


Energy and Environment



Automation, innovation and enclosed zones combine to create process improvements to deliver a range of recycling benefits, reduce the emissions generated by traditional galvanizing and improve safety throughout the different processing zones of a galvanizing plant. KTE can design these factors into galvanizing plants which ensures plants are both productive and environmentally responsible.

Emission Control

The control of emissions is becoming an increasingly important consideration in the design and operation of galvanizing plants. Emissions need to be carefully controlled to avoid contamination in the surrounding neighbourhood, in the land holding and to comply with ever increasing government regulations.

Kingfield Technology & Equipment factors emission control to suit local conditions into all Galvanizing Plant designs.



Sustainability

KTE can design into plants the use of automated materials handling systems to deliver greater processing consistency, therefore reducing consumption of chemicals and waste production. A focus on sustainability in designing innovative systems helps reduce emissions, increase recycling, re-use outputs to minimise waste, improve workplace safety and create a cleaner working environment.

In addition, The Reclaimer King Furnace is designed to reclaim metal from the ash that is created by skimming molten metal and impurities in bath type applications such as galvanizing. This process results in cost savings and improved productivity by managing the process on site. Please refer to the detail about the Reclaimer King under equipment.

Please refer to our Environmental Policy on the website

Energy Use

Substantial energy is required to heat the hot dip galvanizing bath and pre-treatment tanks. It is critical for the profitable operation of a galvanizing plant that energy is used efficiently – and re-used wherever possible. KTE enables energy efficiency and improved energy management through:

- improved burner technology for greater energy efficiency
- improved infinite control over the burners through advanced PLC programming technology
- improved insulation techniques and materials
- more efficient bath enclosures
- greater use of waste heat for heating of pre-treatment tanks

KTE is a leader in combustion technologies designed to achieve maximum performance whilst minimising energy use. Our Control Systems have been designed and built specifically to achieve this and provide global leading results.

Hybrid Furnace – KTE currently provides several combinations of plug and play features dependent upon the customer's requirements, available energy and energy source.

With green electricity produced from solar, wind or hydro power and now combining green hydrogen, our hybrid furnace design offers both electric & hydrogen fuel. We have a furnace design to encompass many variations and combinations. As an example a furnace which heats from green electric power through the day and then heated by green Hydrogen during the night! All this fully automated, monitored and controlled via our remote access Industry 4 digitalisation.