



IRON-MEN

The augmented operator at the heart of tomorrow's factory

In an unpredictable world, industry is faced with unprecedented levels of day-to-day complexity. In factories, this situation is reflected in an exponential increase in training requirements to make teams more flexible. IRON-MEN uses augmented reality (AR) in a unique way to meet this need for flexibility. Skills transfer and learning have never been so effective on the factory floor.

Télécom & Société Numérique Carnot Institute

Scientific / technological breakthrough

The IRON-MEN project is a joint initiative between elm.leblanc (Bosch), a leading manufacturer of heating and air conditioning solutions, and three Carnot TSN research labs (the Optics and Interactions departments of IMT Atlantique and the Artémis department at Télécom SudParis). The expertise and R&D capabilities of these players, structured around 5 CIFRE government-sponsored research doctoral theses, have made it possible to validate the use of augmented reality for training processes in an industrial environment. One of the project's singular features is that this application is deployed at the workstation, right in the heart of the production line; both for creating training instructions and using them to learn, directly from a headset.



Competitive advantage for the economic stakeholders

The project focuses on performance at the elm.leblanc industrial plants in Drancy (Seine-Saint-Denis) and Saint-Thégonnec (Finistère), thus supporting local employment and plant development.

Moreover, collaboration via the IRON-MEN project and scientific publications have made it possible to share and promote this vision of augmented reality as an emerging technology for a brand new generation of training tools within the sector. Training new operators at Drancy now only requires a maximum of three days, versus two weeks previously, with the ability to identify in just a few minutes the fit between a candidate's profile and a given work station.

Partnership

- **elm.leblanc** designs, manufactures, markets and maintains heating, hot water production and cooling solutions throughout France. The company is present on the French market via two strong and complementary brands, Bosch and elm.leblanc, and produces at two factories in Drancy (93) and Saint-Thégonnec (29). www.elmleblanc.fr