



Experience and innovation.

These two words symbolise GIA industri ab. Experience as a result of our longstanding involvement and in-depth knowledge of the underground industry, and innovation that is evidenced by our constant strive to introduce new ideas and developments.

GIA was founded back in 1884. Initially, GIA sold tools, consumables and other essential items to companies in the region.

The embryo of today's business was conceived in the early fifties, when GIA began importing and selling heavy locomotives to local mines. These were in great demand and in the sixties the company took the decision to start building its own locomotives.

Since then, GIA has grown steadily and what was once a typically local supplier has become a company that regards the entire globe as its market place. Today, GIA is represented in every continent of the world with around 80 percent of sales exported overseas. This trend is continuing and whenever a new tunnelling or mining project is set up anywhere in the world, GIA is on hand.

Continuous development is also a feature of the products of the Grängesberg company. It is our ambition to be a complete supplier of equipment for the mining and tunnelling industry. Wherever the customer is based in the world they should only need a single contact – GIA industri ab.

Our product range is almost complete – with locomotives ranging from two tonnes to fifty tonnes, Charging and Service trucks, complete system for underground Ventilation, low profiled Kiruna Electric Truck for underground haulage and supply of a full range of high-speed tunnelling equipment including digging arm loaders and Shuttlecars haulage systems. New machines and applications are being developed continuously to meet market demands. Thanks to its customer orientation, GIA is in many ways a problem-solver to the mining and tunnelling industry. Customers all over the world tell us what they need and GIA puts together a tailor-made solution. In this way new machines are developed in collaboration with the market.

All manufacturing takes place at GIA's production facility in Grängesberg, Sweden, which has been extended and modernised to cope with the volume of orders. The fact that production is managed entirely by GIA also means that the company carries out its own quality testing on all products before they are delivered to customers around the world.

To achieve the best results for customers around the world is and aftermarket service of great importance to the GIA. GIA is working to the greatest extent with representatives offering local service.

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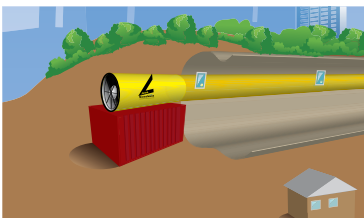


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“All manufacturing takes place at GIA’s production facility in Grängesberg, Sweden.”



General information

GIA have manufactured locomotives since 1960 and today's range consist of diesel hydrodynamic (DHD) and hydrostatic locomotives (D) from 2 up to 50 ton.

One of GIA's strength is that we are very flexible and we can find solutions for most of our customer's requirement.

Facts

Range: 2–50 ton
Max speed: 32 km/h
Width: From 900 mm and up
Gauge: From 600 mm and up
Engine: From 30–300 kW
Operating: With or without PLC

Technical features

- Using only well known components
- High speed
- High traction force
- Easy to customize
- Can easily be prepared for tandem operation
- Hydrostatic solution
- Easy to service and maintain

Shuttlecars



General information

For high-speed tunnelling.

The drive of long, small dimension tunnels requires the use of high capacity equipment designed to operate efficiently in narrow or limited works area, the ability to achieve rapid in-and-out transportation, plus elimination of unnecessary stopping out of niches and alcoves.

Facts

Capacity:
(Volume) HRST90, 9 m³
HRTS115, 11.5 m³,
HRST140, 14.0 m³

Capacity:
(Weight) HRST90, 22 ton
HRTS115, 22 ton,
HRST140, 24 ton

Track gauge: 0.6, 0.75, 0.9 m

Electric motor: HRST90, 2x11 kW
HRTS115, 2x11 kW
HRST140, 2x15 kW

Technical features

- Loading from car to car, inside conveyors provide quicker loading than any other system currently on the market.
- By matching size and number of Shuttlecars to the volume of blasted rock the whole round can be removed in one trip.
- Conveyors use heavy-duty chains with long life "flights" to carry the muck.
- Dual electric motors power the conveyors via centrifugal clutches and worm gears.



HÄGGLOADER Railborne – 8HR



“GIA carries out its own quality testing on all products before delivery to customers world wide.”

General information

For high-speed tunnelling. The drive of long, small dimension tunnels requires the use of high capacity equipment designed to operate efficiently in narrow or limited work areas, the ability to achieve rapid in-and-out transportation, plus elimination of unnecessary stopping out of niches and alcoves.

Facts

8HR-2

Loading capacity: ~3–4 m³/min
Digging width: 2.85, 3.4, 4.0, 6.2 m
Electric motor: 45 kW
Weight: 11.500 kg

8HR-5

Loading capacity: ~6–9 m³/min
Digging width: 4.2, 5.0, 6.2 m
Electric motor: 200 kW
Weight: 20.000 kg

Technical features

- Hydraulic system powered by electric motor.
- Unique system loads the muck on to the conveyor, which then fills the haulage shuttlecar with a constant flow of muck.
- Dozer blades clean the sole effectively thus eliminating the need of manual clean up.
- Built in sprinkler system controls dust effectively.

HÄGGLOADER

Crawler – 9HR



General information

The crawler borne Häggloaders are electro-hydraulic driven, trackless digging-arm or back-hoe loaders, particularly suitable for use in drifts and tunnel with cross section from 8 m² and upwards.

Facts

Loading capacity: ~3–4 m³/min
Digging width: 2.85, 3.4, 4.0, 6.2 m
Electric motor: 73 kW
Pony track gauge: 0.6, 0.75, 0.9 m
Weight: 11.500 kg

Technical features

- Hydraulic system powered by electric motor.
- Unique system loads the muck onto the conveyor, which then fills the haulage truck or Shuttlecar with a constant flow of muck.
- Dozer blades clean the sole effectively thus eliminating the need of manual clean up.
- Built in sprinkler system controls dust effectively.
- Pony track options for towing on rail.



HÄGGLOADER

Rubber tired – 10HR

“Continuous development is also a feature of the products designed at GIA.”



General information

The wheel borne Häggloaders are electro hydraulic driven, trackless digging-arm or back-hoe loaders, particularly suitable for use in drifts and tunnel with cross section from 14 m² and upwards.

Facts

10HR

Loading capacity: ~3–4 m³/min
Digging width: 3.4, 4.0, 6.2 m
Diesel engine: 106 kW
Electric motor: 75 kW
Weight: 17.500 kg

Technical features

- Hydraulic system powered by electric motor.
- Unique system loads the muck onto the conveyor, which then fills the haulage vehicle with a constant flow of muck.
- Dozer blades clean the sole effectively thus eliminating the need of manual clean up.
- Built in sprinkler system controls dust effectively.
- Pony track options for towing on rail.

HÄGGLOADER

Rubber tired - 7HR



General information

The wheel borne Häggloaders are electro hydraulic driven, trackless digging-arm or back-hoe loaders, particularly suitable for use in drifts and tunnel with cross section from 7 m² and upwards.

Facts

7HR

Loading capacity: ~2.5 m³/min
Digging width: 2.85, 3.4, 5.7 m
Diesel engine: 58 kW
Electric motor: 45 kW
Weight: 13.000 kg

Technical features

- Hydraulic system powered by electric motor.
- Unique system loads the muck onto the conveyor, which then fills the haulage vehicle with a constant flow of muck.
- Dozer blades clean the sole effectively thus eliminating the need of manual clean up.
- Built in sprinkler system controls dust effectively.
- Pony track options for towing on rail.



ANFO Charging equipment



“Well known components are used in all GIA products.”

General information

High speed and high charging density for face and up holes.

The GIA charging truck has been developed and tested under many years. Today can GIA industri supply the most technical and advanced charging truck in the market and the sales has been made round the world.

Each component has been tested in the most difficult environments to be able to stand for hard conditions.

Facts

- Hose pusher: For charging up holes
- Meter/speed counter: For hose pusher
- Water adding: To make blasting agents
- Anol CC vessels: Volume 300, 500, 750, 1000 L
- Anol up: Refilling device for vessel
- Radio Remote: For charging

Technical features

- Charging capacity up to 130 kg per minute with high density.
- Crystalline/prilled ANFO, or 50/50 crystalline and prilled which can be charged in all directions.
- Different sizes of ANFO-charges.
- Charging can be done with external air or with on board air compressor, hydraulic driven by diesel engine or electric power pack.

Service Trucks



General information

Service trucks with different applications. Almost every customer has different requirements on their equipment and what type of work the unit shall do. The trucks in our range cover almost all the needs based on our own carrier which has many years behind as a heavy duty carrier.

Facts

Boom and basket

Hit area: 75 m² to 170 m²
Lifting capacity: 400, 500 or 800 kg
Lifting table: Lifting height > 10 m

Scissor lift

Lifting capacity: 1500 kg
Basket size: W x L 2100 x 4000 mm +
extension 2 x 750 mm
Lifting height: 4000 mm or 5500 mm

Other applications: Flat board with work shop, lube/fuel, personnel or special equipment according to customer request.

Technical features

- Accurate, rapid and simple positioning of the service boom.
- Heavy-duty frame specially designed for underground mining and tunnelling.
- Small turning radius gives high maneuverability in narrow drifts.
- Excellent traction/speed performance.
- Diesel engine and hydrodynamic transmission.
- Four-wheel drive.
- Articulated power steering.
- Fail-safe parking brakes.
- Dual circuit braking system.

MEGCIS Cablebolter



“ Easy operating and easy maintenance for rough working conditions. ”



Technical features

Bolting system:

- Bolting boom offers maximum flexibility and long reach.
- Grout hose reel (hose diam. 40/29 mm, max hole length 40 m).
- Steel cable reel for load up to 800 kg.

Cement grouting system:

- Cement mixer/agitator for max volume 80 litre.
- Double acting piston pump with flow capacity of 15 l/min. The pump and hose system can be cleaned separately without emptying the mixer.
- Cement hose feeding depth measurement.

General information

Rock stabilizing equipment for reinforcement is under the name Cable-Bolter.

The unit can be mounted on your choice of carrier, G/A utility truck or other. This equipment inserts grout and a steel cable into a predrilled hole to stabilize tunnel roofs or hanging walls, up to a bore hole depth of 40 meter.

Facts

Boom hit area: 84 m² (12 m x 7 m)

Cable/Cement hose feeder:
Radio remote controlled cable and hose feeder unit with cable cutter and cable buckling. Cable feeding depth measurement.

Cement unit:
The W/C ratio is mixed in a mixer system where the grout is pumped into the bore hole with the aid of a double acting piston pump.

Scaling Equipment



General information

Quality scaling with high reliability. The two different boom systems with the scaling and breaking experience under many years are together with a powerful hydraulic breaker a very reliable system. The unit can take the harsh and often careless treatment.

Facts

Hit area

Brokk 330: 84 m² (12 m x 7 m)
TTS-SP2: 130 m² (12 m x 11 m)

Hydraulic breaker

Weight: 315 kg
Impact energy CIMA (J): 375
Striking rate (b/min.): 480–960

Technical features

- Boom system Brokk330. 3-boom system, folded during transport.
- Boom system TTS-SP2 Boom, extendable.
- Adjustable expanding shafts in stressed boom joints.
- Electric or diesel – hydraulic operation.
- Well protected operator seat.
- Side angle device +/- 70°.
- Water flushing system from external water supply for dust control.



GIA SwedVent Ventilation – High Pressure Fans

“GIA’s wide product range gives a complete supply to the mining and tunnelling industry.”



General information

High pressure tunneling fans.

The fans are designed for delivering air through ducts with extensive length. Highly efficient for lowering the energy costs at a maximum. Delivered with different types of starters as well as automatic air flow control systems. Together with GIA SwedVent ducting and GIA SwedVent ventilation calculations, a complete ventilation system is offered.

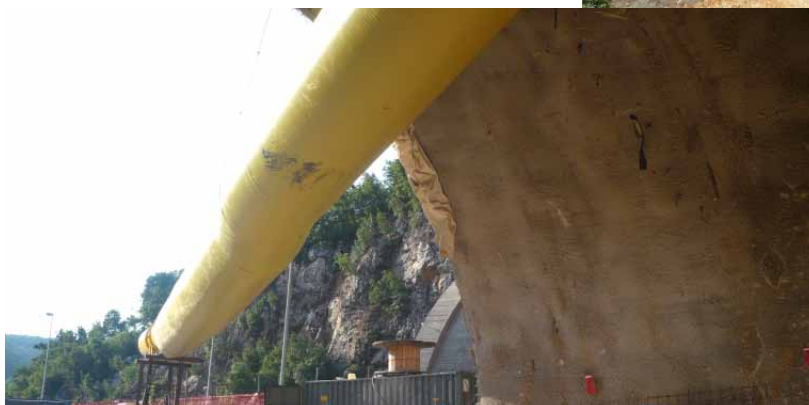
Facts

Diameters:	from Ø500 up to 2.240 mm
Motors:	from 5 up to 500 kW per stage
Stages:	1–5 stages per fan-station

Technical features

- Aerodynamically designed blades.
- Large hub factors (large hubs-short blades).
- Precise hub-casing design (small gap between the casing and blade tip).
- Guide vanes.
- Low sound levels.
- Heavy duty design for mining and tunnelling.

GIA SwedVent Ventilation – Flexible ducting



General information

Low weight-high tenacity. Manufactured from PVC-coated woven polyester fabrics in two different qualities with in built Rip-Stop, both qualities available antistatic treated. Easy to handle. All types of bends, branches and cones made from PVC-coated fabric.

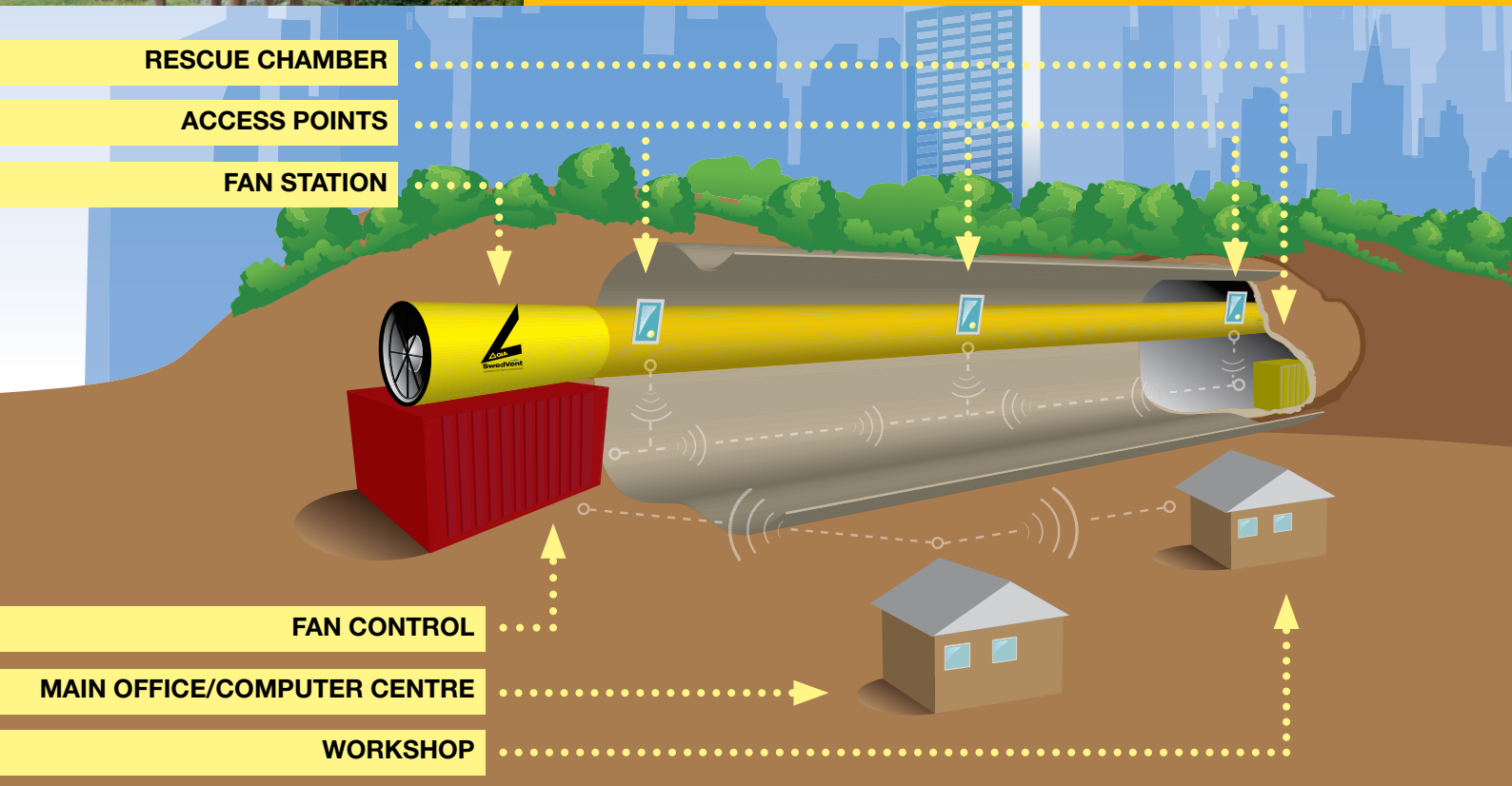
Facts

Diameters: from Ø300 up to 3.000 mm
Unit lengths: up to 150 m
Joint systems: Zips, steel rings, Velcro

Technical features

- All fabrics flame retardant.
- Delivered with mounted suspension hooks.
- Holes/tears easy to repair.
- Rip-Stop. Every 5:th centimetre, the base fabric is made with an enhanced yarn which dramatically increases the tear strength. This feature eliminates the ducting to further-tear longitudinally under normal conditions.

TCV Underground Control system



General information

TCV, developed for, and in close cooperation with demanding Scandinavian contractors.

A complete solution for:

- Tracking
- Communication
- Ventilation

T – Wireless real-time tracking and access control of personnel and vehicles, underground and at surface.

C – Backbone communication over WLAN or WiFi 802.11b/g, or GSM, leaky feeder etc. Computerized underground equipment can be monitored and accessed from surface.

Direct communication with emergency centres etc.

V – Automated ventilation control according to the underground demands, based on measured sensor values; CO, NOx, temperature, air velocity etc, scheduled values or manually set values.

Recording of energy consumption and environmental data.

Facts

- Flexible and cost effective
- One Integrated System, less problems
- Based on WiFi/WLAN, a standard and open platform
- Energy saving by reduced energy consumption, 20 to 50%
- Recording of energy consumption and environmental data

Technical features

Computer:

- Industrialized computer, operating SW Windows 2000, or XP.

Communication:

- Ethernet/TCP/IP.
- Backbone; WLAN or WiFi, 2,4GHz, 802.11 b/g, GSM, leaky feeder or UHF/VHF data radios.

Ventilation:

- Manually, scheduled or automatic controlled
- Manual control panel at front end. Automatic controlled by CO and/or NOx sensors. Blast sensor detects blasting, for quick and effective ventilation of toxic gases.

Telephones:

- WiFi phones, or combined GSM/WiFi phones for local or global access.
- Tracking: System based on 2,5GHz tags, 10 year battery lifetime. Tag integration in personal safety equipment.

Rescue Chamber



General information

Heavy duty design for mining and tunnelling and manufactured to resist underground conditions.

Facts

The Rescue Chamber is equipped with seats at each side of the door. Complete equipped with breathing system, Face Mask and Breathing valve excluding oxygen bottles. The equipment is designed for 300 bars.

Technical features

- Lights and heater.
- Earth-failure protection.
- Outdoors power socket and telephone socket.
- Air-regulator damper.
- Holders for wall mounted oxygen bottles.
- First aid equipment.
- Eyewash.



Kiruna Electric Truck



General information

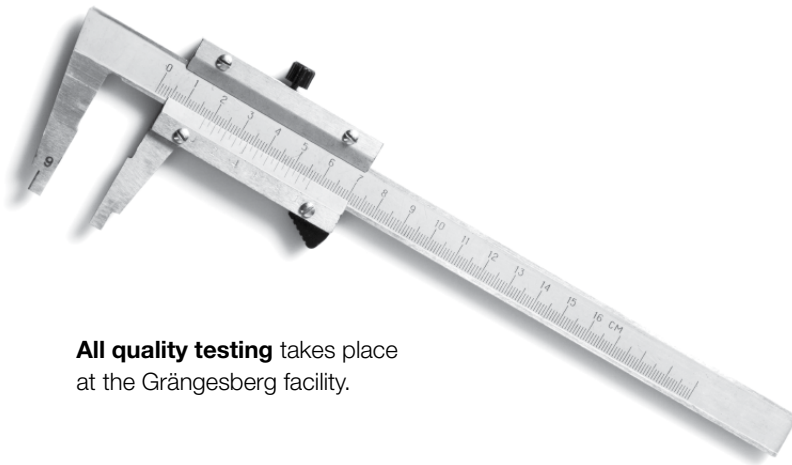
Kiruna Electric ED is the only electric truck in range of 35 and 50 ton capacity for underground haulage. In the normal haulage the truck is powered by an overhead trolley line (no exhaust fumes), when leaving the trolley line a small TIER III diesel engine (~80 kW) is activated. The diesel engine is mainly used when you have no access to the trolley line e.g. loading and dumping stations.

Facts

Ramp haulage applications are normally based on diesel trucks. Due to low speed and excessive exhaust fumes, when going up the ramps, not all the advantages of ramp haulage could be fully exploited. The truck technology in Kiruna Electric represents a completely new and economically competitive ramp haulage alternative. The Kiruna Electric has been in operation all over the world since mid 1980's.

Technical features

- High speed in steep inclinations.
- Environmentally friendly.
- Low emissions.
- Less noise level compared to other alternatives.
- Less ventilation needed.
- 4-wheel drive with one AC motor on each axle.
- Softer driving gives less spare parts consumption and longer life time.
- Lower operating cost per ton transported.



All quality testing takes place at the Grängesberg facility.

GIA is a European leader in the designing, manufacturing and distribution of Industry Grade state-of-the-art safety shower equipment. With over 20 years of experience, GIA now has a wide range of solutions and products for this market segment.



Then and now. GIA industri AB was founded back in 1884. Initially, GIA sold tools, consumables and other essential items to companies in the region. Pelican Picks and Scaling bars are still in the program.



GIA manufacture heavy vehicles for Steelworks and Smelters.





All manufacturing take place at the head office in Sweden.

Sales offices are located in Shanghai – China and Perth – Australia.

Distributors and agent are located in all continents.



GIA Industri AB
P.O. Box 59
SE-772 22 Grängesberg
Sweden

Phone: +46 240 797 00
Fax: +46 240 797 25
E-mail: info@gia.se
www.gia.se