

## Colour film processes: AGFA & ORWO

by Jürgen Kellermann, Adelaide

Email: [juergen.kellermann@adelaide.edu.au](mailto:juergen.kellermann@adelaide.edu.au)

In the last issue of Reel Deals, Mike Tricket presented an overview of mainly American and British colour processes. Other colour film stocks that collectors often come across are Agfa and Orwo.

The German Agfa company has a long history in photographic products. It initially produced photographic papers, and from 1903 on it started to produce cinematographic b/w film stock. From the early 1930s, Agfa did research into colour films. In 1936, it introduced **Agfacolour Neu reversal film**, a year after Kodachrome, but the Agfa product could be processed in a single colour developer. This reversal film was available as 8mm and 16mm for home use, and as 35mm (slide) film. — My article only gives an overview of Agfa colour films; for details of the process and the films made with Agfa, see references below.

**Agfacolor motion picture film** was released by the Agfa company in 1939. It was the first negative-positive process using just one strip of multilayer photographic film. In the following years this German colour film stock became a prestige project of the Nazi regime, who wanted to rival the American Technicolor process. Several short films and advertisements were shot in Agfacolor, and 13 full-length feature films were completed by 1945. The most well-known are the Ufa productions *Münchhausen* (1943), *Große Freiheit no. 7* (1944; *Great freedom no. 7*), both with Hans Albers, and the infamous *Kolberg* (1945). Typical for Agfacolor films were the wide range of natural colours and the pastel tones with subdued reds. This is in contrast to the bright colours of Technicolor.

After the war, the Agfa factory in Wolfen, was in Soviet occupied East Germany (later GDR). This enabled the Soviet Union and other Eastern Bloc countries to soon produce colour films using Agfacolor film stock, often credited as **Sovcolor** or **Polcolor** (in Poland). Because the Allies declared all German patents open and free-to-use, companies like Gevaert in Belgium and Ferrania in Italy adopted the Agfacolor system (**Gevacolor** & **Ferraniacolor**). In Japan, Fuji and Konishiroku (now Konica) also produced colour films based on the Agfa patents (**Fujicolor** & **Sakuracolor**). Another derivative of Agfacolor was **Fotoncolor** in Poland.

In the United States, Ansco also manufactured colour film based on Agfacolor during the war and afterwards under its own name (**Ascocolor** & **Ansochrome**). As an American subsidiary of Agfa, this company had knowledge of the Agfacolor process and its patents. In West Germany, a new Agfa factory was built in Leverkusen, which opened in 1951.

In 1964, after license negotiations, the East German Agfa factory agreed to change its name to Orwo (“**O**ri**g**inal **W**olfen”), whilst the West German company retained the name Agfa. From then on, **Orwocolor** was produced in East Germany. Also in 1964, the West German Agfa merged with the Belgian Gevaert company. This all happened during the rise of Eastmancolor in the 1950s, with more and more studios in America and Europe producing colour films. One of the main problems of Agfacolor and its derivatives was that these films could not be developed by the same process as Eastmancolor films. So in 1968, Agfa-Gevaert discontinued production of the traditional Agfacolor film and changed its chemistry to an Eastman compatible process. Most other companies, except Orwo, also changed their films to the Eastman process.

In 1995 Agfa-Gevaert stopped manufacturing colour negative film and was then only manufacturing printing film, production of which ceased in 2005. After German reunification Orwocolor ceased production in 1995. The factory, however, continues as one of the last producers of b/w film stock under the name FilmoTec. Ferrania ceased production of film stock in 2009, and closed down in 2012, but re-emerged last year, announcing the production of new colour negative and slide films in 2014.

### Film collectors and AGFA

One of the main advantages of Agfa motion picture film stock is that its colours are very stable, probably comparable to Kodak’s LPP film stock. If fading is observed, then it is usually a loss of colour saturation, the film appearing paler overall. In older films, especially in Orwo film stock, there might be a slight shift of the colours to blue/purple, but all other colours are usually still present. And it is definitely not a shift to red/pink, as in Eastmancolor films. This of course makes film prints on Agfa stock very desirable for the collector.

Interestingly, with the change from the original Agfa chemistry to an Eastman compatible process, some of the Agfa derivatives seem to have lost their colour stability. For example, early Ferraniacolor films have very good colours, whereas later prints can fade quite badly towards the brown spectrum (then often labelled **3M**, as Ferrania was purchased by the 3M Company in 1964).

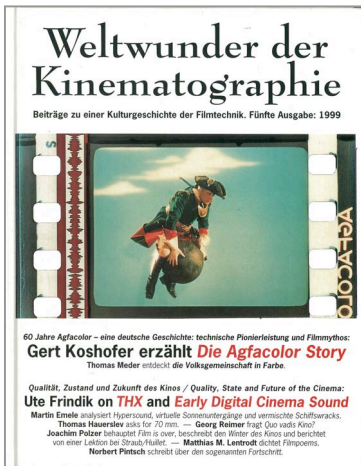
Agfa films can be identified by the following writing between the sprocket holes: **AGFA. AG. AGFA-**

**GEVAERT, 1S, 2S.** Orwo stock is always marked **ORWO**, usually followed by a letter **S** for safety film, and maybe a few numbers. Reversal film is typically black in the sprocket area, with yellow writing. As with other German film stocks, early Agfa film is often labelled **SICHERHEITFILM**, German for safety film. Unfortunately, unlike Eastman Kodak, Agfa did not have an edge code indicating the year of production of the film stock. As such, dating of Agfa or Orwo films is not possible, apart from the fact that stock produced before 1964 cannot bear the name Gevaert, and the name Orwo only appeared in that year, too.

The soundtrack area in Agfa films is often dark blue in modern prints. Orwo always has a brown soundtrack. This is in contrast to Eastmancolor films that commonly have a black (silver) soundtrack, which remains black, even when the image has faded to pink.

**References**

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*Book cover of Koshofer (1999) showing a frame of Münchhausen (1943) with Hans Albers on the canon ball. This is an Orwo print (brown soundtrack, S) from the original Agfacolor negative (white printing on black background).*



*Modern 35mm Agfa print of The prince of tides (1991) with Barbara Streisand and Nick Nolte, showing the blue soundtrack.*



*Titles from a 35mm Orwocolor print of a Russian documentary about lions (year unknown).*

*Scene from the first Agfacolor feature film Frauen sind doch bessere Diplomaten (1941; Women are better diplomats) with Marika Röck.*

