



AMZ News

ROLLOUT, TESTING & FORMULA STUDENT SWITZERLAND



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Team picture at rollout
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Rollout

After 8 months of hard work, *castor* finally drove its first meters on April 30th, becoming the first car in AMZ history to achieve an April shakedown. Our rollout was two weeks later on May 16th, where we could finally present *castor* to our sponsors, families and friends. On this occasion at Autobau Erlebniswelt, *castor* drove for the first time in front of an external audience. The evening ended with an aperitif and a museum tour, where *castor's* predecessors joined legendary cars from the museum's collection.

Testing

This was the beginning of the testing phase. The main goal of testing was as always, to get the car reliably up to full performance before heading to the first event. In this phase in particular, the entire team was called upon to work efficiently and to subordinate themselves to the

team. The result was impressive: *castor* went to the first Formula Student event of the season, Formula Student Switzerland 2023, with more than 350 test kilometers under its belt.

Before the racing season started, we were also able to test our car and our knowledge in a special environment thanks to two of our sponsors. At the Presta Race Day, a pre-season event with static and dynamic disciplines, we took first place, which gave us a big motivation boost for the final phase of preparation. A week later we were allowed to test at the BMW M Driving Experience, a good exercise for the transport of car and test material, and a chance to exchange ideas with experienced engineers and a professional racing driver.

FSCH: Days 1-3

Then the time had finally come and we set off with *castor* to the beautiful Swiss Alps to compete in Formula Student Switzerland 2023 from 01.- 05.07.2023 in Geschinen.

The event started like any other with the so-called scrutineering, where the car is inspected and tested for rules compliance and safety. Very quickly we were able to prove the mechanical rules compliance, but there was a lot of clarification needed on the electrical side and regarding the battery, due to which some changes had to be made. This took time and nerves. Fortunately, the static disciplines had started in parallel and there, the team was able to boost morale, because we made it into the top 3 finals of the Business Plan Presentation, and into the top 3 in the Cost and Manufacturing Event. Thus, two Statics podiums were secured early in the week, but we would only find



castor @FSCH
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out the exact classification at the award ceremony - after all, some suspense had to be kept up until the end. On the third day, the last static discipline, the Engineering Design Event, followed. There, we also qualified for the finals, as we would learn the next day. However, the first dynamic disciplines would follow on the fourth day, which is why we put full focus on completing the scrutineering as quickly as possible.

FSCH: Days 4-5

On the fourth day, three dynamic disciplines were scheduled: acceleration, skidpad and autocross. The team was finally able to finish the electrical scrutineering in the late morning and after the rain and brake tests *castor* was finally allowed to participate in the dynamic disciplines. Unfortunately, it was too late for the acceleration event, which was scheduled for the morning, and *castor* was consequently unable to set a time in this discipline. For Skidpad, the event where the pure lateral performance of the car is tested,

time was already running out, and so the team made the necessary preparations under high pressure and managed to set a time just a few minutes before the event closed, which ended up being the fastest by a small margin, even though the car had a controls issue and was therefore difficult to handle for the driver. The team then had a little more time before heading into the autocross event. In the practice area, the steering problems were fixed and final adjustments were made. A bit more relaxed, the team was able to compete in the autocross event, in which you do one hotlap on a track of about 1.2km. For the first time during the competition, we had the time to make all the allowed attempts and our drivers managed to set up the best lap time. Then it was already evening and the team went to the engineering design final before the pits were closed for the night.

On the morning of the last day, there was only the Endurance event left, where 22km have to be completed in two stints with a driver change. Completing this discipline at all is

already a great achievement, but *castor* was by far the fastest and as it would turn out, the most efficient. *castor* was so much faster and more efficient than the competition during the Endurance event, that no other team got any points in the efficiency discipline.

FSCH: Conclusion

And with that, Formula Student Switzerland 2023 was over and it was time for the award ceremony. Out of 8 disciplines, AMZ Racing made it to the podium in 7 - only in the missed acceleration event were we unable to deliver a top 3 finish. But not only that, the team won every other discipline except the Business Plan Presentation, where we took third place. This strong performance led to a clear overall victory, with 916 out of 1000 possible points, and more than 400 points ahead of the second-placed team.

Outlook

So, all in all, we look back onto a very successful first event of the 2023 racing season. At Formula Student Switzerland 2023 the team was not only able to celebrate great successes, but also to learn many lessons about the car and the organization of the team at Formula Student events. Now we are in the process of implementing these learnings, adjusting the car where we need to, and continuing to tune it to the performance

limit. In addition, we have started driverless testing of *castor* on a large scale to prepare for the events where *castor* will compete autonomously this summer.

So it's far from over, and we look forward to celebrating and sharing more successes with you this summer.

Upcoming Events

- Formula Student Austria
22.07. - 27.07. Red Bull Ring
- Formula Student East
1.08. - 07.08. Hungaroring
- Formula Student Germany
14.08. - 20.08. Hockenheimring

We will be posting live updates during the events on instagram: @amzracing

FS Switzerland Results

Disciplines

Placement

Static Disciplines	Cost and Manufacturing	1st place
	Business Plan Presentation	3rd place
	Engineering Design	1st place
Dynamic Disciplines	Acceleration	DNA
	Skidpad	1st place
	Autocross	1st place
	Endurance	1st place
	Efficiency	1st place
Overall		1st place

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