

Nidarosdom organ project



About a third of the way along the coastline of Norway you will find the city of Trondheim. It has a population about 190,000, and is the third most populous municipality in Norway.

The city functions as the administrative centre of Sør-Trøndelag county.

Trondheim lies on the south shore of Trondheim Fjord at the mouth of the river Nidelva. The city is dominated by the Norwegian University of Science and Technology

(NTNU), the Foundation for Scientific and Industrial Research (SINTEF), St. Olavs University Hospital and other technology-oriented institutions.

The settlement was founded in 997 as a trading post, and it served as the capital of Norway during the

Viking Age until 1217. From 1152 to 1537, the city was the seat of the Catholic Archdiocese of Nidaros; since then, it has remained the seat of the Lutheran Diocese of Nidaros and the Nidaros Cathedral. The current municipality dates from 1964, when Trondheim merged with Byneset, Leinstrand, Strinda and Tiller.

Trondheim was named

Kaupangen (market place or trading place) by Viking King Olav Tryggvason in 997. Shortly thereafter it came to be called Nidaros. In the beginning it was regularly used as the military centre for King Olav I. It was frequently used as the reigning seat of the king of Norway, and was the capital of the country until 1217.

Great fires ravaged the city in 1598, 1651, 1681, 1708, twice in 1717, 1742, 1788, 1841 and 1842; however, these



were only the worst cases and there have been several smaller fires in the city. The 1651 fire destroyed 90% of all buildings within the city limits. The fire in 1681 led to an almost total reconstruction of the city.

In more recent time, Trondheim was a major base for the German Navy, particularly their submarine fleet, during the period of occupation in World War Two.

The Nidaros Cathedral and the Archbishop's Palace are located side by side in the middle of the city centre. The cathedral, built from 1070 on, is the most important Gothic monument in Norway and was Northern Europe's most important Christian pilgrimage site during the Middle Ages, with pilgrimage routes leading to it from Oslo in southern Norway and from the Jämtland and Värmland regions of Sweden. Today, it is the northernmost medieval cathedral in the world, and the second largest in Scandinavia.

During the Middle Ages, and again after independence was restored in 1814, the Nidaros Cathedral was the coronation church of the Norwegian kings. King Haakon VII was the last monarch to be crowned there, in 1906. Starting with King Olav V in 1957, coronation was replaced by consecration. In 1991, the present King Harald V and Queen Sonja were consecrated in the cathedral. On 24 May 2002, their daughter Princess Märtha Louise married the writer Ari Behn in the cathedral.

The Pilgrim's Route to the site of Saint Olufs's tomb at Nidaros Cathedral has recently been re-instated. Also known as St. Olav's Way, (Sankt Olavs vei), the main route, which is approximately 640 kilometres long, starts in Oslo and heads North, along Lake Mjøsa, up the valley Gudbrandsdalen, over the mountain range Dovrefjell and down the Oppdal valley to end at Nidaros Cathedral in Trondheim. There is a Pilgrim's Office in Oslo which gives advice to pilgrims, and a Pilgrim Centre in Trondheim, under the aegis of the cathedral, which awards certificates to successful pilgrims upon the completion of their journey.

Kuhn Orgelbau first encountered the Steinmeyer organ in Trondheim in 1990 and were invited to form an opinion on the condition of the organ. At that point in time it already had a turbulent 60 year long history with far-reaching changes. The original instrument had been subjected to the amputation of entire divisions. Moreover, the ravages of time had wrought lesser and greater damage to the membrane chests and the electric key action, so that the organ's reliability was no longer guaranteed. The atmospheric conditions prevailing in the cathedral, with extreme dryness in the winter, were a major cause of such damage.

Could the basis of this organ really do justice to the majestic proportions of the interior and musicians' requirements? Certainly not in the state it was in at the time! Kuhn very soon realised that the

goal could only be the reconstruction of the Steinmeyer organ in its entirety as it was in 1930. There was no doubt that the tonal qualities of that period, now rediscovered, could be detected in the pipe work. Thus there existed a solid basis for the restoration.

It was some time after the initial considerations that finally, in 2010, the Cathedral issued a call for tenders throughout Europe. In January 2012, the committee of experts, comprising Björn Boysen, Professor at the Norwegian Academy of Music in Oslo and organ expert, Stein Johannes Kolnes, organ expert at the Office for the Preservation of Historic Buildings and Monuments, Per Fridtjov Bonsaksen, Cathedral Organist of Nidaros Cathedral, and Lene Landsem, architect, decided unanimously to accept the offer submitted by Kuhn Organ Builders.

How the Steinmeyer organ changed

Photos taken in 1930 show that the western part of the cathedral nave had still not been finished when the new organ arrived from Oettingen, Bavaria. So this huge 164 rank organ was erected in the north transept, taking up the whole floor space there. The console, on wheels, stood in the crossing of the cathedral. The organ was inaugurated for the 900th anniversary

celebrations of the battle of Stiklestad. At that time the choir organ still reached upwards in the middle of the nave. The division was soon removed again, as this condition was visually unsatisfactory, and the windchests were then relocated to the rear of the organ.

The great nave of the cathedral had already been completed for more than twenty years when the decision was taken in 1960 to place the organ at a distance in front of the cathedral's west wall. The facade still consisted of the case of the former baroque organ, originally built in 1741 by Joachim Wagner. Since this front was much too small for the organ it stood on a projecting gallery, on which the console was also placed. The pedal organ was located behind this gallery, directly on the cathedral floor. The windows, including the wonderful rose window, were still visible above the organ.

The concept and style of the organ as such had undergone significant changes since the instrument was built. The time



The Joachim Wagner North Transept organ

when organs had over one hundred stops and an electric action had passed, neo-baroque organs conformed to the spirit of the time. Thus the Steinmeyer organ lost a number of its 16' and 8' stops. The swell organ of the third manual moved into the triforium at the front end of the nave, where, with some additions, it was used as chancel organ from then on. The swell organ of the second manual survived as a single unit. It was placed in front of the west wall at the northern end of the triforium, where the height of the interior does not allow for open 16' stops. The windchests of the great organ, the choir organ and small pedal organ found their place on the gallery. The high pressure stops and the chests of the solo division were removed in their entirety. Many pipes of the 16' and 8' stops were put into storage, being no longer needed. When a fire occurred in this storeroom, wooden pipes, English tubas and other metal pipes were destroyed, whilst the damage to many zinc pipes was almost as destructive, following repeated storage.

The historical case front was removed from the Steinmeyer organ in 1994, as a consequence of the restoration and reconstruction of the Wagner organ in the north transept. The innards of the Steinmeyer organ were now on view to all comers, a far from pretty sight!

The goal of restoration

Where in the cathedral should this monumental, reunited organ find its home? This question was to preoccupy



The Steinmeyer organ in Trondheim Cathedral prior to restoration

Kuhn Orgelbau for nigh on 20 years. The west wall of the cathedral seemed to be predestined for the purpose. However, they were faced with the requirement to maintain visibility not just of the windows, including the rose window, but also of the west door. The strategic plan prepared on the basis of these requirements can be summarised as follows:

- J The blower and the reservoir bellows will remain in the cellars beneath the organ.
- J The two 16' swell organs of the second and third manuals are sited near the floor of the cathedral.
- J Above them the bellows of the individual divisions and the wind

trunk system are arranged in a mezzanine.

-) Over that there is a floor reaching to the west wall on which are placed the great organ, choir organ and pedal chests.
-) The open 32' pipes move up to the front and stand on their own chests. The (high pressure) solo division is located in the south triforium very close to the crossing.
-) The echo division remains at its original location in the dome of the crossing.
-) The console, now on wheels again, will be equipped with modern technology.

The divided lower case allows access to the west door. Thanks to the deeply recessed middle section, the passage underneath the organ is kept as short as possible. The runs of the pipes from outside to inside allow the windows, including the rose window, to be seen.

The 32' pipes from C, visible in the front, indicate the size of the organ and represent a majestic instrument in a royal cathedral.

Through the restoration, the original specification of the organ has been reinstated, and the pipes have been restored or reconstructed. Apart from preserving the original substance (pipes, windchests, bellows), one consequence of the restoration is that the organ is once again recognizably a Steinmeyer. At the same time, top priority was given to ensuring perfect operation in the atmospheric conditions prevailing in the cathedral.

The accomplished work

This order presented Kuhn with an extraordinary challenge, one that they approached with pleasure, enthusiasm and commitment. The work started in September 2012. After only 20 months the organ was to be heard again in its original splendour, namely on 17 May 2014, the Norwegian National Holiday,

at the same time as the 200th anniversary celebrations of the introduction of the Norwegian constitution.

The Solo organ was made new and Kuhn came to Henry Willis & Sons to recreate the original Solo stops provided to



Steinmeyer in 1930. Henry Willis and Sons manufactured and voiced the new Contra Tuba 16'; Tuba 8'; Tuba Clarion 4'; Orchestral Trumpet 8'; Stentor Diapason 8'; Stentor Gamba 8' and the French Horn for the Swell Organ. The new Solo organ is situated in the South Triforium near to the transept.

Building reconstruction

Work on the cathedral as a memorial to St. Olav started in 1070. It was finished some time around 1300, nearly 150 years after being established as the cathedral of the diocese. The cathedral was badly damaged by fires in 1327 and again in 1531. The nave west of the transept was destroyed and was not rebuilt until the restoration in early



1900s.

In 1708 the church burned down completely except for the stone walls. It was struck by lightning in 1719, and was again ravaged by fire. Major rebuilding and restoration of the cathedral started in 1869, initially led by architect Heinrich Ernst Schirmer, and nearly completed by Christian Christie. It was officially completed in 2001. Maintenance of the cathedral is an ongoing process.

The oldest parts of the cathedral consist of the octagon with its surrounding ambulatory. This was the site of the original high altar, with the reliquary casket of Saint Olav, and choir. Design of the octagon may have been inspired by the Corona of Canterbury Cathedral, although octagonal shrines have a long history in Christian architecture. Similarly, the choir shows English influence, and appears to have been modeled after the Angel Choir of Lincoln Cathedral.

It is joined to the octagon by a stone screen that fills the entire east side of the choir. The principal arch of this screen is subdivided into three subsidiary arches: the central arch frames a statue of Christ the Teacher, standing on the top of a central arch of three subsidiary arches below him. The space above the principal arch, corresponding to the vault of the choir, contains a

crucifix by the Norwegian sculptor Gustav Vigeland, placed between statues of the Virgin Mary and the Apostle John. Built into the south side of the ambulatory is a small well. A bucket could be lowered to draw up water drawn from the spring that originated from St. Olav's original burial place. (This was covered over by the construction of later cathedrals).

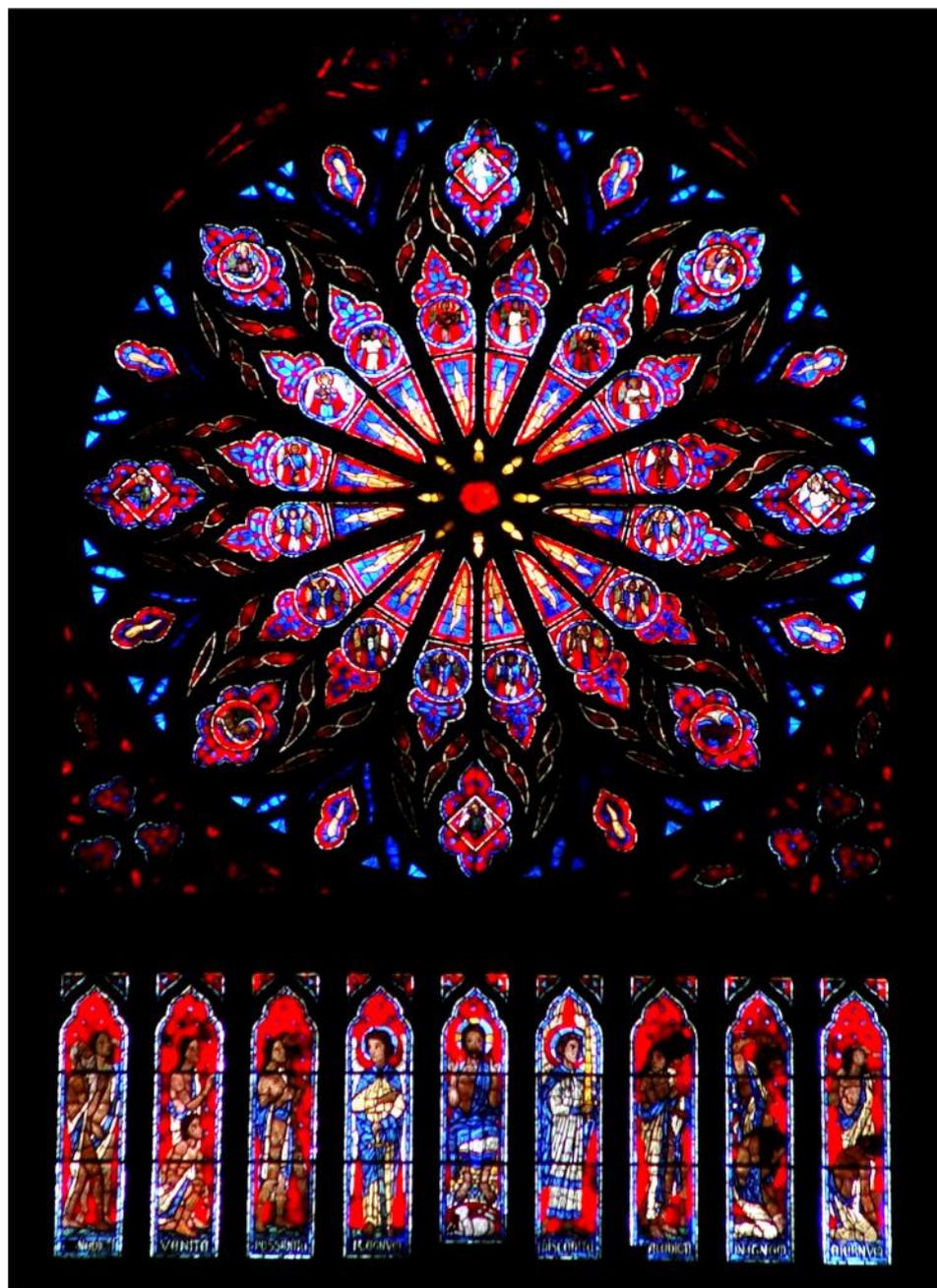
The present cathedral has two principal altars. At the east end of the chancel in the octagon is an altar at the site of the medieval high altar, behind which stood the silver reliquary casket containing the remains of St. Olav. This silver-gilt reliquary casket was melted down for coinage by Christian II and St. Olav's remains buried in an unknown location under the cathedral. The only relic known to have survived is a femur in a silver-gilt reliquary. Shaped as a forearm, it was given by Queen Josephine to St. Olav Catholic Cathedral in Oslo. The original reliquary casket was in the form of a chapel, with



dragon heads on its gables. The dragons are similar to those carved on the gables of Norwegian stave churches. Surviving medieval reliquary caskets in Norway frequently also bear such dragon heads, such as that at Heddal stave church. He was the church's and the kingdom's patron saint. The current altar was designed to recall in marble sculpture the essential form of this reliquary casket. It replaces the previous baroque altar, which was transferred to Vår Frue Church.

The second altar is in the crossing, where the transept intersects the nave and the chancel. It bears a large modern silver crucifix, and was commissioned and paid for by Norwegian American emigrants in the early twentieth century. The design was inspired by the memory of a similar silver crucifix in the medieval church. The medieval chapter house may also be used as a chapel for smaller groups of worshipers.

All the stained glass in the cathedral dates from its rebuilding in the 19th and 20th centuries. The windows on the north side of the church depict scenes from the Old Testament against a blue background, while those on the south



side of the church depict scenes from the New Testament against a red background.

Bruce Duncan

From various sources including:
 Kuhn Orgelbau
 Henry Willis & Sons
 Wikipedia
 The Norwegian Office of Tourism.

The photograph of the Nidaros Cathedral Boys' Choir in front of the new organ (page 21) won a prize for photographer Dag Asle Langø.