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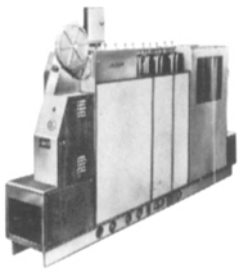

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Abstracts

Abstracts of papers appearing in other journals, chosen for their importance and timeliness, are published in the *Journal* from time to time. Most of these abstract are translations, chiefly from the U.S.S.R., and are made available to the *Journal* by the Research Laboratories of the Eastman Kodak Company. As a rule, translations are made of the foreign language abstracts, not of the paper itself. The respective complete original texts can be consulted at some libraries. Current issues of *Tekh. Kino i Telev.* can be consulted at, or borrowed from, the Society's Headquarters Office.

Those requiring definitive and thorough searches of current literature and patents are referred to *ABSTRACTS of Photographic Science & Engineering Literature* (*APSE*), published monthly by the Society of Photographic Scientists and Engineers. Managing Editor is Miss Leonore H. Hess. The editorial and business office of *APSE* is at: c/o Engineering Index, Inc., 345 East 47 St., New York, N.Y. 10017.

The Subject areas are grouped below:

Lighting (Light Sources and Screens)
Medical Photography
Projection
Sound Recording and Reproduction
Television

LIGHTING (Light Sources and Screens)

More Light (in Czech.), L. Kučera, *Jemná mech. a opt., 7:* 303–305, No. 10, 1962; *Referativnyĭ Zhur., Fotokinotekhnika,* Abstract No. 5.46.201, 1963.

The influence of the quantity of light on the quality of the screen image is discussed. Consideration is given to the construction of the elements of arc lamps used in motion-picture projection, and to factors which influence the raising of their light output.—S.C.G.
(Translated from *Referativnyĭ Zhur., Fotokinotekhnika.*)

More Attention to the Wide Screen (in Russian), A. A. Lapauri, *Tekh. Kino i Telev., 7:* 30–4, Sept. 1963.

The problem of the optimum dimensions of a wide screen is discussed. A rational series of focal lengths for projection lenses has been derived. It is considered necessary to revise the standard NORM SN30/58 so as to bring them into line with present practice in projection in wide-screen cinemas. Attention is drawn to the necessity for a serious study of the quality of wide-screen images for the correct evaluation of the influence of the anamorphotic process.—S.C.G.
(Translation of Author's Abstract.)

B.S. 2063:1963 Studio Spotlights for Tungsten Filament Lamps for Use in Motion-Picture Studios, *B.S.I. News,* 31–32, Nov. 1963.

Specifies requirements for four sizes of spotlights using 750w, 2kw, 5kw and 10kw filament lamps respectively. Specifies the essential features of construction of the optical system and the lamphouse, together with such electrical requirements as will ensure efficient operation and safety in use. Certain limiting dimensions and weights are specified for the lamphouse, and fully-detailed dimensions are given for the spigot mounting, and for barn door backplates and diffuser frames and their supporting brackets. Maximum and minimum angles of divergence are specified for the beam, together with a detailed description of the method of measurement.—B.S.

The Use of Low-Voltage Mirror Lamps for Lighting in Feature Films (in Russian), Ya. L. Butovskiĭ and L. F. Litvinova, *Tekh. Kino i Telev., 7:* 29–34, June 1963.

The experience of the Lenfil'm studios in the use of low-voltage mirror lamps for lighting on location is discussed.—S.C.G.

MEDICAL PHOTOGRAPHY

Endoscopy of the Bile Duct—Experiences in the Preparation of an 8mm Color Film (in German), R. Peper, *Med.-Markt, 11.* 21–2, 11, No. 1, 1963; *Referativnyĭ Zhur., Fotokinotekhnika,* Abstract No. 8.46.278. 1963.

A description is given of the preparation of an educational color film on 8mm film on the subject, "The Endoscopy of the Bile Duct." The photographic materials and the apparatus with the aid of which the photography was carried out are discussed. Certain features of the technique and organization of the photography are also dealt with.—S.C.G.
(Translated from *Referativnyĭ Zhur., Fotokinotekhnika.*)

Photography in the Service of Ophthalmology (in German), M. Engelbert, *Fotohändler, 14:* 80–1, No. 2, 1963; *Referativnyĭ Zhur., Fotokinotekhnika,* Abstract No. 8.46.277, 1963.

A review is given of the uses of photography in the treatment of eye ailments. According to the scale of photography, three main types are distinguished: (1) photography of the general aspect of the eyeball, usually carried out on the normal macro scale with the aid of reflex cameras and electronic flash lighting; (2) photography of details of the eyeball, carried out with the aid of the Leitz eye microscope with a camera with oblique and direct electonic flash lighting; (3) photography of the base of the eye carried out with the aid of the special Zeiss Funduskamera, special electronic flash attached to the camera being used. It is observed that all the apparatus for ophthalmic photography is so standardized and of such high quality that photographs taken at different times are completely comparable among themselves. This makes it possible to observe all changes arising in the course of development of an illness and as a result of treatment.—S.C.G.
(Translated from *Referativnyĭ Zhur., Fotokinotekhnika.*)

Inspect every foot before it leaves your plant with the HFC High Speed Heavy Duty Inspection Projectors -- 16mm & 35mm models now available.

NEW

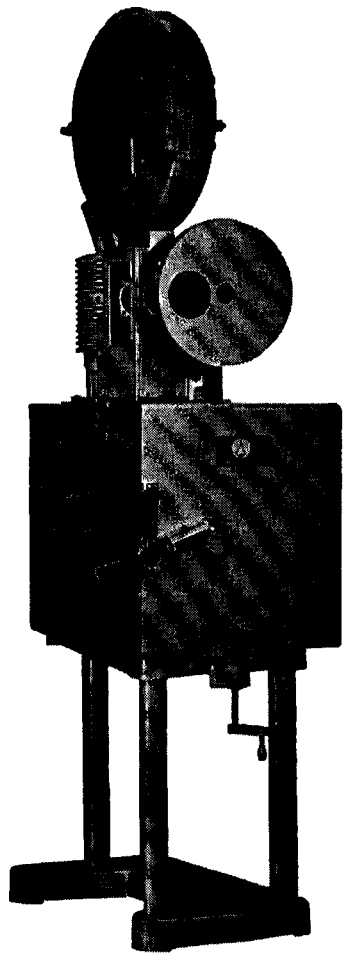
The projector is a converted front shutter Simplex with a two pin intermittent. 16mm or 35/32 film runs at a speed of 144 ft. per minute while 35mm film runs at a speed of 165 ft. per minute.

1. A variac controls the light intensity.
2. A 500 watt lamp is used for 16mm and a 1,000 watt for 35mm (a blower is used to cool the lamphouse).
3. A 2½ inch projection lens is furnished with each unit.
4. A start-stop lever controls the power to the lamp and motor.
5. The magazine and take up core takes up to 3,000 ft. of film.
6. Upper guide rollers are made to handle the film from either direction of the feed reel.
7. A free wheeling take off flange is provided in the magazine.
8. A lamp near the takeup reel permits hand inspection of the film prior to takeup.

NOUVEAU

Le projecteur contient un obturateur Simplex anterieur transformé avec deux clavettes intermittent. Les films de 16mm ou 35/32 tournent avec une vitesse de 144 pieds à la minute, tandis que les films de 35mm tournent avec une vitesse de 165 pieds á la minute.

1. Le regulateur de voltage d'intensité d'eclairage.
2. La lampe de 500 watt est nécessaire pour les films de 16mm, et de 1000 watt, pour les films de 35mm (un ventilateur est mise pour rafraichir la chambre de la lampe).
3. L'objectif de 2½ est instalé.
4. La manette de mise en marche et d'arret controle en meme temps la lampe et le moteur.
5. La boite de films avec noyau peut contenir 3000 pieds du films.
6. La roue supérieure est construite de manière de recevoir le film dans les deux directions, nourrie par la bobine centrale.
7. Une roue est instalée pour libérer rapidement le film de la boite.
8. La lampe se trouve pres de la bobine recepteuse, et donne toute facilité pour inspecter le film a main dans le projecteur.



NUOVO

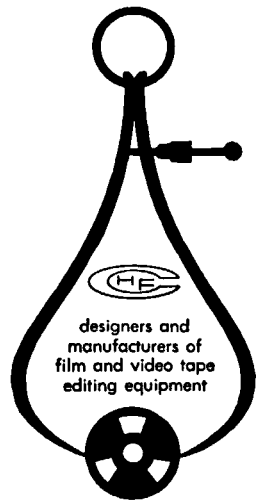
Questi proiettori sono Simplex transformati, otturatore al fronte, meccanismo di scatto di due punte. La velocitá di proiezione in 16 o 35/32mm e di 144 piedi per minuto, e in 35mm, di 165 piedi per minuto.

1. Controllo manuale della luminositá della lampada.
2. Lampada di 500 watt per 16mm e di 1000 watt per 35mm.
3. Obbiettivo di proiezione di 2½".
4. Maniglia per controllo di motore e lampada di proiezione.
5. La cassetta porta pellicola puo contenere 3000 piedi.
6. I rulli superiori di guida sono construiti per operare con film provenente di ambi lati della bobina svolgitrice.
7. Disco con montatura sporgente nel magazzino.
8. Una lampadina illumina la bobina avvolgitrice, permettendo l'ispezione manuale del film prima che si avvolga nel proiettore.

NUEVO

Esta máquina es un proyector simplex convertido, obturador al frente y movimiento intermitente a doble grifa. Para 16mm o 35/32mm, la velocidad fija de proyección es de 144 pies por minuto, para 35mm es de 165 pies por minuto.

1. Un reostato controla la intensidad de la lampara de proyección.
2. Para 16mm se usa una lampara de 500 watt, y una de 1000 watt para 35mm (un chorro de aire ventila las lámparas en ambos casos).
3. Cada unidad está provista de un lente de proyección de 2 pulgadas y media.
4. Una palanca de control opera el motor y la lampara simultáneamente.
5. Capacidad de proyección: rollos de hasta 3000'.
6. Los rodillos de guía superiores operan con la película en ambas direcciones.
7. La tapa de la bobina de carga es desenroscable.
8. Una lámpara ubicada junto a la bobina de toma permite la inspección manual de la película antes que se rebobine en la bobina superior del proyector.



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The Exakta-Varex in Medical Photography (in Russian), K. Gretsch, *Nemetskiĭ Eksport*, 14–16, No. 5, 1963; *Referativnyĭ Zhur., Fotokinotekhnika*, Abstract No. 8.46.-176, 1963.

The miniature single-lens reflex camera, the Exakta-Varex, owing to the complete lack of parallax, shows wide technical possibilities, and a large selection of auxiliary equipment makes it suitable for specialized, including medical, photography. The various attachments that can be used with the camera and the uses to which they can be put in medical photography are discussed.—S.C.G.
(Abridged from *Referativnyĭ Zhur., Fotokinotekhnika.*)

Supplementary Apparatus for Color Photography of Small Operation Fields (in German), A. Gaca, *Med.-Markt, 11:* 63, 11, No. 21, 1963; *Referativnyĭ Zhur., Fotokinotekhnika*, Abstract No. 8.46.275, 1963.

Surgical operations are photographed with a relatively large distance between the operation field and the camera. For obtaining an image of small parts of the subject on a larger scale it is suggested that the Bessamatic, Contaflex and Contarex reflex cameras should be used with the Super-Dinarex telephoto lens, which has a focal length of 135mm. For increasing the size of the image the use of the Focar A and B supplementary lenses is recommended.—S.C.G.
(Translated from *Referativnyĭ Zhur., Fotokinotekhnika.*)

PROJECTION

Portable Rear-Projection Equipment (in Russian), Ya. L. Leĭbov, *Tekh. Kino i Telev., 7:* 59–61, July 1963.

A brief description is given of portable equipment used by Lenfil'm Studios for rear-projection outside a properly equipped studio.—S.C.G.

The Picture is All Around You, T. Shoemaker. *Amat. Cine World, 6:* 570–71, No. 15, Oct. 10, 1963.

A single cine film is projected vertically upwards to a reflecting hemisphere suspended in a domed auditorium, the inside of which is the screen. This gives a panoramic image without joins, but the definition obtainable limits the dome diameter to about 45 ft.—A.S.C.

The Pulldown System of a 16-mm Motion-Picture Projector: Its Working and Maintenance (in Polish), Anon., *Kinotechnik, 16:* 3823–25, No. 176, 1963; *Referativnyĭ Zhur., Fotokinotekhnika*, Abstract No. 8.46.231, 1963.

A description is given of the principles of operation and of the construction of the pulldown system of the AR-12 (Poland), 16-3T-5, "Ukrain" (U.S.S.R.) and Terty (Hungary) 16mm motion-picture projectors. Recommendations are given for their use, lubrication, adjustment and repair.—S.C.G.
(Translated from *Referativnyĭ Zhur., Fotokinotekhnika.*)

The KPP-3 Panoramic Motion-Picture Projector (in Russian), S. Verlinskiĭ and L. Kirnos, *Kinomekhanik*, 25–7, Feb. 1963.

The Soviet-made KPP-3 motion-picture projector is designed for the exhibition of panoramic films made on three 35mm films containing the image and a separate film with the sound-tracks, the latter being reproduced on a special synchronized film reproducer. Some details of the mechanical layout and the optical system are given.—S.C.G.

Motion-Picture Projector Driving Mechanism (in Russian), Anon., *Kinomekhanik*, 21–26, No. 35, Jan. 1963.

The requirements of drive mechanisms are enumerated, and special points in gear, friction, and belt drives used in the transfer in picture projectors are discussed. Some mechanisms are dealt with in more detail.—S.C.G.

SOUND RECORDING AND REPRODUCTION

Sound Recording Materials—A Review. *Brit. Kinemat., 42.* 203–208, June 1963.

Technical data are given on some currently available photographic and magnetic sound-recording materials.—A.S.C.

New Developments in Sound Film Recording and Reproducing Equipment, L. G. Osborn, *Brit. Kinemat., 42:* 196–202, June 1963.

New Westrex sound film recording and reproducing machines use transistors in place of thermionic valves and incorporate a number of other technical advances. These include a mechanical system with less than 0.06% flutter, improved magnetic heads, and reduced-noise optical playback.—A.S.C.

Sound-Recording on a Ferro-Magnetic Track on Amateur Motion-Picture Films (in Russian), V. M. Rozenblit, *Tekh. Kino i Telev., 7:* 68–70, July 1963.

A description is given of the use of magnetic sound-recording on 16mm motion-picture film as used in amateur cinematography in the Soviet Union.—S.C.G.

A Contribution to Solving the Problem of Putting Sound on Short-Length Films Electromagnetically to Obtain Synchronization by Electrical or Magnetic Coupling (in Rumanian), V. Gh. Neaga, *An. ştiinţ. Univ. Jaşi*, Sec. 1, *6:* 833–837, No. 4, 1960; *Referativnyĭ Zhur., Fotokinotekhnika*, Abstract No. 4.46.314, 1963.

TELEVISION

Extending the Cinema Network in the U.S.S.R. by Television (in Russian), E. M. Goldovskiĭ and N. I. Tel'nov, *Tekh. Kino i Telev., 7:* 1–6, Sept. 1963.

The possibility of using television to provide cinema programs from a central station for a large number of theaters is discussed. It is concluded that at present television has not reached the point at which the project is really feasible, although it should be only a matter of time before improvements in television techniques will meet the requirements of large-scale exhibition in theaters.—S.C.G.