BREEDING STEEL FLEMISH GIANT by Lin Stuart

Steel is typically a pattern on a rabbit's coat.
The pattern may look like an agouti but has different banding.

The steel rabbit may be born entirely black with white belly and under the tail, then gradually change so that the white flecking appears through the black giving it the steel appearance

The white ticking on the coat which gives the steel appearance is only located on the tips, with about 50% white and 50% black hairs showing. On the fur directly below this area is a black band and the remaining ¾ length of fur is slate blue to the skin. I have not found any rabbit standard that mentions "gold tipping". Steel is always white.

In Australia and overseas some rabbits have been bred with 'modified' steel rabbit's therefore the colour will appear to be a 'self' This means that other colours can use a modifier gene to hide the steel pattern. Therefore some rabbits born in a steel litter can actually look like a self and be shown as a self but infact hide the steel pattern.

Steels can pop up in most colours, blue steel, chocolate steels etc. these may be thought of as selfs with light coloured ticking on the tips of their hairs with a slightly orange coloured triange on the back of their necks.

Steel genes can pop up where they are unwanted due to the modifier gene. Under the British Rabbit Standard which is followed by Australia for showing, steel is the only colour in Flemish Giant that is showable.
Presently American Flemish Giant is a breed in development in Australia and when approved other colours will also be able to be shown. The thing that is worrying is that in Australia we have worked so hard to establish the steel pattern in our stock that the modifier gene most probably has infiltrated our tight gene pool of Flemish Giants used to establish the new breed of American Flemish Giants. If so, when showing a self coloured Flemish Giant we may be fooling ourselves and knowingly showing a modified steel.

To find out if you have a modified self it can be tested through mating.
A true self mated to a true self colour will always produce a true self.
Should the steel pattern be visible you have the modifier gene (Es) present and they are not selfs at all.

For example:
AABBCCDDEE This is an Agouti
AABBCCDDE^{s}E This is a Steel

Es is the modifier gene. It modifies the (E) colour gene.
It can only exisit when located with
(A) or (at), Full Colour (C) and Full Extension (E) to be visually present as the steel pattern.
It is appears best when used with **AABBCCDDEE**.
The steel gene is dominate over agouti and true selfs. Steel can carry most colours.
Agouti and true selfs will not carry steel.
So we have established that we need to keep steel away from agouti and selfs if we want to retain true selfs and agoutis.

The best mating is to breed steel to steel. The steel colour gene from each parent has a 50% chance of being passed onto their offspring, creating super steels.

AABBCCDDE^{s}E^{s}. Super steels
These rabbits are the most dominate with steel colouring and no matter what colour is mated with them, they will always pass it on.

Breeding steel to steel is the best solution for keeping track of the steel modifier gene.

Just remember that (E) is the extension gene which in nature is dominate over other genes.
However the (Es) steel modifier is dominate over the (E) gene in every case.