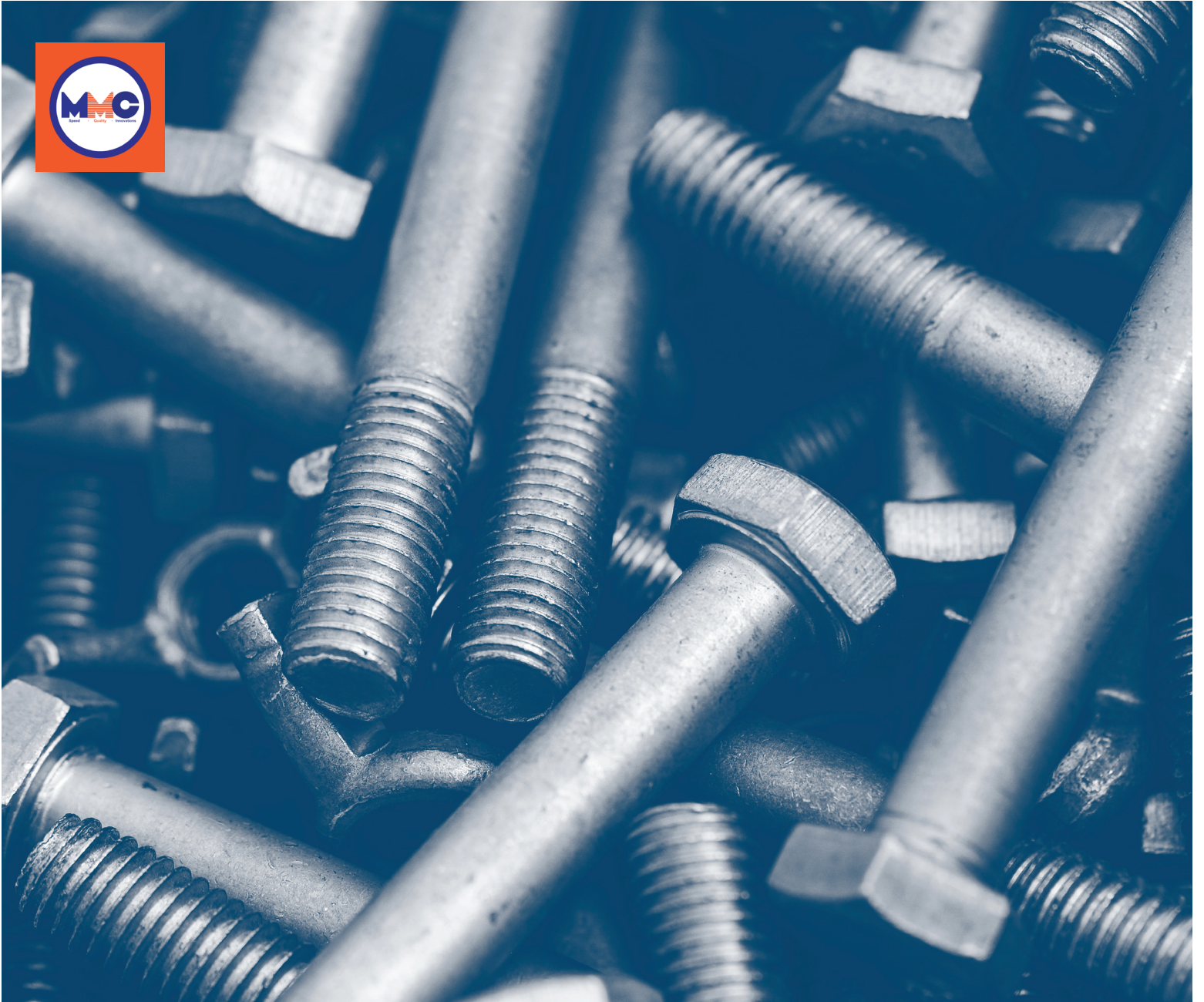




ADVANTAGES OF ZINK FLAKE COATING OVER HOT DIP GALVANIZING

Dundee Case Study



KEY CHALLENGES

A manufacturing program in Dundee required a corrosion-resistant coating solution for stamped components. Traditional hot dip galvanizing presented concerns related to process heat, potential part distortion, manufacturing waste, and workplace environmental conditions.

SOLUTIONS

MMC evaluated and implemented a Zink Flake coating solution as an alternative to conventional hot dip galvanizing. The objective was to maintain corrosion protection while addressing manufacturing and operational challenges associated with high-temperature coating processes.

CASE STUDY TAKE-AWAYS

1. REDUCED MANUFACTURING WASTE

The Dundee project demonstrated that the Zink Flake process can help reduce waste associated with coating operations and downstream production activities.

2. NO HEAT-INDUCED WARPING

Unlike hot dip galvanizing, the Zink Flake process avoids the heat exposure that may distort precision stampings. Maintaining dimensional stability was a significant advantage for stamped components.

3. LOWER FUME GENERATION

The coating process resulted in lower fumes compared with traditional hot dip galvanizing operations, supporting a cleaner manufacturing environment.

4. IMPROVED PRODUCT QUALITY

By reducing the risk of component warpage, the Dundee project demonstrated how Zink Flake coatings can help preserve part integrity and consistency throughout production. This conclusion is derived from the email's statement that the process "will not warp stamping."

5. ALTERNATIVE TO HOT DIP GALVANIZING

The project showed that Zink Flake can serve as an effective replacement for hot dip galvanizing when manufacturers seek corrosion protection while minimizing heat-related processing concerns. This aligns with the subject of the email itself.

CONCLUSION

The Dundee project highlighted the value of Zink Flake coatings as a modern alternative to hot dip galvanizing. Key advantages included reduced waste, elimination of stamping warpage caused by process heat, and lower fume generation, helping support both manufacturing efficiency and product quality.