



Welcome to Whirlpool Norrköping

Whirlpool Corporation is an American company quoted on the New York Stock Exchange. We are a global group of companies specialising in the development, manufacture and sale of domestic appliances and white goods for the home.

Whirlpool Corporation is the world's leading manufacturer and marketer of major home appliances, with 67,000 employees, and 67 manufacturing and technology research centers around the world. The company markets Whirlpool, Maytag, KitchenAid, Jenn-Air, Amana, Brastemp, Consul, Bauknecht and other major brand names to consumers in nearly every country around the world. Whirlpool's European Operations' Center is located in Comerio (VA), Italy.

Our factory in Norrköping has built on its experience and specialist skills since the early sixties and is now the Group's main technology centre for microwave ovens. Yesterday's factory has become today's sophisticated modern manufacturing facility, with all the resources needed for efficient, state-of-the art production – from idea to finished product. Over 400 people work at the plant, about sixty of them in Research and Development.

Whirlpool Norrköping produces about 400 different models on a continuous basis. In all, more than 400,000 ovens are made here each year. Most of them are sold in Europe and North America.

The Norrköping plant aims to remain Whirlpool's first choice for the production of built-in microwave ovens and innovative microwave products. All operations and business activities at Whirlpool Norrköping must be noted for their high quality, creativity, cost-efficiency and flexibility.





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Kontakta: Magnus Björling, tel. 070-60 90 173 eller Niklas Forsberg, tel. 070-331 35 44



www.yit.se





A strong team on a global playing-field

A company is no stronger than its weakest link. If all our links are strong – from suppliers and the company's own internal resources to the people who deliver our products to the customers – our business will boom, jobs will be secured and we will remain a player to be reckoned with on the global white goods market.

Given the many competent, resourceful and optimistic people who work for the company – you can see a few of them in the picture below – we should have every chance of succeeding, both now and in the future.

The following is a brief presentation of our company, our products, our staff, our customers and a few of our suppliers.

Welcome to Whirlpool Norrköping – the natural choice for the development and manufacture of microwave ovens in the Whirlpool Group!

Proffice är det specialiserade bemanningsföretaget med över 10 000 medarbetare i Norden. Vi verkar inom personaluthyrning, rekrytering och omställning.

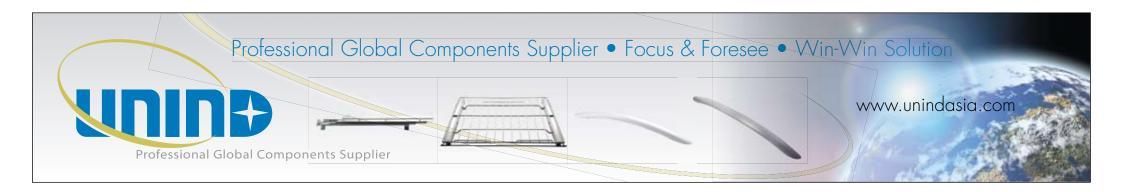
www.proffice.se





From TV sets to a centre for microwave ovens

Today's operations at Whirlpool Norrköping have their roots in the production of electrical components, remote controls and radio and TV sets. However, as far back as the early sixties the Norrköping factory had become something of a centre for the development of microwave technology. The fact that Whirlpool Norrköping was among the Swedish pioneers of microwave technology was a major factor in making Norrköping the Whirlpool Group's technological stronghold in this particular field.









Whirlpool Corporation

1911	The Upton Machine Co. is founded in St. Joseph, Michigan, USA, for the manufacture of electric, motor-driven wringer washers.
1950	The company changes its name to Whirlpool Corporation.
2011	Whirlpool Corporation celebrates 100 year

Whirlpool Sweden AB

1940	Manufacture of radio sets starts at the newly-built Philips-owned factory Nefa in Norrköping.
1962	Development of professional microwave ovens starts in Norrköping.
1974	The company changes its name to Philips Norrköpingsindustrier AB.
1987	The last colour TV leaves the factory.
1989	A joint venture between Whirlpool and Philips is formed and the company name is changed to IREMDA.
1990	Start of manufacture of the first combined forced air and grill microwave ovens.
1991	Our VIP generation of microwave ovens featuring a number of unique patents, such as DES & CRISP, is introduced.
	Whirlpool Corporation buys out Philips to create Whirlpool Europe (WE).
1993	The company name is changed to Whirlpool Sweden AB.
1997	Ten million microwave ovens have now been produced in Norrköping.
2002-2003	Production modified for built-in microwaves.
2003-2004	The two first platforms for Built-In Microwaves, Mini Built In and OPERA, start production.
2009	A third new platform is launched, MiDi Built In.

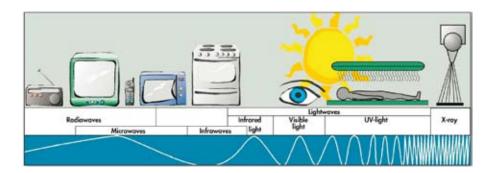
El och värme från oss. Tryggt och säkert.





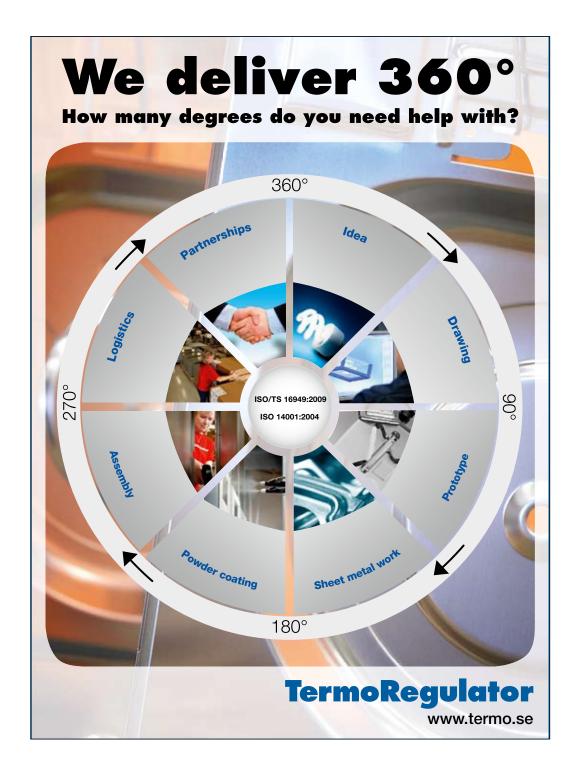
Vibrating water molecules heat the food

The microwaves used in a microwave oven are actually a form of electromagnetic radiation having a frequency of 2.45 GHz. This means that the polarity of the electrical field changes about 5 billion times each second. The water molecules in the food, known as electric dipoles, start to vibrate under the effect of the alternating electric field induced by the microwave beam.



This molecular movement in turn creates thermal, or heat, energy, which heats the food by friction in a process called dipolar heating. Ions such as salt are electrically conductive and heat the food like a resistive heating element. This process is known as ohmic heating. Both processes make microwave cooking quick and efficient.

In the adjacent diagram you can compare the electromagnetic energy with the frequency of the electromagnetic waves used in several of our commonest appliances.







Global trading network

In all, Whirlpool's factory in Norrköping delivers more than 400,000 microwave ovens per year in about 400 different variants. Over one fifth of the ovens are exported to the USA. The greater part of the remaining assortment is sold on the important European market, with the greatest volumes going to France, Italy, Spain and the Benelux countries.

Whirlpool constantly aims at achieving a logistical two-way flow to cut down on the no-load distances to be covered by the carriers. The finished ovens are taken to market on the outward journey to mainland Europe, while raw materials and components are brought back to the factory in Norrköping on the return journey. We work in partnership with major international shippers to ensure that our transport requirements, both overland and maritime, are properly covered.

Our just-in-time scheme does away with the need to maintain large stocks of components or finished products. All "raw materials" reach the factory precisely when they're needed.

GUANGHE INDUSTRY

Guanghe was founded in 1985 with starting business of metal stamping parts. We have now expanded our business into wider range, i.e. tooling design and manufacturing, power coating, silk screen painting, part assembly and fastening series products. With many of our products exported worldwide, our reputation for quality specials has spreaded both at home and abroad.

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Tät dialog med kunden är en förutsättning för lyckad bemanning. Industrikompetens breda samarbete med Whirlpool skapar god kunskap och förståelse för kundens verksamhet. Vårt affärsområde Resurskonsult kan därmed leverera högpresterande konsulter med kort varsel.

Whirlpool i Norrköping monterar microvågsugnar för inbyggnad i kök. Produktionstakten anpassas efter konjunkturen och den globala efterfrågan. Bemanningslösningar är ett smidigt sätt att parera toppar och dalar i produktionen. Att bemanning skulle innebära en risk för sämre kvalitet avfärdas av Anita Hedling, personalansvarig på Whirlpool i Norrköping.

 Nya personer kräver en viss inlärning men våra samarbeten är långsiktiga och Industrikompetens har bra koll på våra krav och förutsättningar.

Som mest har Industrikompetens haft 22 konsulter på plats samtidigt i Whirlpools produktion. Vid ett tillfälle beställdes sju personer med kravet att montörerna skulle finnas på plats redan dagen efter.

 Vi löste önskemålet och det är skönt att se att Whirlpool litar på oss fullt ut, säger Örjan Bäckstrand, ansvarig för Industrikompetens affärsområde Resurskonsult i Norrköping.

Whirlpool förses med effektiv, engagerad, snabbutbildad och noggrann personal. Solskenshistorien om arbetslaget som uteslutande bestod av våra konsulter är bara ett av många bevis. När arbetslaget tog plats vid bandet förklarade Whirlpools arbetsledare att kravet var 44 monterade enheter under kommande kvällsskift.

 De överträffade mina önskemål och slutmonterade 64 enheter! Det var bara att ringa och ge beröm för rekryteringen, säger Conny Barklund, arbetsledare på Whirlbool.

Kvällen efter klarade linjen 72 enheter och innan veckan var slut monterades 84 ugnar under kvällsskiftet. Ryktet spred sig om nykomlingarna som redan höll jämn takt med Whirlpools rutinerade montörer. Det blev besök av produktionschefen och fortsatt beröm till vårt arbetslag.

 Industrikompetens ger oss snabbt de kvalificerade resurser vi behöver vid sjukdomar, specialuppdrag och produktionstoppar. Bemanningslösningar är smidiga för oss och dessutom en viktig rekryteringskälla, säger Anita Hedling.

Text: Hans Ljung, Östgötaforum



Industrikompetens etablerades 1997 med syfte att samordna, planera och effektivisera den kort- och långsiktiga kompetensförsörjningen till regionens industriella arbetsgivare. Efter att från starten främst ha levererat bemanningstjänster inom verkstadsområdet, är numera Industrikompetens en komplett partner i kompetensförsörjningsfrågor med kunder inom såväl det privata näringslivet som offentlig förvaltning och service. Vi kan idag erbjuda våra kunder en helhetslösning som få kan matcha. Och vi gör det med spetskompetens inom varje enskilt område.

www.industrikompetens.se



Extensive development and testing programme

Taking known customer needs as their starting point, some sixty people at the factory in Norrköping are occupied full-time in developing new ideas, calculating, analysing, synthesising, measuring and testing.

Their work includes tests on combinations of different heat sources, development of microwave, heating and control systems, and identification of material combinations that will make the ovens a pleasing addition to the kitchen environment at the same time as they are easy to clean. R&D is directed both at the development of entirely new product platforms and at the improvement of existing ones. Modularised product architecture enables many variants to be produced from a single basic structure.

A significant phase in the production of a new oven is the development of our own electronic system for control of the cooking functions. This includes everything from the basic hardware to the software and layout of the circuit boards. Here, the Norrköping factory's long experience of electronic systems for TV and other appliances has proved invaluable.



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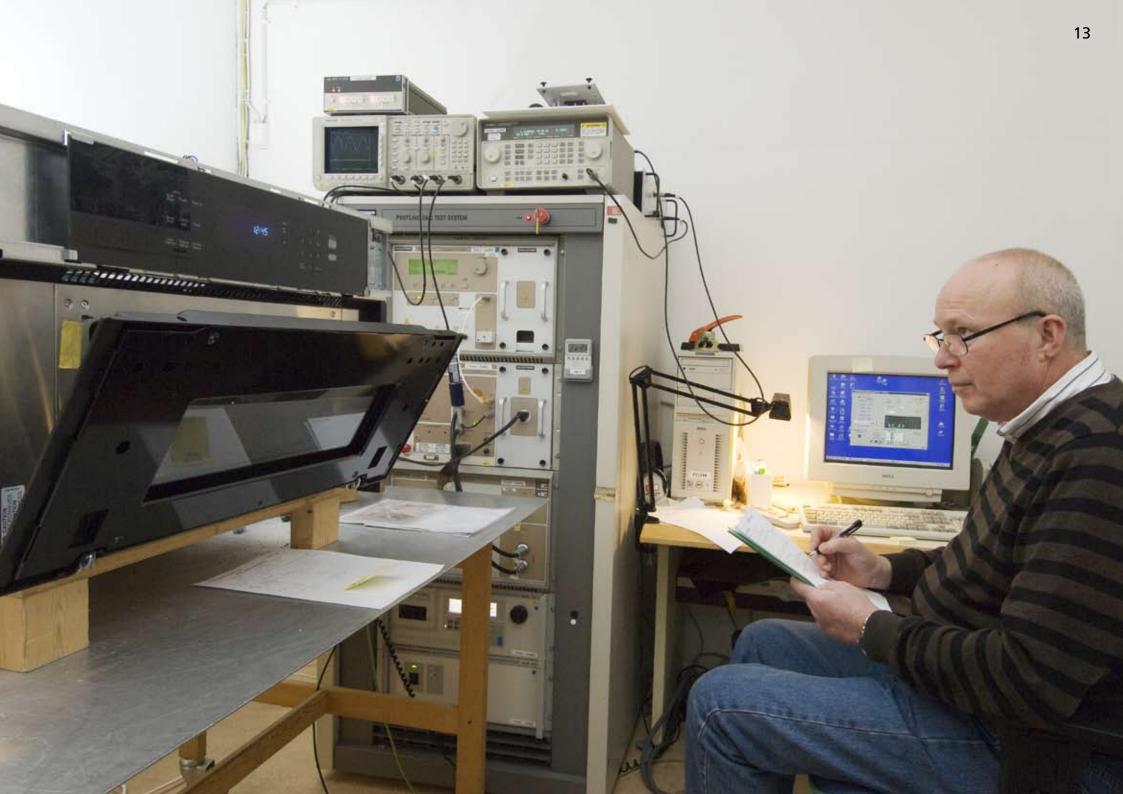


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User perspective controls development

The closeness between research, product development and production enables development cycles at the Norrköping factory to be kept short. Modifications to products and processes can be made quickly and simply.

Before a new microwave oven is given the go-ahead for serial production, it is subjected to extensive testing to ensure that it can be guaranteed to stand up to general release. Testing is carried out both in our own sophisticated thermal and electronic laboratories and in our experimental kitchens.

In our experimental kitchens, we test and develop new heating methods, novel areas of application, recipes and product quality – from the pre-development phase to final inspection. The performance of an oven is always tested from the perspective of the user.

When it comes to development of microwave ovens for other Whirlpool factories, Whirlpool Norrköping cooperates extensively with its Whirlpool colleagues in Shenzen in southern China.



Genom personliga relationer och hög specialistkompetens kan vi vara en god partner som finns nära dig.

Kontakta oss så berättar vi mer! Tel 0771-33 55 99







Stable supplier network

Around 70 percent of our products' value is today made up of the purchase cost of the materials of which the products are made. Our relationship with suppliers and our ability to influence both the price and quality of raw materials are therefore of supreme importance to us.

Whirlpool's strategy in this respect is to keep the number of suppliers and partners to an absolute minimum in each technological field. Our aim, wherever possible, is to build up a supplier base common to the entire group in order to acquire advantages of volume through collective purchasing schemes.

We likewise strive to build up a stable, dependable, close relationship with our suppliers. Normally, suppliers are invited to participate in product development at a very early stage, thereby enabling us to influence the design of the components we need in order to achieve maximum long-term productivity.

For electrical components and certain other raw materials, we rely on a global network of suppliers, while for other, more customer-specific or designed components, we tend to work with local suppliers. Local suppliers provide us, for example, with items of sheet metal, plastic and glass.

Du kan allt om din produkt. Vi kan allt om förpackningar!

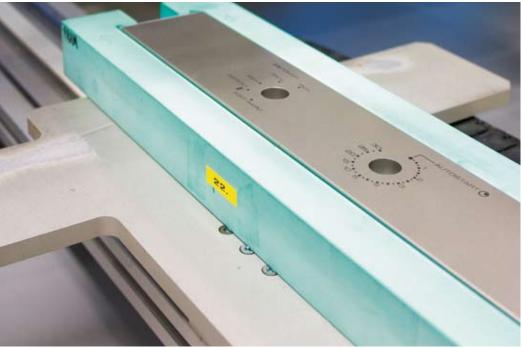
SCA Packaging Sweden AB 0370-420 00 www.scapackaging.se











The earlier we get involved, the bigger the benefit for you

Nolato Polymer offers advanced development and injection moulding in plastic, TPE, rubber and silicone. We are just as much a partner for ideas and development as we are a product and systems supplier. Taking advantage of our many years of experience, our innovative thinking and our in-depth knowledge early on therefore creates a solid foundation for continued cost-effective production.

▶ And you also get the security, resources and expertise that the Nolato Group has to offer, too!





Modern production methods and flexible technology

Whirlpool Norrköping uses modern production methods and is up among the leaders when it comes to technological flexibility. With a floorage corresponding to more than 40,000 square metres, there is plenty of scope for innovative thinking, cost-efficiency and rapid adaptation to the changing demands of the market.

Assembly of the finished product is handled by smart production systems featuring automated final-inspection and packing functions. The shortest series is a single oven; the average series comprises eight ovens.

Assembly is sub-divided into a number of small manufacturing units allowing adequate flexibility for the volumes demanded.

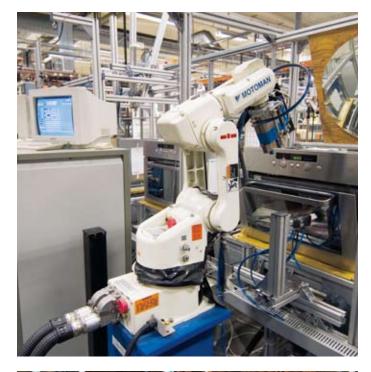
The automated final-inspection system incorporates a range of sophisticated technical features, including a camera system for visual assessment.

Smart production systems

The production systems themselves are based on a modular design, enabling extensive diversification in just a short period. Much of the manufacturing process is based on our "lean operations" concept, "lean" here meaning use of the minimum possible resources. The production system can quickly and easily be adapted to new situations and demands without the need for major adjustments.

The lean concept enables the factory to supply ovens in very sort series. Given just a few weeks' notice, an entirely new product can be supplied, provided it is based on modifications to existing models.

Thanks to highly flexible production procedures and a modular-based product, only a few individual processes or factory workstations need altering in the event of product modification.





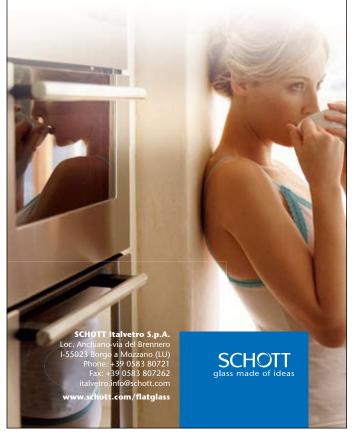




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