg 2125

Tel.: 27-11 793 12 04 Fax: 27-11 792 15 55

HP MARKETING CORP 16 Chapin Road P.O.Box 715 Pine Brook, New Jersey 07058

Tel.: (201) 808-9010 Fax: (201) 808-9004

#### HONG KONG

SHRIBO PACIFIC Ltd. 2nd Floor, Hutchison House 10 Harcourt Road G.P.O.Box 181 Hona Kona Tel : 5245 03 18 Fax: 810 65 86

#### CANADA

DAYMEN PHOTO MARKETING Ltd. # 22. 3241 Kennedy Road Scarborough, Ont. M1V 2J9 Tel.: (416) 298 9644 Fax: (416) 298-3553

TAIWAN R.O.C.

GRAND CHIANG CO., Ltd. 8 Fl. 37. Section 1 Kai-Feng Street Taipei Tel.: 886-2 331 38 10 Fax: 886-2 331 01 98

REP. OF KOREA

KELEX Ltd. In Woo Bldg., 8th Floor 539-11, Shinsa-Dong Kangnam-ku Seoul Tel.: (02) 546 60 51

Fax: (82 2) 543 27 17

### LINHOF WHEN YOUR DECISION IS PRECISION

Wherever the LINHOF name is mentioned among professional photographers, in over 120 countries where LINHOF products are sold and have made a name for themselves, hardly anyone realizes that this company started out over 100 years ago as a small mechanical workshop founded by master mechanic Valentin Linhof.

Today, LINHOF is one of the largest and most prominent manufacturers of large format camera systems and specialized phototechnical equipment, offering the professional photographer a full range of precision products for virtually all fields of applied technical and commercial photography.

- The world famous TECHNIKA series of compact dropbed view cameras; the ultra-light TECHNIKARDAN field cameras and the versatile KARDAN series of monorail studio cameras for professional large format work on location and in the studio.
- Special-purpose cameras ranging from compact hand-held wide angle and panorama cameras to electrically controlled aerial camera outfits including specialized identification and instrumentation equipment and highly sophisticated photogrammetric systems.
- Heavy-duty professional enlarger and precision copy camera systems, special printed circuit cameras for use in photographic applications as well as industrial production processes.
- Precision tripods and heads for amateur and professional use, including custom-made equipment for instrument positioning and heavy-duty studio stands for photographic, industrial and scientific use.

Since LINHOF manufactures professional cameras of several basic designs, the photographer can rely on unbiased advice when selecting the type of camera system that best answers his needs. In addition, the LINHOF organisation offers expert advice on all aspects of professional photography and provides detailed technical information with full aftersales service through competent importers and distributors.

### **SUPER TECHNIKA 23**

6 x 9 cm / 2 1/4 x 3 1/4 in.



#### 000037

Technical baseboard camera with sturdy die-cast body and lift-up flap in top of camera body for increased wide-angle efficiency. Built-in, coupled precision long-base dichroic range finder, triple dropbed extension, detachable quick-change swing back with revolving frame, grid groundglass and removable focusing hood. Fold-up infinity stops and interchangeable distance scales for each coupled lens, tricam coupling disc for three focal lengths. Accessory shoe, 3/8" and 1/4" tripod bushings. Accepts TECHNIKA 23 type lensboards.

Weight: Camera body 1.8 kg/4 lb.

Dimensions, closed: 17x14x9 cm/7x5.5x3.5 in.

### **MASTER TECHNIKA 45**

9 x 12 cm / 4 x 5 in.



#### 000054

Technical baseboard camera with sturdy die-cast body that closes to extremely compact dimensions. The ideal large format system for handheld range finder-focused action shots and for deliberately composed studio or location subjects. Built-in, coupled precision long-base dichroic range finder, triple dropbed extension, lift lever for standard rise, universal spring back with revolving swing frame including grid groundglass and focusing hood. Lift-up flap on top of the camera housing for increased wide-angle efficiency. Easily interchangeable scale stage for 3 each distance scales to match range finder-coupled lens. Removable finder shoe and additional tripod socket on top for positioning the camera upside down for extreme lens drop.

Weight: Camera body 2.6 kg/6 lb.

Dimensions, closed: 20x18x11 cm/8x7x4.5 in

### **TECHNIKARDAN S 23**

6 x 9 cm / 2 1/4 x 3 1/4 in.



#### 000107

Fully adjustable midsize view camera providing the economy and convenience of rollfilm use without the corrective restrictions of rigid medium format systems. The unique concept of the rotating standards reflects LINHOF's know-how in precision engineering and quality manufacturing and combines compact dimensions with full view camera flexibility. Quicklock 23 type groundglass back with lift-off levers. Center swings and tilts for quick and convenient perspective corrections and instant depth-of-field control. Multi-profile, triple extension monorail, precision-machined dovetail fittings for all movements which are positively secured with color-coded locks for smooth and rapid operation. Sturdy L-brackets and zero click stops for swings and tilts assure perfect alignment under all operating conditions. While lenses in all shutters on TECHNIKA 45 lensboards can be fitted, the use of the specially designed TK lenses is particularly recommended.

### **TECHNIKARDAN S 45**

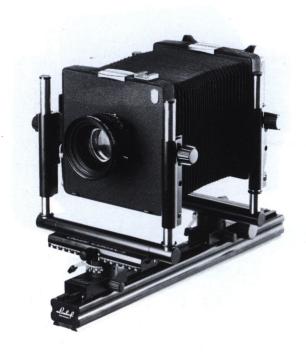
9 x 12 cm / 4 x 5 in.



#### 000108

The ingenious design principle of its smaller companion including the patented rotation of the standards through 90° to achieve a most compact transport position without removing the bellows is perfectly adapted to the larger 4 x 5 size. Full format flexibility from the standard rollfilm sizes up to 4 x 5 in. cutfilm, including the remarkable 6 x 12 cm wide-field images and all the appropriate Polaroid-film formats. Snap-on 45 type groundglass back for horizontal/vertical orientation. Interchangeable bellows. Center swings and tilts with zero click stops for instant camera alignment and for reliable perspective corrections with convenient depth-of-field control. Multi-profile, triple extension monorail, precision-machined dovetail fittings for all movements which are positively secured with color-coded locks for smooth and rapid operation. Fully compatible within the LINHOF system. Camera accepts lenses on TECHNIKA 45 lensboards and all special TK lenses with shutter control module.

## KARDAN E 45



#### 000100

The affordable view camera for the first step into the LINHOF system and the ideal entry to professional large format techniques. Interchangeable bellows for extended wide angle capability. Full range of view camera movements for total image control. Center swings and tilts plus yaw-free direct shifts to the limits of the image field covered. The angle scales read to 70° with 1° division. Solid all-metal design for long service life and professional heavy-duty stability. Precision-machined monorail with special dovetail base and movable tripod bushings for convenient positioning on all tripods and tripod heads. Millimeter scale on monorail for exact depth-of-field calculation.

### KARDAN GTI

 $9 \times 12/13 \times 18/18 \times 24 \text{ cm} - 4 \times 5/5 \times 7/8 \times 10 \text{ in}$ 



000102 000104

Modular multi-function monorail camera system for all professional formats and all focal lengths from extreme tele (1200 mm) to ultra short wide-angle (47 mm). Based on the KARDAN GT design (the "I" of the GTI name tag stands for infinity, but also marks the infinite versatility of this camera), this modular system actually comprises four individual camera configurations each offering perfect solutions for long tele shots, flexible studio and location shooting and extreme wide angle applications. In spite of its excellent stability the camera is easy to carry, as it is of lightweight construction and folds up to very compact dimensions. Naturally, it is fully compatible with the LINHOF system.

### **KARDAN GT**

 $9 \times 12 \text{ cm} / 4 \times 5 \text{ in}$ .  $13 \times 18 / 5 \times 7 \text{ in}$ .



### 000087 000088

Lightweight system camera for studio and location, combining the proven design details of the KARDAN range with an innovative monorail and new base tilt elements providing tri-axial camera adjustments to yield yaw-free movements both with direct and indirect displacements. The modular design concept in conjunction with the ingenious telescoping monorail guarantees outstanding stability and provides full format flexibility with rapid conversion to 5 x 7 and 8 x 10 in.. Special dovetail fittings allow to freely slide the entire monorail back and forth on all tripod heads thus featuring full macro focusing capability and wide angle efficiency as no encircling clamp has to be used. Scales facilitate repeat settings and allow instant depth-of-field calculation. Center swings and tilts for uncomplicated Scheimpflug adjustments, factory adjusted parallel locks on the base tilt elements guarantee perfect camera alignment also with inclined monorail.

### KARDAN GT

18 x 24 cm / 8 x 10 in.



#### 000089

The superior alternative for studio and location, with the same basic features as the smaller GT 45/57 models. Precision engineered for unsurpassed rigidity and long service life. All locking systems are user-serviceable to maintain factory-adjusted smoothness of all movements and freedom from play even after years of rugged use. In spite of its light weight design, the KARDAN GT 8 x 10 is the ideal mobile large format system camera with multi format flexibility. Pre-calibrated zero locks and tilt detents for a highly efficient and speedy camera operation, base tilt locks for yaw-free direct and indirect displacements. Instant change to smaller formats either through reducing backs or complete conversion kits. Precise and convenient depth-of-field calculation even in the macro range with the aid of the incorporated millimeter scale.

### KARDAN MASTER GTL

9 x 12 cm / 4 x 5 in. 13 x 18 cm / 5 x 7 in.



### 000097

Most sophisticated and technically perfect monorail system in the LINHOF line, a superbly engineered heavy duty studio camera with all the proven advantages of the KARDAN design principle and the added convenience of yaw-free indirect displacements. The modular KARDAN GTL combines maximum stability with extended adjustment facilities and extremely smooth movements with solid brass micro drives offering the greatest amount of corrective control of any camera system available today. It utilizes direct displacements to their greatest extent and allows yaw-free indirect displacements with inclined monorail, especially advantageous for close-up table top work, so that each user has total freedom of choice and can select his specific displacement technique, including the optional use of freely adjustable asymmetrical (floating axis) swings and tilts on the rear standard. Built-in depth-of-field optimizer.

### KARDAN MASTER GTL

18 x 24 cm / 8 x 10 in.



#### 000092

The advanced engineering and superb craftsmanship of the KARDAN GTL design is further perfected in the 8 x 10 model which features even more mechanical refinements to cope with the added stability requirements of this large format. The ideal modular system for heavy duty professional use, particularly in conjunction with long focal length lenses and the new Prontor Professional Shutters and their automatic shutter control system. In addition to all the standard GTL features, the oversized brass micro rack-and-pinion drives of the 8x10 version are matched to the weight of the camera components and lenses and feature, on the front and rear vertical movement, an adjustable one-way brake for optimum load compensation.

### TECHNORAMA 612 PC II

6 x 12 cm



#### 000099

This panorama camera with its 2:1 aspect ratio combines the advantages of a large format image with the benefits of 120/220 rollfilm. Two interchangeable top-performance lenses in conjunction with a precision-machined die-cast camera body and a highly precise optical viewfinder produce images of outstanding large format picture quality. Both lenses feature a built-in 8 mm lens rise that gives the effect of a shift lens offering total perspective control both with high or low camera angles which up to now could only be achieved with a view camera. It is particularly well suited for architectural, industrial, landscape and travel photography, as well as for use on construction sites or for aerial obliques. On special order, a custom version of this camera with integrated réseau plate is available for photogrammetric applications.

# TECHNORAMA 617 S



#### 000096

The classic hand camera for sweeping panoramic views in true large format quality with a 3:1 aspect ratio providing four exposures 6 x 17 cm on 120 or eight on 220 rollfilm. The outstanding instrument for the demanding feature photographer specializing in architectural, industrial, science and travel photography. Ideal for hand-held use, but equally suitable for carefully composed tripod shots with new features for even better handling and easier operation Multi-coated Schneider Super Angulon 5.6/90 for distortion-free images of excellent large format quality. Highly precise bright-line optical viewfinder with reflected spirit level and reference cross.

### **AEROTRONICA 69**

6 x 9 cm / 2 1/4 x 3 1/4 in.



#### 000084

Advanced modular hand camera system for professional size 6x9 cm images on perforated 70 mm film. Permits the use of longer lenses in combination with very short shutter speeds. Fully motorized and electronically controlled camera operation. The most important engineering detail is the exclusive rotary focal plane shutter with speeds from 1/500 to 1/1500 sec. and a fastest sequence of about 3 shots in 2 sec. Large selection of interchangeable lenses from 75 to 480 mm, all in helical focusing mounts to permit air-to-air photography at closer distances as well. Modular design and quicklock coupling systems for fast in-flight lens and magazine change. Data imprint optional.

### AERO TECHNIKA 45 EL

9 x 12 cm / 4 x 5 in.



### 000078

Compact motorized camera system primarily for high quality oblique aerial photography. Large 4x5 in. or 6x9 cm images on 5 in. or 70 mm perforated rollfilm (approx. 150 exposures per magazine load). Highly rigid, lightweight aluminium alloy body with two revolving anatomical hand grips, quick-release safety locks for interchangeable rollfilm backs, quicklock bayonet mount for 4 precision lenses from wide angle 90 mm to telephoto 250 mm. All lenses are specially selected for optimum contrast rendition and fitted in sturdy helical focusing mounts for perfect sharpness control also in air-to-air shots or observation photography on the ground. Camera also connects to 24 V DC inboard power supply and/or intervalometer, particularly useful for remote controlled operation in vertical reconnaissance work. Vacuum rollfilm back for perfect film flatness to yield maximum corner-to-corner sharpness under all operating conditions.

### TECHNAR 45 9 x 12 cm / 4 x 5 in.



#### 000071

Wide angle system camera for all professional formats from 4 x 5 in. to 2  $1/2 \times 2 \ 3/4$  in. The connecting link between the dynamic medium format hand camera and the adjustable large format studio camera, used whenever a mobile and fast hand-held wide angle camera for scenics or interiors is required. Multi-coated Super Angulon 65/75/90 or Apo-Symmar 135 mm lenses in helical focusing mounts provide full format flexibility and perfect adaptation to every job at hand. The high definition lenses of the TECHNAR in combination with the full 4 x 5 in. cutfilm size, the panoramic images of the Techno Rollex or the various Super Rollex rollfilm formats provide a maximum of detail rendition, colour brilliance and overall sharpness.



### 000101 000103

Compact precision camera system of rugged design for universal applications in architecture, research and industrial photogrammetry. With its large 4 x 5 in. film format, the Metrika 45 is the interesting alternative to existing imaging systems as it provides an extremely high degree of accuracy while at the same time remaining handy and fully portable to be conveniently used also on location. The extremely rigid camera body with integrated lens (90 mm or 150 mm) uses 5 in./126 mm rollfilm in a vacuum magazine for positive film flatness. Fully motorized and electronically controlled operation, 2 anatomical grips for easy handling. Glass réseau plate built into the camera for precise measurements using analytical plotting systems available from various manufacturers.

### PRECISION COPY STANDS

Decades of experience in manufacturing high-precision copy equipment and universally adaptable accessory stands are reflected in the advanced design and sophisticated engineering quality of the new generation of copy stands that incorporate a host of new features in addition to many proven and time-tested design details.

### **TECHNOPRO I and II**

003013 003015

These manually operated copy stands differ in baseboard size, overall height and total weight but not in their technical concept. The copy column itself is a sophisticated extrusion profile made from a special aluminum alloy to combine extreme rigidity with compact dimensions. Two large hand cranks allow precise elevation control from any position, the large front scales in cm and inch with dual reference markers permit precise positioning and repeat settings which can be securely locked with the aid of a conveniently located adjustable locking lever.

Extension of the camera arm is continuously adjustable via a precision rack-and-pinion system with large drive knob. Camera retaining plate accepts equipment with 1/4 in. as well as 3/8 in. bushings, user-adjustable friction brake compensates for camera loads up to 15 kg. Heavy-duty baseboards, 30 mm thick and satin-black laminated on six sides, with rubberized levelling feet in each corner for secure positioning also on uneven surfaces. Contrast-reducing grey grid for accurate positioning of artwork, grid size 25x25mm.

### **TECHNOPRO III**

003012

In addition to the manually operated units, a **motorized version** is available which is basically identical to the smaller models, but features a longer column with a heavy duty welded steel base frame and a motor driven elevation of the camera carrier. The powerful motor is activated via a remote control providing three combination keys for high / low speed control and change of direction assuring, regardless of the weight of the camera attached, a constant travel speed in both directions. Positioning accuracy 0.3 mm.



As optional accessories, wall mounting brackets as well as welded steel supports are available for the TECHNOPRO copy columns to allow individual positioning without using an extra table.

### PRECISION TRIPOD SYSTEMS

### **LINHOF PRECISION TRIPODS**

are your guarantee for maximum sharpness and for optimum use of the creative potential and the built-in quality of modern high performance camera and lens systems. LINHOF tripods and heads - Made in Germany - are precision-built to the same exacting quality standards as LINHOF cameras. One of the most successful professional models which has been a best-seller in the LINHOF tripod line for many years and a selection of matching heads are described below. Detailed folders on the complete range are available on request.

### **Heavy Duty Pro Tripod**

003323

The classic heavy duty tripod for studio and location photography and for secure positioning of optical and electronic instruments. Robust twin shank aluminium tubes with plastic covering, oversized leg mount collar with 90 mm dia. clamp mount for extreme stability and vibration-free camera support, accepts directly all LINHOF professional tripod heads and accessories. Umbrella struts for added strength and secure leg positioning even on smooth surfaces. Lower leg extension can be adjusted to any intermediate height with the aid of eccentric clamps. Tripod feet convertible from metal tips to rubber pads.

### LINHOF PRECISION TRIPOD HEADS

have long been among the sturdiest and most precise camera supports and are indispensable for accurate and effortless camera and instrument positioning. From quality-engineered ball and socket heads to heavy duty levelling pan/tilt heads they offer extremely smooth movements and secure orientation even under extreme operating conditions. The following heads are particularly recommended for the Heavy Duty Pro tripod described on this page:

#### Profi Ball Head III

003650

Extremely sturdy heavy duty mono ballhead for precise omnidirectional positioning of heavier cameras and instruments.

### Profi III Universal Pan/Tilt Head

003669

The exclusive heavy duty levelling pan/tilt head for use with cameras or instruments requiring secure 3-dimensional orientation with individual locks of all movements.

### Levelling Pan/Tilt Head 90

003668

Highly compact and extremely sturdy levelling pan/tilt head with integrated dove-tail quicklock base for direct insertion of LINHOF Kardan cameras.



### LINHOF QUALITY



MADE IN GERMANY

For more detailed information contact your local professional dealer or the LINHOF distributor in your country.

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