

EOI	N°	Equipment	Need expression
feb 19	195	Automatic Welding Machine for Junctions (AWMJ)	Eol's are sought from suitable suppliers for the supply of a machine to weld automatically the cans together and so to assemble a section. The automatic welding operation of the joints is the final step of the submarines' pressure hull joining process. Two cans, the axes of which are horizontal, rest on a "beam" or "turning gear" sub-assembly allowing either to position them or to drive them in rotation. Linking the two cans by welding uses two welding processes. This link is made in two main steps: • Manual welding with the Coated Electrodes process, inside the cans, on approximately 1/3 of the thickness, in every position, in fixed position. • Automatic welding with the fluxed core wire MAG Submerged arc process (136), outside the cans, for approximately 2/3 of the thickness, in downhand position if cans are in rotation or in every position if the cans remain fixed. The welding equipment features two work stations. Each work station allows for preparing, welding and checking the welds. One station can be preparing when the other is welding. It must be possible to transfer the welding and heating part from one station to the other. During the automatic welding, at the welding area, the joint is preheated and kept at a temperature of approximately 70°C to 150 °C with a maximum temperature tolerance interval of (0, + 30°C). In any other point of the joint, the temperature must be kept at approximately 70 °C to 150 °C with a tolerance interval of (0, + 100°C). In addition, a 3 to 5-hour post-heating is performed following the welding operation, in any point of the joint (temperatures of approximately 70 °C to 150°C (0, +100°C)).
feb 19	202	Rollers for Cans (RFC)	We require rollers for sections to turn cans following horizontal axis allowing: • Nondestructive controls • Welded joint reparation This equipment has to support a section (cylindrical and conical) about 15 to 45 tonnes.
feb 19	224.01	Flat working surface plate for rectification (WSP)	We require the purchasing of 200 flat working surface plates The dimensions of each plate are about 2500 mm x 2500 mm and 200mm high Made of cast (approx. weight 5000 kg) These plates will host panels, sheets of metal and steels structure to be formed, rectified and welded. The tables will be designed with approx. 600 holes to receive holding tools and forming tools. The tables will be able to be joint together to reach the dimensions of dedicated working area in different workshops.
feb 19	386	Automated storage system for drum reels and cutting machine (ASSDR)	Eol's are sought from suitable suppliers for the supply of industrial equipment dedicated to the storage of drum reel and with the ability to cut all type of cable. It will also be able to label all cables out of the cutting machine. A digitally controlled machine linked to the MRP software. The maximum weight capacity of the machine will be 1.5T. Cables sections are from 1.5mm² to 250mm². It has to ensure a throughput rate of 80 samples per day. The equipment will need to meet the Safety Australian Standards
feb 19	400	Automated storage system for long items (ASSLI)	Eol's are sought from suitable suppliers for the supply of industrial equipment dedicated to the storage of long items such as metal bars and profiles. A digitally controlled machine linked to the MRP software. The average length of items will be 6m with diameters from 12mm to 400mm. The equipment will need to meet the Safety Australian Standards
feb 19	403	Automated storage system for pallets (ASSP)	Eol's are sought from suitable suppliers for the supply of industrial equipment dedicated to the storage of standard pallets (Europe size). A digitally controlled machine linked to the MRP software. The maximum weight capacity of the machine for one pallet is 1,5T. It has to ensure a operation rate of 100 samples per day. The equipment will need to meet the Safety Australian Standards
feb 19	406	Cans tilting pivot (CTP)	We require the purchasing of a tilting pivot system dedicated to tilt cylindrical and conical sub-sections. The supplier will need to submit 3 different offers corresponding to 3 different solutions. The best price/technical value equipment will be selected. - First type of equipment : a system that needs an overhead crane to tilt the sub section (this system is simple and similar to the one used in Cherbourg) - Second type of equipment: is a semi-autonomous system with clamps which can be adjustable as per the cans dimension, locks the sections during the tilting and has an automatic crutch system. This equipment needs an overhead crane as well. - Third type of equipment is an entire autonomous system that locks the section during the tilting and works without the help of a crane for tilting operation.
feb 19	768	Piping hydraulic test installation (PHTI)	We require a hydraulic test bench for straight and piping proof according to their maximum operating pressures. Pipes will be made of mild steel, stainless steel and aluminium materials - Proof Pressures: 2 to 375 bars - Proof liquid: Demineralised Water - Tube Diameters: 10 < Ø < 125 mm - Maximum Tube Lenght: 6500 mm The bench will need to be equipped with a manual pressure regulation command. The equipment will need to meet the Safety Australian Standards

feb 19	812	Pipe degreasing plant (PDP)	We require a pipe degreasing and cleaning equipment with a vapour filtration system. Equipment should be equipped with a hot rinsing system. Pipes will be made of mild steel, stainless steel and aluminium materials - Tanks dimensions : L6000mm x I900mm x H900mm The equipment must meet the safety Australian standards.
feb 19	816	Digitally controlled bending machine for small diameters (BMSD)	We require a bending machine which must be able to deform a tube or a bar permanently with a given radius or angle. This cold deformation will need to be made without reducing the bent tube's diameter. The pipes will be made of mild steel, stainless steel and aluminium materials - Tube Diameters: $8 < \varnothing < 50$ - Maximum Tube Length: 6500 mm - Maximum Bending Angle: 195° for an actual 180° bending This Bending machine will need to be digitally controlled The equipment will need to meet the Safety Australian Standards
feb 19	823	Guillotine shearing machine (GSM)	We require a guillotine shearing machine which must be able to cut mild steel, stainless steel and aluminium sheet metal plates - Maximum Thickness: 12 mm - Maximum Dimensions: 3000 mm x 1500 mm This shearing machine will need to be digitally controlled The equipment will need to meet the Safety Australian Standards
feb 19	830	Digitally controlled bending machine for medium diameters (BMMD)	We require a bending machine which must be able to deform a tube or a bar permanently with a given radius or angle. This cold deformation will need to be made without reducing the bent tube's diameter. The pipes will be made of mild steel, stainless steel and aluminium materials - Tubes Diameters: $30 < \varnothing < 60$ - Maximum Tube Length: 6000 mm - Maximum Bending Angle: 195° for an actual 180° bending This Bending machine will need to be digitally controlled The equipment will need to meet the Safety Australian Standards
feb 19	831	Digitally controlled bending machine for large diameters (BMLD)	We require a bending machine which must be able to deform a tube or a bar permanently with a given radius or angle. This cold deformation will need to be made without reducing the bent tube's diameter. The pipes will be made of mild steel, stainless steel and aluminium materials - Tubes Diameters: $50 < \varnothing < 160$ - Maximum Tube Length: 6000 mm - Maximum Bending Angle: 195° for an actual 180° bending This Bending machine will need to be digitally controlled The equipment will need to meet the Safety Australian Standards
feb 19	832	Retrieval machine for tubes (RMT)	We require an automated system for storing and cutting out tubular shaped sections. It will also be able to mark the tubes after cutting. A digitally controlled machine linked to the MRP software. Capability to obtain a 60 cut-outs / day rate with the constraints of cutting small quantities of several different references (diameter / thickness). The equipment will need to meet the Safety Australian Standards
feb 19	853	Universal milling machine (UMM)	We require a Universal Milling Machine - Surface Plate Dimensions: 1600 mm x 600 mm - Maximum processed material strength $R_m = 1100 \text{ Mpa}$ - Required strokes: $x = 1600 \text{ mm}$; $y = 600$; $z = 400 \text{ mm}$ The milling machine will need to be equipped with a 2-axis rotating universal head: $\pm 90^\circ$ around Y and $\pm 30^\circ$ around X. The equipment will need to meet the Safety Australian Standards
feb 19	903	Boring machine (BOM)	We require a pipe horizontal boring machine. Pipes will be made of mild steel, stainless steel and aluminium materials. - Spindle stroke : $800 < L < 1600 \text{ mm}$ - Longitudinal stroke : 760 mm (approximately) - Transversal stroke : 600 mm (approximately) - Pipe diameters : $60 < \varnothing < 355 \text{ mm}$ The equipment will need to meet the Safety Australian Standards.
feb 19	933	Digitally-controlled bending press (BPP)	We require a bending press which must be able to bend mild steel, stainless steel and aluminium sheet metal plates with a 90° angle - Maximum Thickness: 12mm - Maximum Dimensions: 3000mm x 1500mm This bending press will need to be digitally controlled The equipment will need to meet the Safety Australian Standards.

feb 19	972	Forming press (FP)	We require a forming/stamping press - Capacity : 100 T - Stroke : 600 mm (approximately) - Gooseneck : 700 mm (approximately) - Fixed plate dimensions : 1500mm x 600mm (approximately) - Moving plate dimensions : 500mm x 400mm (approximately) The equipment will need to meet the Safety Australian Standards.
feb 19	1135	Water jet cutting bench (WJCB)	We require a water jet cutting machine able to cut differents materials : Mild steel, stainless steel, aluminum, rubber - Maximum sheet metal plate dimensions : 3000mm x 1500mm - Maximum sheet metal plate thickness : 190mm (approximately) - Pressure : 4100 bars The equipment will need to meet the Safety Australian Standards.