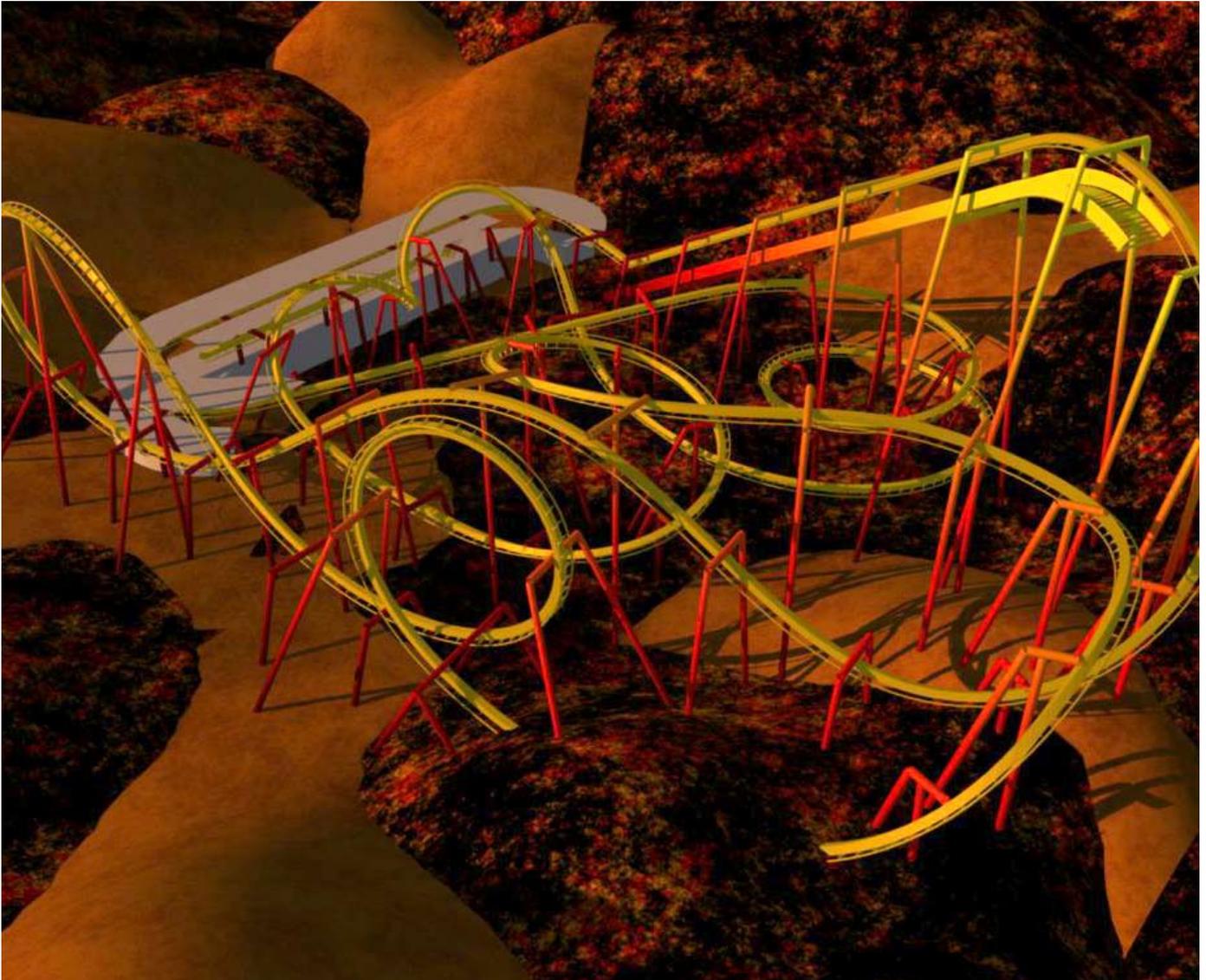
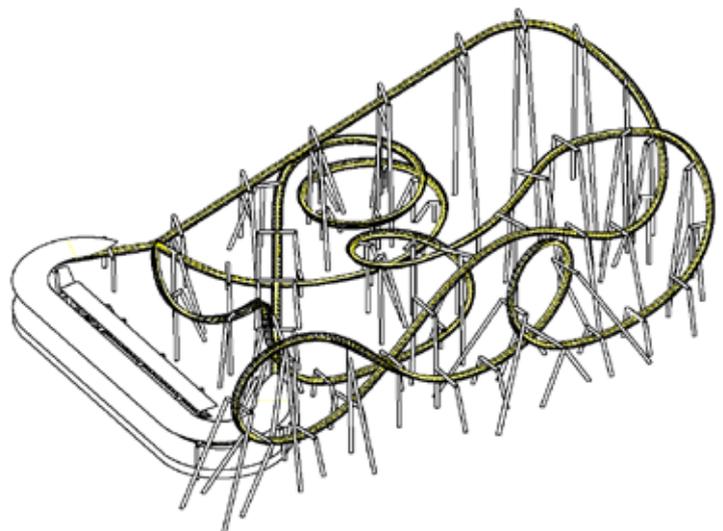


Lava



Technical data

Footprint:	95 x 70 m (312 x 230 ft) *
Heigh:	38 m (125 ft) *
Track length:	840 m (2760 ft) *
Inversions:	4
Running time:	115 sec. *
Max speed:	80 Km/h (50 mph) *
G-force:	4,4 g
Installed power:	220 Kw
Trains:	3 trains x 7 cars x 4 seats
Capacity:	1150 persons/h
	* approximative



Description of the supply

01_Track

m. 840 ca. 3-tubes track with flanges connecting the tracks to one another as well as the tracks to the columns; all tracks are protected by anti rust and epoxy paints, after removing any oxidation or calamine. 30 m dead-end track for maintenance provided with shifting track.

02_Supports

Monolithic columns supporting the tracks with flanges for the connection to the tracks and to the elements for the anchoring to the ground. They are protected by anti-rust and epoxy paints, after removing any oxidation or calamine. If a base structure is to be provided, according to the sale contract, this will be hot galvanized.

03_Train

No.3 trains composed of 7 cars having 4 abreast seats; each seat is provided with shoulder restraints; chassis provided with all mechanical operation and safety organs; vulkollan bearing wheels, side drive wheels and up-stop wheels.

04_Trasmission organs

Transmission organs for the driving ramps provided with three-phase electric motor; epicycloidal reduction gear with crown wheel and pintle and roller heavy chain.

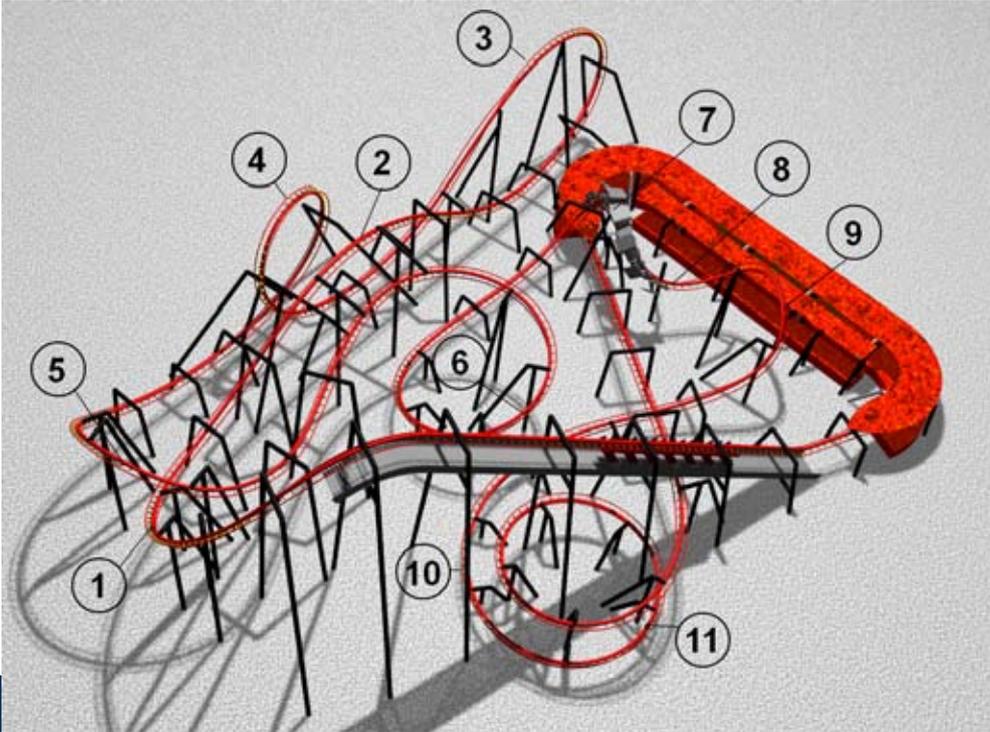
05_Braking system

Magnetic/mechanic braking system. The magnetic part shall slow down the train nearly up to its stopping that can be obtained through the mechanical brakes. This kind of braking allows to have the greatest safety and, at the same time, the greatest silence and the easiest and cheapest maintenance.

06_Electric system

No.1 electric system provided with:

- general supply board;
- drive console with synoptic control panel and P.L.C. (Programmable Logic Controller) for the block system;
- secondary panel for the departures (if required).

- 
- 1- First drop
 - 2- Bunny-Hop
 - 3- In line Immelman
 - 4- Vertical loop
 - 5- Ascending half fan curve
 - 6- Downward helix
 - 7- Half loop
 - 8- Corkscrew
 - 9- Descending half fan curve
 - 10- Highly banked turn
 - 11- Upward helix

Description of the supply

07_ Station and walkways

Passengers' loading and unloading station provided with:

- hot galvanized metallic structures supporting the platforms for the public;
- entrance and exit stairs and platforms made of Durbar plates supported by hot galvanized structures;
- roof made of "sandwich" panels of pre-painted sheet and foam polyurethane or made of transparent polycarbonate sheet;
- decorated (or themed) top panels ;
- protection fences having a decorative structure made of polished stainless steel tubes.

08_ Included in the supply

- Design according to the DIN standards or equivalent (European or Italian);
- Static calculation report for the whole ride;
- Use and maintenance manual;
- Spare parts book;
- Spare parts and tools for a first and simple intervention;
- Technicians for the erection and assembly (commissioning).

09_ Excluded from the supply

- Luminous signs or similar;
- Engineering and construction of any other civil work (foundations, etc..);
- Pre-assembly of foundation bolt in concrete;
- Certifications by third parties or local and/or governmental inspections/certification;
- Approval of any independent institute of all technical documentation, production procedures and at site commissioning;
- All kind of lifting, transport, loading/unloading means on site (such as crane, personnel lifting basket, etc..);
- All yard costs and any superintendence and assistance of yard works;
- Any administrative paper, insurance policy and labour cost;
- Crowd control fences;
- Travelling expenses, board and loading of the technicians;
- Operator's cabin;
- Air conditioning system;
- All what is not included in the items from Trake to Station and walkways.

