

TINKERERS' LAB at Nirma University

TOOLS AND EQUIPMENT LIST



Technical Specifications:

BRAND	Fracktal Works
MODEL NO.	Julia Extended
Maximum printable area	250*250*300mm
Filament diameter	1.75mm
Extruder diameter	0.4mm
Extruder temperature	Upto 270 C
Number of extruder	1
Model of extruder	Direct drive all metal extruder
Recommend material	PLA ,ABS ,Nylon, flexible
Material support	Same as print material
Print accuracy	60-300 microns

Maximum print speed	200mm/s
Maximum travel speed	300mm/s
Layer precision	0.1-0.30mm
Heated bed	Yes
Bed temperature	100 max
Lcd support	Yes
Connectivity	USB,, WIFI,ETHERNET
Enclosure type	Sheetmetal,even spool is covered
Software supported	Repetier ,cura,custom ,kislicer simplify 3D
Total machine weight	13 KG
Power supply unit	110-220V AC, 700 Watt PSU with 1-year warranty
Run time charge sensing option	Yes
Warranty	1 year
Pause print option	Yes(pause and resume even after extruder movement), semi-automatic.
X y precision	HIWIN high precision linear guide rails with 16 micron positional accuracy

CO2 LASER ENGRAVING & CUTTING



Technical Specifications:

BRAND	SIL
MODEL NO.	AccuCut 6090
Max working area(mm)	600×900
Laser power	100W
Laser Types	Hermetic And Detached CO2 Laser Tube
Engraving speed(mm/min)	0-75000
Cutting speed(mm/min)	0-40,000
Minimum letter	English 1 x 1mm
Location precision	≤0.01mm
Resetting positioning accuracy	0.01mm
Driving system	Stepper
Software	Lasercut 5.3 or RDworks V8 (compatible with Coreldraw&AutoCAD)
360°slope engrave	Yes
Power supply AC	220V/50Hz~60HZ (110V is also available)
Operating temperature	0 - 45°C
Operating humidity	5 - 95%
Graphic format supported	BMP, CIF, JPEG, TGA, TIFF, PLT, AI, DXF, DST (TIANDAO Embroidery Software), DWG, CDR, etc
Available materials	Acrylic, PVC, rubber sheet, plastic, crystal, glass, wood, bamboo, oxhorn, figuline,marble, leather, cloth, double-color board, etc. nonmetal materials
Application	Arts and crafts, toys, textile garment, leather, car, mechanism, electron, building upholster, timekeeper and jewelry industry

Vinyl Cutting Machine:



Technical Specification:

MAKE	ROLAND
MODEL	SV-15
Cutting method	Media-moving method
Maximum cutting area	13-3/8 (X) x 39-5/16" (Y) [340 (X) x 1000mm (Y)]
Acceptable sheet size*	Width: 14-1/8 to 15" (360 to 381 mm) Length: 43-1/4" (1100mm) or less
Cutting speed	7/16 to 3-7/8ips. (12 to 100 mm/sec.)
Acceptable material	PVC or label material of 0.004" (0.1 mm) or less in thickness. Total material thickness including the backing of 0.012" (0.3 mm) or less
Weight (unit only)	7.3 lb [3.3 kg]

3D SCANNER:



Technical Specifications:

BRAND	Shinning 3D
MODEL NO.	Ein Scan SE
Single Shot Accuracy:	Less than 0.1 mm
Scan Volume :	Minimum 3 × 3 × 3 cm
Scan Volume	Maximum 70×70×70 cm
Range of Single Capture :	Min 200×150 mm
Scan Speed :	Greater than 8 s
Point Distance:	0.17 mm ~ 0.2 mm
Texture:	Yes
File Format:	OBJ, STL, ASC, PLY
Camera Resolution:	Minimum 1.3 Mega Pixels
Light Source :	White Light
Stand-off Distance:	290 ~ 480 mm
Computer Requirements: (Required)	USB:1 ×USB 2.0 or 3.0; OS: Win7, Win8, Win10 (64 bit); CPU: Dual- core i5 ; RAM: 8G
Computer Requirements :(Recommended)	Graphics card: Nvidia series
Weight (unpacked) :	Maximum 4.7 kg
Weight (packed) :	Maximum 5.1 kg
Dimension:	Minimum 565×207×207 mm
Power Supply:	40 w
Input Voltage :	DC : 12 v, 3.33 A
Calibration Board:	Yes
Turntable:	Yes
Load Capacity of Turntable :	Maximum 5 kg

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Desktop Forming Machine :



Technical Specifications:

MAKE	MAYKU
MODEL	FORMBOX
Size and Weight	<p>Height: 315mm (12.4 inches)</p> <p>Length (with handles): 466mm (18.3 inches)</p> <p>Width: 274mm (10.8 inches)</p> <p>Forming bed: 200 x 200mm (7.9 x 7.9 inches)</p> <p>Draw depth: 130mm (5.1 inches)</p> <p>Weight: 13kg (28.7lbs)</p>
Heater	The temperature range of the built-in ceramic heater is 160°C - 340°C.
Power	110V 5A 1000W and 240V 5A 1000W models available depending on region. 2000W maximum power-through for vacuum cleaner port.
Operating Environment	<p>Recommended Operating Temperature: 15-30°C; Humidity: 30-50% RH</p> <p>Recommended Storage Temperature: 10-35°C; Humidity: 20-90% RH</p>

Regulatory Compliance	<ul style="list-style-type: none"> • CE • FCC • IC • PSE • RoHS • SAA 									
Sheet Materials	The machine works with thermoplastic sheets between 0.25 and 1.5mm in thickness.									
Compatible Sheet Materials	PETg, Polystyrene , EVAfoam, HIPS, PVC, TPU, PLA, Kydex, ABS, Polypropylene, HDPE, Extruded, Acrylic, Polycarbonate, LDPE									
Compatible Template Materials	<ul style="list-style-type: none"> • 3D printed FDM PLA • 3D printed FDM ABS • 3D printed FDM Nylon • Most 3D printed SLA materials • Most 3D printed SLS materials • Wood • Milled and injection moulded Paper and card plastics such as ABS or nylon • Toughened glass • Steel • Aluminum • Plaster • Polyurethane tooling foam • Hardened clays • Silicone 									
Compatible Casting Materials	<table border="0" style="width: 100%;"> <tr> <td>Concrete</td> <td>• Jello</td> <td>• Foam</td> </tr> <tr> <td>Silicone</td> <td>• Resin</td> <td>• Jesmonite</td> </tr> <tr> <td>Chocolate</td> <td>• Ice</td> <td>• Plaster</td> </tr> </table>	Concrete	• Jello	• Foam	Silicone	• Resin	• Jesmonite	Chocolate	• Ice	• Plaster
Concrete	• Jello	• Foam								
Silicone	• Resin	• Jesmonite								
Chocolate	• Ice	• Plaster								
Additional Accessories	<ul style="list-style-type: none"> • Cast Sheet (PVC): 30pcs • Form sheet (PET sheet): 30pcs 									

<p>Digital Vernier Caliper</p> 	<table border="1"> <tr> <td>Model No :</td> <td>1112-150</td> </tr> <tr> <td>Brand</td> <td>Insize</td> </tr> <tr> <td>Type of Product :</td> <td>Digital Caliper</td> </tr> <tr> <td>Measuring Range (mm) :</td> <td>0-150 mm</td> </tr> <tr> <td>Resolution (mm) :</td> <td>0.01 mm</td> </tr> <tr> <td>Measuring Range (Inch) :</td> <td>0-6 Inch</td> </tr> </table>	Model No :	1112-150	Brand	Insize	Type of Product :	Digital Caliper	Measuring Range (mm) :	0-150 mm	Resolution (mm) :	0.01 mm	Measuring Range (Inch) :	0-6 Inch
Model No :	1112-150												
Brand	Insize												
Type of Product :	Digital Caliper												
Measuring Range (mm) :	0-150 mm												
Resolution (mm) :	0.01 mm												
Measuring Range (Inch) :	0-6 Inch												
<p>Digital Micrometer Screw Gauge</p> 	<table border="1"> <tr> <td>Model No :</td> <td>3109-25S</td> </tr> <tr> <td>Brand</td> <td>Insize</td> </tr> <tr> <td>Type of Product :</td> <td>Outside Micrometer</td> </tr> <tr> <td>Measuring Range (mm) :</td> <td>0-25 mm</td> </tr> <tr> <td>Resolution (mm) :</td> <td>0.01mm</td> </tr> </table>	Model No :	3109-25S	Brand	Insize	Type of Product :	Outside Micrometer	Measuring Range (mm) :	0-25 mm	Resolution (mm) :	0.01mm		
Model No :	3109-25S												
Brand	Insize												
Type of Product :	Outside Micrometer												
Measuring Range (mm) :	0-25 mm												
Resolution (mm) :	0.01mm												
<p>Steel Rule</p> 	<table border="1"> <tr> <td>Model No :</td> <td>7110-300</td> </tr> <tr> <td>Brand</td> <td>Insize</td> </tr> <tr> <td>Type of Product :</td> <td>Steel Rule</td> </tr> <tr> <td>Size Of Scale / Gage in (Inch) :</td> <td>12 Inch/300mm</td> </tr> <tr> <td>Material :</td> <td>Stainless Steel</td> </tr> </table>	Model No :	7110-300	Brand	Insize	Type of Product :	Steel Rule	Size Of Scale / Gage in (Inch) :	12 Inch/300mm	Material :	Stainless Steel		
Model No :	7110-300												
Brand	Insize												
Type of Product :	Steel Rule												
Size Of Scale / Gage in (Inch) :	12 Inch/300mm												
Material :	Stainless Steel												
<p>Steel Rule</p> 	<table border="1"> <tr> <td>Model No :</td> <td>7110-600</td> </tr> <tr> <td>Brand</td> <td>Insize</td> </tr> <tr> <td>Type of Product :</td> <td>Steel Rule</td> </tr> <tr> <td>Size Of Scale / Gage in (Inch) :</td> <td>24 Inch/600mm</td> </tr> <tr> <td>Material :</td> <td>Stainless Steel</td> </tr> </table>	Model No :	7110-600	Brand	Insize	Type of Product :	Steel Rule	Size Of Scale / Gage in (Inch) :	24 Inch/600mm	Material :	Stainless Steel		
Model No :	7110-600												
Brand	Insize												
Type of Product :	Steel Rule												
Size Of Scale / Gage in (Inch) :	24 Inch/600mm												
Material :	Stainless Steel												
<p>Degree Protector</p> 	<table border="1"> <tr> <td>Model No :</td> <td>2372-360</td> </tr> <tr> <td>Brand</td> <td>Insize</td> </tr> <tr> <td>Type of Product :</td> <td>Universal Bevel Protractor</td> </tr> <tr> <td>Resolution :</td> <td>0.083°</td> </tr> <tr> <td>Accuracy :</td> <td>±0.083°</td> </tr> <tr> <td>Range :</td> <td>0-360°</td> </tr> </table>	Model No :	2372-360	Brand	Insize	Type of Product :	Universal Bevel Protractor	Resolution :	0.083°	Accuracy :	±0.083°	Range :	0-360°
Model No :	2372-360												
Brand	Insize												
Type of Product :	Universal Bevel Protractor												
Resolution :	0.083°												
Accuracy :	±0.083°												
Range :	0-360°												
<p>Inside caliper</p>	<table border="1"> <tr> <td>Model No :</td> <td>7261-150</td> </tr> </table>	Model No :	7261-150										
Model No :	7261-150												



Brand	Insize
Material :	Carbon Steel
Measuring Range (mm) :	20-170 mm
Jaw Length (mm) :	150mm

Outside caliper



Model No :	7262-150
Brand	Insize
Material :	Carbon Steel
Measuring Range (mm) :	0-140 mm
Jaw Length (mm) :	155 mm

Engineering Square



Model No :	146E
Brand	Local
Weight :	0.225 Kg
Size (inch) :	6 Inch
Type of Product :	Engineers Square

Meter tape(30m)



Model No :	Fibra (FB)
Type of Product :	Measuring Tape
Measuring Range :	30 m
Width (mm) :	13 mm
Sub Type :	PVC Coated Fiberglass Tape

Meter tape(3m)



Model No :	STHT30436
Type of Product :	Pocket Steel Measuring Tape
Measuring Range :	3 m
Width (mm) :	12.7 mm

Meter tape(5m)



Model No :	STHT30437
Type of Product :	Pocket Steel Measuring Tape
Measuring Range :	5 m
Width (mm) :	19 mm

Spirit Level



Model No :	STHT1-43118
Number Of Vials :	3
Level Accuracy :	0.5 mm/m
Length (mm) :	300 mm
Type of Product :	Level

PORTABLE TOOLS

Angle Grinder

Make	Bosch
Model	GWS 600
Rated input power*	660 W
No-load speed*	12.000 rpm
Disc diameter*	100 mm
Grinding spindle thread	M 10
Tool dimensions (width)	77 mm
Tool dimensions (length)	263 mm
Tool dimensions (height)	95 mm
Weight	1.5 kg
Switch	2-way





Straight Grinder




Make	Bosch
Model	GGG 3000L
No-load speed*	33.000 rpm
Rated input power*	500 W
Tool holder*	Collets up to 8 mm diameter
Spindle collar diameter	41 mm
Weight	1.4 kg
Tool dimensions (width)	80 mm
Tool dimensions (length)	360 mm
Tool dimensions (height)	80 mm




Bench Grinder



Make	Bosch
Model	GBG 35-15
Grinding wheel diameter	200 mm



No-load speed	3,600 rpm	
Grinding wheel widths	25 mm	
Grinding wheel bore	32 mm	
Grit	24 , 60	
Rated input power	600 W	
Weight	15 kg	
Tool dimensions (width)	230 mm	
Tool dimensions (length)	370 mm	
Tool dimensions (height)	260 mm	
Table Saw		
Make	Bosch	
Model	GTS 10J	
Incline setting*	47 ° L / 2 ° R	
Table size*	642 x 572 mm	
Saw blade diameter	25 mm	
Cutting height 90°	79 mm	
Saw blade bore diameter	30 mm	
Weight	26 kg	
Max. cutting capacity on the right	460 mm	
Max. cutting capacity on the left	210 mm	
No-load speed*	3,650 rpm	
Circular Saw		
Make	Bosch	
Model	GKS 190	
Rated input power	1,400 W	
Saw blade diameter	184 mm	
No-load speed	5.200 rpm	
Weight	4.1 kg	
Saw blade bore diameter	16 mm	


Tool dimensions (width)	385 mm	
Tool dimensions (length)	260 mm	
Tool dimensions (height)	280 mm	
Max. cutting capacity in wood (90°)*	67 mm	
Max. cutting capacity in wood (45°)	49 mm	
Jigsaw		
Make	Bosch	
Model	GST 700	
Rated input power	500 W	
Stroke rate at no load	1450 - 3200 spm	
Weight	2.1 kg	
Saw, stroke length	20 mm	
Rated input power	500 W	
Cutting depth in wood	70 mm	
Cutting depth in aluminium	10 mm	
Cutting depth in non-alloyed steel	6 mm	
Vibration emission value ah	3.9 m/s ²	
Uncertainty K	1.5 m/s	
Vibration emission value ah	4.2 m/s ²	
Uncertainty K	1.5 m/s ²	
Metal Cut Off Saw		
Make	Bosch	
Model	GCO 220	
Cutting disc diameter*	355 mm	
Cutting disc bore*	25.4 mm	
No-load speed*	3,800 rpm	
Cutting capacity at rectangle 0°	100 x 196 mm	


Cutting capacity at square 0°	119 x 119 mm	
Cutting capacity at L-profile 0°	130 x 130 mm	
Cutting capacity at rectangle 45° mitre	107 x 115 mm	
Cutting capacity at square 45° mitre	110 x 110 mm	
Cutting capacity at L-profile 45° mitre	115 x 115 mm	
Tool dimensions (width x length x height)	256 x 520 x 400 mm	
Weight	15 kg	
Rated input power	2,200 W	
Vibration emission value ah	2.5 m/s ²	
Uncertainty K	1.5 m/s ²	
Handheld Drill		
Make	Bosch	
Model	GSB 13 RE Kit	
Rated input power	600 W	
No-load speed	0 - 2800 rpm	
Power output	301 W	
Weight	1.8 kg	
Rated torque	1,8 Nm	
Drill spindle connecting thread	1/2" – 20 UNF	
Chuck capacity, min./max.	1,5 - 13 mm	
Tool dimensions (length)	266 mm	
Tool dimensions (height)	180 mm	
Impact rate at no-load speed	0 - 44800 bpm	
Drilling diameter in concrete	13 mm	
Drilling diameter in wood	25 mm	
Drilling diameter in steel	10 mm	
Drilling diameter in masonry	15 mm	
Drilling in metal		

Vibration emission value ah	3 m/s ²		
Uncertainty K	1.5 m/s ²		
Impact drilling in concrete			
Vibration emission value ah	26 m/s ²		
Uncertainty K	3 m/s ²		
Screwdriving			
Vibration emission value ah	2.5 m/s ²		
Uncertainty K	1.5 m/s ²		
Cordless Drill			
Make	Bosch		
Model	GSB180 Li		
Battery voltage*	18 V		
Torque (soft/hard/max.)*	21/54/- Nm		
No-load speed (1st gear / 2nd gear)	0 – 450 / 0 – 1.700 rpm		
Battery type	Lithium-ion		
Max. impact rate	27,000 bpm		
Torque settings	20+2		
Max. drilling diameter in wood	35 mm		
Max. drilling diameter in steel	10 mm		
Cordless Screwdriver			
Make	Bosch		
Model	GSR 120 Li		
Battery voltage*	12 V		
Torque (soft/hard/max.)*	-/-/- Nm		
No-load speed (1st gear / 2nd gear)	0 – 380 / 0 – 1.300 rpm		
Battery type	Lithium-ion		
Torque settings	20+1		
Max. drilling diameter in wood	20 mm		

Max. drilling diameter in steel	8 mm	
Hot Air Gun		
Make	Bosch	
Model	GHG 180	
Rated input power*	1,800 W	
Weight	0.75 kg	
Tool dimensions (width)	86 mm	
Tool dimensions (length)	238 mm	
Tool dimensions (height)	244 mm	
Working temperature*	60 – 550°C	
Airflow*	350 – 550 l/min	
Heat-up time	1 mins	
Continuously variable temperature control	-	
Cold stage, 50°C	-	
Control, airflow	3-stage	
Blower		
Make	Bosch	
Model	GBL 620	
Rated input power*	620 W	
Weight*	1.7 kg	
Volumetric flow rate*	3.5 m ³ /min	
No-load speed	16,000 rpm	
Random Orbit Sander		
Make	Bosch	
Model	GEX 125	
Sanding pad diameter*	125 mm	
Rated input power*	250 W	
Oscillating circuit diameter*	2.5 mm	
No-load speed	7.500 – 12.000 rpm	


Orbital stroke rate	15.000 – 24.000 opm	
Eccentricity	1.25 mm	
Sanding sheet / disc attachment	hook-and-loop fastening	
Weight	1.3 kg	
Vibration emission value ah	5 m/s ²	
Uncertainty K	1.5 m/s ²	
Planer		
Make	Bosch	
Model	GHO 10-82	
Rated Power	710 W	
Cutting depth	0 - 1 mm	
Weight	2.5 kg	
Adjustable rebating depth	0 - 9 mm	
No-load speed	16,500 rpm	
Tool dimensions (length)	284 mm	
Tool dimensions (height)	173 mm	
Wet/Dry Extractor		
Make	Bosch	
Model	GAS 15	
Weight*	6 kg	
Container volume, net*	10 l	
Rated input power	1,100 W	
Container volume, gross	15 l	
Container volume, net, water*	8 l	
Tool dimensions (length)	360 mm	
Tool dimensions (height)	440 mm	
Max. airflow rate (turbine)	53 l/sec	
Max. vacuum pressure (turbine)	270 mbar	

Mitre Saw		
MODEL NO.	GCM 10 MX	
BRAND	BOSCH	
Cutting capacity, 0°	103 x 341 mm	
Cutting capacity, 45° mitre	104 x 240 mm	
Cutting capacity, 45° incline	51 x 341 mm	
Mitre setting	52 ° L / 60 ° R	
Bevel setting	47 ° L / 47 ° R	
No-load speed	3.800 rpm	
Saw blade diameter	305 mm	
Saw blade bore diameter	30 mm	

Rotary Tool Kit		
MODEL NO.	4000-6/50	
BRAND	DREMEL	
Cord Length:	6ft	
Speed:	5,000 to 35,000 RPM	
Tool Level:	1 - Corded – variable speed high	
Weight:	1.3kg	
Amperage:	1.6	
Length:	6"	

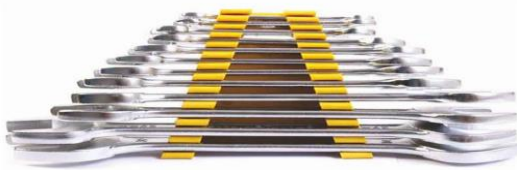


Model number	15-265-23
Brand	Stanley
Depth of Throat	98mm / 3.85 Inch
Blade Length	254mm / 10 Inch

<p>Junior Hacksaw</p> 	<table border="1"> <tr> <td>Model number</td> <td>0-15-218</td> </tr> <tr> <td>Brand</td> <td>Stanley</td> </tr> <tr> <td>Blade Length</td> <td>150mm/6 inch</td> </tr> </table>	Model number	0-15-218	Brand	Stanley	Blade Length	150mm/6 inch				
Model number	0-15-218										
Brand	Stanley										
Blade Length	150mm/6 inch										
<p>Mini Hacksaw</p> 	<table border="1"> <tr> <td>Model number</td> <td>0-20-807</td> </tr> <tr> <td>Brand</td> <td>Stanley</td> </tr> <tr> <td>Blade Length (in)</td> <td>10 in</td> </tr> <tr> <td>Handle Material</td> <td>Metal</td> </tr> <tr> <td>Overall Length (in)</td> <td>11 in</td> </tr> </table>	Model number	0-20-807	Brand	Stanley	Blade Length (in)	10 in	Handle Material	Metal	Overall Length (in)	11 in
Model number	0-20-807										
Brand	Stanley										
Blade Length (in)	10 in										
Handle Material	Metal										
Overall Length (in)	11 in										
<p>CLAW HAMMER STEEL SHAFT</p> 	<table border="1"> <tr> <td>Model number</td> <td>51-152</td> </tr> <tr> <td>Brand</td> <td>Stanley</td> </tr> <tr> <td>Weight</td> <td>8 Oz / 220 gms</td> </tr> <tr> <td>Dimensions</td> <td>27.8 x 12.4 x 3.6 cm</td> </tr> </table>	Model number	51-152	Brand	Stanley	Weight	8 Oz / 220 gms	Dimensions	27.8 x 12.4 x 3.6 cm		
Model number	51-152										
Brand	Stanley										
Weight	8 Oz / 220 gms										
Dimensions	27.8 x 12.4 x 3.6 cm										
<p>BALL PEIN HAMMER</p> 	<table border="1"> <tr> <td>Model number</td> <td>54-106</td> </tr> <tr> <td>Brand</td> <td>Stanley</td> </tr> <tr> <td>Weight</td> <td>110 gms</td> </tr> <tr> <td>Dimensions</td> <td>32.6 x 10 x 2 cm</td> </tr> </table>	Model number	54-106	Brand	Stanley	Weight	110 gms	Dimensions	32.6 x 10 x 2 cm		
Model number	54-106										
Brand	Stanley										
Weight	110 gms										
Dimensions	32.6 x 10 x 2 cm										
<p>Rubber mallet</p> 	<table border="1"> <tr> <td>Model number</td> <td>57-527</td> </tr> <tr> <td>Brand</td> <td>Stanley</td> </tr> <tr> <td>Weight</td> <td>450gms</td> </tr> <tr> <td>Dimensions</td> <td>33.6 x 9.6 x 6.2 cm</td> </tr> </table>	Model number	57-527	Brand	Stanley	Weight	450gms	Dimensions	33.6 x 9.6 x 6.2 cm		
Model number	57-527										
Brand	Stanley										
Weight	450gms										
Dimensions	33.6 x 9.6 x 6.2 cm										

Ring spanner set 12Pcs

Model No.	70-395E
Brand	Stanley
Weight	3.08 Kg
Pc/Set	12 pcs
Size	6mm to 32mm

Open end spanner set 12pcs

Model No.	70-380E
Brand	Stanley
Weight	1.74 Kg
Pc/Set	12 pcs
Size	6mm to 32mm

Combination Spanner set 8Pcs

Model No.	70-963E
Brand	Stanley
Weight	649 g
Pc/Set	8 pcs
Size	8mm to 19mm

Allen Hex Key 10pcs

Model No.	69-213-22
Brand	Stanley
Hex Key Size	1.5mm, 2mm, 2.5mm, 3mm ,4mm, 5mm, 5.5mm, 6mm, 8mm, 10mm
Pc/Set	10pcs

Allen key 12pcs ball type



Model No.	69-257
Brand	Stanley
Ball Key Size	1/16",5/64",3/32",7/64",1/8",9/64",>5/32",3/16",7/32",1/4",5/16",3/8"
Pc/Set	12pcs

Combination pliers



Model No.	70-461
Brand	Stanley
weight	422 g
Size	8 inch / 200 mm

Long Nose pliers



Model No.	70-483
Brand	Stanley
weight	399 g
Size	180mm / 6"

Circlip -Bent pliers



Model No.	84-338-23
Brand	Stanley
Size	130mm/5"

Circlip-straight






Model No.	84-362-23
Brand	Stanley
Size	130mm/5"

Diagonal Cutting Pliers



Model No.	STHT84108-8
weight	281 g

	Size	180mm/6"
Wire stripper 	Model No.	84-213
	Brand	Stanley
Adjustable Spanner 	Model No.	STMT87431-8
	Brand	Stanley
	Weight	299 g
	Size	180mm / 6"
Pipe Wrench 	Model No.	71642
	Brand	Stanley
	Size	300 mm/12

C-Clamp

Model No.	0-83-033
Brand	Stanley
Size	75mm/3inch

C-Clamp

Model No.	0-83-035
Brand	Stanley
Size	100mm/6inch

Snap-Off Knife

Model No.	10-418
Brand	Stanley
Blade Width	18mm

16pcs screw driver set

Model No.	68-0002C
Brand	Stanley
Pieces per set :	16 Pcs

9ways screw driver

Model number	STHT62511-8
Brand	Stanley
Pieces per set :	10 Pcs

6pcs precision screw driver set



Model No.	66-039
Brand	Stanley
Pieces per set :	6 Pcs

Maxsteel Snip Cutter



Model No.	14-556-22
Brand	Stanley

PVC pipe cutter



Model number	14-442
Brand	Stanley
Overall Length :	42 mm

Hot glue gun



Model number	69-GR20B
Brand	Stanley
Power :	40W
Weight :	381 g

Black & Decker 126 Pieces Tool Kit



Model number	BMT126C
Brand	Black & Decker
Weight	2.22 Kg

Small File set



Brand	Thunderbolt
Length	160mm,

Big File set



Brand	Thunderbolt
Length	200mm

Chisel set



Model number	16-089
Brand	Stanley
Weigh	340 g

Punch set



Model number	16-226
Brand	Stanley
Weigh	399 g

Syringes

Brand	Local
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Bench Wise

Brand	JET
Base Type	Fixed
Size	2 3/8 Inch
Jaw Width	60mm

Drill bit set

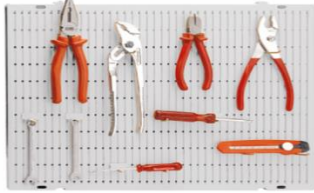
Brand	Local
Width Across Flat (mm) :	1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10, 10.5, 11, 11.5, 12, 12.5, 13
Weight kg :	1.3
Size (mm) :	205x115x55

Baby Wise

Brand	JET
Vice Type :	Bench
Size :	2 Inch
Jaw Width :	50 mm

Pegboard

Brand	Alkon
Art No	MDB-500
Size	505 x 390 mm



Safety Equipment's

GOGGLES



Model No.	1709IN
BRAND	3M

APRON



Model number	-
BRAND	Local

EAR MUFF



Model number	1436
BRAND	3M

MASK



Model number	9004V
BRAND	3M

FIRE EXTINGUISHER



BRAND	ABC
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FIRST AID KIT



Brand	-
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GLOVES



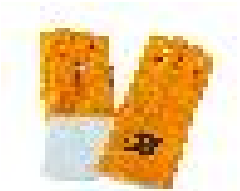
Brand	Honeywell
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Welding Helmet



BRAND	ESAB
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Welding Gloves



BRAND	ESAB
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ELECTRONICS AND ELECTRICAL MACHINES

SOLDERING STATION



Technical specification:

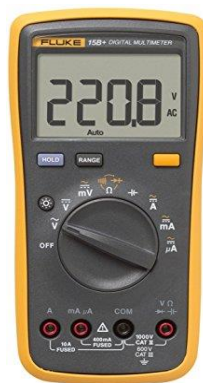
Brand	WELLER
Model No	WE 1010
Soldering Power	70W
Power Supply	120V /60 Hz
Temperature	Range: 200 to 850 F Accuracy: +- 5 Deg C Stability: +-6 Deg C
Display	LCD
Dimension	5.91x4.92x3.94 inches
Weight	1.4 KG

Desoldering Rework Station:**Technical specification:**

MAKE	WELLER
MODEL	WR 2002 (DSX80/WP80)
Channels	2
Temperature range (depends on tool) °C	50 - 550
Temperature range (depends on tool) °F	150 - 950
Temperature accuracy °C	±9
Temperature accuracy °F	±17
Temperature stability °C	±2
Temperature stability °F	±4
Protection class	I
Fuse	T500 mA (230V / 50/60 Hz)
Fuse overcurrent release	1,6 A
Power output	250 W
Voltage	230 V

Dimensions W x D x H (mm)	273 x 235 x 102
Temperature control of channels	Soldering and desoldering tool, continuously variable from 50°C –


DIGITAL MULTIMETER:



Technical specification:

Brand	Fluke
Model No	FLUKE-15B+
Count	4000
Voltage: DC	1000 volts
Voltage AC	1000 volts
DC Accuracy	± 0.5% + 3 digit
AC Accuracy	± 1% +3 digit
Current: DC	10 AMPS
Current AC	10 AMPS
DC Accuracy	± 1.5% + 3 digit
AC Accuracy	± 1.5% + 3 digit
Resistance	40M ohm
Resistance Accuracy	1.5% + 3 digit
Capacitance	1000 µF
Capacitance accuracy	± 5% + 5 digit
50 percent bigger display with bright white backlight Voltage, resistance, continuity, capacitance measurement Input terminal for AC and DC current measurements upto 10 A current Diode test, data hold, min/max	

DIGITAL OSCILLOSCOPE

Model	1102C
Make	Tektronics
	
Bandwidth	100 MHz
Channels	2
Sample Rate	1 GS/s
Record Length	20 K points
Vertical resolution	8 bits
Input sensitivity range	1 mV/div to 10 V/div max. in 1-2-5 sequence with probe attenuation set to 1X
DC gain accuracy	$\pm 3.0\%$ step gain, derated at $0.1\%/^{\circ}\text{C}$ above 30°C
Maximum Input Voltage	300 VRMS, Installation Category II; derate above 4 MHz at 20 dB per decade to 200 MHz
Bandwidth limit	20 MHz (Typ)
Input coupling	DC, AC
Input impedance	$1\text{ M}\Omega \pm 2\%$ in parallel with $14\text{ pF} \pm 2\text{ pF}$
Vertical zoom	Vertically expand or compress a live or stopped waveform
Display Type	7-inch TFT Color Display
Display Resolution	800 horizontal by 480 vertical displayed pixels (WVGA)
Waveform styles	Vectors, Variable persistence, and Infinite persistence
Format	YT and XY
Power source	45 Hz to 65 Hz (100 to 240 V) 360 Hz to 440 Hz (100 to 132 V)
Power consumption	30 W maximum


POWER SUPPLY



Technical specification:

Make	Keitley
Model	2231A
Output Voltage	0 → 30V
Output Current	3A
Bench Power Supply Type	Triple Output DC Power Supply
Number of Outputs	3
Type	Analogue, Digital
Power Rating	195W
Supply Voltage	110 → 230V ac
Number of Displays	3
Input Connector	IEC 320
Output Connector	Binding Post Terminal

FUNCTION GENERATOR:

MODEL	AFG 1022
MAKE	Tektronix
	
Maximum Frequency	10 MHz, 12.5 MHz, 25 MHz
Minimum Frequency	1 μ Hz, 1 mHz
Maximum Frequency Triangle Ramps	1MHz
Number of Channels	2
Minimum Frequency Triangle Ramps	1 μ Hz
Maximum Sampling Frequency	125Msps
Resolution	12 Digit
Pulse Resolution	5Digit
Maximum Pulse Width	999000s
Minimum Pulse Width	40ns
Arbitrary Waveforms	Yes
Display Type	3.95 in TFT-LCD
Rise - Fall Time	<10 ns, <12 ns
Sweep	Linear, Logarithmic
Maximum Storage	50
Dimensions	235 x 295 x 110mm
Connector Type	BNC
Data Entry	Keypad
Inputs	Modulation In, Reference In, Trig In
Length	235mm
Width	295mm
Height	110mm
Minimum Operating Temperature	0°C
Interface Type	USB
Maximum Operating Temperature	+40°C
Weight	3.4kg

CONSUMABLES**ELECTRONICS CONSUMABLES**

1	Arduino UNO (Original)	20
2	Arduino NANO (Original)	5
3	Arduino Mega (Original)	5
3	Raspberry Pi Model 4B	5
4	ESP8266 Node MCU	5
5	ESP32 Development Board	5
6	Voltage Regulator Module	5
7	Mini Micro Submersible Water Pump	5
8	Piezoelectric Plate	5
9	8*8 LED Matrix Module	5
10	Bluetooth	5
11	7 Segment LED Display	5
12	GSM/GPRS/GPS Module	5
13	Laser Module	5
14	LDR Module	5
15	4×4 Matrix Keypad	5
16	Joy Stick Module	5
17	Active Buzzer(BIG)	5
18	Active Buzzer(SMALL)	5
19	Motor Driver	5
20	Sound Playback Module	5
21	BO Motors	5
22	Vibrating Motor	5
23	Capacitive Touch Switch	5
24	IR Sensors (Obstacle Sensors)	5
25	Triple Axis Magnetometer	5
26	Humidity Sensor	5
27	MQ-2	5
28	MQ-3	5
29	MQ-4	5
30	MQ-5	5
31	MQ-7	5
32	Ultrasonic Sensor Module	5
33	Triple Axis accelerometer	5
34	PIR Motion Detector Module	5
35	Pulse Rate Heart Sensor	5
36	Relay Module	5

37	Soil Moisture Sensor	5
38	Touch Sensor	5
39	Rain Drop Sensor	5
40	Flex Sensor	5
41	Temperature Sensor	5
42	Force Pressure Sensor	5
43	Colour Recognition Sensor.	5
44	Water Flow Sensor	5
45	Sound Sensor	5
46	IR Sensor Array for Line Following	5
47	RFID Reader-Tags	5
	RF Modules Tx& Rx 315 MHz ASK	
48	Stepper motor with Driver Board	4
49	Servo Motor 360 rotation	5
50	Servo Motor 180 rotation	20
51	Metal Gear Servo Motor (180° Rotation)	20
52	Solder Wire 100gm	5
53	Solder Flux	5
54	830 Points Solderless Breadboard	5
55	400 Points Solderless Breadboard	5
56	Copper Clad Board single side	5
57	Copper clad board double side	5
58	Zero PCB Board	5
59	Male to Male Breadboard Jumper	5
60	Female to Female Breadboard Jumper	5
61	Male to Female Breadboard Jumper	5

MECHANICAL CONSUMABLES

1	3D Printer spool ABS 1.75 mm	5
2	3D Printer spool PLA 1.75 mm	5
3	3D Printer spool Advance materials (Nylon, PVA, TPU)	5
4	Acrylic sheet 3mm (600* 900 mm)	10
5	Acrylic sheet 6mm (600* 900 mm)	10
6	Vinyl Roll 50feet	3
7	MDF Sheet 3mm (600* 900 mm)	10

8	MDF Sheet 6mm (600* 900 mm)	10
9	Plywood Sheet 6mm (1200* 1200 mm)	10
10	Plywood Sheet 12 mm (1200* 1200 mm)	10
11	Resin Wood 30mm (200* 200 mm)	10
12	Grinding wheel	25
13	Cutting wheel	100
14	Double sided tape	10
15	Masking tape	5 rolls
16	Fevicol 1kg	5
17	Fevibond 100gm	20
18	Acetone 500ml	5
19	Glue stick	200
20	Cutting mat A2 size	5
21	Balsa wood sheet 3mm*1000mm*100mm	10
22	Dremel 4000 Accessories kit	2
23	Jigsaw Blade	5
24	Resin 500 ml	5
25	Aluminum rod 20cm	5
26	Aluminum Block 100*100*10mm	5
27	MIG Welding spool	2

WORKBENCH AND STORAGE

ESD WORKSTATION:



Technical specification:

Model No	AWS 12060SP
Brand	SHARANG
Size	Table Top 1200 mm x 600 mm over all Height 1500 mm

Mechanical work Bench



Technical Specifications

Brand	Furnace
Material	Mild Steel
Type	CRCA
Color	Silver, Grey, Blue, Black, White, etc.
Brand	Furnace

Delivery Time	2 weeks
Finish	Powder Coated
Usage/Application	Industrial /Laboratory
Height	3-5 feet
Width	5 to 8 feet
Depth	2.5 feet

Storage Unit



SPECIFICATION

Make	Alkon
Size	300x900x1800 mm
Number of Shelves	5
Capacity	300 Kg
<ul style="list-style-type: none"> • Shelves are Adjustable • Optionally Door with Lock Available. • Dust Free Storage • Space Saving • Lockable Bins with Strippers • Powder Coated <p style="text-align: center;">Add-On Shelving Systems are possible</p>	

COMPONENT ORGANIZER :



SPECIFICATION :

- Cabinet Size : 40 x 25 x 16 cms
- Drawer Size: 15 x 7.5 x 3.5 cms
- Suitable for homes, workshops and factories Comes with clear visibility through plastic drawers

Electronic Dry Storage Cabinet:



SPECIFICATION :

Brand	HINISO
Style	Digital
Material	Metal
Colour	Black
Item Dimensions LxWxH	38 x 39 x 100 Centimeters

- Dry Cabinet by HINISO has thermoelectric cooling technology (also referred as semiconductor) which is quick, quiet, heatless and therefore

protects your items from moisture, moth, mildew, rust, dust, mold, fungus, rust, oxidation, warping and etc.

- This camera lens storage is one of the safest dry boxes available - it has safe direct current input therefore there is no leakage risks and potential fire danger, moreover, you can place this camera dry box in your bedroom or babyroom without worrying about the radiation
- Our camera dry cabinet has humidity sensor which offers accurate humidity control with plus/minus 5 percent differ, you can control the relative humidity level inside this camera lens storage in the range of 25 to 60 percent

TOOL TROLLEY



SPECIFICATION :

- Size: 698x477x973MM
- No of drawers: 4
- Ball bearing slides for smooth and heavy loading drawer operation
- ABS top tray
- Side folding shelf
- Lockable wheel with rubber castors
- Lockable drawers
- Rubber bumpers on corners
- Side can & Screwdriver holders