SUPPORTING OCRA EVALUATION
BY VIVELAB ERGO

VIRTUAL ERGONOMIC VERIFICATION
FOR THE MANUFACTURING SECTOR

RISK ASSESSMENT
VIRTUAL VERIFICATION
7 ERGONOMIC ANALYSES
OPTIMIZED WORKFLOW
INCREASED EFFICIENCY
SOFTWARE AS A SERVICE
INDUSTRY 4.0
We believe that leading companies need the most innovative technologies to improve today’s workplaces and increase efficiency while focusing on the well-being of employees.

Our mission is to provide fast and accurate 3D virtual ergonomic simulation, analysis and planning for wide range of companies to create optimal working environments and workflows for health, efficiency and competitiveness.
ViveLab is a cloud-based ergonomic simulation software which provides fast and accurate three-dimensional virtual ergonomic tests, analysis, and planning for a wide range of companies. Thanks to the built-in anthropometric database and seven ergonomic analyses ViveLab Ergo highlights the unnecessary, time-consuming movements, and the health-damaging effects of forced movements caused by incorrect workplace design.

With this software-as-a-service solution is easy to create optimal working environments and workflows for health, efficiency, and competitiveness.
VIVELAB BUILT-IN ANALYSES

The ViveLab Ergo software has been developed by ergonomics experts, after more than 30 years of professional experience in the fields of software development, human simulation and ergonomics. Compared to traditional ergonomic visual inspection, the software accurately captures motion, which can be replayed from any angle in the 3D environment. The software uses an extensive anthropometric database to realistically model the geometric features of ninety-nine percent of the human population.

The tools of the ergonomic analysis are the seven internationally known and recognized analysis methods that have been implemented in the ViveLab Ergo software. These methods include RULA, OWAS, NASA-OBI and the already standardized body position assessment systems, such as ISO11226 and EN1005-4. Furthermore, the reachability test and the spaghetti diagram are implemented as well.

All of the built-in analyses can be saved as clear PDF report. It takes only a few mouse clicks. The report highlights the positions where ergonomic measures have to be taken to improve the quality of the workplace.
ADVANTAGES OF THE DIGITAL SOLUTION

✓ FAST AND PRECISE PROCESS: motion measurement and reporting within minutes

✓ RELIABLE AND OBJECTIVE DATA: The result is independent of the analyst because of the motion measured by sensors and analyzed by software

✓ EASY TO LEARN: it takes only 2 days to learn the usage of the ViveLab Ergo software and the Xsens Motion capture, even by non-ergonomists

✓ DETAILED PDF REPORT: detailed, automated documentation in PDF format within a few minutes

✓ CLOUD-BASED TECHNOLOGY: no IT investment needed, accessible worldwide

✓ COLLABORATIVE: You can invite and collaborate with other users or our experts from all around the world

✓ SUBSCRIPTION-BASED REVENUE MODEL: 4 different license packages with monthly pricing
VIVELAB ERGO HELPS TO FILL OCRA CHECKLISTS
THE CALCULATION PROCEDURE OF THE OCRA CHECKLIST

\[
\text{Frequency} + \text{Force} + \text{Posture} + \text{Additional factors} \times \text{Recovery multiplier} \times \text{Duration multiplier} = \text{Ocra Checklist}
\]
VIVELAB MAKES OCRA CHECKLIST EASIER

VIVELAB provides exact, measured data
## VIVELAB-OCRA WORKFLOW

**OBJECTIVE – FAST – PRECISE – EASY TO USE**

<table>
<thead>
<tr>
<th>Step</th>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MEASURE THE MOTION</td>
<td>Accurate, quick, objective and precise data capture of every detail of movement</td>
</tr>
<tr>
<td>2</td>
<td>IMPORT MOTION FILE</td>
<td>The ViveLab software analyzes and filters improper movements and forced postures even if cannot be noticed by visual inspection</td>
</tr>
<tr>
<td>3</td>
<td>EXPORT DETAILED REPORT</td>
<td>It takes only a few mouse clicks to export a detailed report, which highlights improper movements and forced postures</td>
</tr>
<tr>
<td>4</td>
<td>FILL THE OCRA CHECKLIST</td>
<td>Use ViveLab report to fill the „FREQUENCY“ and the „POSTURE“ fields of OCRA checklist easily</td>
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</tbody>
</table>

1. **OCRA**

   - **OBJECTIVE** – **FAST** – **PRECISE** – **EASY TO USE**
ACCURATE DATA & FAST PROCESS

1 ANALYST – 50 WORKSTATIONS – 2 MIN LONG CYCLE TIME

1. **MEASURE THE MOTION**
   - 30 MIN / WORKSTATION
   - PART TIME: 1500 MIN

2. **IMPORT MOTION FILE**
   - ~ 2.5 MIN / WORKSTATION
   - PART TIME: 120 MIN

3. **EXPORT DETAILED REPORT**
   - ~ 2.5 MIN / WORKSTATION
   - PART TIME: 120 MIN

4. **FILL THE OCRA CHECKLIST**
   - OCRA
   - ~ 2.5 MIN / WORKSTATION
   - PART TIME: 120 MIN

Σ **TOTAL OCRA ASSESSMENT**
- ~ 37.5 MIN / WORKSTATION
- TOTAL TIME: ~ 31 HOURS

**CONCLUSION:**
The whole assessment of the 50 workstations takes just 31 hours if just one analyst works on the project. Thanks to the user-friendly interface it takes only 2 days to learn the software and hardware usage. Therefore, it is possible to multiply the analyst team and dramatically reduce the execution time. The task can be seamlessly scaled up to 50,000 workstations.
HOW TO START?

YOU CAN USE VIVELAB ERGO AT THREE DIFFERENT LEVELS AT YOUR CHOICE

- Learn and do everything on your own
- Upload data and let our ergonomists analyze it
- Contract us and we do everything for you on-site