



Edito From The CEO

Dear Customers, dear Partners,

We are glad to onboard you on this #2 Clecim Newsletter. Many major moves from our side in the latest months within our core business, our development and our accelerated organizational approach on ESG as I got the opportunity to detail recently at Global Industry forum in Paris last March. 3 major news I would like to highlight today :

- Ramp up of our large projects of Continuous Galvanizing Lines is going on in the US at Nucor Steel Berkeley with equipment in manufacturing phase, in India at AM-NS CGL4 where the production started since last December. Also in P.R. China with first coils successively produced end of April and end of May at HBIS HCGL and HPAS CGL1 Laoting plants. And even more start-up to come soon in 2024.
- Launch of our "diversification" dedicated team with 2 major new orders in the Renewable Energy and in the Defense Sector. This will complement our growing portfolio of new customers (6 in a year) serviced by this new Clecim team
- Last but not least, we have appointed Aline Vinciguerra as VP HR and Sustainability and started our operational roadmap on the ESG matter (audit, norm, reporting and action plan). Starting with EcoVadis sustainability rating just granted with the Bronze level so far

Wishing you all the best and hope that we can make your experience with Clecim unforgettable !

Sincerely yours

Thomas Comte / CEO of Clecim SAS



Source : interview of Thomas Comte - ceo of clecim by BFM TV at Global Industry the 27 th March 2024 in Paris - Villepinte

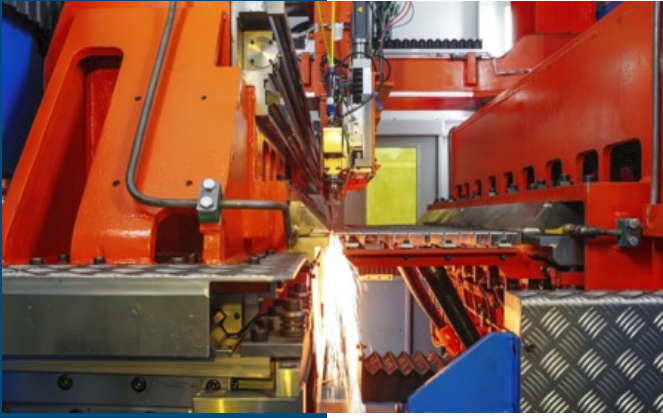
Clecim® Laser Welding Solutions to Support Steel Producers World-wide in Electric Steel Grades for the Growing Electric Vehicle Market!

Your Clients' Challenges

As electric mobility improves and expands, the automotive sector brings about significant changes in adjacent industries, impacting infrastructure, energy, and steel. Specifically, the production of electric steel grades has been greatly affected by this revolution. Electric steels are used in very thin layers and are characterized by their magnetic and mechanical properties: high polarization to maximize engine performance, low losses to promote vehicle autonomy, and high strength to support engine rotation.

Welding these high silicon content grades presents major challenges with conventional resistance welding technologies. Additionally, the welding requirements for coils to pass through annealing and coating lines, as well as finishing lines, tolerate no extra thickness at the weld seam. It is necessary to achieve welding strength within the same range as the base material. This, combined with the absence of extra thick weld seams, allows integrating a weld seam into the engine's stakes. Consequently, it is possible to maintain the welded length inside the coil, thus optimizing the steel producers' rolling mill yield.





The Laser Welder: A Key and Strategic Product in Your Continuous and Complex Processing Lines.

A Laser Welder is a key and strategic product at the entry of your PLTCM (Pickling Tandem Cold Mill) lines and your high-end treatment lines (CGL - Continuous Galvanizing Lines, IL - Inspection Line, ACL - Annealing and Coating Line, RCL - Recoiling Line...).

As a production manager, you expect from the Laser Welder robustness, ease of use, and high reliability, so as not to stop the plant or the line and to ensure safety in the continuous coil manufacturing process. You need the right partner to guide you in your choice with fewer risks for your coil production.



CLECIM SAS in France: Specialist in Laser Welders for 50 Years with a Significant Installed Park.

CLECIM SAS is recognized as a specialist in welding steel grades for 50 years.

Using the experience gained with older technologies such as mash lap and flash-butt, CLECIM SAS has developed since 2010 a range of laser welding machines in light, medium, and heavy sizes to meet the diverse needs of customers in terms of product mix: thickness, width, and steel grades.

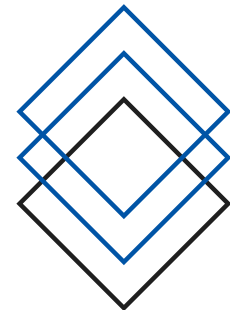
The installed base of CLECIM SAS consists of 234 Laser Welders references worldwide.



Why You Could Trust and Choose CLECIM SAS as Your Laser Welders Supplier?

Robustness and reliability to weld different complex steel grades and ensure the continuous process of a line.

- No extra thickness thanks to perfect control of the weld joint thickness: no marking of coils caused by surrounding windings, increased yield and productivity as the coating rolls remain closed.
- Integrated quality control system improving the operator's confidence in the quality of the weld seam.
- No degradation of the varnish on the surface of the strip with Clecim's laser technology for the automotive market.
- Easy integration into an existing treatment line (e.g., a cutting line for the L-type Laser Welder) thanks to its compact design and installation without civil engineering (interesting for the modernization of old obsolete welding technologies).
- A main point of the laser welding process is the preparation of the strip. Therefore, the cutting operation is a key point. With the laser, the quality of the cut is perfect without deforming the strip, inevitable with mechanical shearing. There is no limitation in terms of steel strength for the cutting capacity.



Maximize the Efficiency of Your Clecim® LW21 Laser Welder with Our Exclusive Services!

You have trusted and chosen CLECIM SAS for your recent investment in your state-of-the-art laser welder or mash lap, specifically designed to weld flat steel coils on continuous process lines. We are confident that this equipment will significantly improve your productivity and product quality.

At CLECIM SAS, we strive to offer you not only cutting-edge products but also to protect and extend the life of your investment.

Original Spare Parts

Ensure you maintain optimal performance of your laser welder by using exclusively our original spare parts. They are specially designed to perfectly fit your equipment and guarantee maximum durability.

Maintenance Contract

Opt for peace of mind by subscribing to one of our annual maintenance contracts. Our teams of experts are committed to ensuring the proper functioning of your laser welder through planned interventions, regular checks, and upgrades if necessary.

Upgrades

Take advantage of the continuous developments of our teams on Laser and Mashlap welders and upgrade them with Weldvision, Swep (or transformer group), Touchless, and Whyco upgrades.

Dedicated Hotline

In case of questions or problems, our dedicated hotline is at your disposal to provide you with quick and efficient technical support. We understand the importance of minimizing downtime, which is why our team is ready to assist you at any time.



On-Site or In-House Specialized Training at CLECIM SAS

Maximize the use of your laser welder by benefiting from our specialized training programs for your beginner, experienced operators, and maintenance managers. Our qualified instructors will guide you through best practices, ensuring optimal use of your equipment.

Presentation of the WeldVision Upgrade: Enhancing Coil-to-Coil Production Quality

We are delighted to announce a significant advancement in our commitment to ensuring optimal quality and reliability in coil-to-coil production processes. Since the beginning of 2023, CLECIM SAS has equipped its range of new laser welders with our exclusive WeldVision welding quality control system.

We are pleased to inform you that this option is now available for an upgrade on existing laser welder installations, regardless of their sizes H, M, and L.

Request our training catalog!

What is WeldVision?

WeldVision represents a revolutionary solution developed in-house by the experts at CLECIM SAS, designed to meticulously monitor and control the quality of welds.

Key Benefits for You, Our Users:

- **Improved Reliability:** The main feature of WELDVISION lies in its integration of an optical profilometer, perfectly incorporated into the welder, offering micrometric precision. All data acquired via WELDVISION are meticulously archived, contributing to a comprehensive database.
- **Improved Quality and Efficiency:** Our solution allows for a clear and immediate qualification of welds (OK/Not OK), accelerating the validation process before sending the welds to the production line (a continuous production line of steel sheets starting from unwound and welded coils).

At CLECIM SAS, our commitment goes beyond simply selling equipment. We are determined to create lasting partnerships with our clients by offering the services and support necessary to ensure the success of your operations. Do not hesitate to contact us for more information about our additional services. We are here to support you at every step of your journey with CLECIM SAS.
services@clecim.com

Moreover, CLECIM SAS has developed an application to utilize the results of the digital chain (geometric measurements and images from the profilometer, temperature sensors, etc.) to qualify welds according to specific criteria (height difference between the input and output sheet, thickness deviation, concavity/convexity, presence of porosity, etc.). The qualification is direct and automatic, facilitated by predefined limits derived from CLECIM SAS's extensive process expertise for each criterion. The application also makes maintenance tasks (such as adjustments of mechanical axes) quick and secure, thereby eliminating the need to enter the welder enclosure for measurements or checks.

In October 2023, the teams at CLECIM SAS successfully upgraded the laser welder of NUCOR STEEL ARKANSAS (USA), a renowned steelmaker, with our WeldVision system.

At CLECIM SAS, we remain dedicated to driving innovation and ensuring unmatched quality in all aspects of your production processes. We are excited about the transformative potential of WeldVision and look forward to collaborating with you to elevate your operations to new heights of excellence.

EVENTS

The rise of electric mobility and its new regulatory standards are disrupting the entire motor production sectors.

Manufacturers of motors for electromobility must now face a major challenge: reconciling large-scale production with increased efficiency, compactness, and rigorous quality control.

For steelmakers, this implies investments at all levels of the production chain, including the establishment of new lines and the modernization of existing equipment.

Clecim SAS stands out as an integrated partner, offering design, manufacturing, and delivery solutions for mechatronic equipment, such as laser welders and Clecim® SIAS DeepLearning automatic surface inspection systems, tailored to the specific needs of the industry.

The laser welding technology developed by Clecim SAS allows for optimal integration of welds into the structure of motors, thus ensuring the delivery of coils with optimized diameters for automotive manufacturers, and thereby avoiding yield losses or coil deterioration.

As for the Clecim® SIAS DeepLearning system, it ensures complete quality control by meticulously inspecting the surface of materials, including the detection of micro-holes. Its ability to be calibrated both on the hardware and software levels allows its seamless integration into the automotive industry's quality processes.



For the second consecutive year, CLECIM SAS exhibited at the Global Industries fair from March 25 to 28, 2023, in Paris Villepinte. Stand 6M35 - Hall 6 at the Club Gier collective.

CLECIM SAS showed visitors at the fair the know-how and expertise acquired in its core business, steelmaking, which it wishes to make available to French and European industrialists, including:

- Design or engineering up to the prototype phase,
- Project management in France and internationally with manufacturing, testing, and delivery in complete confidentiality,
- Machining of large-scale parts.

So, if you are looking for a trustworthy French industrial partner for your project because you need to study or manufacture and test complex products incorporating the latest technologies?

What do our clients say about us: why have you chosen to work with CLECIM SAS? Because it is easy to work with us!

Do not hesitate to contact our experts **Franck VULLIEZ** and **Dominique COUZON**: Tel. + 33 6 79 58 19 31 / franck.vulliez@clecim.com

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