GALA SYSTEMS

CREATIVE SOLUTIONS

SPIRALIFT®

Photo: Wagner-Biro

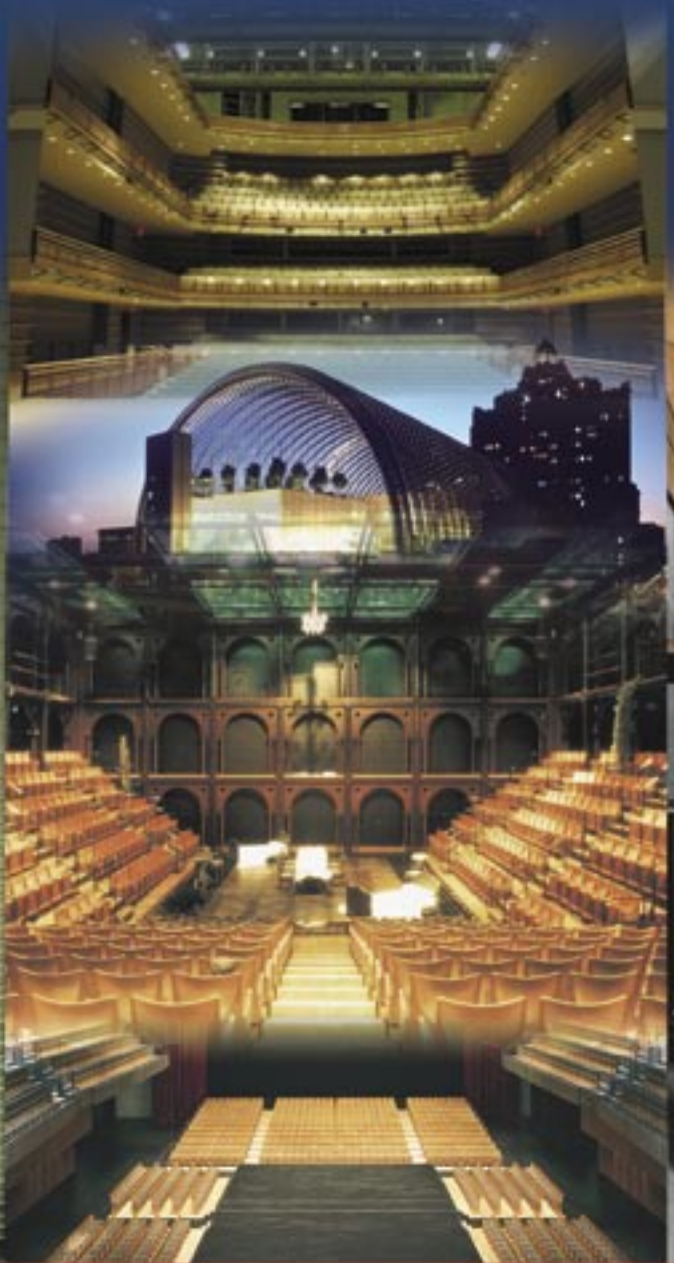

Photo: Scéno-Plus

Spiralift®

Three Spiralift units are used to operate a computer assisted rotating inclining and lifting seat platform.
Cosmodôme, Laval, Quebec, Canada

Direct driven flange coupled with SEW motor

Flange coupled brake

Auditorium Maurice Ravel, Lyon, France

Advantages

WE ARE WORKING WITH THE LEADING THEATRE CONSULTANTS,
ARCHITECTS AND DESIGNERS AROUND THE WORLD AND
HAVE MORE THAN 600 INSTALLATIONS TO DATE.
SPIRALIFT UNITS ARE IN USE IN EVERY CONTINENT.

- Compact
- Stable
- Low cost, competitive anywhere
- Low maintenance
- High capacity
- Versatile and flexible
  - Can be installed in an existing pit
- Easy installation
  - As low as two-week installation for one lift in your facility
- No caissons required
- Little control wiring
- Approved worldwide
- GALA engineering solutions and support

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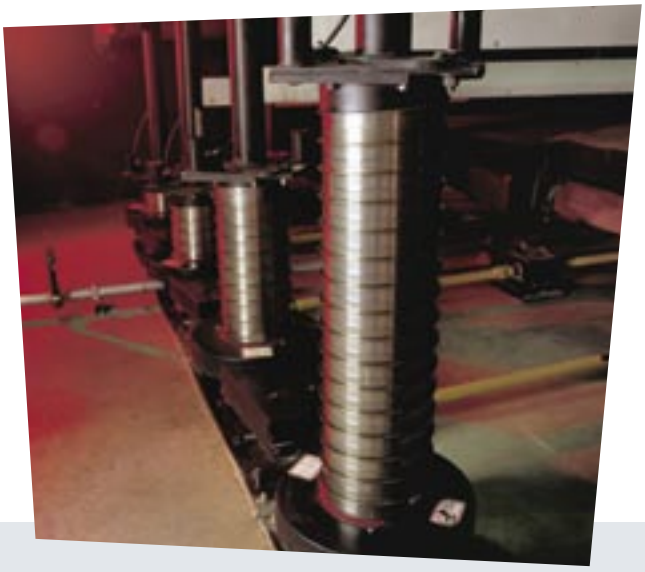
THE SPIRALIFT WAS ORIGINALLY DESIGNED TO IMPROVE EXISTING THEATRES FLEXIBILITY. ITS COMPACT HEIGHT WITH NO REQUIREMENT FOR CAISSONS ELIMINATES OR MINIMIZES EXCAVATION OR MAJOR STRUCTURAL RENOVATION. SINCE THEN, THE SPIRALIFT HAS PROVEN IDEAL FOR BOTH RETROFIT OF EXISTING THEATRES AND NEW CONSTRUCTIONS.

Kanagawa Chikyuu Shimin, Kanagawa, Japan

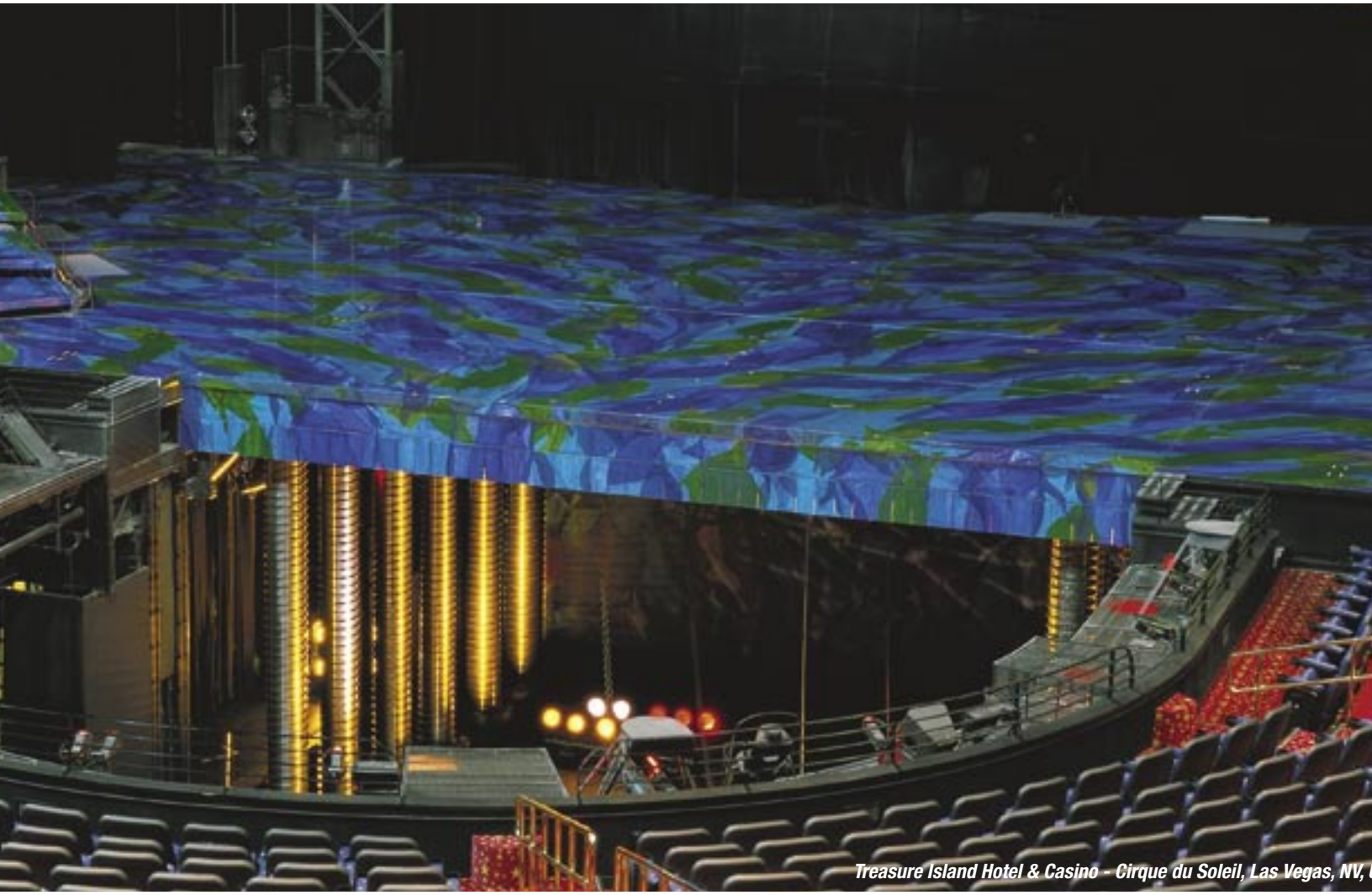


The Principle of the Spiralift

The Spiralift employs a coiled, flexible flat steel spring (slinky) that expands with the insertion of a thin vertically-oriented spiral steel band. The result is a fully rigid column formed of continuously integrated I-shaped sections.
The stainless-steel-on-stainless-steel construction provides for a long life of trouble-free operation.

Spiralift units are mechanically efficient and therefore require relatively low-power motor drives. They can be easily configured in modular designs to suit any platform geometry and building architecture. Multiple Spiralift units can be linked to the same drive train and mechanically synchronized.

- Thrust stage for concerts
- Two or three rows of additional prime seating
- Ability to tune the level of the pit
- A quick way to get the road boxes into basement storage



Treasure Island Hotel & Casino - Cirque du Soleil, Las Vegas, NV,

Characteristics of the Spiralift

The most striking characteristic of the Spiralift is its compact height.

Other features have also contributed to the Spiralift's popularity:

- Least pit depth requirement
- Totally stable
- Longest equipment life (Stainless steel on stainless steel)
- Remains fixed and level at any point (No hydraulic fluid temperature variations or leakage)
- Lowest power requirement (Highest efficiency)
- Any load and platform shape may be accommodated
- Adjacent lifts may be synchronized and operated together
- Quiet operation
- No pump room required

Specifications

ND6 SPIRALIFT

Column diameter	6 in.				152 mm			
Maximum lifting capacity	4,000 lb.				1,750 daN			
Maximum static capacity	8,000 lb.				3,550 daN			
Maximum lift travel	11.5 ft.				3.5 m			
Maximum lifting speed	23 ft./min. (up to 30 ft./min.*)				7 m/min. (up to 9.1 m/min.*)			
Maximum continuous torque	272 lb.-in.				30.7 Nm			
Maximum peak torque	544 lb.-in.				61.5 Nm			
Maximum overhung on input	55 lb.				25 daN			
Maximum misalignment	1.5°				1.5°			
Lift travel per revolution (pitch)	1.293 in.				32.8 mm			
Available worm ratios, R	32.50	16.25	10.83	8.17	32.50	16.25	10.83	8.17
Input torque to lift maximum load, Tm	46.8 lb.-in.	78 lb.-in.	113 lb.-in.	146 lb.-in.	5.2 Nm	8.7 Nm	12.6 Nm	16.3 Nm
Total system efficiency, E	52.3%	63%	65%	66.8%	52.3%	63%	65%	66.8%
Base and housing material	Aluminum				Aluminum			
Column material (bands)	Stainless steel 301				Stainless steel 301			

HD9 SPIRALIFT

Column diameter	9 in.				230 mm			
Maximum lifting capacity	10,000 lb.		8,000 lb.		4,450 daN		3,640 daN	
Maximum static capacity	22,500 lb. (with base on ground)				10,000 daN (with base on ground)			
Maximum travel	20 ft.				6.1 m			
Maximum lifting speed	20 ft./min. (up to 30 ft./min.*)				6.1 m/min. (up to 9.1 m/min.*)			
Maximum peak torque	544 lb.-in.				61.5 Nm			
Maximum overhung force	143 lb.				65 daN			
Maximum misalignment	1.5°				1.5°			
Lift travel per revolution (pitch)	2.084 in.				52.9 mm			
Available worm ratios, R	32.50	16.25	10.83	8.17	32.50	16.25	10.83	8.17
Input torque to lift maximum load, Tm	144 lb.-in.	240 lb.-in.	347 lb.-in.	449 lb.-in.	16.3 Nm	27.1 Nm	39.2 Nm	50.7 Nm
Total system efficiency, E	45.8%	55%	57.1%	58.5%	45.8%	55%	57.1%	58.5%
Base and housing material	Painted steel + Cast aluminum				Painted steel + Cast aluminum			
Column material (bands)	Stainless steel 301				Stainless steel 301			

ND9 SPIRALIFT

Column diameter	9 in.	230 mm
Maximum lifting capacity	10,000 lb.	4,450 daN
Maximum static capacity	22,500 lb.	10,000 daN
Maximum travel	20 ft.	6.1 m
Maximum lifting speed	20 ft./min. (up to 30 ft./min.*)	6.1 m/min. (up to 9.1 m/min.*)
Chain sprocket	Chain no. 60 ASA – 54 teeth	Chain no. 60 ASA – 54 teeth
Torque required to lift maximum load	4,740 lb.-in.	535.6 Nm
Maximum misalignment	1.5°	1.5°
Lift travel per revolution (pitch)	2.084 in.	52.9 mm
Base and housing material	Painted steel	Painted steel
Column material (bands)	Stainless steel 301	Stainless steel 301
Efficiency	70%	70%

ND18 SPIRALIFT

Column diameter	18 in.	457 mm
Maximum lifting capacity	25,000 lb.	11,100 daN
Maximum static capacity	40,000 lb.	17,800 daN
Maximum travel	40 ft.	12.2 m
Maximum lifting speed	40 ft./min. (up to 60 ft./min.*)	12.2 m/min. (up to 18.2 m/min.*)
Chain sprocket	Chain no. 80 ASA – 80 teeth	Chain no. 80 ASA – 80 teeth
Torque required to lift maximum load	20,500 lb.-in.	2,350 Nm
Maximum misalignment	1.5°	1.5°
Lift travel per revolution (pitch)	4.136 in.	105.1 mm
Base and housing material	Painted steel	Painted steel
Column material (bands)	Stainless steel 301	Stainless steel 301
Efficiency	80%	80%

* Applicable for special cases. Contact GALA Systems for more information.

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