

1903 - 2003



100 år med Krüger

Fra funktionelle apparater
til rensning og pumpning af vand

Til markedsførende inden for avanceret
vand og spildevandsbehandling

100 Years with Krüger

From functional devices
for treatment and pumping of water

To market leader within advanced
water and wastewater treatment



1903 - 2003



Ingeniør Ivar Krüger stiftede
I. Krüger den 6. januar 1903

The engineer Ivar Krüger founded
I. Krüger 6 January 1903

- | | | |
|--|-------------|--|
| I. Krüger blev grundlagt
6. januar 1903 | 1903 | I. Krüger was founded
6 January 1903 |
| Introducerede den „Aktiverede slamproces“
i Danmark | 1914 | Introduced the „Activated sludge process“
in Denmark |
| Omdannet
til et aktieselskab | 1927 | Converted into
a limited company |
| Opfører Danmarks første anlæg med
opvarmede slamrødnetanke | 1935 | Builds the first Danish plant with
heated digester tanks |
| En af Danmarks førende leverandører af pumper
til vandværker og
spildevandsanlæg | 1938 | One of the leading market players within the field
of pumps for water plants and wastewater
treatment plants |
| Får sin hidtil største ordre
på et renselanlæg i Sverige | 1946 | Obtains the biggest order so far
for a wastewater treatment plant in Sweden |
| Ringkanaler bliver introduceret
på det danske marked | 1960 | Oxidation ditches are introduced
at the Danish market |
| Krüger A/S er nu 100% ejet
af Danisco | 1962 | Krüger A/S is now 100% owned
by Danisco |
| Arbejdet med Københavns største
rensanlæg begynder | 1965 | The work on Copenhagen's largest wastewater
treatment plants begins |
| Cameroun bliver et af Krügers største
markeder internationalt | 1980 | Cameroun becomes one of Krüger's
main international markets |
| Krüger fusionerer med Akvadan A/S med Krüger
som det fortsættende selskab | 1984 | Krüger merges with Akvadan A/S, with Krüger as
the continuing company |
| Et 100% ejet datterselskab
i Vivendi Water | 2000 | Becomes a 100% owned subsidiary
of Vivendi Water |
| Krüger er med stor succes ansvarlig
for Vivendi Water Systems Nordic Region | 2003 | Krüger is successfully in charge of
Vivendi Water Systems Nordic Region |



I. Krüger blev grundlagt
6. januar 1903

I. Krüger was founded
6 January 1903

1903 - 1913

Ingeniør lørgeren Krüger stiftede firmaet I. Krüger den 6. januar 1903 med to tidligere ingeniørkolleger som medarbejdere.

Firmaets første hovedkontor lå i Studiestræde og havde store glasvinduer ud til den brostensbelagte gade i centrum af København. Her samlede lørgeren Krüger en række repræsentationer for apparater til rensning af vand, pumpning af vand og andre apparater til økonomisk dampdrift.

I 1911 overtog lørgeren Krüger tillige en maskinfabrik i Heimdalsgade i København, hvor han fik fremstillet pumper, ventilatorer, modstrømsapparater til opvarmning af fødevand til dampkedler samt apparater til udnyttelse af spildvarme fra røg.

Krüger leverede bl.a. en forvarmer til kedelvand til hovedstadens daværende Østre Elektricitetsværk.

Men også internationalt markerede firmaet sig med lokal-kontorer i Berlin og Leningrad samt salgsrepræsentanter i Sverige og England.

Omkring 40 medarbejdere stod på daværende tidspunkt sammen om at skabe grundlaget for det Krüger, vi kender i dag.



The engineer lørgeren Krüger founded the company I. Krüger on the 6th of January 1903 with two former colleagues as employees.

The company's first headquarters was located in the centre of Copenhagen and had large glass windows facing the cobblestone street. Here lørgeren Krüger gathered several representations of devices for water treatment, pumping of water and other devices for economic steam operation.

In 1911 lørgeren Krüger also acquired a machine factory on Heimdals Street in Copenhagen on which he manufactured pumps, ventilators, counter-current devices for heating of feed water for steam boilers as well as devices for utilisation of waste heat from flue gas.

At that time, Krüger delivered, among other things, a pre-heater for boiler water for a power plant in Copenhagen.

But the company was also put on the map with local offices in London, Berlin and Leningrad and with representatives in Sweden and Great Britain.

At that time approximately 40 employees joint forces to create the basis for the Krüger we know today.





Udviklede flere nye patenterede produkter Developed several new patented products

1913 - 1923

I årene inden 1. Verdenskrig udviklede firmaet flere nye patenterede produkter, bl.a. et apparat til luftsterilisation og en målemekanisme for dosering af kemikalier, som blev eksporteret til flere lande i Europa samt til USA og Sydamerika. Men da krigen brød ud i 1914, satte den en brat stopper for firmaets internationale udvikling.

Trods de indskrænkede markedsmuligheder fortsatte lørgen Krüger dog ufortrødent, og firmaet oprettede bl.a. en ny ventilationsafdeling.

Men da krigen endte i 1918 kom den økonomiske krise og salget faldt drastisk overalt. Krüger var derfor tvunget til at sælge fabrikken i Heimdalsgade og i stedet få fabrikeret firmaets mange produkter på A/S Vølunds fabrikker. De to ingeniører Bloch og Krogh-Lund, som var med til at starte Krüger, blev også optaget som medindehavere for at styrke firmaets likviditet.

På samme tid introducerede det danske firma Harvey & Co, der senere bliver en del af Krüger, den såkaldte "Aktiverede Slamproces" på Kirkeskov Renseanlæg i Søllerød nord for København. Metoden der var en videreudvikling af "biologiske filtre", stammede fra England, hvor den blev taget i brug i 1914.

Den nye proces havde flere fordele, bl.a. kom man nu det store problem med udlækning af fluer i filtrene til livs, og samtidig blev lugtgenerne i nærheden af renseanlægget væsentligt reduceret. Harvey & Co var derudover også repræsentant i Skandinavien for det engelske selskab "Wallace & Tiernan".



In the years before World War I, the company developed several new patented products including a device for sterilisation of air and a measuring mechanism for dosing of chemicals, which were all sold to countries in Europe as well as to the United States of America and South America. But when the war broke out in 1914, the international expansion of the company ended.

Despite the limited market opportunities, lørgen Krüger continued his efforts, and the company established a new ventilation department.

However when the war ended in 1918, the depression came and sales fell drastically. Krüger was forced to sell the factory in Heimdals Street and all the company's products were to be manufactured at A/S Vølund's factories. The two engineers Bloch and Krogh-Lund were taken in as partners, in order to improve the company's cash position.

At the same time, the Danish company Harvey & Co, which later becomes part of Krüger, introduced the so-called "Activated sludge process" on Kirkeskov Treatment plant in Søllerød north of Copenhagen.

The method, which was a further development of the "biological filters" came from Great Britain, where it was first put into use in 1914. The new process had several advantages, for example it solved the problem with hatching of flies in filters and it reduced the odour in the proximity of the treatment plant. Besides, Harvey & Co. was the representative in Scandinavia for the British company "Wallace & Tiernan".





Krüger blev omdannet til et aktieselskab Krüger was converted into a limited company

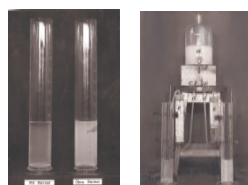
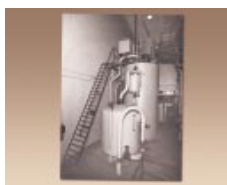
1923 - 1933

I sommeren 1923 kom lørigen Krüger i forbindelse med Dr. Kobelt fra München. Af ham købte Krüger patent for Norden på fremstilling af et særligt materiale "Natrolith" til blødgøring af vand, og selskabet "Det Nordiske Natrolith A/S" blev etableret i 1924. Men 20'ernes største fremskridt var dog udviklingen og markedsføringen af en centrifugalpumpe, som - i forhold til datidens konkurrerende produkter - havde en endog meget god nyttevirkning.

Krüger blev omdannet til et aktieselskab i 1927, og året efter fratrådte lørigen Krüger som ejer og direktør. De to medarbejdere Bloch og Krogh-Lund fortsatte i firmaet som direktører, men en tiltrængt konsolidering af firmaet fandt først sted i 1929, hvor civilingeniør T.C. Thomsen købte selskabet.

lørigen Krüger rejste i 1928 til Sverige som tilsynsførende ingeniør ved bygningen af en bananmodningsanstalt i Stockholm. Men allerede i 1929 vendte han tilbage til Danmark og stiftede - sammen med sønnen Svend Aage Krüger - selskabet "lørigen Krüger" med vandbehandling som speciale.

Krüger, nu ledet af ingeniør T.C. Thomsen, etablerede i 1930 et samarbejde med Dansk Gærings-Industri A/S. Dette førte til at firmaet blev udvidet med en afdeling for spildevandsrensning og opførte flere spildevandsrenseanlæg for gær-fabrikker i Europa. Året efter fik Krüger samtidig patent på et system til elektrolytisk vandbehandling, der fortrinsvis blev anvendt til beskyttelse af varmtvandsbeholdere og varmtvandsledninger mod korrosion og tilstening.



In the summer of 1923, lørigen Krüger got in contact with Dr. Kobelt from Munich. From Dr. Kobelt Krüger bought the Scandinavian patent for the production of a special material "Natrolith" for softening of water, and the company "The Nordic Natrolith A/S" was founded in 1924. Nevertheless, the greatest progress of the 1920's were the development and marketing of the centrifugal pump, which had an excellent efficiency compared to other products of the time.

Krüger was made a limited company in 1927, and the following year lørigen Krüger retired as owner and director. The two employees Bloch and Krogh-Lund continued in the company as managing directors, but a much needed consolidation of the company did not take place until 1929 when T.C. Thomsen, an engineer, bought the company.

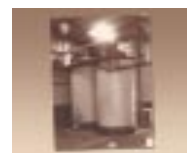


In 1928 lørigen Krüger went to Sweden as supervising engineer on the construction of a banana ripening facility in Stockholm. In 1929 he returned to Denmark, and together with his son Svend Aage Krüger he founded the company "lørigen Krüger" specialised in water treatment.



Krüger, now managed by the engineer T.C. Thomsen, established in 1930 a cooperation with Danish Fermentation Industry A/S, which led to further expansion of the company with a new department for wastewater treatment and construction of several wastewater treatment plants for fermentation factories in Europe.

Also, Krüger took out a patent for a system for electrolytic water treatment, which was mainly used to protect hot-water tanks and hot-water pipes against corrosion and chalk build-up.





Opførte Danmarks første anlæg med opvarmede slamrådnetanke *Built the first Danish plant with heated digester tanks*

1933 - 1943

I 1934 overtog Dansk Gærings-Industri A/S aktiemajoriteten i Krüger. Samme år blev Aktieselskabet Danisco stiftet, og et af aktiverne i det nye selskab var Dansk Gærings-Industri A/S. Danisco ejede således - via datterselskabet - godt 50% af Krüger.

Det gav økonomisk mulighed for produktudvikling, og Krüger blev en af Danmarks førende aktører inden for pumper til vandværker, spildevandsanlæg og centralvarmeanlæg. Især blev den daværende version af dykkede spildevandspumper en stor succes og kom senere til at tegne sig for en væsentlig del af firmaets pumpeproduktion.

Spildevand som forretningsområde tog nu også for alvor fart, og 1935 blev et epokegørende år, idet Krüger opførte Danmarks første anlæg med opvarmede slamrådnetanke i Glostrup - en forstad til København. Krügers største konkurrent på spildevandsområdet i de år var Harvey & Co.

På drikkevandsområdet gik det også fremad for Krüger, der i 1937 fik ordren på design og opførelse af Næstved Vandværk - det var den hidtil største ordre i firmaets historie. Samtidig gik det økonomisk fremad for Krüger som helhed, og i 1937 kunne man for første gang i aktieselskabets historie betale et udbytte til aktionærerne på 6%, dvs. 12.000 kr. Til sammenligning havde en almindelig ingeniør dengang en årsløn på ca. 7.000 kr.

Dengang var der ikke langt fra at rense vand til at "vedligeholde" rent vand og i slutningen af 30'erne startede Krüger inden for vandbehandling til svømmebade. Det første anlæg blev installeret i Frederiksberg Svømmebad, og kravet var, at man skulle have bakteriefrit og klart vand, så de badende ikke kunne blive smittet og "så det kunne ses, dersom de måtte gå til bunds".



In 1934 Danish Fermentation Industry A/S took over the majority of the shares in Krüger. The same year, the company Danisco was founded, and one of the assets of the new company was Danish Fermentation Industry A/S, and now Danisco owned more than 50% of Krüger.

This created an opportunity for product development, and Krüger became one of the leading market players within the field of pumps for water plants, wastewater treatment plants and central heating plants. Especially, the submerged wastewater pumps became a great success and later these pumps would account for a significant part of the company's pump production.

Wastewater, as a business area, now developed very fast, and 1935 marked an era, as Krüger constructed the first Danish plant with heated digester tanks in Glostrup, a suburb of Copenhagen. During those years, Krüger's largest competitor within the field of wastewater was Harvey & Co.

Krüger was also successful within the field of drinking water and won the design and build for Næstved Waterworks in 1937. It was the largest contract in the history of the company. At the same time, Krüger experienced economic progress in general, and in 1937 the company was able to pay a dividend to its shareholders of 6%, i.e. 12.000 DKK. By way of comparison the salary of an engineer was 7.000 DKK per year.

Back then, treatment of water was not very different from "maintenance" of clean water, and in the late 1930's Krüger started up within the field of water treatment for swimming pools. The first plant was installed in Frederiksberg Swimming Pool. The demand was to obtain clean water free of bacteria in order for the visitors not to get infected, and "so it could be seen, should they sink to the bottom".





Krüger fik sin hidtil største ordre på et rensesanlæg i Sverige Krüger obtained its biggest order so far for a wastewater treatment plant in Sweden

1943 - 1953

2. Verdenskrig var brudt ud og det medførte bl.a. mangel på materialer og faldende ordreindgang.

J. Bye-Jørgensen, den hidtidige afdelingsleder af spildevandsafdelingen, blev i 1944 udnævnt til underdirektør. Han var som sådan med til at udarbejde en reorganiseringsplan for Krüger i månederne efter krigens ophør.

En plan der var nødvendig som følge af de vanskelige økonomiske tider i starten af 40'erne og umiddelbart efter krigens ophør.

Den nye struktur fik succes og i 1946 voksede ordreindgangen i såvel Danmark som Sverige, bl.a. fik firmaet en stor ordre, der lød på 1,5 mio.kr., på et rensningsanlæg til Uddevalla i Sverige. Samme år blev J. Bye-Jørgensen udnævnt til administrerende direktør for Krüger, og firmaet gik ud af 1946 med et pænt overskud.

Krüger kom nu ind i en økonomisk stabil periode, og det gav bl.a. mulighed for igen at have egenproduktion af pumper. Det førte bl.a. til flere ordrer på leverancer af borerørspumper så langt væk som til Sydamerika.

I begyndelsen af 1950'erne udviklede Krüger også BS-metoden - det var firmaets første patenterede biologiske proces til rensning af spildevand. På grund af processens særlige opbygning var den meget stabil i forhold til overbelastning og forgiftninger på anlæggene.



World War II had now broken out, and this led to lack of materials and decline in the intake of orders.

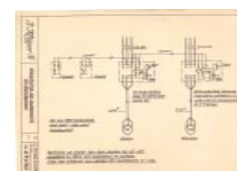
The former manager of the department for wastewater treatment, J. Bye-Jørgensen, was appointed vice-president in 1944. As such he participated in the development of a re-organisation plan for Krüger in the months after the end of the war. The re-organisation became necessary as a consequence of the difficult financial times in the early 1940's and the post-war period.

The new organisation structure became a success, and in 1946 the order intake increased in Denmark as well as in Sweden. The company obtained, amongst others, a contract for a wastewater treatment plant in Uddevalla in Sweden.

That same year, J. Bye-Jørgensen was appointed managing director for Krüger, and the company finished 1946 with a nice profit.

Krüger now entered a more financially stable period, which created an opportunity to start up its own production of pumps again. This led to several orders for supply of pumps for drilling wells, some as far away as South America.

In the early 1950's, Krüger also developed the BS-method (Submerged Biomass), which was the company's first patented biological process for wastewater treatment. Due to its particular properties, it was a very stable process also in case of overload and poisoning on the plants.





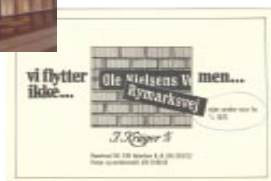
Ringkanaler blev introduceret på det danske marked
Oxidation ditches were introduced at the Danish market

1953 - 1963

Krüger overtog i 1953 en maskinfabrik på Stubmøllevvej i Københavns sydvestkvarter og produktionen af bl.a. pumper flyttede hertil. Nu var produktionslokalerne heller ikke langt fra Krügers administrative hovedkontor, der tidligere var flyttet til Christiansgade.



Ejendommen, der husede Krügers hovedkvarter i Christiansgade, blev imidlertid revet ned i slutningen af 1950'erne for at give plads til flere gadeudvidelser og funktionærstaben hos Krüger blev flyttet til Rymarksvej på Østerbro. I 1961 valgte Krüger desuden at stifte Grenaa Værk A/S, således at man både havde produktionsfaciliteter i København og Jylland til fabrikation primært af pumper, men senere også centrifuger og andre komponenter.

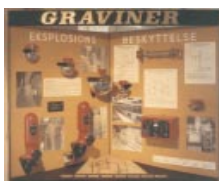


Finansieringen af den fortsatte ekspansion kom gennem en udvidelse af aktiekapitalen til i alt 1 mio.kr. i slutningen af 1950'erne. Det var selskabet Danisco, der primært stod for aktieopkøbet, og per 1. januar 1962 var alle aktierne samlet i selskabet, således at Krüger nu var 100% ejet af Danisco.



Krüger ekspanderede ligeledes på det internationale marked og stiftede bl.a. selskabet I. Krüger AB i Sverige, Cirmax Pumps Ltd. i England sammen med Wright Electric Motors Ltd. samt selskabet Krüger GmbH i Tyskland, hvor 50% var ejet af Dr. H. Widerholtz.

En af de øvrige aktører på det danske spildevandsmarked i den periode var entreprenørfirmaet Wright, Thomsen & Kier A/S. Selskabet havde gennem årene opnået en solid viden inden for biologisk rensning af spildevand og udtaget patenter på en række specialkonstruktioner. Omkring 1960 udviklede man i Tyskland en ny biologisk anlægstype efter slamaktiveringsprincippet og entreprenørfirmaet sikrede sig retten til de anlægstyper i Danmark. Og i løbet af kort tid slog denne proces - ringkanaler - an på markedet. Spildevandsafdelingen i dette entreprenørfirma blev senere en del af Krüger.



In 1953 Krüger acquired a machine factory in Stubmølle Road in Copenhagen, and the production of pumps was transferred to this factory. The production facilities were now located close to Krüger's administrative headquarters in Christians Street.

The building which housed Krüger's headquarters, was however demolished in the late 1950's and the employees were moved to Rymarks Road in the eastern part of Copenhagen. Later, in 1961, Krüger founded the Grenaa Factory A/S in order to have production facilities in Jutland as well as in Copenhagen for the manufacturing of pumps, centrifuges and other components.



The financing of the ongoing expansion was realised through an increase of the share capital to 1 million DKK in the late 1950's. The company Danisco acquired the majority of the shares, and as per 1 January 1962, the company held all the shares, and Krüger was now 100% owned by Danisco.



Krüger also expanded internationally, founding I. Krüger AB in Sweden, and Cirmax Pumps Ltd. in Great Britain, which was established together with Wright Electric Motors Ltd., and finally, the company Krüger GmbH in Germany of which Dr. H. Widerholtz owned 50%.

One of the competitors during that period was the contracting company Wright, Thomsen & Kier A/S. The company had gained a thorough knowledge within biological treatment of wastewater and had taken out patents for a series of special constructions.

Around 1960, a new type of biological plant was developed according to the activated sludge principle, and the company secured the right to this type of plants in Denmark. Before long, the process - the oxidation ditches - became a success. The contracting company's wastewater department became later a part of Krüger.



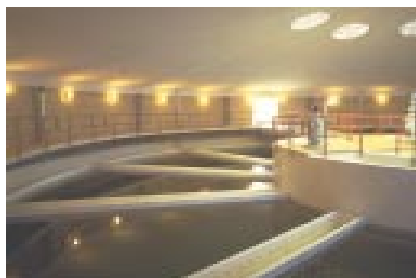


Arbejdet med Københavns største
renseanlæg begyndte

The work on Copenhagen's largest
treatment plants began

1963 - 1973

1960'erne var præget af en generel fremgang i samfundet. Krügers omsætning steg til det 7-dobbelte i løbet af dette tiår og resultatet steg til det 10-dobbelte. Krügers tekniske erfaring inden for vand og spildevand var nu blevet en anerkendt realitet i Danmark.



Arbejdet på et af de største reneanlæg i København I/S Avedøre Kloakværk begyndte i 1965 og det var Krügers hidtidige største opgave inden for spildevandsrensning, der her tog sin begyndelse. Og da Gentofte Kommune allerede i midten af 1950'erne gik i gang med overvejelser om at udnytte overfladevandet i Sjælsø til drikkevand, var Krüger en naturlig partner på projektet. Efter et effektivt projekterings samarbejde mellem kommunen og Krüger stod Sjælsø Vandværk - der dengang repræsenterede det mest avancerede inden for rensning af overfladevand - færdigt i 1968 med en kapacitet på 800 m³ rensset drikkevand i timen. I starten af 1970'erne begyndte ligeledes skitseprojekteringen af Lynetten, der dengang og i dag er Københavns største reneanlæg.



I lighed med de sidste ti år stod J. Bye-Jørgensen fortsat i spidsen som administrerende direktør for Krüger op gennem 1960'erne, men valgte i 1972 at gå på pension. Samme år blev han hædret med erhvervsavisen Børsens miljøpris for sin store indsats i kampen mod forurening.



Civilingeniør P. Vermehren var i 1966 blevet udnævnt til underdirektør med ansvar for de internationale markeder og hentede bl.a. en stor projekteringsordre hjem i Thailand i 1968. Ved J. Bye-Jørgensens afgang i 1972, blev P. Vermehren således udnævnt til administrerende direktør for Krüger.



På det skandinaviske spildevandsmarked valgte Wright, Thomsen & Kier A/S i 1966 at udskille deres spildevandsafdeling fra resten af firmaet og danne et nyt selskab Akvadan. Krügers anden konkurrent på markedet Harvey & Co blev opkøbt af F. L. Smidth i 1972.



The 1960's were characterised by a general progress in the society. Krüger's turnover was sevenfold during this decade and the result was increased tenfold. Krüger's technical know-how within water and wastewater had now become an acknowledged fact in Denmark.

The work on one of the largest treatment plants in Copenhagen, Avedøre Sewerage Plant, was initiated in 1965, and it was Krüger's most substantial assignment within wastewater treatment so far. In the mid 1950's, when Gentofte Municipality considered to utilise the surface water of Sjælsø Lake for drinking water, Krüger was an obvious partner on the project. After an efficient cooperation between the municipality and Krüger, the Sjælsø Waterworks was completed in 1968 - and at that time it represented the most advanced plant for treatment of surface water -with a capacity of 800 m³/h of clean drinking water. In the early 1970's the basic design of the Lynetten plant was also initiated, and it was and is today the largest wastewater treatment plant in Copenhagen.

J. Bye-Jørgensen was still in charge as managing director for Krüger in the 1960s, but in 1972 he chose to retire. The same year he was awarded the environmental prize of the commercial newspaper Børsen due to his efforts in the fight against contamination.

In 1966, P. Vermehren, had been appointed vice-president in charge of the international market. Amongst other projects, he managed to win a large design contract in Thailand in 1969. When J Bye-Jørgensen retired in 1972, P. Vermehren was appointed managing director for Krüger.

On the Scandinavian wastewater market, Wright, Thomsen & Kier A/S chose to separate their wastewater department from the existing company and form a new company, Akvadan. Krüger's other rival on the market, Harvey & Co was bought by F.L. Smidth in 1972.





Cameroun blev et af Krügers største markeder internationalt *Cameroun became one of Krüger's main markets internationally*

1973 - 1983

Krüger var nu for alvor blevet en international virksomhed med projekter rundt om i hele verden. I 1976 vandt firmaet en stor konkurrence på Philippinerne om vandforsyning og kloakering i Cebu samt spildevandsrensningen i hovedstaden Manila. Senere - i 1978 og 1979 - fik Krüger leveranceordrer på to store vandværker i Lagos, Nigeria. Og allerede året efter i 1980 fik Krüger kontrakt på yderligere 6 vandværker i Nigeria. Derefter fulgte flere store kontrakter i Cameroun, bl.a. på bygning af landsbyvandværker, og dette marked var i flere år frem et af Krügers mest succesfulde.



Hjemme i Danmark blev Nordeuropas største og mest moderne renseanlæg Lynetten startet op. Krüger åbnede ligeledes flere kontorer rundt om i Danmark i denne periode. Det gik knap så godt med produktionen af pumper og komponenter i datterselskabet Grenaa Værk A/S og i slutningen af 1970'erne blev selskabet og dermed egenproduktionen afhændet.



Krüger bevægede sig i stedet ud i nye forretningsområder og fik - i samarbejde med Kampsax - ordre på projektering af fordelingsnettet for naturgas i den sydlige del af Jylland. Desuden stiftede Krüger sammen med Kampsax og Kommunekemi et datterselskab Chemcontrol i 1979, der skulle markedsføre kemisk affaldsbehandling internationalt.



Konkurrencen på det danske spildevandsmarked spidsede til i 1970'erne. Krüger konkurrerede med Harvey & Co på de større anlæg og på de mindre anlæg var Akvadan den største konkurrent. Ydermere fusionerede disse to danske konkurrenter Akvadan A/S og Harvey & Co i 1974 og dannede tilsammen selskabet Akvadan-Harvey A/S.



I 1982 opkøbte Danisco, der på det tidspunkt også ejede Krüger, firmaet, der nu havde ændret navn til Akvadan A/S.



Krüger had now become an international company with projects all over the world. In 1976 the company won a major contract on the Philippines for the water supply and sewerage systems in Cebu and wastewater treatment in Manila. Later, in 1978 and 1979, Krüger won the contracts for two large waterworks in Lagos, Nigeria. Soon after, Krüger also obtained a contract for the supply of six other waterworks in Nigeria. Krüger furthermore won several large contracts for supply of waterworks for villages in Cameroon, and for several years Cameroon was one of Krüger's most successful markets.



In Denmark, the largest and most advanced treatment plant, Lynetten, was inaugurated. During this period, Krüger also opened several offices in Denmark. The subsidiary Grenaa Factory A/S had experienced some unsuccessful years and as a result the factory including the production was sold.

Instead, Krüger entered into new business areas and obtained, in cooperation with Kampsax, a contract for design of the distribution network for natural gas in the southern part of Jutland. Besides this, Krüger founded the subsidiary Chemcontrol, together with the two companies Kampsax and Kommunekemi, in 1979, with the purpose of marketing chemical waste treatment internationally.



The competition on the Danish market for wastewater increased during the 1970's. Krüger competed against Harvey & Co. for the larger plants, and Akvadan was the main rival regarding the minor plants. Furthermore, the two Danish rivals, Akvadan A/S and Harvey & Co., merged in 1974 and founded the company Akvadan-Harvey A/S. In 1982, the company Danisco, which also owned Krüger at that time, bought the company, which was now called Akvadan A/S.



Krügers biologiske processer renses spildevandet på størstedelen af de danske anlæg

Krüger's biological processes treats the wastewater at the majority of the Danish plants

1983 - 1993

Krügers og Daniscos bestyrelser besluttede i 1983, at Krüger skulle købe aktierne i Akvadan-Harvey og den 1. januar 1984 fusionerede Krüger og Akvadan-Harvey med Krüger som det fortsættende selskab. Det markerede starten på et årti præget af vækst og fremgang, opkøb af nye selskaber og etablering af internationale kontorer rundt om i hele verden.

Krüger udviklede i starten af 1980'erne - i samarbejde med Danmarks Tekniske Universitet - de biologiske processer BioDenitro/BioDenipho til fjernelse af organiske stoffer, kvælstof og fosfor. Baseret på bl.a. denne proces stod Krüger for udbygning og nyopførelse af renselanlæggene i en lang række kommuner i Danmark. Vedtagelsen af Vandmiljøhandlingsplanen i 1987 satte yderligere gang i aktiviteterne og alene i 1988 steg omsætningen med 27%. Senere opnåede Krüger derudover - i samarbejde med Rambøll - den største enkeltordre på projektering i Danmarks historie, nemlig udbygningen af de københavnske renselanlæg Lynetten og Damhusåen. I 1990 fik Krüger to historiske kontrakter på drift og vedligeholdelse af henholdsvis Søllerød og Farum kommunes renselanlæg - de første renselanlæg i Danmark, der overgik til privat drift.

På det internationale marked oplevede Krüger fortsat en kraftig vækst, især i Cameroun, hvor Krüger i løbet af 1980'erne og 90'erne forsynede ca. 335 landsbyer med rent vand. Derudover havde Krüger både rådgivnings- og anlægsprojekter i andre dele af Afrika, Asien og flere steder i Europa. I 1989 blev der bl.a. oprettet datterselskaber i Grækenland og Irland samt Krüger Inc. i USA.

Danisco besluttede at afhænde aktierne i Krüger og i 1990 fik Krüger en ny ejerkreds, der bestod af danske institutionelle investorer, OTV Holding SA - et datterselskab i den franske koncern CGE (nu Vivendi Environnement) samt Krügers ledelse.

Vækst og fremgang prægede hele firmaet, og i 1991 rundede Krüger 1 milliard kroner i omsætning. Krüger opkøbte ligeledes virksomheden Iørgen Krüger I/S, som i de forløbne 50 år havde specialiseret sig i procesvandsbehandling.



In 1983, the Boards of Krüger and Danisco decided that Krüger should buy all the shares in Akvadan-Harvey and 1 January 1984 Krüger merged with Akvadan-Harvey, with Krüger A/S as the continuing company. This marked the start of a decade characterised by growth and progress, acquisition of new companies and establishment of international offices all over the world.

In the early 1980's, Krüger developed in cooperation with The Danish Technical University the biological processes BioDenitro/BioDenipho for removal of organic matter, nitrogen and phosphorus. Based on this process, among others, Krüger was involved in the extension and construction of wastewater plants in numerous municipalities in Denmark. The adoption of the Aquatic Environment Plan in 1987 boosted the activities further, and in 1988, the turnover rose by 27%. As part of a joint-venture Krüger got the contract for the extension of the two treatment plants in Copenhagen. Furthermore, two historical contracts were obtained in 1990 when Krüger took over the operation and maintenance of Farum and Søllerød municipal wastewater treatment plants. The first treatment plants in Denmark to be outsourced to a private company.

Internationally, Krüger expanded as well, and especially Cameroon accounted for an important part of the turnover. During the 1980's and 1990's, Krüger supplied approx. 335 villages in Cameroon with clean water. Krüger also had projects in other parts of Africa and in Asia. In Europe subsidiaries were founded in Greece and Ireland in 1989. And Krüger Inc. was established in the US of America.

Danisco decided to sell its shares in Krüger, and in 1990 Krüger's new owners were Danish institutional investors, Krüger's management and OTV Holding SA, a subsidiary of the French CGE (now Vivendi Environnement). Growth and progress characterised the entire company, and in 1991, Krüger topped with a turnover of 1 billion DKK. Krüger also bought the company Iørgen Krüger I/S, which had specialised in process water during the past 50 years.



Krüger er nu - med stor succes -
en integreret del af Vivendi
Water Systems

Krüger is now successfully an integrated
company within Vivendi
Water Systems

1993 - 2003

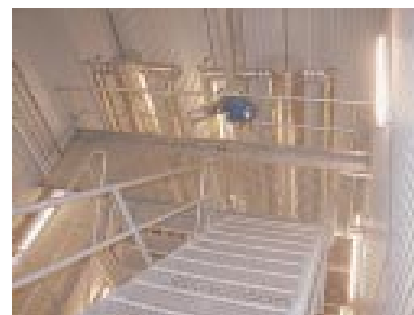
Efter 21 år som administrerende direktør for Krüger valgte P. Vermehren at gå på pension i 1993 og blev efterfulgt af Ole Rendbæk. Krügers omsætning var i de forløbne år steget kraftigt, men resultaterne var ikke fulgt med, hvilket bl.a. hang sammen med at de danske aktiviteter i forbindelse med Vandmiljøhandlingsplanen var toppet.

Derfor startede nu en større omorganisering og rationalisering af Krüger, hvor bl.a. de institutionelle investorer valgte at trække sig ud af ejerkredsen. Den franske concern CGE blev - gennem datterselskabet OTV Holding SA - således hovedaktionærer i Krüger i slutningen af 1990'erne. I starten af år 2000 overtog CGE (nu Vivendi Environnement) alle aktierne og blev således enejer af Krüger A/S.

Op gennem 1990'erne var samarbejdet mellem Krüger og OTV (nu Vivendi Water Systems) blevet stadig mere konsolideret både i forbindelse med projekter på de internationale markeder, og med overførsel af teknologier selskaberne imellem. Specielt de franske processer Actiflo og BioStyr blev en succes. Ikke mindst i USA, hvor Krüger Inc. - ledet af Finn M. Nielsen - tog processerne til sig og bl.a. derfor var i stand til at arbejde firmaet op til en millionsucces med i alt 70 ansatte.

Hjemme i Danmark havde Krüger ikke vist tegn på yderligere fremgang og Finn M. Nielsen vendte derfor tilbage i foråret 2000 og overtog ledelsen af Krüger inklusiv ansvaret for Vivendi Water Systems Nordic Region. En ny strategi med fokus på vand og spildevand inklusiv salg af relaterede unikke produkter samt yderligere integration med Vivendi Water Systems blev nu sat i værk, og allerede året efter kunne Krüger høste resultaterne af de omfattende organisatoriske og strategiske ændringer og tiltag.

I løbet af halvandet år blev udviklingen vendt fra flere års underskud til et stabilt økonomisk overskud. Samme strategi og vedholdenhed sikrer nu den fortsatte fremgang for Krüger, der kunne fejre 100 års jubilæum med en stor fest for medarbejderne og forskellige aktiviteter for kunderne fordelt over hele jubilæumsåret.



After 21 years as managing director P. Vermehren chose to retire in 1993, and Ole Rendbæk succeeded him. During the past years, Krüger's turnover had increased greatly, but the profits could not keep up due to the fact that the Danish activities related to the Aquatic Environment Plan had peaked.

As a result an extensive re-organisation and rationalisation of Krüger was implemented. During this process, the Danish shareholders chose to withdraw from the ownership and in the late 1990's the French company CGE became the majority shareholder through its subsidiary OTV Holding SA. In 2000 CGE (now Vivendi Environnement) acquired all the shares and became sole owner of Krüger A/S. During the 1990's, the cooperation between Krüger and OTV (now Vivendi Water Systems) got still more consolidated in connection with international projects and through transfer of technologies between the companies. Particularly, the French processes Actiflo and BioStyr became a success, especially in the United States. Krüger Inc., managed by Finn M. Nielsen, adopted the processes and turned the company into a success story with 70 employees and a matching turnover.

Back in Denmark, Krüger had not shown any signs of further improvement, and in 2000 Finn M. Nielsen, returned to Denmark to take over the management of Krüger, including the responsibility for Vivendi Water Systems Nordic Region. A new strategy focusing on water and wastewater, including sales of unique products as well as further integration with Vivendi Water Systems was now implemented.

In 2001, Krüger could reap the fruits of the comprehensive strategic changes that were initiated in the summer of 2000. After a year and a half, the development had turned around into a stable profit. The same strategy and persistence still ensure the ongoing improvement of Krüger which in January 2003 celebrated its centenary by a party for the employees and various activities for the clients during the jubilee year.



Krüger A/S i dag Krüger A/S Today

Krüger arbejder som rådgiver, entreprenør samt leverandør af udstyr, service og løsninger indenfor:

Krüger A/S operates as contractor as well as supplier of equipment and services within:

Drikkevand	Drinking water
Procesvand	Process water
Spildevand	Wastewater
Slambehandling	Sludge treatment
Afløbssystemer	Sewerage systems
Jord og grundvand	Soil and groundwater remediation
Styring, regulering og overvågning	Control and monitoring of water and wastewater treatment plants
Korrosionsbeskyttelse	

Internationalt varetager Krüger moderselskabet Vivendi Water Systems's aktiviteter i Skandinavien, Finland, Polen, de Baltiske lande og Tyskland. Derudover er Krüger - i samarbejde med Vivendi Water gruppen - aktiv på øvrige internationale markeder, hvor Krügers teknologi og ydelser er efterspurgt.

Internationally, Krüger A/S manages the parent company Vivendi Water Systems' activities in Scandinavia, Finland, Poland, the Baltic Countries and Germany. Furthermore, in cooperation with the Vivendi Water Group, Krüger A/S is active on all other international markets where Krüger's technology and services are required.

Henrik Forslund,
administrerende direktør for Krüger A/S:
„Krüger A/S og Vivendi Water Systems er markedsleder i Østersøregionen inden for vand- og spildevandsbehandling. Vi er teknologisk helt i front og vores systemer strækker sig fra spildevandsanlæg baseret på vore egne patenterede teknologier til membranlæg for genanvendelse af industrielt procesvand. Fælles for alle vore løsninger er at de skaber værdi hos vore kunder, hvad enten der er tale om komponenter, service, turnkey anlæg eller driftskontrakter.“

Henrik Forslund,
Managing Director for Krüger A/S:
„Krüger A/S and Vivendi Water Systems are market leaders in water and wastewater treatment in the Baltic region. Our technology is in front, and our systems range from wastewater treatment plants based on Krüger's own patented technology to membrane plants for re-use of industrial process water. Common to all our solutions is that they generate value for our customers, whether we talk about components, service, turnkey-plants or operations contracts.“

Se vores produkter og løsninger på www.kruger.dk

Take a look at our products and services at www.kruger.dk



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