

THRIGE AGRO*news*

No. 1
February 1986



NORDSTEN HOWARD VETO GYRO

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THE FRONT AND BACK PAGES

World map in colours marked with the branches of the THRIGE AGRO GROUP + world map showing THRIGE AGRO's distribution network. For reasons of scale not all distributors have been shown on the map and they have not all been quite accurately located.

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EDITING:

Lars Bielefeldt.
Anders Nielsen.

The Thrige Agro Group

Chr. Sonne-Schmidt

Thrige Agro was founded in the summer of 1976 when Thrige Titan for the first time gained a foothold on the Danish market.

The strategic background was to satisfy the farmers' demands for machinery and implements through a close and informal co-operation between the manufacturers on one hand, progressive farmers on the other. Moreover, the period's need for efficient and productive farming called for investments in new methods and machines. Danish farmers have faced this, and with good results.

During the years 1976-81, a number of Danish farm equipment manufacturers with high quality products, good outlets and possibilities of product development were taken over by Thrige Agro.

The firms taken over in Denmark were:

Gyro in Skive, Veto in Oester Toerslev, Holstebro Jernstoeberi, Roland i Nr. Bjaert and Nordsten in Hilleroed. These Danish takeovers led the way to entering the overseas markets through the takeover of Farmhand in Wymondham, England, in 1982.

This gentle international start was a success and was followed up by takeovers of the Howard Companies in Germany, France, Italy, Spain and Malaysia. Thus Thrige Agro has taken a lead in the European farm equipment market. The takeover of the Howard group was effected in September 1985.

At present, the European farm equipment business is going through a number of changes. This applies as much to the main European and American tractor manufacturers as to implement manufacturers.

The coming years will see a large number of mergers, and many firms will go under. This will create new possibilities and strategic threats. Thrige Agro has participated vigorously in structural change since its gentle start in 1976, and will do so also in future.



Chr. Sonne-Schmidt.

The companies which Thrige Agro has taken over have had their own inner strength, which combined with our push and management has created renewed growth. All the new firms were in the agricultural machinery field. This philosophy and approach has over the years given us a still larger knowledge of this business.

We will only take over firms in which we have a deep insight and know how to run.

Application of Thrige Agro's Products

Thrige Agro's products are working on farms all over the world. Our objectives are to increase yields and efficiency and thus make each holding more profitable.

Our products are one of many links in the food produc-

tion chain. We are active in the fields where it all begins and where the results are most dependant on the weather, and where the demand for reliability is most urgent.

The company's range of products consists of the following main product lines:

- Intensive soil preparation (rotary cultivators and rotary harrows. These products prepare the way for the sowing and the fertilizing work - seed drills and fertilizer distributors).

In the future, demands for new combination possibilities of the above products will increase.

- Material handling implements (front-end loaders).

- The Green line for grass processing (forage harvesters, mower conditioners) is mainly used in Northern Europe.

- Grape handling equipment for the Central/South-European market (grape harvesters, wine presses).

Further, the group possesses its own foundry which successfully supplies castings in small series with short delivery times.

A Strategic View of Market Trends

In the mid eighties agriculture in most of Europe finds itself in a squeezed situation. The farmer's income derived from sale of his own products is decided centrally by the EEC (which wants to keep both prices and quantity of products down). Cost levels are especially dependant upon the rate of interest, wages, and exchange rates.

It is to be expected that professional farmers in the late eighties will be able to wrest themselves loose from the price-cost-squeeze, they are in at present, consequently increasing their income which will create the basis for both new

and re-investments. With the current wear and tear of machines and equipment this will mean a less depressed market. Before 1990 there must emerge a freer price regime for agricultural products than that which to a large extent now regulates supply and demand.

Through the central stipulation of agricultural prices, the EEC has a decisive influence on the relation between crop and animal production. A relative fall is to be expected for instance in the prices of cereals compared to the price of more labour intensive products such as milk and meat. This development will simultaneously cause economic advantages with regard to manpower and investment in the food processing industry. The regional disputes will go on within the EEC at the expense of an understanding of agriculture's large influence as a stimulus of business cycles within the total market area. In the Northern countries outside the EEC (Sweden, Norway, Finland) there is and will be a desire to recognize these conditions. It can produce a more stable market situation for agricultural machinery especially for Thrige Agro's wide product programme.

The less traditional markets can be divided into two. The OPEC-countries and the new industrialized countries, will have an increasing importance. The East, Russia and China will be forced to acknowledge that they have to create a larger supply of food based on their own production. It is doubtful, whether this will be realized in this decade (and as a consequence it will restrict major sales to these countries of Danish agricultural machinery).

Organization/Geography

Thrige Agro is situated geographically as follows:

- Headquarters in Skive, Denmark.
- Marketing, product development and production, Denmark (Skive, Hilleroed, Holstebro).
- Marketing, product development and production, France (Loudun).
- Marketing, product development and production, Germany (Michelstadt).
- Marketing, UK (Wymondham).
- Marketing and assembly plant, Spain (Barcelona).
- Marketing, Italy (Brescia).
- Marketing and production, Malaysia (Batu Caves).

The Group employs 1,100 persons in total, of which about 520 in Denmark.

Production Technology

The 4 production plants (Skive, Hilleroed, Loudun and Michelstadt) are organised for fast delivery times and with flexible ressembly lines. Currently, the production plants are being adapted to satisfy the market requirements for a diversified product line, a short order horizon as well as a general need for lightening the economic pressure on stocks. Investments in robots and computerized production machinery are being made, and decisions have been made to invest in CAD/CAM in 1986 in Denmark.

Product Development, Field Methods and System Development

The time spent on field labour has to be reduced and, at the same time, the yields have to be increased. The time gained will be used for farm management, i.e. planning of purcha-

ses and sales and investments in new methods.

Preceding any sowing in any soil, some kind of preparation of the soil has to be done. The choice of methods, and thus implements, depends on the soil, the climate, the crop and the cultivation intensity.

Improved and intensified soil preparation methods, and subsequently new sowing and fertilizing methods, will be created within field mechanization.

A demand for a broader solution of the farmers' cultivation problem will emerge. Systems will be created where machines will do a number of tasks at one time, either in single combinations, or together. Simultaneously, the electronic control systems will be initiated in the machine itself as well as in the tractor cab. Electronic processing control and data collection is under way in cultivation.

Over the next 10-15 years, the farmers will introduce a new kind of technology, just as has been seen in the industry supplying their goods and which buys and manufactures their products.

A new type of technology requires a broad contact between the machine manufacturers and the rather advanced agriculture in Europe. The progress in Scandinavia in recent years has shown that methods and machines originate in Central Europe and England. An exchange of ideas about products and methods will be a must in future if they are to be developed in time and lead to profitable products.

Growth will be created with a view to new products for which competition is small, or not yet established.

THRIGE AGRO

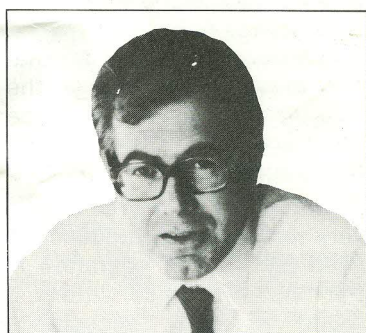
BOARD OF MANAGEMENT



Chr. Sonne-Schmidt
Managing Director

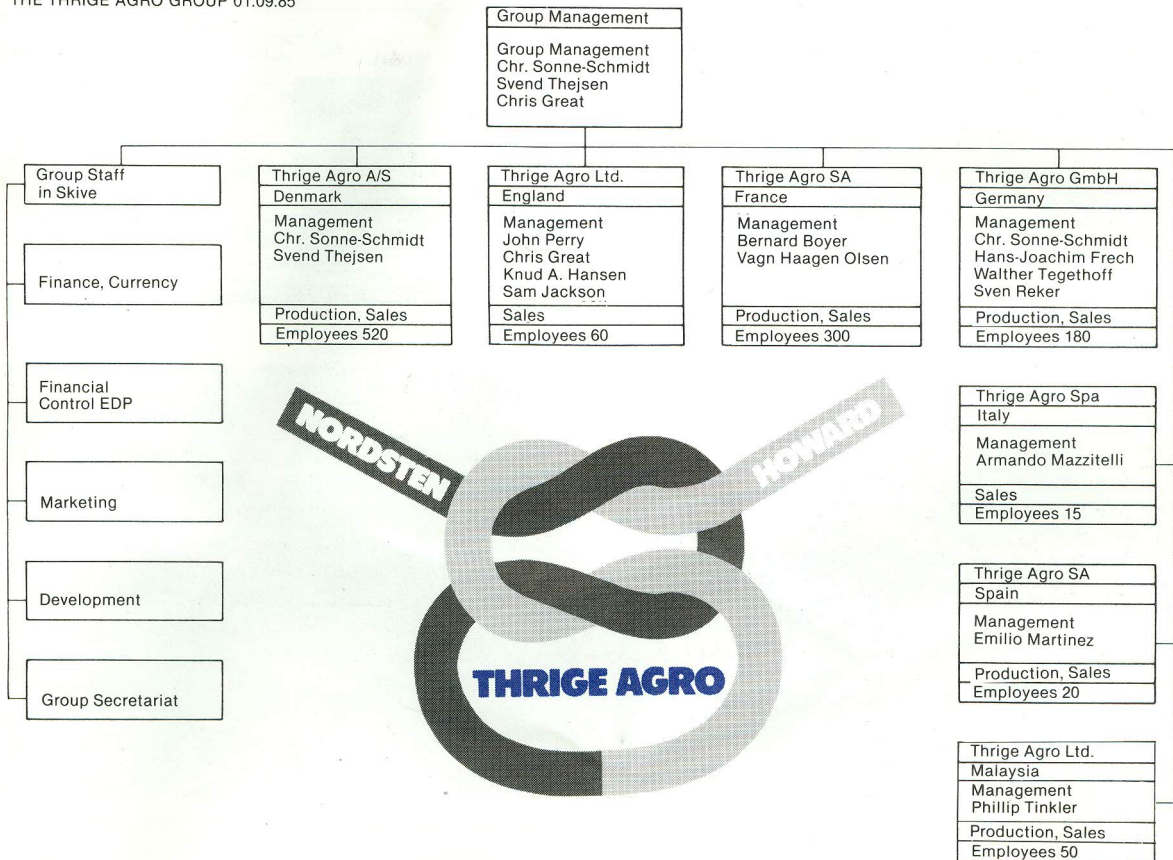


Svend Thejsen
Technical Director



Chris Great
Marketing Director

THE THRIGE AGRO GROUP 01.09.85



Howard – The History

Chris Great

The Howard business was founded in 1938 by an Australian engineer, A.C. Howard, who came to Britain to exploit his radical invention, the Rotavator, a cultivating tool driven by the tractor power take-off. A.C. Howard teamed up with Captain Griffiths, the commercial element of the partnership, and together they ran the company throughout its growth stage until the late 1960's.

The Rotavator proved to be a very versatile tool, producing a seed bed in one operation in the most difficult conditions. It found a ready acceptance worldwide: from the vegetable growers in England, the wine producers in France, Germany and Italy, to the rice growers of Japan and the sugar producers of Australia.

The company grew from its base in West Horndon, near London, with subsidiary companies being established across the world to market the product. Initially production was concentrated at West Horndon but as local demands for specification variants emerged, production was extended to France, Germany, Italy,

Spain, Greece, the United States, Brazil, Malaysia, Australia and New Zealand.

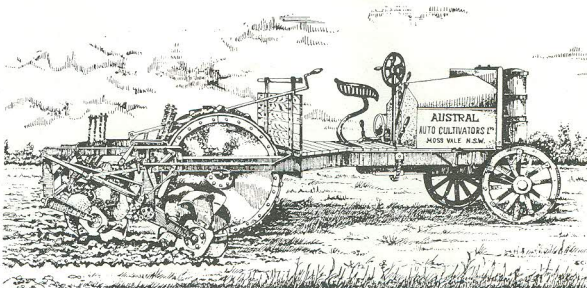
Howard became a highly profitable star of the London stock market. By the end of the 1960's demand was still unsatisfied and the West Horndon factory was replaced by five factories spread throughout East Anglia, specializing in different aspects of manufacture. This move imposed a considerable cost and management burden on the Group, and coincided with increasing competition and saturation of markets.

A number of moves were made to broaden the Company's base, the most profitable of which was the acquisition of Manns of Saxham, the distribu-

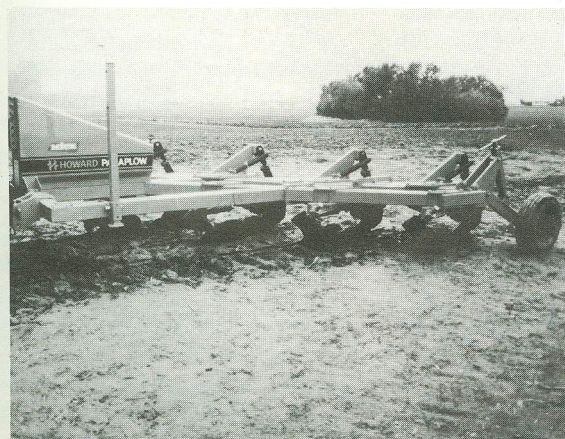
tor of Claas machines in the UK. On the product front, the farm yard manure spreader, the Rotaspreader, enjoyed great success, but largely limited to the UK, and this too was affected by competition and market saturation. Another farsighted move was the development of the large square baler, but engineering problems undermined the product which was subsequently withdrawn.

The 70's were a tough period of rationalization for Howard, and it was clear by 1980 that the group would profit from association with a partner who could broaden the product- and financial base.

The approach by Thrige Agro was therefore a golden oppor-



The first Howard Rotavator



The Paraplow breaks up the tillage pan.



Grubber and rotary cultivator in combination for straw incorporation.

tunity to marry complementary product ranges and complementary geographical strengths. Howard has maintained a worldwide reputation for sound products. This, together with Thrige Agro's financial strengths and bold management initiatives give the many fine people within both organisations an unequalled opportunity to create a strong new international group, providing high quality agricultural machinery to farmers across the world.

World Wide Horizons for Exports

One of Howard's greatest strengths is its world wide network of first class distributors, and this offers enormous opportunities for Thrige Agro's broad product range. A new

team has been set up and they are already travelling the globe, building up strong new relationships and seeking out orders.

Per Martensen in Skive sells all group products into the Scandinavian markets and is responsible for the export administration of products from the Danish factories.

Haagen Olsen handles sales of group products into the French-speaking territories of North Africa and administers all exports from the French factory at Loudun.

Sven Reker is the export manager based in Michelstadt and sells all group products into the German-speaking markets, including Benelux and the Eastern block, as well as being responsible for the administration of German exports together with K. Sammet.

Outside Europe, Erik Matthissen working from Hilleroed, covers the African territories, the Middle and Far East, including Japan, Australia and New Zealand, selling all group products.

Phillip Tinkler will be assisting him for some markets from his base in Malaysia.

Mel Tilly, based at Wymondham, takes the Western hemisphere, Canada, United States and West Indies, Central and South America. He also covers Greece and Cyprus and Pakistan and assists Erik Matthissen in the Middle East.

This team will cover many miles in 1986 playing their part in the chain which gets products from our factories to the world's farmers.



*Chris Great
Marketing Director*



*Lars Bielefeldt
Marketing Manager*



*Erik Matthissen
Export Manager
Overseas*



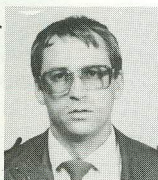
*Mel Tilly
Export Manager
Overseas*



*Bo Erik Christiansen
Export Assistant*



*Kurt Nielsen
Export Assistant*



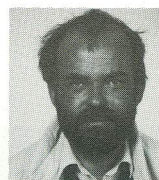
*Per Martensen
Export Manager
Europe*



*Arne Fisker
Export Manager*



*Erik Bjørn
Export Manager*



*Ib Hjorth Jensen
Export Manager*



*Vagn Haagen Olsen
Sales Director*



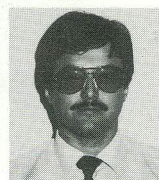
*Sylvette Ferry
Export Assistant*



*Sandrine Mainage
Export Assistant*



*Sven Reker
Export Manager*



*K. Sammet
Sales
Administration*

DENMARK

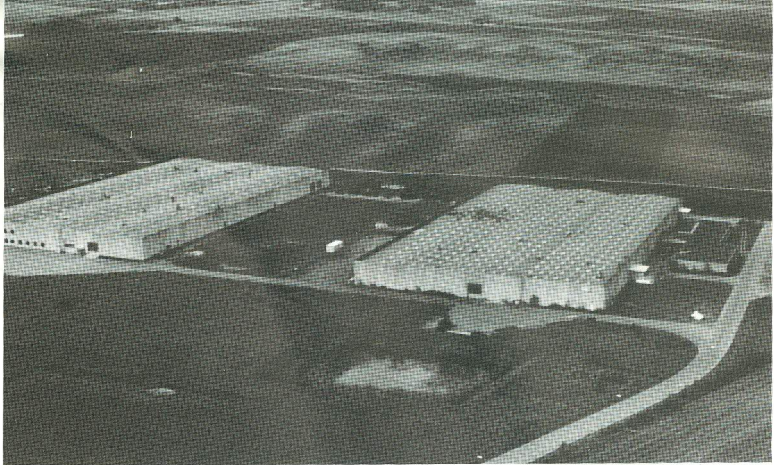
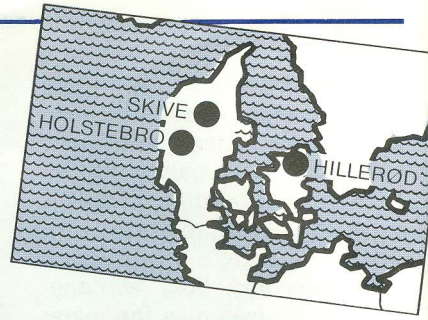
Anders Nielsen / Lars Bielefeldt

THRIGE AGRO in Denmark was established in 1976 under the name of T-T Agro. At the beginning in 1976 120 persons were employed, and the turnover was 28 million D.kr. For 1985 the turnover is estimated at 220 million D.kr. and 500 employees. This means that the company has experienced a considerable growth during its first decade. As it appears from the map of Denmark, THRIGE AGRO has 3 factories in Denmark, namely in Skive, Hilleroed and Holstebro. The main office is situated in Skive together with the new group's headquarters. THRIGE AGRO today manufactures high technology agricultural machinery for farmers throughout the world. The products are marketed under the trade marks: NORDSTEN, GYRO, VETO and HOLSTEBRO JERNSTØBERI. The most important products will appear from the opposite page.

Skive

The company GYRO was founded in 1881 thus being more

than 100 years old. At the foundation the company was situated in the centre of Skive, and over a number of years it developed into the largest company of the city. Today the company is situated in the industrial area of Skive with room for expansion. At the beginning,



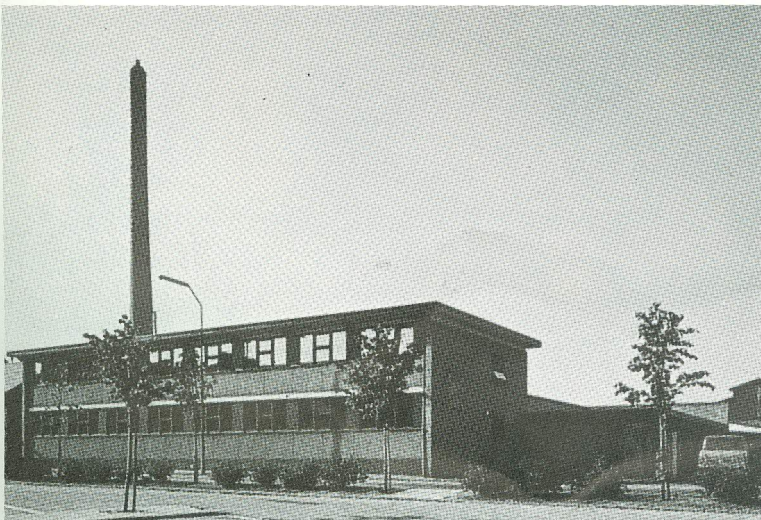
Thrige Agro, Skive (head office).

the production was almost exclusively based on grinding machines, then on the fertilizer distributor VILMO, and later on forage harvesters, but during the years there have been nu-

merous products. Today the production comprises forage harvesters, front-end loaders together with centrifugal and pneumatic fertilizer distributors. Skive has participated from the start of THRIGE AGRO in 1976 and has just installed its first robot, a welding robot, and in October a new modern flexible assembly line with a 3 step Fephosphatizing pre-treatment system will start working.

Hilleroed

NORDSTEN was founded in 1877 in Hilleroed, and until 1963 an iron foundry was included in the company. Over the years many types of machines for agriculture were manufactured such as ploughs, broadcast sowers, threshing machines, straw presses, seed drills, combine harvesters and pick-up presses. During the last decade the company has specialized in

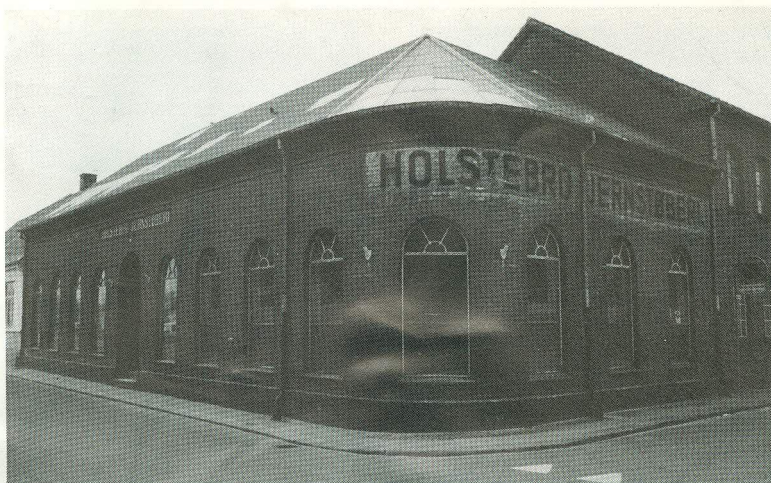


Thrige Agro, Hilleroed.

seed drills for grain, seed and fertilizer. Hilleroed was acquired by THRIGE AGRO in 1981 and got its first robot in January 1985, and in addition Hilleroed has several CNC machine tools. The company is near neighbour to the world famous Frederiksborg Castle which receives 250.000 tourists each year.

Holstebro

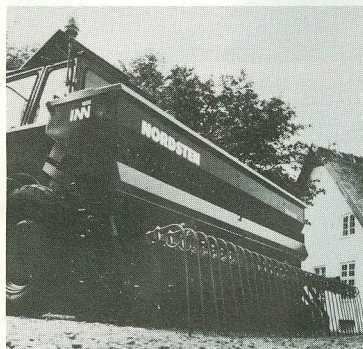
The foundry in Holstebro is the senior company within THRIGE AGRO as next year it celebrates its 125th jubilee. In the course of time a wide range of cast iron goods has been produced by the company and of the traditional cast iron goods we can mention kitchen ranges, stoves, water pumps and iron staircases. Today the production comprises watering troughs for cattle, diaphragm



Thrige Agro, Holstebro (Holstebro Jernstøberi).

pumps, toothed wheels, sprocket wheels and hand wheels together with art and stove rings. Mainly, the company is sub-supplier to a wide range of industries, for example the agricul-

tural machinery industry. You do not have to go to Moscow to see the »Red Square«, as Holstebro has a well-known and popular square of the same name.



Lift-o-matic seed drills have a wide range of optional equipment meeting the farmers' demands.



On the Lift-o-matic CLH 300 the wheels are placed within the working width and the coulters on three rows.



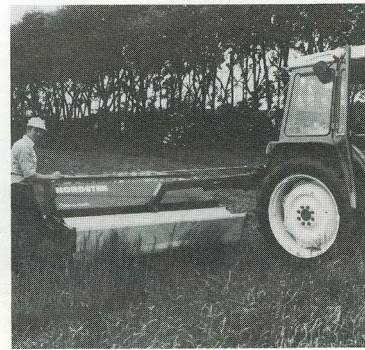
The Combi-matic drills sow both seed and fertilizer at the same time.



On the Air-o-matic pneumatic fertilizer distributor, the fertilizer quantity is controlled by a drive wheel and is thus independent of the driving speed.



The Turbo-matic spinner can be adjusted for a constant spreading width for all kinds of fertilizer.



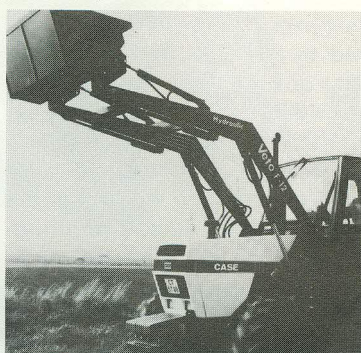
The Disc-o-matic mower conditioner for swathlaying of grass crops gives a light and quick-drying swath.



The forage harvester is mainly used for direct harvesting of grass crops.



The Veto F-15 Parallel with mechanical parallel system is ideal for the handling of pallets and bales.



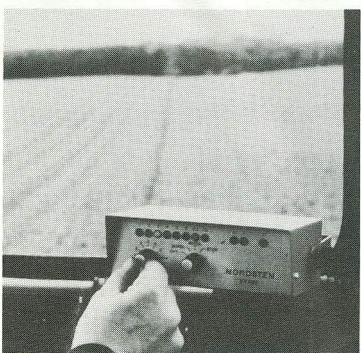
Veto front-end loaders are available for any size of tractor and for any kind of handling.

Combination drilling has come to Scandinavia to stay. Therefore it is at a strategically well chosen moment that Thrige Agro Denmark can offer the Scandinavian market a package consisting of a Nordsten Lift-o-matic seed drill and a Howard Rotalabour or a Howard rotary harrow.

Especially, Rotalabour with its large capacity has achieved some unique results during user tests in Denmark and Sweden in 1985.

In the autumn of 1985 the University of Agriculture in Uppsala, Sweden, has worked with the Rotalabour and here, too, the machine has achieved a very fine result in competition with some of the most well-known rotary harrows.

Furthermore, the Rotalabour distinguishes itself by being extremely easy to operate and maintain, and Thrige Agro's technicians are now working on a further simplification and standardization of the coupling between Nordsten and Howard.



With the Nordsten Monitor NDX 101 Electronic, tramlining is controlled from the tractor cab.



The electronic Calculator PX 50 serves as area meter, milage recorder or bale counter.



NORDSTEN - HOWARD

Combination drilling.

Product managers

Bruno Bedholm: Fertilizer distributors + Electronics.

Poul Hansen: Seed drills + Electronics.

Karsten Wagner: Front-end-loaders + Electronics.

Bo Boysen: Green Line + Howard Scandinavia + Electronics.

Thrige Agro Denmark has 4 well-qualified product managers who each has the responsibility for a product line.

Their field of activity contains among other things:

1. Product courses in Denmark for:
 - Thrige Agro employees.
 - Danish distributors and
 - foreign importers and distributors.
2. Planning of exhibitions.
3. Field demonstrations.
4. Preparation of instruction manuals, spare parts catalogues, sowing tables etc.

5. Preparation of brochures, dias, black-and-white photos, video films, advertisements, posters and various sales information.

6. To keep an eye on products throughout their life and to contribute to the adaption of the products to the needs of the various markets.

7. and a lot more.

The product managers report to the marketing manager.



Chr. Sonne-Schmidt
Managing Director



Svend Thejsen
Technical Director



Peder Nielsen
Production Manager
Skive/Hillerød



Lars Bielefeldt
Marketing Manager



Bent Lund Petersen
Purchasing
Manager



Svend Thomsen
Chief Accountant



Per Kremmer
Development
Manager



Per Martensen
Export Manager
Europe



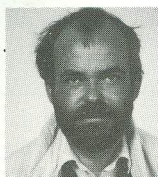
Erik Matthissen
Export Manager
Overseas



Arne Fisker
Export Manager



Erik Bjørn
Export Manager



Ib Hjorth Jensen
Export Manager



Per Lund Pedersen
Production Manager
Holstebro



Finn Egholm
Sales Manager



Rune Axelsen
Sales Manager



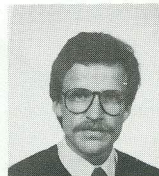
Anders Nielsen
Personnel Manager



Poul Hansen
Product Manager



Bruno Bedholm
Product Manager



Karsten Wagner
Product Manager



Bo Boysen
Product Manager

ENGLAND

John Perry / Chris Great

HOWARD FARMHAND

FARMHAND Limited was incorporated in England in 1965 as a subsidiary of Farmhand Inc., an American equipment manufacturer.

Trading as Farmhand, the company established a good reputation for itself by introducing to the U.K. a range of high lifting front-end loaders and hydraulic bale-equipment from the American factories.

Over the years the product line was expanded and a fair degree of U.K. engineering was put into anglicizing the products to suit the local conditions.

Being fairly innovative in its outlook the company also recognized emerging demands in the U.K. market that could not necessarily be fulfilled by its parent company's product line, but identified equipment that

had already been proven in different parts of the world by other manufacturers, that could find a niche in the U.K.

Accordingly, in 1973 Farmhand introduced to the U.K. farmer the concept of the big round baler and marketing began in earnest the following year. At about the same time the product range was expanded by launching a range of Finnish seed drills.

During the next few years the company continued to expand in the U.K., but the American and U.K. markets and their demands for products developed in different ways. In addition it was increasingly difficult to maintain a competitive posi-

tion with US \$ priced equipment. Farmhand therefore sought alternative products – in particular front-end loaders – from European source and commenced distribution of the Gyro range.

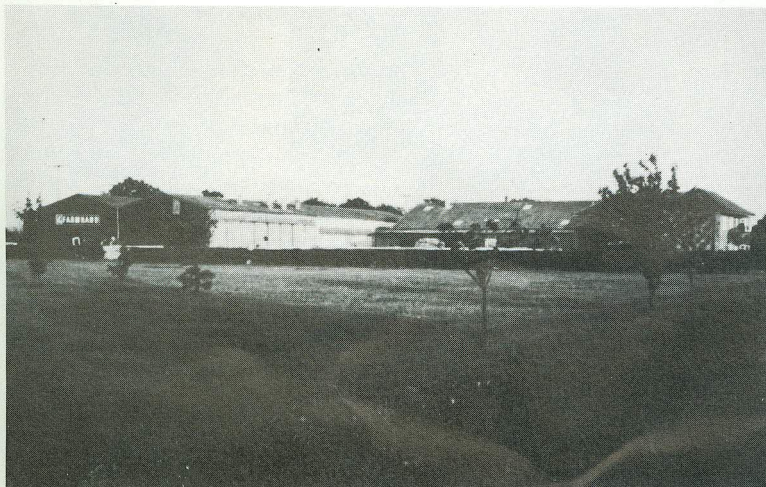
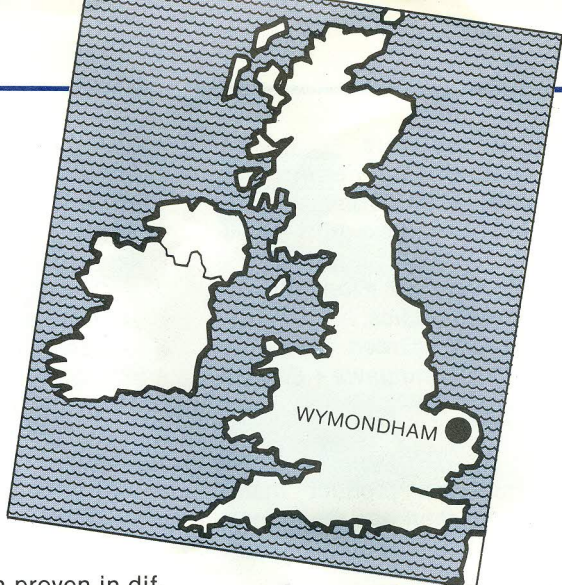
Shortly afterwards a logical conclusion was reached to seek a new parent company, and having already established a relationship with the Vikings, an agreement was reached whereby Farmhand became a subsidiary of T-T Agro Industri at the beginning of 1983.

The latest milestone in the development of the company has been the addition of the Howard business and the arrival of the Howard team. This has effectively doubled the size of our company, and we have marked this by changing our trading name to Howard-Farmhand.

Howard-Farmhand is principally a marketing company, but works closely with its major suppliers to ensure that the products are suitably engineered for the U.K. market conditions.

The Gyro loaders today certainly contain a good deal of our engineering.

Situated in Wymondham Norfolk, 160 km from London, but reasonably close to the East coast ports, Howard-Farmhand is in the midst of a



Howard-Farmhand facilities at Wymondham.

large arable farming region.

Sales are effected through a network of dealerships covering the entire country backed up by staff based either in Wymondham or out on territory.

Placed on a site that it owns of approximately 5 hectares the company has ample room

to expand and modernise its facilities to cope with the additional Howard business.

Prior to the addition of the Howard products, Farmhand had an annual turnover of almost £3 mia. and employed 32 persons. The principle products in the range are the Gyro

loaders, Vermeer balers and Juko drills together with the more recent addition of the Gyro fertilizer spreaders and forage equipment both of which products provide good opportunities for the future. A selection of the equipment is shown on these pages.



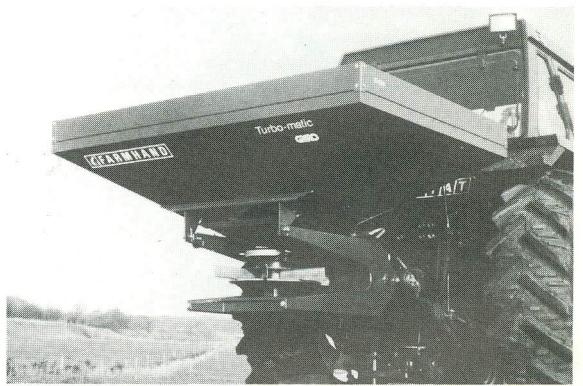
Gyro Loader with Toe-Tip Attachment.



Vermeer Variable Density Baler.



Juko 4 metre Seed Drill.



Gyro Turbo-matic Fertilizer Spreader.



*John Perry
Managing Director*



*Chris Great
Marketing Director*



*Knud A. Hansen
Technical
Production Director*



*Sam Jackson
Engineering
Service Director*

FRANCE

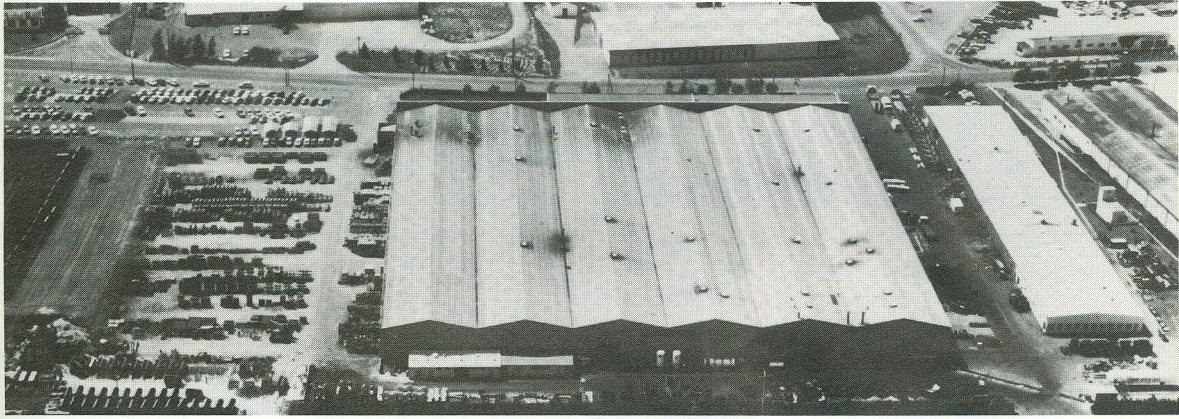
Bernard Boyer / Derek Daines

1938: Foundation of the concern Rotary Hoes Ltd.

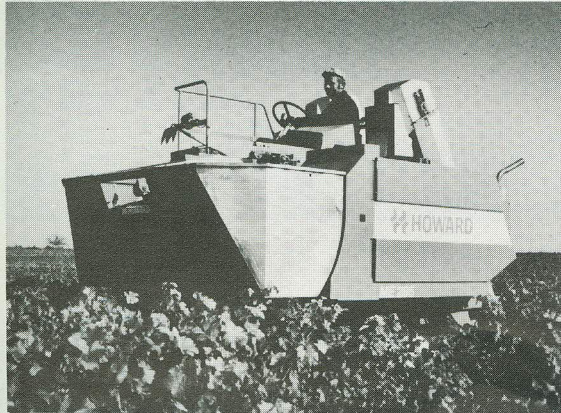
1951: The Rotary Hoes concern decides to establish itself in France.

The same year, the firm Howard Rotavator S.A. starts up its production in Point-Sainte-Maxence (Oise).

It launches the rotary cultivator, a product which very soon gets wellknown to the farmers



Thrive Agro S.A., France.



The grape harvester automatically harvests and cleans the grapes.

as the Rotavator, identifying it with the name of the firm.

During the first 15 years, the firm Howard Rotavator S.A. rapidly develops a full range of cultivators adjusted to the different sizes of tractors.

In the late 60's, the Howard Rotavator S.A. launches the idea of »rationalized farming« thanks to the Semavator, a combined implement obtained by fitting a seed hopper on to the Rotavator.



The Rotalabour in combination with seed drill for soil preparation and sowing in one process.

This product meets with great success, especially in the regions with large-scale farming (the Parisian Bassin and the North-East).

In the early 70's, the Howard Rotavator S.A., facing its

rapid expansion, decides to decentralize its activities, and the Loudun site is chosen owing to the welcome offered by the local authorities. Furthermore, this town is relatively well-centered in relation to the most well-founded markets for the Rotavator.

Thus the enterprise is placed in a town of about 8,500 inhabitants. Now the production plant covers an area of 13.200 m², the office- and spare parts storage buildings cover 5.500 m² and the firm employs 360 persons.

Over the last few years, the Howard Rotavator S.A., expert on the field »soil preparation«, launches successively the Rotalabour, derived from the Rotavator for secondary cultivation, the circular spike harrow

and eventually the Paraplow, a soil loosener.

In the frame of a liberal diversification policy, the Howard Rotavator S.A. contributes since 1974 to the mechanization of grape harvesting by developing the first large-framed machine named the GM. This machine is commercialized in 1976, intended for large farms.

Since then, the range is successively completed with the middle sized harvester ME in 1978, the MT in 1981, and two smaller types, the X200 and the X150 in 1984 and 1985, respectively.

Currently, the Howard Rotavator is the second French supplier in this line.

Thus the Howard Rotavator S.A., pioneer in France for

grape harvesters, confirms its ambitions on this field.

The Howard Rotavator S.A. is classified as No. 12 in order of size among the members of the Association of Producers of Tractors and Farm Equipment, and has over the last working period achieved a turnover amounting to 147 millions Francs, of which 38% from exports.

Thanks to the co-operation of directors, engineers, technicians, employees and workers, the Howard Rotavator S.A. produces more than 9,000 implements in the line soil preparations and the like, 200 harvest machines and 3 million blades a year. This production is sold in France, but is also destined for exports to the five continents.



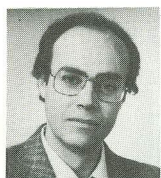
*B. Boyer
Managing Director*



*V. Haagen Olsen
Sales Manager*



*G. Archambault
Purchasing
Manager*



*P. Audecon
Data Processing
Manager*



*M. Chabot
Accounting and
Personnel Manager*



*A. Chiron
Chief Engineering*



*D. Drouaud
Plant Manager*



*Y. Bihoreau
Production Support*



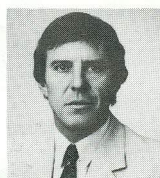
*R. Jamet
Methods Manager*



*A. Lamouille
Product Manager*



*B. Marlow
Product Manager*



*D. Minar
Spares/SAU/Plan*



*M. Moquet
Drawing Office
Manager*

GERMANY

Hans-Joachim Frech /
Sven Reker / Walter Tegethoff

History

In 1938, Mr. A.C. Howard founded the Howard Group, corresponding to his name.

A.C. Howard, who was the son of an Australian farmer, had developed after his engineering studies in 1922 the first fully functioning Rotavator, an implement for soil cultivating. It realized the total new idea of rotating soil cultivating on which system the rotating power of the tractor motor is used by a power take-off shaft for the drive of the soil cultivating implement.

This Rotavator, produced since 1964 in Germany too, established the worldwide success of the Howard Group during several decades.

Howard had started its activities in Germany in 1959 by the foundation of a distribution company at Oldenburg, in the north of our country.

The original successes had been of great promise, and therefore a decision was made to establish our own production company in Germany.

In 1964, Howard took over the Company Michelstädter Hüttenwerke, a foundry and machine manufacturing factory. The existence of this factory situated in the »Heart of the Odenwald« only about 1 motor hour by car from Frankfurt/Main, goes back to the Middle Ages.

On 2nd September 1985, the rather changeable history of this factory moved a further stage with the take-over by Thrige Agro.

The Position of the Company

Michelstadt with its surrounding communities has 14,000 inhabitants. Round about 2,000 are working in the industry re-

presented by 28 smaller middle-sized companies. Besides Cofa, a manufacturer of cosmetics, with 400 employees, Howard Rotavator Maschinenfabrik GmbH. Michelstadt is the most important employer with round about 170 employees.

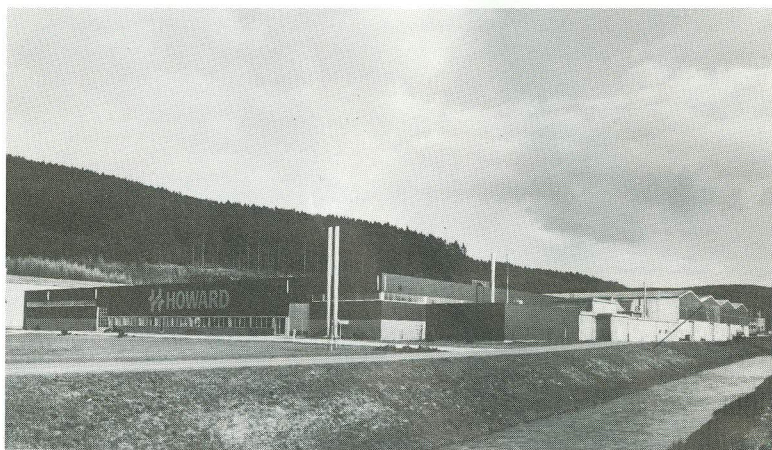
Therefore the development of our company is paid great attention to here.

Besides the industry, the tourist traffic is a main object in Michelstadt. The most famous attraction of the town is the market place with its 500 year old town hall. This building, erected on wooden piers, as well as the partly existing and

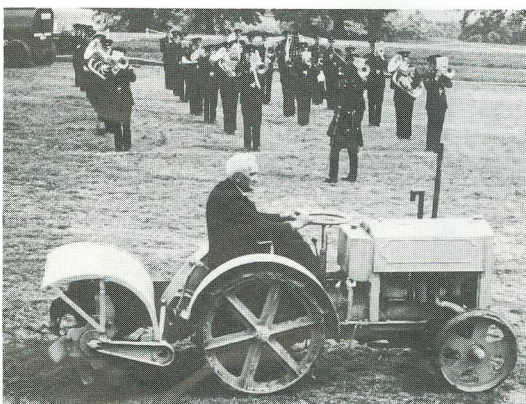


restored town wall and also nice town houses attract a large number of visitors every year.

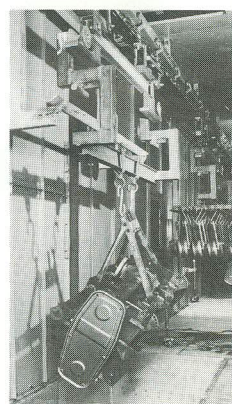
Our new colleagues from



Thrige Agro, Michelstadt 1985.



A.C. Howard drives a tractor with a Rotavator - both developed by himself.



The automatic immersion paint installation.

Denmark who have already visited us may confirm that you can feel good in our little town.

The Production Programme

The average farm size of 15 ha resulted in a concentration on middle-sized machines. Consequently, 3 Rotavator series for tractors up to 100 HP are manufactured in Michelstadt today, which are excellently suited for the German and European markets.

For many years Howard Rotavators have been successfully used for the intensive tillage of stubble and straw. In order to be able to use the same machines for seed bed preparation Howard was the first to introduce to the market the »labour« rotor which can simply be replaced by the blade rotor.

Howard BRD was also the first to develop a combination of a chisel and a cultivator which makes it possible to obtain a suitable combination of deep soil tillage and crumbling at the surface. Another product

developed by Howard, Michelstadt, is the Howard Harrovator, which is now also successfully sold by other Howard companies and engages more than 30% of the production capacity.

The production of wine presses constitutes a separate line of implements. Originally taken over from the Hütten-works, the screw presses of that time have today been replaced by ultra-modern pneumatic machines with fully automatic control.

The number of machines exported from Michelstadt is today 30% - with an upward trend - an appreciable achievement considering that Howard is manufacturing in its own works in the most important export countries.

Since the take-over of the former Maschinenwerke & Hüttenwerke AG, a complete new factory has been built in Michelstadt over a period of 20 years, with modern machine tools and a fully automatic im-

mersion paint installation. Approx. 15,000 m² of the total area of 100,000 m² are under roof. The management is still located in the original office building, which is separated from the factory by the small river Mümling.

Perspectives

The staff and the management appreciate the chance of continuing the success of many years through the take-over by Thrige Agro and thereby securing the existence of the company and the job places. The new efficient company organization with a broad, modern implementation programme is the best guarantee for this.

Perspectives for the Future

Personnel and Management have found out that the take-over by Thrige Agro is the longed for chance to guarantee continuity and jobs for a long time.

Both will do their best to use this chance, and to achieve success for the future.



H.J. Frech
Controller



W. Tegethoff
Sales Manager



Sven Reker
Export Manager



H.E. Pieper
Spare Parts
Counsellor



N. Allmann
Production
and
Purchase Manager



K. Sammet
Sales
Administration



P. Kamps
Development and
Construction
Engineer



E. Trumpheller
Secretary/
Production and
Engineering



H. Kroh
Secretary/Sales



C. Hofmann
Secretary/Financy

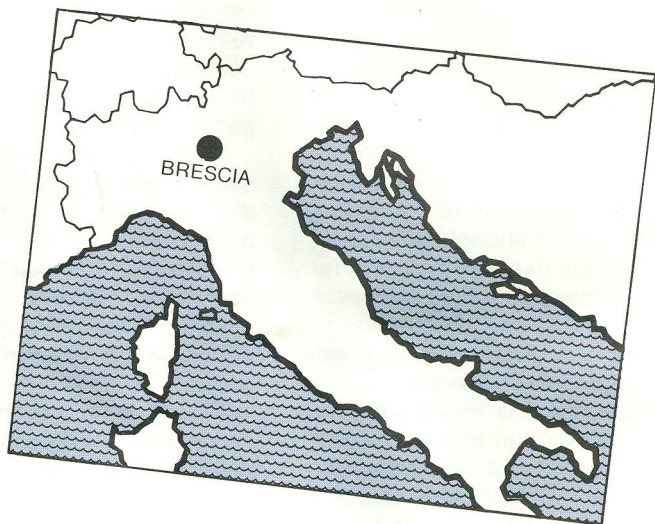
ITALY

Agriculture, with an area of 23 million hectares, is one of the leading factors of the Italian economy. Wheat, with over 3 million hectares, represents, in arable land, the major crop, followed in the Po Valley by maize. In the various agricultural areas throughout the country crops are, however, extremely diversified ranging from vegetables to fruit trees. Among these the leader is wine which covers an area of over 1,000,000 hectares.

The number of people active in agriculture is still very high, 2,500,000 people according to the last census, but progressively decreasing with the spreading of mechanization. The tractor population is very high, but not well distributed and the same can be said of the agricultural equipment necessary for soil cultivation, crop sowing and harvesting. The demand is for reliable and sturdy machines with the objective to obtain, at restrained costs, the highest possible yield: the record yield of maize which farmers in the Po Valley have already been obtaining for years, is a demonstration of this necessity, which certainly is not just local.

Vis-a-vis this agricultural potential, already showing in the sixties, Howard decided to open its own subsidiary company in Italy. The initiative looked well ahead inasmuch as this was the most difficult way to create a marketing outlet in Italy.

In 1962 Howard Rotavator S.p.A. was therefore founded with the task of introducing and distributing Howard equipment, in first place the Rotavators which were soon appreciated by farmers who with the



Thrige Agro, Brescia.

new implement, capable of a large variety of applications, were able to obtain, at low costs, good seed beds and other operations like weeds control in vineyards, olive groves and orchards. Rotavators, which today are still synonyme of rotary tiller, increased in number year by year and their image is one of reliability and

good service. It is estimated that today there are in Italy more than 50,000 Rotavators in operation.

In the course of the years several other implements were added to the Rotavators. Of these, considering the extension of the vineyards in Italy, the wine presses and the mechanical grape harvesters de

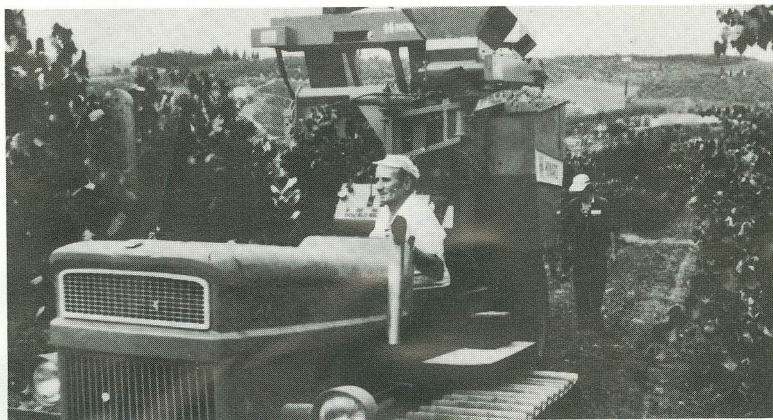
serve a special mention.

Brescia, where the Howard Rotavator S.p.A. is located, was chosen as the basis of operation in Italy for its position in the Po Valley, certainly the largest and more advanced agricultural area of Italy, with very good plainlands and generally irrigated, capable of giving high yields.

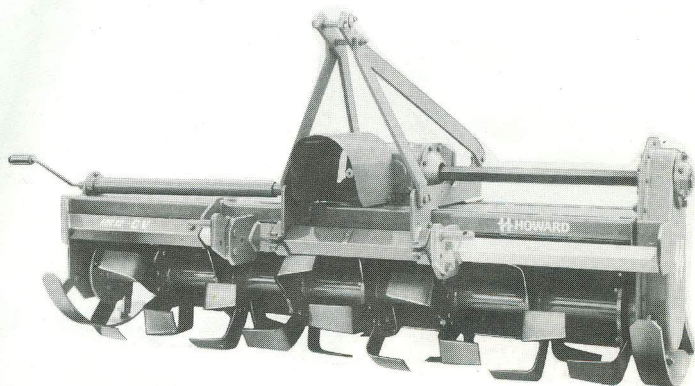
The noticeable extension of the Italian market largely justifies a direct presence of the most qualified European companies and, 23 years later, the idea of having a company of its own operating in Italy has proved far-sighted.

The reputation of our company is not related only to the number of machines sold, but also, and perhaps mainly, to the effort of introducing new technologies to rationalize farm operations and reduce production costs (for instance, Rotavator with spike and blade rotors, subsoilers like the »V« Chisel, Paraplow, etc.).

For this reason the introduction of the new products of the Thrige Agro Group, some of which already known and appreciated in Italy, like the Nordsten seed-drills, will be facilitated by the trust and esteem that the Italian farmer places in us.



Wine harvest by means of a trailed wine harvester.



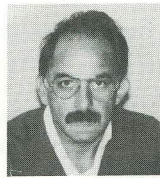
Rotavator Offsettable by screw.



*Armando Mazzitelli
Sales Manager*



*Gianna Cristofolotti
Financial Manager*



*Gabriele Malavasi
Purchase Manager*



*Cesare Pasquali
Sales
Administration and
Shipping Man*

SPAIN

Emilio Martinez Grande

The HOWARD ROTAVATORS are known in Spain since the decade of the fifties. In those days the Spanish HOWARD Company did not yet exist, but some local distributors imported from the United Kingdom these machines which were a novelty in cultivation. In view of the success, in 1965 HOWARD ROTAVATOR IBERICA, S.A. was founded just with a small team of 5 persons. This Company during its ten first years imported and sold the English ROTAVATORS. Due to the restrictions in those years concerning the import licenses, the possibilities of importing were not enough to supply the increasing demand.

To solve this situation in 1974 a new factory was built in Les Franquesas, near Granollers, 35 km from Barcelona, and the ROTAVATORS are assembled there with some critical parts imported from England and France and the remaining are made in Spain.

The range of different models of ROTAVATORS is very extensive from the lighter H-25 Rancho for tractors from 15 up to 40 HP to the heavier HI for tractors from 100 up to 160 HP. Between these two extreme models we have a few different ones: HPL, PMS, ER and EM for tractors from 25 up to 100 HP. The ROTALABOUR is also made in our factory. Concerning the working width the range is from 92 cm to 305 cm depending on the model.

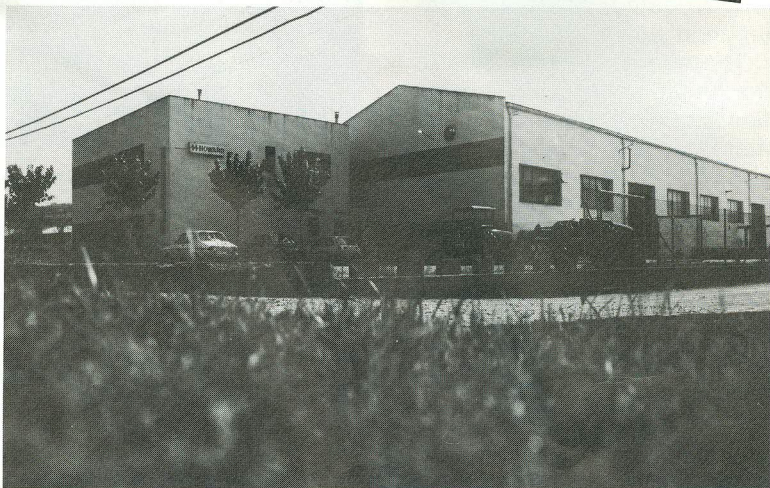
The ROTAVATOR HOWARD makes in Spain, gives a very good service to the farmer. This fact can be noted looking at the high prices paid by the farmers for a HOWARD ROTAVA-

TOR in the second hand market in comparison with the low value of other used rotacultivators.

The geographical area covered by the Spanish Company is the Iberian Peninsula with a cer-

tain concentration of the sales in the horticultural zones.

There are 21 employees of which 11 are in Production and the remaining in Sales, Spares and Administration Departments.



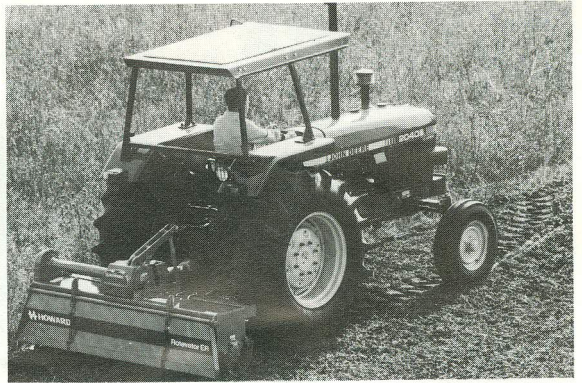
Thrige Agro S.A., Barcelona.



Production facilities.



Efficient seedbed preparation performed by a Rotavator.



The strong Rotavator handles all kinds of soil preparation.



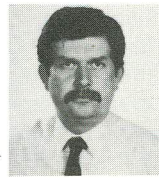
The Rotavator is the perfect equipment for straw incorporation.



Rotavators in all directions.



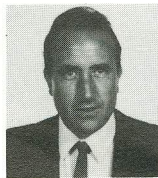
*Emilio Martínez Grande
Managing Director*



*Josep Costa Alguer
Financial Manager*



*Julián Tros de Ilarduya
Commercial Manager*



*Ramón Portell Guirao
Production Manager*



*Juan-Manuel González Santos
Spares Services*



*Rafael Burgos Roldán
Plant Foreman*

MALAYSIA

Phillip Tinkler

Howard actually started as a privately owned company by Mr. Gordon Barnett, a Dunlop rubber planter, in the town of Segamat in North Johore State in the late 1950's. By 1962 he had moved to Selayang near Batu Caves about 10 miles (16 km) north of Kuala Lumpur and the company officially registered as Howard Rotavator (Far East) Sdn Bhd. Although at that time Howard Group had no equity in the company the name was allowed to be used.

This company imported and distributed machines (often specially modified) to suit the plantation industry initially and later rice padi cultivation. Gordon Barnett was a major force in developing the Rotavator/rice market especially with tractor mounted machines and almost single handedly developed the now traditional »contractor« rice Rotavation market in the region.

Sales in the early days were mainly Rotavators, but later Rotaslathers and distribution of other products joined the range.

In 1970 Gordon sold 51% of his company to Rotary Hoes Co. Ltd. (later Howard Machinery Plc.) and sold the remaining 49% to Inchcape Malaysia in 1974, to retire to farming in New Zealand only to get bored and return to corporate life in UK.

The company grew steadily to a magnificent total of 11 people by 1976 based in 3 beautiful tin miners houses on 7 acres of land amid flame trees, mangoes etc. Unfortunately, the Government wanted the land to build a new express road and at the same time a decision was made to set up a small factory. So the company

was moved 0.5 km up the road to a new factory premises, concrete, no trees. While Howard Rotavator (FE) Sdn Bhd still carried on marketing functions initially a sister company, Ala-



Thrige Agro Ltd., Malaysia.

pertanian Sdn Bhd was formed to manufacture mostly fabricated items. Alatpertanian as a name is a corruption of Malay language - »alat alat« meaning implements and »pertanian« meaning agriculture and was a joint venture between National Farmers Association 49% and Howard Rotavator Pty Ltd., Australia (later Farming Aids Ltd.) 51%.

The new manufacturing venture was very successful, importing transmissions and making bodies to complete machines as well as making bodies and components for the factory in Australia.

Established beginning of 1977 the new company recovered its establishment costs in 14 months and for 3 years ran 2

shift per day to cope with demand. In 1982 Alatpertanian took over all the function of the marketing company and the name changed to Howard Alatpertanian Sdn Bhd.

In the few years of its existence, the company has become one of the largest implement manufacturers in ASEAN and has developed new machines and adapted old ones to give a quite comprehensive range of well priced quality products suited to the region which compliments other machines imported and distributed.

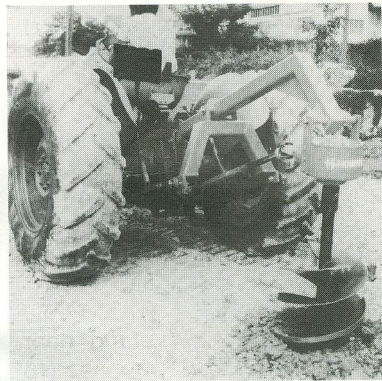
Now, extremely honoured to be part of the Thrige Agro Group, Malaysia looks forward to future growth and to compliment the new Group.



HFS500 disc Spinner Fertilizer SPREADER.



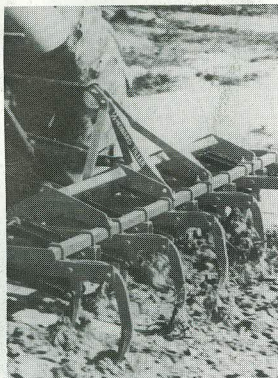
HR11 Series ROTAVATOR.



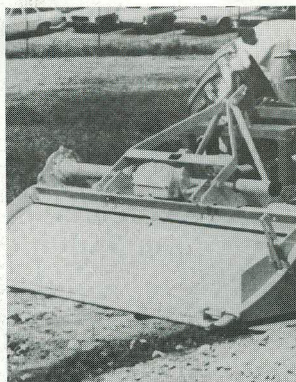
PHD31 POST HOLE DIGGER.



SERBATREK.



TINE TILLER.



UNIMEX LOW COST-HIGH OUT-PUT. Mix-in-place soil stabilisation.



HS21 Series ROTASLASHER.



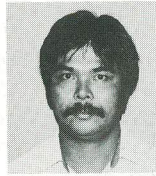
P.J. Tinkler
Managing Director



R. Khoo
Company Secretary
Finance/Admin
Manager



Mohd Yusoff
Sales Manager



Adl Rahman Said
Production
Manager



Choo Weng Sum
Commercial
Co-ordinator



Edmund Loke
Import/Export
Supervisor



Rahamad Naning
Engineering
Designer



Dominic Damien
Planning/
Purchasing
Supervisor



G. Palaniandy
Service Supervisor



Choung Suit Kong
Research and
Development

THRIGE AGRO*news*

Rational implements
for modern farmers.



SYMBOLS:

- THRIGE AGRO production and sales companies.
- THRIGE AGRO sales companies.
- ▲ Importers/Agents.

NORDSTEN HOWARD VETO GYRO