11th year - 2011- nr 1

VALK MAILING

a publication of Valk Welding

Anniversary edition

50 YEARS IN WELDING TECHNOLOGY

30 YEARS IN WELDING ROBOTS

ALSO IN THIS ISSUE:

Valk Welding was founded 50 years ago this year. What began with the sale of welding equipment to Dutch metals companies has grown in those 5 decades into a leading internationally oriented welding technology company. With its own establishments in a number of European countries, a total of 1800 installed robot systems and the monthly delivery of over 600 tons of welding wire, Valk Welding is now one of the biggest total solutions suppliers for the European welding industry. The many innovations developed by Valk Welding in partnership with one of its manufacturers, Panasonic Welding Systems, have facilitated the flexible automation of welding production in Europe. Valk Welding regards it as its mission to continue to invest in knowledge and in the years to come to disseminate its experience in this area to the entire European manufacturing industry and even beyond.

1961 1988 2000 2011

valk welding

1961 - 1990

1961 LAS Verkoopmaatschappij is established as an agency of Cloos Schweisstechnik Germany.

1963 The agency of Ideal Schweisstechnik Germany is brought into being.

1965 LAS Verkoopmaatschappij opens establishments in Belgium and expands its sales area to the entire Benelux region.

1966 LAS Verkoopmaatschappij starts the automation of the arc welding process and the first special appliances are delivered in the Benelux region, mainly to the agricultural machinery industry. This first step towards automation is followed ten years later by robotisation.

1967 LAS Verkoopmaatschappij expands and relocates to larger premises in The Hague.

1978 The first Unimation hydraulic robots are launched on the Benelux market via Cloos Germany.

H.L.J. Valk buys the shares in LAS Verkoopmaatschappij from the original investor, the company Van der Heijden in The Hague.

1979 Relocation from The Hague to the current location in Alblasserdam.

The first hydraulic Unimation robot in the Netherlands is delivered to the Dutch firm Kemi. This is a robot for welding applications. LAS Verkoopmaatschappij acquires the dealership for IGM in the Benelux region.

1981 LAS Verkoopmaatschappij starts Valk Inc. in a subsidiary for the sale of IGM robots in the USA. Remco H. Valk moves to the USA to oversee this company.

1983 Remco H. Valk returns from the USA owing to the health problems of Henk J.L. Valk and takes charge of the sale of welding robot systems in the Benelux.

1984 The partnership with the welding wire manufacturer C.I.F.E. is brought into being.

1986 LAS verkoopmaatschappij celebrates its 25th anniversary. This marks the change of name from LAS Verkoopmaatschappij to Valk Welding, mainly in order to simplifier international contacts.

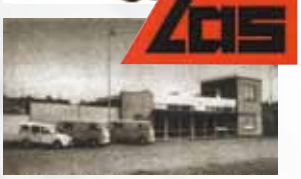
1987 Installation of the hundredth (Cloos) welding robot at the company Tijdink Metaalwaren B.V.

1988 The Panasonic agency in the Benelux is brought about following the visit of Remco H. Valk to Panasonic in Japan.

1989 Cloos Schweisstechnik terminates the partnership with Valk Welding.

In response to the explosive growth of Valk Welding and owing to the age of Henk J.L. Valk, Remco H. Valk takes over the general management of the companies belonging to the Valk Welding Group.

1990 The major breakthrough in the area of arc welding robots has become a fact! The huge success at the Techni Show '90, at which more than 50 Panasonic welding robots are sold, heralds the definitive breakthrough of Panasonic welding robots. That is mainly because they form a competitive alternative



50 YEARS' EXPERIENCE I

Remco H. Valk, who took over the management of the company from his father at the end of the eighties, knows better than most which factors are responsible for the growth of the company. Robotisation and digitisation, knowledge and service, internationalisation and a total programme for welding production are key terms that explain the company's headlong growth in the past three decades.

The sale at the end of the seventies of the first generation of welding robots on the Dutch market placed Valk Welding among the pioneers in this area. It was also in that period that the first CNC machines were placed on the market, which together with industrial robots led to a true wave of automation in the metal industry. Because the programming was very time-consuming at that stage, they were used only for large series. The experience Valk Welding had gained in the automation of arc welding in the sixties made it possible for the company to respond effectively to this new development. The sale of the first generation of welding robots enabled Valk Welding to extend its knowledge and experience and its competitive advantage in this area.

30 YEARS' EXPERIENC

Valk Welding takes Japanese robot technology to the Benelux region

With the same pioneering spirit, in 1988 Remco Valk became one of the first to take Japanese robot technology to the Benelux with the Panasonic dealership. The Japanese robots presented an excellent alternative to the more expensive robots of the European manufactures, although the market did have to get used to them at the time. During that period the market mechanism gradually began to change shape too. Manufacturers could no longer afford to dictate to the market with large volumes. The demand for more product variation rose, and the demand for small series grew with it. Flexibly deployable CNC machines and welding robots formed the response to rigid automation systems.

Breakthrough follows in 1990

The breakthrough for these welding robots on the Benelux market followed in 1990 with the sale of 90

N WELDING TECHNOLOGY

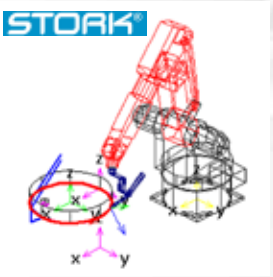
Panasonic AW welding robots in one year. The first customers, including Case-New Holland, MCFE, Bosal, Alcomij, Aalbers and Kemi are still included in the clientele, and one of them is even still using the AW. That made Valk Welding one of the biggest robot customers of Panasonic Welding Systems in Japan, which led to closer partnership in the development of the technology and the offline programming software DTPS. In 1996 the first DTPS licence was installed at Stork PMT, and shortly afterwards at Hansa Mertens in Belgium. This DeskTop Programming System made it possible to programme the welding robot on a PC outside of production. The arc duration and flexibility rose sharply as a result. Now with 300 users, DTPS has since grown to be the most commonly used offline programming system for (Panasonic)welding robots.

Digitisation of the welding process
The role of software in the steering of the robotised welding process is gaining in importance. Not only the welding programs, but even the complete system, including the welding jigs, can be drawn and simulated in DTPS. The Valk Welding engineers are able as early as the offer stage to judge whether a specific welding application is actually feasible and whether it is worth giving the client a complete 3D proposal.

E IN WELDING ROBOTS

To meet the wishes of users as closely as possible the engineers of Panasonic Welding Systems in Japan work together with the Valk Welding engineers on continuously improving and extending the options provided by the DTPS software. With its welding know-how, Valk Welding makes an indispensable contribution to this.

Digitisation made further progress in the steering of the welding process. At the beginning of 2000 Panasonic Welding Systems was the first to produce a compact digital control system, the Global Controller, in which the welding and current source are integrated in a single system. The most important benefits of this were higher performance, improved welding quality and faster programming. This was the first time that it became possible to lay down commonly used patterns and functions such as arc start-retry and wire stick release in the control system.



1990 - 2000

for the more expensive European makes at that time.

Valk Welding's market share rises explosively to 75%! In this peak year a total of more than 90 Panasonic welding robots are sold.

1994 Remco H. Valk takes over the shares in Valk Welding Group from his father, Henk J.L. Valk.

1996 The DTPS offline programming system is successfully installed at a customer's company for the first time. Stork PMT in Boxmeer takes the software into use as the world's first licensee. This is just the beginning. More than 300 companies (2010) have yet to follow!

Cees Wieringa has a 25% holding in Valk Welding

1997 Opening of new premises at Staalindustrieweg in Alblasserdam.

It is during this year that the partnership with Nachi Robots starts, and the first two robots of this make are sold.

The three-hundredth Panasonic robot is sold to furniture manufacturer and interior fitter Marko in Veendam. Together with Z-Tech Products Valk Welding delivers a large and complete automated production system with a welding lane consisting of three welding robots and a transfer system. The installation achieves a capacity utilisation level of more than 95%. This is unique for this kind of application in the sector in 1997.

1998 Valk Welding delivers its four-hundredth Panasonic welding robot to the Dutch firm RoboWeld.

Valk Welding delivers two Nachi spot welding robots to New Holland Belgium (an agricultural machinery manufacturer). These Nachi robots are used to produce parts for combine harvesters.

1999 Launch of the 'plug and weld' robots; low-price welding robots that can be installed by experienced customers themselves.

The Wire Wizard wire feed products are added to the range. These systems make it possible to increase the productivity of welding robots even further.

Valk Welding presents a standard welding robot cell during Welding Week '99. The low price level, the quality control system and the short delivery time enable Valk Welding once again to place a highly competitive welding robot on the market.

At Viking a grinding robot is used for the production of a new Dutch phenomenon, the 'clap skate'.

2000 Valk Welding launches the IntelliARC welding parameter control system.

Valk Welding creates a 70 m^2 training area and a Technical & Training Centre of more than 50 m^2.

2001 Panasonic introduces the Global Controller, Panasonic's first fully digital control system with an integrated welding current source.

Valk Welding starts with detaching experienced programmers.

2001 - 2005

Valk Welding celebrates its 40th anniversary.

Valk Welding enters the Danish market with the dealership for Panasonic.

The sale of solid welding wire increases to 450 tons a month.

2002 Valk Welding starts the sale of 3M welding masks and fresh air systems.

Valk Welding develops a simplified programming system for Mitsubishi Caterpillar Forklift Europe (MCFE), which makes it possible for operators without professional knowledge to use a touch screen to switch to a welding programme for one of the four hundred variants.

With a universal angle bending robot for automating existing angle bending machines, Valk Welding offers a user-friendly automation solution for the supply industry.

The service help desk is available 16 hours a day, 6 days a week.

With the delivery of the first welding/cutting robot to Wolter & Dros, Valk Welding sets the trend in robotised plasma cutting in the steel construction industry.

2003 Valk Welding delivers several welding robot systems to a new production facility of Thermo King in China.

Valk Welding extends its range of welding wire with nickel alloy welding wires.

2004 Valk Welding opens its own establishment in the Czech Republic to serve Benelux customers with a production location in that region and to continue to expand to the East European Market.

Launch of a standardised robot cell for the car industry, the first robot cells are delivered to Bosal in France, Turkey and Spain.

With the establishment of Valk Welding France, Valk Welding intensifies its sales and service activities for the French market.

2005 Valk Welding delivers welding robot systems to the Polish, Czech, French, German and Danish establishments of multinationals.

Valk Welding starts the distribution of Wire Wizard wire feed systems for the whole of the European market.

Panasonic introduces the TAWERS arc welding robot, a new generation of welding robot in which the robot and welding machine controls are integrated in a single 64-bit control system.

Launch of DTPS G2 programming and simulation software, fully geared to TAWERS, Global 2 control and 3D Solids.

Valk Welding completes a major robot project for Polish trailer builder Wielton. This is a new market in which Valk Welding will focus throughout the whole of Europe in the years to come.

Valk Handling now starts to use Fanuc robots for handling projects.

Valk Welding delivers a laser welding robot to Versteeg Metaal Groep (VMG) for the welding of balcony railings.

From trading

The step to European System Integrator
The number of welding robots sold now stands at 1500, a number of which to the Polish, Czech, French, German and Danish establishments of multinationals. Valk Welding started its own establishments in Denmark in order to serve the local market as well as these clients. That was followed later by the Czech Republic and France. The step to becoming a European System Integrator had been set in motion.

TAWERS, 2nd generation arc welding system
In 2005 Panasonic Welding Systems came up with a completely new robot system based on digital control. The TAWERS offered several welding processes (MIG, MAG, TIG) in a single machine, delivered a high output and a higher, spatter-free welding quality. The very fast control system based on a 64 bit CPU regulated both the robot movements and the welding machine and wire feed. The digital control made it possible to develop software functionalities for complex welding processes.

European robot s

Single piece production on the robot
Version G2 DTPS is now a full 3D solid programming system, tailored completely to the functionalities of the new TAWERS arc welding robot. Valk Welding identifies more and more ways of using welding robots to make smaller series or even single piece operations profitable. For that reason the software department is further strengthened and develops Custom Made Robot Software for that purpose. These software modules, which are added as a plug-in for DTPS G2, make it possible to automatically generate a welding programme for a large variation of the same product. Valk Welding thus made the use of robots an even more attractive option for many companies.

Calibration
A common theme running through all developments is the aim of achieving the highest possible arc duration. In the event of a crash there is a good chance that a number of shafts will shift, which prevents the welding programmes from being correctly implemented. All of the shafts have to be returned to their original baseline points. This recalibration of the robot is usually a time-consuming business. In the middle of the nineties Valk Welding had already developed a smart system for this (Program Protection System), which made it possible to quickly calibrate a robot after a crash, replacement or

S COMPANY TO

relocation in order to minimise downtime. For TAWERS, calibration can be completed in as little as 15 minutes.

Quick Touch: position seeking with welding wire
The biggest challenge is to produce a welding program that can be directly used without many corrections and tests. But the risk remains that the position of the welding wire will not correspond precisely to what has been programmed, e.g. as a result of setting differences, twisting, or bending of the material. As well as gas head searching, Valk Welding has also further developed the wire search method. The robot is able to use the welding wire to detect the position of the welding seam with a precision of 1/10 mm, and to automatically adapt the welding program to any deviations. Virtually all welding seam forms can be detected in this way, even in inaccessible places, and with thin as well as thick plating.

Quality reports
Since the welding current source is completely integrated in the Pansonic robot control, the welding process can be

SYSTEM INTEGRATOR

followed in detail at a high level of precision. Monitoring the welding process is one of the standard functions of the Panasonic Tawers welding robots. Using a software option even makes it possible to register the welding values and other important functions such as power consumption in the wire drive motor, etc. That in turn offers possibilities for companies needing to demonstrate the welding values to their clients as evidence of correctly completed welding work in conformity with the ISO standard.

The complete process under control
The developments at technological level at Panasonic Welding Systems and its know-how in the area of robot application in welding technology have enabled Valk Welding to raise the robotised welding process to a higher level in the past twenty years. Offline programming, Custom Made Robot Software, simple calibration, pneumatic torch switching, the wire detecting method, the quality reports, wire feed solutions and other innovations all form the vital pieces of the puzzle that have made the robotised welding process a reliable and highly profitable process in the metals industry. Valk Welding has positioned itself as a high level specialist in this area. Many European companies have made use of this and thus greatly improved their competitive position.

2006 - 2011

2006 Valk Welding commissions a new assembly facility with a surface area of 4000 m^2.

Valk Welding delivers the 25th robot system to MCFE Almere.

A quarter of Valk Welding's turnover is now achieved outside of the Benelux region.

The newly introduced pneumatic disconnection mechanism prevents damage to the robot arm and reduces the number of service interventions and program corrections.

2007 As well as MIG and MAG, the Panasonic Tawers welding robot can now also be used for the TIG welding process.

With the Arc Welding Monitoring system Panasonic is the first to offer a total integrated solution for welding data registration in a single machine.

Valk Welding obtains the NEN-EN-ISO 9001:2000 certificate for the delivery of welding wire and welding accessories in Europe.

Valk Welding sets up a dealer and distribution network for Wire Wizard wire feed systems for Western/Eastern Europe and Russia. Valk Welding attends Weldex 2007 in Moscow.

2008 East European countries account for 50% of the turnover in welding robot systems and consumables.

Valk Welding Denmark takes new business premises in Nørre Aaby (Middelfart region) into use.

Voortman Automation integrates Valk Welding plasma cutting robot in beam coping systems.

2009 With the incorporation of Valk Welding France Atlantique, Valk Welding extends its activities to Southwest France.

With the Replacement programme Valk Welding makes investment in the latest welding robot technology an attractive option.

Valk Welding CZ s.r.o. moves to larger premises.

Valk Welding delivers mega-welding robot system to Bollegraaf Recycling Machinery for the welding of complete frames (25 ton product weight).

Valk Welding obtains the RAB Robotics Safety Mark.

Dealer network extended through partnership with Lasaulec in the Netherlands and Palmaers in Belgium.

2010 Voortman and Valk Welding start the development of an automated welding system for steel construction.

The welding wire search system is successfully applied as an alternative to gas head searching, which greatly increases the flexibility of the welding robot.

Valk Welding starts with the sale of welding and cutting robot systems on the German market. Valk Welding now completely covers Western and Eastern Europe.

2011 **22 March 2011: Valk Welding celebrates its 50th anniversary!**

Field of play outside of the Benelux continues to grow

By opening is own establishments in Denmark, the Czech Republic and France just ten years ago, Valk Welding paved the way to extending its activities beyond the Benelux region. Also with a view to providing local support for international customers in those countries, Valk Welding saw this as an ideal springboard to reach the surrounding countries. Up to that time Valk Welding had already gained a lead in that area by installing hundreds of welding robot systems. "To retain and carry on exploiting that knowledge it is important not to depend on the Benelux alone. Also, the rate of robotisation in Western Europe was so high that you have to be ahead of the point at which saturation takes place. The obvious decision was to seize opportunities in the emerging markets. If you want a chance of success in them, you have to serve the customers in their own language and culture. The establishments in Denmark, the Czech Republic and France are therefore manned by locals who we support from Alblasserdam", says Remco Valk.

Eastern Europe
The opening of our own establishment in Ostrava, Czech Republic, was an important reason for a number of multinationals and local companies to select Valk Welding as their supplier. That resulted in big orders from companies including Dhollandia (with more than 50 systems, 2011), Bosal, Panav, Vermeiren, Profsvar, VOP and Zugil. A huge order from the Polish trailer builder Wielton was Valk Welding's biggest order in terms of construction and size up to now. Valk Welding CZ s.r.o. is now responsible for more than 250 robot systems in that region, all of which are served by the Czech establishment with local employees.

The aim is to provide service support with a maximum action radius of 600 km. That means that Valk Welding CZ s.r.o. will be able to serve both the southern part of Poland and the whole of Slovakia from Ostrava.

France
France and Germany are currently growth markets for Valk Welding and offer the most potential for welding robot systems and welding additives. The establishment of Valk Welding France was followed at the end of 2008 by Valk Welding France Atlantique. 'Despite the fact that many investment plans were put on the back burner during the crisis, a number of France companies still opted for our systems."

Germany
The German producers of agricultural and transport systems, machines and appliances, steel structures, etc. have also recognised how they can further improve quality and efficiency with the capacity and functionality of Panasonic welding robot systems and the offline programming system DTPS G2. "We will be taking a more active approach to involving that region in our marketing and sales efforts", adds Remco Valk. Valk Welding has now installed more than fifty systems in Germany.

Europe and beyond?
Remco Valk sees plenty of opportunities in emerging markets bordering Europe, such as Ukraine, Turkey and even Russia. Valk Welding is considering opening its own establishments there. "As a total supplier to a number of multinationals, including Bosal and Dhollandia, we are now supplying in more than 28 countries outside of the Benelux region."

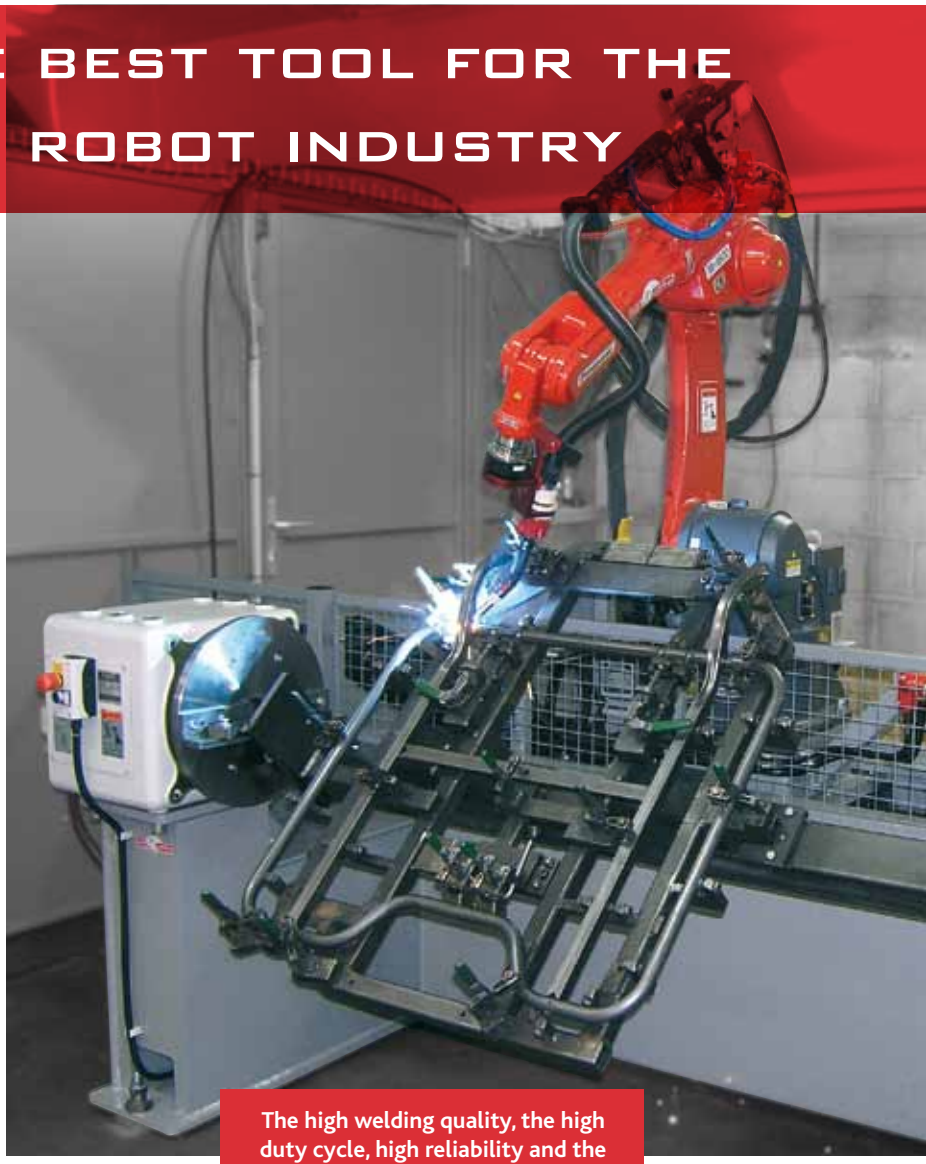
Further intensification in the Benelux region
Valk Welding works in partnership with a number of technical wholesalers in order to provide the Benelux region with an optimum service at local level. These specialist traders supply welding additives, welding torches and other consumables to the local medium-sized and small businesses market.

Valk Welding is currently delivering to the following countries:

- The Netherlands
- Belgium
- Luxembourg
- France
- Germany
- Switzerland
- Austria
- Denmark
- Sweden
- Finland
- Norway
- United Kingdom
- Ireland
- Czech Republic
- Slovakia
- Rumania
- Poland
- Hungary
- Turkey
- Spain
- Portugal
- Italy
- Russia
- South Africa
- USA
- Malaysia
- Indonesia
- Mexico
- Guadeloupe
- Tunisia
- Egypt

Panasonic, the best tool for the arc welding robot industry

TAWERS™
The Arc Welding Robotic Solution



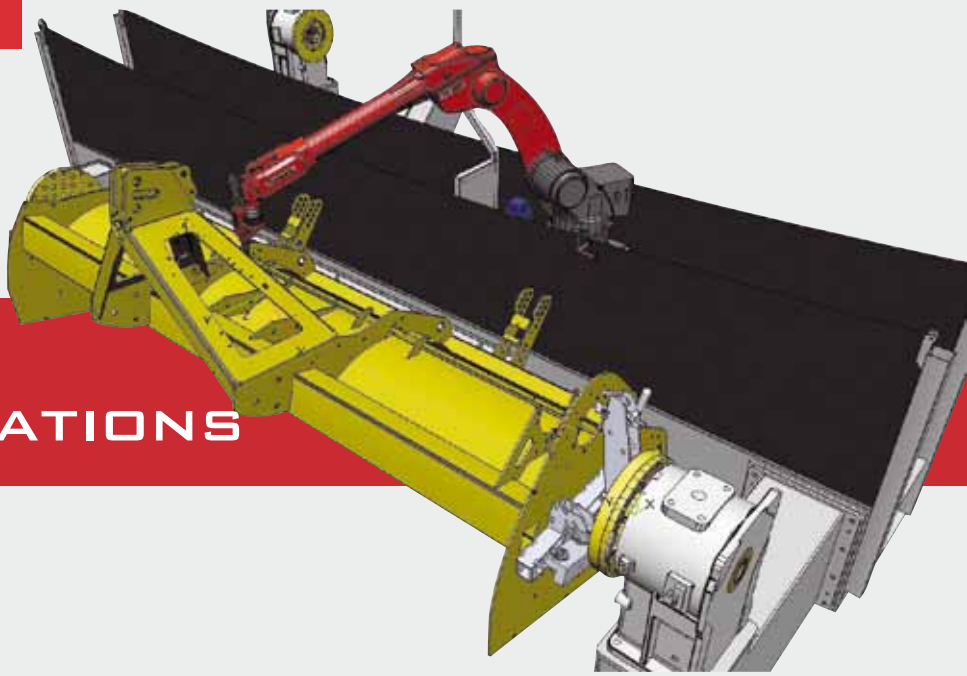
The high welding quality, the high duty cycle, high reliability and the flexible and broad deployment make the Panasonic TAWERS welding robot the favourite among users for the arc welding process.

Valk Welding uses Panasonic arc welding robots to robotise the welding process. Panasonic is one of the few welding robot manufacturers producing all components and the software under its own management. This carries the advantage that the welding robot, welding power source, control, wire feeder, positioners and software are optimally geared to each other. Panasonic has thus grown to be one of the most innovative manufacturers in this field.

A complete system specifically developed for the arc welding process.
Both the TAWERS and the DTPS G2 programming systems were developed "to create the best tool for the Arc Welding robot industry." The result: a complete and flexibly deployable system completely tailored to the robotised arc welding process. As well as high output and a high, spatter-free weld quality, the perfect communication between all components has also facilitated the development of a wide range of software applications. MIG/MAG/TIG pulsed welding, MIG aluminium welding, "thick-plate welding" can be applied with the same control. A single system for all arc welding applications!

With TAWERS Panasonic offers the following benefits for arc welding applications:

- High welding quality (spatter-free)
- High productivity
- Fast acceleration and movement speeds (up to 180 m/min)
- Lower operating costs
- Easy to operate and programme
- Very strong controller/controls
- Welding data registration and monitoring
- Broad range of standard welding software and functionalities
- Several welding processes (MIG, MAG, TIG) with a single machine
- Collision detection
- Unique wire feeding system
- Offline programming
- Automatic calibration (PPS)
- Working range from 2.000 till 3.800 mm ø
- Flexible extendable software
- Specific functions for welding thin plate materials (SP-MAG), thin aluminium (Spiral Weaving) and various thicknesses (Synchro pulse)



DTPS KEY TO FLEXIBLE OPERATIONS

VIDEO LIBRARY

see: www.valkwelding.com/videos/
[page 4]

External programming increases arc duration of welding robot

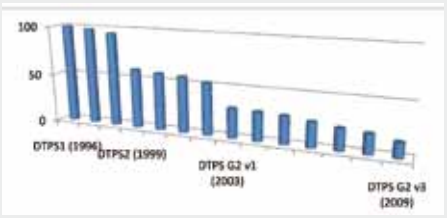
In 1996 Valk Welding placed DTPS (DeskTop Programming and Simulation System) on the market for the first time, a software system that makes it possible to build the welding programs on an external PC. The fact this was Panasonic's own software with identical programming on both the PC and the robot made this unique. This made it possible to prepare the programming independently of the welding production, which considerably increased the arc duration of the welding robots. In close partnership with the software specialists of Panasonic Welding Systems in Japan, Valk Welding has continued to optimise the software on the basis of requests of the users of the systems supplied by Valk Welding. The latest generation of DTPS G2 makes it possible to programme and present each work piece, complete with the jig and the entire welding robot system, in 3D Solids and all of the options of the TAWERS arc welding robot are integrated in the software.

Usage for small series unique

During the past fifteen years substantial investments have been made in specific software solutions to facilitate medium, small and single-piece manufacture using the welding robot. Valk Welding has responded to this market trend of increasing product variation in increasingly smaller numbers. DTPS G2 and the option for parametric programming have played a vital role in these solutions. With the development of the customer-specific Custom Made Robot Software (CMRS) Valk Welding has made it possible to have the programming of variants carried out automatically within a product family. A number of manufacturers with their own products, such as grids (Dejo), lintel beams (Leenstra), fences (Betafence), Stairlifts (ThyssenKrupp), Loading platforms (Dhollandia), Forklift trucks (MCFE) and many others are now using welding robots for single-piece production and thus achieving considering programming time reductions. This makes Valk Welding unique in the market for welding robot systems.

The cradle of DTPS

Led by Adriaan Broere, the DTPS system has developed over fifteen years into a vital component in the overall robot control system. Together with the Japanese programmers he visited clients to chart what the market wanted. Users of the programming system are therefore happy to take their questions to him. During the past 15 years the main focal point has been further simplifying the programming process. Developing routines for common functions has made it possible to reduce the overall programming time by more than 90% compared to the first version. DTPS has thus grown to be a fully-fledged 3D CAD/CAM system for welding robots. With more than three hundred licenses DTPS is now the most frequently used offline welding robot programming system in the Benelux.



In the current version, DTPS G2, the programming time is only a tenth of the initial time

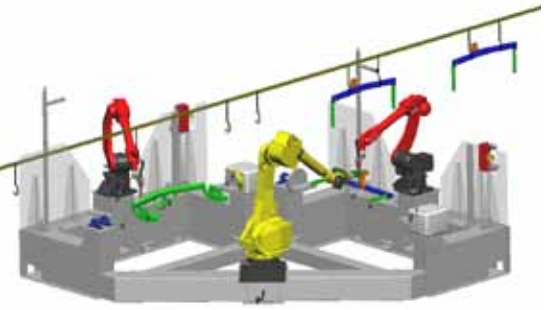
Users club

Valk Welding has invited its DTPS customers to a users club day in Alblasserdam for the introduction of the first DTPS update. This initiative has become a recurring two-yearly event for all robot customers. Adriaan: "The purpose of the users club is to talk to customers about current matters and new developments. That means for everyone wanting to keep up-to-date in this area." The users club is now attended by more than a hundred and fifty guests.

In recent decades the digitisation of welding technology has raised the welding process to a higher level. The Panasonic TAWERS arc welding robot, in which the welding machine and the robot controls are integrated in a single 64 bit CPU, is a good example of this. This makes it possible to develop welding applications that until recently were considered impossible. The next step is to automate the logistics process surrounding the welding robot with the use of handling robots. Valk Welding is already working with Voortman on the development of a robotised production cell for the steel construction sector. The only question remaining is whether we'll be able to find enough people to operate it. For that purpose Valk Welding is looking for young talent among students in order to train them internally for this task.

Welding and handling robots to work together more intensively

In the years to come, welding and handling processes will increasingly be combined, as a result of which a lot of the manual work around the welding robots will be taken over by handling robots. Valk Welding has now delivered several welding/handling cells.



Also, the programming of robotised production cells will become increasingly accessible in the years to come, so that less professional know-how will be needed to operate a production cell. For that purpose Valk Welding's software engineers are working on automating the programming and a simplified interface.

Jigless welding

Automating simple manual work in welding production is mainly about placing separate components in the jig. Valk Welding therefore started working on jigless welding concepts a few years ago for a number of customers. In this concept handling robots place separate components in the right position, after which they are fixed and welded by a welding robot. That makes it possible to automate compilations of products and save expensive jig costs.

Vision systems will be playing an important role in locating and picking up separate components. The first systems have been delivered for the manufacture of sprinklers, cylinders and other, similar, products.

Steel construction becoming growth market

Valk Welding is working intensively with Voortman Automatisering on a joint development process for welding automation for the production of steel structures. Voortman has already presented an automated solution for each step of the steel frame production process. But the welding of top plates and other components is still done manually. In the cell of the future, handling robots will pick up the separate components and position them in a pre-programmed position on a steel frame, after which they will be fixed and welded by a welding robot. Software engineers from the two companies are working on translating the CAD data into

an all-encompassing CAM database in which the position, tolerances and quality of the weld are laid down. Systems including vision systems will be used to pick up the loose components. The two companies expect to meet a growing market demand with this system.

Voortman and Valk Welding have also been working for some time on the integration of plasma cutting robots in the Voortman frame lintel systems. The use of cutting robots in the steel construction sector offers unprecedented freedom of form for making lintels and connectors in steel frames. That explains why the sales of these lintel systems are doubling each year.

Valk Welding anticipates that the use of plasma cutting robots will also be increasing for other applications in the years to come. It is precisely for shortening and cutting holes in tubes and pipes that the plasma cutting robot is many times faster and more accurate than conventional drilling, sawing and milling machines.

Training the next generation

Labour shortages mean that there is a danger of there not being enough people who can develop, build, maintain and operate these systems in the future. Valk Welding is therefore paying a lot of attention to internally training young technicians. By offering industrial placements to students of technical programmes in the region, Valk Welding is hoping to evoke the enthusiasm of talented and motivated students for a future in robot/welding technology. The idea is to continue to train young people once they have graduated from their technical study programmes.

"Making the operation and programming of robotised welding systems more accessible and simpler." That is the challenge that Valk Welding's software developers have been facing for many years. By laying down all of its welding and robotics know-how in software, Valk Welding is setting out to make both the programming and the operation more and more accessible to non-software specialists and the less highly qualified.

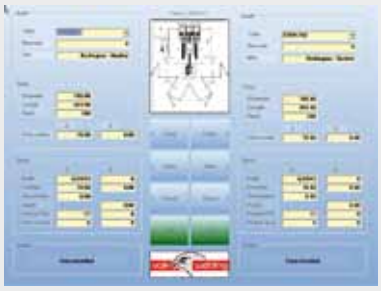
Packaging knowledge in user-friendly software

Responding to the next generation
Users of the DTPS programming system are usually familiar with welding technology and sufficiently trained to steer the robot and operate the program. The questions is whether the next generation of young people will yield enough technicians who are able to continue work planning and operation in the same way. That will make it necessary to simplify both the operation and the programming of welding robots so that the next generation will be able to continue to operate them. That presents a tough challenge for software engineers.

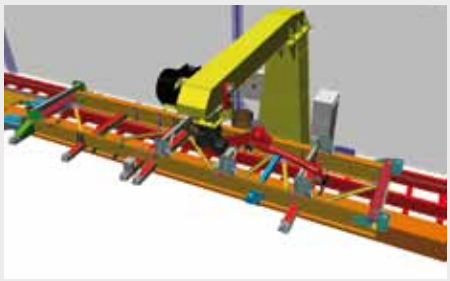
The software department of Valk Welding is therefore working hard on a toolkit designed to further simplify the programming and make it accessible to a larger group of people. Under team leader Paul van den Bos the department is working on a toolkit that can automatically generate welding programmes. "It is often the case that high-end software can only be understood and maintained by specialists. Some of the welding programs are therefore programmed by Valk Welding. The idea is for customers to be able to do this themselves in the future. That will make it possible for the customer himself to set up a system incorporating his own welding experience. We also want to pack as much human expertise as possible in software, so that non-experts are also able to keep production going", explains Paul van den Bos.

Programming with APG automation
With 15 years' experience in software development for arc welding robotics, Valk Welding's software engineers have developed an Automatic Path Generator (APG) that can automatically generate welding programs based on data from ERP, CAD systems and Excel sheets. APG uses this data to automatically generate programs for the welding robot, which in addition to the position of the welding torch, also contain the torch angle and the right welding parameters, such as the current intensity, tension, weaving parameters, crater filling parameters, etc.

Since Adriaan Broere joined Valk Welding in 1996 there has been a great deal of development in the IT area, the most important effects of which have been felt in the offline programming of the Panasonic welding robots. Under his inspiring leadership, Valk Welding has joined Panasonic in developing a concept that has taken the programming of industrial robots to an unparalleled level. Adriaan Broere is currently also in charge of the software department in his position as technical director. His vision can be summarised as simplicity combined with performance.



APG for DTPS-G2 tool
"The client can use APG to build his own Custom Made Robot Software. The idea is for software firms as well as customers to be able to use the toolkit. As well as the advantage of needing fewer highly qualified people for the programming, this also saves an attractive amount of time in the work planning", explains Paul v.d. Bos.



Van Hool achieves time savings with APG
The Belgian Truck & Bus manufacturer Van Hool in Koningshooikt is one of the first companies to use APG to make programs for its truck and trailer frames. This is enabling Van Hool to achieve substantial cost savings in the programming of complex products with a cycle time of more than 5 hours. The data from the Pro Engineer CAD software is used as input for the APG software.

Hiring knowledge as consultation
The very limited staff turnover at Valk Welding makes it possible to continuously extend all of the company's knowledge of welding and robotics. That amounts to about 700 man hours of experience!
Valk Welding sets out to use that knowledge to increasingly simplify welding production and programming on the one hand, whilst advising its customers on how to optimise their production on the other.
For that purpose Valk Welding offers the option of screening existing welding robot systems and their programming and providing advice on further optimisation.
"Customers are usually satisfied with their welding robot, but are not getting the most out of it. It usually turns out that the robot can do more than the customer thinks. When we go through the system with the client, we often find a number of potential improvements that can ultimately increase output."

600 TONS OF WELDING WIRE A MONTH

With monthly supplies of over 600 tons of welding wire, Valk Welding is one of Europe's biggest independent suppliers of solid welding wire. According to Henk Visser, who has been responsible for the sale of welding wire at Valk Welding since the end of the eighties, this success can be attributed mainly to the consistent quality and smoothly running distribution system. Henk Visser is currently in charge of a department with 7 direct employees (as well as the regional commercial staff), which has plans to extend beyond the Benelux region with the sale of welding consumables.

Valk Welding has achieved a sharp rise in the sale of solid welding wire by first building up a large network of end-users and resellers in the Benelux region. According to Henk Visser, the consistently high quality and the 24-hour delivery service within the Benelux are important reasons for customers to buy our welding wire. "During that time we have also grown sharply in the sale of welding robot systems. That has certainly been given a boost by the sale of our welding wire under our own label."

Consistently high quality
Valk Welding's welding wire is also manufactured by an Italian subsidiary of Lincoln Electric. The large monthly volume makes it possible for that wire to be produced according to Valk Welding's specific requirements. The mechanical pre-bending system has a cast of 1000 mm or more and a maximum twist of 25 mm, which minimises the risk of torsion in the drum and reduces the wear upon insertion. Also, the chemical composition has been further improved in the course of time, as a result of which the quality of SG2 wire almost equals that of SG3.

Extension of nickel alloy steel types
Companies specialised in cladding and surface welding also come to us for CrNi welding wire. After extending the supply range with stainless steel and aluminium welding wire, around the turn of the century Valk Welding decided to extend the range with welding wire in nickel alloy steel types.

Valk Welding's welding wire throughout Europe
Valk Welding delivers welding wire to a number of multinationals. That has extended the distribution radius to 25 countries outside of the Benelux. "That places opportunities to extend the sales market throughout Europe within our reach. We are now building up stocks at our locations in Denmark, the Czech Republic and France in order to gain a logistical advantage with fast delivery", explains Henk Visser.

Wire Wizard wire feed systems
Valk Welding sets out to serve its customers with a broad range of welding consumables. As well as welding torches and wear parts, the company also delivers safety products such as welding masks. The sale and distribution of Wire Wizard wire feed systems was added in 2005. These systems facilitate faultless wire feed over larger distances between the drum and the wire motor, which offers advantages especially in automated and robotic systems. Submerged arc welding systems and applications are also increasingly being equipped with devices from the Wire Wizard range.

Attractive for customers
"The large volumes of welding wire that we sell make it possible for us to deliver most types from stock within 24 hours. We also offer our customers a broad choice from an extensive range", reiterates Henk Visser.

CUSTOMERS CONGRATULATE VALK WELDING 50 YEARS ANNIVERSARY

BOSAL congratulates all employees of Valk Welding with achieving its 50th anniversary.
50 years in which Valk Welding has proven to be at the forefront of welding technology and have given meaning to partnership.
BOSAL is pleased to be associated with Valk Welding and wishes the Company many successful years to come.

Dirk Dessers
Group Operations Director
Bosal

Valk Welding has been our partner for the automation of our welding processes for many years. We currently have 14 robot systems that were delivered by Valk Welding, and all of them meet our high production and quality standards.
What we like the most is Valk's technical know-how, the close partnership and the service. We hope to continue working together with Valk on this basis for many years to come.

Bart Dedeurwaerder
Case New Holland
Belgium

We started the cooperation with the company Valk Welding in 2006. It won the selection procedure as a supplier of robotic welding workplaces. Till the 2011 were successfully made 6 robotic welding workplaces with the robots from Panasonic. Our cooperation runs on the area of welding materials, welding technology, solving of operational failures and other nonstandard defects. We believe our mutual cooperation will continue in the future.

Ing. Adolf Veřmiřovský
Managing Director
VOP-026 Sternberk, s.p.
Czech Republic

The Valk Welding Company has become an exclusive supplier of robotize workplace for our company since 2005. During our cooperation I had chance to learn Valk Welding technical as well as commercial background which has convinced me, together with its employees, about right decision of choosing this company as a supplier of our robotize workplaces. I especially appreciate the Czech Valk Welding employee attitude who have proved to be professionals when dealing with new potential supplies, essential services and repairs. I wish the Valk Welding Company many successful robotize workplace installations together with one which is also being prepared in our company in these days.

Ing. Václav Zajíc
Managing Director
PROF SVAR s.r.o.
Czech Republic

Bollegraaf Recycling Solutions would like to congratulate Valk Welding with its 50th anniversary. In 2011 Bollegraaf Recycling Machinery will also celebrate its 50th anniversary. The right means of production were critical for the growth that Bollegraaf experienced during this period and its continued success. Cooperation with Valk Welding and using four of their welding robots Bollegraaf was able to achieve major efficiency improvements.

H.S. Bollegraaf
CEO
Bollegraaf Recycling Machinery
The Netherlands

On the day of the 50th anniversary of VALK WELDING we wish you continued success, especially in the markets of the Eastern Europe. We have been working together on automation of welding process for seven years; the first four years saw a massive joint effort to build a total of 12 stations with 16 robots. Today we wish to congratulate and also thank you for a great support and perseverance in the implementation of our joint projects.

Tomasz Swędrak
Wielton
Poland

We at Thule Towing Systems BV (formerly Brink Trekhaken) have known the company Valk for 20 years as one of the pioneers in the combination of welding equipment with robots and excellent welding wire. A complete additional series based on years of practical experience and smart people who are able to convert ideas into applications.
The people at Valk never hesitate to put forward their own suggestions for improving processes. With an enthusiastic team they have kept that up for 50 years, and will be able to carry on that way for another 50. Congratulations!!!

Wim Feddes
Thule Towing Systems BV
The Netherlands

CUSTOMERS CONGRATULATE VALK WELDING 50 YEARS ANNIVERSARY

All companies have partnership as their slogan
Valk and Voortman have already worked on many projects together. Mutual trust, excellent problem-solving abilities, purposeful: those are all words that we associate with Valk.
And last but not least, the people at Valk have a passion for their profession.
As far as we are concerned, Valk is now officially certified to use the slogan "partnership".

Mark Voortman
Voortman Automatisering BV
The Netherlands

Voortman

In the past 15 years we've known Valk Welding as a company that knows how to put itself in its customer's shoes. They are not afraid to use new technologies and help the customer to take innovative directions.
The continuous developments in offline programming have offered us clear added value for the production of small series for 15 years now. With Valk Welding we work towards solutions in any situation.

Steven Delputte
Manager Mechanical Workshop
Belgium

VAN DE WIELE

50 Years valk welding in welding 1961-2011

Stertil has also been operating for 50 years in the metals industry, and has been using automatic welding systems for over 20 years. Some years ago we switched to the systems provided by Valk Welding. We operate strict specification and performance standards, but they were met by the systems supplied by Valk Welding. In our business, which involves the regular introduction of new models and programmes, after sales support by the system supplier is an important aspect, and that was at the required level too. In short: a total package that we can use to extend our business.

Jan Bosch
Stertil BV
The Netherlands

stertil

"With what now adds up to 11 robot systems we can look back on a partnership of 20 years. It's good to see that Valk Welding still shows the decisiveness and dynamism of a young bird.
I'd like to offer Valk Welding my sincere congratulates and wish them all the best for the future."

Geert Cuvelier
GDW Towbars
Belgium

gdw

Successful, strategic partnership for steel structural engineering in Germany!

We got off to a successful start: Butzkies Stahlbau of Krempe in Schleswig-Holstein has been successfully using two Valk welding robots to fabricate structural steel components since the beginning of 2010. It was clear from the start: two owner-managed enterprises are working together with the same vision! For an order from a premium German car manufacturer, a welding robot and a plasma cutting robot are in constant use. Due to the short delivery deadline, Valk Welding installed the robots in a matter of weeks. These operations are currently running in three continuous shifts, seven days a week. Going forward, we are planning additional joint projects.

On the occasion of this 50th anniversary, we wish our partner and its committed employees all the very best for the future as well!

Kay Butzkies-Schiemann
Managing Director, Butzkies Stahlbau
Germany

butzkies stahlbau

Our partnership with the Valk company dates back to 1997. Together with Valk, Van Hool has been able to demonstrate that the offline programming of welding robots is not a fiction but a feasible reality.
We wish the Valk company all the best for the future, a future filled with many new challenges.

Stefan Dhont and Daniel Kemp
Van Hool
Belgium

VANHOOL

We have been working very constructively and intensively with Valk. As an owner-managed company, Valk always puts the concept of service and "serving the customer" first, and as a result we have built a very successful business relationship in recent years.
We wish you all the very best for your 50th anniversary and look forward to continuing our successful partnership with you.

D.Burs
BRÜGGEN
Oberflächen- und
Systemlieferant GmbH
Germany

BRÜGGEN

SUPPLIERS CONGRATULATE VALK WELDING 50 YEARS ANNIVERSARY

Valk Welding 50 years old!
What a tremendous milestone for this company.
My first meeting with Valk Welding dates back 3 years, when I was put in charge of the Speedglas™ brand at 3M, with a range of eye and respiratory protection equipment for professional welders. During this period I personally got to know Valk Welding as a highly skilled, professional and pleasant company to work with. I look forward to continuing our successful partnership in the future!

Ronald van Berkel
Account Development Supervisor
Personal Protection, Safety and Environment, 3M The Netherlands B.V

"Common roots from the beginnings of robotic welding technology (1979) link VALK WELDING and J. Thielmann Automatisierungstechnik. The resultant, very positive customer–supplier relationship is already more than 20 years old.
The innovative ideas and customer proximity of J. Thielmann led to an extensive, rounded product range in the field of gas nozzle cleaning devices for welding robots.

Technical challenges and special solutions by VALK WELDING were turned into new developments and are used today in new systems by VALK WELDING. Thanks to VALK WELDING's international orientation, our products are used by satisfied customers in many systems throughout Europe.

Congratulations on your 50th anniversary! We look forward to continuing the good relationship of trust we have built up."

Johannes Thielmann
Gesellschaft für Automatisierungstechnik mbH
Germany

Congratulations to 50th anniversary of Valk Welding and best wishes for the future.
We set up our own company in Holland in 2009 and rented Valk's facility to supply GeKa branded welding products to the European market.
I and Remco have the same responsibility to run our family companies and to expand our businesses further.
Valk Welding teams have been working with great dedication and competence which give us great pleasure to working with such a successful team.
Based on this good business relationship, we plan to extend our coöperation to the automation engineering in Turkey .

I believe that GEDIK's co-operation with Valk Welding will enjoy the growth for the next 50 years.

Hülya Gedik
GEDIK WELDING
Turkey

For more than 20 years Machinefabriek Otten has a very good relationship with Valk Welding as a supplier of structures around the robots, such as tracks and frames. For some projects we also supply the welding jigs. Over the years our relationship has grown very close. It is often as early as in the quotation stage that we assist with projects in order to come up with the ideal solution. In some cases we make a 3D outline at that stage in order to facili–tate range tests in DTPS.

What I appreciate most is the honest way of doing business and the will to produce the best solu–tion together. The latter point is a must for the complex robot projects we work on these days.

I'm still fascinated by the developments in the field of robots. The possibilities in the software area are almost limitless. I regard it as being a good thing that Valk continues to invest in software. It won't be long before software becomes the distinctive element in the world of robots.

Ben Otten
Machinefabriek Otten B.V.
The Netherlands

IDEAL supplies resistance welding machines for the wiring industry as well as for sheet processing lines, sheet metal fabrication and profiling lines.

Valk Welding and IDEAL have been collaborating for almost 50 years. Valk Welding was our first agent in the Netherlands, Belgium and Luxembourg. It continues to be renowned for its excellent relationships with customers, and market knowledge. Our partnership has always been characterised by a high level of technical expertise, strong commitment, and highly successful commercial decisions.

We offer our long-standing business partner Valk Welding our sincere congratulations on its 50th anniversary, and we look forward to continuing our pleasant, successful collaboration. We would like to thank the Valk family for decades of solidarity with our company, and we wish the family all the best both personally and professionally.

Dorothee Jungeblodt
IDEAL-Werk C.+E. Jungeblodt GmbH + Co. KG
Germany

SUPPLIERS CONGRATULATE VALK WELDING 50 YEARS ANNIVERSARY

It is with pleasure that I extend my best wishes to you on the occasion of the 50th years anniversary of Valk Welding BV.
Panasonic has been business relationship with Valk Welding for 23 years.
I realized very well that the dramatic expansion of Valk Welding in the last 50 years has been brought by not only Valk Welding remarkable system proposal ability which contribute customer's productivity improvement but also president Remco's way of thinking, company culture which handle all stakeholder with excellent care.

We appreciate Valk Welding strong support for Panasonic welding robot and welding product so far and we expect to see further growth of Valk Welding. Since we, Panasonic would like to continue to develop new products which contribute Valk Welding and Valk Welding customer, please count on us.
Let us work together and make grow for both of us for next 50 years toward your 100 years anniversary.

Koichiro Masai
President Panasonic Welding Systems

"I try hard to meet Valk Welding request furthermore as a customer voice from now on."

Nick Tatsunari

Congratulations on Valk Welding 50 years anniversary. I believe I am the first person to meet Mr.Remco Valk and his father Mr.Henk Valk in Japan in 1988 and after that our business relationship between Valk Welding and Panasonic has started.

I am deeply honored to join such a fateful encounter. As one of employee for Valk Welding supplier, I have learned a lot from Valk Welding such as customer first policy, treat each employee with respect, think always new things, the way of marketing,etc.

Nick Tatsunari
America and Europe Team Global sales group,
Panasonic Welding Systems

Congratulations and best wishes on 50th anniversary of Valk Welding.
I'm truly honored to work with you for the past 10 years and I was impressed a lot of your activities.
My favourite one is "User Club" as "Face to Face" activity. I always enjoy it to feel close relationship between Valk Welding and customers.
Now, I would like to thank all of you for strong support to Panasonic for a long time and I hope we will grow together to be No.1 in the market.

Ken Dobashi
Panasonic Factory Solutions Europe

Congratulations to 50th anniversary of Valk Welding.
In my 20 years carrier in Panasonic, more than half of the time, I worked with Valk Welding. Valk Welding was a leader of our partners not only in Europe but in the world, being always "creative in technology and marketing, aggressive in sales activities and fully cooperative to Panasonic."
I believe Valk Welding and Panasonic together will enjoying growth and prosperity for the next 50 years.

Hiroshi Mayumi
Welding and Robotics
Panasonic Factory Solutions Co. of America

"For over 10 years, it has been our honor to have Valk Welding exclusively represent our Wire Wizard product line throughout Europe. The Valk team's professionalism, organizational structure, and technical knowledge, have led to significant increase in our Wizard sales and visibility in Europe. This increase would not have been possible without Remco's vision and Peter Haspel's dedication. We wish the entire Valk network much continued success."

Edward Cooper
ELCo Enterprises Inc.
USA

Lincoln's business relationship with Valk started in March of 2000 when Lincoln purchased one of Italy's finest mig wire factories. Years earlier 1986 Valk had selected this factory as their primary supplier of the Valk branded mig wire because of its exceptional quality.

Valk is a demanding customer. This insistence on excellence is not just for their suppliers.
They also demand excellence from themselves.
Therefore, it is no surprise that Valk is the largest supplier of welding wire in the Benelux, and one of the top suppliers of welding wire in all of Europe.
It has been a pleasure to work with such dedicated people, and I wish them continued success for the next 50 years

Thomas J. Angelino
Lincoln Electric Europe
Vice President- Sales

Exhibitions and events

Valk Welding will be presenting at the following international trade exhibitions and events this year:

Metavak Hardenberg, the Netherlands	05-07 April
Salon Ouest Industrie Rennes, France	10-12 May
Nitra 2011 Nitra, Slovakia	24-27 May
Vision and Robotics Veldhoven, the Netherlands	25+26 May
Herning Industriemesse Herning, Denmark	06-09 Sep
DSV Expo Hamburg, Germany	27-29 Sep
Welding Week Antwerp, Belgium	18-21 Sep
MSV 2011 Brno, Czech Republic	03-07 Oct

News letter

As well as the six-monthly publication of Valk Melding, Valk Welding also keeps its customers informed monthly in an email newsletter.

Video Archive

Valk Welding has made a large number of robot automation projects, which are published on the website.
The film clips provide an insight into various specific welding, handling and cutting applications and combinations of them.

www.valkwelding.com/videos

Valk welding Forum for welding robots

Valk Welding is starting a forum for its customers. Customers will be able to use it to share their experiences and questions, and also put them to Valk Welding staff.
This is on the request of a large majority of customers during the most recent users club.

Also, a second forum will be set up specifically for the programming system DTPS. This forum is intended exclusively for customers with a DTPS support contract. Users will be able to share their experiences with each other and with the Valk Welding software engineers, put specific programming questions and contribute to practical improvements. The plan is to have both forums up and running in May 2011.

An initial start will be made with a Dutch language forum. Depending on the amount of interest and usage, it could also be implemented in other languages.

colophon

'Valk Mailing' is a twice-yearly publication of Valk Welding B.V. and is sent free to all business relations. If you want to receive this publication in the future, please send an email to info@valkwelding.com

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