= Top Thrill Dragster =

Top Thrill Dragster is a steel accelerator roller coaster built by Intamin at Cedar Point in Sandusky , Ohio , United States . It was the sixteenth roller coaster built at the park since the Blue Streak in 1964 . When built in 2003 , it was the first full circuit roller coaster to exceed 400 feet (120 m) in height , and was the tallest roller coaster in the world , before being surpassed by Kingda Ka at Six Flags Great Adventure in May 2005 . Top Thrill Dragster , along with Kingda Ka , are the only strata coasters in existence . It was the second hydraulically launched roller coaster built by Intamin , following Xcelerator at Knott 's Berry Farm . The tagline for Top Thrill Dragster is " Race for the Sky "

= = History = =

Planning for Top Thrill Dragster started around 2000 when Millennium Force opened . Footers started being poured during the winter of 2001 / 2002 then were covered up during the 2002 operating season . To construct the roller coaster , the park had to use a 480 feet ($150\ m$) crane , only one of four in the United States . Vertical construction by Martin & Vleminckx started in fall 2002 , months before the announcement . By October 2002 , the roller coaster had reached 200 feet ($61\ m$) . The ride was announced on January 9 , 2003 and the structure , built by Intamin 's subcontractor Stakotra , was finished shortly after . It is tied with Millennium Force for being the two largest investments in Cedar Point history . The announcement revealed the park 's goal to build " the tallest and fastest roller coaster on earth " , reaching 420 feet ($130\ m$) and accelerating up to 120 miles per hour ($193\ km\ /$ h) in 3 @.@ 8 seconds . On March 10 , 2003 , Cedar Fair Entertainment Company filed a trademark for the name Top Thrill Dragster .

Top Thrill Dragster 's media day was held on May 1 , 2003 then it officially opened to the public on May 4 . It became the "tallest "and "fastest "roller coaster in the world overtaking both world records from Steel Dragon 2000 at Nagashima Spa Land that was just built three years earlier. It lost the title of being the world 's tallest and fastest roller coaster when Kingda Ka at Six Flags Great Adventure opened in May 2005 . Intamin designed both Kingda Ka and Top Thrill Dragster , and the two share a similar design and layout that differs primarily by the theme and the additional hill featured on Kingda Ka .

The ride had constant downtime in its first couple seasons. Several problems such as the ride 's hydraulic system and launch cable caused the ride to experience downtime. Top Thrill Dragster was also closed in 2003 for the annual event, CoasterMania.

= = Ride experience = =

= = = Layout = = =

After leaving the station , the train enters the launch area . To the left of the launch area is a " Christmas tree " light , similar to those employed at the starting line of a drag strip . A brief message is played to the riders to : " keep arms down , head back , and hold on . " Once the train is prepared to launch , a motor revving sound effect is played and its magnetic braking fins are lowered from the launch track . It then launches , accelerating to a speed of 120 mph (190 km / h) in 3 @.@ 8 seconds . Shortly after reaching its maximum velocity , the train begins its ascent up a 90 @-@ degree incline , twisting 90 degrees clockwise before climbing over the 420 @-@ foot (130 m) top hat . Upon descending , the track twists 270 degrees before leveling out , allowing the train to be stopped by the magnetic brakes .

= = = Theme / trains = = =

The roller coaster is based on the Top Fuel Drag Racing motor sport . A real Top Fuel dragster

weighs approximately one ton , while each train on the coaster weighs 15 tons . Its dragster themed trains once had decorative spoilers and engines , but these were removed soon after opening , allowing an extra row of seats to be added to each one . Also , when the ride opened , it had only four cars on each train , including the decals . By the middle of the 2003 season , the fifth cars were added to all trains , making them the five cars long that they are now . The fifth cars were added on shortly before the decals were removed . The ride 's theme song , " Ready to Go " by Republica , is played while in the station .

= = = Rollbacks = = =

Occasionally , a train is launched with not enough speed to clear the crest . This typically happens in cool , wet , or breezy weather , or when the wind is working against it . In these conditions , the launch often does not provide it with enough speed to climb over the hill , which causes it to stop short of the top , and roll back down the hill in reverse , hence the term " rollback " . The launch track is equipped with retractable magnetic braking fins which are raised after the train is launched in order to slow one that did not crest the hill .

On very rare occasions a combination of the weight distribution of the train, the force of the launch, and the wind can stall a train on the top of the tower. When this happens, a mechanic takes the elevator to the top and pushes the train down the hill. This has only happened three times with passengers on board, June 24, 2005, October 25, 2008, and May 25, 2009.

= = World records = =

When Top Thrill Dragster debuted, it set four new records:

World 's tallest complete circuit roller coaster

World 's tallest roller coaster

World 's tallest roller coaster drop

World 's fastest roller coaster

It was the fourth roller coaster to break the 100 miles per hour ($160~km\ /\ h$) speed barrier . It was preceded by Tower of Terror II at Dreamworld , Superman : Escape from Krypton at Six Flags Magic Mountain and Dodonpa at Fuji @-@ Q Highland . The previous record holder for overall height was Superman : Escape from Krypton at Six Flags Magic Mountain , standing at 415 feet (126~m) . Its record was broken in 2005 when Kingda Ka opened at Six Flags Great Adventure , standing 456 feet (139~m) tall . The previous record holder for speed was Dodonpa , at 107 miles per hour ($172~km\ /\ h$) . This record was broken by Top Thrill Dragster , which reaches speeds up to 120 miles per hour ($190~km\ /\ h$) , which was later broken by Kingda Ka which reached a top speed of 128 miles per hour ($206~km\ /\ h$) . In November 2010 , Formula Rossa at Ferrari World broke the record for fastest roller coaster , with a top speed of 149 @.@ 1 miles per hour ($240~0.0~0~km\ /\ h$) .

As of 2015, Top Thrill Dragster has the second tallest lift, the third fastest speed, and the second @-@ highest drop among steel roller coasters in the world.

= = Operation = =

Top Thrill Dragster is negatively affected by unfavourable weather conditions as both a high altitude and high velocity ride. "Rain, high winds, and / or lightning "may result in the closing of the ride depending on the severity. It will close in high winds and any kind of precipitation.

There is no minimum age requirement, but passengers must meet the miniumum height requirement of 52 inches and a maximum of 78 inches to ride. Some persons over a certain weight / waist size will not be permitted to ride if the seat and lapbar harness cannot accommodate them. Passengers on Dragster may not bring any loose articles onto the train and will be required to wear shirts and footwear. Headphones must be removed before boarding.

Passengers are advised that they must not ride Dragster if they have " a history of recent surgery , heart trouble / high blood pressure , neck trouble , back trouble , or any other condition that may be

aggravated by riding, or who are pregnant ".

= = Incident = =

On July 14 , 2004 , four people were struck by flying debris while riding the coaster . Reports indicated that a metal cable frayed during launch , shearing off shards of metal that struck the riders . The injuries were mainly arm abrasions , with one passenger experiencing cuts to the face . They were treated at the park 's first aid station , and two later sought further medical attention .

= = Awards = =

= = Records = =