

FIRSTWELD™ is a Huys Welding Strategies initiative. Huys Welding Strategies Ltd. is the engineering consulting company that grew out of internationally acclaimed welding innovator, Huys Industries Ltd.

As a complete resistance welding solutions company, Huys Industries manufactures and sells a full range of standard resistance welding consumables, including standard electrode shapes, shanks, and adapters, as well as custom-made products. Over the past 25 years, Huys Industries has consistently laboured to reduce costs in quality welding. This has resulted in numerous patents and innovations. Notably, advancements such as the FIRSTWELD™ program, COST PER WELD program, and the patented family of TiCAP™ coated electrodes have propelled Huys into the limelight as a leader in the industry.

Huys Welding Strategies provides customers with the tried, tested, and proven technologies and programs that have been honed by Huys Industries. Welding Strategies identifies and recommends solutions on a variety of subjects including customers' welding issues, process optimization, and cost reduction. Customers using programs such as FIRSTWELD™, capitalize on Huys' years of research, experiences, and successes to improve their own productivity and processes.

FIRSTWELD™
MAKES YOUR FIRST WELD A GOOD WELD



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- ☀️ set up a new weld process with the best parameters
- ☀️ save time and materials by simulating new welds before testing
- ☀️ troubleshoot bad welds
- ☀️ reduce costs by stabilizing welding processes
- ☀️ predict and improve design fixturing and alignment by showing real time animations of the weld as it forms



Save Valuable Time and Money with FIRSTWELD™

Huys Welding Strategies is revolutionizing the way welds are done. With today's manufacturing processes, optimization is essential to remain competitive. Our FIRSTWELD™ consultation program helps customers set up a new weld cell, save costs on current welding operations,

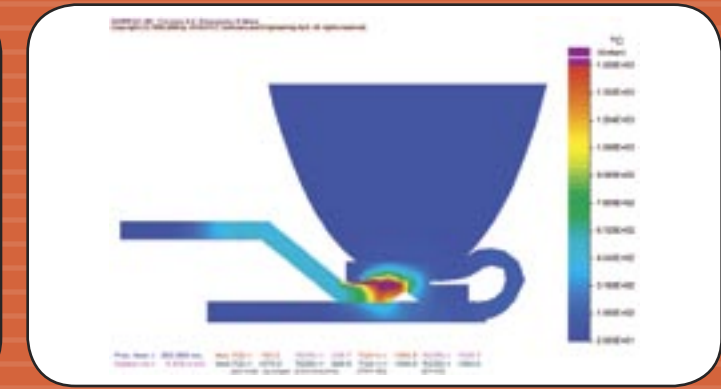
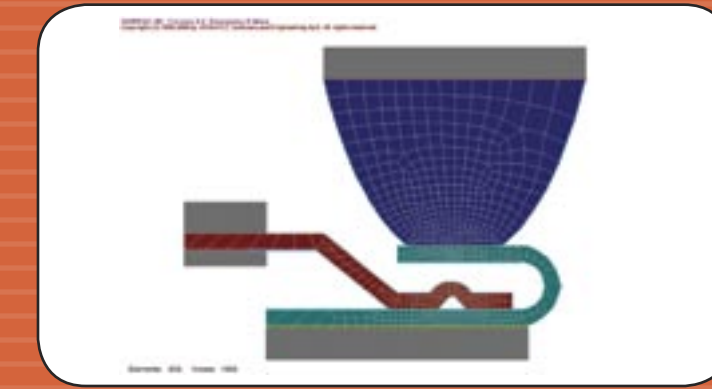
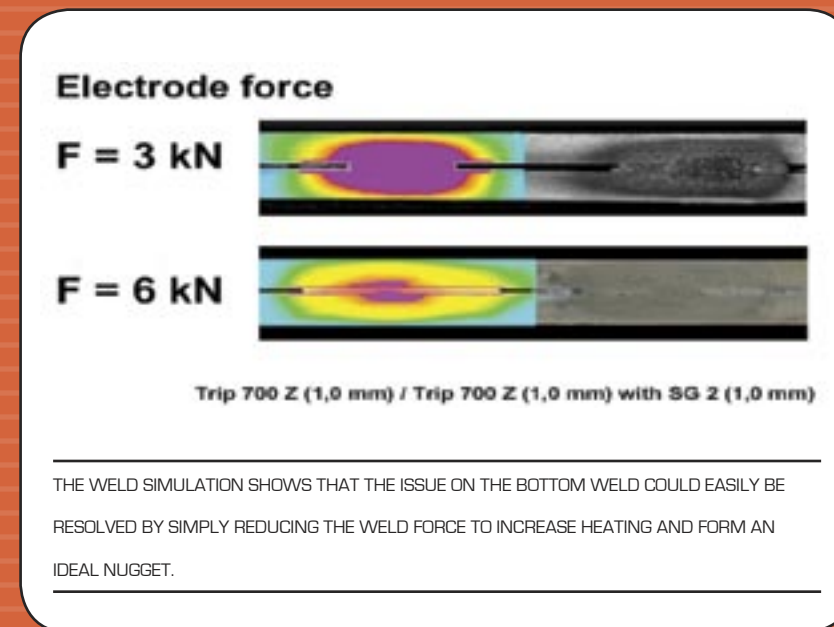
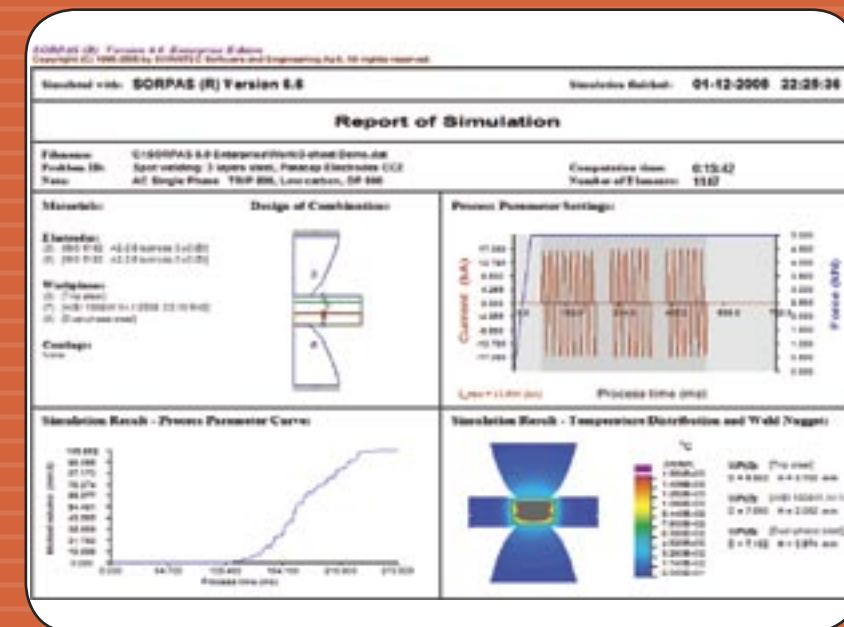
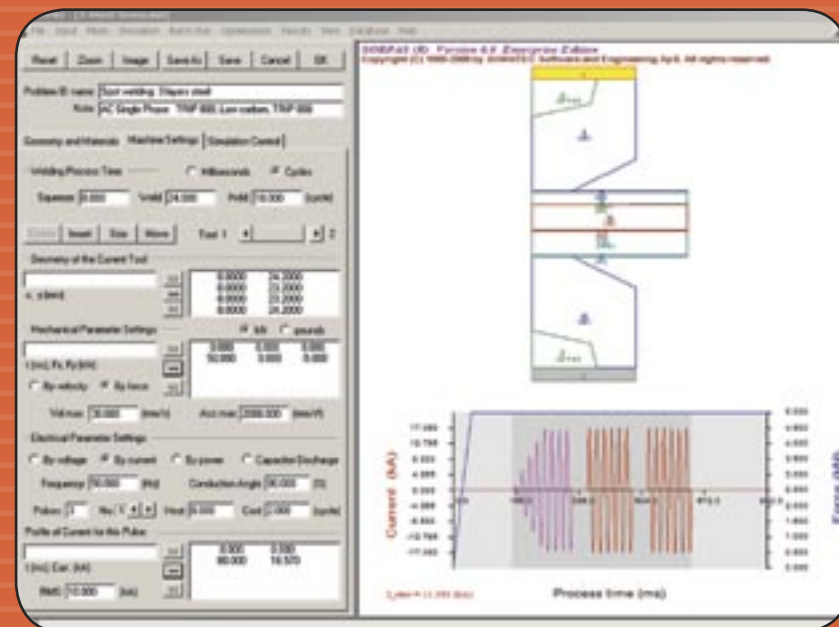
and solve resistance welding issues for both new and existing processes. It's our exclusive program designed to provide shopfloor-ready solutions in days, not weeks.

Professionally trained in using SORPAS® software, Huys engineers visit manufac-

turing plants to easily and accurately simulate the welds in a company's welding processes. Unlike traditional methods, SORPAS's advanced computer simulations quickly and efficiently provide results — before implementation. Within minutes, our experts analyze welds to gain valuable

insight into their effectiveness without testing or destroying actual parts. End result? Armed with only material and machine data, Huys engineers can determine whether or not a company's current weld schedule is appropriate for the application, as well as the optimum

weld schedule for a completely new setup. And best of all, our engineers complete the whole process without taking up costly production time.



Simulation has its Benefits

ABOVE: AN INNOVATIVE DESIGN FOR SINGLESIDED INDIRECT WELDING. THIS FIGURE SHOWS THE VALUE OF SIMULATION WHEN DESIGNING JOINTS USING NEW TECHNIQUES FOR WELDING. BY USING SIMULATIONS AS A DESIGN TOOL, FIRSTWELD™ ENGINEERS WERE ABLE TO CREATE A JOINT BETWEEN THE TOP TWO SHEETS WITHOUT AFFECTING THE BOTTOM SHEET. SIMULATION ALLOWS FOR THE RAPID DEVELOPMENT AND OPTIMIZATION OF NEW WELDING APPLICATIONS.

Get FIRSTWELD™ Working for You

Our FIRSTWELD™ consultation service has three solutions to help optimize your welds. Each solution utilizes the weld parameters and materials data you provide. Please note that all reports generated also include our Huys Specialist's comments and recommendations.

Stage 1 - Single Simulation

- ☀️ Simulates your welding process.
- ☀️ You receive a one-page simulation report detailing weld parameters, assumptions, and penetration.
- ☀️ You also receive image files of the geometric setup, final nugget shape, and video animation of the weld simulation.

Stage 2 - Weldability Lobe

- ☀️ As in Stage 1, you receive a report of your current process.
- ☀️ We perform multiple simulations to determine the weldability lobe for weld current, weld time, or both using your criteria for upper and lower limits of the lobe.
- ☀️ Welding parameters are optimized by our engineers.
- ☀️ You receive a simulation report detailing weld specs. at each point in the weld lobe. The report outlines the weldability lobe welding parameters and resultant weld sizes as the nominal weld size.
- ☀️ You also receive video animations of the weld nugget development at upper and lower points on the lobe; the weld simulation at the upper and lower bounds of the weld lobe; and the nominal weld size.

Stage 3 - Weld Certifications

- ☀️ You receive the reports as in Stage 2. In addition, certifications can be tailored to include extensive testing and confirmation procedures.
- ☀️ We analyze the best weld parameters for your process and certify weld quality.
- ☀️ We provide multiple simulations to optimize welding parameters including electrode geometry and size, weld current, and time and force to yield the best quality weld at the lowest cost to you.
- ☀️ You receive simulation reports outlining weld parameters as well as predicting weld shapes and sizes.
- ☀️ We perform and certify welds to your welding standards, or to national or international standards as required.
- ☀️ Additional work is performed as required to ensure the welds simulated are tested and confirmed on actual production. This may include the full range of procedures, including cross sectioning and micrographic analysis to provide total confidence.



Make the Call Instead of a Mistake

Contact Huys for a FIRSTWELD™ consultation and start optimizing your welds. To set up a time for an engineer to visit, contact us by phone, fax, or email.
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WELDING IS EASIER WITH HUYS FIRSTWELD™. WITH SHORT LEAD TIMES REQUIRED FROM CONCEPT TO PRODUCTION, YOU CAN'T AFFORD TO MISUSE YOUR VALUABLE TIME OR MATERIALS. HUYS FIRSTWELD™ AIDS IN QUICK AND EFFICIENT DESIGN DECISIONS BY ELIMINATING THE GUESS WORK, MISTAKES, AND WASTED MATERIALS. CONTACT HUYS FOR A FIRSTWELD™ CONSULTATION. AN ENGINEER CAN VISIT ONSITE AND USE SORPAS® SOFTWARE TO DETERMINE THE OPTIMUM ELECTRODE TYPE, MATERIAL COMPOSITION, THICKNESS, COATINGS, JOINT DESIGN, AND LAYOUT. THE ENGINEER CAN TROUBLESHOOT WELDS AND SHOW YOU POSSIBLE ALTERNATIVES WITH ANIMATED FILES. THIS COMPLETE CONSULTATION SERVICE ENSURES THAT YOUR FIRST WELD IS THE ONE YOU WANT.