

Aluminized Steel Construction



Avtron uses aluminized steel construction for superior corrosion, heat and finish protection.

Aluminized Steel

- It is designed to combat heat and corrosion. Common examples of aluminized steel products: catalytic convertors, mufflers, furnace heat exchangers, and incinerators
- Aluminized steel has a maximum surface temperature of 1250°F*. This higher value insures a load bank will not fatigue in high temperature exhaust applications (i.e. duct/radiator mount)
- AGA (ANSI Standards) rated to 1030°F above ambient.
- UL rated to 1180°F above ambient.
- Aluminized steel will not become brittle under heat.
- Even up to 800°F* aluminized steel reflects up to 80% of radiant heat that strikes it. This results in a significantly cooler load bank.
- It provides superior corrosion protection. Aluminized resists salt spray corrosion at a rate 2.5x that of galvanized. This protection assures maximum useful service life of Avtron Load Banks.
- Aluminized steel is available in multiple qualities and grades. (i.e. commercial, drawing, or special kiln). It can be tailored for a variety of applications.
- Aluminized Steel has a hard and smooth surface which is easy to paint and clean.
- Low thermal expansion ensures steel will not deform under heat stress.

* Data sourced from AKSteel.com ** Data sourced from galvenizeit.org

Galvanized Steel

- It is not ideal for load bank applications with its low corrosion and heat thresholds. Typical galvanized steel products are gutters, hog feeders, roof shingles, and garbage cans.
- Recommended service temperature of 392°F**
- No approval ratings.
- 480°F** maximum rating.
- It becomes brittle between 500-700°F.
- It will start to absorb heat at 500°F. A load bank would effectively become a heat sink. This heat will fatigue internal and external components. A load bank's exterior becomes a heat hazard.
- It starts to corrode at approx. 200 hours in salt spray conditions.
- It is limited to commercial quality only.
- Galvanized steel has zinc content which reacts with a paint's binding agent that results in peeling paint.
- Due to its low thermal rating, galvanized steel is more susceptible to heat stress.