

Blog Article

Paving the Way for the Next Generation of Women in NDT

Succeeding Today, Inspiring Tomorrow

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Abstract

Marie Rudolfova (Bohacova), a Level 3 NDT professional and owner of eddyczech s.r.o., shares her journey in the Czech NDT industry, inspired by her father's work in electrical engineering and NDT equipment. Despite NDT being a male-dominated field, Marie focused on gaining knowledge and expertise to earn respect. She overcame the challenges of balancing motherhood with her Ph.D. studies, thanks to the support of her family. She encourages women in NDT to be confident and assertive in their roles, contributing their diligence and patience to achieve excellence.

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1. What inspired you to pursue a career in NDT?

My dad inspired me. I have always been fascinated by his work. How he understood all electrical things and became an expert in electrical engineering from eddy current device designs to probe designs. I remember when I was a little girl, my father built a luminous Christmas tree from a printed circuit board in the shape of tree. It contained about 30 small LED diodes. My first luminous tree in the communist Czechoslovakia. During the communist regime, American films were not available in the Czechoslovakia. After the collapse of the regime in 1989, I learned that there was a film called E.T. The Extra-Terrestrial. Unfortunately, you could watch E.T. only on a satellite television in the nineties. My family did not have enough money to buy a satellite TV even to own receiver in form of a satellite dish. So my father built it. Then, I could watch E.T. on a German channel with one small snag - I do not understand German. Additionally, in the nineties, my father with my mother established their company focused on the production of eddy current probes, devices, manipulators, and other NDT equipment. As teenagers, my sister and I sometimes helped our parents complete an order. It was funny how we pulled the cables through the twelve-meter (or more) tube for the probes used for the inspection of the heat-exchanger/steam generator tubes. Great job.

So, I decided to study high school with a focus on electrical engineering and then continued with electrical engineering at university.

2. What challenges have you faced as a woman in the field and how have you overcome them?

As a woman, I have faced men. NDT is a predominantly man affairs. But it's not the man's fault. Let's face it, most women aren't attracted to technical fields, especially NDT. Fortunately, throughout my NDT career, I have met and had the opportunities to work mostly with smart men who didn't care that I am a woman, but mainly whether I understood the given NDT issue/task/project or not. If so, I was welcomed on NDT board.

My next challenge was to finish my Ph.D. During my studies, I got pregnant and gave birth to a second child. It was very difficult to pass all exams and to write the dissertation thesis. My husband and the rest of my family helped me a lot and together with my supervisor they convinced me not to give up my studies.

I consider another challenge to be the opportunity to participate in extending the service life of L410 aircraft in terms of NDT. Great job and I have met with great professionals.

3. How has your work in NDT shaped your personal and professional development?

I am proud to be able to work in such a unique field as the NDT is. Each NDT task/project pushed me further and further. In each project, I put my acquired professional knowledge and experience and, as my husband says, "a little bit of that woman touch" - diligence and patience to achieve the expected goal and results.

Working in NDT makes me stronger, tougher and intransigent. I think that my

children, especially my daughter, have a good example of how a woman can succeed in a very non-standard job for women.

4. Can you share a memorable situation that other women in NDT can relate to or that will enlighten them?

I have just only one recommendation: "Do not be shy and always keep your head up. Especially if the entire meeting room is full of men".

5. How do you see the future of NDT and what role do you see women playing in shaping it?

More robots, less human.

6. On International Women's Day, what is your message to other women in NDT or those aspiring to enter the field?

I wish every woman in NDT and beyond to live the life she wants.

#WOMENINNDT 99 Do not be shy and always keep your head up. Especially if the entire meeting room is full of men Marie Rudolfova, Level 3 NDT Professional and Owner of eddyczech s.r.o. | CZECH REPUBLIC

About the Author:

I graduated from the Brno University of Technology, Faculty of Electrical Engineering and Communication in 2006. I received my Ph.D. in the field of Physical and Material Engineering at the Faculty of Mechanical Engineering at Brno University of Technology in 2017. My first job was during my studies at the university and after at my father's company INDETEC ndt in 2006. During this job, I got my very first NDT level 2 in ultrasonic testing. Then, I joined the aerospace research institute - VZLU aerospace in Prague in the period from 2008 to 2017. During this period, I obtained my Level 3 in ultrasonic and eddy current testing. My solo carrier as a self-employed person started in 2017. Now, I have my own company eddyczech focusing on NDT/NDE and I work for various companies, especially for aircraft operators and manufacturers. Finally, I became a presidium member of the Czech Society for NDT at the end of last year 2024.

I have published NDT articles and conducted lectures and training activities. I am 43 years old mother of three children, wife and NDT person who loves her work.