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# ARRI



A PICTURE CHRONICLE



ARRI  
MS-16  
No. 1372

ARRIFLEX 435

**ARRI** 

**ARRI** 

2001

A PICTURE CHRONICLE

# An Invitation to Dream

*"Imagine..." To realize dreams, to transform them into moving images – this is what cinematography has been about since its beginning.*

*This medium, combining imagination and technology in a unique and fascinating way, has created increasingly realistic illusions in its 100 year history. And often one could not determine afterwards what came first: the filmmaker's untamable imagination, or the technology that made it possible to capture it on film. Thus the history of film is also the history of film technology.*

As filmmakers dreamed up more and more fantastic images and camera angles, film technology had to progress. Furthering this process was one of the prime motivations of August Arnold and Robert Richter. Arnold and Richter, while still students, started their own company in Munich on the 12th of September 1917 – 22 years after the first public film presentation by the brothers Lumière.

As aspiring cinematographers, they quickly became aware of the many limitations of existing filmmaking technology which was still in its infancy. They worked to improve existing gear, then to develop their own film printer and lighting instruments. In 1924 they developed their first film camera, the small and portable Kinarri 35.

### **Rotating Revolution**

The development of the first industrially manufactured film camera with a reflex mirror shutter was revolutionary and groundbreaking. The reflex mirror shutter, as introduced in 1937 with the legendary ARRIFLEX 35, is a design principle that is now incorporated in every modern motion picture film camera. For the first time in the history of moving pictures a camera operator could view the exact framing without any parallax errors. In addition, focus could now be judged through the viewfinder.

This had not been possible with other cameras which used a range finder or rack-over mechanism.

“This development was not simple at all,” remembers Erich Kästner, then chief engineer, who created the ARRIFLEX 35 in cooperation with August Arnold. “There had been many patent applications for a camera with a reflex mirror, here and in America. But they never were actually executed. The main problem was that it was not possible to simply flip a shutter up 24 times a second, like in a still camera, and that a rotating shutter had to be used for a film camera. We angled the shutter and the mirror and combined them into one unit. The film industry was at first very skeptical if this would work.” Well, it worked: In 1938 actor and director Harry Piel shot a few scenes of «Menschen, Tiere, Sensationen» with the brand new ARRIFLEX 35.

The ARRIFLEX 35 was also exceptionally small and compact, allowing the camera operator a degree of creative freedom previously thought impossible: now they were able to shoot hand-held, while still controlling the exact framing. Because of its small weight, this camera was not only a favorite with feature film productions, but also with news photographers. In 1982 Dr. August Arnold

and chief engineer Erich Kästner received the Academy Award Class I Oscar for the design and development of the first 35 mm film camera with a reflex mirror shutter system. This would not remain ARRI’s only trophy: by 1999 ARRI had received nine Academy Awards for technical development, and Erich Kästner was honored with the Gordon E. Sawyer Award for his lifetime achievement.

### **A Mass Medium is Born – Television**

Innovation became one of Arnold & Richter’s business principles. The new medium television required fast and inexpensive production methods. 16 mm film, which up to that point had been used exclusively in hobby cinematography, would prove to be the standard capture medium for television. Robert Richter had recognized the importance of the 16 mm format during his travels in the US. In 1952, ARRI introduced the first professional 16 mm film camera with a reflex mirror shutter, the ARRIFLEX 16 ST.

1958 saw the birth of the Electronic Cam: a set of modified ARRIFLEX 35 cameras equipped with video assist cameras and blimps. It provided not only traditionally exposed film but also a live video signal that could be viewed and edited by a director in television style. This was an early example of what, in the

meantime, has become the classic method for television series production.

Diversity and change were the sign of the times at the end of the 1960s and beginning 70s, and this was reflected in the way film language changed. In Germany the so called ‘Autorenfilm’ became popular, and directors were shooting on location on every occasion and spending less and less time in studios.

Now it was more crucial than ever to have a small, portable – but most importantly – a quiet film camera. To meet this need ARRI introduced the 35BL in 1972. It was the first self-blinded 35 mm film camera. In contrast to the 80 pound (35 - 40 kg) blimped monsters used up to that point, the 35 BL was 33 pounds (15 kg) light and was so compact that it could be used for hand-held work. ARRI had already introduced the 16 BL for 16 mm film in 1965.

### **Traveling to New Worlds of Images**

A need for new stories, new material, new ideas... arose parallel to the development of television and filmmakers made fantastical illusions look like reality. With rising production costs, expectations rose with regard to technical perfection, film stock, image control, and even to the film format itself.

The ARRIFLEX 765 – the first compact 65 mm production camera – was introduced in 1989. The 765, even though it uses 65 mm film, is lightweight and quiet, allowing sync sound recordings. Other impressive specifications include a speed range of up to 100 fps, a very bright and versatile viewfinder, 25dbA at 24 fps and a weight of 70 pounds (32 kg) with a loaded magazine and lens. Lauding the large screen format during the shooting of «Little Buddha» in 1994, Vittorio Storraro said: "In the same way that you need to establish the right proportions in life, you also have to respect these proportions in the cinema."

A special kind of image control became possible with the ARRIFLEX 535, which was introduced in 1990. The open angle of the mirror shutter can be changed while the 535 is running. This allows for exposure compensation or so-called 'speed/exposure ramps', giving the film maker a new phrase in the language of film which is now routinely used in feature films and commercials. A scene can be shot slightly undercranked at 20 fps, thus resulting in an acceleration of the action scene when projected. The camera can then 'ramp', that is change fps while running to the sync sound speed of 24 fps for a dialog sequence and after-wards ramp back to 20 fps. Speed/exposure ramps are a powerful tool, giving the film-maker the ability to compress or stretch time during a scene on the set without any additional costs in post-production.

Another big hit was the ARRIFLEX 535's fully adjustable viewfinder, which can also be found on the 535B introduced in 1992. While reflecting the technical requirements of modern filmmaking, these cameras are also extremely quiet, they include a LCD display for comprehensive monitoring and control functions, connect to many powerful accessories and sport a modular design that allows for an easy upgrade or exchange of components. Some features of these cameras, like the fully integrated Timecode or the high-quality color video assist, are specifically designed to speed up the post-production process.

The ARRIFLEX 435, introduced in 1995, soon became the new standard tool as a second unit/MOS high-speed camera. In addition to an electronic shutter that allows speed/exposure ramps, the 435 can run forward and reverse from 1 to 150 fps while keeping perfect image steadiness. This is the reason why the 435 is used on an increasing number of special effects films, in particular because it is well suited for any material that will be used in digital post-production, where steadiness is a must. Because it features the same bright and versatile viewfinder as the 535B while remaining compatible with the old 35-3/2C magazines, the 435 has become the favorite high-speed MOS camera of filmmakers all over the world.

## **ARRICAM**

ARRICAM – a new name and camera concept for a new century is introduced in September 2000 at the cinec: A system consisting of two cameras – the 'ST' featuring the most innovative and advanced functions for filmmaking, and the 'LITE' which is specifically designed for hand-held and Steadicam applications. ARRI and Moviecam, now a member of the ARRI group, joined forces in this new camera system to bring new creative possibilities to the industry.

## **New Fields of Activities**

"From the field, for the field" – this maxim penned by Arnold and Richter results accounts for a strong devotion to and a dedicated involvement in the film industry: We trust what we use and what we test ourselves. This consequently leads to a strong commitment to service: not only was an ARRI film lab with ARRI film processing machines was founded, but also the ARRI Film and Television Studios, a camera and lighting rental house, audio and film post-production facilities, and in 1982, ARRI TV the electronic post production house.

Recent additions include not only ARRI Digital Film, a facility branch of the subsidiary ARRI TV, but also the ARRILASER, a hardware product which has become the industry standard for exposing digitally edited images back to film in full film resolution.

ARRI's service branches have become a self-supporting and future orientated part of the business. ARRI currently employs approximately 1000 persons worldwide, of which 800 are located in Germany. 12 subsidiaries in the USA, Canada, England, Italy and Austria, as well as 50 ARRI dealers all over the world ensure customer-oriented service wherever film is exposed.

## **1917**

On September 12th, August Arnold and Robert Richter move into a small shop at Türkenstrasse 85. The company name ARRI originates from the first two letters of their surnames.





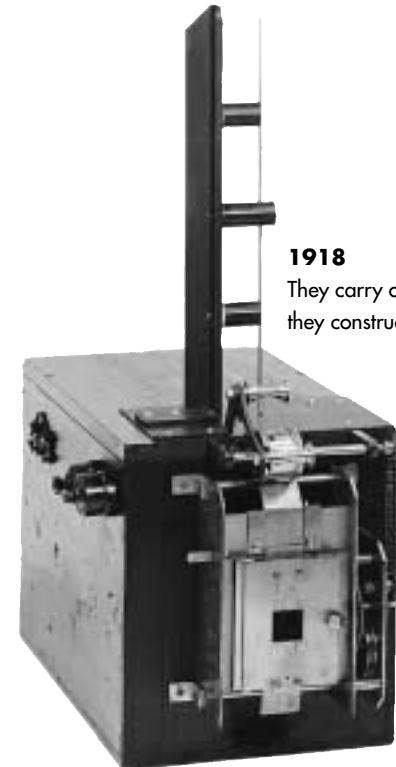
CAPITOL

ADWIG RICTER

ARAL BIKER G

**1918**

Arnold and Richter work as camera operators and actors. They soon acquire two additional cameras which they also rent out, and they are able to employ six co-workers.



**1918**

They carry out print orders with a printing machine they constructed themselves.





**1920**

The new version of their printer is a great success: an Italian film producer buys 12 units at the Amsterdam Film Exhibition and orders 12 more. The price of 100.000 Marks is a first sign of the great inflation to come.



**1920**

Robert Richter and Karl Dittmann, later first cameraman, shooting the film "Der Eisenbahnräuber". On the left, director and leading man Fred Stranz.

**1920**

On December 8th the upper floor of Türkenstrasse 85 burns down: a spark caused by a short-circuit sets strips of celluloid on fire, and the whole printing and film processing department is destroyed by the spreading flames.



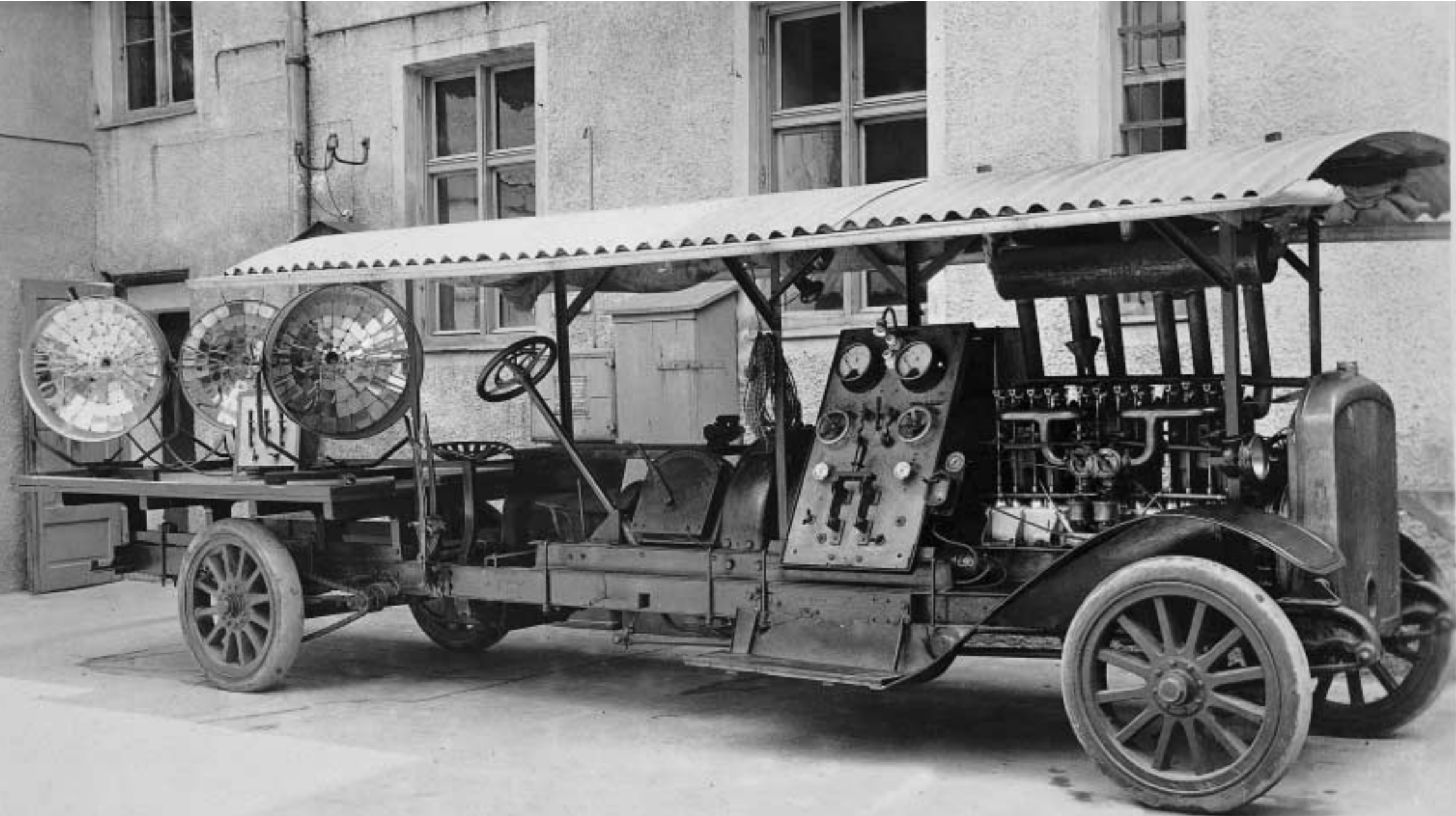
**1924**

August Arnold constructs the first mirror facet reflector with an electric light bulb.



**1924**

The first electricity unit on wheels, built with an aircraft engine, makes the mobile use of the mirror facet fillers possible.



**1924**

'Kinarri 35' is the name of the first 35mm amateur camera constructed by August Arnold.

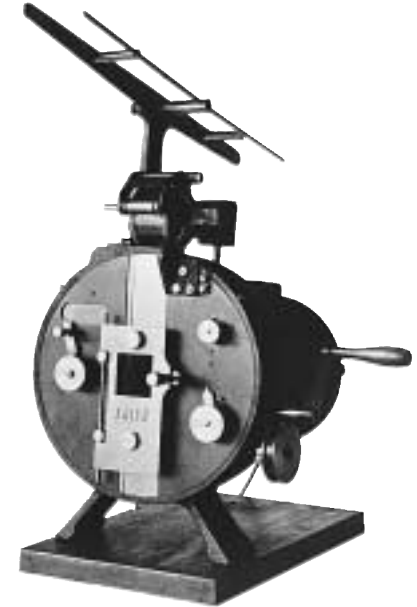


The improved model II called 'Tropen' already has an adjustable rotary shutter.



**1925**

Robert Richter achieves his first sales success in the United States with the improved printing machine.

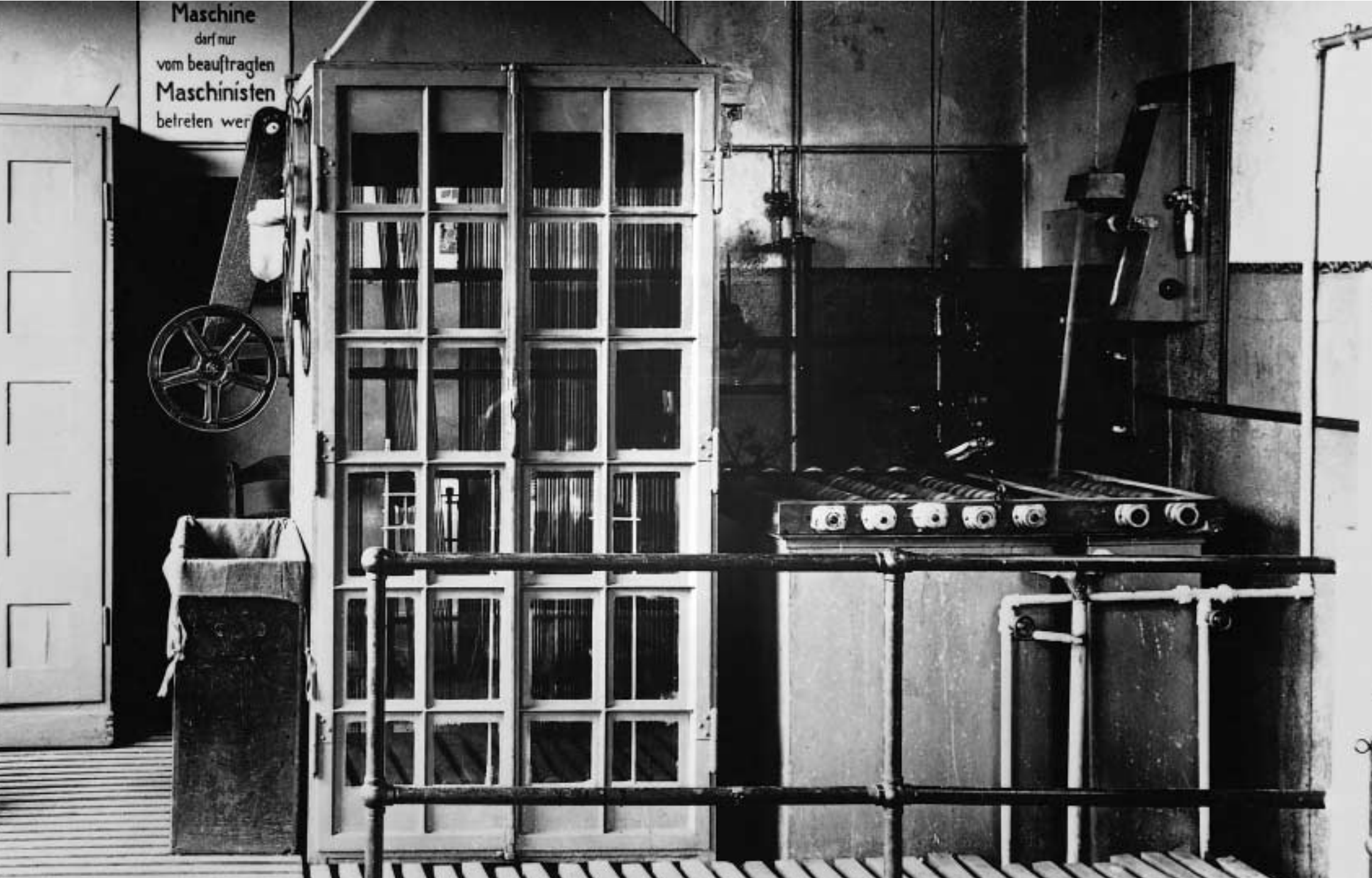


**1927**

After expanding the printing department as early as autumn 1925 with self-constructed machines, Robert Richter now builds the first big film processing machine with friction drive. The company now has 20 employees.

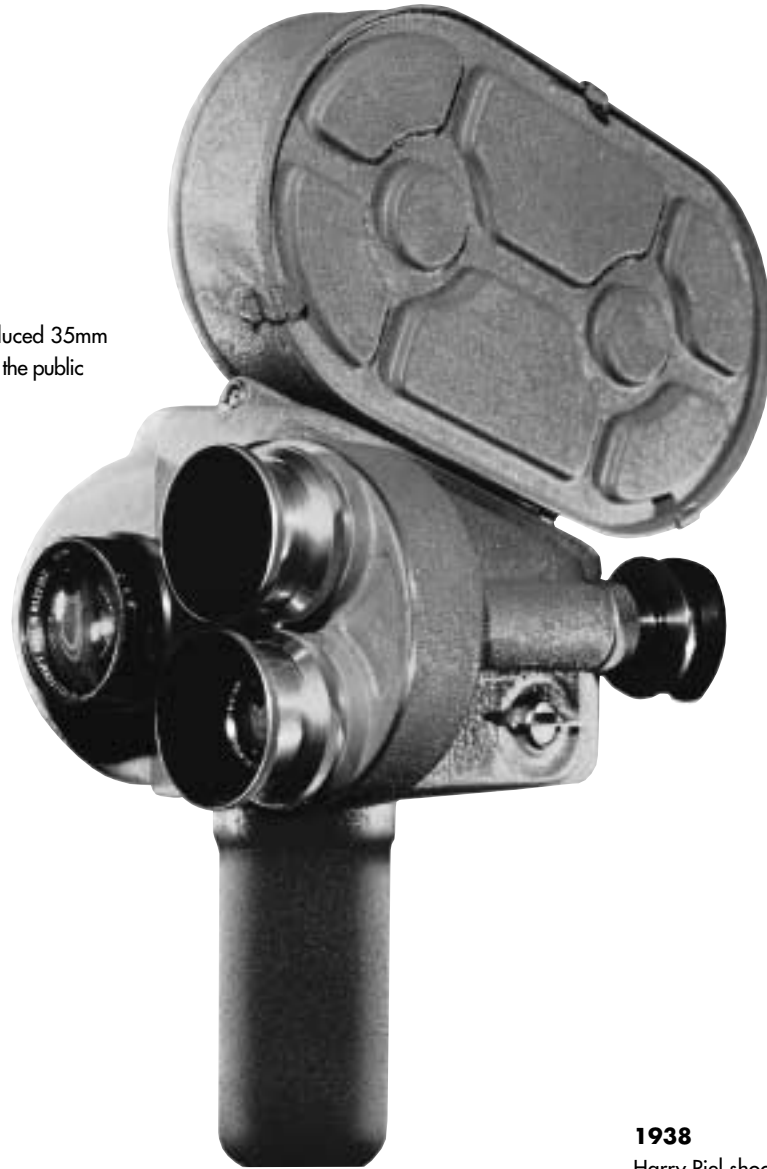


Maschine  
darf nur  
vom beauftragten  
Maschinisten  
betreten wer



**1937**

ARRIFLEX 35, the first industrially produced 35mm camera with reflex system is presented to the public at the Leipzig Fair.



**1928**

'Kinarri 16', an amateur camera with a hand crank, and the sophisticated version with spring mechanism.



**1938**

Harry Piel shooting the circus film "Menschen, Tiere, Sensationen" with the ARRIFLEX 35.



**1942**

The air raids over Munich are now so heavy that part of the production has to be transferred to Schloß Brannenburg on the banks of the Inn river.



**1944**

An air raid totally destroys the ARRI factory at Türkenstrasse on July 13th.



**1945**

The building remains are removed from the city center with the so-called "Trümmerexpress", the "Rubble-Express".



**1945**

After the war the ARRI grounds are declared a "reconstruction object".

Wiederaufbauobjekt

Material-Entnahme  
strengstens verboten!

Wieder... baubjekt

Material-Entnahme  
strengstens verboten!





**1946**

70 ARRIFLEX 35II cameras are already in production again. Over the years, more than 17.000 ARRIFLEX 35 are built.

**1948**

Post-war reconstruction proceeds at high speed; the front building at Türkenstrasse is finished first. This phase of construction is completed in the late fifties with Studio 2.



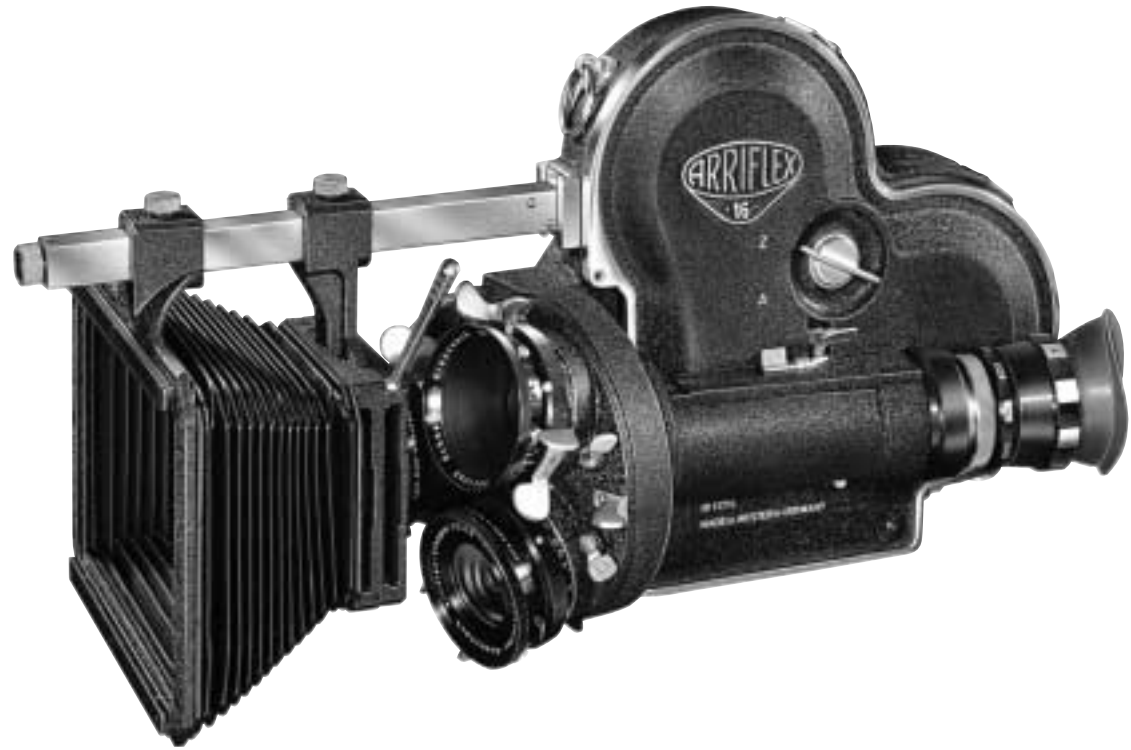


**1950**

In Stephanskirchen near Rosenheim a piece of property was purchased where a foundry and a special grinding shop for optical lenses (Anamorphic lenses) are built. The grounds also serve ARRI for outdoor shooting. "08/15" Part I and II are the first films that are produced here.

**1952**

The ARRIFLEX 16 St is the first professional 16mm movie camera on the market with a reflex system. Until then, 16mm was strictly an amateur format. The new camera is built especially for the requirements of television reporting and internationally revolutionizes the field of television broadcasting in the years to come. More than 20.000 ARRIFLEX 16 St varieties are built.





**1953**

The first blimps are developed for the 16mm and 35mm camera.

**1953**

The first motion picture productions are completed in the big studio. Later a second studio is built and these two complexes are connected by dubbing studios.



**1958**

The modern ARRI cinema is built where the Capitol movie theatre once stood. In **1985** the movie hall as well as the entire technology is brought up to the latest standards.



**1965**

ARRIFLEX 16BL is the first self-blimped camera. In the following years it becomes one of the most successful cameras ever.



**1972**

ARRIFLEX 35 BL is the first self-blimped "studio-silent" camera. Compared to the 35 - 50 kg which a camera weighs together with a separate blimp, this 35BL camera weighs only approx. 15 kg. Put to the test the first time under extreme conditions at the Munich Olympics, it proves itself perfectly. More than 1700 cameras of this type are sold.



**1970**

The ARRITECHNO 35 is the only X-ray movie camera on the market. It is used for instance for Angiocardiography.



**1972**

ARRISONNE in action: The Königsplatz in Munich is illuminated during the Olympic Games. Due to the success of the ARRISONNE which was constructed based on the HQI-principle, the development of the fresnel-lens reflector APOLLO DAYLIGHT on the HMI-lamp basis is continued.





**1975**

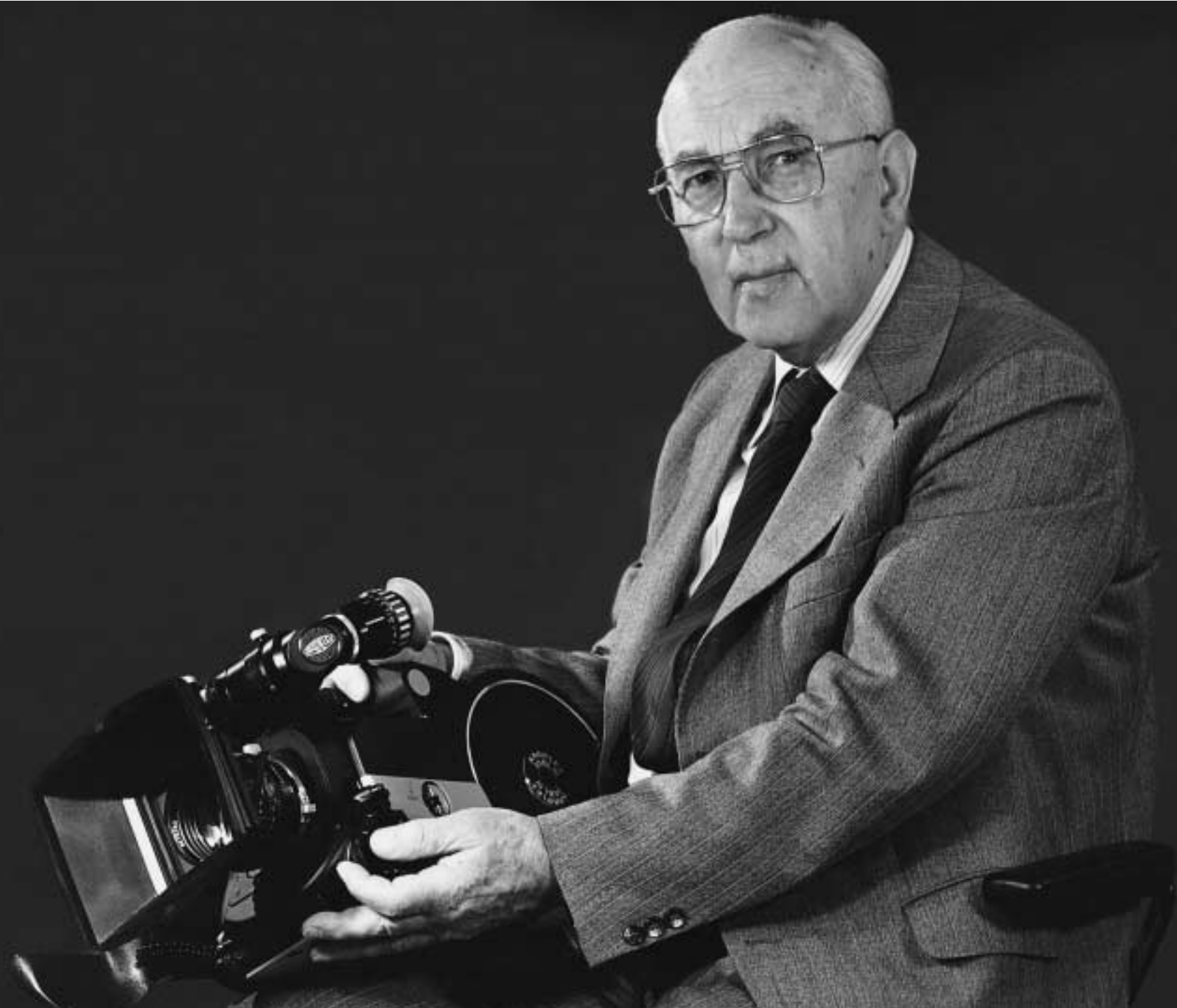
ARRIFLEX 16 SR is the first professional camera with symmetrical operation construction. This offers a far wider range as a reportage and documentation camera.

In 1982 its successor, the ARRIFLEX 16 SR II, appears on the market.



**1980**

Erich Kästner, chief constructor since 1933, with the ARRIFLEX 35 BL III.



**1983**

ARRI TV is the subsidiary company that offers complete production and processing services from studio production to post-production under the same roof.

**1986/87**

The first Harry was installed at ARRI TV  
Followed by a Flash Harry in 1992 and a Henry in 95/96.





**1989**

ARRIFLEX 765 is the first compact, light and silent 65mm production camera with a reflex view finder.



**1990**

The new version of ARRIFLEX 535  
is presented to the public.

The first camera featuring  
an electronically adjustable  
mirror shutter



**1991**

The 65mm camera technology in use on Robert  
Hosseins stage spectacle "Jésus Etait Son Nom".





**1992**

After the Winter Olympics in Albertville and the World Exhibition in Sevilla, ARRI also equips the opening and final ceremonies of the Olympic Games in Barcelona with the latest in lighting technology.

**1992**

The ARRIFLEX 16SR 3 can easily be converted to shoot in the Super 16 format.





**1992**

ARRIFLEX 535B – While this camera is lighter in weight it also features a modular detachable viewfinder system and is equipped with an innovative new grip system.



**1994**

A new MOS standard is introduced with the ARRIFLEX 435 which is even more compact, more versatile and equipped with an electronic mirror shutter.

**1994**

ARRI Digital Film is founded and the first Cineon System is installed on the European Continent. For the first time film images can be edited electronically in film resolution in this market.



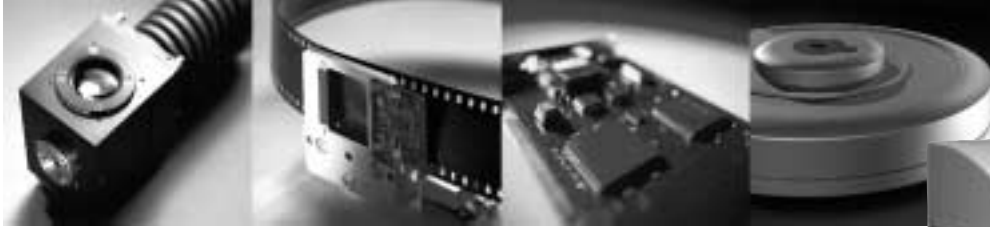
**1994**

A new philosophy in lenses –  
the Carl Zeiss/ARRI Variable Primes with the optical  
qualities of a prime lens and the ease of use of a zoom.  
16 to 105mm are covered steplessly by three lenses.

**1996**

ARRILUX 125 Pocket Par – an indeed small but powerful (HMI) 'highlight' is introduced.





**1998**

The ARRILASER, introduced in 1998 soon becomes the standard tool of all leading post-production facilities to expose data back onto film. It is the first product coming out of ARRI Digital.





**1998**

The Carl Zeiss / ARRI Ultra Primes set new standards for high-speed prime lenses.

**1999**

The ARRIFLEX 16SR 3 Advanced



**2000**

ARRI and Moviemax, now a member of the ARRI group, join forces to design the most advanced camera system available: the ARRICAM Studio and ARRICAM Lite.







## 2000

What August Arnold and Robert Richter started in a little shop at Türkenstrasse 1917, today takes up the whole block between Türkenstrasse, Rambergstrasse, Kurfürstenstrasse and Adalbertstrasse: ARRI. Four subsidiaries – in the United States, Great Britain, Italy and Austria – and a network of about 50 agencies provide professional service and distribution everywhere abroad.



# Chronology

**1916** Construction of the first **film printer**.

**1917** The first retail store is opened on the 12th of September 1917 in the Türkenstraße in Munich.

The founders were August Arnold (later Dr. h. c) (Born on the 12th September in Werfen by Salzburg, † 7th of April 1983) and Robert Richter (Dipl. Ing. Dr.) (Born on the 17th of May 1899 in Nürnberg, † 18th of June in 1972)

Construction of the first **film processing machine**.

**1924** **Kinarri 35**, a 35 mm camera with hand crank, that sold about 100 units.

**1925** Construction of the first **lighting instruments**.

**1928** **Kinarri 16** a 16 mm camera with hand crank.

**1937** **ARRIFLEX 35** the first 35 mm camera with a rotating mirror reflex shutter.

- For the first time in movie-camera-history the camera operator sees through the same lens the same image that is exposed onto the film
- Viewfinder with eyepiece
- Viewed frame outlines are identical to exposed frame
- Focus can be checked on the ground glass
- Viewfinder image is upright and not reversed
- Butterfly mirror shutter with a 120° open angle
- Rotating lens turret holding 3 lenses
- Electric motor integrated in handgrip
- 200' (60 m) lightweight magazines
- sold about 17,000 units up to 1978.

**1948** 180 copies of the "Fox Weekly News" were developed and copied every week in the ARRI lab. The "Fox Weekly News" production and editing facilities were also housed in the ARRI headquarters in the Türkenstr..

**1950** The ARRI film production company is founded.

**1952** **ARRIFLEX 16ST** the first professional 16 mm film camera with a rotating reflex mirror shutter

- Rotating lens turret
- Exchangeable motors
- Sold about 20,000 units.

**1953** **ARRIFLEX 35 II A**

- 180° open shutter angle
- pull-down claw with registration function

Construction of film studios  
Construction of audio dubbing studios

**1957** Expansions to the color lab in Munich

**1958** **Electronic Cam** first 35 mm multi camera film recording system; Specially modified ARRIFLEX 35 cameras inside Blimp 300s with attached video assist cameras were used not only to expose film, but also for live video viewing and editing by the director.

**1960** **ARRIFLEX 35 II BV**

- with variable mirror shutter

**ARRIFLEX 35 II HS**

- high speed camera for up to 80 fps

**1962** **ARRIFLEX 16 M**

- runs with magazines instead of daylight spools

**1964** **ARRIFLEX 35 II C**

- Film camera with mirror reflex shutter and exchangeable ground glass
- New viewfinder door with de-anamorphoser

**1965** **ARRIFLEX 16 BL** first self-blimped 16 mm camera with integrated TTL lightmeter

**1971** **ARRITECHNO 35** first film camera for X-ray photography with semi automatic film threading, runs up to 150 fps, runs in all orientations

**1972** **ARRIFLEX 35 BL**, the first self-blimped, sync-sound 35 mm camera

- low weight allows hand-held usage. The 35 BL weighs around 33 pounds (15 Kg), and a blimped camera weighs around 80 pounds (35 - 40 kg).
- Movement has dual pull-down claws and dual pin registration
- Runs 5 to 100 fps

**1975** **ARRIFLEX 35 BL II**

- runs 5-50 fps
- Blimp for zoom-lenses

**ARRIFLEX 16 SR**, silent, compact 16 mm news camera for hand-held work

- 26 db (A) silent
- A viewfinder that can be swung to the other camera side and rotated 360°, allows for a very slim camera. The image is kept upright regardless in what position the viewfinder is
- Integrated motor with built-in precision crystal speed control and various external speed control options
- Removable battery
- Movement with multi-link pull-down mechanism and registration pin
- Coaxial magazines allow for a quick change of the magazines
- Integrated TTL lightmeter and optional automatic exposure setting.

**1977 ARRIFLEX Corporation** in America is founded

Parts production facilities are moved to the Theresienstrasse to expand the operation.

**1979 ARRIFLEX 35 III**

- Exposure possible during forward and reverse running from 5 to 100 fps.
- Viewfinder camera door can be exchanged quickly for hand held, video assist or studio use.

**ARRIFLEX 16SR HS**

High speed camera for 10 to 150 fps, with 24, 25 and 30 fps crystal speeds.

**1980 ARRIFLEX 35 BL III**

Includes a PL (positive locking) lens mount.

**1982 ARRIFLEX 35 III C**

Camera designed especially for hand held work, weighs only 8.8 pounds (4 kg).

**ARRIFLEX 16SR II**

16 mm camera with TTL-Si-exposure meter, runs 22db (A) quiet.

**ARRIFLEX 16SR HS II Automatik**

- Fully automatic exposure control
- Runs 10 to 150 fps, with 24, 25 and 30 fps crystal speeds.

**ARRIFLEX 16SR II Super**

and **ARRIFLEX 16SR HS II Super**

- Standard and high speed 16SR camera for super 16 film format.

**ARRI GB Ltd.** founded in London

**ARRI TV** founded

**1985 ARRI Italia S.r.L.** founded in Rome/Milano

**1986 ARRIFLEX BL 4**

35 mm camera 22 db (A) quiet

- Viewfinder with fluorescent frame outlines
- SMPTE Timecode exposure possible

**ARRI Austria** founded

**1988 ARRIFLEX BL 4s**

35 mm camera with running noise below 20 db (A)

- Runs 6 to 40 fps, with 24 and 25 fps crystal-controlled
- 3 or 4 perf movements available
- 7 link movement for perfect image steadiness
- Integrated movement pitch control
- SMPTE Timecode exposure possible

**1989 ARRIFLEX 765**

first compact 65 mm camera for sync sound productions

- Viewfinder will keep image upright regardless of viewfinder rotation
- Silicone mirror shutter, variable to 180°, 172.8°, 144°, 135°, 120°, 105°, 90°, 75°, 60°, 45°, 30°, 15°
- 5 perf movement and dual, 3 pin pull-down claws and dual pin registration.
- LCD displays on both camera sides for camera control and monitoring
- Crystal speeds of 15, 24, 25, 29.97, 30, 60, 75, and 100 fps forwards, and 24 fps reverse.
- 400' (120 m) and 1000' (300 m) displacement magazines.

**1990 ARRIFLEX 535**

35 mm camera with running noise below 20 db (A) and an electronically adjustable mirror shutter

- Mirror shutter angle can be varied during camera run from 11° to 180°.
- The viewfinder that can be swung 270° from left to right and rotated 360°.
- Crystal speeds of 3 to 50 fps forward and 24/25/30 fps reverse.
- ARRIGLOW - programmable illuminated frame outlines.
- Film gate with integrated format mask and gel holder.
- 7 link movement with dual registration pins and dual pull down claws
- Integrated Timecode generator
- LCD displays on both camera sides for camera control and monitoring
- Creation of speed/exposure ramps is possible with external controllers
- First motion picture film camera with a RS-232 port, allowing digital remote control by a computer

**1992 ARRIFLEX 535B**

Programmable 35 mm camera, designed as a lightweight companion to the 535.

- Exchangeable viewfinder system
- Flexible grip system
- Mirror shutter can be changed manually
- Viewfinder assembly can be exchanged with video only top
- Programmable through CCU-1, RCU-1 or LCC
- lighter and smaller construction than 535
- Compatible with all 535 accessories
- Crystal speeds of 3 to 60 fps, forwards and reverse
- lightweight carbon-fibre magazine for Steadicam use

**ARRIFLEX 16SR 3**

16 mm camera with a PL lens mount that can easily be converted to Super 16 format.

- Mirror shutter can be changed manually
- Timecode exposure option built into magazines
- Running noise 20 dB (A) + 2 dB(A)
- Video Assist
- Viewfinder with ARRIGLOW illuminated frame outlines
- Backwards compatible with 16SR and 16 SR II magazines

**1994 ARRI Digital Film** founded

**ARRI Canada Ltd.** founded in Toronto

**1994 Variable Primes**

A new set of lenses is introduced – the Carl Zeiss/ARRI Variable Primes with the optical qualities of a prime lens and the ease of use of a zoom. 16 to 105 mm are covered steplessly by three lenses.

**1995 ARRIFLEX 435/ 435 ES**

Modular 35 mm high speed MOS camera

- Mirror shutter electronically variable between 11° and 180° with the 435 ES
- Weighs only 14.3 pounds (6.5 kg)
- Completely compatible with all 535 accessories
- The viewfinder that can be swung 270° from left to right and rotated 360°
- Easy conversion to Super 35 format
- Speed range: 1 to 150 fps, forward and reverse
- Viewfinder assembly can be exchanged with video top only
- 5 link movement with full fitting dual pin registration and dual, 3 pin pull-down claws, seated in high precision ball bearings
- LCD display allows change and monitoring of all camera values
- Compatible with 35-3/2C magazines.

**1998** The **ARRILASER** is introduced and soon becomes the standard tool of all leading post-production facilities to expose digitally edited image data back onto film.

**1998 Ultra Prime** lens series is introduced.

**1999 ARRIFLEX 16SR 3 Advanced** featuring an extremely bright viewfinder, larger magazines and a new film gate

**2000 ARRICAM camera system**

ARRI and Moviecam, now a member of the ARRI group, join forces to design the most advanced camera system available: the **ARRICAM Studio** and **ARRICAM Lite** featuring:

- a lens-data system to read out all relevant settings of the lens right in the camera and to display these graphically on a mini monitor along with a depth-of-field calculation.
- in-camera-slate to assign all takes right in the camera with clearly readable information on the negative
- ultrasonic measure tape
- new video-assist for unparallelled image quality
- new magazines including an ultra compact active displacement magazine for special applications.

# Academy Awards



**1982**

"Academy Scientific and Engineering Class I Award to  
Dr. August Arnold and Erich Kästner Chiefconstructor,  
for the Concept and Development of the  
First 35mm Motion Picture Reflex Camera  
1982"





**1967**

On April 10th 1967 Arnold & Richter are presented with an Academy Award for the first time.  
"Academy Scientific or Technical Class II Award to Arnold & Richter KG for the Design and Development of the ARRIFLEX 35mm Portable Motion Picture Reflex Camera 1966"



**1974**

"Academy Scientific or Technical Class II Award to Arnold & Richter KG for the Design and Development of the ARRIFLEX 35 BL Portable Motion Picture Production Camera 1974"



**1989**

"Scientific and Engineering Award to the Arnold & Richter Engineering Staff, Otto Blaschek and ARRIFLEX Corporation for the concept and engineering of the ARRIFLEX 35 - 3 Motion Picture Camera Presented: March 19, 1989"



**1991**

"Scientific and Engineering Award to the Engineering Department of Arnold & Richter for the continued Design Improvements of the ARRIFLEX BL Camera System, culminating in the 35 BL-4s Model Presented March 2, 1991"



**1993**

"Scientific and Engineering Award to Arnold & Richter, Otto Blaschek and the engineering department of ARRI Austria for the design and development of the ARRIFLEX 765 camera system, for 65 mm motion picture photography Presented March 6. 1993."



**1996**

"Scientific and Engineering Award to Arnold & Richter Cine Technik for the development of the ARRIFLEX 535 Series of cameras for motion picture cinematography presented March 2. 1996"



**1999**

"Scientific and Engineering Award to Arnold & Richter Cine Technik and Carl Zeiss Company for the concept and optical design of the Carl Zeiss/Arriflex Variable Prime Lenses presented February 27. 1999"



**1999**

"Scientific and Engineering Award to Arnold & Richter Cine Technik and ARRI USA, Inc. for the concept and engineering of the ARRIFLEX 435 Camera System presented February 27. 1999"  
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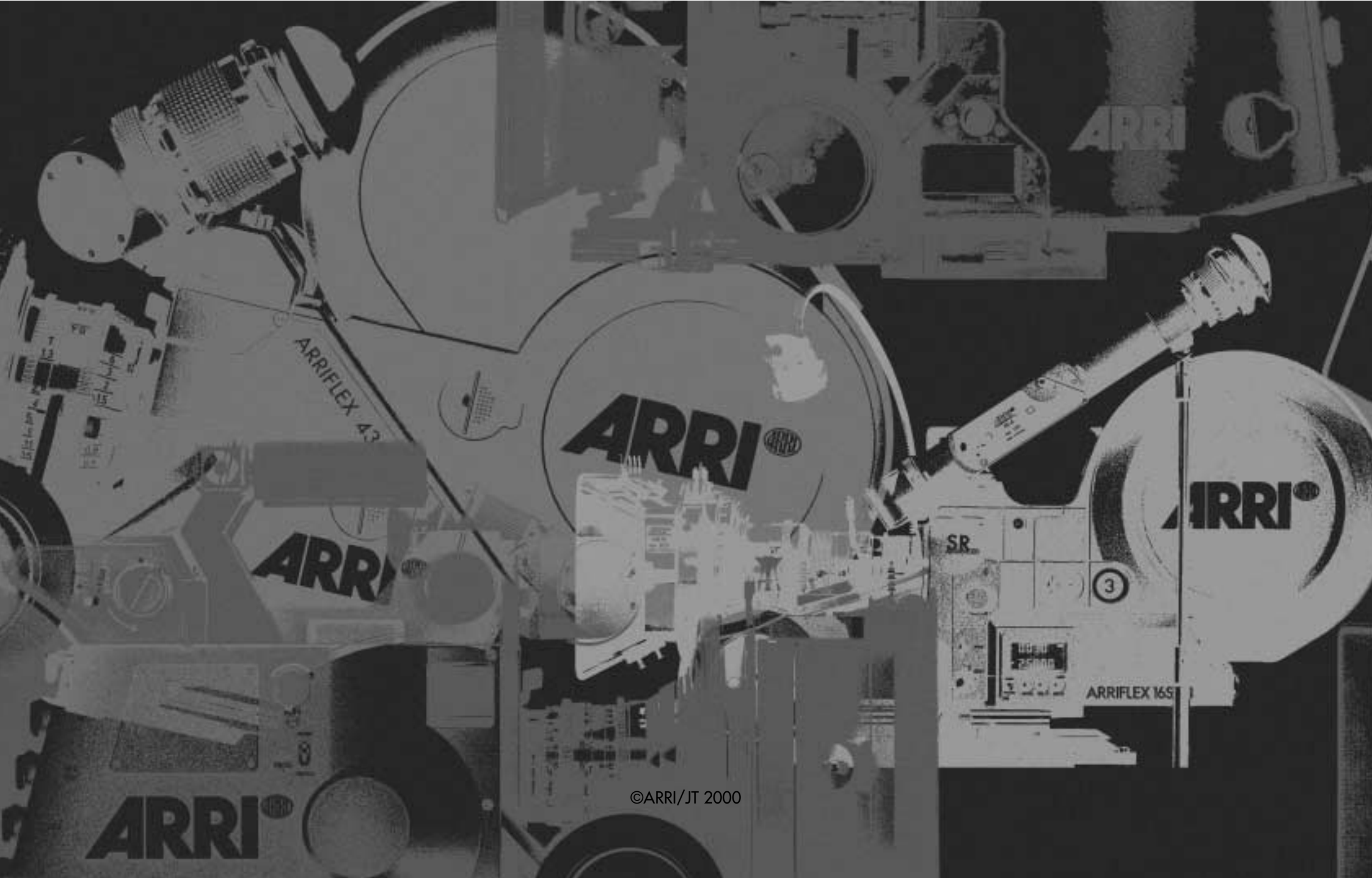
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