

SPINNING COASTER



**SARTORI**
AMUSEMENT RIDES

Rides manufacturer since 1957

TECHNICAL SPECIFICATIONS

Park Model / Portable Version

3D VIEW

DESIGN

Size and design of this Attraction have been designed to better simplify the assembly procedure and fit, as best as possible, all parts in containers or semitrailers for easy shipment.

Base Size: ~ 42x20 m – 137.8x65.6 ft

Height: ~ 15 m – 49.2 ft

Track Length: ~ 420 m – 1377.9 ft

Vehicles: n. 6 (max 8)

Seats/Vehicle: 4 seats/each

Ride Time: ~ 120sec

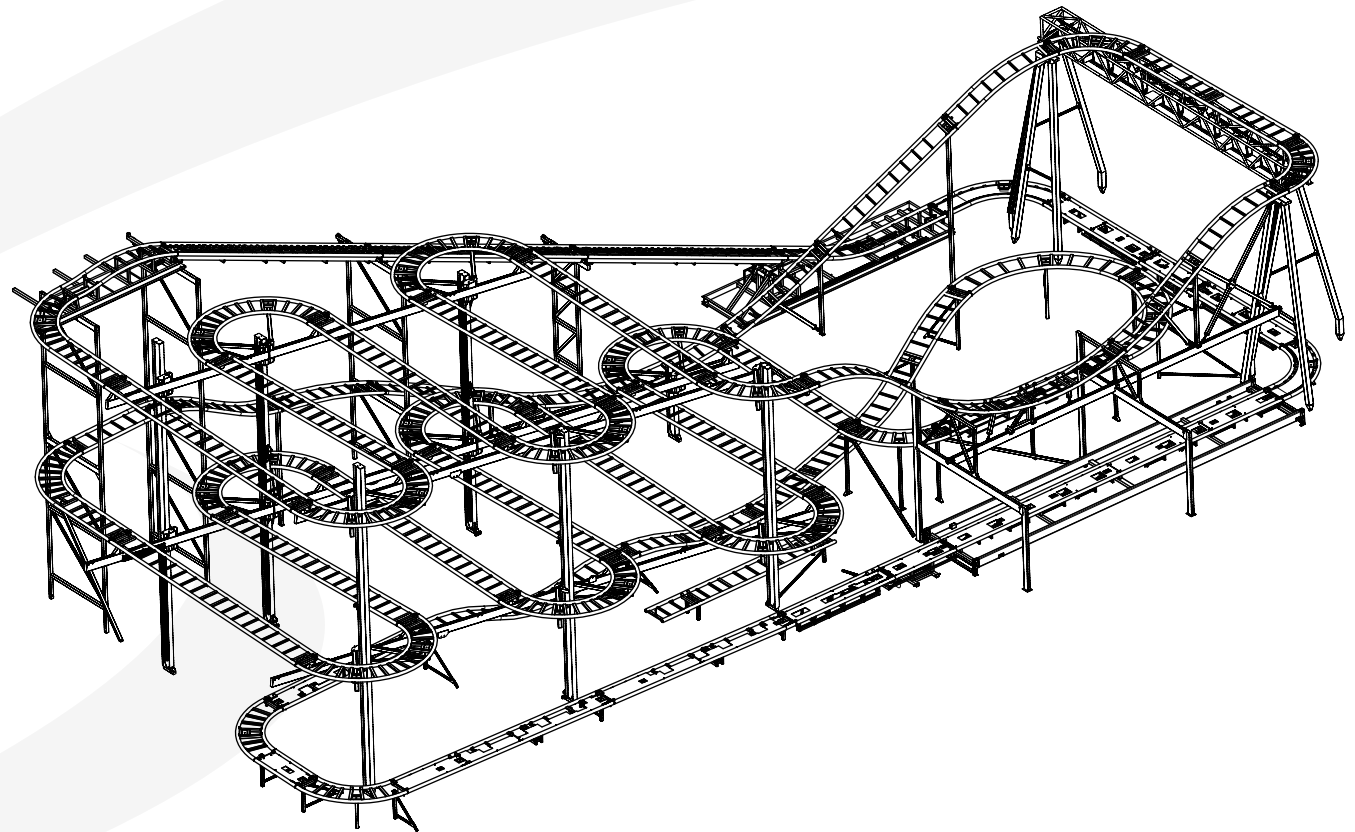
Th. Capacity: ~ 850passengers

Speed: ~ 3.5 m/sec max.

Acceleration: 3g max

Lighting: ~ 12 kW

Moving Power: ~ 50 kW



SPINNING COASTER

TECHNICAL SPECIFICATIONS

Structure

TOP VIEW

LIFT

Allowing to lift the vehicles to the top with a special high resistance chain with double safety anti roll back, managed by a gearbox and AC motor.

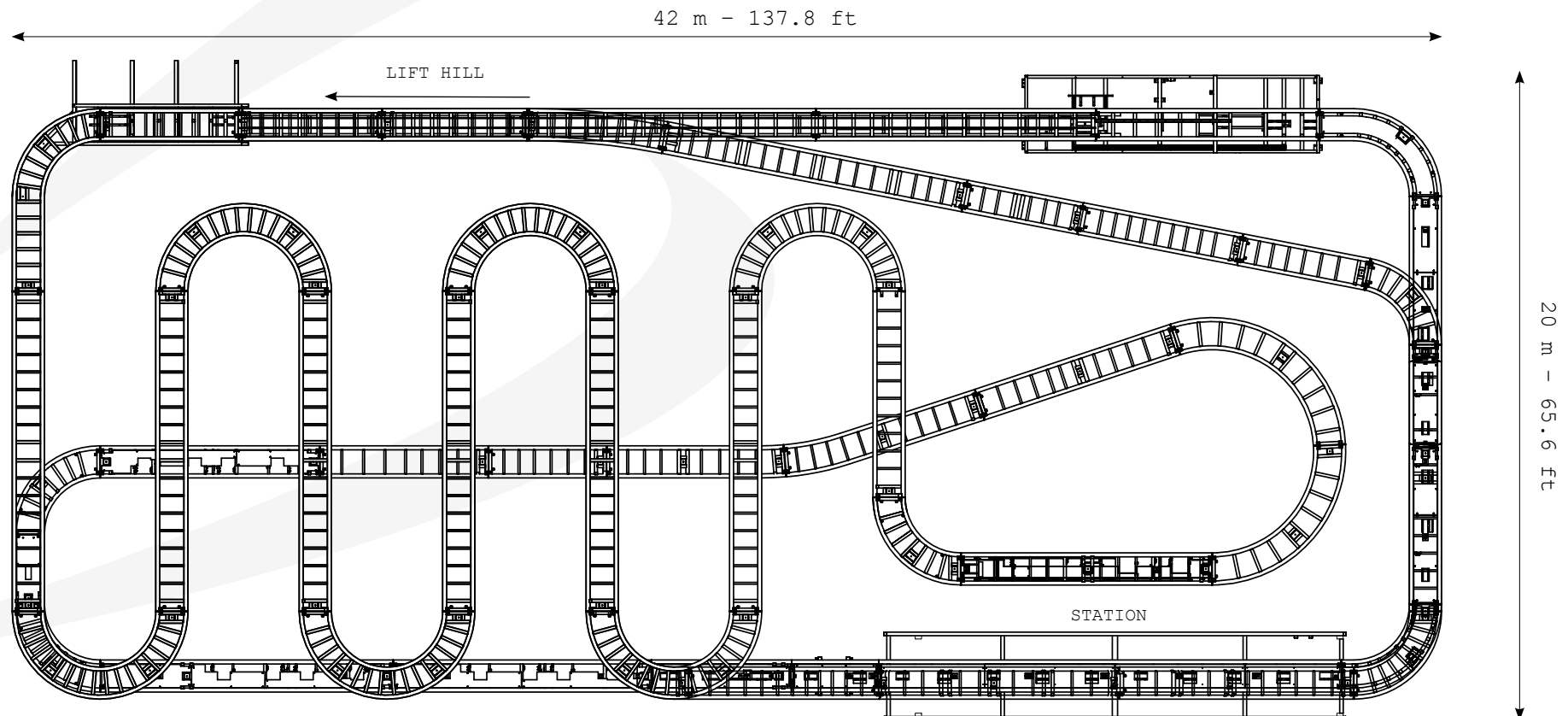
TRANSPORTATION

All parts of the Attraction are sized to be loaded in containers or semitrailers. Loading of Standard version Attraction can be arranged as follows:

- ~ 7 Containers (40' Open Top) +1 Flat Rack or
- 7 Semitrailers 14.5 m long

WEIGHT AND GROUND PRESSURE

Designed overall weight of the Attraction is estimated in 100 metric Tons. This weight is distributed on the ground through concrete foundations to be design according to local specifications and laws. Attraction Distributed static load 500 daN/mq.



TECHNICAL SPECIFICATIONS

Structure

FRONT VIEW

STEEL BASEMENT

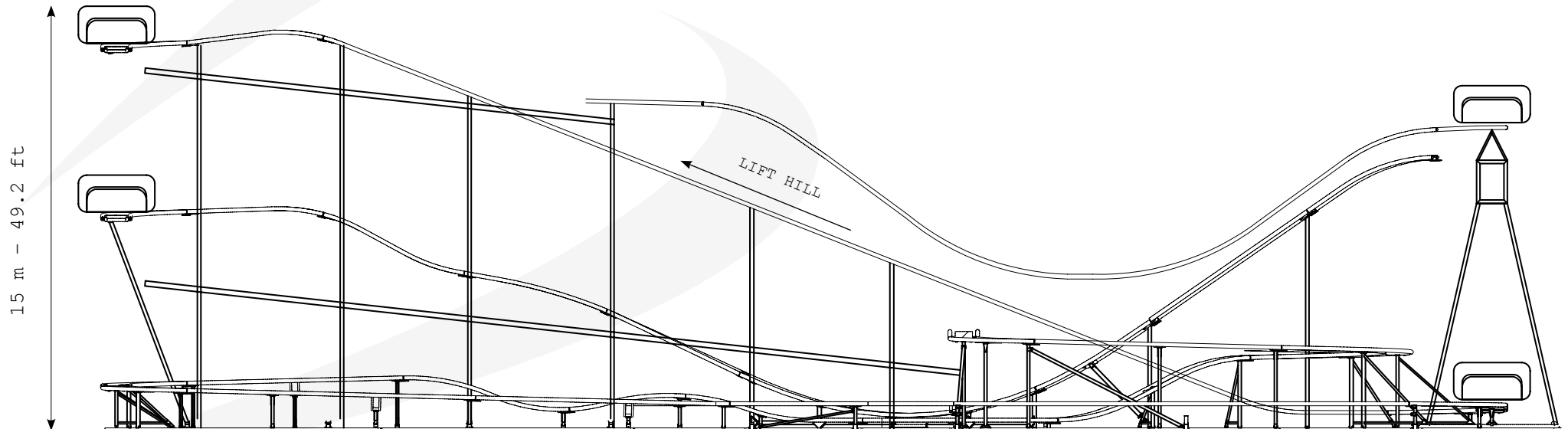
The basement consists in steel tube connected each other in order to allow the installation of the structure and distributing the weight of the Roller Coaster; all parts are hot deep galvanized.

SUPPORTS / COLUMNS

Mainly made with IPE section steel installed over the steel basement, completed with tie roads and diagonals to connected each other, all main parts are sandblasted and painted in one colour.

TRACK / RAILS

Special frames made with steel tube welded connected to the columns, all main parts are sandblasted and painted in one colour.





TECHNICAL SPECIFICATIONS

Vehicles

VEHICLES

Vehicles are complete with a steel frame, decorated fiberglass, two lap bars with semi-automatic safety system made with hydraulic cylinders, with limit switch control whether the safety lap bar is open or closed position and single-coil linear solenoids to guarantee the locking of the safety lap bar during the ride operation + limit switch control the correct operation of single-coil linear solenoids.

BREAKING SYSTEM

Total track is split in 9 breaking zones with a total of 18 breaks, this include slow down breaks and emergency breaks managed with sensors and fail-safe PLC system.

STATION

Special frame completes with roof and entrance platforms, allowing passengers to enter in the vehicles, complete with kick off motors and breaks.





TECHNICAL SPECIFICATIONS

Manufacturing

STEEL CONSTRUCTION

The manufacturing of the steel structures will be made according to EN standards and executed by primary European manufacturers. All necessary certificate of quality of the steel and any NDT welding inspection will be made according to design.

PAINTING

- Sandblasting SA 2/2,5
- Primer, Bi-comp. Epoxy ~ 130 µm
- Finish Coat, Acrylic ~ 70 µm
- According to minimum ISO 12944-6 as C3

ELECTRICAL

Electric panel and control panel design and manufactured according to EN standard, complete with fail safe PLC.

STRESS ANALYSIS

Stress analysis of all steel structures and safety related components according to EN-13814/2004 and with finite element method results.

Wind resistance against overturning as specified above.

Thermal effects due to high thermic differences during night/day time or under heavy sun effects are not calculated and is not guaranteed.

TECHNICAL DOSSIER

Technical Dossier containing all the following information and documents:

- General Assembly Drawings
- Operational, use, maintenance and installation manual instructions (English language)
- Instruction for emergency evacuation of passengers
- PLC Error List
- Electric, Pneumatic & Hydraulic schemes



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