



# Schwabach Gold Leaf

## and its Manufacture



In 1504, the figures of the stunning high altar in the town church of Schwabach, which are attributed to the famous wood carver Veit Stoss, were gilded. The size of the gold leaf used suggests it originated in Schwabach.

The individual stages of gold leaf manufacture have changed very little over the centuries. The only difference is that some of the processes are now mechanised.

The manufacture of gold leaf starts with gold being melted down in a crucible before being cast into a bar. Bars of pure gold, as well as bars with added silver, platinum or copper are available. The gold has a lighter or reddish tone depending on the actual admixture.

Whilst still hot, the bars are smithed on an anvil until they measure roughly 4 cm in width. Once cold, the bars are rolled about 35 – 40 times into a long ribbon of gold. It passes continuously through the rollers until it has a thickness of only 3/100 mm (the same thickness as newsprint).

The ribbon is subsequently divided into “lengths” of equal weight, which are then placed on top of one another and cut to size. Each “length” is cut up into 64 squares.

These little squares are picked up with ebony pincers and layered in a special form of 'Montgolfier paper', making what is called a "cutch". The "squares" are now placed between sheets of 'Montgolfier paper' up to a thickness of 500 sheets.

This packet is then enclosed in leather and beaten until the leaves of gold have been reduced to a thickness of about 1/170 mm.

Today, this is a mechanised process, but in the past gold was beaten by hand with an approximately 20 to 22-pound hammer for about one hour.

The highly complex production stages involve three quartering and beating processes until a final thickness of 1/8000 to 1/14000 mm is achieved.



The final beating process requires roughly 5,000 to 7,000 hammer strikes and can take anywhere between two and a half and six hours to accomplish. The special hammers used by gold beaters weigh between 2 and 12.5 kg. The process of inserting and quartering is carried out by the gold adjusters.

The final process stage sees the wafer-thin finished leaves being trimmed to size. Using pincers, the gold cutter removes each leaf separately from the form, straightens it with a light breath onto a pad and cuts it using a special blade. The most common size is 80 x 80 mm.

Twenty-five leaves of gold are put in a small booklet between sheets of tissue paper – ready for distribution around the world.

Gold leaf is used whenever and wherever you wish to create the impression that an object is made of gold. It is widely used for gilding works of art and architectural features, for decorating books and food, as well as for both medicinal and cosmetic purposes.

Further information: Tourist Information Schwabach  
Tel 0049 (0)9122 860-241 · [www.schwabach.de](http://www.schwabach.de)



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