



# High quality training for high quality products

How Frontline supports training and onboarding processes





# Why 3D Training is becoming crucial for Enterprise Customers



## Technological advancements

*Processes are more complex than ever, demanding new skills.*

With AR solutions it is **easier to train and upskill workers** that are required to adapt and learn new skillsets to handle the new technology.



## Costly recruitments

*Training and onboarding new hires are expensive.*

With AR, onboarding becomes more **efficient and faster**, cutting need for resources, lowering costs, and accelerating time to productivity.



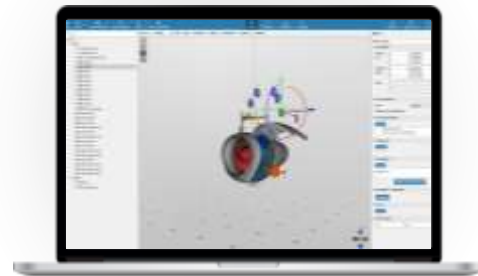
## Social changes

*Increasing skill gap as baby boomers leave the workplace.*

Invaluable operational, tribal knowledge can **easily be captured and distributed** via AR solutions.

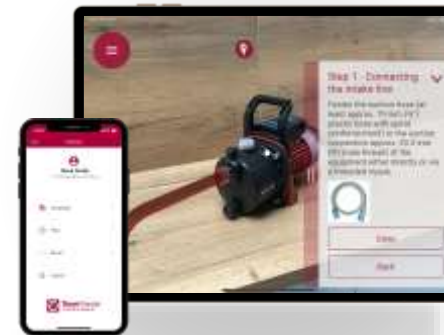
# Frontline Spatial is a combination of content creation and viewer apps to build immersive 3D (training) experiences

**Frontline Spatial** is a combination of content creation and viewer applications to build immersive 3D training experiences based on PLM data (digital twins and CAD)



## Frontline Spatial Editor

*Build 3D step-by-step instructions around digital twins, CAD data or scans with a native Windows application*



## Frontline Spatial Workplace

*View 3D instructions as user assigned tasks on the device of your choice – either in 3D mode or in AR*

# Bridging the gap for efficient usage of 3D data and AR content



## Leverage the existing

Frontline’s direct integration into Teamcenter enables businesses to leverage the existing data for AR or 3D applications.

## Streamline the process

Streamline user experience for an adaptable technical authoring process and reuse of already existing content from Teamcenter.

## Reduce the workload

Minimize the workload when creating AR content by utilizing graphic editors and a two-way connection between systems

1

## AUTHORING



Teamcenter

Frontline Spatial Editor

Digital twin as basis for AR content creation

2

## PUBLISHING



Frontline Command Center & xMake solution

AR content hosting and distribution

3

## VIEWING



Frontline Spatial Workplace

User application to interact with AR content

# Skill-based training for frontline workers

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**Focus on developing job-specific skills required for employees to perform their roles effectively**



## **On-Site Live Classes**

Frontline Spatial is supporting instructors in on-site classes with device-agnostic and immersive training software



## **Remote Live Classes**

With the Frontline platform instructors are capable of managing remote classes with a more individual learning part



## **(Remote) Self-Study**

Trainees can use immersive content at home and work afterwards on the devices they have at hand

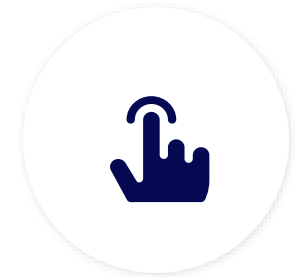
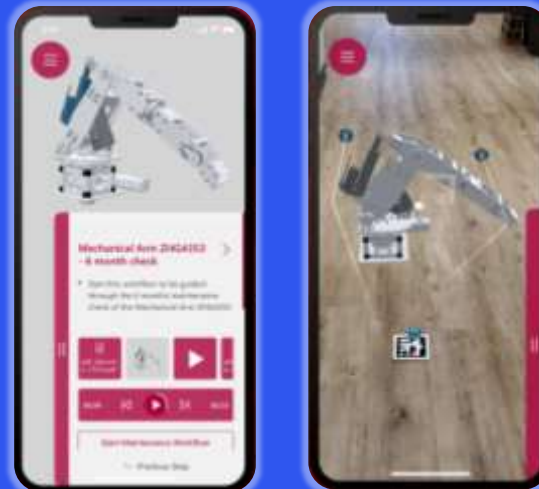
# How does it work?

Different use cases require different methods.



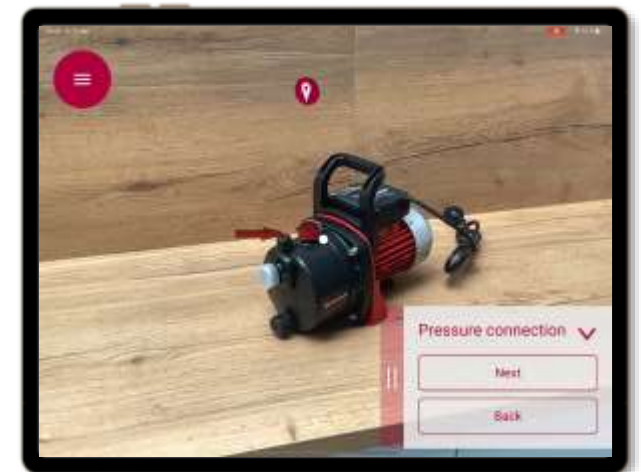
## Training on a digital object

Location-independent training in fully virtual environment. Real object is not at hand (one of a kind) or safety concerns (pre-training).



## Training on a real object

Faster onboarding via immersive solution to easily convey more complex tasks on real-life assets for hands-on experience.



# Success Story: Field Service Technicians repair and calibrate industry-type scales

## Use Case Description

- Support field service technicians servicing (repair, calibrate, etc.) industry scales
- Created service workflows are used to document the procedures systematically

## Actors

- Service department and training team create content
- Service technicians in the field use instruction to complete work

## Pain Points

- Documentation of maintenance procedures are difficult and not holistically send to a connected backend
- Only textual instruction lead to mistakes

## Added Value

- Animations create a better understanding of the steps to perform

