

# Safety Solutions for The Global Water Industry



- FLEXIBLE SOLUTIONS FOR ALL TYPES OF HANDRAIL AND GUARDRAIL
- HIGH CORROSION RESISTANCE, STRENGTH & DURABILITY
- NO WELDING, THREADING OR BOLTING REQUIRED
- EASE OF INSTALLATION



# **Solutions for The Global Water Industry**

Kee Safety, a leading global supplier of handrail, guardrail and height safety equipment, offers cost effective, flexible and safe solutions designed to separate people from hazards. Waste and Water Treatment facilities require corrosion resistant, durable, heavy-duty solutions to withstand outdoor exposure and everyday use. Kee Safety products easily meet these requirements.

Kee Safety has supplied safety solutions to many Sewage Treatment Plants, Pumping Stations, Petrochemical Plants and Desalination Plants around the World. For example at Sewage Treatment Plants in Al Wathba, Abu Dhabi, UAE; at the Psyttalia Waste Water Treatment Plant in Greece, at the Sea Desalination Water Plant in Jeddah, Saudi Arabia, at the A'Seeb Waste Water Project in Oman and at the Waste Water Treatment Plant in Nova Sol, Poland to name just a few.



## **Safety Barriers**

Many areas on a Water Treatment Plant require guardrailing:

- Aeration tanks
- Sedimentation tanks
- Sludge post-thickening storage tanks

Kee Safety barrier systems offer a cost effective alternative to traditional welded handrails. Our guardrails are quick and easy to design and install and very cost effective due to the modularity of their parts.

Slip-on fittings securely join standard sizes of structural tube into almost any configuration imaginable, utilising the widest range of fittings available on the market today.





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## **Modular Barrier Systems**

Installing barriers using modular components is quicker and more flexible than fabricated systems. There is no need for detailed site surveys, a simple layout drawing showing where to place the uprights is all that is required before construction of the barrier can begin. Fittings can easily accommodate changes in level or direction, and meet virtually any design requirement.

Modular barriers are easy to install so there is no need for skilled labour or special work permits, and because there is no cutting or welding of components, the integrity of all coatings is left intact and railing systems are more resilient to corrosion.

Kee Safety supplies KEE KLAMP tubular fittings made from malleable iron and KEE LITE aluminium fittings, both types can be used in internal and external applications. An additional optional powder coating can be arranged for aluminium fittings and tube to provide the extra corrosion protection needed in the harshest environments.

- Simple way to create guardrail & handrail
- High corrosion resistance
- Galvanised steel or Aluminium options
- No welding / No hot work permits
- Quick installation / Cost effective
- Adaptable to changes in design
- Use standard tube
- Flexible systems allow on-site alterations



#### **Galvanised slip-on fittings**

Innovative and versatile products that are used in the construction of handrails, railings and barriers. The fittings are hot dip galvanised cast iron for optimum corrosion resistance, strength and durability.



#### **Aluminium slip-on fittings**

Tubular fittings manufactured from a high grade Aluminium Silicon Magnesium Alloy. The components are strong yet light, and extremely durable even in harsh environments.

Kee Safety barrier systems conform to stringent global industry standards. KEE KLAMP and KEE LITE fittings have been tested and approved by TÜV, one of Europe's leading test houses.



## **Design & Installation Service**

Kee Safety can offer our customers a full design and installation service, undertake surveys and produce CAD drawings for each project to give you the most cost effective solution to your needs, and ensure that all designs conform to the relevant standards.

### **Fall Protection Solutions**

In some areas of a Water Treatment Plant work at height equipment may be required. Kee Safety supplies a vast range of both Collective and Personal Fall Protection products designed to ensure a safe working environment.

We provide a range of guardrail products for use on either flat or profile roofs, guardrail for skylights, engineered lifeline systems, deadweight anchors and rooftop walkways.



# 'Kee' Player in the Water Industry



The perfect showcase for the versatility of Kee Safety's barrier systems is the Psyttalia Waste Water Treatment Plant – Europe's biggest sewerage plant and one of the largest internationally.

The plant is situated on the island of Psyttalia, 2.2 kilometres south of the Athens suburb of Keratsini, and it treats the lion's share of Athens' waste water (about 1 million cubic metres of waste water per day).

Kee Safety, together with its local distributor, supplied a number of different types of KEE KLAMP fittings for this impressive installation. A major part of the plant's construction has involved the creation of a series of aeration tanks, orthogonal, primary sedimentation tanks and sludge post-thickening storage tanks.



Over 22,000 metres of guardrailing were connected together by KEE KLAMP fittings, ensuring optimum safety and secure handhold for treatment works employees tasked with maintaining and monitoring the plant.

One of the key challenges faced on the project was the many changes in angle required around the perimeter of the various tanks. With the most comprehensive range of fittings on the market, Kee Safety was able to comfortably accommodate the resulting changes in guardrailing direction required by the specification.

The versatility of KEE KLAMP fittings also helped ensure that all the guardrailing could be cost-effectively assembled in double-quick time and with the minimum of installation difficulty.



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