

# **O** Dive

# WE EMPOWER ENGINEERS

to focus on creating great products. Our particle-based simulation software takes care of everything else. No installation, no hardware - just engineering.

# OVERVIEW

dive solutions provides meshfree, browser-based simulation software in the cloud to help engineering teams optimize their designs in a time and resource efficient manner.

We believe that engineers should be able to focus on delivering great products. Our mission is to get rid of all unnecessary distractions and limitations within that development process. Therefore, we are committed to providing the leading cloud- and browser-based engineering environment that allows product design teams to setup, compute, analyze, and share design studies hassle-free. All you need is a browser. We take care of everything else. No installation, no maintenance – just engineering.



Our powerful inhouse code uses the Smoothed Particle Hydrodynamics method to treat highly dynamic flows in a more natural way, allowing for the accurate prediction of free surface flows, multiphase flows, and moving machinery.

Some applications of our software are:

- Gearbox lubrication and churning loss prediction
- Sloshing prediction in tanks
- Heat transfer computation for electric engines
- IPX certification for electric systems

Visit our website to learn more about how we empower engineers to create epic stuff.



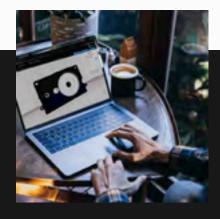
**DIVE IN...** 



# YOU FOCUS ON JUST ENGINEERING

#### We take care of everything else

As an engineer, your job consists of much more than optimizing your designs - you deal with hardware issues, install and maintain software, spend time meshing, sit in meetings and, of course, you must wait to see the results of experiments or simulations. **Our goal is to eliminate or minimize as many of these distractions** as possible so that you can focus on your passion: just engineering.



## ACCESS ANYTIME FROM ANYWHERE

Our application's **browser-based** nature allows you to work on your simulations whenever and wherever you choose. Work freely, without limitations.

### **EXPERIENCE EFFORTLESS SPEED**

Choose the power you need and activate computing resources with just the click of a mouse. Forget about hardware and its maintenance – we've got you covered.





#### **ENJOY FAST WORKFLOWS**

Enable quick design decisions through simple meshfree setup and automated recurring tasks.

# REDEFINE THE LIMITS OF SIMULATION

Make the greatest impact with your resource usage. Save time and money while taking care of the environment by replacing laboratory experiments with virtual simulations. Less setup and waiting time means more engineering.





### TEAM UP & CREATE EPIC STUFF

Engineering is a team sport and collaboration across distances has never been more important than it is today. Our cloud-based platform allows for individuals within teams and across departments to seamlessly work together on projects.



# MESHFREE CAE IN YOUR BROWSER

Turn engineering design ideas into shared insights without the hassle.



#### ALL IN ONE BROWSER-BASED APP

Now you can do everything in one place - setup your simulation in the efficient preprocessor and work with it in the postprocessor.



#### FREE SURFACE AND MULTIPHASE FLOW

Highly accurate free surface flow computation. Simulating different fluids at the same time. We don't let slow your flow.





### MOVING COMPLEX GEOMETRY

Use our optimized and user friendly framework to set up dozens of moving components or complex movements like planetary gearboxes with ease.



### INLET & OUTLET CONDITIONS

Our inlet and outlet conditions enable you to simulate injection systems and pumps like a superhero.



### **BOUNDARY CONDITIONS**

Highly accurate triangle-based boundary conditions. Accurate geometry = better results.



### CUSTOMISABLE DASHBOARD

Run and monitor your simulation smoothly without any distractions on the way.



# THINK OUTSIDE THE GRID

#### with Smoothed Particle Hydrodynamics

With its ability to treat highly dynamic flows in a more natural way, the SPH method is a powerful tool to predict free surface flows, multiphase flows, and moving machinery.

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Particle-based CFD solutions open the door to new simulation use cases without compromising physical foundations. Based on the langrangian form of the well-known **Navier-Stokes equations**, they dramatically reduce preparation times and computational efforts. Due to its computational scalability, the method is also perfectly suited for high performance computing tasks.

Learn more about the SPH method here.

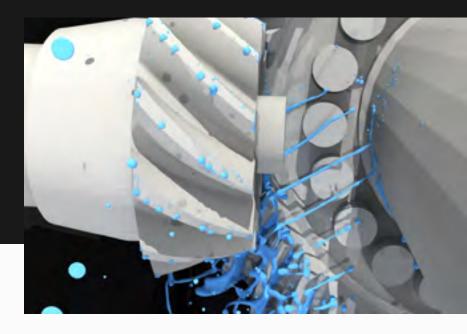


# SOLUTIONS

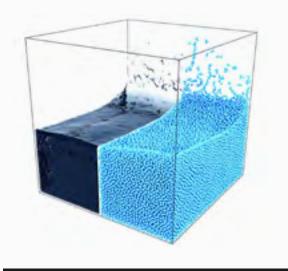
#### **GEARBOX**

**Gearbox Lubrication and Churning Loss Prediction** 

Read article







TANKS
Sloshing prediction

AND MORE.
LET'S REDEFINE THE LIMITS TOGETHER.



#### **HOW TO GET STARTED**

Sound interesting? We would love to get in touch with you to provide more information about our product and services and figure out how we can best serve you. Let's get in touch.

#### Workshop

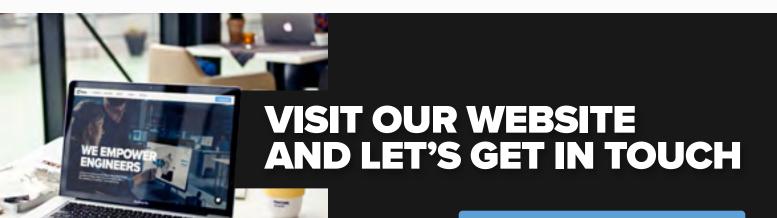
Participate in a free, non-binding workshop where we will show you how our software works on your unique case

#### **Trial**

If you like what you see, you can begin a **3-month paid trial** to test our software in your daily engineering life, supported by a fully dedicated customer success engineer

#### **Subscription**

When the trial ends and you're left wanting more, you can choose a **subscription option that suits your requirements** and continue creating epic stuff



Click here to visit our Website