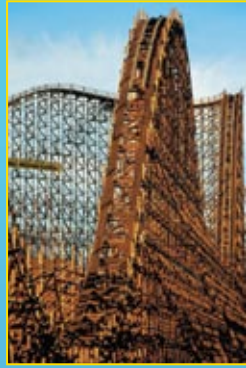


Our experience with wooden giants



Colossos, Heide Park Soltau
Germany, 2001
Timber building, delivery,
assembly



Balder, Liseberg
Sweden, 2003
Timber building, delivery,
assembly



El Toro, Six Flags Great Adventure
USA, 2006
Timber building - delivery only



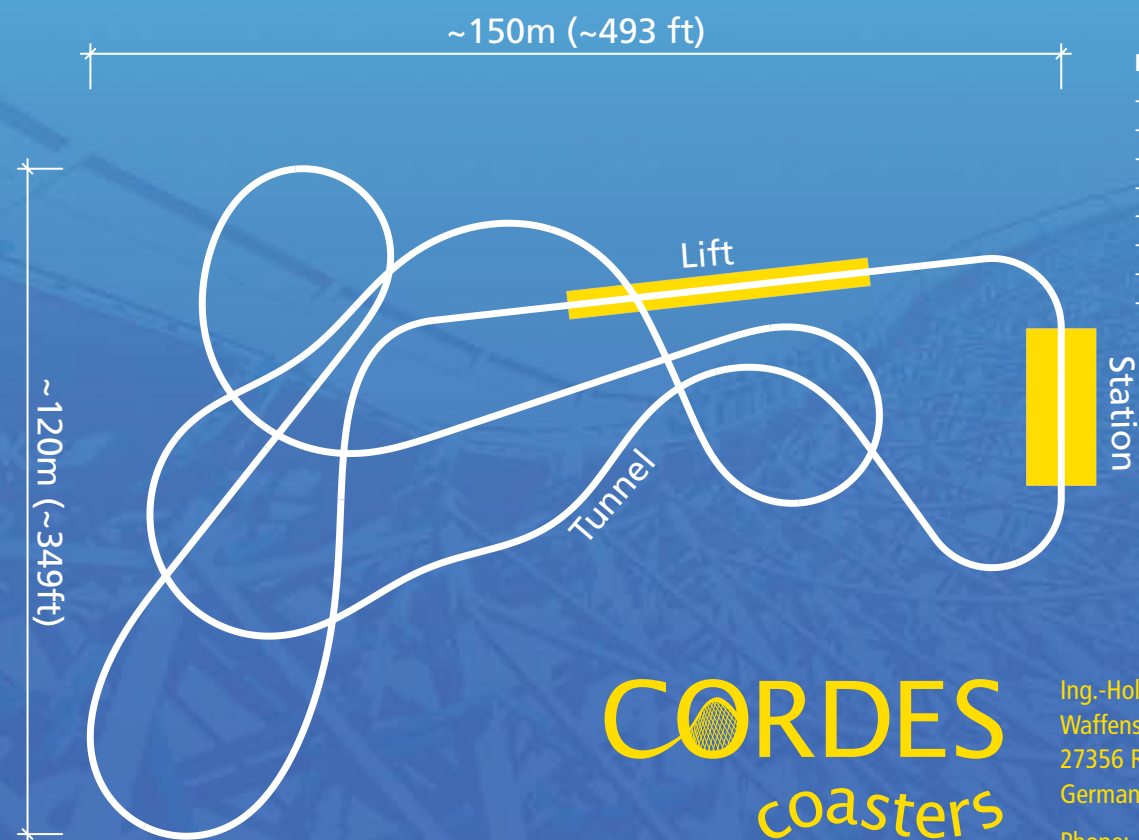
Mammut, Tripsdrill
Germany, 2008
Overall responsibility



High-Tech in Wood



Layout example Mammut



Fact Sheet:

- Height: 30 meters (~99 ft.)
- Length: 860 meters (~2827 ft.)
- max. 85 km/h (53 mph)
- 3,5 G vertical
- 1,0 G lateral
- Trains: 6x4 persons
- At least 120cm/48" tall to ride
- Capacity: 1,200 pph

CORDES
coasters

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Layout: Alex Korting Design | Photo Copyrights: Erlebnispark Tripsdrill, Holzbau Cordes, Nejib Boubaker, Lifthill.net (Panorama), Christian Ahuis, Alexander Korting, Holzbau Magazin/Karsten Koch, Adam Ahmed, Uli Eyring



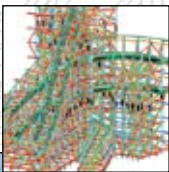
Timber: **German pine**, perfectly impregnated



Structural **timber protection**: columnfeet, timberedge-angling



CAD construction design and calculated clearance diagram



Trains and components by **Gerstlauer**



Track: Traditional riding experience, infinite, 8 layers



Height: <20 meters – over 60 meters



Completely **bol-
ted** together, all steel parts hot-dip galvanized



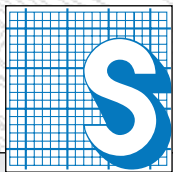
Successful **TÜV**-inspection optional



Assembly: **Com-
plete package**, meticulous and on time



Dynamic and statical calculations: **Ing.-Büro Stengel GmbH**



Wooden roller coasters are living through a renaissance moment – however many parks fear faulty constructions and incalculable maintenance fees. But with **Cordes Coasters** these doubts must no longer exist – you have found a manufacturer that takes care of all of these issues. Because our wooden coasters are ...

Perfectly calculated

For years we have been working with one of the most renowned engineering companies in the roller coaster industry, the 'Ingenieurbüro Stengel'. To further ensure that everything fits right from the beginning, our own construction office creates the entire CAD-planning and the secondary support system.

Robustly constructed

The pinewood we use comes from sustainably cultivated German woods and surpasses other wood for example the Southern Yellow Pine, in points such as density and resilience which optimizes the quantity of wood and minimizes the amount of scraps. For our production we only use preselected wood, which are then assessed by an external party. That is how we ensure that only the best and most load-bearing wood is processed.

Impregnated for durability

We treat our wood with a vat-pressurized impregnation after it is cut. That is how the cross-grained timber ends and the now already existing boreholes are especially protected and weak points, that can emerge from processing pre-impregnated, package ware wood on the construction site, are avoided. Another positive aspect is environmental protection – by processing the wood this way no impregnated wood scraps are generated. In terms of the profitable amount we follow the strict Scandinavian NTR-Impregnation guidelines which dictate a broad protection of the wood even with constant water contact. That is how we prepare our roller coasters for a long lifetime.



Meticulously processed

We cut all of the timber for our roller coasters in our own sawmill with CNC-technology which guarantees a high amount of precision. We also create complete documentation of every component, so that if requested the entire construction can be delivered with instructions and is ready to build. Thanks to our consequent high quality pre-fabrication assembly mistakes can be eliminated and margins minimized. The result: A short construction time. We can deliver timber in lengths up to 12 meters which reduces the amount of joints in the wood and decreases maintenance time. The stands of our coasters rest in hot-dip galvanized columns at least 10 centimeters above the fundament which is the perfect protection against pooling water and allows it to dry quickly. Because of all of these high quality standards even roller coasters over 60 meters (~197 ft.) are no problem for us. And the aesthetic pretence of our wooden coasters through the usage of special display wood is self-explanatory. That is how we ensure that Cordes Coasters are an eye catcher as well.

Tightly connected

Every connection of our roller coaster is reviewed and executed by 'Ingenieurbüro Stengel'. All of the fasteners and every steel piece used by us is hot-dip galvanized and therefore rust free. For bolt connections we use customized dowels which has the advantage of reduced fastener usage and causes less slippage. Our delivery package includes all necessary steel pieces. Stair grade consoles, stair beam consoles, batterbrace connections, enforcing steel profiles and fundament anchors. That is how we guarantee that what belongs together, fits together.

Exactly steered

Our coasters transmit the traditional feeling cherished by roller coaster-fans all over the world – shake, rattle and roll! For this we use a bolted, 8-layer track of vat-compressed impregnated pinewood which is processed by the high standards of the Stengel offices, including all of the steel coatings and fasteners and a track course calculated by heart line. Only Cordes Coasters offers you a track connection through special screw nails and bolts as well as the fixation of every single layer through adhesion. That is how our coasters stay on track an entire lifetime.

A great ride

The controls, the trains and the low-maintenance magnetic breaks are built and delivered by the experienced roller coaster company 'Gerstlauer'. That is why our maintenance costs are up to 2/3 lower compared to those of other producers.



Customized for Cordes Tracks: The special SFS double threaded fasteners for the innovative assembly of timber



Completely assembled

Cordes Coasters are always delivered and executed with all the fasteners including, catwalks, stairs etc. Upon request the park associates can be integrated in this process. The pre-assembly through our team is conducted inside of a special tent on site. Said tent as well as all assembly appliances, the necessary lift vehicles and cranes are always included in our deals. That is how no hidden costs can emerge.

Regularly inspected:

Security is on the top of Cordes Coasters' list. That is why we offer the TÜV-inspection immediately, upon request. Should the assembly be conducted through our team our deal can also include a five year guarantee. This includes annual visits from our team which then checks the entire construction for damages and abrasions. Should we find damaged timbers, we will replace them – without any additional costs, of course. We also inspect bolts and fasteners and adjust them if necessary.

