

#JOINTHEJOURNEY

Iasi, 12.06.20<mark>20</mark>
Emanuel Bot<mark>ezat – Vitesco Tech</mark>nologies Engineering Romania SRL

Public



CONTINENTAL CORPORATION

FACTS & FIGURES 2018



€ 44,4 billion sales



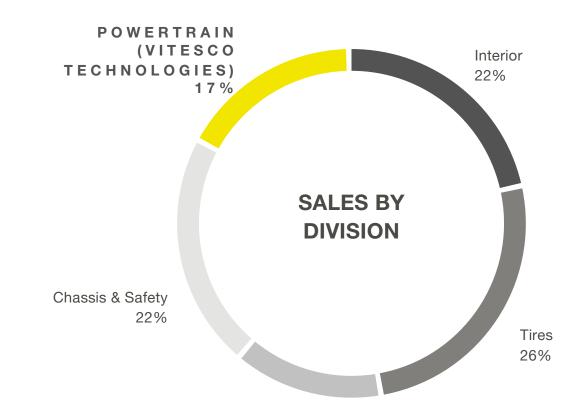
243,226



employees



544 sites* in 60 countries



ContiTech 14%

*Status: December 31, 2018

CONTINENTAL POWERTRAIN GOES VITESCO TECHNOLOGIES

> Vitesco Technologies is a leading international developer and manufacturer of state-of-the-art powertrain technologies for sustainable mobility. With smart system solutions and components for electric, hybrid and internal combustion drivetrains, Vitesco Technologies makes mobility clean, efficient and affordable. The product range includes electrified drivetrain systems, electronic control units, sensors and actuators, and exhaust-gas aftertreatment solutions. In 2018, Vitesco Technologies, a division of the Continental AG, recorded sales of EUR 7.7 billion and employs more than 40,000 employees at about 50 locations worldwide. Vitesco Technologies is headquartered in Regensburg, Germany.



M

AROUND 50 LOCATIONS

for production and development.

> 40,000 EMPLOYEES

are globally active for the company.

€ 7.7 BILLION SALES

achieved in 2018.



OUR EMPLOYER BRAND IDENTITY

PASSIONATE, PARTNERING, PIONEERING

Passionate



We develop clean mobility for a better world.

Partnering



Grow with us in a networking culture.

Pioneering



Be a pioneer and build tomorrow's technologies.

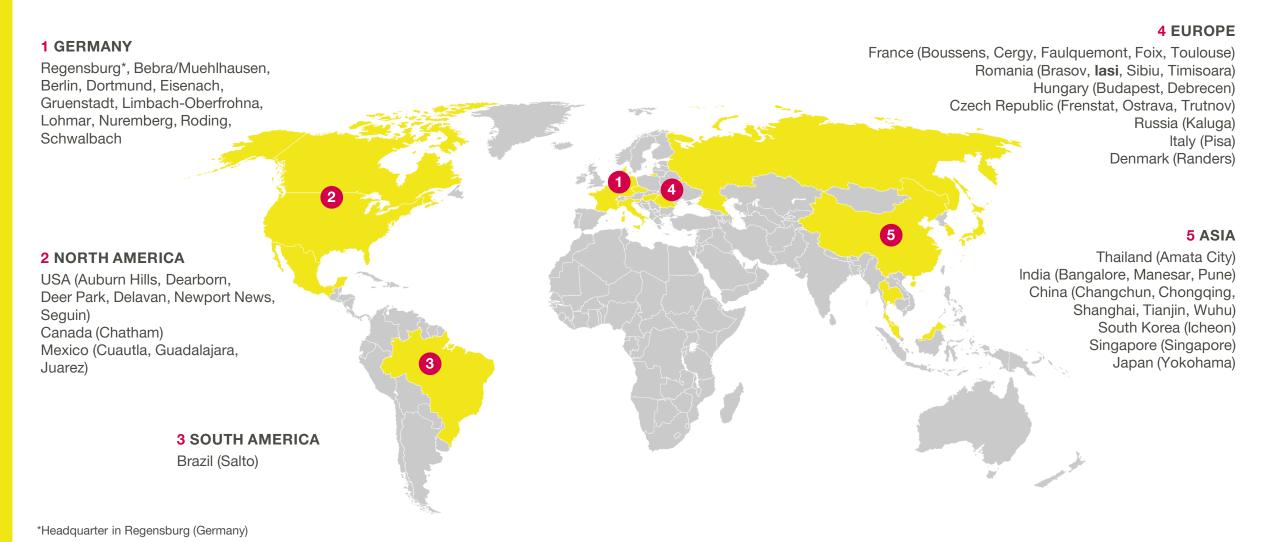
The world is transforming and it's up to us to make a difference. At Vitesco Technologies we are determined to **develop clean mobility for a better world**. Our employees act as **pioneers** who strive for new paths with our technologies and systems. In order to make this possible, we support our employees to grow and to develop their competencies in our global network culture.

Powering the future together.



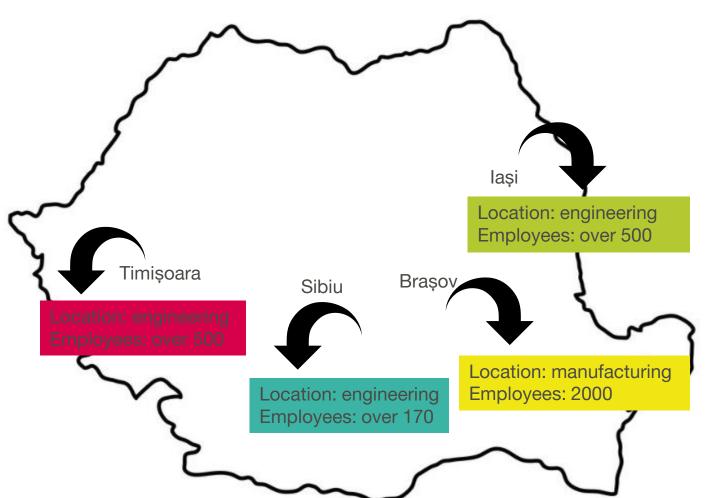
VITESCO TECHNOLOGIES

GLOBAL FOOTPRINT





WHERE WE ARE IN ROMANIA



EUROPE

France (Boussens, Cergy, Faulquemont, Foix, Toulouse)

Romania (Brasov, lasi, Sibiu, Timisoara)

Hungary (Budapest, Debrecen)

Czech Republic (Frenstat, Ostrava, Trutnov)

Russia (Kaluga)

Italy (Pisa)

Denmark (Randers)

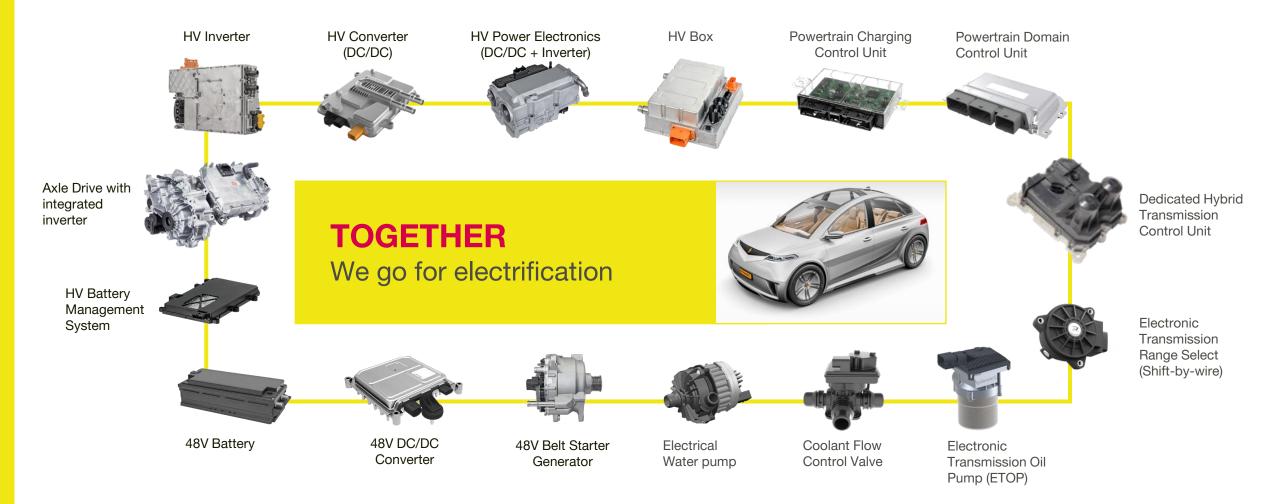
ROMANIA - COMPETENCIES

Software Hardware Mechanical design Project management



POWERTRAIN

ELECTRIFICATION SOLUTIONS





VITESCO TECHNOLOGIES' OPPORTUNITIES

VITESCO TECHNOLOGIES' BUSINESS UNITS

- > Electrification Technology (ET)
- > Electronic Controls (EC)
- > Sensing & Actuation (S&A)
- > Contract Manufacturing



#WEAREELECTRIFIED

EXPERT CAREER OPPORTUNITIES

- > Electrification Technology
 - > Software Developer
 - > Software Test Engineer
 - > Hardware Engineer
 - > Mechanical Engineer
 - > System Engineer
 - > System Test Engineer
 - > Cyber Security Software Developer
 - > Application Specialist

> Electronic Controls

- > Software Developer
- > Cyber Security Penetration Tester

STARTER CAREER OPPORTUNITIES

- > **Internship** for:
 - > Software Development
 - > Software Test Engineering
 - > Hardware Engineering
 - > Mechanical Engineering
 - > System Engineering
 - > System Test Engineering



WWW (WHY? WHAT? WHO?)

> **WHY?**

> Vitesco Technologies provides the best environment for **students** to practically experience automotive projects and make a valuable contribution to their future.



> WHAT?

- > Limited number of students
- > 3 weeks unpaid collaboration
- > From 13th of July until 31st of July
- > 6 hours per day (90 hours)
- > Two areas:
 - > Software engineering
 - > Hardware engineering

> **WHO?**

- > Students that are in 2nd and 3rd year from the following faculties:
 - > Automation and Computers
 - > Electronics and **Telecommunications**
 - > Electrical Engineering Faculty
 - > Informatics







SOFTWARE ENGINEERING PROJECT DESCRIPTION

> SMART HOME

- You will have to develop the software for a smart home application using EVB5.1
 ATMEGA32 development board or Proteus (academic license has to be acquired by the student)
- > Requirements for the software
 - > Blinking LED each 500ms
 - > Read temperature information
 - > Display on LCD temperature information for each room
 - > Change reference temperature for each room
- > Required knowledge!
 - > C programming
 - > Microcontroller
 - > Hardware basics

> WHAT WILL YOU LEARN?

- > Usage of Eclipse IDE
- > Embedded C
 - > Development and debugging
- > ATMEGA32 microcontroller peripherals
 - > Ports
 - > ADC
 - > Timers
 - > Interrupts
- > Usage of different electronic devices:
 - > Switch (button)
 - > Potentiometer
 - > LED
 - > LCD
 - > Temperature sensor
- > Proteus (if you have the academic license)

> HOW WILL YOU LEARN?

- > Each morning you will meet online with our trainers and you will receive the subject for that day; each after noon you will again with our trainers to present the results
- > On the last day you will have to present your solution and you will receive a short test for certificating the obtained competences.





HARDWARE ENGINEERING PROJECT DESCRIPTION

> BASIC CIRCUIT DESIGN

- > You will have to develop a function by using basic electronic circuits. Ex: low power isolated power supply, amplifiers, window comparators, etc.
- > Required knowledge!
 - > Passive and active components knowledge
 - > Circuit analysis
 - > Basic math (Smath)
 - > Spice simulation (Ex: LTSpice)

> WHAT WILL YOU LEARN?

- > Basic circuits
- > How to get from a requirement to a project
- > How to use the circuit analysis knowledge in design
- > How to make the simulation as close to the real circuit as possible

> HOW WILL YOU LEARN?

- > Each morning you will meet online with our trainers and you will receive the subject for that day; each after noon you will again with our trainers to present the results
- > On the last day you will have to present your solution and you will receive a short test for certificating the obtained competences.







SUMMER PRACTICE TIMELINE (ONLINE VERSION)



5th of July last day for exams



3rd of July

Apply until 3rd of July (https://www.continental-jobs.com/index.php?ac=jobad&id=129 8808)

Prerequisites for student:

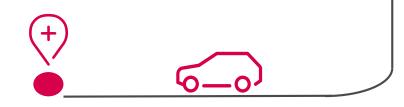
- Has a PC with network connection
- Has a Microsoft Teams account
- Didn't participate to CLL (they will receive summer practice certificates based on their participation)

13th of July

Start summer practice program

Structure:

- 3 weeks with 6 hours / day
- Unpaid collaboration



31st of July

Demo Day to present the project results and Test for ending the Summer Practice program



#JOINTHEJOURNEY

www.vitesco-technologies.com

Contact: emanuel.botezat@continental-corporation.com

