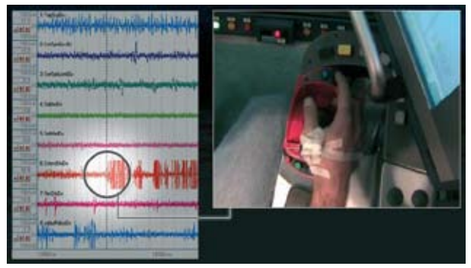
brieda cabins
dynamic project team

*The "Dynamic Project Team Brieda", in cooperation with the **Biomedical Technology Department of the University of Milan and the EPM (Research Unit-Ergonomics of the body Posture and Movement)** have developed the biomechanical studies of the operator on the control station, taking measurements with sensors, positioned on the muscles under stress, during the various work operations.*
This has led to a new design of the various controls and supports, reducing over 60% of the muscular stress, particularly in the lumbar area.
Less fatigue and stress provide better working efficiency and accuracy. The reduction of working stress and operator comfort have been studied and documented by a special task force of the Brieda Cabins company, combining technical measurements, medical reports and live footage of actual crane operations to provide the most comprehensive study of crane operator stress ever attempted.

The Brieda Dynamic Project is in accordance with the European Standard:
EN 1005-3/4/5
- *Human Physical Performance*
- *Risk assessment for repetitive handling high frequency*
- *Evaluation of work postures and movements*

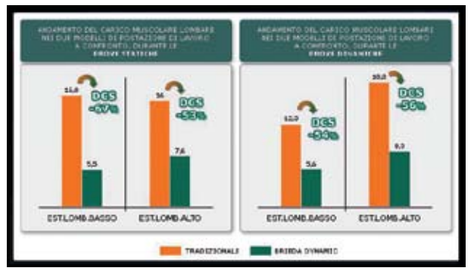
The OCRA Index Method
- *Occupational Risk Assessment on the overload of the upper limbs.*
- *Method also used in the International Standards* ***ISO 11228-3***

Analyzing method
*We have used the **OCRA Index Method** to evaluate the risk to contract muscle-tendon pathologies with the innovative use of the joystick and push buttons.*



Evaluating our system with the electromyography by positioning some electrodes on the zones interested by our research, has enabled us to scientifically investigate the muscular contractions and evaluate the stresses imposed by various working positions.

Results assessed by comparing the traditional working system of the operators with the DYCS Brieda system.
The diagrams show both static and dynamic positions.
The data here shown are relevant to the lumbar area, but in our medical report, we have charts for each zone concerned.



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Made in Italy

brieda cabins

Harbour Crane

the new dynamic control station

Welcome to a new dimension: DYCS Brieda Cabins

A new generation of ergonomically-designed Crane Cab Operator interface devices

This is the control station which provides an effective scientifically-tested answer to the persistent crane operator lower back stress and pain.
With the new and innovative function of the joystick, the forearm is completely supported.

This design reduces overall stress, including, as a consequence, reduction of the lower back lumbar load.
Lumbar stress has always been one of the main causes of strain, loss of productivity and development of functional muscular disorders associated with crane operation. Now this problem has finally been properly addressed.

The joystick is activated with the simple use of the fingers.
The highly ergonomic position of all the controls enables the crane operator to monitor the work in the best possible way, considerably contributing to the overall performance and productivity. It will soon be the possible to record with a memory card the work position of various operators.

The universal floor attachment point makes installing or retrofitting the Brieda DYCS possible in every type of operators cab. The adjustment of the control boxes is performed by an electric device for all the required directions.
The DYCS utilizes an extremely strong structure with a shock-absorbing system, tested for over 5000 hours under stress conditions.