

Case Study

# **Case Study: EJOT-ATF's Journey to ZinKlad® Certification**

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When EJOT-ATF Fasteners de México set out to expand their manufacturing capabilities and strengthen their position in the automotive fastener market, they identified vertical integration as a key step in meeting the strict quality and performance standards of major OEMs. As a global supplier of safety-critical fasteners and cold-formed components, the company, based in San Luis Potosí, Mexico, sought to bring plating operations in-house to enhance control and distinguish itself as a leader in surface finishing.

To support this strategic move, EJOT-ATF turned to MacDermid Enthone for their proven ZinKlad® certification program, technical expertise, and global support network.

“We initially selected MacDermid Enthone due to their ZinKlad program, which is well known with global OEMs,” said Miguel Angel Garcia, General Manager of EJOT-ATF. “In the automotive and industrial sectors, ZinKlad certification is seen as a mark of industry-leading quality and performance. It is approved by Ford, GM, Tesla, and John Deere, just to name a few. We knew that becoming a certified applicator would elevate our business, making us a trusted choice in Mexico and setting us apart from the competition.”

The journey to certification began in 2021, when EJOT-ATF embarked on a complex project to build and qualify a new plating line for zinc-nickel coatings. Their goal was to achieve ZinKlad 1000, 1000B, and 1000B-EXP certification levels, ambitious targets that would position them for success. From initial equipment design to establishing process controls and supporting start-up and ongoing maintenance, MacDermid Enthone remained in lockstep with EJOT throughout every step of the process.

“We supported EJOT from the very beginning,” said Rodolfo Gloria Contreras, Account Manager at MacDermid Enthone. “This included providing expert guidance in plating line design, assisting with certification documentation and procedures, and providing ongoing technical support. Once the line was running, we continued to work with their teams in Mexico and Germany to enhance the quality and consistency of their plating processes.”

The relationship was marked by ongoing communication, transparency, and cross-functional teamwork. Weekly meetings between MacDermid Enthone experts from Mexico and Germany, and the EJOT teams in San Luis Potosí and Europe, created a

collaborative environment focused on refining chemistry control, improving equipment performance, and aligning testing methodologies.

“We faced several challenges related to controlling chemistry parameters, maintaining the right color and brightness, acquiring the correct equipment, and passing CQI-11 requirements,” Garcia recalled. “But MacDermid Enthone walked us through every step. Their training, onsite visits, and technical support were critical to our long-term success.”

Within 14 months, EJOT achieved its goal of ZinKlad certification. In addition to securing certification for ZinKlad 1000, 1000B, and the demanding 1000B-EXP level, the plant also received GM approvals for GMW16730 and is nearing final approval for GMW4700.

The results have been transformative. In 2024, EJOT-ATF increased plating production volume by 250% compared to 2023, with internal rejection rates dropping by 90%. With a fully integrated process now in place, they’ve eliminated delays and quality issues previously experienced with external suppliers. The ZinKlad quality controls have also improved process stability and performance consistency, with better results in torque-tension testing, salt spray resistance, and coating uniformity.

“These certifications give us a competitive advantage,” Garcia noted. “Our customers are seeing the difference. Since certification, we’ve won 18 new projects, and customer approvals are coming more quickly. We are undoubtedly seeing the return on our investment.”

From a sustainability standpoint, ZinKlad coatings help EJOT meet ROHS and ELV compliance goals, aligning with the environmental expectations of global OEMs.

Looking ahead, MacDermid Enthone continues to support EJOT through regular assessments, ongoing recertification efforts, and collaborative improvement initiatives. The ZinKlad program has elevated EJOT-ATF’s operational capabilities and solidified its position as a high-performance supplier in the global fastener market.

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