



Various Laboratory Supplies/ Other Materials (Maritime Education and Training Requirements)

Unit	Description	Quantity
unit	<p>Printer [HP Color Laser 150a (4ZB94A)]</p> <ul style="list-style-type: none"> ● Printer for assessment printing <p>Paper handling Input capacity: Up to 150 sheets Output capacity Up to 50 sheets Media sizes supported (metric) Tray 1: A4; A5; A6; B5 (JIS); Oficio (216 x 340 mm); Tray 2: Not supported; Optional Automatic duplexer: Not supported Media sizes, custom (metric): 76 x 148.5 to 216 x 356 mm Media types: Plain, Light, Heavy, Extra Heavy, Coloured, Preprinted, Recycle, Labels, Bond, Glossy Media weight supported (metric): 60 to 220 g/m²</p> <p>Power Energy savings feature technology: Auto-Off Technology; Power save Power supply type: Internal (built-in) Power Supply Power supply: 220 to 240 VAC, 50/60Hz Power consumption: Active Printing: 282 W; Ready: 27 W; Sleep: 1.0 W; Manual Off: 0.2 W; Auto Off/Manual On: 0.2 W</p> <p>Print cartridges Number of print cartridges: 4 (1 each black, cyan, magenta, yellow)</p> <p>Printing specifications Print technology: Laser Duplex printing: Manual (driver support provided) Print resolution (best): 600 x 600 dpi 4 bits Maximum print area (metric): 216 x 356 mm Monthly duty cycle: Up to 20,000 pages Print languages: SPL Printer smart software features: Manual duplex, booklet print, N-up printing, skip blank pages, collation, poster print, watermarks, accepts a variety o paper sizes and types</p> <p>System requirements Minimum system requirements for Windows: Windows 7 or newer, Intel® Pentium® IV 1 GHz 32-bit or 64-bit processor or higher, 1 GB RAM, 16 GB HDD Compatible Network Operating Systems: Windows®: 7 (32/64-bit), 2008 Server R2, 8 (32/64-bit),10 (32/64-bit), 2012 Server, 2016 Server Operating system (supported note): Windows 7 or higher</p>	2

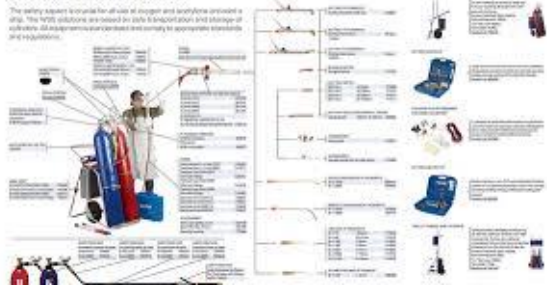
pcs	<p>Medicine Cabinet Requirement for Occupational Safety and Health (OSH). 23 " x 19 " (inches)</p> 	20
pcs	<p>Fire Extinguisher HCFC 10 to 20 lbs Mandatory safety requirement.</p> 	10

Gas Welding Posters
480 x 330 mm

Mandatory requirement for OSH and maritime education and training (MET).
 5pcs/set6



Complete Gas Welding & Cutting Solution for Maintenance Onboard



sets

6



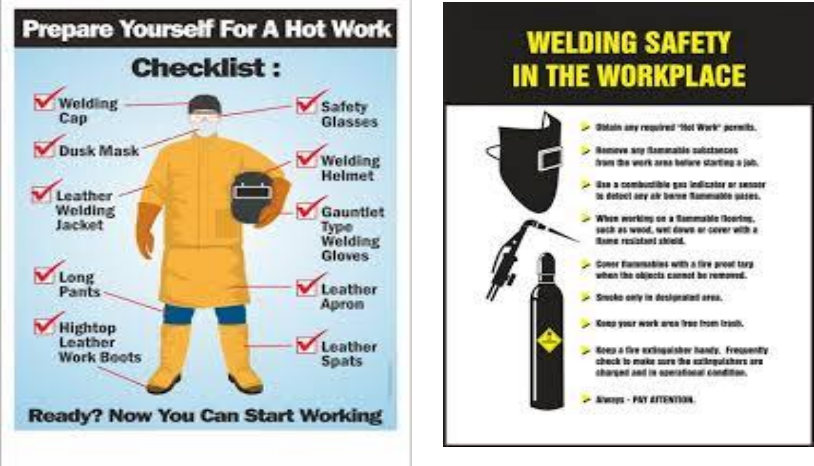
Acetylene Gas (Tanks and refill)

For mandatory laboratory training
 Diameter: 230 mm
 Gross Weight : 73 kg
 Height : 1360 mm
 Weight: 6.2 net
 Volume: 40 L

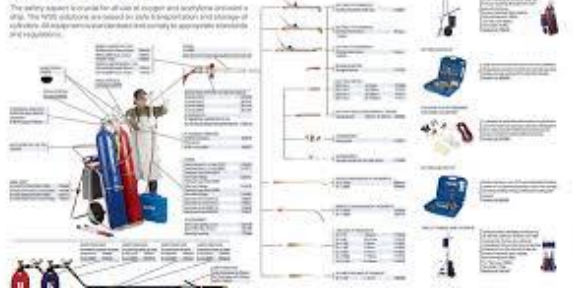


sets

6

sets	<p>Oxygen Gas For mandatory laboratory training Diameter: 230 mm Gross Weight : 60 kg Height : 1360 mm Weight: 7.8 net Volume: 40 L</p>	 <p>6</p>
sets	<p>Welding Cylinder Trolley For mandatory laboratory training S.W.L 200 kg Weight: 28 Kgs</p>	 <p>6</p>
sets	<p>ARC Welding Posters 480 x 330 mm Mandatory requirement for OSH and maritime education and training (MET). 5pcs/set6</p>	 <p>6</p>

Complete Gas Welding & Cutting Solution for Maintenance Onboard



pcs

Electrode Cabinet

For proper housekeeping of electrodes
 H x W x D
 600 x 600 x 300 mm
 Net Weight: 37.5 kg (empty)
 Made of steels



1





pcs



Automatic Face Shield



Mandatory requirement for OSH and maritime education and training (MET), specifically eye protection



12

pcs	<p>Anvil (10 Kg) MET requirement 310x150x130mm Puresteel</p> 	8
pcs	<p>Center punch, 60 mm MET requirement Carbon steel</p> 	10
pcs	<p>Center punch, 90 mm requirement steel</p> 	MET Carbon 10
pcs	<p>Machinist's combination set MET requirement Technical Data Square head: Used to set the rule at 90 degrees or 45 degrees to an edge of a workpiece. Center head: Used to locate centers of round workpieces Protractor head: Used to set the rule at a desired angle to an edge of a workpiece. Also used for measuring angles.</p> 	6

sets	<p>Drill bit, 15-30 mm, cylinder shank (Brand: Milwaukee 48-89-4680) 18-Piece Shockwave Impact Duty Thunderbolt Titanium Drill Bit Set w/ Anti-Walking 135 Degree Angled Tip and Storage Case</p> <ul style="list-style-type: none"> • KIT INCLUDES: 2 x 1/16", 2 x 5/64", 2 x 3/32", 1 x 7/64", 2 x 1/8", 1 x 9/64", 1 x 5/32", 2 x 3/16", 1 x 7/32", 2 x 1/4", 1 x 5/16", 1 x 3/8" • SHOCKWAVE GEOMETRY: These bits are rated to stand up to high torque applications from heavy duty drill / drivers • CHIP CLEARING: A parabolic flute form helps clear chips and debris away from the bit, decreasing friction and heat for a faster, cooler drilling process • TITANIUM COATING reduces heat buildup, making this safer to use with minimal warping while working on multiple applications in rapid succession • STORAGE: These bits come with an included, robustly designed, plastic storage case. This has a slide lock system and individually molded compartments for each bit, so you can bring them in transit or keep them in your tool kit without worrying about them retaining damage 	6
sets	<p>Pipe Wrench Various sizes MET requirement inches= 12" 14" 18" 24"</p> <ul style="list-style-type: none"> ▶ Pipe Wrench is made with maxStrong I-beam handle design withstands high torque ▶ Durable heavy-duty cast-iron housing ▶ Strong I-beam handle design withstands high torque ▶ Floating hook jaw design allows ratcheting function ▶ Durable drop-forged hook jaw for long life 	6

<p>pcs</p>	<p>Oil can MET requirement Made from high quality steel for Long lasting use. Capacity 1/2 PINT - 236 ml. Wesco type Design. Nozzle is Steel & Chrome Plated. Very convenient for Oiling - Car, Bike and Machines. OIL NOT INCLUDED. Color: Red</p> 	<p>10</p>
<p>sets</p>	<p>Pipe Cutter MET requirement 1/8 to 2 inches cutting diameter Ideal for fast, clean pipe cutting by hand or power Features an extra-long shank that protects adjustment threads Extra-large handle allows for quick and easy adjustments Can be converted to 3-wheel cutter by replacing rollers with cutter wheel Pipe cutter has a 1/8-inch (3 mm) to 2-inch (50 mm) pipe capacity Item Weight 3.52 ounces Product Dimensions 17.72 x 7.87 x 3.27 inches Size Small Color Red Power Source Corded-electric Batteries Included? No Batteries Required? No</p> 	<p>6</p>
<p>kg</p>	<p>Packing gland (Graphite Steam Valve Gland Packing for Water Pump Steam Valve) MET requirement 2-25 mm Standard; Graphite; use for Pump, Compressor, Valve, Piping Material: Graphite Usage: Pump, Compressor, Valve, Piping Application: Machinery Certification: ISO, CE Temperature: -150-650c</p> <p>Product description: Material: Pure Flexible Graphite Packing is made from expanded graphite yarn braided into through all kinds of technology of braiding. They are almost suitable to all media, such as hot water, steam, acids, alkalis, organic solvents, hydrocarbons, low temperature liquids, etc. Application of equipment:</p>	<p>20</p>

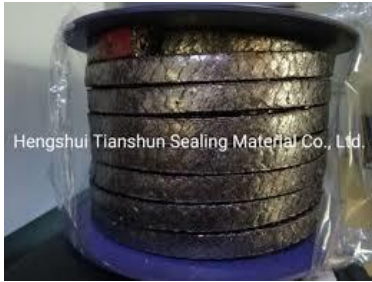
Flexible Graphite Packing can be used in valve and some rotary application, high temperature valve and soot blowers.

Application of medium:

Flexible Graphite Packing is suitable for all application, seals hot water, high temperature and pressure steam, heat transfer fluid, hydrogen gas, ammonia, Solvents. Hydrocarbons, Cryogenic liquids, etc.

Application Data:

	Centrifugal pumps	piston pumps	valves
Pressure: Mpa	2	10	18
Speed: m/s	22.8	3	1.5
PH Range	0-14		
Temperature: C	-150-650		
Density (g/cm ³)	1.4		
Thickness: mm	4*4-50*50		



Single Coil Spring Seals
MET requirement

30mm / 35mm / 40mm / 45mm Inner Diameter

Face Material: Carbon, Ceramic (99.5%), Silicon Carbide, Tungsten Carbide, Satellite.

Pressure Balanced: 35 bar

Pressure Unbalanced: 10 bar

Shaft diameter 5/8 to 6(inch)

Speed: Up to 2900 rpm

Temperature: -50 C to + 220 C

sets



10

Drain Cock




MET requirement



3 units - 1/4 inch

3 units - 3/8 Inch

unit

10

	<p>4 units - 1/2 inch Connection Type: Threaded Material of Construction: Brass</p> 	
sets	<p>globe valve MET requirement</p> <p>Media: Gas, Oil, Water Temperature: High/Low/Ordinary Temperature Actuator: Manual/Gear/Electric/Pneumatic/Hydraulic Material: Stainless Steel, Carbon Steel and Others Structure: Through Way Globe Valve Sealing Form: Metal</p> 	5
sets	<p>gate valve MET requirement</p> <p>Cast Iron Gate Valve 2" x 200wog Flange Type Rising Stem</p> 	5
sets	<p>quick closing valve MET requirement</p> <p>Type:Emergency Shut-Off Valves Application: Fuel Tank marine use Power: Manual Operation: Manual and pneumatic Temperature of Media: Medium Temperature Media: Oil Structure: Shutoff</p>	5

	<p>Material: Cast steel body and Bronze Application: use for marine pipelines of fresh water, air or gas, fuel oil, lub oil, steam at 205°C in ship building or repair or marine platform construction.</p> 	
sets	<p>Analog Multi-tester MET requirement</p> <p>90 x 60 x 32 mm DC Voltage Range: 0 - 10 - 50 - 250 - 1000V AC Voltage Range: 0 - 10 - 50 - 250 - 1000V DC Current Range: 0 - 0.5 - 50 - 500mA</p> 	10
sets	<p>Insulation Resistance Tester MET requirement</p> <p>600 V Cat III safety design specifications 50% of the display range, bright white backlight Overvoltage indicator Frequency and temperature measurement Voltage, resistance, current, capacitance Input terminal of the AC and DC current measurement value of 10 A Diode test, data retention</p> <p>5-range testing voltage 50 V/100 MΩ to 1000 V/4000 MΩ Continuity check via 200 mA testing</p>	10



Digital Clamp Meter

MET requirement

Display: LCD, max. 1999 digits, 35.6 × 18 mm

AC Voltage: Auto Ranging

- 2V ±(1.2%+5)
- 20V ±(1.2%+5)
- 200V ±(1.2%+5)
- 600V ±(1.5%+5)

*Overload Protection: 600V rms

*Input Impedance: 10MΩ // < 100pF

*Displays RMS value of sine wave (mean value response)

DC Voltage: Auto Ranging

- 200mV ±(0.8%+3)
- 2V ±(0.8%+1)
- 20V ±(0.8%+1)
- 200V ±(0.8%+1)
- 600V ±(1%+3)

*Input Impedance: 10MΩ

*Overload Protection: 600V rms

Resistance: Auto Ranging

- 200.0Ω -Resolution 100mΩ- ±(1.2%+2)
- 2.000kΩ -Resolution 1Ω- ±(1%+2)
- 20.00kΩ -Resolution 10Ω - ±(1%+2)
- 200.0kΩ -Resolution 100Ω - /±(1%+2)
- 2.000MΩ -Resolution 1kΩ- ±(1.2%+2)
- 20.00MΩ -Resolution 10kΩ - ±(1.5%+2)

*Overload Protection: 600Vp

Continuity:

- Range Resolution: 100mΩ
- Accuracy: At <10Ω, buzzer beeps

Diode

- Resolution 1mV




AC current: Auto Ranging




- 20.00A ±(2.0%+5)
- 200.0A ±(1.5%+5)
- 600A ±(2.0%+8)




*Overload Protection: 600A rms




sets

3

	<p>*Frequency Response: 50Hz to 60Hz</p> <p>Package: 1*UT202A Clamp Meter, 1 *Test leads, 1 *User manual, 1 *Carrying pouch, 1 *9V Battery(installed) ,1 *Lanyard</p> 	
sets	<p>Live Line tester MET requirement 141 x 18.6 x 16mm</p> <ul style="list-style-type: none"> - Lightweight design and super convenient to bring with. - Handle is made of AS plastic and the hardened & tempered carbon steel probe is chrome plated. - The sharp steel probe easily pierces wire insulation to check circuitry. - Light in handle glows when circuit connection is complete. - Test a range of circuits ranging from 6V to 24V. 	10
sets	<p>Thermistor MET requirement 10pcs Thermistor Resistor (10D-11 Thermal Resistor)</p> <ul style="list-style-type: none"> • The NTC thermistors are reliable and stable, with wide range of over-current control. • With small size and large power, they have strong capacity to inhibit surge current. • Large material constant, large B value, with small residual resistance. • Thermal shock resistance, with wide range of operating temperature. • Used for controlling the inrush current of motor, heaters, bulb voltage stabilizer, electronic energy-saving lamp, etc. 	2
sets	<p>Extension hoses</p> <p>Must fit with the hose connections for sand blasting equipment and air compressor</p>	1

	<p>Must match with the sand blasting machine</p> <p>MET requirement</p> 	
sets	<p>Air Distributor for multiple works</p> <p>Must fit with the hose connections for sand blasting equipment and air compressor</p> <p>MET requirement Aluminum Body Shutoffs with check valves High quality construction</p> 	2
piece	<p>USH Socket Couples</p> <p>Must fit with the hose connections for sand blasting equipment and air compressor</p> <p>1-1/2in / 1-1/2in 1/2in / 1/2in 1/4in / 1/4in</p> <p>MET requirement</p>  	20
piece	<p>UPH Plug for airlines</p> <p>Must fit with the hose connections for sand blasting equipment and compressor</p> <p>MET requirement</p>	20

		
set	<p>Air hose coil of 50 m PVC Must fit with the hose connections for sand blasting equipment and air compressor MET requirement</p> 	1
set	<p>Airline filter Must fit with the hose connections for sand blasting equipment and air compressor MET requirement</p> <p>Heavy duty, steel housing withstands rugged industrial environments Available in two outlet and six outlet models for respirator use and single outlet model for non-respirator use Offers easy portability, weighing approximately 23 pounds (10.5 kg)</p> 	1
sets	<p>Chisel Scaler Must fit with the hose connections for sand blasting equipment and air compressor MET requirement Air Consumption (L/min) 99 Overall Length (mm) 317 Related Documents: Instruction manual , Inquiries about common products , How to use Needle Length (mm): 3Φ×180 Included Accessories: PT1 / 4 coupler, spring x 1PC, 125mm chisel x 5PC Suitable Air Pressure (MPa): 0.62 Piston Diameter (Φmm): 19 Number of No-Load Impact (min -1): 4500 Mass (kg): 1.98 Number of Needles:19</p>	10

		
sets	<p>Needle Scaler Must fit with the hose connections for sand blasting equipment and air compressor MET requirement</p> <p>Very useful tool suitable for removing paint, rust etc. Suitable for use on heavier work such as wheels, engine blocks, chassis rails and box sections. Fits 150mm and 190mm Air chisels/hammers. 4. Screw on design. Tighten the Allen key grub screws to attach and remove. Loosen during use. (Allen key pictured is not included) Made up of approximately 19 needles which chip away at the surface. Suitable for removing rust and paint, it screws on the end of a standard size air chisel. Air Descaler Needle Attachment Kit Fits Air Chisel Hammer Removes Paint & Rust To be used with an air chisel Colour: Black Material: Steel Heavy duty steel casing Knurled ring Black oxide finish to prevent corrosion 220mm length 30mm diameter (inner) 45mm (outer) Package Contents: 1* 19 Pin Air Descaler Needle</p> 	20
sets	<p>Scaling Hammer MET requirement Head Length: 170 mm Head Tip Width: 24 mm Handle Length: 295 mm</p> 	20
sets	<p>Pneumatic Grinder Must fit with the hose connections for sand blasting equipment and air compressor MET requirement Straight Grinder: 6 or 6.5 mm 3-piece design collet</p>	20

	<p>Angle Grinder: 100mm/ 4in Cutting disk</p> 	
sets	<p>Air Sprayer feed type Must fit with the hose connections for sand blasting equipment and air compressor MET requirement</p> <p>1000mL Paint Capacity 2mm Nozzle Operating Pressure: 3.0-4.0 Pattern Width: 180-280mm Air Consumption: 118-201LPM (4.2-7.1CFM) Adjustable Fluid, Pattern & Air Controls Stainless Steel Needle & Nozzle Includes Cleaning Accessories</p> 	5
sets	<p>Air Sprayer gravity type Must fit with the hose connections for sand blasting equipment and air compressor MET requirement</p> <p>Required Compressor (kw) 1.5 Spray Distance (mm) 150~180 Air Pressure (MPa) 0.27~0.3 Suitable Paint Container 0.5L</p>	5



Digital Infrared Thermometer Laser Temperature Gun (Not for Human)
 Non-contact-58°F -1382°F (-50°C to 750°C), Standard Size, Yellow

BETTER ACCURACY The distance to spot ratio is 16:1 meaning the laser grip 800 can accurately measure targets at larger measurement area with the same distance compared with other thermometers with DSR 12:1 or 8:1

TARGET QUICKER Measure surface temperature ranging from -58°F to 1382°F/ -50°C to 750°C you can choose the unit from °F/ °C A built in laser gives you the precision to hone in on the exact space you want to measure

ADDED FUNCTIONS The LCD screen is backlit it also has an auto-off function to extend the battery life and features a low battery indicator so you never accidentally run out of juice (battery included)

VERSATILE DESIGN Infrared technology makes this thermometer handy to measure the surface temperature of various objects especially temperatures above boiling points and below freezing points Use it when you are cooking and barbecuing performing auto maintenance doing home repairs and a host of other tasks

NOTE For best accuracy the distance between thermometer and object of measurement should approximately be 14-17 inches (36cm) Temperature readings from this devices are inanimate objects the measured temperature for humans or animals will not be correct FDA FCC CE compliant Class 2 laser optical power 0.5-0.9mW



units

5

Portable gas detector
 Portable gas detector, easy to use for the detection of combustible and toxic

units

2

gases in 0 - 500 ppm range

Features:

High sensitivity detector with 0-500ppm measuring range (Standard)
Best suited for measuring toxic and combustible gases in the ppm range
Lightweight 450g (16 oz.) and compact
Built-in correction factors for up to 5 flammable gases.(factory option)
Explosion proof according to Exibd II BT3
Gas detected: Combustible gases and vapors (specify gas to be detected)
Detection principle: Catalytic combustion
Sampling method: Extractive
Detection range: 0-5,000ppm or 0-10,000ppm
Indication accuracy (under identical conditions): H range $\pm 5\%$ L range $\pm 10\%$
Alarm set value: 250 or 500ppm
Display: LCD digital (with back ight)
Digital display:0-5,000ppm or 0-10,000ppm
Digital bar display: Auto range changeover
0-5,000ppm or 0-10,000ppm (L range)
0-5,000ppm or 0-10,000ppm (H range)
Alarm indication
Gas alarm: Intermittent buzzer, red lamp flashing
Trouble alarm: Buzzer, red lamp flashing, LCD display
Explosion- Proof Structure Exibd II CT3
Operation Temperature -20 to 50°C
Power source: 4xAA alkaline dry cells
Battery life Up to 20 hours
Dimensions: W82xH162xD36mm
Weight: Approx. 450g(16oz)
Standard Accessories: Soft case, 4 x AA alkaline dry cells, Gas sampling hose (1 m), Probe with filter/moisture trap, spare filters
Optional Accessories
2-30m gas sampling hose, Gas dilution probe, Data download software(CD-ROM software and USB cable)

