



## Centre of Vocational Excellence in Welding and Non-Destructive Testing

### Introducing the COVE-WENDT Project:

#### Advancing Excellence in Welding and Non-Destructive Testing (NDT)

We are excited to present **COVE-WENDT** – Centre of Vocational Excellence in Welding and Non-Destructive Testing, a forward-thinking initiative funded under the ERASMUS+ EDU-2023-PEX-COVE program, aiming to build a strong, innovative, and sustainable skills ecosystem for the welding sector across Europe.

#### What is COVE-WENDT?

**COVE-WENDT** unites leading VET centres, research institutes, universities, industrial companies, and regional stakeholders from Romania, Spain, Italy, Hungary, and Belgium.

Together, these partners form an international network of Centres of Vocational Excellence (CoVEs) to strengthen skills development and foster innovation in welding and non-destructive testing (NDT), supporting Europe's transition to a green and digital economy.

#### Project Goals

**COVE-WENDT aims to:**

- Strengthen collaboration among Quadruple Helix actors (industry, education, government, and civil society)
- Create an international IT platform to share best practices and innovative knowledge
- Develop cutting-edge training materials focused on digitalization and green technologies
- Enhance trainers' skills to address societal and industrial challenges through education
- Build a network of living labs to test and develop new solutions, technologies, and products

#### Key Results

**By the end of the project, COVE-WENDT will deliver:**

- Innovative curricula and learner-centred educational materials
- A transnational collaborative IT platform and job board
- A dynamic living labs network for testing and co-creation
- 24 training events, 12 job fairs, 2 international skills competitions, and more

#### Why is COVE-WENDT Important?

The welding industry is evolving rapidly, driven by the need for digital transformation and sustainable practices. However, there is a growing skills gap, particularly in digital education and green technologies.

**COVE-WENDT** responds to these challenges by equipping trainers, professionals, and young talents with the necessary skills to lead this transition and ensure the industry's future competitiveness.

##### How Will the Project Work?

**COVE-WENDT will be implemented in five key phases:**

1. Mapping regional skills needs
2. Strengthening local skills ecosystems
3. Co-creating innovative solutions
4. Piloting new VET practices
5. Ensuring long-term impact and sustainability

##### Long-Term Impact

**COVE-WENDT aims to create:**

- Dynamic regional skills ecosystems
- International collaboration through mobility and knowledge exchange
- Greater alignment between VET systems and industry needs
- Sustainable structures that last beyond the project's lifetime

Through strategic partnerships with organizations like **EFW (European Federation for Welding, Joining and Cutting)** and **IIW (International Institute of Welding)**, the project's results will reach stakeholders across Europe and internationally, ensuring lasting change.

### Forum on Vocational Excellence – COVE 2024 - Lyon, France

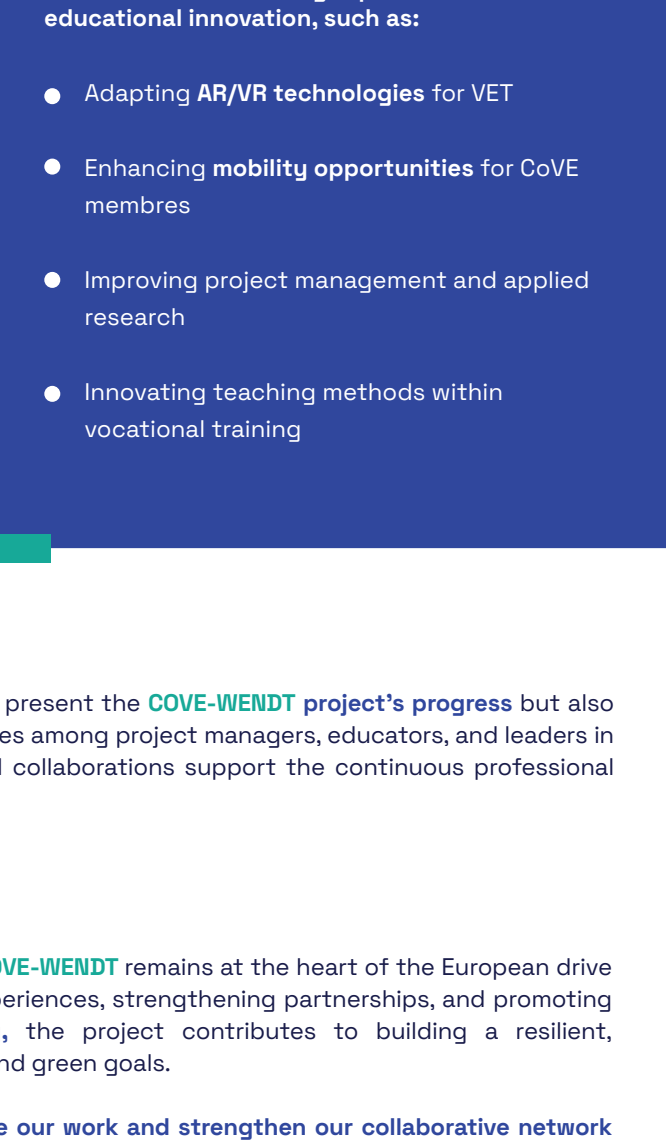
From September 10–13, 2024, a delegation from ISIM Timișoara proudly represented the **COVE-WENDT** project at the prestigious "Forum on Vocational Excellence – COVE 2024", held at EUREXPO LYON, France.

This major event gathered Centres of Vocational Excellence (CoVEs) from across Europe, all working on ERASMUS+ COVE projects, offering a unique space to share progress, create new international partnerships, and grow networks among vocational training centres (VET), universities, research institutes, and industrial companies.

#### COVE-WENDT on the European Stage

For **ISIM Timișoara**, this event was a key opportunity to:

- Showcase the research and development infrastructure being developed as part of the **COVE-WENDT Living Lab**, which will drive innovation in welding and allied technologies.
- Strengthen collaborations using the **Quadruple Helix model**, uniting industry, academia, government, and civil society to stimulate local and regional innovation.
- Reinforce the **COVE-WENDT** project's role within Europe's wider network of competence ecosystems for the green and digital transformation.



#### Key Topics Shaping the Future

- Throughout the forum, participants engaged in interactive workshops and expert-led sessions on vital themes such as:
  - Industry 4.0 and future transportation
  - Energy transition and sustainable cities
  - Digital sovereignty and data management

Challenges of ecological and societal transitions

**Additional cross-cutting topics** focused on educational innovation, such as:

- Adapting **AR/VR technologies** for VET
- Enhancing **mobility opportunities** for CoVE members
- Improving project management and applied research
- Innovating teaching methods within vocational training

#### A Platform for Growth and Exchange

The **COVE 2024 Forum** not only provided a platform to present the **COVE-WENDT** project's progress but also facilitated the exchange of expertise and best practices among project managers, educators, and leaders in vocational education. These valuable discussions and collaborations support the continuous professional development of all involved.

#### Reinforcing European Cooperation

Participation in such high-level events ensures that **COVE-WENDT** remains at the heart of the European drive for excellence in vocational education. By sharing experiences, strengthening partnerships, and promoting innovation in welding and non-destructive testing, the project contributes to building a resilient, future-ready workforce, aligned with Europe's digital and green goals.

We look forward to further opportunities to showcase our work and strengthen our collaborative network across Europe.



### International Campus for Teachers and Trainers – Genoa, Italy

An outstanding milestone in the **COVE-WENDT** project was achieved with the successful organization of the "International Campus for Teachers and Trainers / Future Trainers 2024", held from September 23–27, 2024, in Genoa, Italy. Hosted by the Italian Welding Institute (IIS), this unique training experience brought together project partners committed to advancing skills in welding and non-destructive testing (NDT).

#### Building Excellence Through Training

The International Campus served as an informal school designed to empower participants—current and future trainers—by:

- Sharing the latest developments in welding and NDT
- Exchanging best practices from across Europe
- Enhancing skills in the digitalization and greening of manufacturing processes

This hands-on training environment helped equip attendees with **essential competencies** to become successful trainers within the **COVE-WENDT** network, while fostering collaboration among VET centres, research institutes, universities, and industry partners.

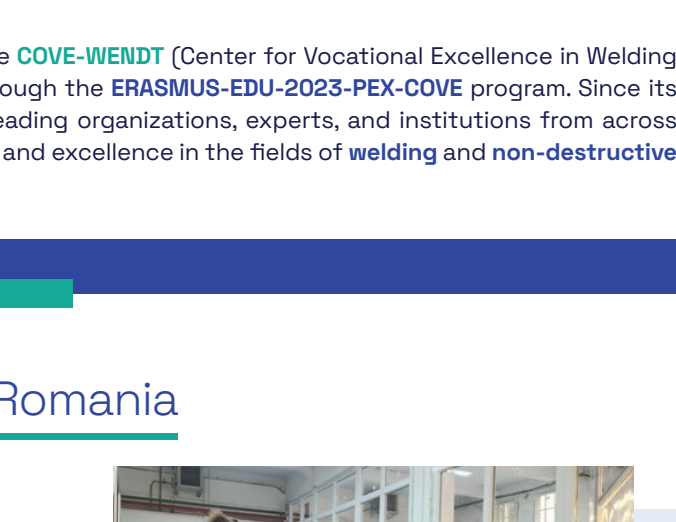
#### Strengthening the COVE-WENDT Community

By participating in this campus, the project partners are reinforcing their positions as Centres of Vocational Excellence (CoVEs) in welding and NDT, ensuring continuous access to the **newest industry knowledge**, cutting-edge technologies, and innovative teaching tools.

#### Looking Ahead

We are confident that the expertise gained through this initiative will contribute directly to:

- Improving training programs
- Enhancing the competencies of future professionals in the welding sector
- Supporting the digital and green transitions in manufacturing.



The success of this campus is yet another step forward in our shared mission of fostering innovation and excellence in vocational education across Europe.

### COVE-WENDT National Workshops:

#### Advancing Welding Excellence Across Europe

The **COVE-WENDT** project is proud to share the successful completion of four **National Workshops** held in Hungary, Romania, Spain, and Italy, bringing together experts, trainers, students, and industry leaders to discuss the latest innovations in welding and non-destructive testing (NDT). These events created unique opportunities to present the project's objectives, promote excellence in vocational education, and foster collaboration within the European welding community.

#### Hungarian National Workshop – Miskolc

October 10, 2024 | Vocational Training Centre of Miskolc

The Hungarian national event was an inspiring gathering of innovators, professionals, and educators focusing on **new trends in welding and industry advancement**. Organized by Miskolci SZC Andrásy Gyula Gépipari Technikum, the workshop provided a hands-on environment for participants to explore modern technologies, share experiences, and identify opportunities for future cooperation.

The event reinforced Hungary's commitment to developing a skilled workforce, prepared to lead digital and green transitions in the welding sector.

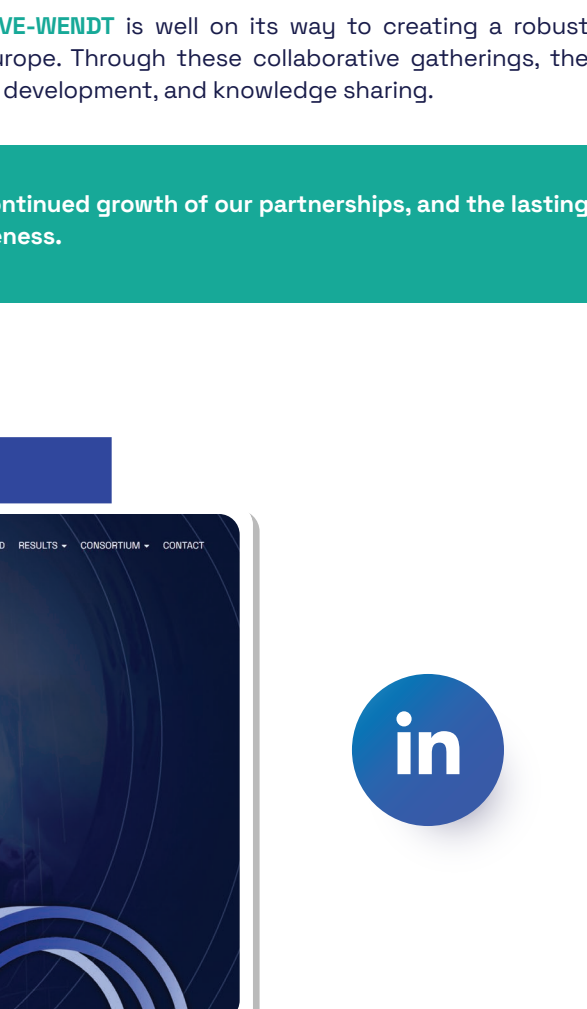
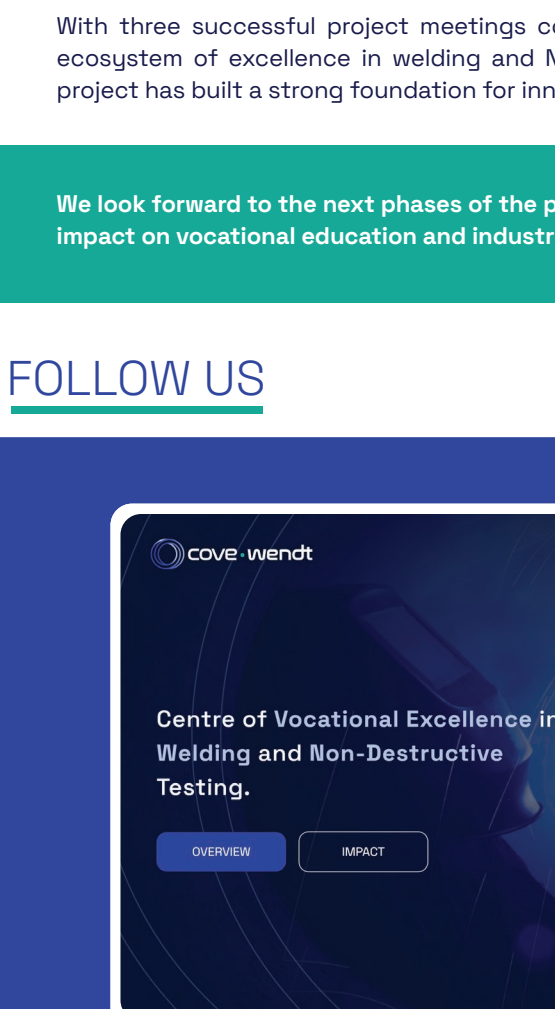


#### Romanian National Workshop – Timișoara

November 8, 2024 | Polytechnic University of Timișoara

Led by ISIM Timișoara, the coordinator of the **COVE-WENDT** project, this workshop gathered 82 participants from academia, industry, and training organizations to explore innovations and trends in welding and NDT.

The event served as a platform for sharing the project's progress and discussing ways to enhance skills development through knowledge exchange and cross-sector collaboration. By bringing together local and international experts, the workshop contributed to reinforcing regional innovation ecosystems in Romania.



#### Spanish National Workshop – Madrid

November 2024 | Metal Madrid Industrial Fair 2024, IFEMA Madrid

CESOL SOLDADURA represented the **COVE-WENDT** project at Metal Madrid, Spain's leading industrial fair, during an innovative workshop focused on **welding, robotics, additive manufacturing**, and industrial adhesives.

This dynamic event highlighted the **COVE-WENDT** project's impact on skills development and industry innovation, while fostering dialogue among key stakeholders and promoting best practices in vocational education. Thanks to the active participation of industry leaders, this workshop helped strengthen Spain's leadership in advanced manufacturing technologies.

#### Italian National Workshop – Ferrara

February 27, 2024 | University of Ferrara

More than 50 young engineers took part in the Italian national workshop, hosted by Istituto Italiano della Saldatura (IIS). The event introduced participants to the **COVE-WENDT** project's goals and achievements while highlighting **new welding trends** that support the sector's green and digital transformation.

Focusing on the next generation of professionals, the workshop emphasized the importance of strong academic preparation combined with practical skills to drive innovation and sustainability in the welding industry.



#### Looking Ahead

These national workshops have demonstrated the strength of the **COVE-WENDT** network in uniting diverse European stakeholders to share knowledge, promote innovation, and support the future of vocational excellence in welding and NDT.

With these successful events completed, we look forward to continuing our work, fostering new collaborations, and supporting the digital and green transition of the welding sector across Europe.

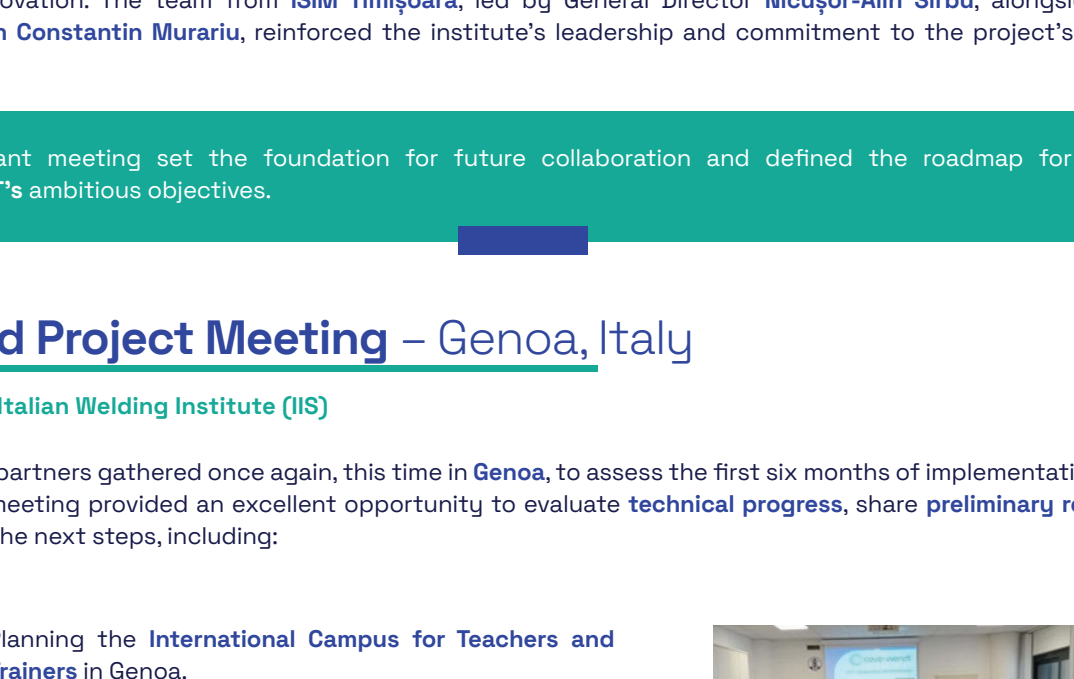
#### Key Milestones and Meetings Driving Innovation in Welding and Non-Destructive Testing

We are excited to share the latest progress of the **COVE-WENDT** (Center for Vocational Excellence in Welding and Non-Destructive Testing) project, funded through the ERASMUS+ EDU-2023-PEX-COVE program. Since its launch in early 2024, the project has gathered leading organizations, experts, and institutions from across Europe to advance skills development, innovation, and excellence in the fields of welding and non-destructive testing (NDT).

### Kick-off Meeting – Timișoara, Romania

April 3–4, 2024 | ISIM Timișoara

The journey of **COVE-WENDT** officially began with a successful Kick-off Meeting hosted at ISIM Timișoara. The event welcomed 28 distinguished participants, including representatives from the International Institute of Welding (IIW), the European Federation for Welding, Joining and Cutting (EFW), cluster organizations, industry leaders, and academic experts.



During the two-day launch event, participants shared insights on strengthening vocational education and driving industry innovation. The team from ISIM Timișoara, led by General Director Mădălin-Alin Sirbu, alongside project manager Alin Constantin Murariu, reinforced the institute's leadership and commitment to the project's long-term success.

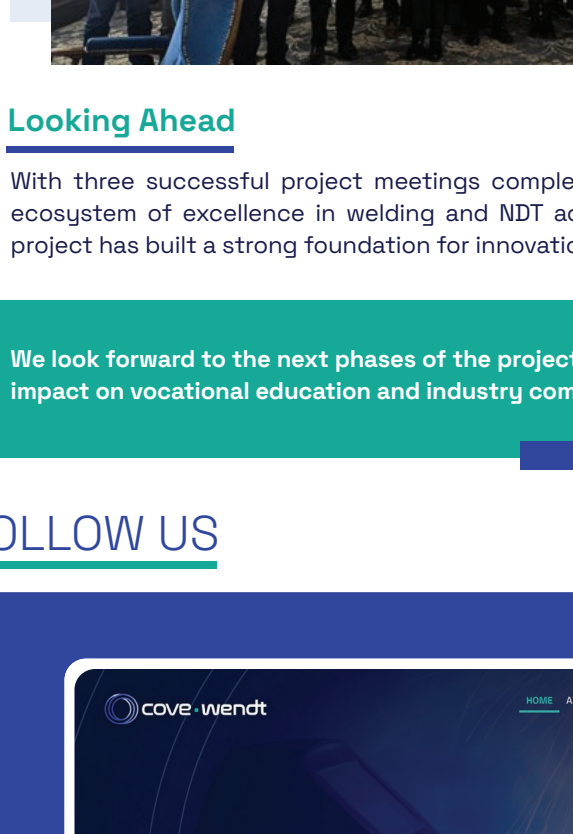
This important meeting set the foundation for future collaboration and defined the roadmap for achieving **COVE-WENDT's** ambitious objectives.

### Second Project Meeting – Genoa, Italy

June 2024 | Italian Welding Institute (IIS)

The project partners gathered once again, this time in Genoa, to assess the first six months of implementation. Hosted by IIS, this meeting provided an excellent opportunity to evaluate **technical progress**, share **preliminary results**, and coordinate the next steps, including:

- Planning the International Campus for Teachers and Trainers in Genoa.
- Developing the project's **communication strategy**, visual identity, and website.
- Organizing national workshops to disseminate results across Hungary, Romania, Spain, and Italy.



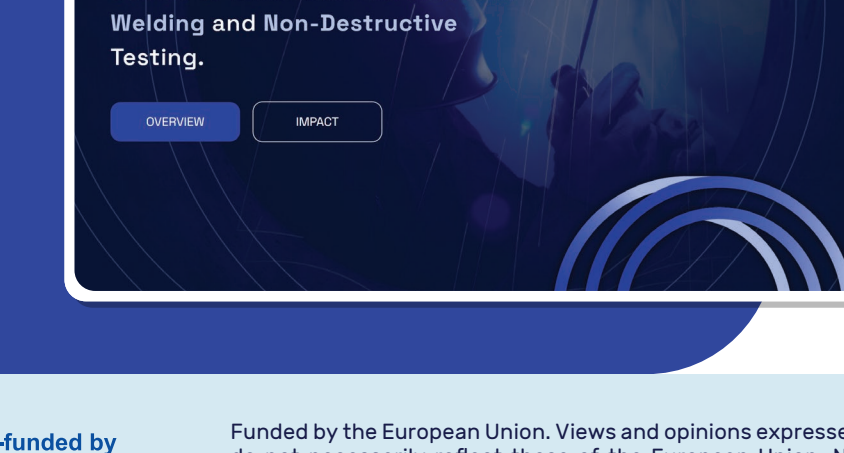
The open and productive discussions in Genoa ensured the smooth progress of project deliverables and reinforced the collaborative spirit among partners, keeping the **COVE-WENDT** initiative on track for success.

### Third Project Meeting – Miskolc, Hungary

April 2025 (M12) | SZC Headquarters & University of Miskolc

The third project meeting, hosted by SZC Miskolc, marked a major milestone by bringing partners together to evaluate the project's **implementation status** and the results achieved after the first year.

Participants also enjoyed an inspiring visit to the University of Miskolc's laboratories, where they witnessed groundbreaking research and cutting-edge innovations that support the welding and NDT sectors. The tour provided valuable insights into how academic excellence can directly contribute to vocational training and industry advancements.



#### Looking Ahead

With three successful project meetings completed, **COVE-WENDT** is well on its way to creating a robust ecosystem of excellence in welding and NDT across Europe. Through these collaborative gatherings, the project has built a strong foundation for innovation, skills development, and knowledge sharing.

We look forward to the next phases of the project, the continued growth of our partnerships, and the lasting impact on vocational education and industry competitiveness.

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