
TESLASUIT
IMPROVING HUMAN PERFORMANCE
teslasuit.io

BREAKTHROUGH
SOLUTION

Teslasuit is a **human-to-digital interface** designed to simulate experience and accelerate mastery in the physical world.

The integrated complex of haptics, motion capture,
and biometry provides improved human performance.

INNOVATIVE APPROACH TO TRAINING

Passive learning relies solely on employees' ability to perceive information. XR training, instead, increases information retention and engagement through experiential learning techniques.

Teslasuit does its best to prevent safety-critical mistakes. We enhance the realism of simulations, leading to significant training results and provide detailed real-time performance data for each trainee.

INTEGRATED TOOLKIT FOR ENTERPRISE APPLICATIONS AND TRAINING

Electrostimulation-based haptics increase immersion, stimulate neural activity, and foster muscle memory, thus improving learning.

EMS triggers muscle memory and provides heavier impact simulation. TENS triggers neural responses, improves reflexes and provides smaller impact simulation.

Motion capture system tracks full skeletal positioning and creates a user's avatar in VR.

Biometry ensures extensive analytical capability.

THE SUIT

Advanced Haptics

Motion Capture

TENS/EMS

Biometry

HAPTICS

80+ channels

Delivered via EMS/TENS
using dry electrodes

Calibration system

Provides a wide range
of realistic sensations

EMS

- Accurate muscle targeting
- Safe and proven technology
- Provides haptic feedback in XR platforms
- High resolution of 80+ channels, compared to 9-16 channels in conventional EMS suits

TENS

- Provides a highly nuanced sense of touch
- Pleasant and natural sensations
- Proven to alleviate pain and stress
- Potential to increase mental performance
- Medically used over 20 years

MOTION CAPTURE

10 inertial sensors

Sophisticated drift
reduction algorithms

Accurately captures and transfers
movements from the real
to the virtual world

BIOMETRY

Electrodermal activity (EDA)

Electrocardiography (ECG)

Highly accurate sensing

Myography (planned, in research)

FEATURES

	Train for composure under pressure with simulated XR environments and haptic
	Scale expertise by creating a virtual subject matter expert to guide trainees
	Embedded galvanic skin response sensors can measure stress levels in training
	Haptic feedback trains reflexes quickly and effectively
	Motion capture records sequences of movement and allows to review and compare the performance of individuals and the team

MEASURABLE VALUE FROM XR

AIRBUS

MANUFACTURING

500% improvement in productivity for seat installation; defect rate dropped to near zero

kpn

FIELD SERVICES

17% operating cost reduction; 5% faster completion time; 17% error rate improvement

intel

DISTRIBUTION

Pick time reduced by 29% error rate dropped to near zero

BOEING

MANUFACTURING

35% wing assembly reduction for new trainees; 90% increase in first task completion

BAE SYSTEMS

MANUFACTURING

30-40% efficiency gain training new employees on product assembly

xerox

FIELD SERVICE

67% increase first-time fix rates; 20% efficiency jump (2 hour improvement)

GE

MANUFACTURING

34% productivity increase in on complex wiring process in wind turbines

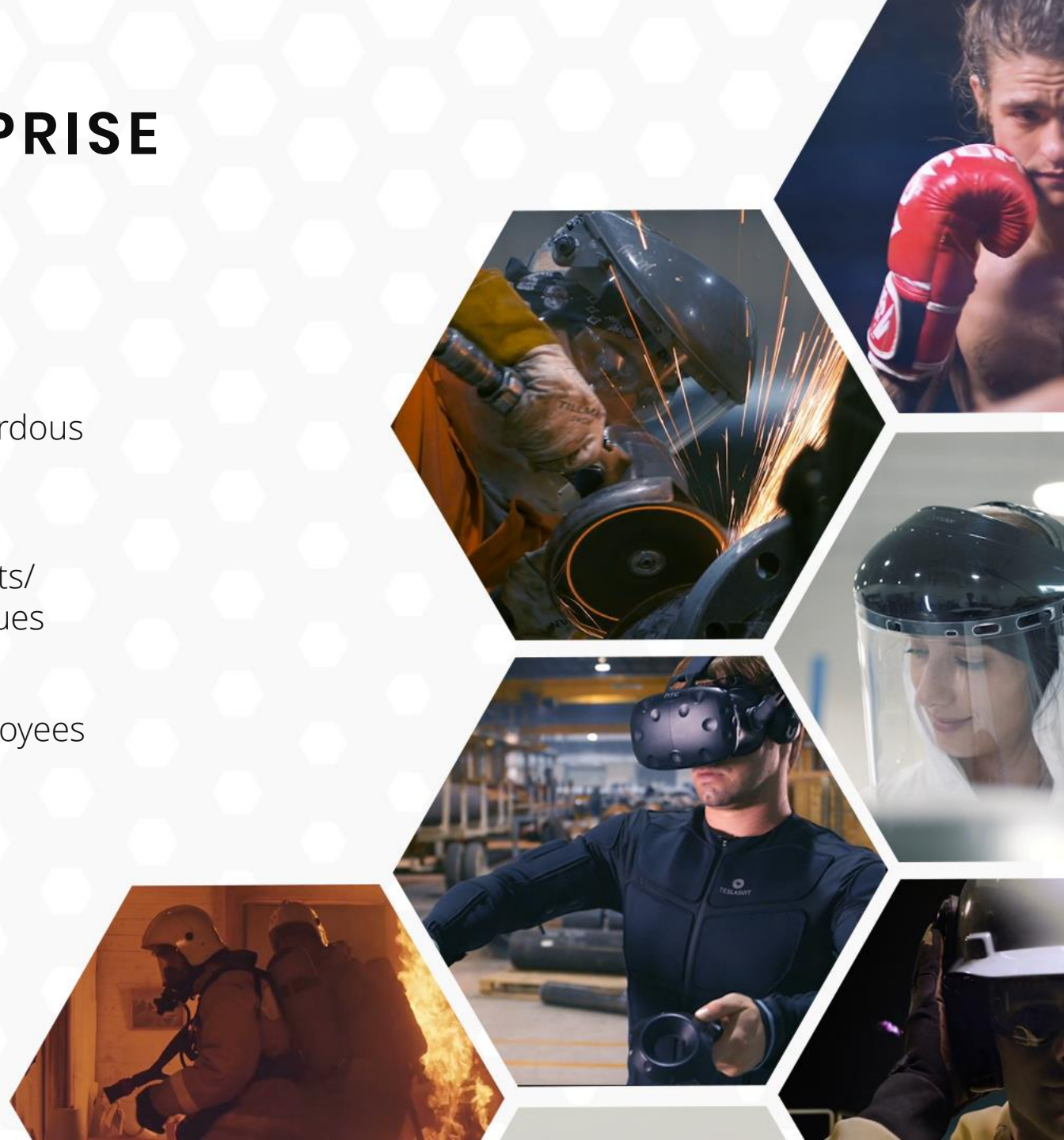
Deutsche Post DHL

DISTRIBUTION

25% productivity gains in picking process

WIDE RANGE OF ENTERPRISE TRAINING SCENARIOS, INCLUDING

- Haptic guidance and assistance
- Safety training for electrical equipment
- Mission-critical tasks training
- Complex operations sets training
- Handling of hazardous materials
- Working at heights/ climbing techniques
- Training for employees in high-risk jobs



USE CASES: SCHLUMBERGER

Oil and Gas Demo Powered
by Schlumberger Insights

The demo application showcase user behavior and training in an Oil Rig emergency scenario created in virtual reality.

Functionalities:

Motion capture

Biometry

Haptic Feedback

USE CASES: DTEK

Virtual reality training course for DTEK employees, based on a set of tasks relating to inspections and repairs at its power plants.

“Teslasuit’s state-of-the-art technology has totally transformed the way we train our employees. Training is safer, more effective, and more efficient.”

Emanuele Volpe,
Chief Innovation Officer DTEK

Functionalities:

Motion capture

Biometry

Haptic Feedback

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AWARD WINNING PRODUCT

Consumer Electronics Show (CES) 2019
Innovation Awards Honoree

DIGITALEUROPE 2019
Future Unicorn Award

Red Dot Award 2019
Product Design - Best of the Best

TESLASUIT MEDIA COVERAGE

> Using electro-tactile haptic feedback, the Teslasuit can mimic sensations like bumping into a wall, touching an object, or the impact of a punch in AR/VR settings. We witnessed these sensations first-hand at CES 2019. From the prickly patter of raindrops to the growing waves of static, we experienced how the Teslasuit can bring virtual worlds to life.

Felicia Miranda,
Digital Trends

> Complete sensory VR immersion is years away, but is one of the most oft-requested and dreamed about advances in the industry. Teslasuit appears to be the next product to market that aims to let you feel it all in VR, and it looks a hell of a lot like Wade's suit.

Maggie Lane,
TechCrunch