

# Solutions for Explosive Atmospheres



**Maximum Safety**  
**Highest Performance**  
**Constant Innovation**

**GH** CRANES &  
COMPONENTS

**Designed to fit**  
**Built to lead**

# A Match That Makes Sense

GH strengthens its Ex Solutions through a strategic alliance with E.T.S. Engineering S.p.A. Combining decades of specialized engineering excellence, **we deliver high-performance, explosion-protected lifting systems** engineered for the most demanding hazardous environments, assuring our commitment to maximum safety & innovation.



## Shared Values Driving Exceptional Solutions



### — PRECISION ENGINEERING

Together, we uphold the highest standards in design and manufacturing, ensuring reliability and exact performance in every solution we deliver.

### — UNCOMPROMISING SAFETY

Safety and compliance remain at the forefront of all our Ex Solutions, safeguarding personnel and assets alike.

### — CLIENT-CENTRIC COLLABORATION

Our partnership strengthens client relationships, delivering tailored solutions aligned with unique operational challenges.

### — EXCELLENCE IN EXECUTION

From consultation to implementation and support, we ensure superior quality at every stage of the project lifecycle.

### — OPERATIONAL AGILITY

Our combined expertise allows us to adapt quickly to evolving client needs and dynamic market demands.

### — COMMITMENT TO HIGH-VALUE INNOVATION

We consistently provide solutions that maximize efficiency, safety, and return on investment for our clients.

### — PIONEERING THE FUTURE OF EX LIFTING

By joining forces, we lead the industry through continuous innovation and R&D, shaping the next generation of lifting solutions for explosive atmospheres.

# Ex Solutions by **GH**

A range specifically designed to provide reliable, high-quality lifting solutions in environments classified as **Explosive Atmospheres**, for both gas and dust, **backed by GH's expertise and proficiency:**



**Expert and bespoke advice** throughout the entire design, manufacturing and delivery process.



Worldwide production, sales, service and technical support network, which gives us **optimal responsiveness.**



**We develop our own products**, allowing us to offer superior quality in the market.

## Industries Operating in Explosive Environments

### PETROCHEMICAL & HYDROCARBONS



- Oil & gas exploration, refining, and derivatives.
- Storage, pipelines, and fuel distribution.

### FOOD & BEVERAGE PROCESSING



- Grain and bulk storage with dust risks.
- Milling, powder handling, and distilleries/breweries.

### PAINTS, COATINGS & ADHESIVES



- Manufacturing and storage of paints and solvents.
- Spray booths and coating processes.

### CHEMICAL MANUFACTURING



- Production of base chemicals, fertilizers, and industrial gases.
- Handling flammable liquids/gases and polymers.

### FORESTRY & WOOD PRODUCTS



- Sawmills with wood dust and chemical treatment.
- Pulp and paper processes involving dust and chemicals.

### ENERGY & POWER GENERATION



- Thermal plants handling coal dust or fuel oils.
- Facilities with hydrogen or fuel-storage hazards.

### PHARMACEUTICAL & BIOTECHNOLOGY



- API production with solvents and powders.
- R&D labs and storage of medical gases.

### METALLURGICAL & HEAVY INDUSTRY



- Processing reactive metal dust.
- Metal finishing with paints, solvents, and chemicals.

### WASTE MANAGEMENT & RECYCLING



- Wastewater plants producing methane/biogas.
- Solvent recovery and flammable material distillation.

# A 360° solution range - ATEX, IECEx, UL & CSA Certified Components



GHD13Ex3D hoist

## Product range

- Electric wire rope hoists
- Electric chain hoists
- Manual chain hoists
- End carriages
- Wheel blocks
- Single and double girder cranes, overhead and suspended
- Heavy duty open winches
- Jib cranes & LNG solutions
- Transfer carts
- Winches
- Custom solutions



End carriages

**OPEN WINCH TYPE EOT CRANES**

Heavy-duty, easy-to-maintain, and customized modular lifting system built with individual high-performance components provide maximum lifting capacity, span coverage, and optimized hook approaches.



**GANTRY CRANES**

Versatile mobile or fixed lifting structure suitable for both indoor and outdoor operations.



**JIB CRANES**

Flexible, localized lifting solution offering optimal coverage for specific workstations or processing areas.



**LNG JIB CRANES**

To remove and install heavy submerged cryogenic pumps, typically located 70 m high.



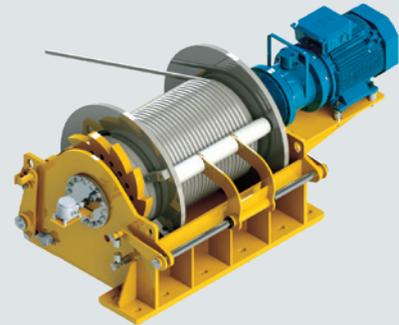
**LNG JIB CRANES**

A space-efficient alternative designed specifically for tank topside installations.



**WINCHES**

For flare system installation and maintenance.



**TRANSFER CARTS**

For maintenance or replacement of pumps, rotors, turbines, and valves in restricted areas.



**CHAIN HOISTS**

Compact and versatile solutions and tight operational spaces.



All images in this catalogue correspond to real projects developed and delivered by our team.

We also provide expert consultation and tailored engineering services to meet unique, site-specific lifting challenges within Ex zones:

**CUSTOMIZED SOLUTIONS**

Tailored engineering and design services to address unique, site-specific lifting challenges and complex operational requirements within Ex zones.

**CONSULTATION & AUDITING**

Expert services for assessing existing infrastructure and recommending compliant ATEX/IECEx upgrades and solutions.

# Understanding ATEX Hazardous Area Classification



At GH, safety and compliance are our priority. Our certified lifting solutions are engineered for reliable, secure operation across the ATEX zones.

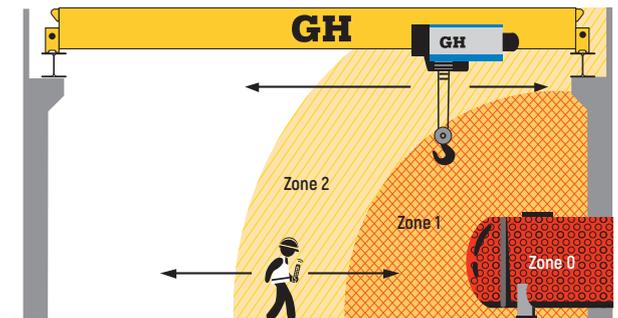
## ATEX Zone classification: Gas, Vapour, Dust & Mist

Flammable substance	Presence of flammable substance	Zone Classification	Group	Category	Protection level
Gases, Vapours	Continuously, for long periods or frequently	Zone 0	II	1G	Ga
	Occasionally	Zone 1		2G	Gb
	For a short period	Zone 2		3G	Gc
Dusts	Continuously, for long periods or frequently	Zone 20	I	1D	Da
	Occasionally	Zone 21		2D	Db
	For a short period	Zone 22		3D	Dc
Firedamp		Mining	I	M1	Ma
				M2	Mb

Gas group	Type of gas or vapour						
IIA	IIA	IIA	ammonia	ethanol	gasoline	acetal-	
			methane	cyclohexane	hexane	dehyde	
IIB	IIB	IIB	ethane	butane			
			propane				
IIC	IIC	IIC	mains gas	ethylene	ethylene		
			acrylic nitrile	oxide	glycol		
			hydrogen	acetylene		carbon disulfide	
			T1	T2	T3	T4	
			< 450°C	< 300°C	< 200°C	< 135°C	< 100°C
			Temperature class				
			Maximum surface temperature of electrical equipment				

Dust group	Dust type	
IIIA	IIIA	Combustible flyings
	IIIB	Non-conductive dust
	IIIC	Conductive dust

Our complete range of certified Ex equipment is designed to meet the most demanding requirements, ensuring compliance, reliability, and safety for your hazardous applications.



## Remote monitoring Leading high-tech integration

Pioneering the industry by integrating cutting-edge technology and intelligent features as standard components across our product lines.

## GH COREBOX<sup>®</sup>

### Smart. Connected. In Control

Equipping your crane with our CoreBox unlocks a new era of intelligent, innovative crane management. Powered by our digital services, it gives you complete visibility and control over every lifting operation, so you can optimize performance, ensure safety, and make smarter decisions—effortlessly.

# Why Choose Ex Solutions by **GH**?

With decades of experience and certified safety expertise, GH, in synergy with ETS, delivers **explosion-proof lifting solutions** built for reliability, performance, and peace of mind in the most demanding industrial environments.

## / **GH MANUFACTURING CAPABILITIES**

Ensuring total quality assurance and complete vertical integration throughout the entire production process.

## / **ENGINEERED FOR RELIABILITY**

In-built redundancy and high-quality, in-house manufactured Ex components deliver consistent, durable performance in demanding industrial conditions.

## / **CERTIFIED SAFETY EXPERTISE & COMPLIANCE**

Our personnel, certified by recognized bodies (INERIS and LOM, including **IsmATEX 2-E\_M**), ensure rigorous compliance with the ATEX 2014/34/EU and Machinery 2006/42/EC Directives, and Regulation (EU) 2023/1230. Our equipment is explicitly approved for use in Zone 1, Zone 2, Zone 21, and Zone 22 environments, guaranteeing safe operation in both explosive gas and combustible dust atmospheres.

## / **MAXIMUM IGNITION PROTECTION**

Featuring explosion-proof Exd/Exd-e enclosures and a comprehensive anti-spark package—including bronze wheels, bronze-coated hooks, and bronze-lined rope guides—to mitigate ignition risks to the absolute minimum.

## / **COMPREHENSIVE, ONE-STOP SOLUTION PROVIDER**

Meeting all your lifting requirements with a complete portfolio that ranges from standard catalogue items to fully tailor-made, highly specific engineering solutions.

## / **PROVEN RELIABILITY BACKED BY DECADES OF EXPERIENCE**

With over **130,000 cranes** sold across **70+ countries** and more **than 65 years of experience**, we deliver robust performance and guaranteed durability.

## **GH**Realtime Digital Maintenance Service

Our advanced digital system connects machines, data, and users, giving you full control over your cranes throughout their lifecycle. By leveraging smart data on the crane and in the cloud, we help you **boost efficiency, safety, and productivity**.

### **KEY FEATURES**

- Data analysis and reporting, including history of events, alarms and downtime.
- Single-platform crane feet management, regardless their location.
- Remote diagnostics and technical support, without the need for an immediate on-site visit.

### **KEY BENEFITS**

- Reduced downtime and maintenance costs.
- Increased safety and operational predictability.
- Full transparency and control over lifting processes.

# About **GH**

We are a comprehensive manufacturer of cutting edge lifting solutions, founded in Spain in 1958.

Our greatest assets are our more than **65 years** of expertise in multiple sectors, the more than **130,000 cranes** we have manufactured, the trust of our customers, **a philosophy based on proximity, and our pioneering**, tailor-made solutions.

Through our **11 production plants** (USA, Mexico, Brazil, Spain, Poland, Saudi Arabia, UAE, China and Thailand) and an extensive **sales, service and technical support** network, we are a global team of more than **1,000 people** present in over **70 countries** on 5 continents.



**+130,000**  
Cranes sold



**+70**  
Countries



**+1,000**  
People