Procuring New Equipment

Before obtaining new equipment the following issues need to be considered

Introduction

The purpose of this document is to help address the following issues before purchasing or otherwise obtaining new equipment:

- Selection of equipment: select equipment that complies with all regulatory and statutory requirements (*including CE Marking,* etc.).
- Identification of utilities required: identify the services and location requirements (e.g. *electrical supply required, water supply, specialist gases, monitoring systems,* etc.).
- Consideration of safe use: how the equipment will be safely operated (*risk assessment and training provisions*).

The utility requirements may dictate location, for instance, if the new equipment requires fume extraction this may mean that the location may have to be close to the roof or if floor vibration were an issue then the instrument would be better on a ground floor location. **Sometimes unconsidered installation requirements have high costs and so identifying these requirements beforehand is crucial.**

This guidance is primarily intended for equipment that may present significant risks by its intrinsic nature and method of operation, agents used in conjunction with it or the environment it is used in. For example:

- Machinery, electrical equipment, pressurised equipment, equipment that emits radiation, equipment used at height, etc.
- Equipment used in association with chemical, radioactive or biological agents, etc.
- Equipment that is used in adverse conditions including wet or explosive environments, etc.

For most proprietary equipment, if recently purchased and used in low risk environments, no action will be needed, e.g. general office equipment, personal computers, etc.

Fulfilment of these requirements will ensure compliance with The Provision and Use of Work Equipment Regulations 1998 and The Supply of Machinery (Safety) Regulations 1992.

The University document 'Guidance on Equipment Provided for Use at Work GUIDANCE/1/EPUW/04' should be read in conjunction with this form:
https://intranet.birmingham.ac.uk/hr/documents/public/hsu/hsuguidance/1epuw.pdf

Requirements and Modifications to Infrastructure

Manufacturers or suppliers often send out a 'pre- installation check list' which puts all of the responsibility on the buyer to have everything in place prior to the commissioning engineers visit. The checklist can be ambiguous, therefore it is strongly recommended that you ask for the Installation Engineer to attend site and to go through the pre-installation check list with you. It is advisable to do this before making the purchase as the cost of any extras could form part of any negotiated purchase deal.

The pre- installation check list and the installation manual will help you to collect the information required below, it is useful to request these from the outset – you will need both before making a purchase.

You should bear in mind that if any alterations to the building e.g. refurbishment, new build or installation of utilities are required then it will need approval by Estates. Small scale works can take weeks to months to arrange whereas larger projects can take up to a year to consult/design, tender and construct.

Risk Assessment and Standard Operating Procedures

Risk assessment and safe operation should be considered now; one or more risk assessments and a standard operating procedure will need to be completed before the equipment is first used. Training should be provided by a competent person and a record of trained users maintained.

Issues for Consideration

Once completed this form must be discussed with your Local Technical Manager and Health and Safety Coordinator before placing an order. If you do not do this you may find it difficult/impossible to commission the equipment once it arrives on site.

Information about the equipment	
Name of Equipment:	
Name of supplier:	
Who is funding the equipment (EPSRC etc.)?	
Purpose/function of equipment:	

Proposed location:	

Please ask the supplier to confirm/supply the following before purchase.

Does the equipment comply with current legislation and standards?	
Is the equipment CE marked?	
If the equipment is second hand have any modifications been made since CE marking?	
Will a pre-installation checklist be provided? Please request this now.	
Will an installation manual be provided? Please request this now.	

Location requirements	
Size of the room – is the room/lab large enough to house the equipment and ancillary items?	
Floor Loading – what is the weight of the equipment, will the floor need to be reinforced or is a vibration free floor required?	
Lighting – Is the lighting sufficient for people to work, are filters required etc.	
Security – is a standard key lock sufficient or is swipe card access required for H&S reasons?	
Decoration – Painting of the walls, new carpet or special floor covering and furniture required?	
Benching – Will there be a requirement for laboratory benching, chemical resistant?	
Data Points – How many data points will be required?	
Telephone Point – will there be a requirement for a telephone point?	
Are there any noise considerations? Will sound proofing and/or PPE be required?	

Equipment requirements	
Power – What are the requirements, what is the current rating and what type of breaker protection will be required, how many separate circuits will be required?	
Will the equipment require cooling water? – will the water chiller be in the room/lab (noise implication) or external to the building, is the cost of the chiller and its installation included in the purchase price?	
Will the equipment require a compressed air supply?	
Will the room require cooling, air conditioning? State any tolerance.	

Will the equipment require a specialist gas supply, please list gases below?

Name	Pressure	Hazard Statements

Will any of the gases required be flammable? If so the lab may require gas detection monitor(s) to be installed and 4 hour fire resistant ventilated storage unit if the cylinders are to be stored and used in the room/lab.	

Will any of the gases required be toxic or an asphyxiant? If so the lab may require gas detection monitor(s) to be installed.	
Will the equipment require large quantities of liquid refrigerant? e.g. Liquid Nitrogen or Liquid Helium? If so the Lab will require Oxygen Depletion Monitor(s) to be installed.	

Hazardous substances to be used (excluding gases discussed above):

List any hazardous substances to be used with the equipment:

Name	CAS	Form (liquid, solid etc.)	Amount	Hazard statements

List any biological substances to be used with the equipment and state class:

Name	Type	Class

LEV (Local Extract Ventilation) – Does the equipment have a vacuum system or require fume/dust extraction? If so, there will have to be an extract system installed to either remove the vacuum pump exhaust and/or possibly an extract hood to remove fumes from the process.	Comments:

Warranties and Maintenance Contracts	
Please consider an extended warranty or maintenance contract as call-outs charges and parts costs can be considerable.	Comments:

Date form completed:	

Once completed this form must be discussed with your Local Technical Manager and Health and Safety Coordinator.

Prepared by Health and Safety Co-ordinators EPS and the Health and Safety Unit December 2014