

Metal and Metallurgy

The use of metal materials was widespread within the Islamic communities. Metal basins and pans were used for the daily cooking, doors and windows were decorated with metal artwork, guest's hands were washed with metal cans, the literate made use of metal pens and ink pots, the women's lavatory had mirrors creatively decorated with various metals and almost all the make-up items (cosmetics) for women were stored in metal containers in different shapes and sizes. Even horses wore brass metal armors and the army were also provided with the finest metal armories.

There is an impression from old paintings and various artifacts that most metallic items were made with gold, silver and brass during the golden Islamic period (800-1600 CE). This impression is false if we carefully look at the many archeological findings of artifacts in which other metals were clearly used, thus proving the claim to be incorrect. Metal equipments were inexpensive, even though many households owned many metal equipments and materials. This used to be the standard in every household back then. There was likely to be 10 times more metal objects to be found in the household of the Ummah than anywhere else in the world during that period. Quranic verses (Chapter 57 verse 25) imply the benefits and great use of iron to all mankind. This chapter in the holy Quran is called "The Iron", surah "Al Hadeed".

The names of the owners and artists were engraved on the many metal works using calligraphy, making it possible to trace back the owners and the makers. Besides blessings in the form of prayers, the titles of the owners and even the rulers of that time were engraved in Kuffic style. After the twelfth century many villages and cities established metal workshops to stimulate industrialization and mass production. Iron was associated with science and engineers with their ingenuity and work. The work of these skilled people should therefore be honored and deserve to be recognized for their skills and hard labor. Gold in contrast, had a bad reputation. This so called precious metal was closely associated with corrupt and unworthy leaders and businessmen.

One of the greatest feat in Islamic metal works is the "Damascus Sword". The quality and strength of this sword was legendary and famous among the Christian crusaders. The sword didn't rust, didn't lose its quality and didn't break easily on the battlefields. Many crusaders fell victim to this sword of high quality during the numerous crusades (Period 1069-1272 AD). Many of the defeated Christians took some of these swords on their return back to home in Europe despite the Church's disapproval. The Church proclaimed the swords to be of satanic powers because of its unique qualities and patterns. The Europeans tried to replicate this steel with its superior qualities till the twentieth century. They were never able to do so.

Damascus steel was manufactured from wootz steel and came from Tamil Naidu and Kerala in the Southern part of India. This steel had unique chemical properties and was melted at a very high temperature. Wootz steel has existed since 600 CE in South India (Hindustan) and was then known to be of the best quality until the twentieth century. Indian iron smiths were so skilled that they were forbidden to produce any wootz steel during the British occupation in the 18th and 19th century. Wootz steel was imported from India during the rise of the Islamic Empire when it reached its borders. The first mosque (Cheraman Juma Masjid) in India was built in Kerala in the year 629 CE by the King Cheraman Perumal, better known by his Muslim name Tajudin. He was the ruler of the wootz producing province in South India.

The unique wave patterns in the wootz steel of the legendary damascus swords.



A metal decanter, manufactured in the 13th century from Iraq

Metal cup with a closing flap, 12th century

Shashmir (sword), 18th century India. Decorated with golden calligraphy