

British 1984 Frama Issue

British Royal mail introduced its first automated vending machines on May 1, 1984. The manufacturer of the machines was Switzerland Frama AG. Four Frama FE 263 machines were installed inside head post offices in London, Cambridge, Southampton, and Windsor. The Frama stamps were available from these four on-site machines between May 1, 1984 and Apr 30, 1985. The Frama stamps can also be ordered from Royal mail philatelic center between May 1, 1984 and Apr 30, 1986.

Unlike normal postage stamps, which are printed once in the factory, there are two stages to print a Frama stamp. The first stage is to prepare background paper without design or denomination in two steps: A phosphorescent layer and gum were applied on top of white paper in the first step; Then, a pattern of green waves as security design were applied by Harrison on top of the phosphorescent layer. The background paper was cut into rolls and loaded into Frama machines. The paper with phosphorescent layer and gum only is called lead paper since they were at edges of original paper rolls. At the second stage of printing Frama stamps, customers can select the denomination and print various values after they paid in coins. The design and denomination of the Frama stamp were then printed on top of the background paper in red ink and cut into pieces.

The original denominations of the Frama stamps were between ½P and 16P with half penny incremental. Later on, 16½P and 17P were introduced on Aug 28, 1984 to prepare the postage rate change on Sep 3, 1984. The half pence were removed and only whole penny can be printed after Jan 1, 1985. 0 pence were used to test machines. There were also out of range values printed when the coins were stuck in machines and accumulated values to the very next Frama stamp printed. White paper, lead paper, and gum side print were accidentally used in Frama kiosks. Dry print, smear, double print and partial print were also rarely seen.

Given the nature of two stages of printing for Frama stamps, there were multiple tests and different combinations of paper varieties and values outside of normal range printed. There were also derivatives of this Frama issue: the first one is the first class paid stamp, which was per-printed to pay 1st class rate on top of the Frama stamp paper; the second is the National Postal Museum (NPM) specimen where one Frama machine was install at NPM in London to print souvenir. This exhibit displays the tests of Frama stamps before its official issue, the usages of normal stamps and all known Frama varieties and derivatives. The very rare items are bordered in red.

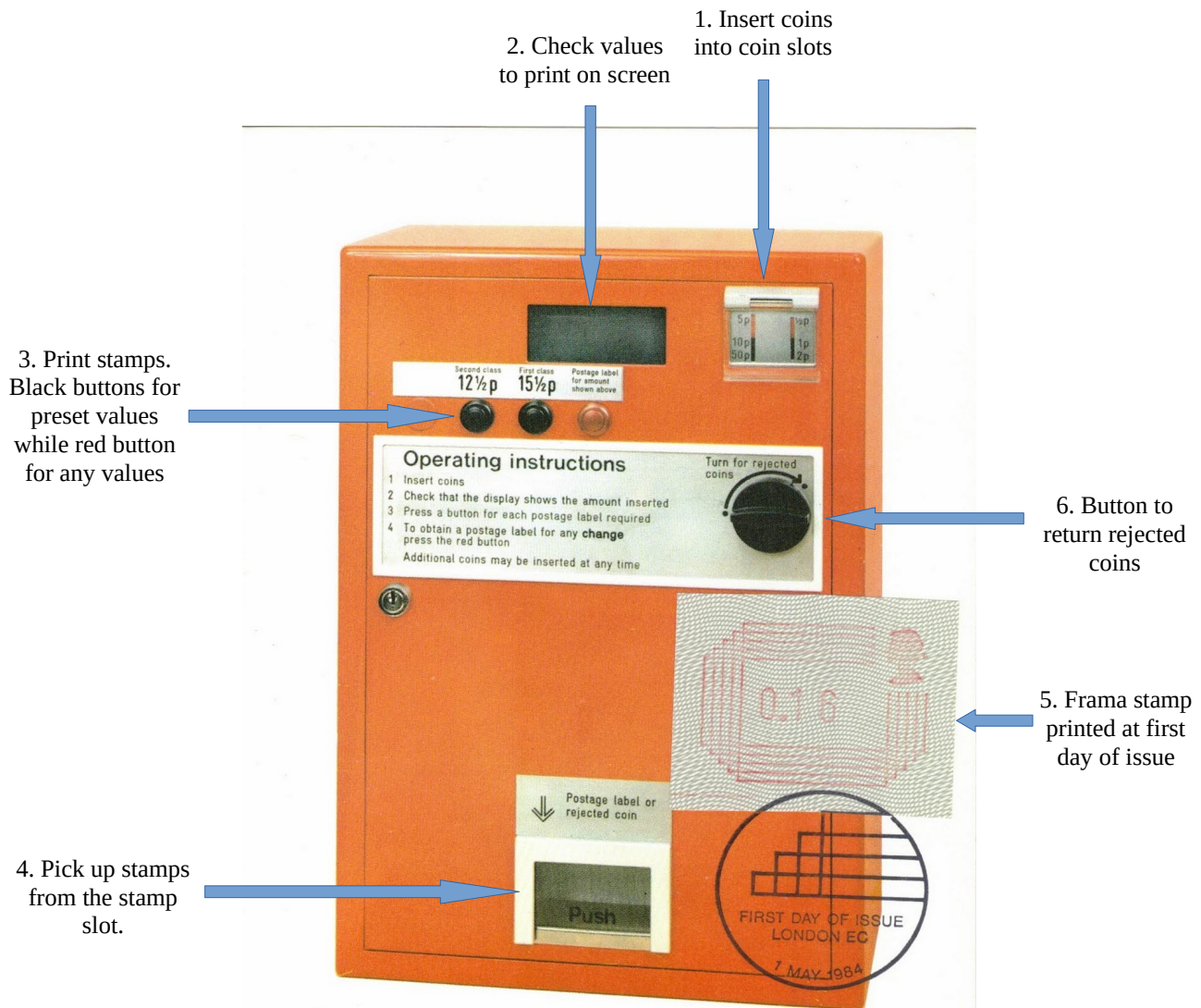
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1 Introduction

1.1 Frama machine

British Royal Mail introduced its first automated vending machine on May 1, 1984. The manufacturer of the machines is Switzerland Frama AG, a famous manufacturer for international automatic stamps. Frama's first machine was Frama FE for Swiss Post's first ATM on Aug 9, 1976. Then, 9 countries, including Norway, Brazil, Portugal, Belgium, Finland etc., adopted Frama machines for their ATM issue before they were installed for British Royal Post. So, Frama automate machines had been tested extensively before Royal Mail selected it as the vendor.

The design of the Frama machine is pictured on the maximum card below. There are a few major features on the control board of this machine to print a Frama stamp as following. The machine accepted coins from customers and print stamps at the values in preset value or customer selected other values.



1.2 Frama paper

The paper used for this Frama issue is phosphorescent with dark green water-wave as security design. The size of the stamp is 33mm high and 40mm wide without perforation. There are about 1,400 labels in a full roll.

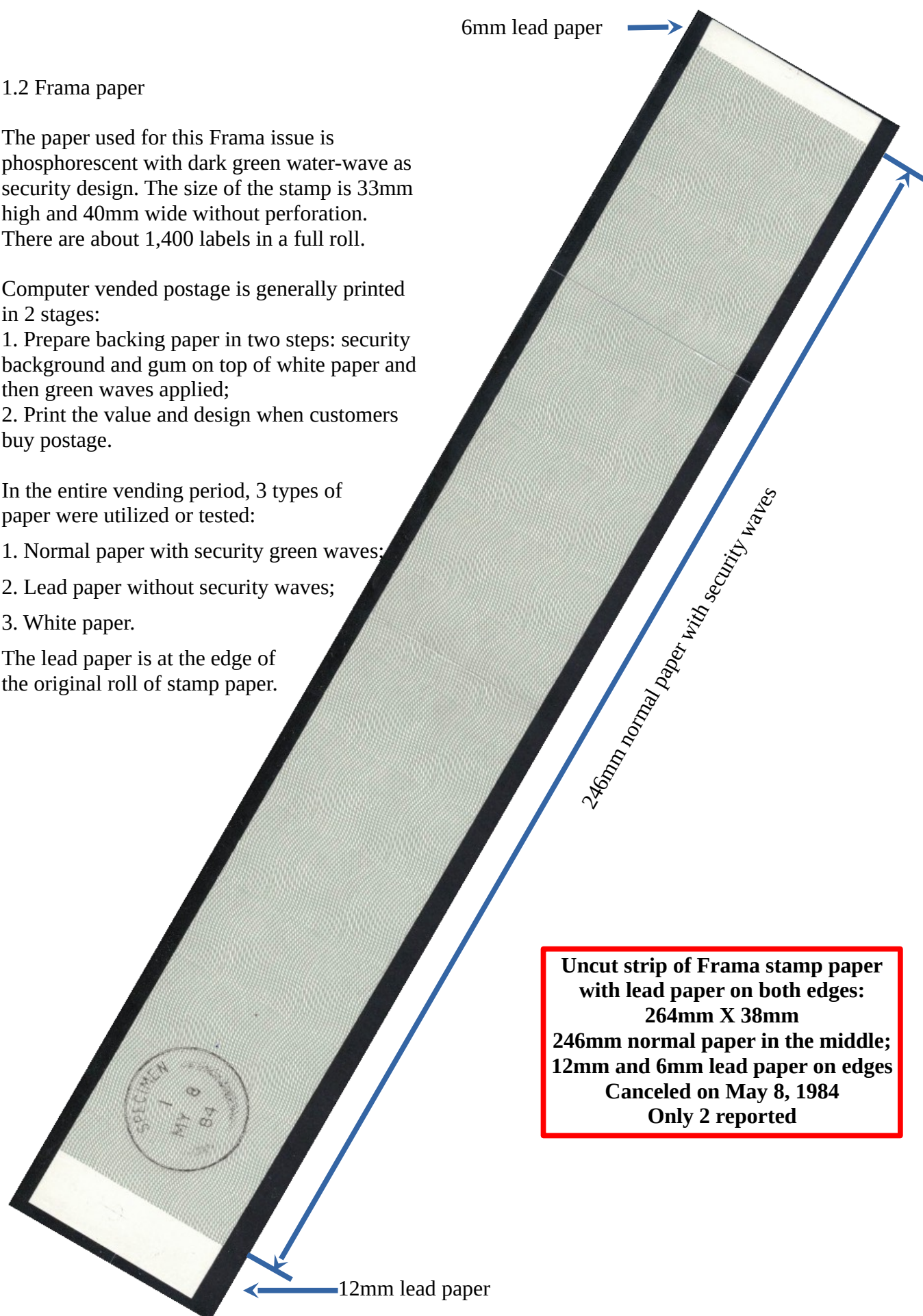
Computer vended postage is generally printed in 2 stages:

1. Prepare backing paper in two steps: security background and gum on top of white paper and then green waves applied;
2. Print the value and design when customers buy postage.

In the entire vending period, 3 types of paper were utilized or tested:

1. Normal paper with security green waves;
2. Lead paper without security waves;
3. White paper.

The lead paper is at the edge of the original roll of stamp paper.

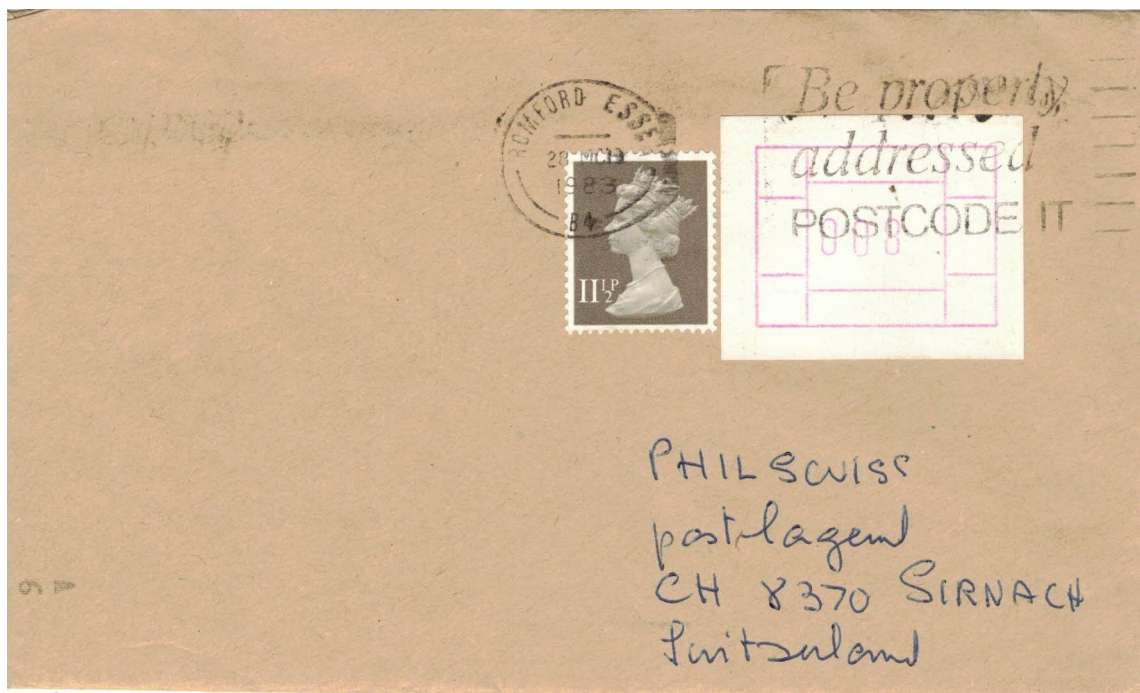


**Uncut strip of Frama stamp paper
with lead paper on both edges:
264mm X 38mm
246mm normal paper in the middle;
12mm and 6mm lead paper on edges
Canceled on May 8, 1984
Only 2 reported**

2 Forerunner and tests

2.1 Forerunner covers

To test these new Frama stamps in Royal Mail system, multiple letters with Switzerland test Frama stamps and British stamps were mailed from the suburb of London to Switzerland.



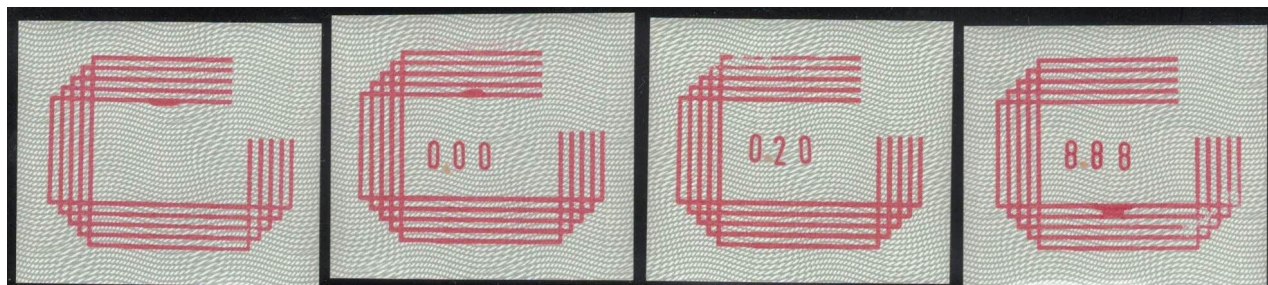
8P test Swiss Frama and 11½P British stamp mailed from Romford Essex to Switzerland on Mar 28, 1983. (19½P was the airmail rate from British to Europe)



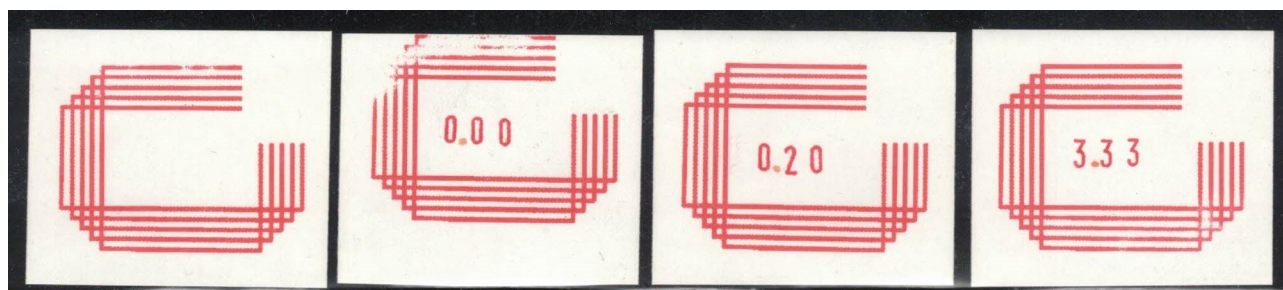
20P test Swiss Frama and ½P British stamp mailed from Cricklewood on May 12, 1983 to Switzerland. (20½P was the new airmail rate from British to Europe after rate change on Apr 5, 1983.)

2.2 Trial labels

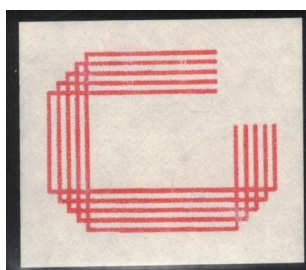
The British Frama stamp was designed by Martin Newton with 5 overlapped rectangles and Queen's head at top right corner. Stamps with same design minor the Queen's head were tested before the official issue. These trial labels were generally printed with same design on normal paper, lead paper and white paper. There are 0 values, overvalues, and blank labels.



Trial stamps of blank, 0 value, 20P and £8.88 overvalues on normal paper

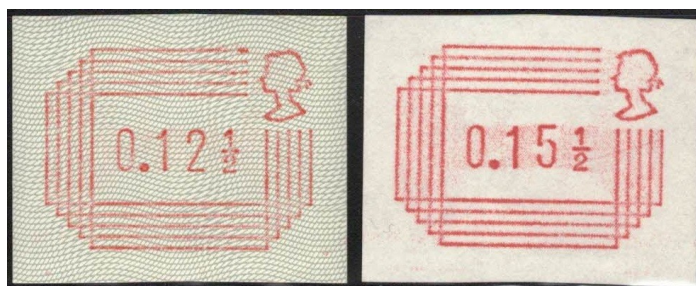


Trail stamps of blank, 0 value shifted up, 20P, and £3.33 overvalues on lead paper
All of them are rare. The up-shift 0 value trail print is very rare.



Blank trail stamp on white paper

Before the final approval, Frama stamps with hollow Queen's head were tested on both normal paper and white paper as well.



3 Official issued stamps and covers

The British Frama stamps were official issued on May 1, 1984. They were available from 4 on-site Frama machines at London, Cambridge, Southampton, and Windsor, between May 1, 1984 and Apr 30, 1985 and until Apr 30, 1986 from Royal Mail philatelic center. Values were available based on time:

- May 1, 1984 – Aug 27, 1984: ½P to 16P at ½ P step
- Aug 28, 1984 – Dec 31, 1984: ½P to 17P at ½P step
- Jan 1, 1985 – Apr 30, 1985: 1P to 17P at 1P step



Frama stamps: ½ P (lowest value), 12 ½P (2nd class mail), and 16P (1st class mail and highest value on May 1, 1984)

Additional values of 16 ½P and 17P introduced on Aug 28, 1984

First day covers mailed on May 1, 1984 are quite common from all 4 Frama machines. Registered airmail to foreign destinations or paquebot usage are less common. Stamps with error imprint are rare on cover.



Paquebot cover from Dover to Brussels, Belgium on May 1, 1984
20½P was the international rate from UK to Europe



First day express mail from London to Germany



Partial print 1P (top) used on postcard mailed on July 23, 1984

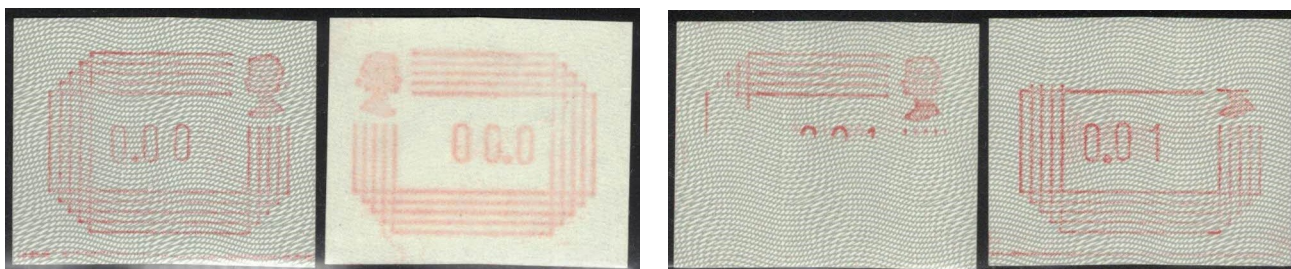
4 Frama stamp varieties

Given the nature of two stages of printing for Frama stamps, there are different combinations of paper varieties and values outside of normal range printed. The varieties are separated by paper type in this section including normal paper, white paper, lead paper and gum side paper. The value varieties including blank, 0 value, overvalues, and double values. Faint and smear prints are also included.

4.1 Normal paper varieties

Frama stamps with normal paper were available between May 1, 1984 and Apr 1, 1985. Given a full year usage on 4 machines, there are 6 different varieties available on normal paper.

0 value: Engineers need to test the machines but do not want to mess up accounting or sales of these kiosks. So, they printed 0.00 for testing and called engineering 0. They should be discard after testing but some of them ended in collectors' hand.



The engineering 0 value on normal paper

0 value with full offset at back; less than 10 reported

Partial print with top part only

Partial print with bottom part only

Partial print: when the ink was not evenly distributed across the Frama stamp or the printer head run in uneven speed, there were stamps only printed top part of bottom part.

Blank or dry print: when the ink is almost gone, there could be blank label or dry print with almost no sign of imprint. There were also blank labels exist from testing.

Smear print or offset: when the ink was too much or leaked, the ink could smear the face of Frama stamps and created offset at back.



Blank label canceled on May 1, 84 from Cambridge

Very faint print

Smear print with full or partial offset at back

4.1 Normal paper varieties

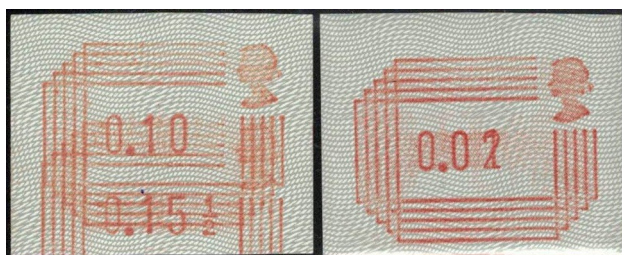
Overvalue: when the coins stuck in the Frama machine, the current value can be added to next stamp printed. Depending on the values added together, the values above 17P can be printed. The overvalue imprints included a few values: 20P, 20½P, 24½P, 25P, 27P, 30P, 50P, 60P etc. There are very few overvalue Frama stamps more than £1 on normal paper.



Example of overvalues printed on normal paper.
£2.83 is the highest value known on normal paper with less than 10 reported.

Double print: when the paper stuck in the Frama machine, the face value could be already printed but background paper may not fully move or cut, then the imprint of the second stamp can be printed on the same stamp. Such examples are very rare. Following values were reported: 1P/2P, 2P/2P, 6P/17P, 10P/11P, 10P/15P, 10P/15½P.

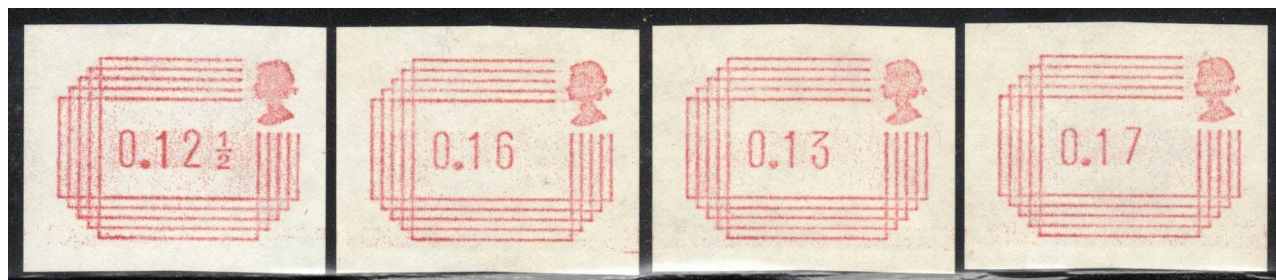
Two rare double printed Frama stamps, 1P/2P and 10P/15½P, are shown below. 1P/2P with both values were printed at the same location, which means the Frama paper did not move or cut after first value printed. The 10P/15½P were printed at different locations, which means the paper moved after first value (15½P) printed but did not cut correctly; then the second value (10P) was printed on the same Frama stamp and cut at correct location.



1P/2P and 10P/15½P double printed Frama stamps.
Both of them are rare with less than 5 copies reported.

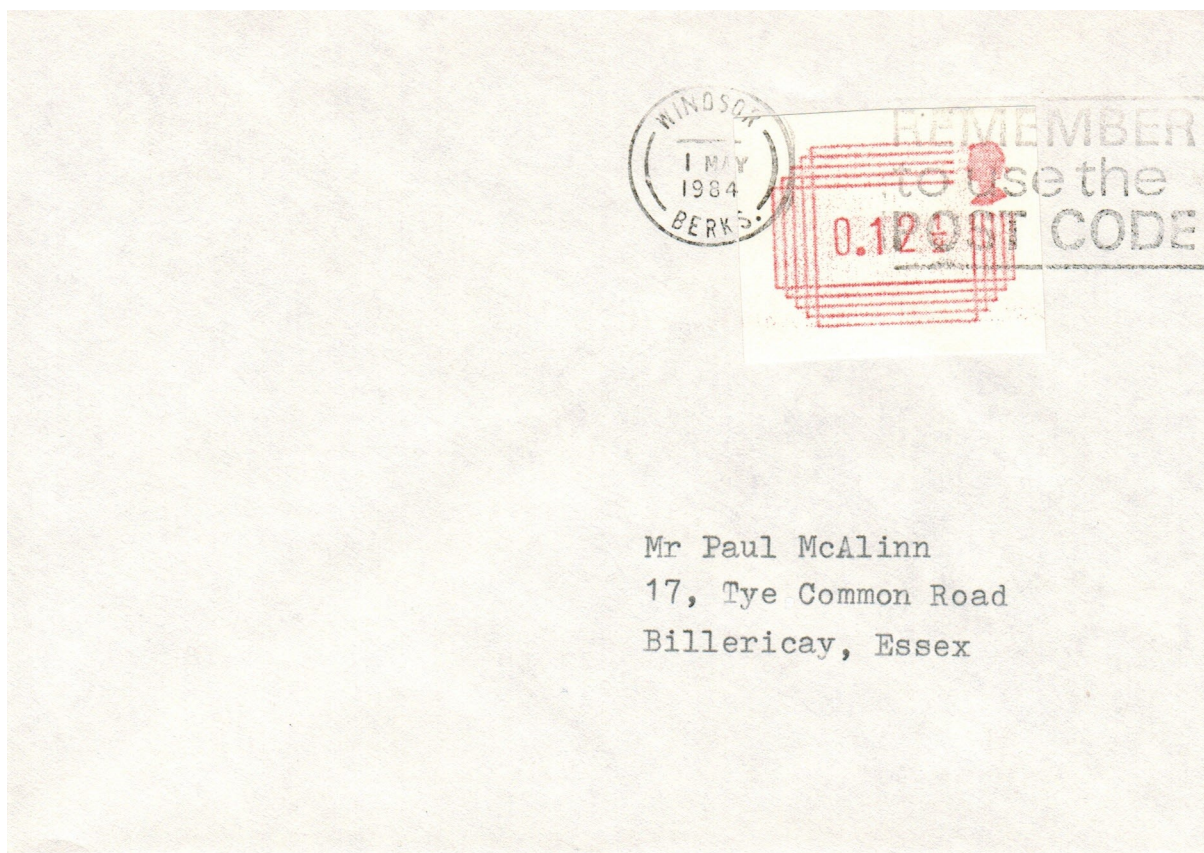
4.2 White paper varieties

On the very first day of this Frama issue, one engineer accidentally left white paper instead of correct normal paper in the Frama machine in Windsor and resulted in the famous Windsor white Frama stamp. The white Frama stamp could be from other machines as well. There are limited information of white Frama stamp in MICHEL catalog and Stanley Gibbons catalog Appendix Y. Both of them did not mention all varieties on white paper.



Windsor white Frama for first class and second class rates before and after rate change on Sep 3, 84
12½P: 2nd class by 9/2/84; 16P 1st class by 9/2/84; 13P: 2nd class after 9/3/84; 17P: 1st class after 9/3/84

There are first days covers for Windsor white stamps. European dealers prepared such covers, including first class (16P) to UK address, second class (12½P) class to UK address and airmail to European address (20½P). One example of the first day cover is shown below.



The Windsor white 12½P Frama stamp used on first day cover to pay 2nd class mail postage

4.2 White paper varieties

Except normal values, there were other value varieties available on white paper.

Engineering 0: Similar to normal paper, 0 value was used to test machine without accounting impact.



Engineering 0 on white paper

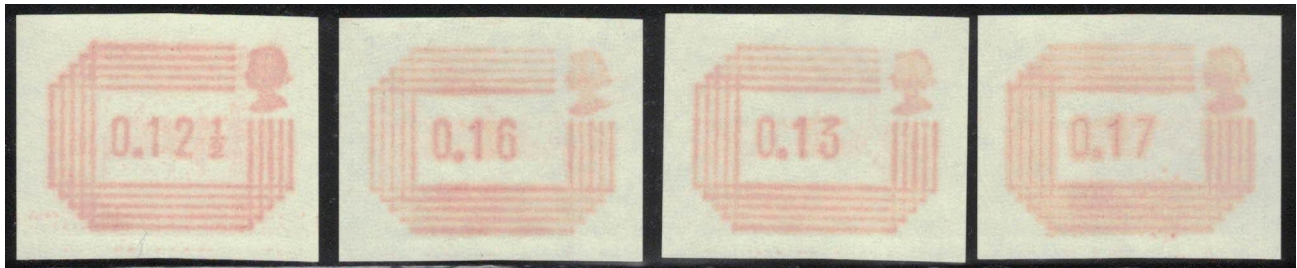
Overvalues: similar to normal paper, there are overvalues on white paper. Following values are reported: 23½P, 25P, 50P, £1.70, £1.76, £1.77, £1.83, £1.90, £2.83, and £2.90. All overvalues above £1 have incomplete or missing 2 lines at bottom. It could be due to the coins stacked too high to print correctly.



Overvalue Framma stamps on white paper. All of them are rare with a few copies reported. £1.9 one is fully offset at back. £2.9 is the highest value known on white paper.

4.3 Gum side print varieties

When the engineer installed new roll in London kiosk for the adjusted values of 16½P and 17P, the stamp roll was accidentally put in the opposite position. This resulted in the famous Frama print on gum side. There are a few full sets of gum side print between ½P and 17P exist.



Gum side print Frama for 1st class and 2nd class rate before and after postal rate change on Sep 3, 1984

Unlike normal paper or white paper, there is no overvalue, double print or other varieties reported on gum side print except engineering 0.

There were also 0.00 testing stamps from the gum side print. It is believed less than 10 copies ever exist for gum side Frama. The engineering 0 on gum side print with offset is one of the rarest Frama varieties.



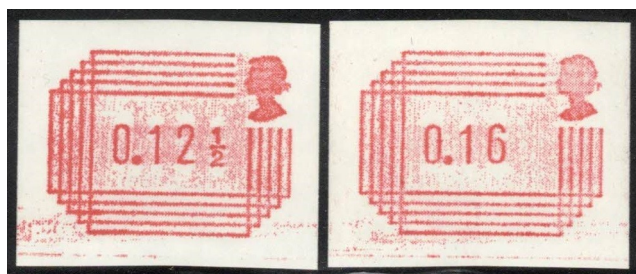
0 value on gum side paper
less than 10 reported



0 value on gum side paper with offset at back
only 2 reported

4.4 Lead paper varieties

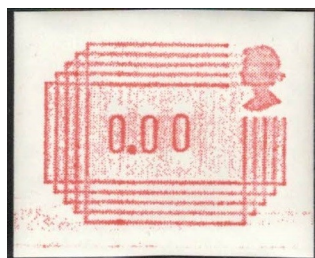
The paper used for British 1984 Frama stamps is printed by British printing house Harrison and Sons. The paper were printed in two stages. First, a phosphorescent layer and gum were applied on top of white paper. So, it looks different from white paper. Then, the green water waves are applied as security design. The paper without security design are called lead paper since it was at the end of original paper rolls. It was tested accidentally in the period when Frama machines available. There are a few full sets of lead paper Frama stamps between 1/2P and 16P.



The 1st class and 2nd class rate Frama on lead paper

There are also other varieties on lead paper including engineering 0.00, dry print, and overvalues printed on lead paper.

Engineering 0 was used to test whether machines functional. Very few 0 values on lead paper. Dry print: when the ink is almost gone, there were dry print on lead paper as well.

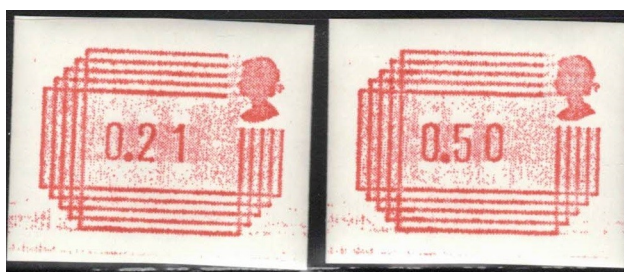


0 value on lead paper
Less than 10 reported



Dry print 0 value on lead paper
Less than 10 reported

Overvalues on lead paper: there were only a few overvalues known on lead paper: 20P, 21P, 24P, 25P and 50P were reported.



Overvalue 21P and 50P on lead paper;
both of them are very rare with less than 10 reported.

5 Frama derivatives

5.1 First class paid stamp

The 1st class paid stamp printed on same paper with dark green waves used for Frama stamp. The 1st class paid design could be the source of Frama design. These stamps are printed from as standard stamps rather than from Frama machines. The size of this issue is 41MMx30MM.

The stamp was used for Letter Cassette envelop as first class postage without weight limit. The envelop is used to send greeting card and a cassette within UK. It can also be used to mail internationally with additional postage. Mint never hinged examples with full gum are rare for this issue.



1st class paid removed from cover



1st class paid with full gum



1st class paid used on cover



1st class paid with additional stamps used for international airmail to Germany on Aug 27, 1985

5.2 NPM Specimen

When the Frama machines were removed from on-site post offices, Royal mail put one of them in National Postal Museum at London. It was used to print NPM specimen as souvenir to visitors. It was printed from Frama machine but the design was different from Frama stamp with two rectangles and “NATIONAL POSTAL MUSEUM SPECIMEN” in clockwise and Malta crossing marks at each corner. However, these are considered as labels without postal values.

The NPM was available starting on May 6, 1988 in Red color. To celebrate 150 anniversary of Black Penny, blank ink was added to the red ink and generated a brown and then black color labels. Based on the shade of red and black, there could be many different shades in total between red and black. Only full penny was available since it was the case after Jan 1, 1985. The detailed time of colors in NPM is:

May 6, 1988 – May 22, 1990: Red

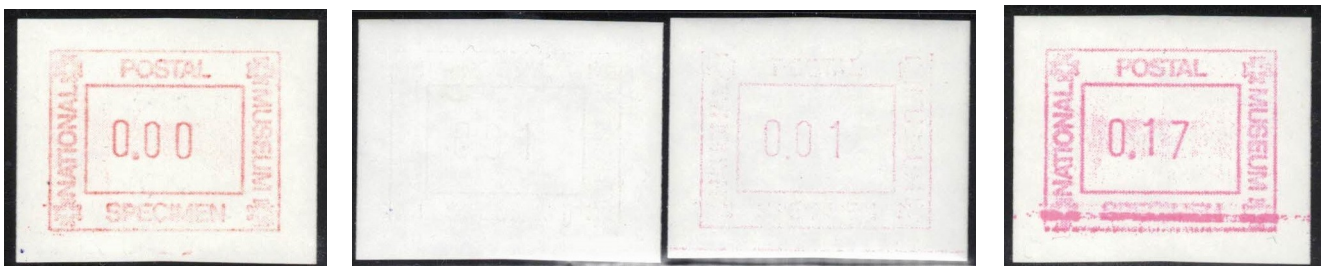
May 23, 1990 – Jan 18, 1993: Black

Jan 19, 1993 – Apr 13, 1993: Red



NPM specimen with different colors: from pink/red to brown/black

Similar to normal Frama stamps, there are also 0 values from NPM machine. When the ink was almost gone, there were also NPM specimen with dry print or faint print. Smear print was available when the ink was spilled over the NPM label.



0 Value NPM specimen

The dry print and faint print of NPM specimen

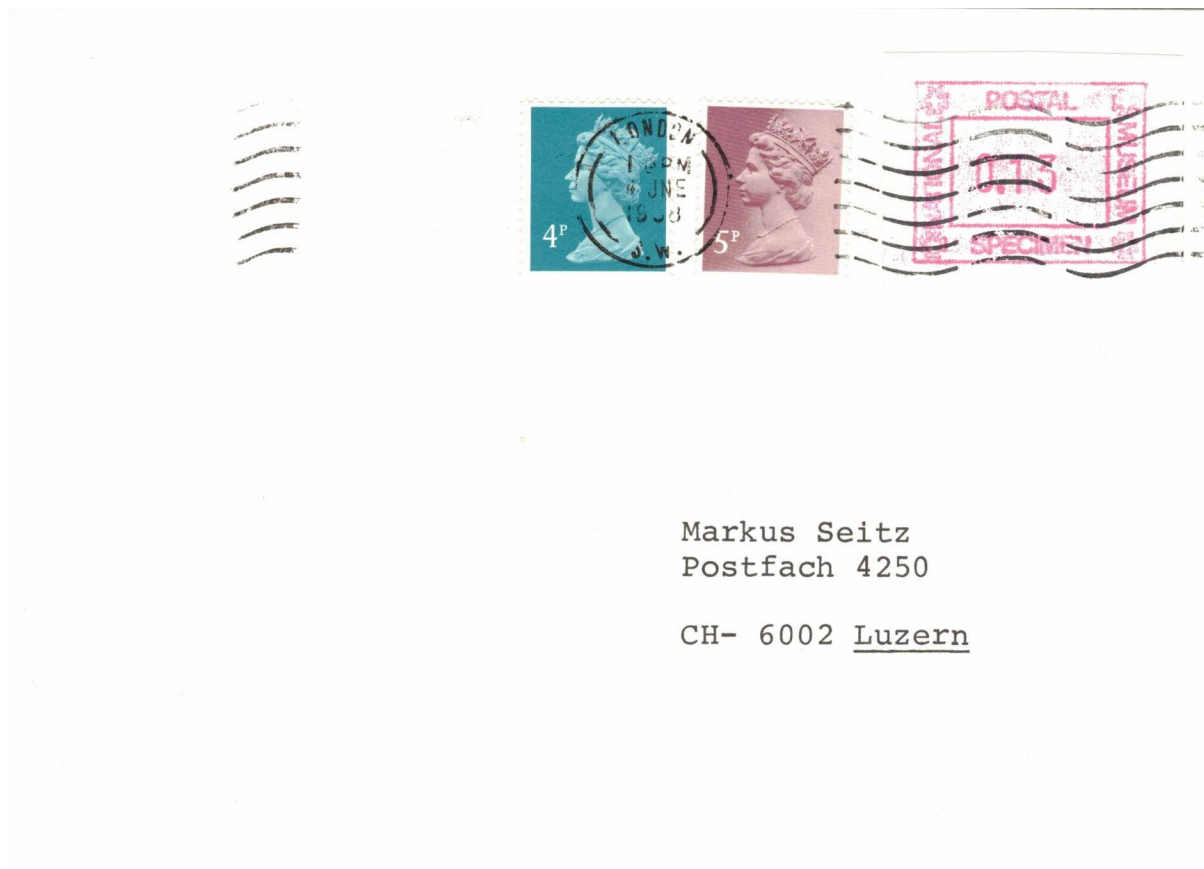
Smear print NPM specimen

Overvalues: Similar to normal Frama stamps, there were overvalues printed from the same machine for NPM specimen. There were 19P, 21P, 22P, 23P, 30P, £1.11 known. Other values could exist as well.



Overvalues from NPM specimen. 30P label is in different colors.

Although NPM specimen were considered as label, they were used as postage occasionally.



NPM specimen used as postage on airmail to Switzerland on June 4, 1988
(22P was the airmail rate from UK to Europe)