Guidance for Purchasing and Installation of Work Equipment
This document supports the Universities work equipment protocol and provides additional guidance that can be used when purchasing and installing work equipment.

Purchasing New Work Equipment
The purchase and installation of machinery, plant and equipment, must be properly planned and controlled. Staff and students who wish to introduce new equipment into their areas must first ensure that the equipment meets the requirements of the University’s Work Equipment Protocol.

In the case of “off the shelf” machinery, there should be a reasonably simple comparison to be made by reviewing the hazards identified by the manufacturer and the controls they have put in place to remove or reduce the risk. In the case of “custom built” or more complex machine, Schools and Services should work with potential suppliers to determine the best options available for ensuring machine safety.

To help you comply with the University Protocol consider the information below when purchasing, receiving work equipment as a donation or a gift;

Pre-purchase installation plan
An Installation plan before any purchase is approved by the budget holder will help to determine where the equipment is to be located within the site, the workflow implications, and the impact on the environment and give a measure of the size of this element of the project.

At this stage, it is possible to do a theoretical (desktop) risk assessment in preparation for the practical assessment that will be required when the machine is delivered. This assessment will be used to verify machine positioning, provision of services and other operating arrangements as they relate to a safe operation. In addition pre commissioning checks may need to be carried out before first use by the installer or other competent staff to confirm that the machine or equipment as installed is safe for use.

The initial assessment should identify any specific characteristics that may be required by potential machine operators so that these can be built into the person specific operator training requirements.

Placing order for Equipment
It is important that the order accurately reflects the specification for the equipment. The competent person(s) within the project team should take all reasonable measures to satisfy themselves that the specification clearly establishes the standards required for health and safety of the equipment. Wherever possible the project team or purchaser should be provided with the opportunity to see the machine or a very similar one operating by the selected supplier or manufacturer, in order to verify the ability to meet all aspects of the specification, including the health and safety requirements.

Equipment purchased from Outside the EU
All suppliers have to make sure the machinery they supply in the European Economic Area (EEA) is safe, no matter where it is produced. The EEA includes the European Union member countries and also Iceland, Norway and Liechtenstein, but excludes Switzerland even though that country is implementing the European Directive.

They also need to check that:

- The manufacturer has carried out all the steps involved in making sure the machine is safe
- There is a Declaration of Conformity or Incorporation for the machine
- There are full instructions for installing, using and maintaining the machine; and if complete, the machine has CE marking

When purchasing equipment from outside the EU it is important that you receive and retain these documents.
Post installation assessment
The pre-installation plan/risk assessment will need to be reviewed following installation. A practical risk assessment of the activity may be required which includes its use, maintenance, inspection and training requirements. This assessment can be effectively achieved with the full participation of academics technical staff, machine operators and maintenance staff, who can bring practical expertise to the process. This task will best be performed during trial running and before the competent staff or installation/commissioning engineers hand the machine over for use.

Training and instruction
The training programme will need to be developed from information provided by the manufacturer or a competent person. This may include:

- Task analysis (including health & safety and contribution to maintenance, cleaning etc.)
- Fault analysis and rectification (including all identified hazards)
- Instruction plan
- Minimum training standard for users which balances theory and practical skills
- Provision of written safe working procedures and job aids, where required
- Recording of training and competence, including knowledge and skills, can be through testing and observation to confirm the required standard has been achieved.

Good practice, particularly for complex machines and process lines in particular, is to arrange for the machinery manufacturer to provide operators with initial familiarisation training.

Purchase or receipt of second-hand machinery/equipment
Second-hand machinery/equipment (whether purchased or received as a gift), is subject to the same requirements as new equipment, and the work equipment protocol must be applied.

CE Marking Second-Hand Machinery/Equipment
In cases where second-hand machinery does not have CE marking, it is still the duty of the supplier to make sure that it is safe and has instructions for safe use. It is the duty of the purchaser to make sure that second-hand machinery is:

- Safe for use (adhering to the work equipment standard will ensure this is the case).
- Suitable for the work it is to do
- Maintained in a safe condition

If a second-hand machine has been totally refurbished (e.g. adding CNC control, together with other work) it may have CE marking. This is because the way it operates is different after the refurbishment and, as a result it has been treated as if it was a new machine.

In addition, the supplier of second-hand equipment must supply the recipient with complete information regarding the condition of the equipment. This principle applies even where the equipment is a free gift from another institution. The supplier must;

- Determine that the equipment is free of defects, or
- Where there are defects, present a full, written declaration of the defects and indication of how they might be repaired
- Provide a signed declaration by a senior person within the supplying organisation who has sufficient authority to do so