

The Van Hagerbeer-Schnitger organ in the St. Laurenskerk Alkmaar

History and description

Preparations 1637-1639

In a letter from 1637 to the mayors of Alkmaar, the organist of the St. Laurenskerk, Jan van Bochem, complained about the two organs of the church, on which he couldn't fully demonstrate his capabilities since they were too small and were lacking pedals. He stated that in many other towns organs were enlarged or renewed; Alkmaar could not stay behind! Van Bochem proposed to build a new large organ, or, if this was too difficult, to renovate and enlarge the two existing instruments. It is remarkable that one of these organs is still extant: the 1511 Van Covelens organ [see: description]. The smaller instrument, built in 1545 by Claes Willemsz. from Haarlem, placed above the south-entrance in the choir of the church, was dismantled in the 17th century. Its pipes were removed around 1640, to be used in the new large organ. The empty case (with closed shutters), depicted by Pieter Jansz. Saenredam in 1661, was removed in 1690.

The specification of this instrument (according to Gerhardus Havingha, 1727) was as follows:
Manuaal: Prestant 8', Holfluit 8', Octav 4', Gemshoorn 1 ½' (2'?), Sifflet (1'), Mixtuur
Compass: F,G,A-g''a''. Most probably the two large separate pipes, also depicted by Saenredam, worked as a Trom (a so-called Drum stop).

A minute investigation of the pipes of the large organ, by Dr. Jan van Biezen, has brought to light fragments of (probably) four stops from this instrument:

- Holfluit 8': 9 pipes in Roerquint 10 2/3' (Pedaal)
- Octav 4': 9 pipes in Prestant 16' (Hoofdwerk)
- Gemshoorn and Sifflet: 22 pipes in Fluit 4' (Rugwerk)

The first plan was to join both instruments into one larger 'double organ' (i.e. with a 'Rugpositief'). In June 1638 a contract was made with the organ-builder Levijn Eekman from Amsterdam. A resolution of July 1638 affirms the decision to place this instrument at the west-wall of the church. However, before Eekman had been able to make progress with the work he died already in August of the same year.

At the 25th of October 1638 an agreement was signed with the famous organ-builders Van Hagerbeer.

At first the original plan was adhered to (with some new stops added), but later it was decided to construct a new, much larger organ, in which the pipes of the small organ from 1545 could be included: this second, more detailed contract dates most probably from the 21st of October 1639. Havingha (1727) tells an interesting story about the intervention of two notables of Alkmaar, the brothers Andries and Laurens Schagen. They were great admirers of music, and enlarged the plan even more: the compass of the keyboard from the Hoofdwerk was extended from C to FF. Indeed, the foot-measures of the Hoofdwerk stops were changed in the specification of 1639 (for example: the Principaal 16' became 24' tall). According to Havingha the split keys were also added at that time. Perhaps these alterations were also the result of some visits by the mayors of Alkmaar, in 1639, to the workshop of Van Hagerbeer in Leiden 'to hear about the work at the organ'.

The building of the Van Hagerbeer-organ 1639-1646

The organ builders Van Hagerbeer

With the agreement with Van Hagerbeer, the mayors of Alkmaar contracted the best organ-builders of Holland at that time. The family consisted of three organ builders:

- Galtus Germer van Hagerbeer (father, b.15? Hage, N.Germany-d. probably 1653, Alkmaar)
- Germer Galtusz. van Hagerbeer (elder son, b. before 1611-d.1646, Alkmaar)
- Jacobus Galtusz. van Hagerbeer (younger son, b.1622-d.1670, Amsterdam)

Germer Galtusz., an extraordinary gifted organ builder, signed the contracts at Alkmaar and played a central role in the creation of the instrument. Alas, he died shortly before the completion of the organ in April 1646.

Before starting their work at Alkmaar, the Van Hagerbeers were able to complete (within a span of only 15 years!) a large number of renovations and new instruments, for example:

Nijkerk, Hervormde Kerk 1626	Leiden, Hooglandse Kerk 1637
's-Gravenhage, Grote Kerk 1629	Gouda, St. Jan 1636
Harderwijk, Grote Kerk 1632	s-Gravenhage, Hofkapel 1643
Haarlem, Grote Kerk, 1633	Utrecht, Dom 1642
's-Hertogenbosch, St. Jan 1635	Leiden, Pieterskerk 1643
Amersfoort, St-Joris 1638	Arnhem, Grote Kerk 1644

The two mentioned instruments at Leiden are both preserved and have been carefully restored in recent years. The organ at the Pieterskerk represents an outstanding example of a large Dutch town organ from the first half of the 17th century. To get an impression of the sound characteristics of the Van Hagerbeer organ in Alkmaar in the 17th century we have to go to the Pieterskerk at Leiden!

The instrument built by the Van Hagerbeers

In 1639 the organ-builders started their work at Alkmaar. According to the contract an instrument with three manuals and pedal, supplied with 31 stops should be built:

Stop list according to the specification of 1639

<i>Bovenwerk</i>	<i>Rugwerk</i>	<i>Hoofdwerk</i>	<i>Pedaal</i>
Prestant 8'	Prestant 8'	Prestant 24'	Attached to Hoofdwerk
Holpijp 8'	Quintade 8'	Prestant 12'	
Octaëff 4'	Holpijp 4'	Octaëff 6'	
Openfluyt 4'	Octaëff 4'	Micxtur 4'	
Quintfluyt 3'	Superoctaëff 2'	Scherp 3'	
Gemshoorn 2'	Holfluytgen 2'	Trompet 12'	
Superoctaëff 2'	Quintfluyt 1 ½'		
Naesaet 1 ½'	Schuffelet 1'		
Schuffeleth 1'	Micxtuier		
Quint prestant 1 ½'	Scherp		
Sesquialtra half	Quint prestant 1 ½'		
Scherp	Schalmey 8'		
Vox Humana 8'			

Stop list according to Gerhardus Havingha (1727) after the completion in 1645(?) by Jacobus van Hagerbeer, after the death of Germer (1646) and Galtus (1653?) van Hagerbeer

Most probably Havingha describes the situation after the renovation in 1652-53 by Jacobus van Hagerbeer. This may perhaps explain the many differences with the specification of 1639. [See: 1652-1653 / Large alterations by Jacobus van Hagerbeer, and: The placing of the wind chests until 1722]

<i>Bovenwerk(II)</i>	<i>Rugpositief(I)</i>	<i>Hoofdwerk(III)</i>	<i>Pedaal</i>
Prestant 8'	Prestant 8'	Prestant (B/D) 24'	Prestant 8'
Bourdon 16'	Quintadena 8'	Prestant (B/D) 12'	Octav 4'
Holpyp 8'	Octav 4'	Octav 6'(4'?)	Trompet 8'
Quintadena 8'	Fluyt 4'	Tertiaan [1 3/5']	
Octav 4'	Super Octav 2'	Mixtuur (B/D)	
Opene Fluyt 4'	Fluyt 2'	Scherp (B/D)IV-VI	
Echo Holfluyt 4'(from c)	Nassat 1 ½'	Groot Scherp	
Super Octav 2'	Quintanus 1 ½'	Trompet 8'	
Nassat 1 ½'	Sifflet 1'		
Gemshoorn 1 ½'	Tertiaan 4/5'		
Sexquialter II(from c')	Sexquialter II(from c')		
Tertiaan 4/5'	Mixtuur III-IV		
Sifflet 1'	Scherp IV		
Trompet 8'	Trompet 8'		
Vox Humana 8'(from c)			

Compass Bovenwerk and Rugpositief: C-d'''

Compass Hoofdwerk: C-d''', Prestant 24' and 12': FF,GG,AA,BB,HH,C-d''

(according to the specification of 1639 all the Hoofdwerk stops could have this extended compass!).

Compass Pedaal: C-f' for own stops, attached to Hoofdwerk: FF,GG,AA,BB,HH,C-f

Split keys for d# and a# on all manuals

Transposing mechanism (to play a natural higher)

Tuning: mean-tone temperament

Soundboards: spring-chests

Wind supply by six diagonal bellows

Pipe materials: lead, except for the resonators of the Trumpets which were made from painted iron sheets.

According to Gerhardus Havingha the finished instrument was examined in April 1645 by:

Jacob Jansz. Crabbe (town organist, Alkmaar)

Dirck Jansz. Sweelinck (organist Oude Kerk, Amsterdam, son of Jan Pietersz.)

Cornelis Jansz. Helmbreeker (town-organist, Haarlem)

Hendrik Jansz. Prins (organist, Medemblik)

Curiously enough a preserved account from 1646 gives partially different names

(apart from the town organist, J.J. Crabbe):

Pieter de Vois ('s Gravenhage, pupil of Jan Pietersz. Sweelinck)

Alewijn de Vois (Leiden)

Johan Baptista Verrijd (Rotterdam)

In a resolution of the mayors of Alkmaar (dated the 30th of August 1646) we can read that they were allowed to present a dinner after the completion of the organ. We may assume that the final examination of the instrument took place in this period in which several festivities were held (including a reception organized by the town-organist Jacob Jansz. Crabbe, visited by 248 persons). The dinner at the town-hall, organized by the municipality of Alkmaar, was attended, among others, by the inspectors of the organ and the architect Jacob van Campen. Johannes Erasmus (1605-1658), vice-principal of the Latin School, wrote some panegyrics on the organ.

Some characteristics of the Van Hagerbeer-organ

The three big 24ft-organs completed by Van Hagerbeer ('s-Hertogenbosch, St. Jan / Leiden, Pieterskerk / Alkmaar, St. Laurens) display a similar overall structure.

The Hoofdwerk was in fact a split-up Blockwork (with a Trompet 8' added). The Pedal had only a few

stops (in the contract with Van Hagerbeer at Alkmaar in 1639 no Pedal stops were mentioned). The Sexquialters were built as treble stops, common to the 17th century Dutch tradition. Many 2', 1 ½' and 1' stops were built, in Alkmaar no separate Quint 3', but a Tertiaan on all manuals.

Flutes 4' were either built as open Flutes or chimney Flutes. As reed-stops only Trumpets and a Vox Humana were built.

Like the Sexquialter the Vox Humana was a new type of solo stop introduced by Van Hagerbeer in order to bring out a solo part clearly (for example Psalm-tunes on which the organists had to improvise!).

Especially fascinating are the split keys on all three manuals (in four octaves: from C-c'''). From a letter (dated the 25th of March 1643) from Germer van Hagerbeer to the mayors of Alkmaar we know that he had installed double key's to enable the organist to accompany the Psalms one tone higher, so that a suitable pitch for congregational singing was always available. The split keys (for d# and a#, as has been pointed out) were therefore added in the first place in connection with the transposing mechanism: to maintain the specific qualities of the mean-tone temperament when playing one tone higher!

The financing of the organ

The instrument had cost the enormous amount of 52.095 Dutch guilders, which also included the still existing building for the bellows at the west-end of the nave. An interesting story tells us that this gigantic sum derived from an inheritance of 60.000 guilders from a former monastery ('de Blinken', demolished in 1571) in the neighbourhood of Alkmaar. The dispute about the legacy between Haarlem and Alkmaar, which started in 1630, was won by Alkmaar in 1636. After this happy end (for Alkmaar) the ideal circumstances were created for the most ambitious organ-project in Holland in the 17th century. Jan van Bochem [see: 1637-39 / Preparations] wrote his request at the right moment!

The organ-case

The architect: Jacob van Campen

The case was designed by the painter/architect Jacob van Campen (1595-1657). At the time Van Campen was already a well-known and respected artist. His fame today is based mainly upon his work as an architect due to the fact that only few of his paintings have survived. During his whole life he worked closely together with the painter Pieter Jansz. Saenredam (1597-1665) from Haarlem. Van Campen was very much influenced by the work of the Italian classical architect, Andrea Palladio. He designed several important buildings in 's-Gravenhage (Mauritshuis) and elsewhere. His last work was the design of the town-hall at Amsterdam (at the moment used as Royal Palace). After he had finished his work at Alkmaar he designed the organ-case of the Nieuwe Kerk in Amsterdam (1645). Of great importance was Van Campen's friendship with the Secretary of three princes of Orange, Constantijn Huygens (1596-1687), a man of great influence and talents in many fields (e.g. music!). In this period the position and function of the organ were the subject of fierce arguments. Huygens strongly advocated an intelligent use of the organ, also for the accompaniment of congregational-singing, in his book (printed in 1641) entitled: 'Gebruyck of ongebruyck van 't orgel in de kercken der Vereenighde Nederlanden' ('Use or Disuse of the organ in the churches of Holland').

Since its completion in 1646 the Van Hagerbeer-organ was used for this much discussed organ-accompaniment (this practice had already been introduced in the St. Laurenskerk in 1640, according to payments to the town-organist, Jacob Jansz. Crabbe).

The design by Jacob van Campen

Jacob van Campen had great interest in classical forms (i.e. from ancient Greek and Roman architecture and the Renaissance) and his integration of these architectural elements (from a classical temple-façade) into an organ-case was in many respects a novelty. Also new was the design of a so-called 'soffiet': the sculptured decoration underneath the Rugpositief. These aspects were repeated and varied many times in later designs of Dutch organs in the 17th and 18th centuries.

Van Campen also applied to his design the so-called rule of the Golden-Section.

This rule of proportion can be described as follows: a measure is divided into two parts in such a way that the shorter part has the same proportion towards the longer part as the longer part has towards the whole measure ($a:b=b:a+b$). Only the proportions of the main case differ slightly from this rule, but this might have been the consequence of the decision to increase the size of the largest pipes.

The case of the Rugpositief was made in the workshop of Van Hagerbeer in Leiden, but the main case was constructed by Jacob Jansz. Turck at Alkmaar in order to avoid transportation problems.

The pillars were made by Anthonie Dionijs Kelck, Pieter Matthijsz. manufactured the carvings of the main case. The statues on the Rugpositief were made by Jan Karstijnsz.

These statues surround seven gilded arrows (kept together by a snake!): they symbolize the unity of the seven provinces of Holland. In fact, the whole organ-case can be seen as a hymn on the glory of Holland, the princes of Orange, the municipality of Alkmaar (represented by the city-arms at the top of the case), and - last but not least - God: 'AD SOLIUS DEI GLORIAM', ('only God be honoured') can be read underneath the organ-balustrade!

The painting of the organ-case was carried out by Aelbert Jansz. in the same colours in which the organ has been repainted during the last restoration. Nicolaes Jacobsz. van der Heck gilded the organ-case. The inner side of the hinged doors was painted by Jacob Pinas (wood imitation) on which Hendrick Gerbrandtsz. (of Hoorn) painted floating groups of so-called 'putti' (naked boys). These 'putti' were repainted in the 18th century by Jan Peter van Horstok. (After a thorough investigation in the 1980s, with the help of huge Röntgen-photos made in December 1985, the paintings by Hendrick Gerbrandtsz. were rediscovered, but it was decided to maintain the paintings by Van Horstok.) [see: 1781-82 / The repainting of the organ-case]

The Paintings at the hinged doors

The painter: Caesar van Everdingen

The paintings at the outside of the hinged doors were made by the painter Caesar Boethius van Everdingen (born in Alkmaar around 1617 and buried at the St. Laurenskerk in 1678).

Van Everdingen was influenced as an artist by the group of painters called the 'Caravaggists' (painters at Utrecht, influenced by the Italian painter Michelangelo da Caravaggio, like Gerard van Honthorst and Hendrick ter Brugghen) and the 'Academists' from Haarlem like Salomon de Bray, Pieter de Grebber andJacob van Campen. Probably he made his first large painting in 1641 in Alkmaar: a painting of the Civic Guard (now in the 'Stedelijk Museum' of Alkmaar).

Between 1641 and 1643 Van Everdingen stayed in total 547 days at the estate of Jacob van Campen, 'Randenbroek' in Amersfoort, like the castle 'Muiderslot' (near Amsterdam, with its famous occupant the poet P.C. Hooft), this place was a very important meeting point for artists in the first half of the 17th century. At 'Randenbroek' Van Everdingen painted a model of the organ-case of Alkmaar. After the approval of these paintings by the mayors of Alkmaar, Van Everdingen was given the task and could start his work at the doors of the actual organ. It took him about seven months to finish these gigantic paintings with a surface of more than 70 square meters!

The theme of the paintings

There are several theories about the choice for and the explanation of the chosen theme: 'The triumph of Saul after David has defeated Goliath'. It might have been an allegory on the battle between Holland and Spain in 80 years of war between 1568 and 1648. Prince Maurits and/or Prince Frederik Hendrik could have been honoured by comparing them with Saul and/or David (the actualisation of biblical themes and figures was very popular at that time). Saul wears a red mantle and rides a white horse. David (with a moustache) stands close to him (in his hands the sword of Goliath, speared on it the head of the giant), together with a woman and a boy carrying the helmet of Goliath. Soldiers are setting watch over several prisoners and musicians are all around the scene. The several statues placed at the triumphal arch represent biblical figures of the Old Testament like Abraham, Moses, Joshua, Gideon and others.

The painting is probably inspired by the triumphal arches (some of which were designed by Jacob van

Campen) which were erected for monarchs when they visited towns (such arches were filled and surrounded by so-called 'tableaux-vivants' as on the shutters in Alkmaar.)

The arch was decorated in gothic style which was rather unusual in that period. The gothic details were copied from a screen at the St. Joriskerk in Amersfoort (where Van Everdingen stayed such a long time). This style was probably chosen because of the gothic architecture of the St. Laurenskerk: with closed shutters the classical organ-case fits perfectly in the gothic building, without denying its own style!

Technical difficulties of the painting

Van Everdingen did not have an easy job. He had to paint upon the wooden round towers of the hinged doors as well as on the flat canvas in between. The transition between the flat and the curved parts of the painting gave many perspective problems. The figures had to look 'normal' when they were seen from the floor of the church, which required sometimes a transformation or broadening of figures, faces and objects (e.g. a German Flute had to be a sickle-shaped and some fingers of the flute-player had to be enlarged enormously to be recognisable from the floor!). No doubt all these problems were studied on the mentioned model in Amersfoort.

Renovations between 1646 and 1722

Large alterations by Jacobus van Hagerbeer 1652-1653

In April 1650 large repairs appeared to be necessarily. The organists Cornelis Helmbreecker and Nicolaas Lossy inspected the instrument in 1651 and drew up a report. From the payments (in the town-accounts) can be concluded that Jacobus van Hagerbeer renovated the organ from 1652 to 1653 for the considerable amount of nearly 2750 guilders! The tin-founder supplied lead for 185 guilders (for this amount about 1500 pounds of lead could be bought!). We may safely assume that the specification was changed radically. This may explain the very complex structure of the instrument, for example the numerous divided wind-chests and conduits [see: 'the placing of the wind-chests until 1722'] and the differences between the specification of 1639 and Havingha's description. Havingha states in his book ('Oorspronk..', 1727, p.155/156) that the organ was completed by Jacobus van Hagerbeer after the death of Germer and Galtus van Hagerbeer. Germer died in April 1646 and it is assumed that Galtus van Hagerbeer died at Alkmaar in 1653. It seems likely that we must change the year 1645 in Havingha's description not only into 1646 but into 1653: the year in which the Van Hagerbeer-organ got its final shape!

Restoration by Duytschot 1684-1685

On the 5th of July 1683 the mayors of Alkmaar decided that the organ had to be repaired: an agreement for the restoration was signed with Johannes Duytschot and his father, Roelof Barentsz. Duytschot, organ-builders from Amsterdam. These very able organ-builders can be seen as the continuators of the Van Hagerbeer tradition.

They carried out the following work:

- The supply of six larger bellows
- The keyboards from the Hoofdwerk and Bovenwerk were reversed (Hoofdwerk was III and became II, Bovenwerk was II and became III)
- A new pedal-board was made
- A coupler Rugwerk-Hoofdwerk (probably divided) was added
- The Trumpet 8' on the Hoofdwerk was changed into a Basuyn 16' with 30 pipes, corresponding with the three separate Pedal stops: the bass function of the Pedaal was reinforced. (These changes can be related to a new kind of organ-accompaniment during the congregational-singing; because of the large congregations which assembled in the town churches in Holland in the second half of the 17th century, powerful accompanying instruments were required on which a melody (the 'Voys') could be brought out as clearly as possible; for this reason many

organs were modified and increased in sound volume at the time and couplers - often divided between bass and treble - were added).

- On the Bovenwerk the Bourdon 16' was replaced by a Baarpijp 8' (this beautiful stop is still extant), bass pipes were added to the Quintadena 8' and a new Vox Humana 8' was made (now the beloved 'Dutch Trio', Baarpijp, Quintadena and Vox Humana was complete!)
- Finally wind-leakages were mended and the whole instrument was tuned.

The organ was examined in August 1685 by:

Henrik Rypelberg (organist Nieuwe Kerk, Amsterdam)

Jurriaan Buff (organist Pieterskerk, Leiden)

Gerhard van der With (town-organist, Alkmaar)

Probably during the period of office of Gerhard van der With (1684-1690) the split keys were removed; a change firmly criticized by the organist Quirinus van Blanckenburg (1654-1740) in a letter (from 1722!) to the mayors of Alkmaar.

In 1692 the wall above the organ was painted blue with gilded stars. These paintings soon peeled off. Therefore, in 1693 this wall was covered with wood and decorated by Romeyn De Hooghe with a painting depicting 'The Triumph of Christ over Death and Sin'.

A smaller restoration by Duytschot was carried out in 1704, on which occasion the draw-stops of the Rugpositief were placed in their own case (originally they were placed above the upper keyboard).

The placing of the wind-chests until 1722 (as described by Gerhardus Havingha, 1727):

- Hoofdwerk: Four wind-chests, interconnected by a lead conduit of about 3" diameter. The 30 pipes of the Basuyn 16' had three wind-chests with separate action, fed from the main wind-chests by conduits. The FF-pipe of the Principaal 24' had a conduit of 2" diameter and a length of 16' with 5 bends close to 90 degrees! (Havingha gives a drawing of this extraordinary conduit)
- Bovenwerk: Three wind-chests, interconnected as on the Hoofdwerk. Above the main chests another set of three wind-chests fed through conduits from the lower wind-chests. The top board of the Baarpijp 8' was fed by means of conduits from the middle wind-chest. Further below the three main chests a set of three wind-chests for the Quintadena 8' and Fluyt 4' fed through conduits by the main wind-chest, for the Holpyp 8' a separate top board with conduits of 1' to 2' length.
- Rugpositief: Lower wind-chest in one piece with an upper wind-chest about 4' higher supplied with wind by conduits from the lower wind-chest. Between the doors of the case and the upper chest a separate wind-chest for the Scherp, fed from the upper chest by means of conduits.
- Pedaal: One wind-chest for the three stops.

Havingha concludes in his description ('Oorspronk', 1727, p.182) that anyone with some knowledge about the arrangement of organs, can clearly see how chaotic ('verstrooyd en verwerd') the structure of the old instrument had been [see also: 1722-1725 / The rebuilding by F.C. Schnitger / Complaints]. It seems likely that the changes and additions made by Jacobus van Hagerbeer in 1652-53 meant a considerable increase of the complexity of the instrument.

The rebuilding by Frans Caspar Schnitger 1722-1725

A new town organist 1722

On the 22nd of April 1722 Egbert Enno Veldcamps, town organist of Alkmaar since 1702, died after a short illness. On the 3rd of September of the same year Gerhardus Havingha (1696-1753), until then organist at Appingedam and son of Petrus Havingha (organist at the Martinikerk, Groningen), was appointed organist. With his arrival a new and important period in the history of the organ of Alkmaar commenced.

It was Havingha who introduced the North-German organ-builder Frans Caspar Schnitger (1692-1729) in Alkmaar.

Complaints

- Havingha had many complaints about the Van Hagerbeer-organ, for example:
The technical layout of the instrument was too complicated
[see: 'The placing of the wind-chests until 1722']
 - The wind-supply was insufficient
 - The pedal-division was much too small
 - The (mean-tone) temperament in which the organ was tuned gave too many restrictions
- Moreover, Havingha was familiar with the North-German style of organ-building and -playing, he knew a number of organs built by Frans Caspar's famous father Arp Schnitger (1648-1719), and, last but not least, he knew the impressive organ at the St. Michaelskerk, Zwolle, begun by Arp Schnitger in 1718 and completed in 1721 by Frans Caspar.

Proposals for a renovation

In three stages Havingha convinced the municipality of Alkmaar about the necessity of a large renovation. His first report is called 'Necessary Reparation' and the second 'Necessary and powerful Reinforcement of the large Organ of the city of Alkmaar'. After some days of deliberation by the mayors, Havingha was asked to combine his reports in a new specification, and: he was allowed to 'summon the builder of the organ at Zwolle'; the introduction of Frans Caspar Schnitger to Holland was a fact!

The rebuilding by F.C. Schnitger 1723-1725

The contract between the town-council and Frans Caspar Schnitger was completed on the 7th of May 1723. The specification had been drawn up by Havingha. Within the existing cases an entirely new instrument should be built, equipped with slider-chests, new tracker action and three additional bellows. Originally the organ should get 52 stops, but finally 56 stops were supplied. Suitable pipes from the old organ could be used again. The pitch had to remain unchanged ('netto Camer of Houbois thoon': $a'=415$ Hz.). Nothing was said about the tuning.

Soon after signing the contract the work started. Then also serious opposition arose, which becomes clear from several letters exchanged between Schnitger and Havingha. A copy of the specification 'leaked out' and came to the attention of some Dutch organists: a real organ-row was born! [See: 1727 / Controversy!]

Nevertheless much progress was made with the work and in the summer of 1725 the rebuilding was finished.

Four organists examined the instrument:

Cornelis van Herk (organist Kapelkerk, Alkmaar)

Petrus Havingha (organist Martinikerk, Groningen, Gerhardus' father)

Jan Jacob de Graaf (organist Nieuwe Kerk, Amsterdam)

Gerhardus Havingha

The examination report was dated the 9th of August 1725 and was full of praise, particularly about the stops which were supplied in addition to those specified in the contract. It was also emphasized that Schnitger's new Vox Humana (Rugpositief) was better than the old one made by Duytschot (Bovenwerk): Schnitger's superiority to the Dutch organ-builders had to be clear!

Specification of 1725

<i>Bovenwerk (III)</i>	<i>Rugpositief (I)</i>	<i>Groot Manuaal (II)</i>	<i>Pedaal</i>
Praestant 8'	Praestant 8' I-II	Praestant 16'	Principaal 22'
Baarpyp 8'	Quintadena 8'	Praestant 8'	
Rohrfluit 8'	Octaav 4'	Praestantquint 6'	Rohrquint 12'
Quintadena 8'	Nasaat 3'	Octaav 4'	Octaav 8'
Octaav 4'	Fluit 4'	Quinta 3'	Quinta 6'
Fluit Dous 4'	Superoctaav 2'	Octaav 2'	Octaav 4'
Spitsfluit 3'	Quintfluit 3'	Flachfluit*) 2'	Nachthoorn*) 2'
Superoctaav 2'	Waldfluit 2'	Ruyschpyp II	Ruyschpyp III
Speelfluit 2'	Quintanus 1 ½'	Tertiaan II	Mixtuur VIII
Sexquialtera II	Mixtuur V-VI	Mixtuur VI	Basuin 16'
Scherp IV	Sexquialtera II	Trompet 16'	Trompet 8'
Cimbel*) III	Cimbel III	Viool di Gamba 8'	Trompet 4'
Trompet 8'	Tregter Regaal 8'	Trompet 4'	Cornet 2'
Hautbois 8'	Fagot 8'		
Vox Humana 8'	Vox Humana*) 8'		
Tremulant	Tremulant		

*) stops supplied in addition to those specified in the contract

Some characteristics of the renewed instrument Schnitger reused old pipes in the following stops:

- On the Hoofdwerk: in all the flue stops (16', 8', 6', 4', 3', 2', 2') and the Ruyschpijp.
- On the Bovenwerk: in the Praestant 8', 4' and 2' and Baarpyp 8'. The Quintadena 8' and the Fluit Dous 4' were also made from old material.
- On the Rugpositief: old material was used in the Praestant 8' (front pipes and doubled pipes in the treble), Quintadena 8', Flutes 4', 3' and 2'.
- On the Pedaal: in the Principaal 24', 16', Rohrquint 12', Octaav 8', Quinta 6' and Octaav 4'.
- Schnitger made new Mixtures of narrow scale and mostly of pure tin. In the Rugpositief the new Octaves 4', 2' and Quintanus 1 ½' were also narrow scaled.
- From the classical 'Dutch Trio' (Baarpyp, Quintadena and Vox Humana), although retained on paper, only Duytschot's Baarpyp 'survived'.
- A modern combination was the Rohrfluit 8' and Fluit Dous 4' on the Bovenwerk: one of the earliest examples of a sweet sounding 4' stopped Flute.
- Contrary to the custom in Holland, Schnitger made continuous Sexquialters, which were on the other hand based on 16' in the treble. This low composition was required by the Dutch organists A.E. Veldcamp, E. Havercamp and N. Woordhouder in their examination report concerning the Schnitger-organ in Zwolle (1721) 'to strengthen the melody ('voys') during the singing'. Together with the low pitch (a'=415 Hz.) and the 'Dutch Trio' on the Bovenwerk this can be seen as a concession to the Dutch demands. A low composition can probably be related as well to the equal temperament in which the organ was tuned: an equal-tempered major third is too wide in comparison with the pure major thirds in the Sexquialters and the Tertiaan; when used as an ensemble stop a low composition in the treble 'softens' this difference.
- Schnitger also provided two Cimbels (made of tin); stops which had hardly been built in the previous century in Holland. (In the 16th century e.g. Henrick Niehoff built this stop in his instruments. In North-Germany the Cimbel remained popular throughout 17th century). Because of their high composition they provide the sound-colour of the organ with a special brilliance!
- Thirteen(!) new reed stops were made in North-German style. Especially fascinating is the rich variety of solo reeds Schnitger introduced in the Alkmaar organ: Fagot, Hautbois, Viool di Gamba, Tregter Regaal and two different Vox Humana's; the first examples of these types of reeds in Holland. It is a very happy circumstance that these stops, with their unique resonator shapes,

have been preserved almost completely. They constitute one of the special beauties of the organ!

- Three manual couplers were made: III-II, II-I and III-I (this last coupler was called a 'Curiöse Coppelung': it didn't touch the second manual). No pedal couplers were added. According to the North-German tradition the Pedal had to be completely independent!

Although Havingha speaks about a 'Repair' ('Herstellinge') of the organ it must be emphasized that a new organ in North-German style was built within the existing organ-case. Some major characteristics of this style:

- Each division ('Werk'), the Pedal included, is supplied with a more or less complete chorus of stops of the various groups: principal-, flute-, mutation- and reed stops.
- This concept results in a high degree of independence of the separate divisions; for this reason pedal couplers were regarded as superfluous!
- The 17th century North-German organ-case represents the inner structure of the instrument: each division was visible in the front display. This principle was called the 'Werk-prinzip'. This last aspect wasn't realized in Alkmaar: Van Campens design was left unchanged and so Havingha could play down the rebuilding as a 'repair'.

The other aspects contrast nevertheless strongly with the tradition of organ-building in Holland and so a confrontation between Havingha and his Dutch colleagues - who knew what was really going on in Alkmaar - couldn't stay away.

Controversy! 1727

Notwithstanding the favourable outcome of the examination, a lot of opposition remained among Dutch organists. In 1727 Havingha decided to defend himself in a book entitled: 'Oorspronk en Voortgang der ORGELEN, met de voortreffelykheit van Alkmaars groote ORGEL, by gelegentheit van deszelfs herstellinge opgesteld door Gerhardus Havingha, Organist en Klokkenist te Alkmaar' ('Origin and Progress of the ORGANS, with the excellence of the large ORGAN of Alkmaar, written on the occasion of its restoration...'). The book is of particular importance because of the detailed description of the Van Hagerbeer-organ and Schnitger's rebuilding, furthermore it gives particulars of other organs in Alkmaar.

Around 1727 Jacob Wognum (a citizen from Alkmaar and former friend of Havingha) published a 'Verdediging....Tégen de lasterende Voor-reden' ('Defence.... against the slandering Prefaces') in Havingha's book. Apart from a slanging match he attacks Havingha mainly about his ideas about temperament: Havingha defends the modern equal temperament (wherein the renewed organ was tuned), Wognum pleads in favour of the traditional mean-tone temperament.

Another publication came from Eneas Egbertusz. Veldcamps (son of Havingha's predecessor in Alkmaar: Egbert Enno Veldcamps, and himself a leading Dutch organist). In his 'Onderrichtinge' ('Instruction'), printed in Alkmaar in 1727, he blames Havingha for making the readers believe that the organ had only been changed and repaired, whereas in reality a new organ had been built. Furthermore, he fulminated against the new equal temperament, the continuous Sexquialters, the absence of a pedal coupler and the impracticability of the Principaal 24ft. This last stop was connected by Schnitger to the Pedal. Veldcamps regarded this solution as 'an unforgivable mistake' and proposed an extension of this stop to 32ft. Veldcamps also preferred spring-chests above slider-chests (as used by Schnitger). He even travelled to Alkmaar in order to buy the old Van Hagerbeer spring-chests; Veldcamps regarded them as 'unimprovable'! He came too late alas: the old wind-chests had been destroyed already.

Veldcamps concludes at the end of his book with bitterness: '.....and (I) hope you (Havingha) will henceforth pay more attention to the advice of a certain old and wise man, which you needed, before bringing to light such an imperfect quotation, or (which is the worst of all) let it being carried out, and, by doing so, ruin the most famous organ in the Netherlands (due to ignorance).....'

Consequences of the controversy

Schnitger's rebuilding of the Van Hagerbeer-organ meant no less than an earthquake in the Dutch organ-landscape. With the breakthrough of Schnitger in Holland and the death of Johannes Duytschot in 1725 the Dutch school of organ-building, connected with great names as Van Covelens, Niehoff, De Swart, Van Hagerbeer and Duytschot, came more or less to an end. Furthermore, a number of foreign organ-builders (mostly from Germany) arrived and filled the gap. Among them were Rudolph Garrels, Christian Vater, Jacob François Moreau (from Flanders), Christian Müller, Albertus Anthoni Hinsz and Johann Heinrich Hartmann Bätz. In their instruments they reached a synthesis between their own native traditions and the style and aesthetics of the Dutch school. One of the most famous examples of such a synthesis is the Christian Müller-organ (1738) at the St. Bavokerk, Haarlem, at its completion examined (among others) by Gerhardus Havingha!

The 18th Century

1729-1753 / Death of Frans Caspar Schnitger and Gerhardus Havingha. In 1729 Frans Caspar Schnitger dies at the early age of 36 years. The maintenance and tuning of the organ were taken over by Nicolaas Willebroek in 1731 and Christian Müller (1690-1769) in 1734, who also carried out repairs in 1734 and 1751.

In 1753 Gerhardus Havingha dies at the age of 56 years, after an engagement of more than 30 years as town-organist and carillonneur of Alkmaar. He was buried in the St. Laurenskerk, in the northern transept near to the Van Covelens-organ, where his tombstone still can be found.

1779-1780 / Preparations for a restoration

Town organist Michael Körnlein complains about several items of the instrument which were not in a satisfactory condition and for which he partly blamed Pieter Müller (son and successor of Christian Müller), who was at that time responsible for the maintenance of the instrument.

Several organ-builders were consulted, but finally a contract was signed with Johannes Strumphler on the 5th of June 1781.

Restoration by Johannes Strumphler 1781-1782

According to the specification the following work should be carried out:

- Cleaning of the instrument
- New upper edges to the pipes (by which the pitch should be increased with $\frac{1}{4}$ tone).
- The Principaal 24' had to be changed into 32'.
- Trumpet resonators for the Trechterregaal (Rugpositief); this Trumpet changed places with the Fagot 8'. (Mayor D. Ras of Alkmaar criticised this change with a remarkable comment: Schnitger made this arrangement of reeds intentionally and he regretted the loss of the 'soft and agreeable sound' of the organ!)
- On the Hoofdwerk: Praestantquint 6' replaced by a Holpijp 8', Quint 3' replaced by an Open Fluit 4', Trumpet 4' changed into 8', place changed with Viool di Gamba
- Revoicing, if necessary
- Various smaller repairs (e.g. of the wind-supply)

During the execution several changes and additions to the contract were made:

- Rugpositief: new tin front pipes for the Prestant 8' were made, involving also a rearrangement of the front (e.g. the 'mirror-flats' were changed into normal double flats). A cedarwood Fluit Travers 8' came instead of the Quintfluit 3' and the Quintadena 8' was refashioned into a Holpijp 8'.
- Pedaal: the Principaal 24' was changed into 32' by adding seven large wooden pipes for the tones C-F# (these pipes are still preserved at the organ). The Prestantquint 6' was refashioned into a Gedektquint 6'. Probably also the Rohrquint 12' had been remade into an 8'.

The repainting of the organ-case 1781-1782

As a result of changes in taste the whole exterior of the organ was repainted in this period (except for Van Everdingen's painting on the shutters). This scheme was maintained until the last restoration (1982-1986). Some of the carvings and pipe shades of the Rugpositief were renewed (in connection with the new Prestant 8') by the sculptor Jac. Cressant. Probably the shutters of the Rugpositief were also removed at this moment. A black iron fence and a marble floor were placed underneath the organ. Jac. van Stadloon painted the 'soffiet' and the pillars black, the case of the Rugpositief ochre-gold, the balustrade grey marbled and the main case was given a mahogany imitation.

Johan Peter van Horstok painted lockets (surrounded by angels) at the inner sides of the shutters (which have been maintained after the last restoration), depicting piety (left) and King David with harp (right). With this metamorphosis the organ should get a more fashionable and elegant 'Louis XVI'-appearance!

Examination 1782

In October 1782 the organ was examined by M.J. de Crane (headmaster at the Latin School, Hoorn) and the organist A. Stechwey. Apart from a few critical remarks their judgement was favourable.

Further complaints 1783-1786

In numerous letters and reports (more than 40 documents of this period are preserved in the archives!) organist Michael Körnlein expresses his dissatisfaction with the results of the restoration. For example: Strumphler had promised a Fluit Travers and no bungling work! Furthermore much running and ciphering in the instrument remained.

All these complaints caused the mayors to ask for an independent judgement. The organist at the Domkerk, Utrecht, Frederik Nieuwenhuijzen (1758-1841) was invited to inspect the organ. He reported in 1784 that he had found some small defects, but Körnlein's complaints about the Fluit Travers were a matter of taste and the effect of the double striking of the keys could be avoided by - and this is an interesting remark - playing in accordance with the nature of the instrument! It might have been that several of Körnlein's complaints had a connection with his style of organ-playing.

1785 / Abbé Vogler

In 1785 the famous abbot Vogler gave a 'Concert Spirituel' in the St. Laurenskerk. Apart from being a theologian, organ-builder and theorist of music, Vogler was celebrated for his compositions and improvisations. His Battle-improvisations and Pastorales (e.g. 'Spazierfahrt auf dem Rhein vom Donnerwetter unterbrochen') enjoyed immense popularity! He played apparently in the same fashionable style as Michael Körnlein and agreed with his complaints. Vogler offered to change the instrument in accordance with his own ideas, but there is no proof that the two letters he wrote to the mayors of Alkmaar ever have been the subject of discussion.

Finally no further changes were carried out. It is not clear whether this Mr. Körnlein was simply a nuisance or whether he was justified in his complaints. It cannot be said that he was satisfied with the instrument!

The 19th Century

Restorations by Van Gruisen, Ypma, Naber and Witte The 19th century

After some smaller repairs in 1794 by J.M. Gerstenhauer and J.C. Deijtenbach (a former assistant of Strumphler) in 1804, a restoration was carried out by Albertus van Gruisen & Son from Leeuwarden in 1823-24. Only scarce information about this restoration is available, but probably Van Gruisen changed the Quintanus 1 ½' (Rugwerk) into a Flageolet 1' and added a pedal coupler.

1843-1844 / Restoration by Dirk Sjoerds Ypma

Dirk Ypma was an apprentice of Van Gruisen and had settled in Alkmaar as an organ-builder. The examiners were not very satisfied with the work of Ypma: after an inspection of the organ Ypma had to improve a lot of things, e.g. there were complaints about the voicing of the Prestant-stops of the Hoofdwark and several stops of the Bovenwerk. On the other hand the touch and the wind-supply of the Hoofdwark and Bovenwerk was improved: Ypma had enlarged the windtrunks. Furthermore

Ypma removed(!) the pedal coupler and changed the manual couplers in such a way that they could be moved during playing.

Possession of the organ is handed over to the church 1851-1853

After an argument in the town-council about the future cost of repairs of the organ, a committee was founded. Much to their surprise it was discovered that, according to a law of 1798(!), the possession of the organ should have been handed over to the church long ago. After repayment of the insurance premium of the last 13 years by the church, the town-council agreed on the 23rd of February 1853 with the change in the right of possession.

Restoration by C.F.A. Naber 1854

Before the contract with Naber was signed in December 1853 the church authorities considered an offer from Bätz & Co (= the organ-builder C.G.F. Witte, who managed a well-known factory in Utrecht). For the first time after the rebuilding by Schnitger in 1725 an option for a renewal of the instrument was also discussed. Due to other obligations Witte could not start his work before 1855 and a short time later the task was appointed to C.F.A. Naber (1797-1861), an organ-builder from Deventer. During this restoration the general appearance and the lay-out of the console were changed very much. Instead of the Mixtuur at the Hoofdwerk a Cornet V was placed.

The organ was examined by Johannes Gijsbertus Bastiaans (town-organist St. Bavokerk, Haarlem) and J.H.A. Ezerman.

Their judgement was mixed:

They were satisfied about the revoicing of the old pipework and the new Cornet stop at the Hoofdwerk. The new keyboards and the new pedal-coupler were certainly an improvement. On the other hand, the action was partly unreliable and the touch too heavy or too deep. There were runs and leakages, the wind-supply was not sufficient and the temperament was not equal and not as required.

Even though Naber didn't agree with the critical remarks, he made improvements to the organ. After the approval of the examiners he begged for a favourable testimony. The churchwardens agreed and placed indeed an advertisement in the Haarlemmer Courant!

Restoration by Johan Frederik Witte 1897-1898

In a report, dated March 1896, the organist of the church J.M. Otto asked for repairs to the organ but he also made suggestions for alterations:

- Regulators for each wind-chest
- An increase of the pitch by half a tone
- Several changes of stops: -a Viola di Gamba and Voix Célèste (Bovenwerk)
- a Violon (Hoofdwerk) instead of the Viool di Gamba
- a Basson and a French Trumpet (Rugpositief)
- a Carillon on Rugpositief or Bovenwerk

Upon the request of the churchwardens Witte made a proposal in April 1896 in which he states that the organ had 'several beautiful aspects' and was very famous. However, it lacked a lot and was in a bad condition. The reason, according to Witte, was that the people in the period of the building of the instrument didn't make such high demands. However, as Witte knew that the church couldn't afford high expenditures he restricted himself to what was strictly necessary. Apart from the usual repairs and cleaning, Witte intended to revoice the fundamentals in order to reinforce them. He also would make the mixtures less bright and give the reeds a fuller tone. Witte also improved the wind-supply and the accessibility to the pipework. Fortunately none of the changes in the stop list as proposed by Otto were realized.

It is interesting to note that Witte is the first organ-builder who speaks about the 'restoration' of the organ

(instead of the usual 'repair' or 'renovation'): this marks the beginning of the process of awakening of the historical value of the instrument. In 1898 also a glass surround was built around the console which remained there until the last restoration.

The work of Witte was judged favourably on the 23th of February 1898 by the examiners Willem Ezerman (organist St. Bavo, Haarlem) and J. M. Otto (Alkmaar).

The 20th century

Evil plans 1898-1946 / Restoration 1947-49 / Restoration 1982-86

The organ in danger / Evil plans 1898-1946

As Johann Friedrich Witte could not find the opportunity to do regular maintenance to the instrument, several other persons and firms tried to get a contract for this work. This problem gave much trouble. In 1899 the maintenance of the organ was appointed to Ypma but also requests from other organ-builders were taken into consideration (e.g. from the organ-builders Spanjaard and Pels from Alkmaar).

In 1907 the ropes of the hinged doors were renewed and in 1921 an electric blower was installed. In the meantime the condition of the building deteriorated. The situation soon became dangerous. In 1923 a restoration was started, Herman van der Kloot Meyburg was appointed as restoration-architect, but in 1927 further work was stopped. The restoration resumed in 1940 on a much larger scale.

In this period there was also a lot of discussion about the organ, even a large restoration was considered.

A short summary of the most important facts:

- Organ-builder J. de Koff (Utrecht) declared, in his report from November 1928, that the most necessary work at the organ could be done for 5000 guilders.
 - In 1929 Hendrik Wicher Flentrop (Zaandam) asked to be invited to do the restoration and regular maintenance (his name is mentioned in the church-accounts already in 1905 when he asked for permission to give an organ-recital on a Sunday; in those days an impossibility!).
 - Upon the advice of the well-known organist Jan Zwart, who was regularly giving concerts in Alkmaar, a quotation for a restoration was asked from organ-builder A.S.J. Dekker (Goes). The latter wanted to change the organ drastically: it should be equipped with electric action and a keyboard compass to g''' and a pedal compass to f'!
- The churchwardens decided, however, to wait until the restoration of the church was finished.
- After several idle attempts H.W. Flentrop was given the contract for the maintenance of the organs of the St. Laurenskerk and Kapelkerk in 1935. In 1939 he restored the Van Covelens-organ and in 1940 the Müller-organ at the Kapelkerk. In 1940 Hendrik Wicher Flentrop retired and was succeeded by his son Dirk Andries.

Preparations for a restoration 1939-1946

In 1939 there was contact between the architect Van der Kloot Meyburg and Flentrop about the large organ. At the time the architect was only discussing a dismantling and remounting of the organ. Flentrop, on the other hand, preferred an entire restoration. In his first offer from 1939 Flentrop mentions an amount of 9600 guilders for dismantling and remounting, including a new wind-supply.

In 1941 Flentrop made a proposal for a restoration in which he also gives some historical information about the instrument. Flentrop wanted to re-establish more or less the original specification and restore the instrument. The cancelled stops should be placed on a separate cone-chest. The total cost was to be 15.000 Guilders.

The N.K.O. (the Dutch Bells and Organ Board) indicated in a letter the scales of the new pipework. Soon after the pipe-maker Stinkens (Utrecht) was commissioned to restore the pipework and make new pipes. The making of the new pipes was started immediately but the restoration of the old

pipework had to wait until the instrument had been dismantled. At the same time it was decided to install large hot air heaters in the church. Flentrop was frightened and sounded a warning note about the consequences for both organs.

The loss of the original wind-supply 1941-1943

According to the plans of the architect the 17th century building for the bellows had to be demolished: in his view it didn't belong to the original gothic building and so it had to disappear. As nobody seemed to regret the loss of the authentic wind-supply, the nine old bellows (six by Duytschot and three by Schnitger!) were sawn into pieces in November 1941, and so a very important historical part of the organ disappeared. It is tragic to know that in 1944 it was decided to maintain this building; too late for the bellows alas....

Dismounting and dark clouds....1944-1946

In January 1944 the organ was dismantled on the request of the restorers of the church. All parts were packed in chests and stored in the southern part of the transept.

It is a well-known fact that many organs of historical importance have survived the 19th and early 20th centuries due to a lack of money. This certainly applies to the organ at Alkmaar; it escaped entire renewal or demolishing in 1854, 1898 and around 1930.

However, in 1944/1945 the instrument was in danger again. Organist Dr.P. Brommer of the St. Laurens- kerk proposed in 1944 to give the mixtures and reeds electric action. Later on, after having visited the Gonzalez-organ in the cathedral of Notre Dame at Reims in 1945, Brommer developed a plan for a practically new organ with four keyboards in which the old pipework would be placed in the old case. Quite a different opinion had organist Feike Asma: he stated that nowadays pipes could not be made like the existing old pipes and so the instrument should be left unchanged. Only(!) a pneumatic Swell-organ should be added in order to play modern music.

In 1946 the N.K.O. dissociated itself from the plans of Brommer and Asma. Soon after, the R.A.C. (State Advice Council) was founded in which, however, several members of the N.K.O. had a seat.

Restoration by D.A. Flentrop 1947-1949

Immediately after Easter 1947 Flentrop started the restoration of the instrument. Shortly before it had been discovered that many parts of the organ (especially the wind-chests) had been seriously damaged by melting water.

In the meantime the opinions about what should be done had changed. Flentrop himself was not happy anymore with the plans. The N.K.O. was dismissed in the autumn of 1947 and instead Anthon van der Horst was appointed as advisor. The cooperation between Flentrop and Van der Horst became of very great importance. In November 1947 they made a new proposal which went entirely against the ideas of the N.K.O. and the R.A.C.. Their proposal aimed at a return into the original state as much as possible, without additions. A new modern wind-supply was also included.

Nevertheless Flentrop received in December 1948 a request to make an offer according to the requirements of the R.A.C. In this plan a new Borstwerk was included in which the cancelled stops would find a place together with some Schnitger stops.

In January 1949 Flentrop confirmed that he would adhere to his own plan and that the additions from the R.A.C. would have to be realized later on. The plans of the R.A.C. had also been criticised very negatively by the Hervormde Orgelcommissie (a counsel of the Reformed Church) in a report written by Lambert Ern . The conflict with the R.A.C. was so serious that even the Minister was involved.

At the delivery of the organ by Flentrop in August 1949 none of the special requirements of the R.A.C. had been realised. The pipework of the cancelled stops was stored in the bellows room. No decision had been taken about the Quint 6' and 3' on the Hoofdwerk (no pipes were placed at that moment) and the Principaal 32'/24'(Pedaal).

On the 20th of September 1949 the church and the organ were taken into use again with a concert by the new organist of the church, Simon C. Jansen (who played music by J.S. Bach) and the advisor,

Anthon van der Horst, who played a composition of his own hand: 'Partita over Psalm 8', a piece written for and inspired by the sound of the historical Dutch organs.

It is most remarkable that finally, after so many disgraceful plans, the restoration was completed in such a relatively simple way. However, some serious losses have to be regretted:

- The loss of the entire wind-supply.
- The removal of the plastering from the walls of the church, which resulted in a considerable deterioration of the acoustical circumstances in the church.
- The rather rough way (even though with the best intentions) in which the pipework was treated.

A short summary of the work executed in 1947-1949

- A new wind-supply was placed in the old house of the bellows, all the regulators were placed in the organ. The wind channels and both Tremulants were renewed, the cut-out ventiles (afsluiters) were removed.
- The position of the Naber-keyboards and the knee panel was changed, a new pedal board was made and the stop-labels by Naber were replaced by new labels inspired by the originals by Schnitger, which were discovered underneath the Naber-labels.
- The couplers and parts of the action were renewed.
- The pipework was being revoiced. The changes made by Witte were removed as much as possible (e.g. the nicks in the stopped pipes. Foot openings were made larger in general. All tuning wires of the reeds were renewed in phosphor bronze.
- A very positive fact was the decision to preserve all the pipework (except for Strumphler's Fluit Travers) that was not used again in the blowing chamber.
This fact should be of great importance at the next restoration (1982-1986), during which all the old pipes could be replaced in their original positions!

The restoring of the specification:

- On the Rugpositief a new Holpijp 8' was placed. The original Quintadena 8', which had been refashioned by Strumphler into a Holpijp 8', was made a Quintadena 8' again. The lowest octaves in the bass of the Holpijp and Quintadena were combined. The Flageolet 1' became a Quintanus again. The treble of the Sexquialter was moved up (until then: $5 \frac{1}{3}'$ - $3 \frac{1}{5}'$, changed into: $2 \frac{2}{3}'$ - $1 \frac{3}{5}'$).
- On the Hoofdwark the Bourdon 8' and Openfluit 4' were removed. Some time later the open places were used for a provisional Quint 6' and Quint 3'. The tierce of the Tertiaan was moved up one octave (from $3 \frac{1}{5}'$ to $1 \frac{3}{5}'$). A new Mixtuur was placed instead of Naber's Cornet. The Trompet 8' was moved back again and remade into a Trompet 4'.
- On the Bovenwerk the treble of the Sexquialter was changed in the same way as on the Rugpositief.
- On the Pedaal the Roerfluit 8' was lengthened to 12'. The large wooden pipes of the 32' made by Strumphler were removed. The remaining pipes of the Principaal were not connected ('extra usum' could be read on the stop label for nearly 40 years!).

Preparations for a new restoration 1974-1982

From 1960 on a gradually increasing number of defects were found in the organ, especially the condition of the wind-chests worsened. The tuning of the instrument gave many problems and was unreliable. This manifested itself at the most in the wind-chests of the Pedaal; the tuning of the four reed stops became almost impossible.

The organ-committee of the Reformed Church was asked for advice. This resulted in a report dated the 18th of July 1974. As proposed, advisors were appointed soon: Klaas Bolt and Jan Jongepier. The church-wardens added the organist of the church: Piet Kee.

A.C.M. Luteijn writes ('de Mixtuur' nr.32/33 October 1980): 'In spite of all the lacks the sound of the organ is still magisterial'. The organ recitals could therefore be continued.

At first a restoration in phases was considered, starting with the wind-chests of the Pedaal, but soon it was realized that a better solution was to tackle the restoration of the whole instrument completely.

After much deliberation and investigation the first offer for the complete restoration of the instrument by Flentrop Orgelbouw was presented on the 8th of February 1978.

It was decided to return, with a few exceptions, to the situation of 1725. The modern wind-supply would be replaced by a reconstruction of the old system.

A committee with the name 'ORGEL 78' was founded to raise money for the tremendous cost (around 3.000.000 guilders) of the restoration. This committee attracted a lot of attention and was very successful in its task to raise funds. Two gramophone recordings were released in 1978 and 1980, on which Piet Kee played on both organs of the church.

In 1978-79 the instrument and the archives were inspected thoroughly by the advisors and in 1980 a full historical report was published, combined with proposals for a restoration of the instrument. A new offer from Flentrop Orgelbouw followed on the 1st of September 1980. The order was given to Flentrop on a festive meeting on the 29th of March 1982.

The last concert, an impressive happening in the presence of Mr. Pieter van Vollenhoven, took place on the 14th of September 1982 and was performed by Piet Kee, who played music by J.S. Bach and Felix Mendelssohn, the 'Nederlands Kamerkoor' (directed by Ton Koopman), the 'Nederlands Koperensemble' and the 'Alkmaarse Oratoriumvereniging'. After a performance of Henry Purcell's 'Music for the Funeral of Queen Mary' the large hinged doors were shut; after a long time the imposing painting on the shutters by Caesar van Everdingen became visible again and the organ, sounding brilliant up to the last moment, was being closed for the largest restoration in its existence.

Restoration by Flentrop Orgelbouw 1982-1986

The dismantling of the instrument started in the autumn of 1982. The research of the pipework was started in January 1983 and was carried out by Dr. Jan van Biezen, Koos van de Linde and the organ advisor of the Government, Mr. Onno B. Wiersma.

As a result the original places and functions of all the pipes could be ascertained. Further it was realized that the sound character had been spoiled by the continuous curtailing of the pipes in the course of time (in order to increase the pitch to $a'=440$ Hz.).

It was decided to return to the original low pitch (i.e. the so-called 'Camer of Houbois thoon', $a'=415$ Hz. =half a tone below normal pitch).

As much dust had always fallen down into the instrument from the stone wall behind the organ, this wall was covered with lead plates.

The remounting of the instrument started in June 1984. The revoicing of the pipes could start on the 3rd of June 1985. This delicate work lasted, with an interruption during wintertime, more than a year. It would have been possible to take the organ into use at that time (autumn 1986), but in the meantime it was decided to restore the hinged doors too.

The completion of the whole restoration was therefore postponed to 1987.

Work executed in 1982-86

The Organ-case

After a thorough investigation (by removing the several layers of paint with a sharp knife on several places) the original colours of the organ-case of 1643 could be reconstructed; these appeared to be mainly light beige/grey. Similar colours were found on a drawing made at the time of the building of the instrument. It was also discovered that the case had only been repainted once: this must have been done in 1782. The putti on the Rugpositief appeared to have been dark brown originally and the women figures from the 'soffiet' underneath the Rugpositief (painted black(!) in 1782) had been rose-pink.

Even though no funds were available in the beginning for restoring the paintwork of the case, it was possible in 1984 to order the entire repainting of the case according to the original colour scheme. The organ-case itself was also being restored carefully. Oak panels replaced the existing (unoriginal)

gauze panels in the sides of the case. The oak rear wall of the main case was completed where possible. New hinged doors were made for the Rugpositief.

The permanent glass housing around the console from 1898 was taken away and instead an easy dismountable casing was made.

Entrance to the organ

During the restoration of the church and the organ between 1940 and 1949 changes had been made at the rear of the organ, with the result that the instrument could only be entered via a door in the lower part of the main case. The original situation was reconstructed: via an outside staircase it is now possible to get into a garret for the organist and from there to the level of the wind-chests of the Hoofdwerk and Pedaal.

By reconstructing the staircases and walks in the main case, the instrument was made much better accessible than before.

Wind-supply

The wind-supply, including the bellows, was entirely reconstructed (among other things with the help of drawings made by J.F. Witte). For financial reasons only six of the original nine diagonal bellows were replaced, but if necessary, the three extra bellows can be installed.

Console

Little had been left from the original layout of the console from 1725, but the arrangement could be reconstructed by comparing work by F.C. Schnitger elsewhere.

Two pedal couplers, not present in 1725, were added.

Wind-chests

In view of the large amount spent for the restoration, and in order to prevent new problems with the wind-chests, it was decided to cover the chests on the upper side with thin wooden layers with water resistant plywood. For preventing air leakages the slides got rings on both sides.

In order to solve the problems of the wind-supply to the pipes of the Principaal 24' spare grooves in the wind-chests of the Pedaal were utilized. Additional pallets were made and so the pipes from C-f from both Principaal 24' and 16' were connected to these spare grooves.

Action

In general the action was repaired or reconstructed to the original situation. In 1898 Witte had made springs to compensate for the large weight of the rods to the sliders and to prevent unwished opening or closing of the stops. Originally this was prevented by means of notches behind the stop-knobs. After several experiments the original arrangement was re-established again for the Hoofdwerk, Bovenwerk and Pedaal.

Restoring the sound

In the course of time the specification of 1725 had been altered only on minor points.

Two later changes, made by Johannes Strumphler in 1781-82, were maintained:

- The front pipes from the Rugpositief (=Praestant 8'; the inner pipes from this stop are still by Van Hagerbeer and Schnitger).
- The alteration of the Techterregaal 8' on the Rugpositief into a Trompet 8'. The change of place of the Trompet and Fagot was also maintained.

The following stops were repaired or reconstructed:

Rugpositief

Quintadena 8' Corrections to the cut-up of the pipes

Quintfluit 3' Reconstructed (partly with the original pipes)

Quintanus 1 ½' Moved back to the original place

Sexquialter II Made 5 1/3'-3 1/5' again in the treble (with original pipes)

Cimbel III Reconstructed into the original composition

Hoofdwerk

Quintpraestant 6' Reconstructed from the original pipes

Pedaal

Principaal 22'	Situation of 1725 reconstructed (sounds as a Quint 21 1/3')
Rohrquint 12'	C-E new, the other pipes refashioned and placed back on original places
Octaaf 8'	Change of place with Rohrquint 12'
Quinta 6'	Refashioned, pipes placed back on original places
Mixtuur VIII	Was made VI, original composition reconstructed
Quint 3'	New, made in the style of van Hagerbeer
Tertiaan II	Made 5 1/3'-3 1/5' again in the treble (with original pipes)
Mixtuur VI	New, in style and composition of 1725
Viool di Gamba 8'	Placed back to original place
Trompet 4'	Place changed with Viool di gamba, 12 highest pipes renewed

Bovenwerk

Sexquialter II	Made 5 1/3'-3 1/5' again (with original pipes)
Cimbel II	Reconstructed into original composition

General repairs to the pipework

The pitch of the instrument was slightly increased at each restoration. Moreover, modern tuning arrangements had been made. The original low pitch (a'=415 Hz.) was reconstructed by restoring all the pipes to their original lengths.

The wind pressure was established at 76mm water pressure: after several experiments and discussions this appeared to give the best results. During the revoicing the changes which had been made during the restorations of 1897-98 and 1947-49 to the foot openings, the languids and the positions of the upper lips were corrected.

Inauguration 1987

In the summer of 1987 the restored instrument could be presented to the public after an intensive restoration-period of five years. Since then this magisterial instrument has re-established its world-wide reputation as an outstanding baroque organ. All the aspects of Frans Caspar Schnitger's masterly concept can be heard and admired again: from the 'Gravität' and 'Brilliantz' of the large ensembles with Trumpets, Mixtures, Sexquialters and Cimbels to the subtlety of the Flute stops, from the brightness of the numerous 'organo-pleno'-combinations to the intimacy of the chamber-music imitations with Hautbois, Fagot, Viool di Gamba and Vox Humana; the palette of sound colours and combination-possibilities appeared to be almost infinite!

Restoration of the church 1991-1996

From 1991 to 1996 the St. Laurenskerk was closed for restoration. During this period of restoration a number of decisions were taken which were of great importance to the organs in the building:

- A floor-heating system was constructed under the tombstone floor (therefore all the graves were opened, investigated and emptied) which protects the instruments against sudden changes of temperature and humidity (as is the case with e.g. a hot-air heating system!)
- The long desired wish to re-plaster (a part of) the church could be fulfilled: the nave of the church was plastered again. During the restoration of the church in the 1940s this plaster was removed (as it was done in the Nieuwe Kerk, Delft and Pieterskerk, Leiden). The return of the plaster on the walls has a very positive effect on the sound of the organ: all frequencies are being resonated much better and the organ-sound is more direct and clear.

- The windows at both sides of the main organ were closed again (they were filled with glass during the restoration of the 1940s) and so the paintings at the hinged doors by Caesar van Everdingen could be protected from sunlight and other weather influences which had a very negative effect on the colours and the quality of these invaluable paintings.

The present specification

Specification since 1986 with data of the pipework

<i>Bovenwerk (III)</i>		<i>Rugpositief (I)</i>	
Praestant 8'	1646	Praestant 8' (Tr.II)	1782 (front)/1646/1725
Baarpyp 8'	1685	Quintadena 8'	1646 (1782/1949/1986)
Rohrfluit 8'	1725	Octaav 4'	1725
Quintadena 8'	(1646)1725	Nasaat 3'	1725
Octaav 4'	(1646)1725	Fluit 4'	(1545/1646)1725
Fluit Dous 4'	(1646)1725	Superoctaav 2'	1725
Spitsfluit 3'	1725	Quintfluit 3'	1646/1986
Superoctaav 2'	1646	Waldfluit 2'	1646/1725/1986
Speelfluit 2'	1725	Quintanus 1 ½'	1725/1986
Sexquialtera II	1725	Mixtuur V-VI	1725
Scherp IV	1725	Sexquialtera II	1725
Cimbel III	1725	Cimbel III	1725
Trompet 8'	1725	Trompet 8'	1725/1782
Hautbois 8'	1725	Fagot 8'	1725
Vox Humana 8'	1725	Vox Humana 8'	1725
Tremulant		Tremulant	

<i>Groot Manuaal (II)</i>		<i>Pedaal</i>	
Praestant 16'	(1545)1646	Principaal 22'	1646
Praestant 8'	1646	Praestant 16'	1646
Praestantquint 6'	1646(1782/1986)	Rohrquint 12'	(1545/1644)1725(1782/1949/1986)
Octaav 4'	1646	Octaav 8'	1646
Quinta 3'	1986	Quinta 6'	(1646)1725(1986)
Octaav 2'	1646	Octaav 4'	1646
Flachfluit 2'	1646/1725	Nachthoorn 2'	1725
Ruyschpyp II	1646/1725	Ruyschpyp III	1725
Tertiaan II	1725	Mixtuur VIII	1725(1986)
Mixtuur VI	1986	Basuin 16'	1725
Trompet 16'	1725	Trompet 8'	1725
Viool di Gamba 8'	1725	Trompet 4'	1725
Trompet 4'	1725(1986)	Cornet 2'	1725

Compass Manuals: C-d^{'''}

Compass Pedal: C-d'

Manual couplers: Rp+GM, Rp+Bw, GM+Bw

Pedal couplers: P+Rp, P+GM (added to the specification of 1725)

Four cut-out valves

Pitch: a'=415 Hz

Equal temperament

Wind pressure: 82 mm

Data and makers of the pipework

1545: Claes Willemsz. (reused material from the former small choir-organ)

1646: Galtus, Germer and Jacobus van Hagerbeer

1685: Roelof Barentsz. and Johannes Duytschot

1725: Frans Caspar Schnitger

1782: Johannes Strumphler

1949: D.A. Flentrop

1986: Flentrop Orgelbouw

Some remarks about the mutation stops

Rugpositief

Mixtuur V-VI C: $2/3'$ - $1/2'$ - $1/3'$ - $1/4'$ - $1/6'$ from c'' with $5\ 1/3'$

Sexquialter II C: $1\ 1/3'$ - $4/5'$ c: $2\ 2/3'$ - $1\ 3/5'$ c' : $5\ 1/3'$ - $3\ 1/5'$

Cimbel III C: $3/16'$ - $3/20'$ - $1/8'$ F: $1/4'$ - $1/5'$ - $1/6'$ repetitions on every c and f

Hoofdwerk

Ruyschpijp II C: $2'-1\ 1/3'$ (no repetitions)

Tertiaan II C: $4/5'$ - $2/3'$ c: $1\ 3/5'$ - $2\ 2/3'$ c' : $3\ 1/5'$ - $2\ 2/3'$

Mixtuur VI C: $1'-2/3'$ - $1/2'$ - $1/3'$ - $1/4'$ - $1/4'$ from g' with $5\ 1/3'$

Bovenwerk

Sexquialtra II same composition as on Rugpositief

Scherp IV C: $1/2'$ - $1/3'$ - $1/4'$ - $1/6'$ (based on $8'$ throughout)

Cimbel III same composition as on Rugpositief

Pedaal

Ruyschpijp III C: $2\ 2/3'$ - $2'-1\ 1/3'$ (no repetitions)

Mixtuur VIII C: $1\ 1/3'$ - $1'-2/3'$ - $1/2'$ - $1/3'$ - $1/4'$ - $1/6'$ - $1/6'$

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Appendix: organists at the Van Hagerbeer/Schnitger-organ, 1639-2000

Jacob Jansz. Crabbe, 1639-1670	Johannes Wilhelmus Kranch, 1816-1836
Henrik Bakkerus, 1670-1684	Jan Hendrik Anthonie Ezerman, 1836-1881
Gerhard van der With, 1684-1690	Jan Meindert Otto, 1881-1929
Jurriaan Jurriaansz. Buff, 1690-1691	W. H. Slinger, 1929-1935
Johannes Kempfer, 1691-1702	P. Brommer, 1936-1940
Egbert Enno Veldcamps, 1702-1722	Hendrik van Westrienen, 1940-1946
Gerhardus Havingha, 1722-1753	P. Kist, 1946-1948
Adrianus Winkel, 1753-1765	Simon C. Jansen, 1948-1952
Frederik Willem Michelet, 1765-1773	Piet Kee, 1952-1987
Michael Körnlein, 1773-1806	Hans van Nieuwkoop, 1990-2000
Cornelis Berghuijs, 1807-1816	Pieter van Dijk, 2000-

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