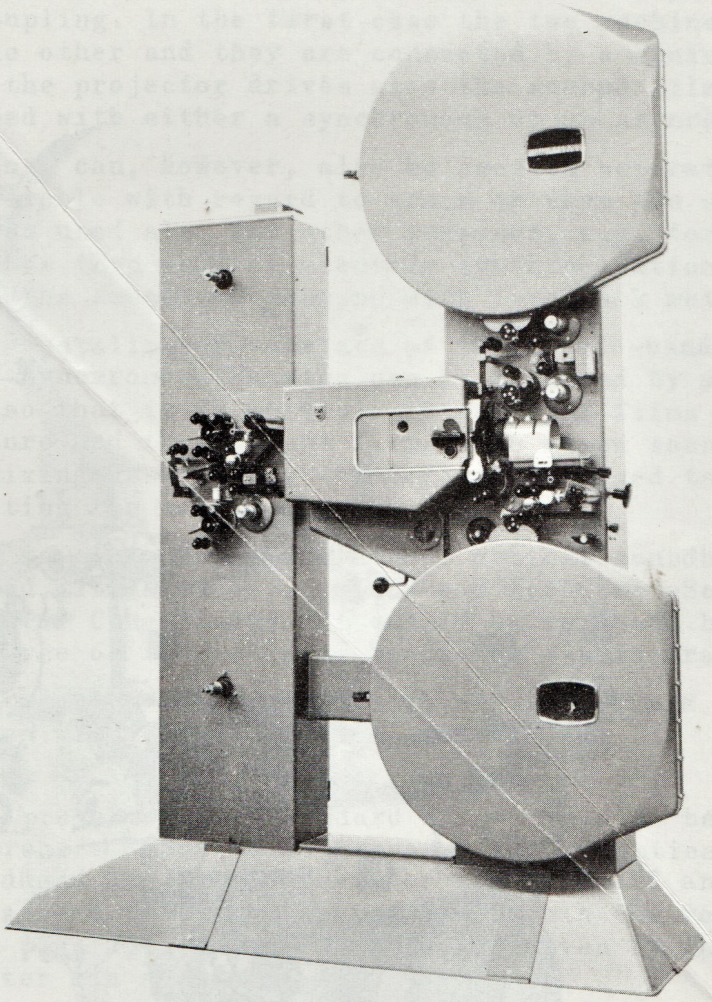
USE OF THE PULSED DISCHARGE LAMP WITH DOUBLE-BAND PROJECTORS IN FILM STUDIOS



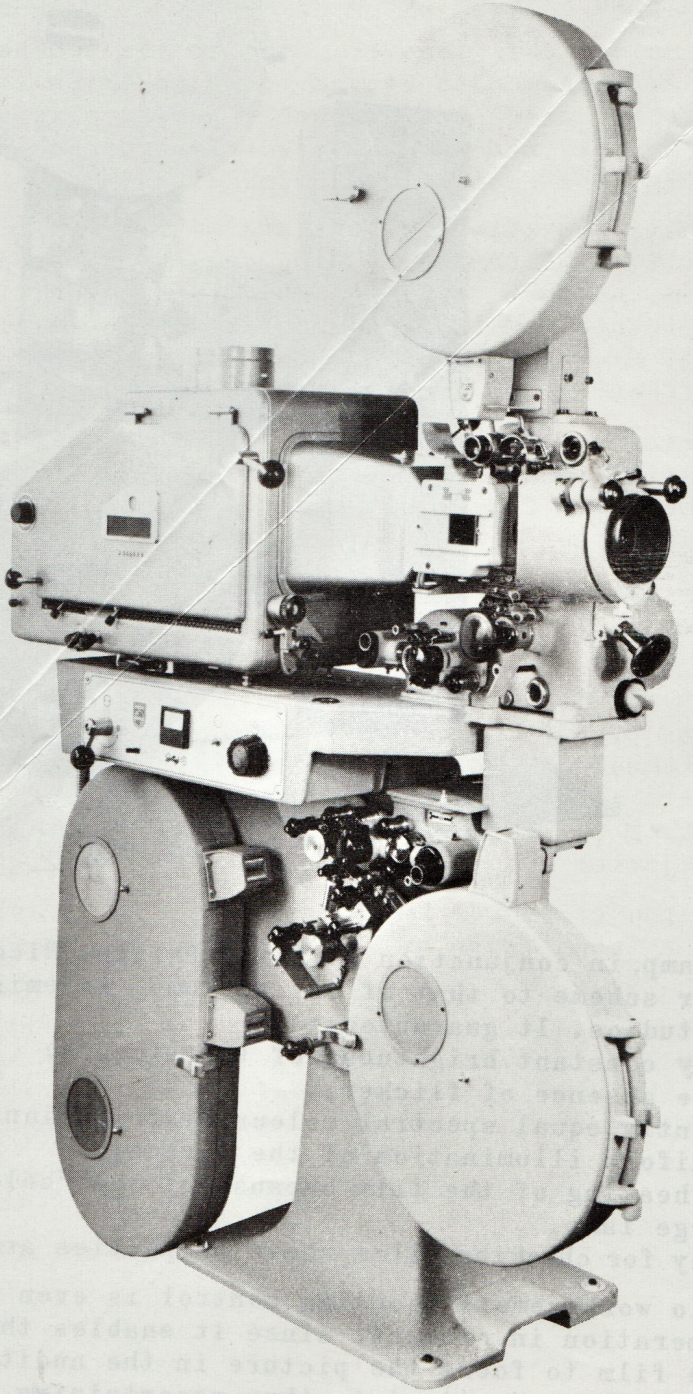
The SPP lamp, in conjunction with the Philips Hicor-Filter for equalizing the colour scheme to that of an arc lamp, is eminently suitable for use in film studios. It guarantees:

- perfectly constant brightness of the picture;
- absolute absence of flicker;
- permanently equal spectral colour distribution of the light;
- very uniform illumination of the screen;
- little heating of the film because of the "cold light" of the pulsed discharge lamp.

Especially for checking films these properties are of utmost importance.

For studio work remote focusing control is even more important than for normal operation in cinemas, since it enables the persons who have to judge the film to focus the picture in the auditorium without the intermediary of the projectionist, thus ascertaining whether, when the picture is out of focus, this is due to bad focusing or to the film itself.

The requirements the various studios make on the projection equipment vary enormously. The construction of the Philips FP 20 and FP 20 S projectors with their large mounting plane makes it possible to satisfy in an elegant way these different demands.



In principle are used for double-band installations a nearly normal FP20S projector and a similar steel housing arranged for running the second film, either a normal film or a magnetic 35-mm perfotape. The synchronism between the two films can be achieved either by mechanical or by electrical coupling. In the first case the two machines are placed the one behind the other and they are connected by a chain. Consequently, the motor of the projector drives also the second film. The projector can be equipped with either a synchronous or an asynchronous motor.

The two machines can, however, also be located separately when this should be desirable with regard to space or when the soundfilm machine alone has to be used also for other purposes, e.g. for magnetic recordings. Use is then made of electric synchronization by equipping the projector and the soundfilm machine with interlock motors.

When a studio installation consists of two double-band projectors coupled mechanically, synchronous running can be achieved by means of an interlock system, so that it is possible to run four films simultaneously, viz. one picture and three sound films. The mixed sound can be monitored via a small mixing desk before the definitely mixed tape is recorded without affecting the normal use.

The projector is equipped with a normal optical soundhead. Moreover, it can be provided with a magnetic soundhead for CinemaScope films. The magnetic head for CinemaScope can easily be replaced by other heads, e.g. by the three or four-channel heads for studio tracks on perfotape.

The soundfilm machine is provided with an optical and with a magnetic soundhead, also with exchangeable magnetic head.

Philips FP 56 projector for standard films can also be extended to a double-band projector. For this purpose a second optical soundhead, a magnetic soundhead and a spool box for the take-off and the take-up spool of the second film are mounted underneath the mounting table (see photograph on page 2). The second film is driven by the take-up shaft of the projector via a chain.

The FP 56 projector can be equipped with any desired light source, an arc lamp, a Xenon lamp, an incandescent lamp and - of course - also with an SPP-lamp.

As normally for studio use the film is not wound on spools but on 2" cores, the spool shafts are provided with corresponding fixing sleeves. Moreover, the driving mechanism of the take-up friction is adapted to the smaller core diameter. This applies to both types of double-band projectors.

Data subject to change without notice.