

3-RAEREN

Fire and Steam mark the history of Raeren

By the mid 19th century, more and more steam trains traversed the nations of Europe. Belgium was the continental pacemaker for this new era. Steam engines were already frightening, fiery apparitions to the people of the time. Steam locomotives that moved along steel rails were monstrous. But prior to the arrival of the railway, fire and steam had long been confidants of the denizens of Raeren. They were the necessary partners in the manufacture of Raerener Stoneware, which was once known throughout Europe. And yet in 1850, 15 years after the first steam train on the continental mainland puffed its way from Brussels to Mechelen, 35 years before the first Vennbahn trains rolled from Aachen Rothe Erde via Raeren to Monschau, the embers of the last Raeren pottery oven glowed for the last time. With the blessing of Parson Franz Josef Sünne, a major piece of Raeren's past finally became ... history.

Raeren, a vital hub of the Rhineland potters' art

Rhineland's potters were once numbered among the best and most successful in Europe, possibly in the world. One of the hubs of pottery production was the village of Raeren. Further to the East could be found the pottery towns of Frechen, Langerwehe, Siegburg and Montabur in Westerwald. A revolutionary new shape was responsible for the pole position of the Raerener potters from the second half of the 16th century, when more rigorous architectural shapes and proportions began to displace the previously rotund jugs. The new cylindrical central part of the "Stein" made it possible to decorate with friezes and images in relief instead of only medallions and heraldic arms. These told entire stories in words and pictures, much like the comics of today. Sacred and profane motives delighted the customers and were a key element in the desirability of the stoneware jugs, pots and bottles from Raeren. The favourite motive found on jugs from the 16th century was the "Raerener Bauertanz" (Raeren Farmers' Dance). This could be had in as many as 30 different versions. The originals came from copperplate etchings by Hans Sebald Beham (1500-1550) of Nürnberg. There were possibly as many as 50 kilns active in Raeren at the height of stoneware production in the second half of the 16th century. By 1803, there were only 10 ovens still in service, in which up to six firings per year were carried out until the last oven was fired up for the last time in 1850.

Raerener stoneware, valued across the world

Wherever pottery vases, jugs, tankards and bottles have proved either useful or desirable, their remains can be found in the ground or in the sunken bellies of shipwrecks. Rhineland pottery, such as that from Raeren, was exported all over the known world, as well as to the Americas within a century after their discovery. English, Dutch and Spanish sailors valued the robust stoneware, not only for the preservation of foodstuffs, but also as something they could easily trade in the colonies of the new world. Thus, pottery from Raeren found its way to the distant markets of North and Central America, as well as to Australia and South-East Asia. Among the markets closer to home, the Hanseatic city of Cologne was the most important exchange for Raerener ceramic ware. From there, the pottery travelled the Rhine and other distribution routes of the Hanseatic League to North and Eastern Europe. At the height of the industry, and with the exception of rejects, the 50 ovens in Raeren with their 300 firings per annum produced a volume of 200,000 to 400,000 vessels.

Pots, jugs and bottles went to market by horse and cart in the days before the Vennbahn

Experts estimate that up to 2,000 cartloads left the potters' village of Raeren every year, each one carrying a ton of stoneware. Today's equivalent would be 90 articulated lorries. Had the Vennbahn been available at the time, 133 wagons carrying 15 tons would have left Raeren station or, at 20 trucks per train, 7 goods trains a year. And, just for interest's sake, if that entire production were to be carried in bicycle trailers, assuming about 140 kilograms per heavy-duty bike, then a column of 14,000 such bicycles would be required. Together, they would build a 35-kilometre convoy ... enough to stretch along the Vennbahn route from Raeren to Sourbrodt.

Raeren's speciality products - accessories for pilgrims

However, there was one market for Raeren ceramics that lay much closer to home: water bottles and horns for the pilgrims who came every seven years to Aachen and Kornelimünster. The horns, in particular, were blown by the host of pilgrims at the moment when the sacred relics were displayed before the Aachener Dom. "it must have sounded a lot like the Vuvuzela fanfares at World Cup 2010 in South Africa", says Ralph Mennicken, Director of the Raeren Pottery Museum.

Firing the Stoneware - the furnace sings and bellows

Clay needs the power of fire to turn it into ceramic. According to best estimates, there were about 50 firing ovens working in Raeren in the 16th century. For each firing session, about 40 m³ of beech-wood were required. Thus, 12,000 m³ of beech-wood were consumed per annum. Beech gives a particularly long flame. With the addition of birch and birch-bark, such was the thinking in the 19th century; Raeren tankards acquired their characteristic golden appearance. The furnace was fired-up gradually, until the oven reached its base temperature. Only after some 12 to 15 hours, once the oven had reached 600° Celsius, would firing be intensified. At this point the two "stokers" would throw beech-wood billets hand over hand into the furnace chambers. By peering occasionally into the oven, either through an aperture in the oven door, or through the "salt hole" at the top, they could tell from the colour of the flames when the ideal temperature had been reached: at the start of the firing process, the blaze would glow cherry red. As the temperature continued to rise, this would change to vermilion, finally to orange and yellow tones, even white. Experienced furnace masters could gauge the exact firing temperature from these changing colours. The flames had to travel a distance of 10 metres to reach the furthest confines of the oven. When the furnace was really blazing, the oven would literally roar. 50 such ovens threw an eerie glow into the night sky. From afar, this spectacular landscape of dancing pillars of flame and smoke looked like a scene from hell. White billows of steam marked the last step in the stoneware firing process

One could tell from a distance, by the billows of steam shooting up into the air, that another firing sequence in Raeren was nearing its end. Seasoning was the last step in the pottery process. Through the addition of common cooking salt, the stoneware acquired a hard, corrosion-resistant glaze, also lending the crockery its characteristic finish. For this process, rough crystal salt - for Raeren pottery this mainly came from the Aachen salt works or from Westphalia - was poured into the oven through its peak aperture. The 300 firings a year required 120 tons of salt. The hellish work of seasoning was carried out only by the toughest and most experienced potters. Two men dressed in thick clothes and with their heads wrapped in cloth poured the moistened cooking salt into the peak aperture, using a long-handled spoon. A loud crackling and hissing followed as the crystals splintered in the intense heat and the moisture instantly converted into sodium enriched steam. This sodium vapour would settle on the pottery surface, combining with the silica present in clay to make the special glaze. The remaining hydrogen chloride vapour would escape through every seam and fissure in the oven to form an acrid white cloud, billowing up into the heavens.

The furnace master - of pottery firing and locomotive stoking

The work of a furnace master responsible for the firing of stoneware is not unlike that of the stoker on a steam locomotive. He is not only in charge of seeing that the fire is fed, but also maintaining the ideal working temperature: "Three to the left, three to the right, three down the middle and keep the corners closed!" This was the rule of thumb for evenly stoking the huge fire-grid. But the real work of a stoker is to understand the individual "character" of his engine. "Every locomotive had its own soul", writes Uwe Miethe on a website dedicated to the secrets of vanishing professions. "There were the willing and the unwilling, the reliable and the awkward. One would never let you down and always get you there, another never ceased to give you trouble because you'd done something to annoy it. One really malevolent locomotive nearly killed my driver and I." And he ends his reminiscence with the remark: "Treat them like people. It might sound like superstition, but it's the key to getting the job done!" And this, thinks Ralph Mennicken, could equally well have been said by a stoneware potter when talking about his experience with temperamental ovens.

Taming the power of steam made the railways possible

According to the cultural historian Wolfgang Schivelbusch in his work on the history of rail travel (“Geschichte der Eisenbahnreise”), with the arrival of the steam engine, a modern means of production was introduced into the technical development of civilisation, emancipating us from the organic limits of nature. “Steam appears like a power, independent of nature, even in opposition to it - artificial energy versus the forces of nature.” Maximum work for minimum machinery - this was the maxim that made the mobile application of the steam engine possible. Initially, it found its place in the shipping industry. Travel and transport over land had always been the weakest link in this chain of emancipation from natural limitations. Now a form of motion was possible, which was exemplary by virtue of its uniformity, regularity, strength and endurance. The new world of the railway is marked by an astonishing level of technical discipline. The mechanical engineer Franz Reuleaux (born in Eschweiler, 1829) insisted that the “free interplay of elements is thus brought to a close” by its invention. But the enthusiasm of engineers clashed with the fearful concern of the general public. The first sight of a train caused excitement and horror in equal measure. The sheer power, size, sight and sound of these monsters was frightening, as was the inexorable way they progressed, their oily rods and cylinders pumping, their giant wheels revolving, rushing smoothly down the shiny rail on a carpet of escaping steam - all this was far too much for many people to stand. The artist William Turner is one of the few to truly celebrate the arrival of the steam train, eternalised in his iconic 1844 expressionist work “Rain, Steam and Speed” as a fiery fleck of colour surrounded by a turbulent halo of vapour, smoke and water.

Even the people of Raeren find it hard to adopt the new railway

In the 1880s, the rumour began to spread in Raeren that the “fire-spitting, cacophonous steam-train sought to lay its iron trail as far as Raeren”. The very first negotiations with the railway company showed the unwillingness of the local council. Their beautiful village should not be split by rails, nor should its bucolic tranquillity (Raerener Stoneware was history by now) be disturbed by the thunder of iron horses. If the railway had to have a station, then let it be built “somewhere up near the forest”. Thus, a distant attitude led to physical distance, too. The station was constructed far from the heart of the village and unconnected with its daily doings. On 1st July 1887 at 10:30, the first train, hung with garlands and wreaths, rolls into Raeren station. It is the maiden trip from Aachen Rothe Erde to Monschau. Three years later, the first train from Raeren arrives in Eupen. Here too, as the reporter for the “Correspondenzblatt des Kreises Eupen” records, the reception is rather on the cool side. “Only a few houses near the station carry flags, the rest of the town does not seem to have been aware of the celebration.” On 4th April 1976, Raeren station said goodbye to the scheduled arrival and departure of steam trains. The era of fire and steam was thus closed forever in the village of potters.