Preliminary Data Collection

Data available to Inspectors from day-to-day surveillance, literature, reports, etc.

Companies' identification

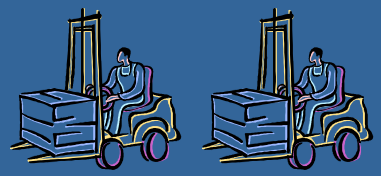
Preliminary contact to facilitate cooperation

Inspections

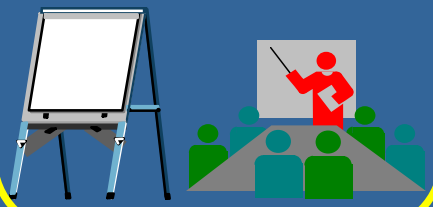
Compilation of company sheet

Selection of skilled machine users

Preparation of material & documents for the Working Group



Working Group



Compilation of Working Group management sheet

Consolidation of Working Group management sheet

Project Report

Technical Report

Choice of machinery

1 Data collection

- data on accidents, incidents, near misses,
- data on the market,
- relevant applicable standards, state of the art,
- instruction handbooks,
- etc ….

2 Choice of SMEs

2a …where the machine is used

Preliminary meeting

The collaboration of the employers and the workers is essential

Possible sources for collecting… 

data on accidents, incidents and near misses with machines, occupational diseases and syndromes (even unrecognised), data on poor working conditions, stress, data from risk assessments (all sources: company and third parties);

Statistics, registers of accidents, registers of sickness leave or absenteeism, multisource/policy - directed systems (reports from labour inspectorates, administrative data through workplace visits), stress -related systems, exposure databases

data on the market: range and presence of machines, new preventive technical solutions, relevant applicable standards, state of the art, market situation, data on market -monitoring

3

Field inspection in the SMEs where the machine is used

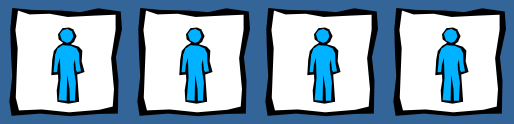
3a

Company sheet is compiled

collection of the information and selection of the skilled workers to be involved in the job ergonomic analysis carried out by the working group.
(at least one worker from every SMEs involved).

3b

Skilled machine operators are selected



During the field investigation in the SMEs where the machinery is used….

… pre-defined sheets will be used to collect information on:

- the SMEs (type of activity, activities, etc.)
- the working environment;
- machinery types;
- any information concerning machinery safety;
- any information on accidents, incidents, near misses occurred with the machinery chosen in the Project.

This information goes into the "Company sheet"

4

Preparation of the Working Groups

5a

Questionnaire to assess users' knowledge on machinery safety

5

5b) Working group meeting

Questionnaire to assess the improvement of users' knowledge

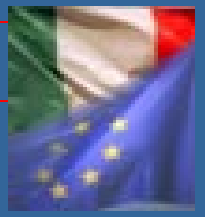
5c

At least 7-8 workers from differents companies and 1-2 experts (project facilitator):

- job ergonomic analysis-brainstorming (task steps, operating procedures, knowledge, risks, suggestions),
- the project facilitator will note down the information collected in the pre-set sheets (working group management sheet)

forklift trucks safety

Workgroups management sheet



Work Task

Task step	Operating procedure… … followed to carry out the task step: tools & equipment used, safety devices, personal protective equipment (PPE) etc.	Knowledge… … necessary to carry out perform the task step at best (how tools & equipment are used, materials, procedures, etc. and information contained in the instruction handbook)	Risks… … associated with the task step. In particular, risks from: the machine, equipment, safety devices, environmental factors (microclimate, dust, lighting, layout, etc.), fatigue, organizational factors (work pace, shifts, etc.)	Suggestions… … to eliminate or reduce the risks: 1) to the designer (inherently safe design measures, safeguarding, information for use) 2) to the user (organisation, additional safeguards, PPE, training).

Examples of work task:

- **pre-start up checks** (example of task step: “tyre check”)
- **travelling when empty** (example of task step: “driving reverse”)
- **loading** (example of task step: “load selection”)

The Workgroups management sheet has been designed on the basis of the terminology of the standard ISO 6385:2004 "Ergonomic principles in the design of work systems"

- **Work task:** activity or set of activities required by the worker to achieve an intended outcome;
- **Work environment:** physical, chemical, biological, organizational, social and cultural factors surrounding a worker;
- **Job:** organisation and sequence in time and space of work tasks;

6

Report of the Working Group and its validation

7

- Experts (Project Facilitators) finalize the report on the working group management sheet
- The report, if needed, is corrected and modified by the members of the working group. Afterwards, it is validated.

8

Final Report

Putting together ALL information collected along the Project = the PHOTO of the project

9

Technical report

addressed to..

- standard-makers to improve C type standards
- designers and manufactures on specific aspects
- employers to improve selected aspects of the work environment