



CASE STUDY

ENGINEERING & DESIGN

FLAME ARRESTOR TOLERANCE ISSUE

AT A GLANCE

Problem: Ongoing site operating constraints due to faulty flame arrestors.

Challenge: The client urgently needed to install self-procured flame arrestors but encountered tolerance issues that would cause clashes with supporting steelwork.

Solution: GDi was able to provide a quick solution by engineering, fabricating, and delivering bespoke inline spacers within 7 days by using Vision and existing point cloud data.

Outcome: Successful installation of flame arrestors, removing plant operating restraints, and demonstrating GDi's agility and problem-solving abilities.

SOLUTION

GDi was initially tasked with supporting the client by supplying installation materials and providing on-site construction assistance for the installation of the flame arrestors. However, upon delivery of the new flame arrestors, the site team discovered that they significantly deviated from the vendor-supplied drawings, posing a potential clash with supporting steelwork.

In response to this urgent issue, GDi quickly mobilised to review the problem and present possible solutions. **GDi's engineering expertise led to the development of various options, and ultimately, new bespoke inline spacers were engineered, fabricated, and delivered to the site within just 7 days.** These spacers were specifically designed to resolve the tolerance issue and ensure a successful installation.



Laser Scanning &
Data management



Vision



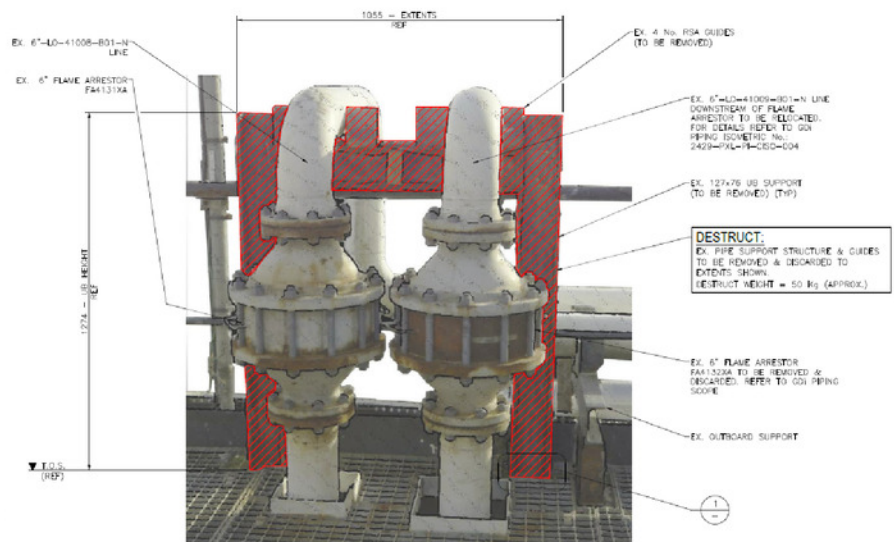
Engineering
& Design



Construction &
Fabric Maintenance

CHALLENGE

A UKCS Operator and GDi have established a collaborative relationship since 2020, working on various scopes, including addressing anomalies in pipework ranging from small single spools to substantial 24-inch Gas Export pipelines. In February 2023, the client had self-procured flame arrestors with the goal of installing them rapidly to eliminate ongoing plant operating restraints.



OUTCOME

GDi's rapid response and innovative engineering solution led to the successful installation of the flame arrestors at the client's site, whilst removing plant operating restraints. The ability to swiftly engineer and fabricate bespoke inline spacers within one week demonstrated GDi's commitment to delivering efficient and effective solutions to their clients.

