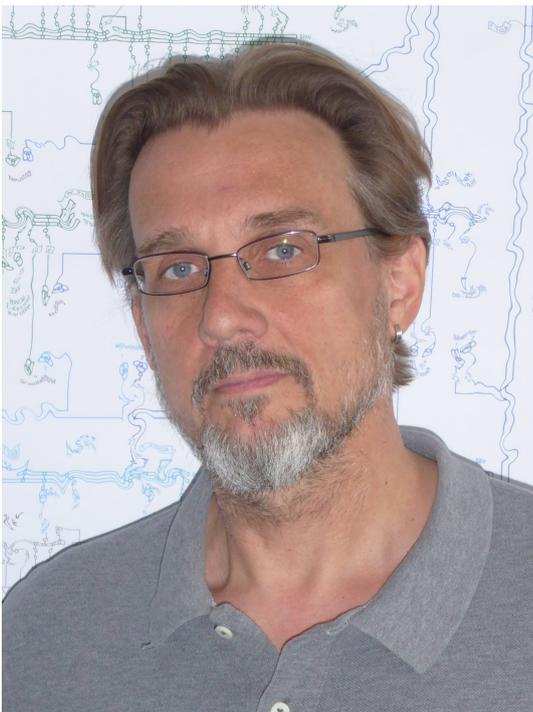


ELECTRICAL-ENGINEERING.ACADEMY

10 questions to: Marco Pfannenstiel

WELCOME dear friends of protection, control & electrical engineering ! The networking of our readers, ie. the networking of developers, engineers, suppliers, operators, sellers, programmers, students and young and old is the most important thing, a strong network is the basis of mutual success. That's why we launched our new series "**10 questions for: ...**". Again, we introduce a driving player in the protection and control engineering world.

In our new post of our highly interesting series we introduce **Marco Pfannenstiel** of the company Stromnetz-Hamburg GmbH. Many will already know him, but by no means all. We start with 10 questions to **Marco Pfannenstiel**.



Marco Pfannenstiel

Marco Pfannenstiel started his training as a power system electronics technician at Hamburgische Electricitäts-Werke AG (HEW) in Hamburg in 1984 and completed his training in 1987. Immediately after completing his training, he gained his first experience as a test assistant in the field of protection technology. In 1992 he passed the examination to become an industrial foreman in electrical engineering and then worked as a master protection technician. Since 2005 he has been transferred to the position of the protection

technology commissioning engineer. His main tasks are project support and the commissioning of network systems in the 380, 110, 25 and 10 kV voltage levels as well as power plants with a generator output of up to 1,300 MW. Among other things, he has been involved in the substation 2030 (UW2030) project since 2019 with the development, planning and construction of a new substation standard for Stromnetz-Hamburg GmbH (successor company of HEW) based on IEC 61850.

10 questions to: Marco Pfannenstiel

1. When and where were you born?

On April 3rd, 1968 in Hamburg Barmbek. On April 3rd, Marlon Brando and Eddie Murphy's birthdays are also celebrated. ;-) ...

2. Why did you become an engineer?

Since I did not study, this question is difficult to answer. I came to HEW and thus to electrical engineering for a very simple reason: my mother worked in the HEW's canteen. At the age of 16 you didn't have any global goals, so HEW was okay.

3. Which university did you go to?

... ;-)

Editor's note: This superfluous question can also be used to highlight the disadvantage of standardization.

4. How did you get into protection and control technology?

As already mentioned, I started in the field of protection technology immediately after completing my training. It quickly became clear to me that protection technology still enjoys a different status than most of the other departments.

Protection engineers are generally not very popular. That may be because they mostly want to be right and are often right too.

But what I quickly realized: when things get difficult, you usually bring in the protection technology. I find protection technology to be an ideal field of activity, on the one hand, well-founded theoretical knowledge must be available and expanded or refined almost daily, on the other hand, despite the secondary-heavy activities, you have an indispensable relationship to the primary system.

5. What has been your greatest personal success in your job?

The commissioning of the new machine transformers in what was then the Krümmel nuclear power plant was a particular challenge for me. Here, the soft initial switch-on via a machine set in the nearby pumped storage plant and the subsequent circulating current drive over parts of the 380/110 kV network had to be planned and carried out relatively laboriously.

6. Looking back, would you do things differently?

Sometimes I think you would have studied, because sometimes less persuasion is necessary with the piece of paper. On the other hand, there would have been the risk of not being 100% technically involved. So I feel good the way it is. I still enjoy the technical challenges in protection technology a lot.

7. Where do you see protection and control technology in 2030?

I think the protection system components such as overcurrent, distance, differential, etc. are already implemented quite completely in their algorithms. With increasing cross-location communication, it becomes easier to map protection-related problem cases. In our city network, I can't think of a protection problem that has not yet been solved. So I don't expect any major changes in classic protection technology - what is protected with which protection component. The more exciting question then will be where these components will be located in the future. Will it remain with dedicated device components with copper wiring or will the required algorithms be kept in central computers in the future? After many years of further development, IEC 61850 has now reached a level that is broadly ready for implementation. Device manufacturers have also picked up speed and are offering ready-to-use solutions. Here, too, the following applies: "The appetite comes with eating!" But the fact is that a lot of energy still has to be invested in implementing the technology. Last but not least, the transfer of information to the operating teams is imperative. The aim must be to establish a technology here that remains manageable, even for non-engineers, even at half past two at night.

That is why I will see more systems based on IEC 61850 in 10 years' time, but the broad masses will still be conventional.

8. What is your motto in life?

"Setting tasks, understanding tasks and fulfilling them as best as possible"

Quote: Helmut Schmidt

9. What advice or advice can you give other engineers?

Just do it. You only understand many new things and the new possibilities that come with them once you have touched them. Unfortunately, there is usually no time for that.

10. Did we forget an important question that we should have asked you?

How do we manage to switch to increasingly complex technologies without losing the team?

Many thanks to Marco Pfannenstiel