

Århus Domkirke. Restoration of the Grand Organ

In March, 2016, 34 members and friends of the Nottingham and District Society of Organists descended on Denmark, to savour – over a period of eight days – the many delights readily and welcomingly available to the lover of all things good, not least its organscape. Add to that its architecture, food, hospitality and its unique *hygge*, and you have the recipe for a perfect holiday – busman's or otherwise. Even the weather, end-to-end, was perfect and that, it must be admitted, is by no means a given; actually, what we have here we then send to them, across what they charmingly call the 'Vest See', the only difference being that, by the time it gets there, it is usually a degree or two cooler.

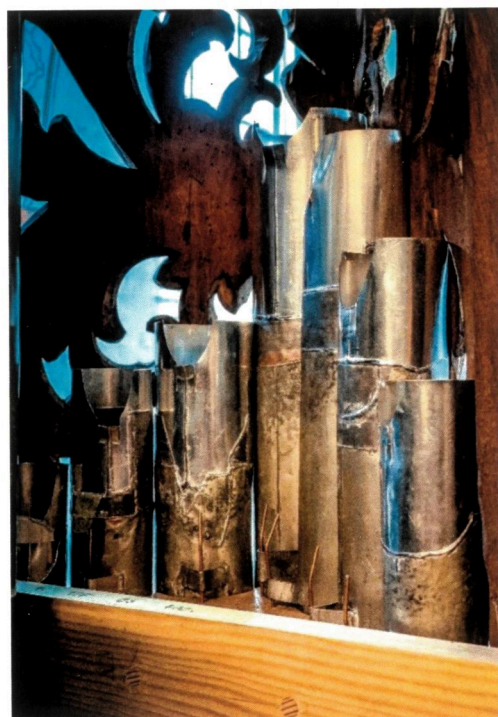
Our 'home' town was Esbjerg, and the first day of the tour was to be a longish journey up to Aalborg, to see, hear, play and thoroughly inspect inside and out, Marcussen's magnificent new concert organ in the Musikkens hus. Of course, any building of that nature is inevitably busy, and we were fortunate to secure a 3-hour slot in the mid-afternoon to ourselves, in between orchestral rehearsals. The appointed hour meant that we had plenty of time beforehand to 'linger'. However, one does not travel all the way to Denmark just to linger! We had already factored in a slight detour *en route* to Mariager (with its new Aubertin organ) if there was to be time. Better than that in the event, we were able to stop earlier on for a goodly lunchbreak at Århus, Denmark's second city and a really delightful place, too. Having wended our way through a pretty tortuous series of temporary roadworks and diversions (I'll never understand how our bus-driver managed some of the twists and turns!), we parked fortuitously right by the cathedral. A bonus indeed! Inevitably, nearly everyone made a beeline into this unexpected prize. What a wonderful building – huge yet beautiful, and adorned throughout with the most wonderful wall paintings dating right back to the fifteenth century. In fact, the cathedral is full of superlatives ... The frescoes cover a total of 220 sq. metres; the paintings of St Christopher and St Clement are the tallest in the country; the one and only stained glass window dating from 1926 is the tallest in the country; and the church's model ship (you will find one or more in almost every Danish church) is the largest in the country. The altarpiece, completed by the famous Lübeck sculptor and painter Bernt Notke and dedicated on Easter Day, 1479, is regarded as one of Denmark's great treasures. It is unique in that it incorporates movable sections which can be shunted around to depict the various stages of the liturgical year. The baptismal font, the golden gates, the bells and the tombs and memorials are no less worthy of this cultural paradise. And the organ? Well, of course, it's the largest in Denmark. Mind you, for a little while it had to be re-categorized as the largest *church* organ in Denmark when the Van den Heuvel arrived at the new Danish State Radio complex; but recent additions have once again tipped the balance. Amusing parallels here, methinks, with the R.A.H. / Liverpool story!

Although we were able to look up in envy at the magnificent Baroque case of the west-end organ, we knew we should have to rest content on that occasion in our capacity as just casual visitors. Little did we then know that there were already well-advanced rumblings afoot to have this beautiful giant fully restored / updated / call it what you will. So it was that, as far back as 2012, a comprehensive internal inspection had revealed an unexpectedly poor state of affairs. This was to be followed by a strongly motivated agenda to determine the way forward, to which end a high-profile committee of experts was formed under the inspired impetus of the recently appointed organist, Kristian Krogsøe and with extensive financial backing from five Danish charitable foundations which generously covered most of the cost. The specific 'job sheet' would be headed up by the Swedish organ consultant, Anders Johnsson, who is university lecturer in the organ and organography at the Conservatory of Music, Malmö.

The first question one always asks of any restoration is: "What does it mean? Where do you start and how far do you go?" ... questions which have been debated time after time in this very journal and elsewhere. Even more controversially: What does 'updating' mean? Clearly, the restoration needs to have a specific focus, which doesn't necessarily mean going back to the beginning. The answer adopted here is, I think, true to our time, that is to say that whilst I am convinced we still owe a great deal to the efforts of the so-called *Orgelbewegung*, there has developed over the last few decades a far deeper and more insightful respect for, and understanding of, the former Romantic schools of organ building, be they English, French, German or whatever. But to obtain a proper perspective of the Århus question, we need to look a little more closely at its history. Basically, the organ was built in 1730 by one of Arp Schnitger's

most successful pupils, Lambert Daniel Kastens (c.1690-1744). It comprised three manuals and pedals and 43 speaking stops, and included the wonderful case we see today with its elaborate gilded decorations. At this time, however, some of the case pipes, although voiced for speech, were left disconnected. Various markings on the internal framework indicate that the original layout was such that the conduits from the *Positiv* soundboards to the relevant pipes would have been so long as to have been unworkable, so equivalent pipes were placed directly on the soundboards to do the job. In 1747, Kastens' pupil Benjamin Wulff, was back with a couple of his own men, doing some work at the top of the south (CC) side of the organ during a thunderstorm, when they were struck by a bolt of lightning, tragically killing two of them. It seems that the lightning entered a side window and 'spattered' into the organ, disturbing many of the smaller pipes as well as the clock, and burning some of the large case pipes in the areas around their iron fixing nails. No-one would subsequently go up there to complete the work (until now), and indeed to this day some scorch marks can still be seen on the larger pipes.

In 1799, the controversial Abbé Vogler gave a concert on the organ, arising from which he proposed a radical rebuild on what he called his 'simplification system', involving amongst other things scrapping half of the Kastens pipework. Fortunately, nothing came of this, so the organ soldiered on for another 50 years, by which time it was considered hopelessly out-of-date with short bass octaves, limited compass and at a high, so-called kortøne pitch. Thus in 1848, the Danish organ builder Peter Ulrik Frederik Demant (1802-1868) visited the instrument and put forward a proposal for a new organ to be built behind the existing façade, incorporating nine of the Kastens registers. Nothing much happened for a long while, however, apart from odd repairs and miscellaneous tonal alterations. Eventually, it was Demant's son, Johan Andreas (1830-1878) who was contracted to build this virtually new organ, again of three manuals and 43 speaking stops, including the nine Kastens registers as proposed by his father. The console of this organ remains – in beautiful condition – within the main case of the organ. The Demant pipework is of the highest quality, and has featured significantly in the present restoration.



Some of the 'blitzed' case pipes

From around 1915, at the instigation of the new organist Jørgen Nielsen, all sorts of proposals were put forward, including such radical steps as the replacement of the slider soundboards with cone-chests and the addition of a fourth manual, all on electric action, and general tonal augmentation in what might best be described as a late Romantic style. Over the next few years, a modest number of these proposals was carried out, though precise documentation is curiously lacking. But it was in November 1922 that the seeds were first sown for a thoroughgoing rebuild and great enlargement of the Demant organ, in the form of a treatise by none other than Dr. Albert Schweitzer: his *Gutachten für die Restauration der grossen Orgel des St. Clemensdomes zu Aarhus*. This contained 15 broad points, well detailed over 5 closely-written pages, in which amongst other things he declared the Århus organ to be one of the best in the world, reminiscent in the breadth of its tone to that of Notre-Dame, Paris.. A major rebuild should incorporate, amongst all else, slider soundboards, and tracker action assisted as necessary by Barker lever machines; electric action should not be used; old pipework and slider chests were not to be discarded, but incorporated into the new organ, and the wind pressures were not to be raised. Only the Swell organ would receive significant attention, much influenced by the French Romantic school as exemplified by the work of Cavaillé-Coll, who had already built a two-manual instrument in the Jesus Church at Valby. In short, the new instrument should not be a 'factory organ.' There would however be a new console standing forward and detached from the existing case, with a full complement of playing aids on the 'English system.' Schweitzer concluded his proposals by re-iterating that what was already there was a 'jewel', and that the best starting point was the careful conservation of its inherent beauty. This document was pretty remarkable for its time, though one must remind oneself that its author had been expounding the virtues of the earlier famous builders, in particular Silbermann,

as far back as 1897, in a personal reaction to some of the more recent German ‘factory organs’ deploying high pressures, pneumatic actions and excessive layers of console accessories. This led to some valuable collaboration with Oscar Walcker, as exemplified by that builder’s early ‘Alsatian reform’ organs in, for example, both St Reinoldi Dortmund (1909) and St Michaelis Hamburg (1912), to name but two.

There followed extended correspondence and consultation with a number of authorities. Proposals for a 70-stop Cavaillé-Coll were at a pretty advanced stage when the Domkantor of Roskilde Cathedral, Emilius Bangert wrote, on 1st. December, 1923, that he felt Frobenius should also be considered for the project as they had been associated with the place for so many years. The correspondence that followed this is well preserved, and has been a mine of information for the current restoration. Particular focus at the time devolved on the Kuhn organ at Winterthur in Switzerland, such that by the end of 1924, that builder was also now being considered for the eventual contract. Other builders and suppliers, too, were investigated, but eventually it was decided that Frobenius would build the organ, with input of many of the new ranks, mainly reeds, initially from the French supplier Frederic Härfper who would come to Århus to finish them (but in the event from Leau), as well as some from Laukhuff. After seemingly interminable discussions (so what’s new?) the contract was signed in the autumn of 1926. The Laukhuff involvement in all this may seem somewhat foreign to the concept of a Frobenius organ. It was however a perfectly pragmatic and natural course, considering not only the immensity of this contract, but also in view of the fact that the firm was building two other very large organs all at the same time. Furthermore, Theodor Frobenius had actually worked for Laukhuff for a while in his earliest, formative, days, and he knew them well. In the event, the Laukhuff pipework was of the highest quality, zinc – for example – being entirely eschewed apart from the bass octave of the 16 ft. Pedal Salicional. All of this, along with the sliderchests which they also made for Frobenius in the style of Cavaillé-Coll, were of first-class quality and have been entirely preserved in the current work. Admittedly, the ultimate agenda politely laid aside several of Schweitzer’s proposals, but in contemporary terms the 1928 organ left nothing to be desired. This enormous instrument of 89 speaking stops was a ‘model’ of its time, big, successful, superbly voiced by Theodor Frobenius himself (who had even been on a reed-voicing course to Paris just to make sure he got it right). It was as nearly a Romantic organ as the Danes ever managed. There were 4 x 8 ft. flues on the Hovedværk, two sets of undulating strings, full reed choruses (nearly all French) respectively on Hovedværk, ‘Récit’ and Pedal; and an enormous Pedal department complete with a wooden 32 ft. Bombarde from Laukhuff. Much of the voicing was of its time of course, with many open ranks slotted and with wind pressures starting at 80 mm, and so on. But that was 1928. The *Orgelbewegung* was already gathering pace, and not only in Germany. It was a mere two to three years later that Frobenius’s principal colleagues on Sønderjylland, Marcussen og Søn, under the inspired leadership of the famed Sybrand Zachariassen, were to build their first (one might say prototype) ‘classical’ instruments – in Esbjerg Vor Frelses kirke (still with pneumatic cone-chests) in 1930, and København Sct. Nicolaj (with ground-breaking tracker action and slider soundboards, 1931.) And so it was that, as organ building began to ‘reform’ itself year by year, with concomitant changes in taste, so did dissatisfaction with the Århus instrument – not with the Frobenius firm, that is, just with the 1928 concept. Even before the Second World War, both Frobenius and Marcussen were keeping well in line with the North German concept of the ideal Baroque organ. Thus it came to pass that, as early as 1940, the Århus organ was rebuilt and ‘modernized’. Amongst other things, there was a new ‘Kronpositiv’ division of six ‘Baroque’ stops (oddly in a little Swell box of its own); and the proposal back in 1928 to replace two fundamental Pedal stops with a Mixture was carried through. Following the Second World War, Danish organ building really entered a golden era, in the opinion of many even excelling over albeit excellent German and Dutch firms. It is indeed remarkable to think that the restoration of such notable historic Dutch instruments as Goes, Amsterdam Nieuwe kerk and Haarlem St Bavokerk should all have been entrusted to Marcussen, not to mention the same firm’s new instruments for Radio Hilversum and St Nicholas Utrecht (1956 – at the specific instigation of the church’s organist with the enthusiastic backing of Dutch organ consultant Cor Edskes); along with the three organs (1959 to 1973) in St Laurenskerk, Rotterdam. In the light of all this, the Århus instrument was considered to be getting seriously left behind and, by 1959, notwithstanding various intermediate tinkering, it was considered once more to be hopelessly out-of-date! This is the year when another comprehensive rebuild was undertaken, yet again by Frobenius, in accordance with the

requirements of the recently appointed organist, Georg Fjerald. In a wide-ranging agenda of tonal 'modernisation', the pipework was comprehensively re-worked, much of it shortened with all the slots filled in and with many ranks shunted around to different parts of the instrument. Most of the string stops were cut down to be re-made into higher pitched ranks. But, still, those *Positiv* façade pipes didn't speak.

Well, that was 1959. You've guessed! No sooner had all this work been completed, than the current perception of 'balance' began to kick in – a growing appreciation of the Romantic, yet within a respectful framework of all that was best in the *Orgelbewegung*. Thus it was that the last major intervention took place in yet another comprehensive operation in 1983. Once more, Frobenius were employed to undertake a programme of rationalization with an ostensibly retrospective eye to 1928. Notwithstanding, the various transposed ranks remained where they were; no attempt seems to have been made to recapture Theodor Frobenius's voicing of 1928; and altogether the 1959 *Orgelbewegung* aesthetic remained paramount.

For example, the newly introduced reed stops had employed mahogany blocks, and new bass pipes were made of copper. Many ranks were rescaled in the treble with an increase in power, involving interspersing odd new pipes here and there to cover the gaps thereby created. In the *Hovedværk*, the 1730 pipes of both the 4 ft. Oktav and 2 ft. Oktav were entirely replaced by new; the *Hovedværk* Mixture was also new; the Fladfløjte was replaced by a Ters, and the Rauschquint II was replaced by a Clarion 4 ft. In Manual II (effectively the *Positiv*), the 5 1/3 Quint was remade into a 16 ft., with new bass pipes of copper, and the Gemshorn 4 ft. was replaced by an 8 ft. Trompet. Mechanically, the decision was taken to replace the tubular-pneumatic element of the key action with electrics, the tracker and Barker lever parts remaining intact. Yet further tonal alterations were made in another intervention in the year 2000 and, finally, a completely new combination system was installed in 2003. So, if nothing else, at least the instrument

could be claimed by now to have 'evolved'! But, at that size and complexity, it had lost its way; a true, single, ethos no longer existed. Aesthetically, it didn't hang together any more; nor, in the opinion of one of Denmark's leading authorities, Svend Prip, did it even fill the building comfortably. It was time for a radical review, a daunting – some would say impossible – task, of bringing everything back together again into a cohesive, thoroughly convincing and musical, whole. After four major rebuilds and innumerable intermediate interventions along the way, how on earth could this be achieved?



They tell their own tale

It is probably fair to say that it was the appointment of the youthful Kristian Krogsøe as organist in 2007, that brought the necessary fresh impetus to bear on the situation. Here was a grand old organ in beautiful clothes, an organ which could tell many stories; which was made up of multiple layers of craftsmanship, musical perceptions and alterations, generally done well and with complete sincerity – but which, as a consequence, had lost its identity. The major internal survey and re-appraisal carried out in 2012 gave rise to a unanimous verdict that the time was ripe for a complete, thorough-going, restoration of the organ's major identity, that of 1928. This organ was a sleeping masterpiece. Much respect had usually (not always) been shown towards the historic pipework during the course of its various incarnations; but, apart from anything else, after 90 years of use it was mechanically worn out and hence in need of complete technical rejuvenation. At the same time, many of the intervening modifications – so it turned out – displayed

different aesthetics, involving the use of aluminium, plastic, flexible conduits and plywood. So, in co-operation with the team of expert advisors headed up by Johnsson, a comprehensive agenda was created. Obviously, cleaning and technical restoration in every detail would be total; recognition of the 1928 organ as a masterpiece in its own right would be the primary motivating focus; the majority of the 6,000 + pipes would have to be re-lengthened and their speech reset accordingly; wherever necessary and ideally, second-hand pipes would be purchased from several different sources to recreate authentic 1928 voices; remaining replacement pipework would be new. In addition, all those pipes rejected in the 1983 rebuild had been preserved in the cathedral, and these would also be sourced as appropriate. Finally, the 1928 console would be refurbished and brought completely up-to-date in line with contemporary registrational requirements. Along with this, special respect would be paid to the surviving pipework of Kastens (1730) and Demant (1876) and, for the first time ever, nearly all the façade pipes would be brought onto speech and become an integral part of the ensemble.



As is proper, the cathedral's Organist and advisors knew exactly what they wanted before a short-list of six firms of international standing was approached for further comments and for quotations. In the event, the comprehensively researched proposals from Marcussen won the day, not so much on price (which I understand was midway) but for their in-depth understanding of exactly what was wanted



Daniel Christensen and Stefan Paulsen

by the cathedral's organist and advisors. The way ahead was to be a massive essay in fine organization and perfect collaboration between all the parties involved. It is impossible to do justice to the work which has gone into this project in the space of one article. But in briefest terms, overall management both as to costing and personal logistics, were in the hands of Marcussen's MD, Claudia Zachariassen, and the works manager Hans-Ulrick Hansen; Bernd Lorenzen was responsible for the technical side of the project, and Jens Christensen with his three fellow voicers Daniel Christensen, Stefan Paulsen and Daniel Zink Loft undertook the enormous task of dealing with literally every one of over 6,000 pipes. In the earlier stages back at the organ works in Åbenrå, much of the pre-voicing work on the remade pipes was done by Olav Ousorren, the immensely gifted organ builder who had been responsible back in the 1970s for the scaling and voicing of the two Nottingham Marcussens. Tragically, Jens – who was utterly devoted to the project – died halfway through the work, creating a potential crisis point; for three people were not sufficient for the task in hand. After some discussion, Flentrop were invited to make up the shortfall in the form of their own chief voicer, Dirk Koomans. This turned out to be a singularly warm and happy partnership, so much so that they feel that it is reflected in the overall result. Apart from the enormous job on hand with the existing pipework, it was found that seven of the 1928 stops were completely missing, whilst some others were altered beyond redemption. A comprehensive search for suitable *genbrugt* (once used) pipes yielded some fantastic results, not only from the stash of erstwhile discarded pipes found on the gallery in the east transept, but also from certain redundant organs over a wide geographical area – Laukhuff pipes from the discarded Johansson organ (1931) in Fröslunda; pipes from the stored organ in Haderslev Seminarium (including some by Furtwängler & Hammer); an 1876 Marcussen Fugara 8 ft. stored at Marcussen's; more pipes from a Jørgensen organ of 1927 in Sofienberg (Oslo); and a Mixture from Ullern. Of course, it could

arguably have been easier to make new pipes, but in this ever-so-faithful restoration, that was only to be a last resort. Everything was handled meticulously, and particular attention was paid to the reeds which had all been revoiced more 'lightly' over time. Useful organs of reference were the two Frobeniuses in Jerusalemskirken in København and in Tønsberg cathedral. Such was the interest in getting a Clarinet stop just right, that Jens was sent on a 'Clarinet tour' to København and Skåne (the southern part of Sweden) to determine exactly what would be the best model for Århus! One or two outright additions seem to have worked well, most notably a Roosevelt Doppelfløjte from around 1880 which is very beautiful.

So far, so good. However, Kristian Krogsøe's agenda didn't quite stop there. On top of everything else, he wanted two powerful additions, a Tuba rank in English style and a solo Trompette rank from France. What, one may ask, has that got to do with the beautiful old lady of Århus? Not a lot, one might think.. The question was: Could they be added rather than incorporated, such that they did nevertheless fit in to the musical whole in certain circumstances? Logistically, it was feasible. They have both been placed at the top of the organ, just behind the clock mechanism, on their own electric chests; the idea being that the next generation can always take them out again if they must! Apparently, the argument goes that such an expedient was seriously proposed by Mutin, and much chewed-over, right back in 1923; and that anyway the whole history of the organ had been one of evolution. Maybe. In the event, Marcussen's pipemakers were far too busy making and re-making all the other pipes in the organ, so the French rank was to come from Nicolas Toussaint of Nantes and the Tuba from Terry Shires of Leeds. I have not heard the French rank. The Tuba, however, arrived pre-voiced on 10", at which level it turned out to be too strong for the organ. So the whole lot was revoiced on 7" and then everyone was happy. I must say that I am surprised how well it fits. It's no light pressure Danish Trompet, but it does have its place and, I am told, it certainly did in the opening recital on 4th. October, when Thomas Trotter concluded his inaugural recital with the *Ride of the Valkyries*!

As to the outcome, I was fortunate enough to be able to play it in its near-completed state in August, and was most impressed; and a good clamber around its innards brought home the immensity of the work involved. Unfortunately, I was prevented from being able to return for Thomas Trotter's opening recital in October, thanks to severe transport restrictions, but I can report that it has been hailed as 'outstanding' in every respect. Huge credit goes to the firm and its various personalia in pulling together the well-nigh-impossible – to the fundamental job of administering the whole thing, down to the utter dedication of each individual involved. The all-in cost to the cathedral was in the region of D.Kr.18 million (just over £2m), which included the comprehensive restoration and regilding of the case, fees and V.A.T.

The best way to enhance one's appreciation of this amazing project will probably be to source a splendid series of 23 little videos created by Per Rasmussen on behalf of the cathedral authorities. <https://www.youtube.com/watch?v=RtyO99U65C4> is the first of these, and the rest should follow on. Alternatively, tap in *Aarhus domkirke orgel renovering*, then: *Følg orgelrestaureringen*. Unfortunately, it is nearly all in Danish and there are no subtitles; but still well worth watching. There is also a recording by Kristian Krogsøe of Duruflé's *Le monde dans l'attente du Sauveur*: <https://youtu.be/GCmpF2OQzDg>

The whole enterprise has been exhaustive and meticulous. One can only hope that this really is the definitive answer; that it is an organ for all seasons, not just for the rest of this decade. Kristian Krogsøe should be satisfied. Oh, not quite! It seems he now has tabs on a redundant Ernest M. Skinner organ, op. 867 from 1931; the plan being to install it in the north transept, and to make it also playable from the main console. There is strong documentary evidence that this was to be a part of the 1928 plan, the *raison* lying in the need for accompanimental provision in that particular part of this very long building. (There is already an excellent Christensen choir organ which can pack quite a punch.) The least that can be said is that the Århus organ(s) will assuredly retain its status as the largest in Denmark! More to the point, however, the unique combination of Kristian Krogsøe (organist). Anders Johnsson (consultant) and the artistic team at Marcussen & Søn have succeeded in bestowing on the music-loving world an instrument of the rarest beauty and majesty.

Manual I Hovedværk 88mm. w.g.

Principal	16	CC/CC# 1876, pine, DD-BB façade, 1730. Rem. 1876. Lengthened and re-slotted
Bordun	16	CC-f''' 1876. CC-B pine, lengthened. f#''' - c''' 1928
Principal	8	CC-d#''' stored 1876 pipes, renovated and re-instated. LD RSLD e''' - c''' new
Praestant	8	1730. DD-c#'' façade, sounding once more in the side flats. Pneumatic assistance. e''' - c''' new
Viola di Gamba	8	CC-BB 1928, spotted metal. Remainder 1855. C-a'' new beards. LD RSLD
Principalfløjte	8	Reconstruction. CC-b' pipes from Fröslunda (Laukhuff 1931) CC-BB open pine; C-b' from 4' flute, metal with 1/5 th . mouth. c'' - g''' Haderslev (Furtwängler) scaled up. g#''' - c''' new
Bordun	8	1928. CC-BB pine
Quint	5 1/3	1730. Canistered. f'' - c''' reconstructed
Oktav	4	CC-B 1876. LD RSLD. c' - f''' also 1876. f#''' - c''' new
Spidsfløjte	4	1876. Severely conical. g''' - c''' 1928. LD RSLD
Quint	2 2/3	CC-BB and a'' - c''' 1876. Rem. 1730 LD RSLD
Superoktav	2	CC-F# 1928 with some old pipes. Rem. new
Cornet 5f		1928 re-introduced 2020. LD RSLD. 4' starts at C; 8' (chimney flute) at F
Mixtur 4f.	2	Ullern Mixture (Jørgensen), lengthened to achieve the correct scale
Cymbel 4f	1	1928/2020. Approx. half the original pipes were found, remainder reconstructed
Bombarde	16	1928 Leau. LD RSLD
Trompet	8	1928 Leau. LD RSLD
Tuba Magna	16	New, in Willis-style. 175 mm. w.g.
Tuba mirabilis	8	From 16'
Grde. Trompette	8	New chamade after the Cavaillé-Coll Sacre-Coeur style. Unit chest at top of organ. Hooded. 150 mm. w.g.
Cor harmonique	4	From above

Manual II Positiv 80 mm. w.g.

Rørfløjte	16	1928. CC-BB Fröslunda (Laukhuff 1931). C-B 1876, wood. Remainder 1928 rescaled accordingly
Principal	8	CC-CC# 1928 zinc. DD-GG# 1730 in façade below centre tower.. AA-f''' 1876. f#''' - c''' 1928. LD RSLD
Fugara	8	1869. CC-BB 1928 spotted metal. e''' - c''' new. LD RSLD
Salicional	8	EE-e'' back from Pedal & LD. g' - f#''' Haderslev Gamba with roller-beards. Rem. new
Spidsfløjte	8	1876. Oak. CC-f' LD. Rem LD RSLD
Rørfløjte	8	1876 Bass pine. f#''' - c''' 1928 conical

Oktav	4	1876. f#''' - c''' 1928. LD RSLD
Gedaktfløjte	4	1928
Spidsquint	2 2/3	1730 Conical a'' - c''' 1928
Fløjte	2	1730. d''' - c''' new
Terts	1 3/5	1928 conical LD RSLD
Larigot	1 1/3	1928 cylindrical LD RSLD
Sivfløjte	1	1928 cylindrical LD RSLD
Dulcian	16	1928 Giesecke cylindrical, 1/2-length copper. CC-BB LD
Corno	8	USA 1800s. CC-BB capped. On new unit chest
Krumhorn	8	1928 Giesecke. Cylindrical. LD RSLD
Skalmei	4	Leau 1928 with teardrop shallots LD RSLD
Tuba Magna	16	from Man. I
Tuba Mirabilis	8	from Man. I
Tuba Clairon	4	from Man. I
Tromba Magna	16	from Man. I
Grande Trompette	8	from Man. I
Cor harmonique	4	from Man. I
Tremulant		New 2020

Manual III Récit 90 – 120 mm. w.g.

Bordun	16	1928 CC-B pine
Principal	8	1928 Plain metal throughout
Violoncello	8	1928
Vox Celeste	8	1928 T.C.
Vox retusa	8	1928 Slightly conical. LD RSLD. CC-E re-constructed
Nathorn	8	1928 CC-BB pine, then metal, chimneys. g#''' - c''' open conical
Fløjte harmonique	8	1928 CC-BB open, pine. Harmonic from f#'
Oktav	4	1928
Fløjte travièrse	4	1928. Harmonic from c'
Nazard	2 2/3	1928. From Sesquialtera, re-scaled
Oktavin	2	1928. Harmonic only from C to e'''
Terts	1 3/5	1928. From Sesquialtera, re-scaled
Plein Jeu 5 f.	1 1/3	1928
Fagot	16	Leau 1928. Teardrop shallots. LD RSLD
Trompet harm.	8	Leau 1928. LD RSLD
Fagot-Oboe	8	Leau 1928. LD RSLD
Clairon harm.	4	Leau 1928. g#''' - c''' flues LD
Vox Humana	8	1910. New unit chest, top of Récit
Tremulant		New 2020

Manual IV Ekkoværk 83 mm. w.g.

Violonprincipal	8	1876. LD RSLD. CC-GG mitred zinc from USA. GG#-BB remade
Violin	8	2 nd . hand Viole d'Orchestre from USA. CC-BB zinc
Harmonika	8	CC-EE from Fröslunda 1931 in zinc. CC-DD mitred. FF-BB 1928 LD. C-e''' Fugara from the Siseby Marcussen 1876. f'''- c''' new
Doppelfløjte	8	CC-BB Roosevelt c.1880. Wood. In Kronpositiv. Powerful solo voice
Flauto amabile	8	1928 with 15 new pipes. In-pitch former U.Maris rank, conical. Bass from Tectus
Unda Maris	8	1928. T.C. Conical. Constructed and tuned flat as an undulating flute in the style of the Old Masters (Schiess)
Tectus	8	1876 Plain metal throughout. f#'''- c''' open conical
Quintatøn	8	Bearded. In Kronpositiv. 1880 CC-f'', 1928 f#'''- c''', f#'''- c''' conical
Fugara	4	1901. LD RSLD
Fløjte	4	CC-CC# new. DD-BB 1928 LD RSLD. C-a#'' from Haderslev 1904. b''- c''' new. Harmonic from c'
Genshornquint	2 ^{2/3}	1928. LD RSLD
Waldfløjte	2	CC-c'' Haderslev 1904. Rem. new
Terts	1 ^{3/5}	In Kronpositiv.1940, new languids. CC-F canistered with inv. chimneys
Septim	1 ^{1/7}	Conical. In Kronpositiv. Old Magnusson pipes
Piccolo	1	Harmonic. In Kronpositiv. CC-E ex Fröslunda. Rem. 1940 Sivfløjte. LD RSLD
Mixtur 4f.	1 ^{1/3}	1928. LD RSLD
Cor Anglais	16	Leau 1928. Teardrop shallots. Resonators LD. c'''- c''' doublelength
Clarinette	8	Beating. Used Giesecke shallots. Copied from Oslo Sofienberg 1927
Vox Humana	8	from Man. III
Tuba Magna	16	from Man. I
Tuba Mirabilis	8	from Man. I
Grande Trompette	8	from Man. I
Cor Harmonique	4	from Man. I

LD = Lengthened RSLD = Re-slotted

Pedal 80 – 120 mm. w.g.

Subbas	32	1928 pine. Speech restored
P:incipal	16	1876 pine. New roller-beards. LD RSLD
Praestant	16	1730. In façade
Violone	16	1876. CCC-BBB pine. New roller-beards. LD RSLD CC-G metal, reconstructed 2020
Salicetbass	16	Sofienberg (Jørgensen 1927) LD. CCC-AAA was previously haskelled. CCC-BBB zinc
Subbas	16	1928 pine
Gedaktbas	16	1881 pine, partly LD
Rørquint	10 ^{2/3}	1730, plain metal
Principal	8	1876. Plain metal. LD RSLD
Praestant	8	1730, borrowed from Man. I
Fløjte	8	CC-BB pine, ex Fröslunda Principalbas, rem. Haderslev (Furtwängler) 1904
Violoncello	8	1870 LD RSLD
Dulciana	8	1928. CC and AA-g' LD. Rem. reconstructed 2020
Bordun	8	1876. Pine
Quint	5 ^{1/3}	1730. Canistered. Plain metal d#'- g' 1928
Oktav	4	1876. LD RSLD
Fløjte	4	1876. Oak
Terts	3 ^{1/5}	1730 d#'- g' 1928
Fløjte	2	1876 c'- g' new
Contrabombarde	32	1928. Giesecke. Pine, full-length
Bombarde	16	Borrowed from 32'. G#-g' from Corno (Man. II)
Basun	16	Leau 1928. LD RSLD
Fagot	16	Leau 1928. LD RSLD
Trompet	8	Leau 1928 LD RSLD
Bassetthorn	8	Leau 1928. Teardrop shallots. LD RSLD
Corno	4	Leau 1928. LD RSLD
Tuba Magna	16	from Man.I
Tuba Mirabilis	8	from Man.I
Grande Trompette	8	from Man.I
Vox Humana	8	from Man.III
Cor Harmonique	4	from Man.I
Cornet	2	from Man.I (Grande Trompette)

Full complement of couplers and accessories