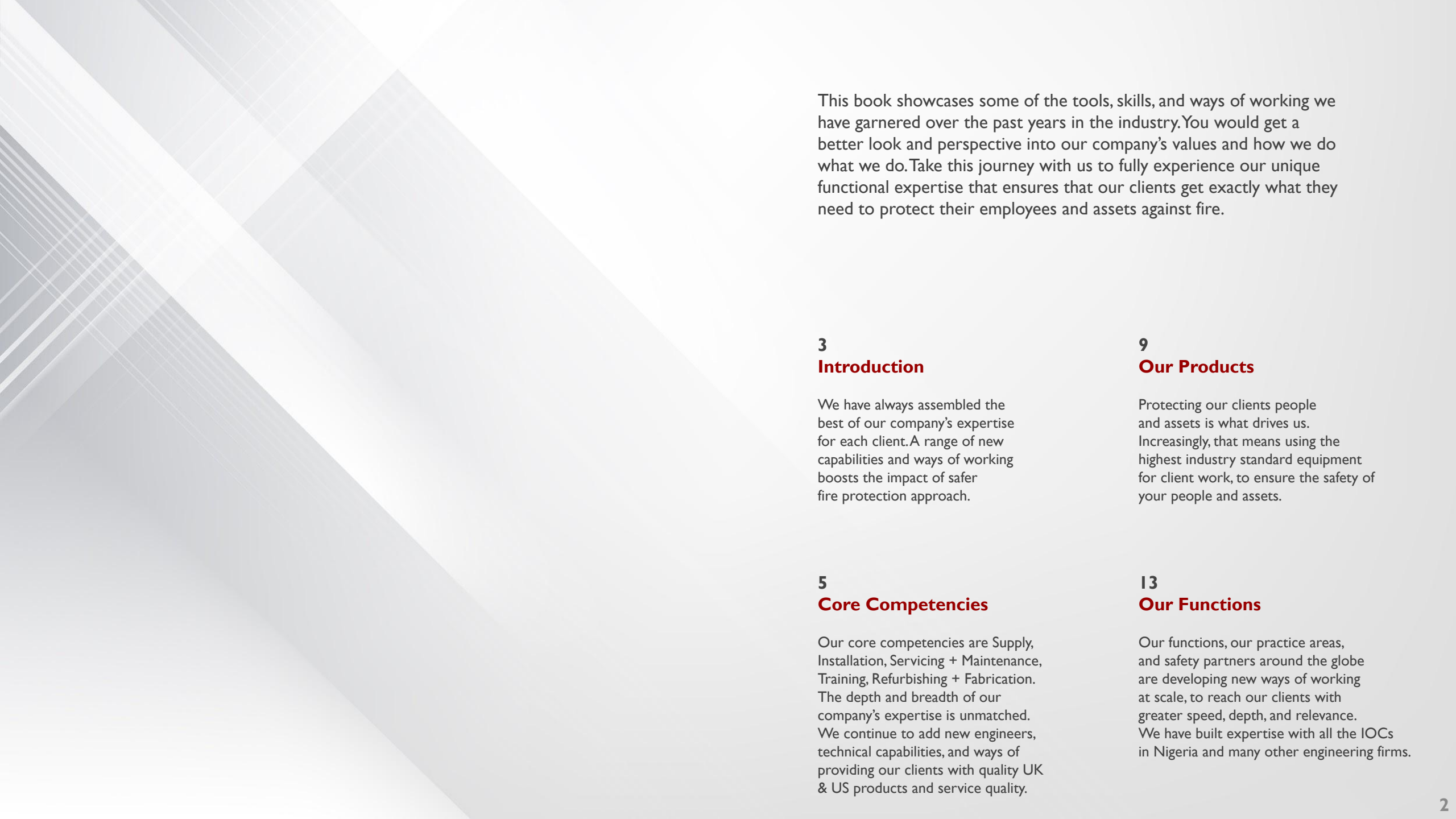




A Small Book on **Fire Safety Engineering**

**RedSense**



This book showcases some of the tools, skills, and ways of working we have garnered over the past years in the industry. You would get a better look and perspective into our company's values and how we do what we do. Take this journey with us to fully experience our unique functional expertise that ensures that our clients get exactly what they need to protect their employees and assets against fire.

### **3**

#### **Introduction**

We have always assembled the best of our company's expertise for each client. A range of new capabilities and ways of working boosts the impact of safer fire protection approach.

### **5**

#### **Core Competencies**

Our core competencies are Supply, Installation, Servicing + Maintenance, Training, Refurbishing + Fabrication. The depth and breadth of our company's expertise is unmatched. We continue to add new engineers, technical capabilities, and ways of providing our clients with quality UK & US products and service quality.

### **9**

#### **Our Products**

Protecting our clients people and assets is what drives us. Increasingly, that means using the highest industry standard equipment for client work, to ensure the safety of your people and assets.

### **13**

#### **Our Functions**

Our functions, our practice areas, and safety partners around the globe are developing new ways of working at scale, to reach our clients with greater speed, depth, and relevance. We have built expertise with all the IOCs in Nigeria and many other engineering firms.

# Introduction

## Fire Protection Engineering

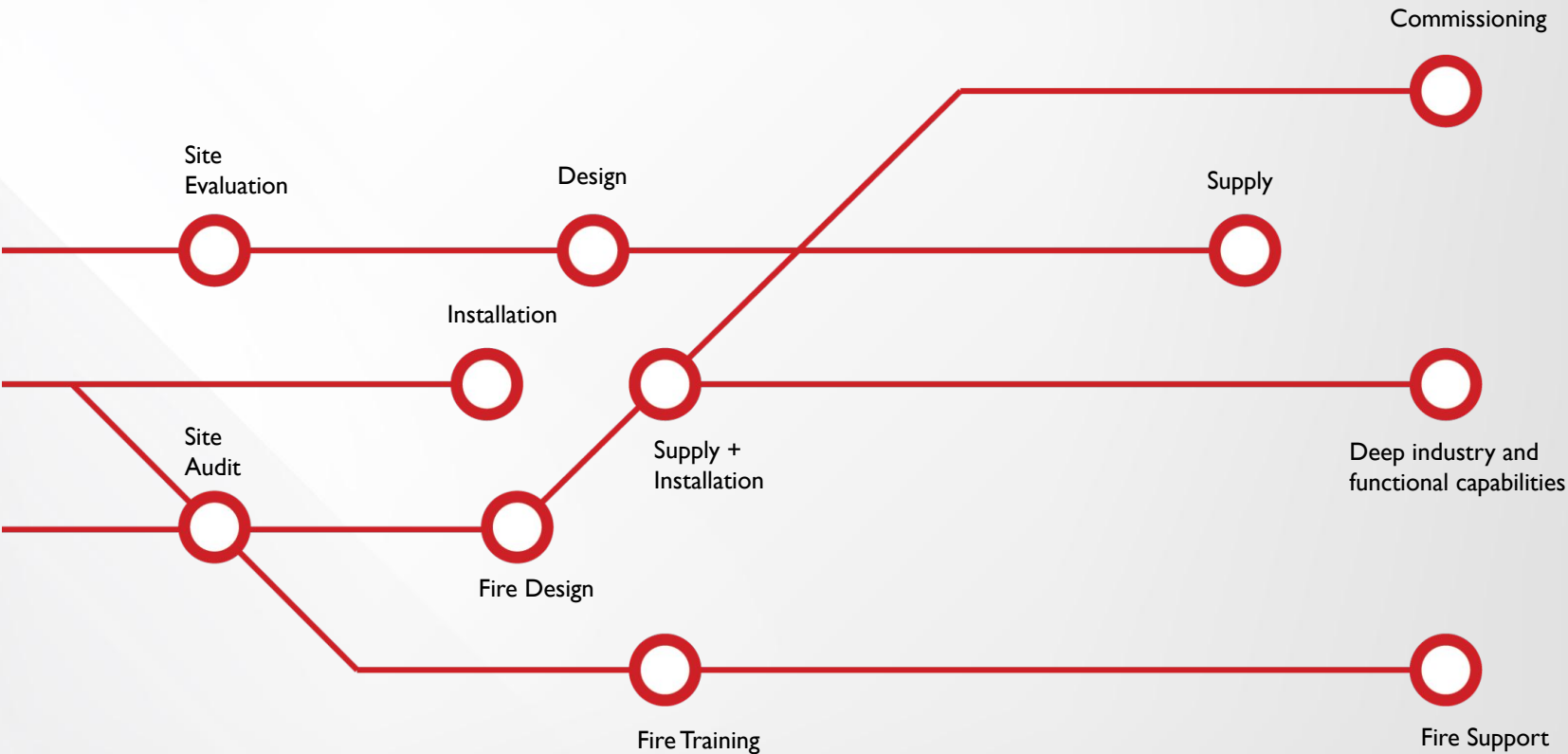
RedSense is the country's leading Fire Protection Engineering organisation. We take pride in providing safety solutions and simplifying operational challenges for our clients in public and private sectors across the globe.

At RedSense, we understand that no two company problems are the same, we help each of our clients design safety solutions tailored specifically to meet their asset needs. Our vast industry and engineering expertise, including safety partners across the globe, emergency technology and robust installation and commissioning expertise, allows us to address problems in the continent, in unique ways that no one else can.

We provide fire consultation, fire building designs, fire strategy and training services of the highest quality to help you build stronger teams, install and commission - UL approved fire equipment. Our clients are fully involved in the processes since we provide personalised solutions to the safety problems.

We design, supply, install, commission and service - Fire Fighting Equipment, such as, Fire Extinguishers, Fire Trucks, Fire Hose Reel, Fire Fighting Foam & Powders, Foam, Equipment Sprinkler System, CO<sub>2</sub> Total Flooding Systems, Fire Detection System (Smoke, Heat, Flame, Explosion Sensors), Fire Hydrant Equipment, FM 200, Argon, Inergen, Fog Water, Fire Fighting Systems, Dry Powder, Fire Fighting Systems, Portable and Trolley units.

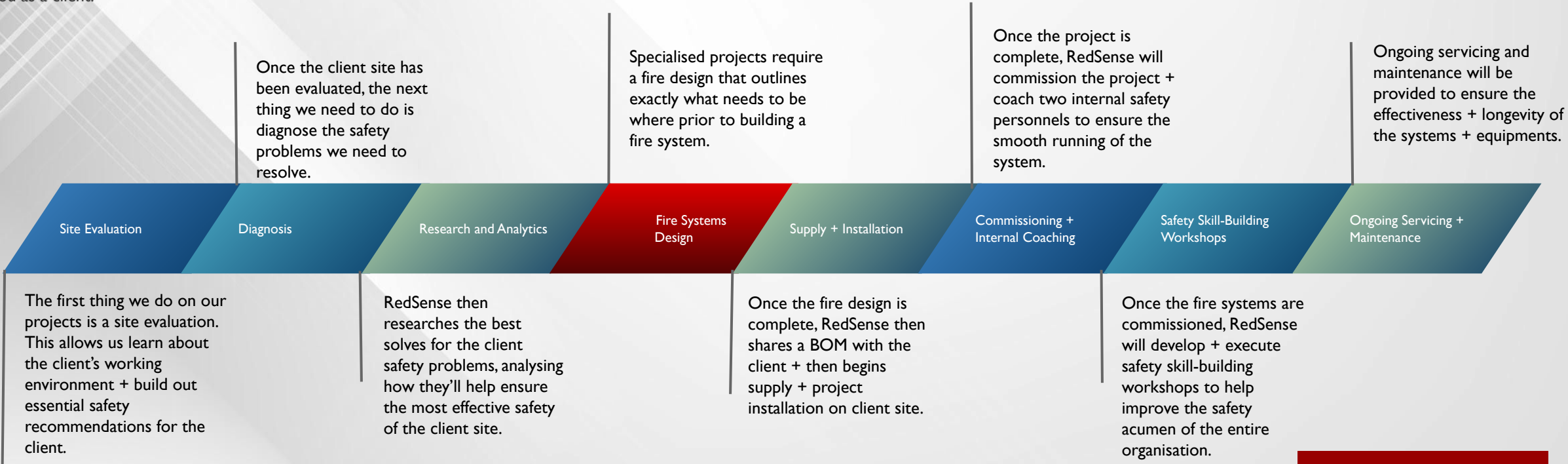
We have an enhanced capacity to implement change, build capacity, and help organisations implement UK standard safety measures, ensuring the total safety of their people and assets. Combining the full scope of our offer today with the strengths of our clients will spark and drive effective fire management across client organisations.



# Introduction

## How we work: A client example

We put together a special blend of skills, experts and equipment for each organisation. The consequence is a safer workplace for our clients + their assets. As our clients safety challenges are simplified through our intelligent processes, longer-term organisational health and safety is also increased. Here is what that means for you as a client.



**₦1.25B**  
worth of value, added to the client's safety line in 3.4 years



## Core Competencies

### Design, Supply, Installation + Maintenance

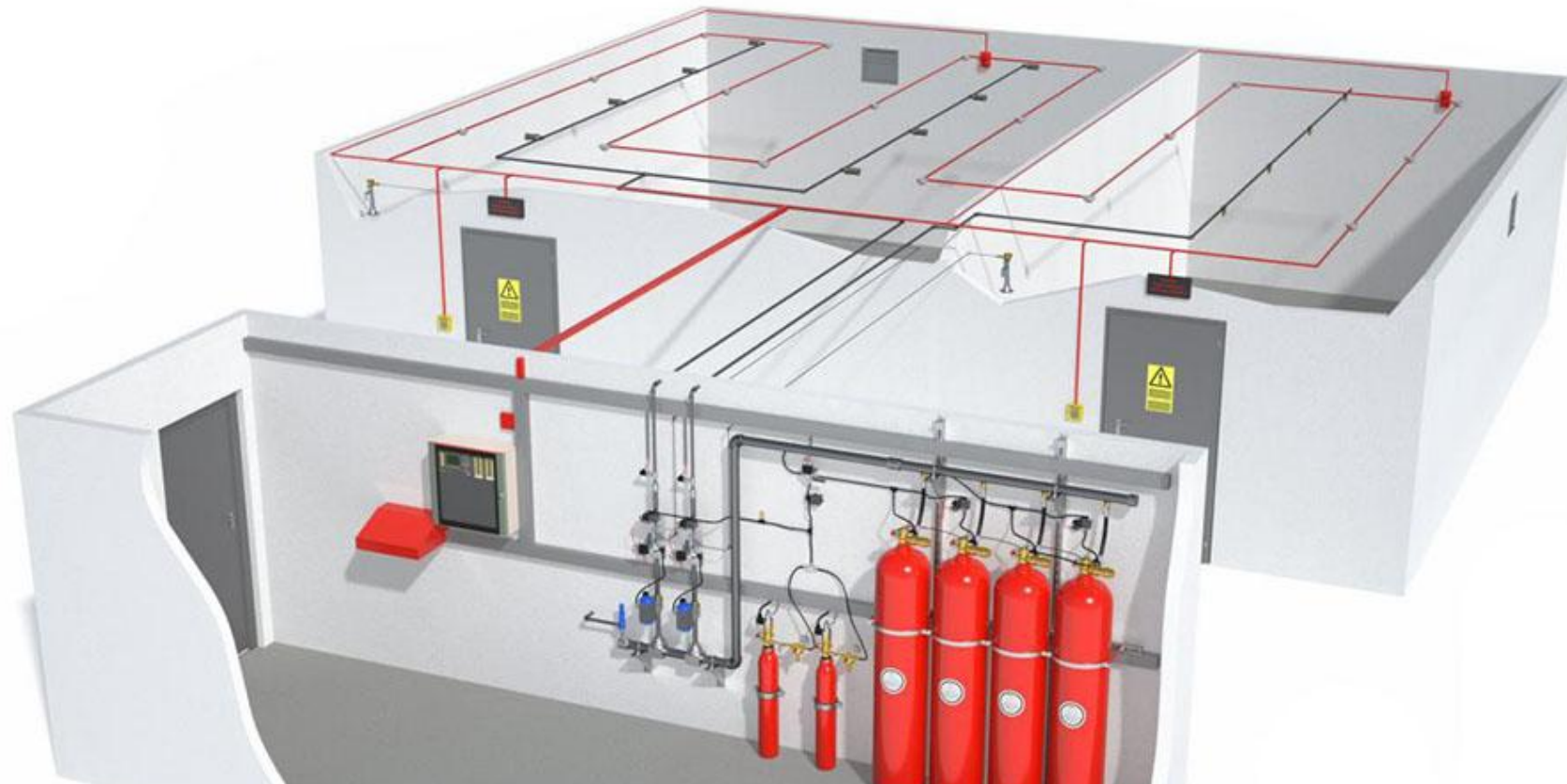
**Design** – Fire suppression systems are a critical component of a comprehensive fire protection system. Unique to the buildings for which they are designed, fire suppression systems can be incredibly complex involving an intricate system of wiring, piping, equipment, and other components. Hence why we start out with a clear fire engineering design. In addition, fire designs must be designed in accordance with a stringent set of rules, laws, and codes to ensure that in the event of a fire, the systems will function properly to suppress fire + fuel.

**Supply** – With RedSense as your safety partner, you are rest assured that the components, wirings + fittings for your fire systems will be of the Industries highest quality. We will also allow you the option of choosing between the industry leader and other safe options so you can make the best choice for your safety. We supply IOCs, Government Institutions, and other International organisations.

**Installation & Maintenance** – RedSense installs fire systems with well trained experts. This allows us manage your project with the highest efficiencies and priority. When we finish installing your system we go through an extensive checking procedure to make sure it works correctly and is installed to the correct design. This includes full witness testing and sign off of commissioning, handover procedures and any certification for your compliance.

| 30+

installation projects across many industries and functions in the three decades.



#### Fire Safety Designs

Buildings need to be designed to offer an acceptable level of fire safety and minimise the risks from heat and smoke. The primary objective is to reduce to within acceptable limits the potential for death or injury to the occupants of a building and others who may become involved, such as the fire and rescue service.

RedSense next critical role is to ensure business continuity after a fire. Also crucial are protecting contents and ensuring that as much as possible of a building can continue to function after a fire - and that it can be repaired. The risk to adjoining properties also needs to be considered, as well as possible environmental pollution. A good fire safety design takes all of these into consideration, while allowing for adequate planning of the safety of people and assets in the event of a fire outbreak.

#### Installing Fire Protection Systems

In order for fire protection systems to perform as intended it is important to understand that fire protection at a facility consists not of just a few sprinkler heads, but of a network of engineered systems that must all function in synchrony to get the intended effect.

For this reason, the specification, design, installation and testing of fire protection systems need to closely adhere to accepted industry fire protection standards.

#### Active Fire Protection

Active fire protection systems include hoses, water spray, deluge, sprinklers, firewater monitors, and steam rings around flanges. In most cases the principal firefighting medium is water. However, other agents such as carbon dioxide can also be used. Generally firewater has two functions. The first is to cool the fire and the area around the fire. The second is to suppress the fire itself. The presence of steam inside the flame reduces the amount of oxygen that is available for the flames.

# Core Competencies

## Fire Training

Our fire safety training courses offer comprehensive, accredited training to individuals, managers and organisations. We offer fire safety courses in basic fire safety training, fire risk assessment, the principles of fire safety for the workplace, fire warden (fire marshal) training and fire risk assessment and management training.

Today's most exceptional organisations take the safety of the people and assets very seriously. In this stead, they invite experts to train, equip and inform their team on how to stay safe and protect company assets in the event of a fire outbreak.

RedSense offers a host of fire training workshops to help organisations understand how to fight small fires, know when to evacuate and safely protect assets. It is also a legal requirement for certain members of staff to be trained in fire safety procedures in the workplace.

Our Training includes: safety measures to proactively practice in the workplace to prevent fire, what action they should take on the discovery of a fire, know the difference between different fire classes, which extinguisher to use for which fire and what the evacuation procedure is.

5+  
people across solution teams

75+  
people trained in the past year



**Fires destroy property, cause injuries, and take lives.** A fire in the workplace can also mean the termination of jobs, as many of the offices and factories destroyed by fire in the country are never rebuilt. One of the key strategies to maintaining a safe workplace and preventing fires is fire safety training.

With proper training workers can eliminate fire hazards and respond quickly and efficiently if a fire breaks out. Without proper training a small occurrence can quickly grow to become a major incident with devastating outcomes.

Everyone is at risk if there is a fire. However, there are some workers who may be at greater risk because of when or where they work, or because they're not familiar with the premises or the equipment at the work site.

Fire safety training can teach workers how to recognize fire hazards, conduct a fire safety risk assessment, prevent a workplace fire, and respond if a fire occurs

**In addition to Fire Safety Training, RedSense offers training workshops in**

- Active shooter/Hostile event response
- Alternative Fuel Vehicles Safety Training
- Building and life safety
- Electrical
- Emergency response
- Fire protection systems
- Health care
- Wildfire hazards and mitigation
- Hot work
- Industrial hazards



# Core Competencies

## Servicing + Maintenance

Alongside detailed planning and proper installation, maintenance and servicing are the crux of fire safety and ensure that your devices and systems last a long time.

Maintenance involves checking and looking after your fire safety systems and equipment, so that it continues to work for your organisation as long as possible, without needing repairs. Depending on the type of fire safety system/equipment, it might be cleaned, adjusted and lubricated, or wear parts might be replaced, for example. Servicing is where a RedSense engineer/technician fixes any faults in the fire safety equipment to get it working properly again.

### Maintenance Schedule - At least once a year:

- Wall-mounted fire hose reels with “wet/dry” or “wet” riser
- Above-ground and underground hydrants
- Securing devices for fire doors and gates
- Smoke and heat extractors
- Fixed extinguishing systems
- Emergency lighting

### At least quarterly:

- Fire alarm systems

12+  
Years of servicing and  
maintaining fire systems

15+  
maintenance projects



RedSense makes maintenance easy – our committed and experienced technicians manage your equipment maintenance and repair records electronically. This creates accessible documentation and assists with cost reductions, budgeting, scheduling, planning, inspections, and maintenance. Our fire equipment services include repair and maintenance of the following:



Fire Sprinkler Systems



Fire Alarm Systems



Kitchen Suppression Systems



Fire Alarm Monitoring



Fire Doors



Emergency Lighting Systems



Fire Extinguishers



Back Flow Systems



Water Systems



Special Hazards

## Core Competencies

### Safety Advisory

Optimal fire protection requires the right advice, planning and execution in and around the building. We are happy to take care of every step - right up to the official documentation.

Fire Safety is multifaceted. Our Fire Protection Engineers can help you understand and address the fire risk in your organisation through assessments, consulting services, and more.

Our Fire Safety Advisory team interventions can reassure insurers, employees and other stakeholders that your company is fully protected.

Our fire protection consulting services provide answers to all your fire-related questions, carry out fire protection risk assessments, create customised fire safety action plans and offer support on-site. As a result, you and your employees are protected from the risks of fire and explosions at work.

We have the resources, including assessment tools and technologies, specialised personnel and a thorough knowledge of compliance issues, that are necessary for effective fire prevention.

50+

relationships with organisations  
as Safety Consultants + Advisors



#### RedSense HSE Policy

RedSense actively seeks to create and maintain a working environment safe from the risks of fire, in compliance with the Regulatory Reform (Fire Safety) Order UK 2005 and The Management of Health and Safety at Work Regulations 1999. RedSense will ensure, so far as is reasonably practicable, the health, safety and welfare with regard to fire, of all its employees, contractors and visitors and any others on our premises. We also acknowledge our responsibility to protect our clienteles' buildings and assets from the threat of the accidental outbreak of fire.

#### The Fire Safety Plan and Procedures in our Health and Safety Policy - RedSense will:

1. Provide information, instruction, training and supervision to enable all employees to carry out their duties effectively and safely following health + safety guidelines
2. Provide safe equipment and systems of work to ensure the safety of our team
3. Carry out meaningful fire risk assessments for all areas and implement appropriate remedial actions
4. Be proactive in fire prevention and reactive in fire and near miss investigation

RedSense is committed to understanding and meeting the quality needs and expectations of our customers. We strive to achieve a reputation for delivering quality components. We have established a comprehensive quality assurance system that allows our company to meet all of the requirements of the ISO 9001:2008 quality assurance standard. Our quality assurance system focuses on the following principles: We will continue to ensure that client satisfaction is achieved at all times. We will share a comprehensive quality policy prior to the start of a project / engagement so as to be aligned with the client company in ensuring the safe performance of our team while executing on client sites.



## Our Products

### Safety Supplies

Optimal fire protection requires the right advice, planning and execution in and around the building. We are happy to take care of every step - right up to the official documentation.

#### Our Guarantee

We recommend and stock mainly Angus and Kidde fire safety equipment. We are an authorised dealer in many safety industrial companies and work closely with safety partners to ensure you get the most innovative equipments to safeguard your people and assets in the event of a fire. Here are a few of our equipment, but do reach out if you have specific requirements we have not listed on here due to the need to be concise.

100+

known international fire safety manufacturing companies.



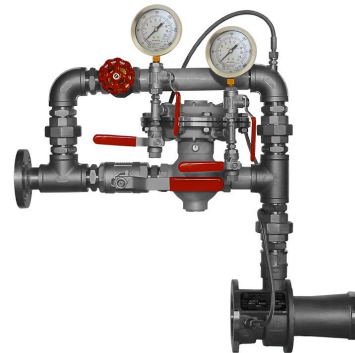
FIRE HOSE



WATER DELIVERY HOSE



FIRE FIGHTING CHEMICALS



FOAM EQUIPMENT



MONITORS



BREATHING AIR SYSTEMS

# Our Products

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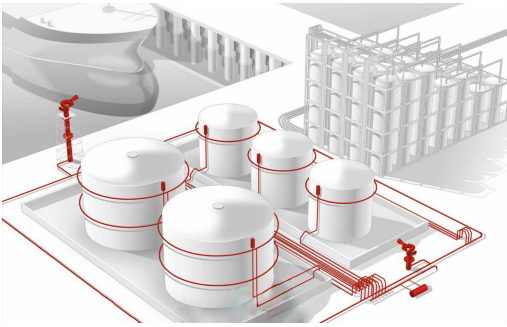
100+  
known international fire safety  
manufacturing companies.



PORTABLE PUMPS



FIRE EXTINGUISHERS



FIRE PROTECTION SYSTEMS



FIRE ENGINES



FIRE FIGHTING GEARS



ETC.

# About RedSense

## Our History

Our fire protection engineering company has been a quiet reasoning partner alongside a number of international oil companies, government organisations + private companies, in a variety of sectors. Working hand-in-hand with top tier executives and safety units like yours, we guide them through the rough patches of building robust and fire protected organisations.

## Our Mission

Our mission is to help build the next generation of some of the safest companies in the world.

## Values

Our values are Safety. Innovation + Excellence.

- **Safety:** we believe safety should come before profits.  
We have a robust history of creating safer companies for our clientele, we go the extra mile to ensure this.
- **Innovation:** we help companies find the most innovative ways to improve safety.
- **Excellence:** we work with exceptional clients whom we support to build excellence in safety engineering.

## Vision

We want to be the most trusted, indigenous go-to organisation for fire safety engineering in country +

78%

of our clients are engineering companies, with a sizable portion of international engineering companies.



## Some Key Clients





Our People

Key Executives

Our team is made up of people from diverse backgrounds and fields.  
Who joined RedSense for the opportunity to apply create safer working environments for companies in Nigeria.  
We have 15 professionals made up of Fire Safety Engineers, Fire Safety Technicians, and Engineering Interns



Christian Reuben  
MD/CEO

Christian is a safety strategy consultant and executive coach. He helps companies in the continent simplify challenges and build teams. He has a 7+years of experience in fire safety engineering and understands how particularly important, safety is in our country + continent. He has spearheaded a variety of safety initiatives, including fire systems installations and maintenance for a few international companies. He has a robust knowledge of safety.



Engr. Sopakiribo Jack  
Chief Operating Officer

Christian is a safety strategy consultant and executive coach. He helps companies in the continent simplify challenges and build teams. He has a 7+years of experience in fire safety engineering and understands how particularly important, safety is in our country + continent. He has spearheaded a variety of safety initiatives, including fire systems installations and maintenance for a few international companies. He has a robust knowledge of safety.



Engr. Daniel Meke  
Lead Safety Engineer

Engr. Daniel is a result-driven and adaptable with extensive experience managing combined project values up to \$6B. Excel at leading and developing high-performing teams to deliver projects within schedules and under budget. Major highlight - Daniel, spearheaded \$1B in projects that involved building a data center, integrated controls center, and 5K accommodation for the operations team to control 1% of the world's oil production.

## Our Functions

## Our Clients

Our work with clients has always been at the intersection of deep industry expertise and extensive functional capabilities. We will continue to develop new safety disciplines to ensure our clients experience results that are bigger, faster, and more sustainable than ever before.

Our clientele spans from international nonprofits to Government institutions and Universities. Here are a few companies we have a working relationship with:

## Industries

Advanced Electronics  
Aerospace & Defense  
Automotive & Assembly  
Capital Projects & Infrastructure  
Chemicals  
Consumer Packaged Goods  
Electric Power & Natural Gas  
Financial Services  
Healthcare Systems & Services  
High Tech  
Media & Entertainment  
Metals & Mining  
Oil & Gas  
Paper & Forest Products  
Pharmaceuticals & Medical Products  
Private Equity & Principal Investors  
Public Sector  
Retail  
Semiconductors  
Social Sector  
Telecommunications  
Travel, Transport & Logistics

## Functions

Safety Assessment  
Fire Design  
Digital Fire Safety  
Fire Training  
Implementation  
Installation  
Commissioning  
Operations  
Organisation  
Recovery & Transformation Services  
Risk Assessment  
Strategy & Corporate Finance  
Sustainability & Resource  
Fire Trucks  
Fire Systems  
Fire Hose Reel  
Fire Fighting Foam + Powders  
Foam Equipment Sprinkler Systems  
CO<sub>2</sub> Total Flooding Systems  
Fire Detection System (Smoke, Heat, Flame, Explosion Sensors)  
Fire Hydrant Equipment  
Fire Fighting Systems,  
FM 200, Argon, Inergen, Fog Water

## Our People

### Our geographic reach

We keep expanding our global network of suppliers and experts, capabilities, and tools. With strong links with suppliers in the UK, US and UAE.



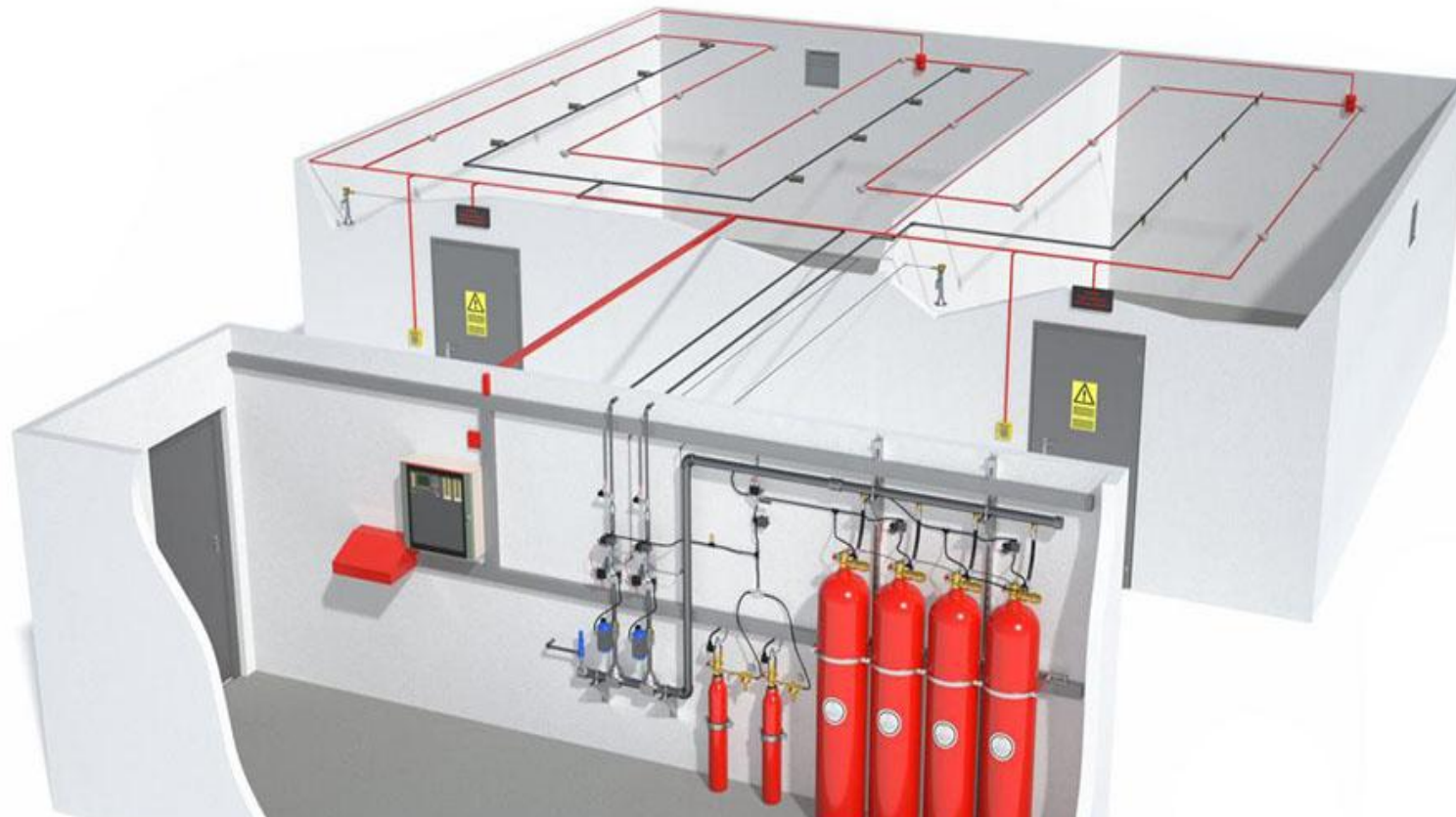
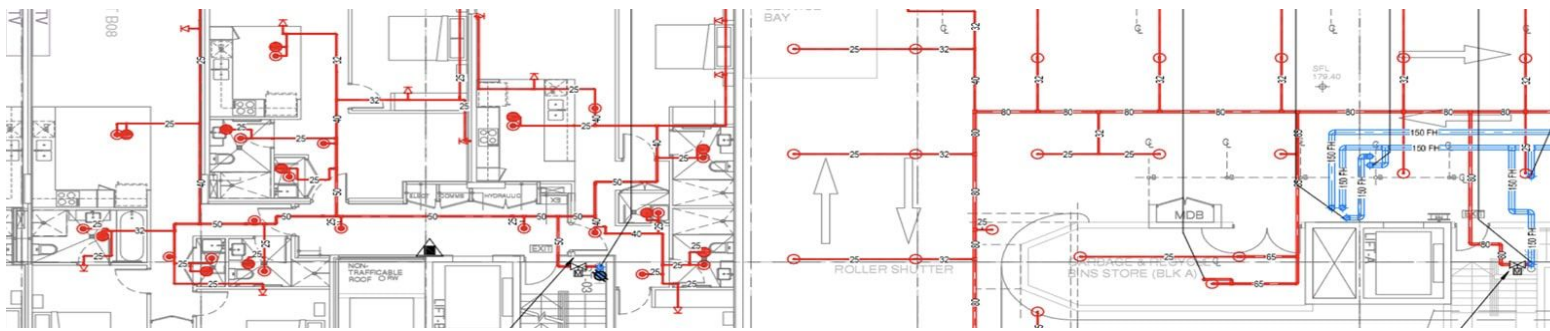
12

cities

5

countries





RedSense has worked hard for years to keep pace with the changes in safety technologies. In recent years, as our clients have faced more rapid transformation and disruption of their businesses and organisations, we too have accelerated our pace of innovation. In today's working environment, we consistently hear two themes from our clients. First, they need us to bring new forms of expertise and insight to solve their most challenging safety issues. We are constantly upgrading the capabilities that we bring to our clients.

We are also hiring more safety professionals who bring expertise in areas such as fire systems digital design, machine learning, robotics and drone technology, to augment our traditional client service staff. All told, in 9 months, colleagues with new capabilities in these areas will account for one-third of our total professional team..

Secondly, we hear consistently that the line between installation and servicing work has blurred, and that clients want us to serve not just as safety contractors but as true impact safety partners in delivering exceptional value from our work.

Through fire safety design, supply, project implementation and commissioning, we work with clients to deliver exceptional work on ground. Our confidence in our safety before profits approach is reflected by the fact that 25 percent of our engagements now link our fees to supply, prudent cost reductions, procurement savings, and other metrics.

This transformation in how we work is also exemplified by our recently created Safety innovation team, which focuses on identifying and fostering innovations and integrating them into our client service. The group provides an enhanced foundation for the culture of entrepreneurialism we have always had.

While much is changing, some things about RedSense never do—like our unrelenting commitment to put our clients' interests first, our deep investment in our exceptional people and safety acumen, and our shared set of values across our company.

As we move forward, we are excited by the dual challenge of preserving our core and innovating to meet the safety needs of our clients. We hope this book helps explain what is new at RedSense, and our commitment to meet these new challenges head-on.

**Christian Reuben**  
Managing Director

In the midst of all that is changing in the world, some things are constant.  
We remain true to our basic company values: Safety, Innovation and Excellence.

These help ensure we always remain relevant and up to date  
to provide companies with the appropriate advice and tools to grow.

For more information, visit <https://redsensefire.com>

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<https://www.linkedin.com/company/redsensefire>