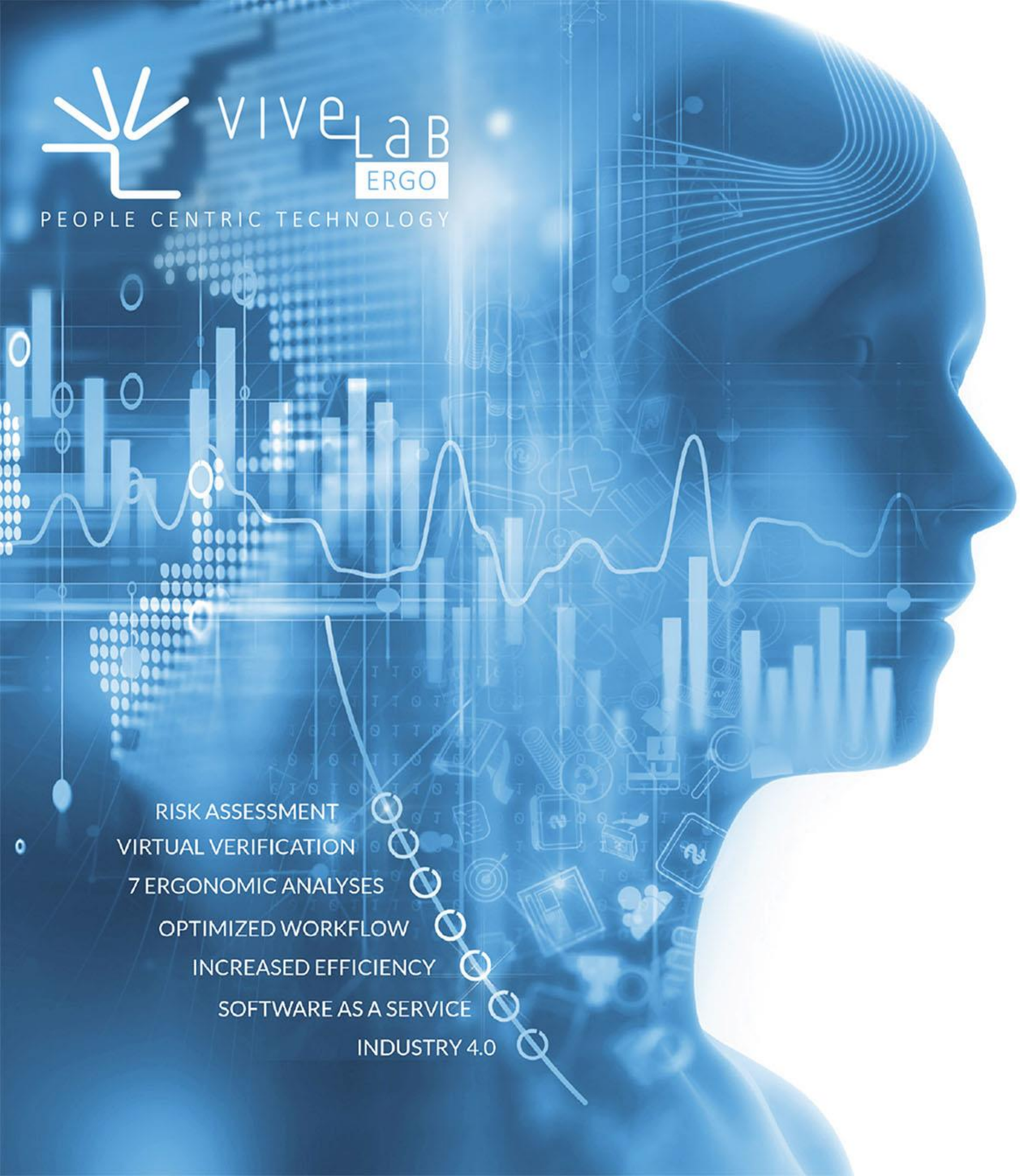


SUPPORTING EVALUATIONS BY VIVELAB ERGO

VIRTUAL ERGONOMIC VERIFICATION
FOR THE MANUFACTURING SECTOR

VISION

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.

WORK BETTER, FASTER, HEALTHIER!

VIRTUAL ERGONOMIC VERIFICATION

GUARANTEES THE ERGONOMIC COMPLIANCE OF WORKSTATIONS

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.

EVEN IF IN THE DESIGN PHASE WITHOUT A PHYSICAL PROTOTYPE

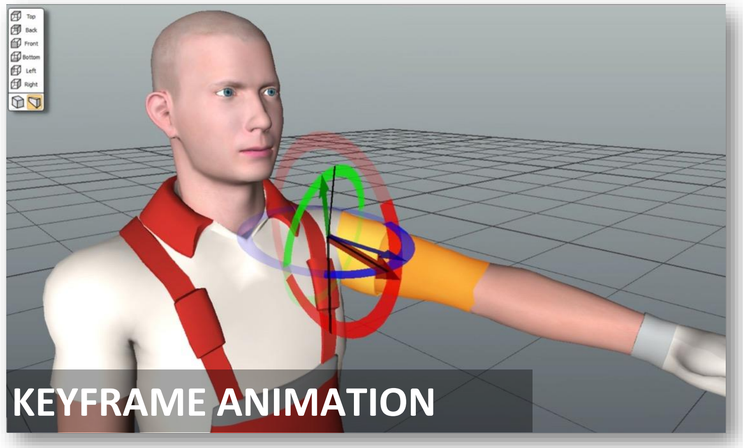
VIVELAB BUILT-IN ANALYSES

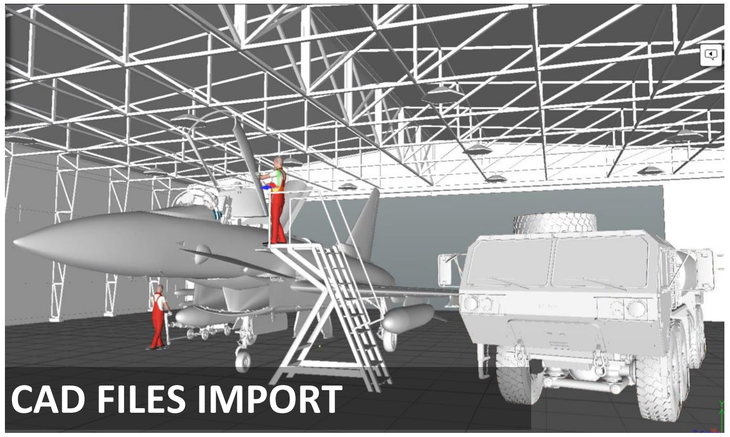
The ViveLab Ergo software has been developed by ergonomics experts, after more than 30 years of professional experience in the fields of software development, human simulation and ergonomics. Compared to traditional ergonomic visual inspection, the software accurately captures motion, which can be replayed 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.

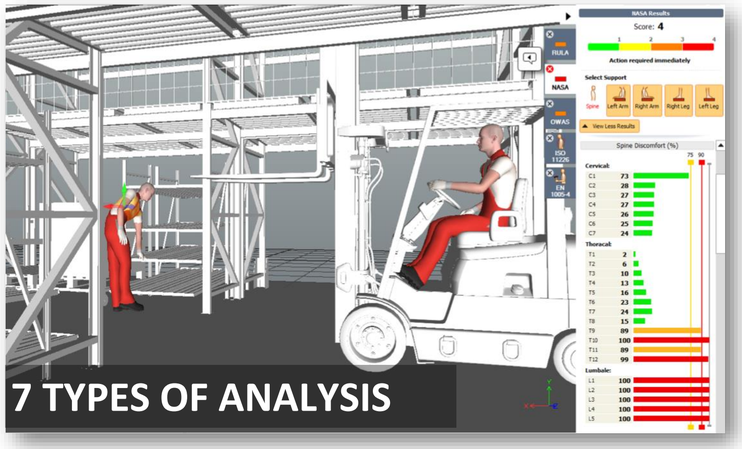
The tools of the ergonomic analysis are the seven internationally known and recognized analysis methods that have been implemented in the ViveLab Ergo software. These methods include RULA, OWAS, NASA-OBI and the already standardized body position assessment systems, such as ISO11226 and EN1005-4. Furthermore,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

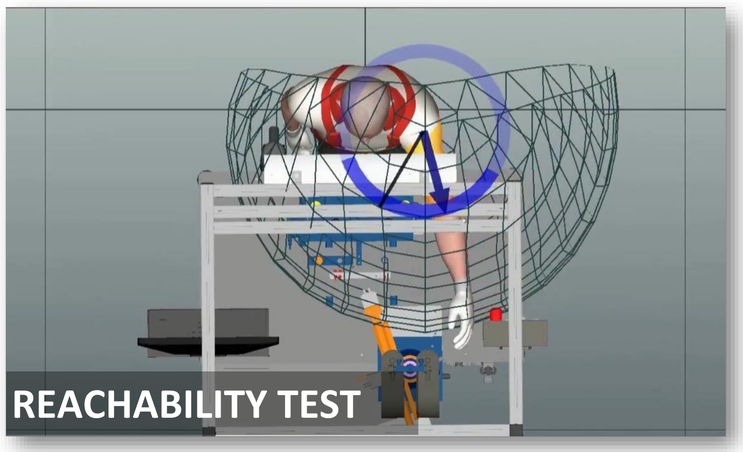
All of the built-in analyses can be saved as clear PDF report. It takes only a few mouse clicks. The report highlights the positions where ergonomic measures have to be taken to improve the quality of the workplace.

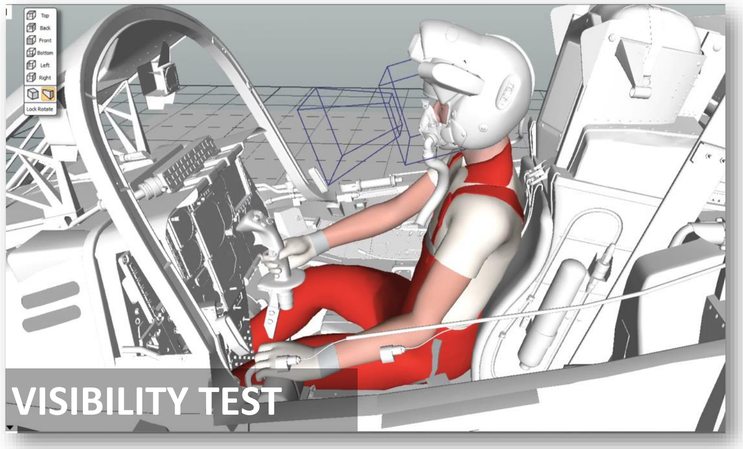

MOTION CAPTURE FILES IMPORT

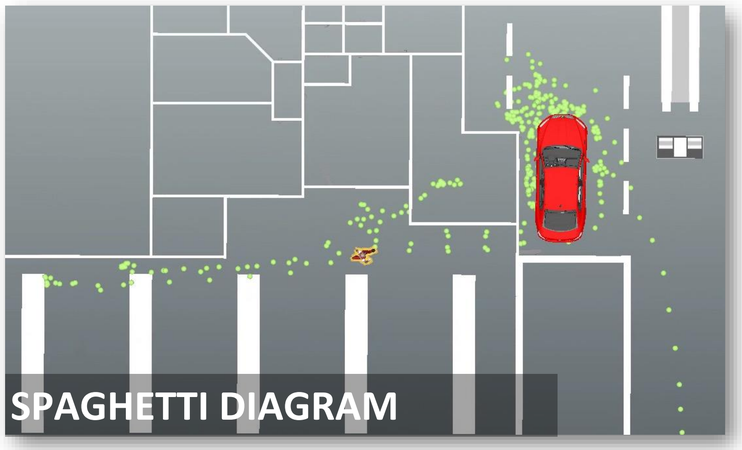

KEYFRAME ANIMATION

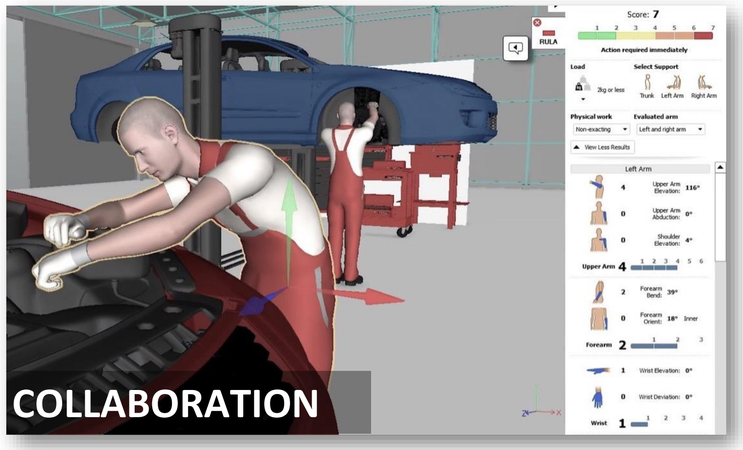

CAD FILES IMPORT

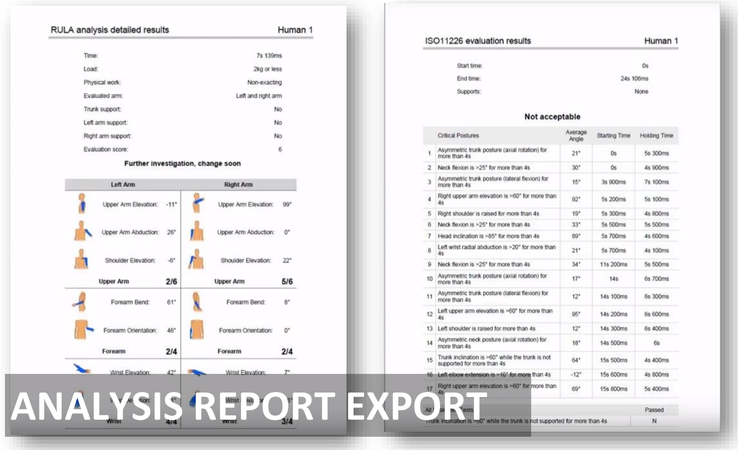

7 TYPES OF ANALYSIS


REACHABILITY TEST


VISIBILITY TEST


SPAGHETTI DIAGRAM


COLLABORATION


ANALYSIS REPORT EXPORT

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 EVALUATION CHECKLISTS

OCRA APSA EAWS KIM-MHO NPW REBA WERA

VIVELAB - EVALUATION WORKFLOW

OBJECTIVE – FAST – PRECISE – EASY TO USE

1	**MEASURE THE MOTION**	Accurate, quick, objective and precise data capture of every detail of movement
2	**IMPORT MOTION FILE**	The ViveLab software analyzes and filters improper movements and forced postures even if cannot be noticed by visual inspection
3	**EXPORT DETAILED REPORT**	It takes only a few mouse clicks to export a detailed report, which highlights improper movements and forced postures
4	**FILL THE EVALUATION CHECKLIST**	Use ViveLab report to fill the evaluation checklist easily

ACCURATE DATA & FAST PROCESS

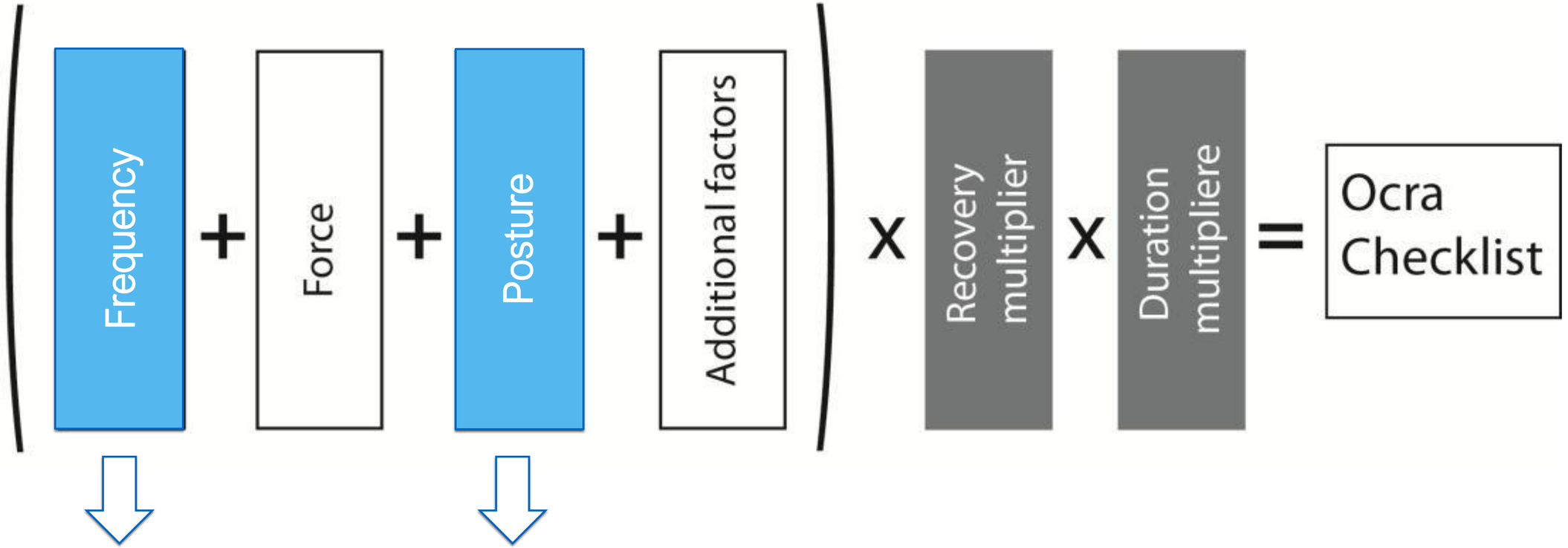
1 ANALYST – 50 WORKSTATIONS – 2 MIN LONG CYCLE TIME

1	MEASURE THE MOTION	30 MIN / WORKSTATION	**PART TIME: 1500 MIN**
2	IMPORT MOTION FILE	~ 2.5 MIN / WORKSTATION	**PART TIME: 125 MIN**
3	EXPORT DETAILED REPORT	~ 2.5 MIN / WORKSTATION	**PART TIME: 125 MIN**
4	FILL THE EVALUATION CHECKLIST	~ 10 MIN / WORKSTATION	**PART TIME: 500 MIN**
Σ	**TOTAL ASSESSMENT**	~ 45 MIN / WORKSTATION	**TOTAL TIME: ~ 37.5 HOURS**

CONCLUSION:

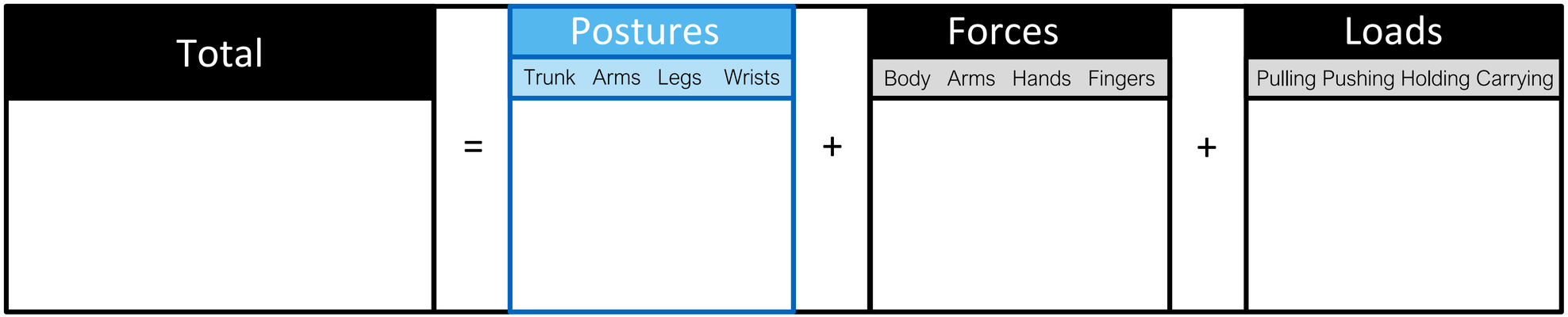
The whole assessment of the 50 workstations takes just 37.5 hours if just one analyst works on the project. Thanks to the user-friendly interface it takes only 2 days to learn the software and hardware usage. Therefore, it is possible to multiply the analyst team and dramatically reduce the execution time. The task can be seamlessly scaled up to 50,000 workstations.

VIVELAB – OCRA WORKFLOW



VIVELAB provides exact, measured data

VIVELAB – APSA WORKFLOW



VIVELAB provides exact, measured data

VIVELAB – EAWS WORKFLOW

Whole Body	=	Postures	+	Forces	+	Loads	+	Extra
	=		+		+		+	

Upper Limbs

VIVELAB provides exact, measured data

VIVELAB – KIM-MHO WORKFLOW

	Type of force exertion(s) in the finger-hand range	
+	Force transfer/gripping conditions	
+	Hand/arm position and movement	
+	Work organisation	
+	Working conditions	
+	Posture	
=	**Total**	

VIVELAB provides exact, measured data

x | Time rating points | | = | Risk score |

VIVELAB – NPW WORKFLOW

Whole Body	=	Postures	+	Forces	+	Loads	+	Extra
	=		+		+		+	

Upper Limbs

VIVELAB provides exact, measured data

VIVELAB – REBA WORKFLOW

Total	=	Postures	+	Force / Load	+	Grip by hand	+	Activity
		Trunk Lower arms Neck Upper arms Legs Wrists		Whole Body		Grip of handle		Static posture Dinamic posture Large range changes

VIVELAB provides exact, measured data

VIVELAB – WERA WORKFLOW

Total	=	Postures	+	Force	+	Vibration	+	Contact stress	+	Task duration
		Trunk Upper arms Neck Wrists Legs		Lifting the load		Using of vibration tool		Using of tool handle or wearing hand gloves		Task hr/day

VIVELAB provides exact, measured data

HOW TO START?

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

LEARN MORE

vivelab ERGO

PEOPLE CENTRIC TECHNOLOGY

Sign up for a free trial:

VIVELAB.CLOUD