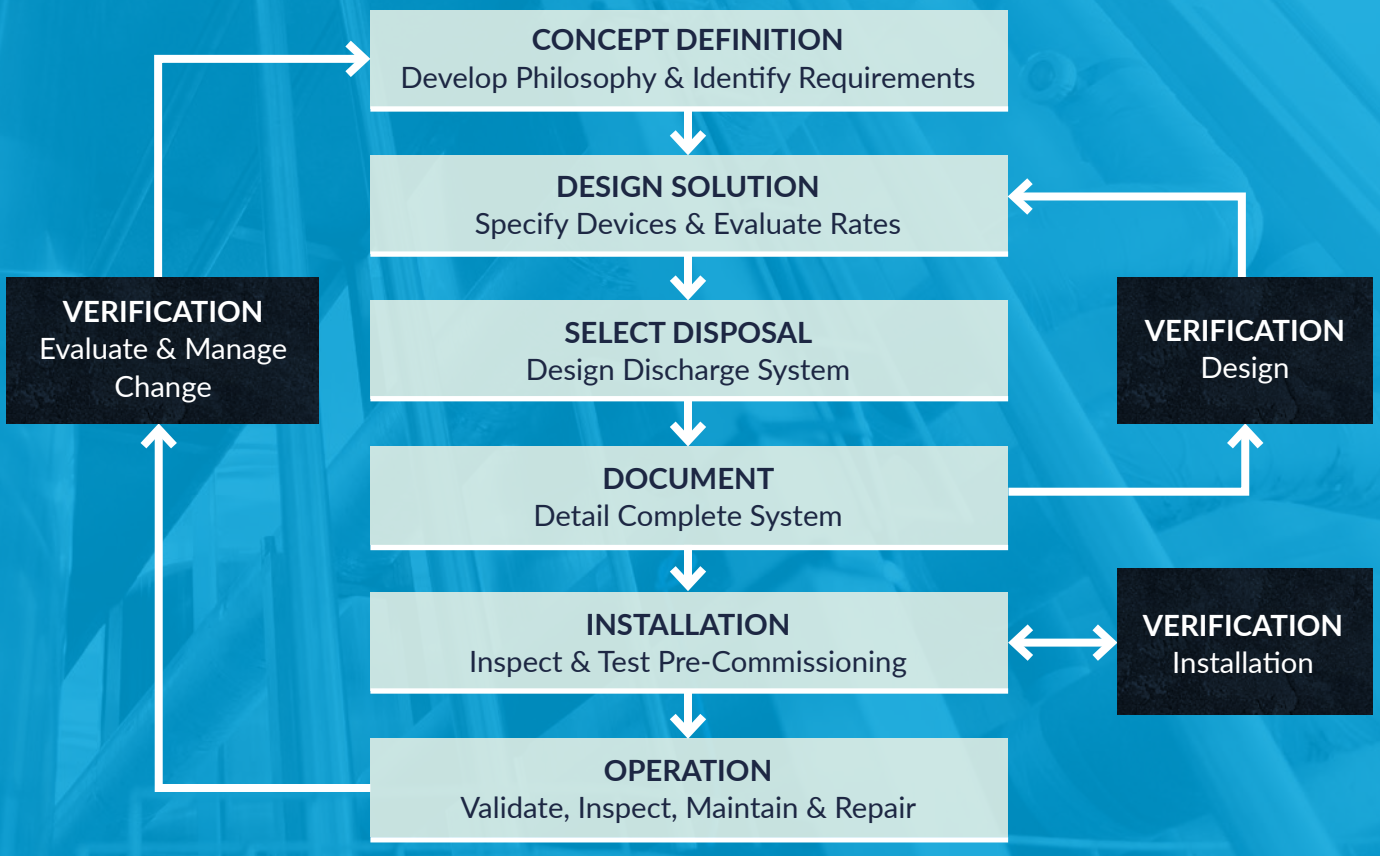
Pressure Relief
Delivering Total Solutions

Pressure Relief Lifecycle

PRESSURE RELIEF SYSTEMS
Protection of equipment and piping from over and under pressure



AXIOM
MAXIMISING ASSETS - MINIMISING RISKS

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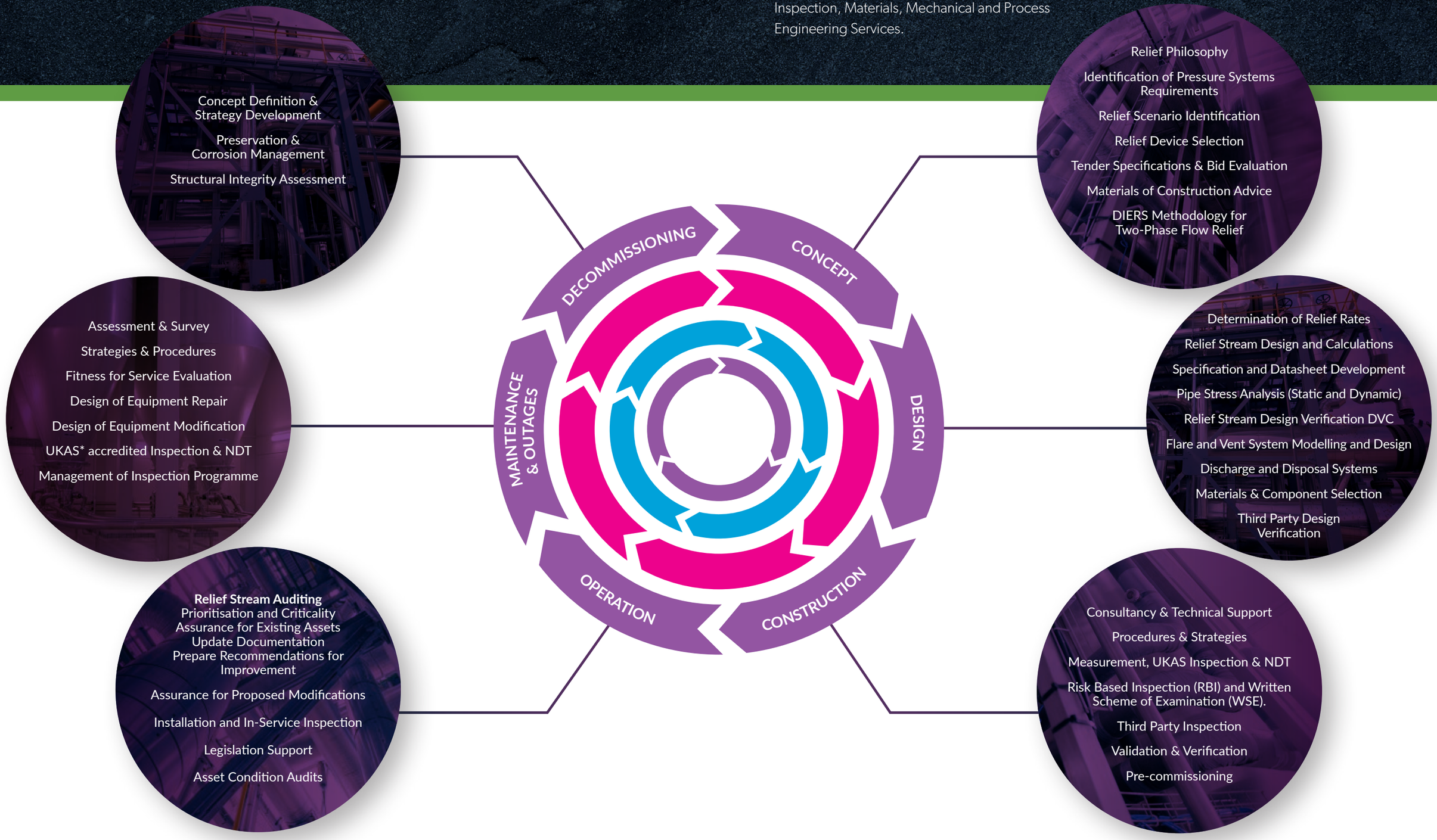
Pressure Relief

Pressure relief systems are a critical layer of protection. To achieve this, pressure relief needs to be considered at each stage of the asset life cycle.

AXIOM has both capability and expertise to provide pragmatic support throughout the pressure relief life cycle. From concept – identification of pressure system requirements and design through to consultancy and technical support, AXIOM will work with you to ensure your plant operates safely and satisfies regulatory compliance. Supporting a range of sectors and businesses globally, AXIOM can help you improve the performance of your plant assets by ensuring correct relief processes are in place with the assurance that the appropriate relief devices are used for their intended purpose.

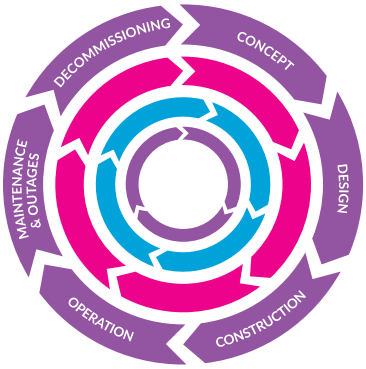
Total solutions are delivered by the integration of our Inspection, Materials, Mechanical and Process Engineering Services.



*Our accreditation is limited to those activities described on our UKAS schedule of accreditation

Pressure Relief

AXIOM can deliver a complete suite of pressure relief lifecycle services as your trusted partner. Together, AXIOM will support you with all aspects of pressure relief on site giving peace of mind and the confidence that your operations are safe for your people, the community and the environment.



CASE STUDY

Global Pharmaceutical Manufacturer

Project name: Bursting Disc Failure.
Project location: UK.

PROJECT DESCRIPTION

The client is a key pharmaceutical operator who suffered an unexpected failure of a bursting disc.

Investigation undertaken to examine the failed disc and determine the root cause of the failure.

- Rupture discovered to be along the stress intensifying groove.
- Comparison with an identical bursting disc was to be undertaken to understand if a similar failure could be possible.

SERVICES AND OUTCOMES

- SEM examination of sections of the fracture surface.
- Compositional analysis to confirm bursting disc material.
- Conclusion that most likely cause of failure is due to fatigue cracking resulting from an irregular profile of the bursting disc groove formed during manufacture.
- Similar groove profile on the intact bursting disc indicated susceptibility to the same failure mechanism.

CASE STUDY

Global Petrochemicals Manufacturer

Project name: Installed Relief System Audit.
Project location: Top Tier COMAH Site UK.

PROJECT DESCRIPTION

The client is a major petrochemicals site and required verification of several installed relief systems within a hydrocarbon processing plant.

- Multiple streams for assessment using a standardised approach.
- Utilisation of process modelling techniques to determine system characteristics.

SERVICES AND OUTCOMES

- Define installed capacity of existing relief systems.
- Review capacities against identified fire relief scenarios.
- Identify shortfalls in fire relief capabilities.
- Develop readily implementable solutions to ensure compliance against site codes.

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