

GIS

swiss lifting solutions

ELECTRIC CHAIN HOISTS LPM/LP/LCH



 since
1957

www.gis-ag.ch



Sydney Opera House

Stephen Batten, CEO, Hasemer Materials Handling. «The GIS hoist provides the perfect solution for the entertainment industry. Its quiet operation, lightweight size and wide range of options enable us to tailor the hoist to exactly what our customers require. Furthermore, if a customer's solution changes, in many situations the GIS hoist can be modified rather than replaced, increasing the productivity of our customers' fleet of hoists.»

References

Opera House Sydney, Australia | Entertainment Centre Sydney, Australia | Exhibition Centre, Sydney, Australia | Perth Arena, Australia | Burswood Casino, Perth, Australia | Entertainment Centre, Brisbane, Australia | O2 Arena Berlin, Germany | ISS Dome Düsseldorf, Germany | New Music House, Helsinki, Finland | Exhibition Centre, Helsinki, Finland | YLE TV Broadcast Company, Helsinki and Tampere, Finland | Finnish National Opera House, Helsinki, Finland | Energiehuis, Dordrecht, Holland | Het Rijksmuseum, Amsterdam, Holland | Lindab Arena, Ängelholm, Sweden | Małopolski Ogród Sztuk, Cracow, Poland | Baltic Philharmonic, Danzig, Poland | O2 Arena Prague, Czech Republic | Schauspielhaus, Zurich, Switzerland | Opernhaus Zurich, Switzerland | Stadttheater Basel, Switzerland



POWERFUL AND LONG-LASTING

Simple and easy to use – reliable and safe in operation – long-lasting and easy to maintain. In theatres, schools, sports centres, multifunction event venues, arenas, congress centres, TV studios or on concert tours, GIS chain hoists are in use worldwide. Developed and manufactured in Switzerland – for the world market.

GIS Entertainment Electric Chain Hoists – safe in all weather



LPM/LP



Reliable and long-lasting

- 3 year warranty
- Made in Switzerland
- Gearbox with permanent lubrication
- Proven DC spring-loaded brake
- High safety in operation
- No sensitive electronics
- Aluminium casing and cover
- 1600 operating hours with 40% duty cycle, 240S/h
- Corrosion resistant profile steel chain with increased service life
- Dry-running slipping clutch
- Load hook with dampening system

Easy to operate

- Low dead weight from 12 kg
- Usable as stationary or climbing hoist without modification
- Geared limit switch with high positioning accuracy
- Quiet running with 3-step drive and helical gearing
- Protection class IP65 for outdoor use
- Liquid drain as standard
- No special tools for maintenance needed
- Effortless to maintain, easy accessible slipping clutch
- Load hook rotates through 360 degrees
- Short delivery time

Customer specific

- Three- or single-phase power
- Direct or contactor control
- Operating voltages
- Control voltages
- Special controls
- Special speeds
- Eyebolt or hook suspension
- Lifting heights up to 200 m
- Hook path with upper and lower end position individually adjustable
- Push trolleys and motorised trolleys
- Wide range of accessories and options

YOUR BENEFITS

With a weight of only 12 kg and a lifting capacity of 320 kg, the LPM is the lightest among the electric chain hoists in the entertainment industry. Its low weight, the protection class IP65 and the robust construction with the cover made of aluminum means it is perfectly suited for mobile and outdoor use. The manganese phosphated profile steel chain offers high corrosion resistance and improved dry running properties. The load hook is equipped with a dampening system and a single fall hook clamp which positively follows the hook.





Powerful

The case hardened and manganese phosphated profile steel chain provides about 15 % more capacity at an identical nominal diameter compared to the round steel chain. The higher cross-sectional area reduces wear and increases the lifetime of the chain. The manganese phosphating improves its corrosion resistance and dry running properties.

Light

LPM, the smallest chain hoist of the LP-family, weighing only 12 kg, lifts up to 320 kg as a D8-hoist. It is modular in design with compact construction which is why it is perfectly suited for the integration in traverses. It offers the option to equip the hoist as D8-Plus by mounting a second DC-spring-loaded brake on the existing shaft.

Quiet

All LP electric chain hoists are equipped with a 3-stage self-contained gear. The helical gearing with geometric optimisation ensures extremely quiet running. This allows the handling of loads during events. Thanks to the protection provided by the cover and housing the sound pressure level of the LP is only 60 dB. This makes it one of the quietest motors available on the market.

Weatherproof

A feature of the hoist is the protection class IP65. It is dust proof and protected against water jets. The LP is perfectly suitable for outside use, even under the most difficult conditions. On open-air events or on concert tours, the rigger will appreciate the weather resistance and reliability of this electric chain hoist.



D8

Standard version

Lifting capacities: up to 2500 kg (1-fall)

Standard voltages:

3 × 400V / 50Hz, 3 × 230V / 50Hz,
1 × 230V / 50Hz, 1 × 115V / 50 Hz

Terminal board for direct control

One lifting speed

Suitable for frequency inverted operation

Housing, chain and equipping parts black

Eyebolt suspension

Usable as stationary or climbing hoist

Protection class IP65

Liquid drain (LP)

Isolation class F (motor)

DC spring-loaded brake

Slipping clutch not in the flow of forces

Wear plate as additional chain guidance

Load hook with dampening system (LP)

Interlocking hook lug



Accessories and options

42 V low voltage control
with geared limit switch

Other operating and control voltages on
request

Two lifting speeds

Hook suspension

Safety load locking hook

Geared limit switch with two additional
emergency stops

Radio remote control

Ergonomic control switch

Terminal board with brake contactor

Terminal board with fast switching relay

Second, independent brake

Temperature monitoring

Chain container for various lifting heights

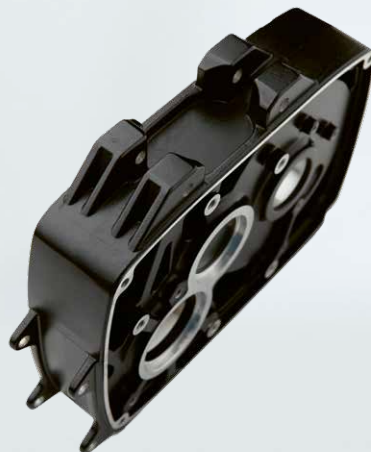
Push trolley and motorised trolley

Liquid drain for outdoor use (LCH)

Handles

YOUR BENEFITS

The cathodic dip-paint coating (KTL coating) offers good protection against mechanical wear and high UV resistance. Due to this special coating of the housing and protection class IP65, the chain hoists are ideal for mobile and outdoor use. Without conversion it can be used flexibly as a stationary or climbing hoist.





Performance data D8

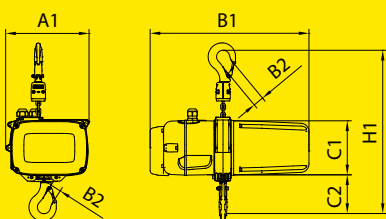
Type	Load capacity 1-fall (kg)	Classification ISO (FEM)	Speed, 50 Hz (m/min)	Motor power (kW)	Power consumption fully-loaded (A)	Weight unequipped (kg)	Chain diameter (mm)	Chain weight per meter (kg)	Sound pressure level in hall 1 m distance (dBA)	Chain safety factor static
LPM250/1NL.D8	400	M3 (1Bm)	4	0.25	1.8	12	3.75x10.75	0.34	60	6.4
LPM250/1SL.D8	125	M5 (2m)	8	0.25	1.8	12	3.75x10.75	0.34	60	16
LP500/1NL.D8	800	M3 (1Bm)	4	0.55	1.8	22	5.25x15	0.69	60	5.1
LP500/1N.D8	800	M3 (1Bm)	8	0.72	2.8	22	5.25x15	0.69	60	5.1
LP500/1NF.D8	800	M3 (1Bm)	8 / 2	0.72 / 0.18	2.8 / 1.8	23	5.25x15	0.69	60	5.1
LP1000/1NL.D8	1600	M3 (1Bm)	4	1.50	3.6	45	7.45x23	1.37	75	5.1
LP1000/1N.D8	1600	M3 (1Bm)	8	2.30	6.5	49	7.45x23	1.37	75	5.1
LP1000/1NF.D8	1600	M3 (1Bm)	8 / 2	2.30 / 0.68	5.7 / 4.1	49	7.45x23	1.37	75	5.1
LCH1600/1NL.D8	1600	M3 (1Bm)	4	1.22	4.5	53	9x27	1.75	75	6.4
LCH1600/1N.D8	1600	M3 (1Bm)	8	2.44	6.8	53	9x27	1.75	75	6.4
LCH1600/1NF.D8	1600	M3 (1Bm)	8 / 2	2.44 / 0.61	7.3 / 6.2	55	9x27	1.75	75	6.4
LCH2000/1NL.D8	2000	M3 (1Bm)	4	1.53	4.8	53	10x28	2.25	75	6.4
LCH2000/1N.D8	2000	M3 (1Bm)	8	3.06	7.3	53	10x28	2.25	75	6.4
LCH2000/1NF.D8	2000	M3 (1Bm)	8 / 2	3.06 / 0.77	8.5 / 6.6	55	10x28	2.25	75	6.4
LCH2500/1NL.D8	2500	M3 (1Bm)	3.2	1.53	4.8	53	10x28	2.25	75	5.1
LCH2500/1N.D8	2500	M3 (1Bm)	6.4	3.06	7.3	53	10x28	2.25	75	5.1
LCH2500/1NF.D8	2500	M3 (1Bm)	6.4 / 1.6	3.06 / 0.77	8.5 / 6.6	55	10x28	2.25	75	5.1
LPM250/1NL1Ph.D8	250	M5 (2m)	4	0.25	3.2	13	3.75x10.75	0.34	83	8
LPM250/1N1Ph.D8	125	M5 (2m)	8	0.25	3.2	13	3.75x10.75	0.34	83	16
LP500/1NL1Ph.D8	500	M5 (2m)	4	0.55	4.7	23	5.25x15	0.69	76	8

Other specifications on request

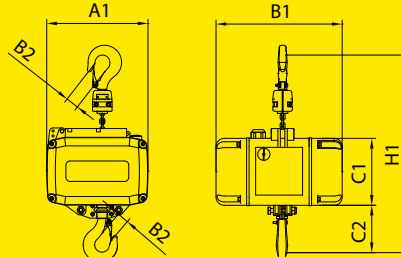
Dimensions D8

Type	Number of falls	A1	B1	B2	C1	C2	H1
LPM250 / D8	1	206	368	20	134	95	393
LP500 / D8	1	293	414	24	162	133	519
LP1000 / D8	1	374	514	32	212	151	656
LCH1600 / D8	1	347	389	37	230	164	667
LCH2000 / D8	1	347	389	37	230	164	667
LCH2500 / D8	1	347	389	37	230	164	667

LPM / LP



LCH



D8 PLUS

Standard version

Lifting capacities: up to 1250 kg (1-fall)
Standard voltages: 3 × 400V / 50 Hz, 3 × 230V / 50 Hz, 1 × 230V / 50 Hz, 1 × 115V / 50 Hz
Terminal board for direct control
One lifting speed
Suitable for frequency inverted operation
Housing, chain and equipping parts black
Eyebolt suspension
Usable as stationary or climbing hoist
Protection class IP65
Liquid drain (LP)
Isolation class F (motor)
Two independent DC spring-loaded brakes
Slipping clutch not in the flow of forces
Wear plate as additional chain guidance
Version according to DIN 56950-1 2012 with chain safety factor 8:1
Version according to IGWV SGP2 2010 with chain safety factor 10:1



Accessories and options

42 V low voltage control with geared limit switch
Other operating and control voltages on request
Two lifting speeds
Hook suspension
Safety load locking hook
Geared limit switch with two additional emergency stops
Radio remote control
Ergonomic control switch
Terminal board with brake contactor
Terminal board with fast switching relay
Additional rectifier
Temperature monitoring
Chain container for various lifting heights
Push trolley and motorised trolley
Liquid drain for outdoor use (LCH)
Handles

YOUR BENEFITS

In the D8 Plus version, people may stand under the resting load. Two independent DC spring-loaded brakes secure the load. The electric chain hoist is designed to equip with a second brake which is mounted on the existing shaft in just a few simple steps.





Performance data D8PLUS

Type	Load capacity 1-fall, chain safety min. 8:1 static* (kg)	Load capacity 1-fall, chain safety min. 10:1 static** (kg)	Speed, 50 Hz (m/min)	Motor power (kW)	Power consumption fully-loaded(A)	Weight unequipped (kg)	Chain diameter (mm)	Chain weight per meter (kg)	Sound pressure level in hall 1 m distance (dBA)
LPM250/1NL.D8PLUS	250	200	4	0.25	1.8	13	3.75x10.75	0.34	60
LPM250/1SL.D8PLUS	125	125	8	0.25	1.8	13	3.75x10.75	0.34	60
LP500/1NL.D8PLUS	500	400	4	0.55	1.8	23	5.25x15	0.69	60
LP500/1N.D8PLUS	500	400	8	0.72	2.8	23	5.25x15	0.69	60
LP500/1NF.D8PLUS	500	400	8 / 2	0.72 / 0.18	2.8 / 1.8	24	5.25x15	0.69	60
LP1000/1NL.D8PLUS	1000	800	4	1.50	3.6	47	7.45x23	1.37	75
LP1000/1N.D8PLUS	1000	800	8	2.30	6.5	51	7.45x23	1.37	75
LP1000/1NF.D8PLUS	1000	800	8 / 2	2.30 / 0.68	5.7 / 4.1	51	7.45x23	1.37	75
LCH1600/1NL.D8PLUS		1000	4	0.76	4.5	60	9x27	1.75	75
LCH1600/1N.D8PLUS		1000	8	1.53	6.8	60	9x27	1.75	75
LCH1600/1NF.D8PLUS		1000	8 / 2	1.53 / 0.38	7.3 / 6.2	62	9x27	1.75	75
LCH2000/1NL.D8PLUS		1250	4	0.96	4.8	60	10x28	2.25	75
LCH2000/1N.D8PLUS		1250	8	1.91	7.3	60	10x28	2.25	75
LCH2000/1NF.D8PLUS		1250	8 / 2	1.91 / 0.48	8.5 / 6.6	62	10x28	2.25	75
LPM250/1NL1Ph.D8PLUS	250	200	4	0.25	3.2	14	3.75x10.75	0.34	83
LPM250/1N1Ph.D8PLUS	125	125	8	0.25	3.2	14	3.75x10.75	0.34	83
LP500/1NL1Ph.D8PLUS	500	400	4	0.55	4.7	24	5.25x15	0.69	76

Other specifications on request

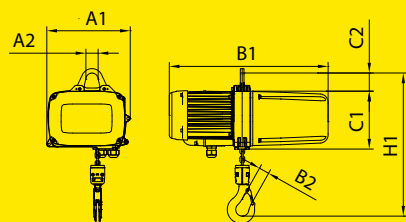
* according to DIN 56950-1:2012, classification M5/2m

** according to IGWV SQP2 2010, classification M3/1Bm

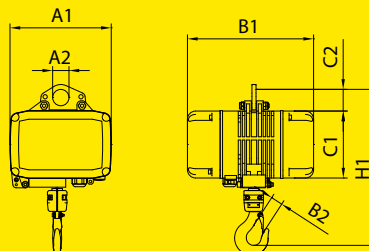
Dimensions D8PLUS

Type	Number of falls	A1	A2	B1	B2	C1	C2	H1
LPM250 / D8PLUS	1	206	Ø30	368	20	134	45	342
LP500 / D8PLUS	1	293	Ø40	414	24	162	58	444
LP1000 / D8PLUS	1	374	Ø52	514	32	212	70	575
LCH1600 / D8PLUS	1	366	Ø75	485	37	230	141	638
LCH2500 / D8PLUS	1	366	Ø75	485	37	230	141	638

LPM / LP



LCH



C1

Standard version

- _____ Lifting capacities: up to 1000 kg (1-fall)
- _____ Standard voltages:
3 × 400V / 50Hz, 3 × 230V / 50Hz
- _____ Terminal board for direct control
- _____ One lifting speed
- _____ Suitable for frequency inverted operation
- _____ Housing, chain and equipping parts black
- _____ Eyebolt suspension with load sensor:
output signal 0 – 10V
- _____ Protection class IP65
- _____ Isolation class F (motor)
- _____ Two independent DC spring-loaded brakes
- _____ Slipping clutch not in the flow of forces
- _____ Incremental encoder on chain wheel
- _____ Integration of PLC controller possible
- _____ Geared limit switch with two additional
emergency stops
- _____ Wear plate as additional chain guidance



Accessories and options

- _____ Contactor control 24VDC
- _____ Other operating and control voltages on
request
- _____ Hook suspension for load sensor
- _____ Safety load locking hook
- _____ Terminal board with brake contactor
- _____ Terminal board with fast switching relay
- _____ Additional rectifier
- _____ Load sensor:
output signal 4 – 20 mA
- _____ Preparation for path measurement with
incremental or absolute encoder on the
drive shaft (without encoder)
- _____ Preparation for path measurement with
incremental or absolute encoder on the
chain wheel (without encoder)
- _____ Temperature monitoring
- _____ Independent brake monitoring for primary
and secondary brake
- _____ Chain container for various lifting heights
- _____ Handles

YOUR BENEFITS

For both path and load measurement, additional components and electrical parts can be easily integrated in the chain hoist. On the drive shaft and/or the chain wheel, the installation of incremental or absolute encoders is prepared for path measurement. Special eyebolt and hook suspensions allow easy installation of a load measuring pin for load measurement. Our partners who develop and supply the control for multiple hoists value this highly.

Path measurement



Load measurement





Performance data C1

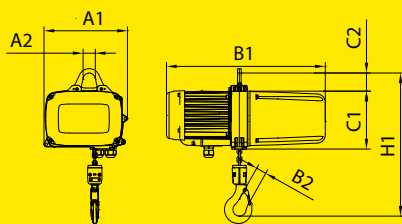
Type	Load capacity 1-fall (kg)	Classification ISO (FEM)	Speed, 50 Hz (m/min)	Motor power (kW)	Power consumption fully-loaded (A)	Weight unequipped (kg)	Chain diameter (mm)	Chain weight per meter (kg)	Sound pressure level in hall 1 m distance (dBA)	Chain safety factor static
LP500/1NL.C1	400	M5 (2m)	4	0.55	1.8	24	5.25x15	0.69	60	10
LP500/1N.C1	400	M5 (2m)	8	0.72	2.8	24	5.25x15	0.69	60	10
LP1000/1NL.C1	800	M5 (2m)	4	1.50	3.6	49	7.45x23	1.37	75	10
LP1000/1N.C1	800	M5 (2m)	8	2.30	6.5	53	7.45x23	1.37	75	10
LCH1600/1NL.C1	800	M5 (2m)	4	0.61	4.5	60	9x27	1.75	75	12.9
LCH1600/1N.C1	800	M5 (2m)	8	1.22	6.8	60	9x27	1.75	75	12.9
LCH2000/1NL.C1	1000	M5 (2m)	4	0.76	4.8	60	10x28	2.25	75	12.8
LCH2000/1N.C1	1000	M5 (2m)	8	1.53	7.3	60	10x28	2.25	75	12.8

Other specifications on request

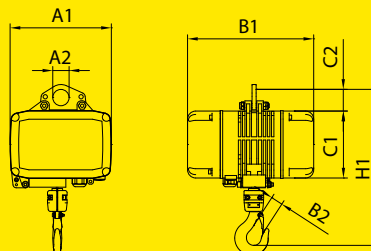
Dimensions C1

Type	Number of falls	A1	A2	B1	B2	C1	C2	H1
LP500 / C1	1	293	Ø40	414	24	162	109	495
LP1000 / C1	1	374	Ø52	514	32	212	132	637
LCH1600 / C1	1	366	Ø70	485	37	230	146	648
LCH2500 / C1	1	366	Ø70	485	37	230	146	648

LP



LCH



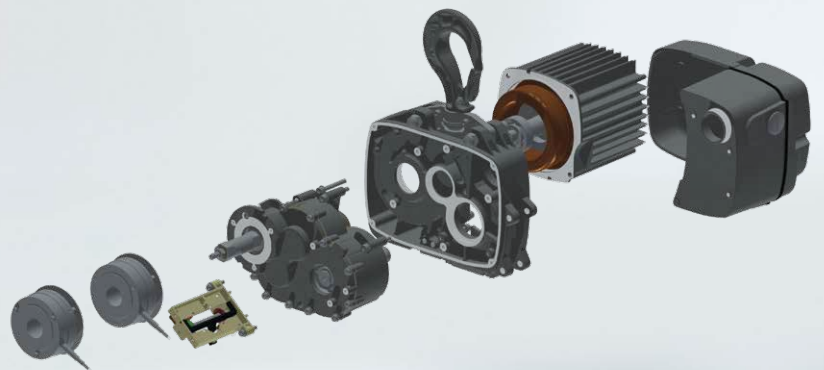
SERVICE & MAINTENANCE



The LP is simple in construction and is distinguished by low weight and a high lifting capacity. It is designed to be low in wear and tear and has a long service life. Repair and maintenance work can be done quickly and efficiently. The easy accessibility of parts and ease of maintenance make the electric chain hoist economical to maintain. The LP series has a 3 year warranty.

YOUR BENEFITS

The LP series has an overall modular structure. Wearing parts are replaced in a simple manner. The electric chain hoist can be quickly disassembled and reassembled thanks to the polygonal connections. This saves time and costs, which both service technicians as well as the customers appreciate.





Polygonal connection

The inner part of the modularly designed chain hoist embodies real innovation. All shaft-hub connections are built to a polygonal design. This allows significantly faster disassembly and assembly during maintenance. The service cost can be considerably reduced due to time savings.

Chain guidance

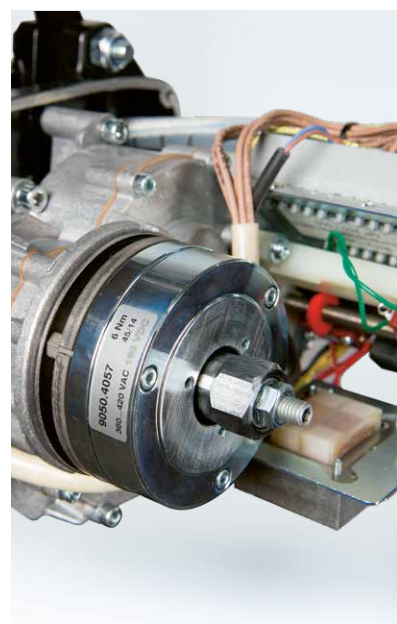
When used as a climbing hoist, the wear plate is used as an additional chain guidance which allows the chain to run smoothly into the hoist and out of it. This even works if the chain gets entangled, for example when pulling the chain into a transport case. Wear plate, chain and chain guidance are wearing parts, which have to be regularly checked and replaced if necessary.

Spare parts

The modular design of the electric chain hoist and the accessibility of the components means that wearing parts can quickly and easily be removed and replaced. This requires no special tools. We guarantee customers rapid availability of spare parts through our worldwide distribution partners.

Brake

The DC spring-loaded brake allows safe braking of the load with optimum braking efficiency. The second brake can be mounted on the existing shaft and independently monitored. This proven brake system is highly reliable and easy to maintain.



ACCESSORIES & OPTIONS

Safety radio remote control

The 295 gram lightweight, very rugged handheld transmitter is powered by a rechargeable lithium ion battery and has a protection class of IP66. The receiver which is integrated in a stable housing has a protection class of IP65. With its certified STOP function the receiver meets the requirements of SIL 3 Performance Level PL e.



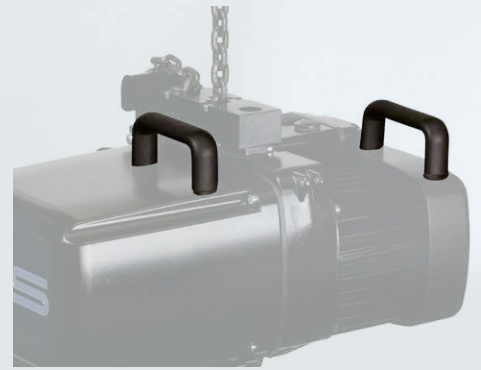
Safety load locking hook

The mechanical interlocking of the hook lug of the 360° rotatable and 180° swivelling safety load locking hook secures the transported goods. The load hook closes automatically under load and must be manually unlocked for opening.



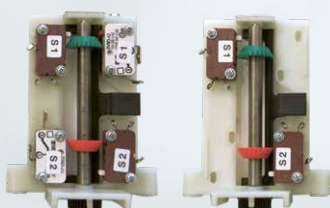
Handles

As a climbing hoist, the electric chain hoist can be lifted out of the transport packaging with its own chain. If the rigger has no electricity available on site, the chain hoist can be lifted using comfortable handles.



Geared limit switch

With the integrated geared limit switch (3 ph.) the upper and lower end position of the load hook can be set easily and precisely. To increase safety, two additional emergency stop contacts are available.



External limit switch

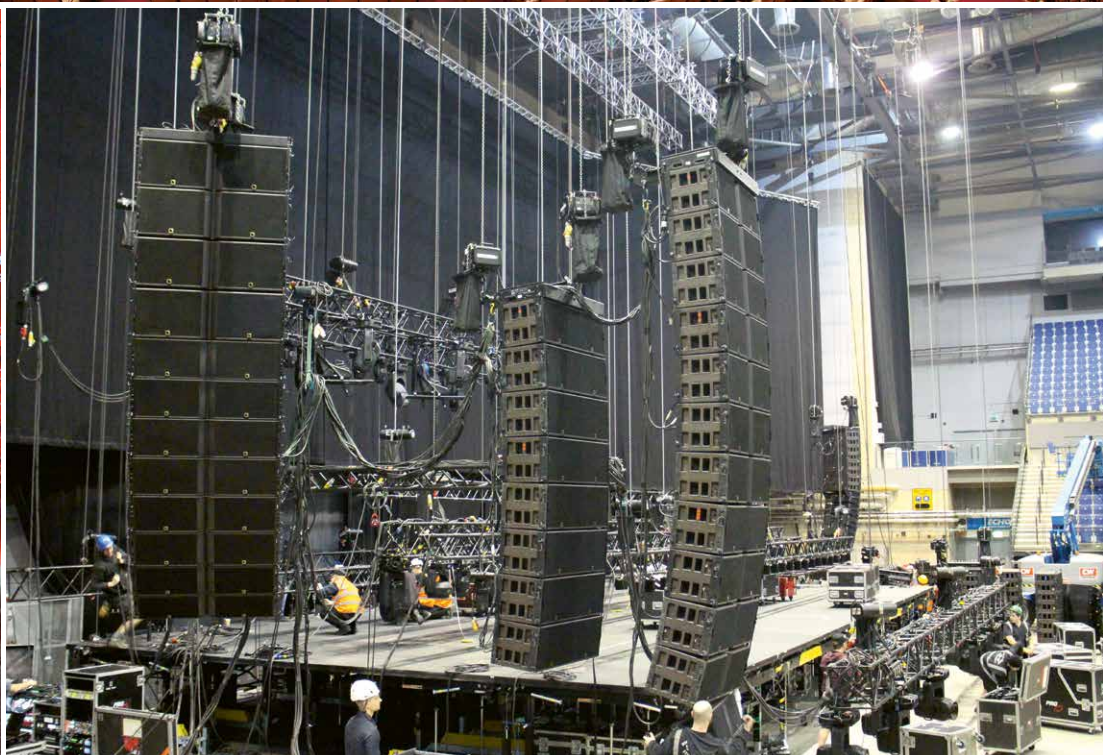
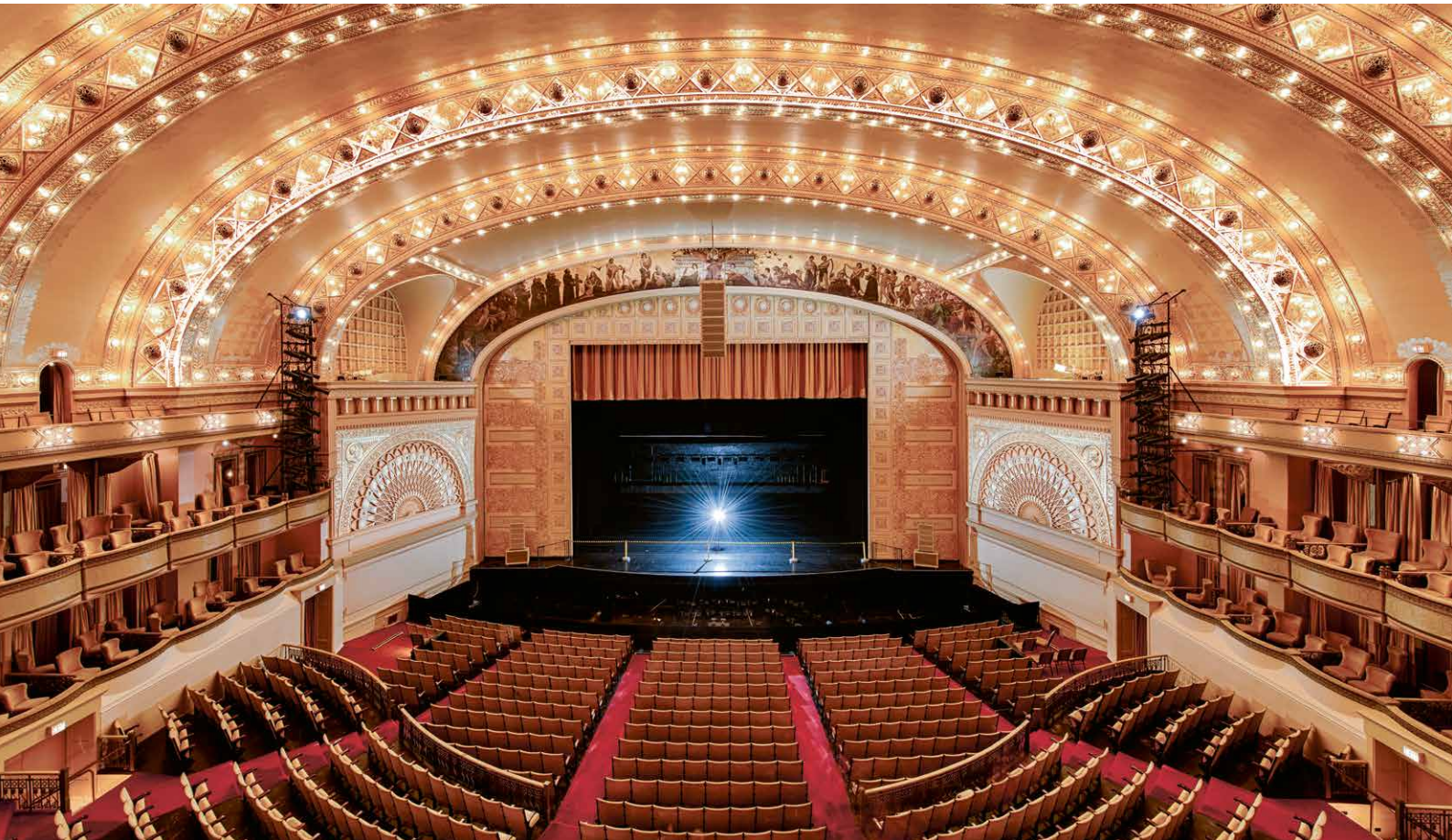
The external limit switch interrupts the lifting procedure just before the load hook hits the housing. The limit switch built into the wear plate thus protects the housing from mechanical damage.



Second brake

Each D8 chain hoist can be optionally equipped with a second, independent brake. In a few simple steps, it is mounted on the existing drive shaft just behind the first brake.







swiss lifting solutions



D8

Electric chain hoist D8 according to DGUV 54 (BGV D8) as a modular chain hoist for lifting loads. Lifting capacities 125 kg – 2500 kg in single fall operation. Can be used as climbing or stationary hoist without modification. Suitable for mobile and outdoor use. Lifting and moving loads above people is not allowed.



D8PLUS

Electric chain hoist D8 Plus based on DGUV 54 (BGV D8) as modular chain hoist for lifting loads. Lifting capacities 250 kg – 1250 kg in single fall operation. Can be used as a climbing or stationary hoist without modification. Suitable for mobile and outdoor use. Lifting loads above people is allowed.



C1

Electric chain hoist C1 according to DGUV-17 (BGV C1) for stage presentation. Lifting capacities 250 kg – 1000 kg in single fall operation. Can be used as a climbing or stationary hoist without modification for lifting and moving loads over people.

GIS AG – the specialist for crane systems Founded in 1957 | With own subsidiary in Germany since 1966 | Development and production of electric chain hoists in Switzerland for over 50 years | Swiss manufacturer of complete crane systems incl. hoisting equipment and vacuum lifters | Certified to ISO 9001 since 1994 | Complete market services from project planning to installation, start-up and maintenance | International sales network with over 50 qualified partners worldwide

Swiss Lifting Solutions

Certified to ISO 9001

