

## = Floorless Coaster =

A Floorless Coaster is a type of steel roller coaster manufactured by Bolliger & Mabillard where riders sit with no floor underneath them allowing their feet to swing freely just above the track . Development of the Floorless Coaster began between 1995 and 1996 with Medusa ( now known as Bizarro ) at Six Flags Great Adventure opening on April 2 , 1999 , making it the world 's first Floorless Coaster . Floorless Coasters also tend to have 3 to 7 inversions incorporated in the layout of the coaster . Recently , Bolliger & Mabillard have used floorless trains on their Dive Coasters , such as Griffon and Sheikra . Though they contain floorless trains , the coasters are still not considered Floorless Coasters as B & M classifies them as another model . Also , Maurer Söhne have designed their own version of the Floorless Coaster , a variant of their X @-@ Car called X @-@ Car Floorless , but currently do not have any installations .

## = = History = =

According to Walter Bolliger , development of the Floorless Coaster began between 1995 and 1996 . In 1999 , the world 's first Floorless Coaster opened at Six Flags Great Adventure as Medusa . In 2009 , the coaster was renamed Bizarro and re @-@ themed . After the success of Bolliger & Mabillard 's prototype Floorless Coaster , SeaWorld , Cedar Fair , Six Flags , and independent parks , Janfusun Fancyworld , Parque Warner Madrid , Tivoli Gardens , and Ocean Park Hong Kong have built other coasters of this model at their parks . There are currently 14 Floorless Coasters in operation with Dominator being the only one relocated to another park .

## = = Design = =

The design of a Floorless Coaster has one main difference from traditional steel roller coasters around the world : it has no floors between the seats . While a train is in the station , a floor is used only for loading and unloading purposes . Because the front row has nothing in front of it to stop riders from walking over the edge of the station , a gate is placed in front of the train to prevent this from happening . Once all the over @-@ the @-@ shoulder restraints are locked , the floor separates into several pieces and moves underneath the station . The gate then opens , allowing the train to move forward . When the train returns to the station , the floor is brought back up and the gate is closed as the next riders board the roller coaster . Aside from the station , a Floorless Coaster has several inversions similar to B & M 's Sitting Coaster 's .

## = = Installations = =

Bolliger & Mabillard has built thirteen Floorless Coasters with an additional roller coaster converted from a Stand @-@ up Coaster . The roller coasters are listed in order of opening dates .

\* Converted from a Stand @-@ up Coaster to a Floorless Coaster .

Note : Although some Dive Coasters ( such as Sheikra and Griffon ) feature floorless trains , they are not considered Floorless Coasters .

## = = Similar rides = =

Maurer Söhne , a German roller coaster and steel manufacturer , has developed their own version of the Floorless Coaster called the X @-@ Car Floorless . The car is the same as the original X @-@ Car with the only difference being that there is no floor during the ride . As of 2012 , no X @-@ Car Floorless roller coasters have been manufactured .