Mads Clausen

In this jubilee brochure the story begins with a little about Mads Clausen, founder of Danfoss. It goes on to give a history of the firm which became his lifework.
Mads Clausen’s technical ingenuity and mechanical flair were inherited attributes, but to build his future on this inheritance was nothing which others urged him to do. He was born on the family farm on the island of Als in 1905 and soon came to disappoint his relatives by rejecting farming as a way of life. However, the farm was to become his starting point and through the years it witnessed an industrial development which no one could have foreseen. Right up to his untimely death in 1966, Mads Clausen’s home and office lay close to his birthplace. The farm is still owned by the Clausen family and the farmhouse now contains the Danfoss museum.
When, as a young engineer, Mads Clausen founded Danfoss in 1933, he had not formulated a definitive goal for his firm. Neither had he considered general strategy nor carried out a detailed market analysis. Everything was based on an idea, backed by tremendous willpower and an exceptional ability to see and exploit opportunities.

Mads Clausen was, above all, an individualist. He achieved results by making salable products. The money earned was the tool with which to build the company, the products were the means.

His was a complex nature combining the spirit of the pioneer with talent, stubbornness and vision. He listened, read and thought, and thoughts became actions. His endeavours bore fruit; indeed after a time far beyond what he himself had believed possible.

Mads Clausen on the family farm with his elder brother.

The Nordborg factory in 1966.
Mads Clausen's original technical sphere was refrigeration. Not unnaturally, therefore, his first efforts were directed at the production of automatic controls for refrigeration plant. For the initiated, such plant offers countless control possibilities and the process that takes place in the closed tube system covers a spectrum of flow conditions and changes in physical states. The ability to control this circuit paved the way for the development of automatic controls for many other applications and it was this path with its many offshoots that Danfoss followed. The keyword was versatility and the product range was extended to cover a variety of trades widely different in character. The know-how gained in one product line was extensively used in others so that there was a constant influx of new know-how.
From 1945, the whole world became a natural market for Danfoss products and Mads Clausen recognized the importance of matching sales effort to foreign demand. As early as 1950, Danfoss was represented by a sales organisation in so many countries that it became appropriate to invite the managers concerned to the first international meeting in Nordborg – an arrangement that became known as the Danfoss Convention 1950.

Gradually, as the firm grew, the choice of the right personnel to perform the different tasks became critical for Mads Clausen. His “talent-spotting” ability was undoubtedly one of the secrets behind the success of the firm, as was his appreciation of the importance of teamwork.

Regardless of the value of the knowledge and ability of personnel, it is however only through the coordination of views and activities that real results emerge. Mads Clausen was a man who could both inspire people and see matters from all sides, while never losing sight of the main objective.

The capability of an initiator to hold on to a vision based on the assessment of its many facets can never be replaced. But once Danfoss was firmly established and had, on the initiative of one man, developed to a certain stage, the way to further progress lay open to the teams that Mads Clausen had inspired.

The dynamic development, characteristic of Danfoss then and in the years following 1965, is evidence that these opportunities were grasped by those who have since borne the responsibility for management and professional operation in all areas.
A little history

Als is one of many Danish islands and has been developed from a decidedly rural to an industrial society where balance is preserved between old traditions and modern techniques. On this island — by the town of Nordborg, halfway between Copenhagen and Hamburg — the story of Danfoss begins in 1933. The underlying idea was an automatic expansion valve for refrigeration plant, conceived at the right time and quickly followed up by a series of products designed with an eye to the future that automation promised.

Mads Clausen begins the story when as a young engineer he comes home to his family farm on Als and under primitive conditions in the attic of the farmhouse where he was born starts to turn his idea into reality by producing the first refrigeration valve. In 1933 the number of valves sold was 466. One year later the number had increased so much that Mads Clausen decided to start a “proper factory” in a wooden hut by the side of the farmhouse and engaged four people to work in it.

Here we have marked the island of Als where Mads Clausen founded his firm.

The village where the whole story started, seen from the birthplace of Mads Clausen.

The firm’s first letter-headed stationery.

An artist’s impression of the “den” where the first drawings were made and the first experiments with the expansion valve were carried out.
By the summer of 1943 the firm had been in existence for ten years and the product range consisted of 37 different types of units. It was not until 1947 that the first really large expansion in factory area took place and by 1950 Danfoss had about 5000 m² of workshop area. The original name of the firm was “Dansk Køleautomatik og Apparat-Fabrik”. “Køle” means Refrigeration, which was all-important in the start phase. The name “Danfoss” was registered in 1946. During the fifties, development accelerated as regards buildings, products, and manpower. Employee no. 1000 was welcomed in 1953 and only one year later employee no. 2000 was greeted. Distributors were appointed and departmental offices opened; the world was travelled extensively by sales representatives and technicians. All this was undertaken in a pioneering spirit with everyone working as a team – an atmosphere that has characterized the firm ever since.

Tool manufacture for production around 1940.

The first proper design tracing office at Danfoss ca. 1943.

The first known photograph of personnel from about 1935.

A contrast with today’s mechanised production processes.
The factory as it was around 1936.

The turning shop was the first milestone in the firm’s history; photographed on the ten year anniversary.

The first large factory extension occurred in 1947. Now there was a 3890 m² area available for production.

Sales department personnel around 1943. There were five of them at the time.
From workshop to concern

The large factory buildings stand out, representative of industrial Denmark today, a clear expression of the dynamic firm that in the space of fifty years has grown from a one-man enterprise with a 20 m² workshop to a large concern with a floor area of 460,000 m² and a staff, at home and abroad, of 11,000.

With an annual turnover of around 4000 million Danish kroner in the jubilee year, Danfoss must be considered as among the major companies in its field.

The headquarters of the concern sharply outlined against the sky in the late afternoon.