



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

DEPARTMENT OF MECHANICAL ENGINEERING

ENGINEERING WORKSHOP-I LABORATORY

The Engineering Workshop Practice for engineers is a training lab course spread over entire semester. The modules include training on different trades like Fitting, Carpentry, Black smithy which makes the students to learn how various joints are made using wood and other metal pieces.

List of Equipment

| S. No | Item | Make | No. of Units | Cost per Unit (Rs.) | Total Cost (Rs.) |
|------------------|---|-------------------------|--------------|---------------------|------------------|
| CARPENTRY | | | | | |
| 1 | Carpentry vice | TAS Trading Corporation | 24 | 2900 | 69,600 |
| 2 | Metal Jack plane | TAS Trading Corporation | 10 | 825 | 8250 |
| 3 | Try Square (150 mm) | TAS Trading Corporation | 12 | 140 | 1680 |
| 4 | Hand Saw (300 mm) | TAS Trading Corporation | 10 | 140 | 1400 |
| 5 | Firmer chisel 1 | TAS Trading Corporation | 12 | 200 | 2400 |
| 6 | Firmer chisel 2 | TAS Trading Corporation | 12 | 220 | 2640 |
| 7 | Steel Rulers (300 mm) | TAS Trading Corporation | 20 | 30 | 600 |
| 8 | Wooden mallet (round) | TAS Trading Corporation | 10 | 105 | 1050 |
| 9 | Wooden rasp files | TAS Trading Corporation | 12 | 390 | 4680 |
| FITTING | | | | | |
| 10 | Wire brushes | TAS Trading Corporation | 12 | 45 | 540 |
| 11 | Flat rough files (300 mm) | TAS Trading Corporation | 12 | 350 | 4200 |
| 12 | Flat files (smooth) Single cut (250 mm) | TAS Trading Corporation | 12 | 200 | 2400 |
| 13 | Surface plate, Angle Plate, Vernier Height gauge | TAS Trading Corporation | 1 | 12500 | 12500 |
| 14 | Try Square (100 mm) | TAS Trading Corporation | 12 | 150 | 1800 |
| 15 | Hammers (1 lb) Ball peen | TAS Trading Corporation | 15 | 150 | 2250 |
| 16 | Dot punch (4") | TAS Trading Corporation | 3 | 50 | 150 |
| 17 | Hacksaw Frames (Fixed) | TAS Trading Corporation | 12 | 150 | 1800 |
| 18 | Hacksaw blades | TAS Trading Corporation | 15 | 450 | 6750 |

| | | | | | |
|------------------------|--------------------------|-------------------------|----|-------|-------|
| 19 | Flat round file (200 mm) | TAS Trading Corporation | 12 | 200 | 2400 |
| 20 | Round file (250 mm) | TAS Trading Corporation | 12 | 320 | 3840 |
| 21 | Scribers | TAS Trading Corporation | 15 | 22 | 330 |
| 22 | Bench Drilling Machine | Jafuji | 1 | 15000 | 15000 |
| 23 | Shaping Machine | OMEGA | 1 | 62560 | 62560 |
| HOUSE WIRING | | | | | |
| 24 | Cutting Pliers | TAS Trading Corporation | 8 | 200 | 1600 |
| 25 | Testers | TAS Trading Corporation | 15 | 50 | 750 |
| 26 | Screw Drivers | TAS Trading Corporation | 8 | 50 | 400 |
| 27 | Insulation cutters | TAS Trading Corporation | 8 | 160 | 1280 |
| 28 | Noise Pilers | TAS Trading Corporation | 5 | 150 | 750 |
| BLACK SMITHY | | | | | |
| 29 | Anvils | TAS Trading Corporation | 1 | 2000 | 2000 |
| 30 | Swage Block | TAS Trading Corporation | 1 | 2000 | 2000 |
| 31 | Sledge Hammer (10 lb) | TAS Trading Corporation | 8 | 250 | 2000 |
| 32 | Flatters | TAS Trading Corporation | 8 | 400 | 3200 |
| 33 | Flat tongs | TAS Trading Corporation | 8 | 400 | 3200 |
| 34 | Hand Gloves | TAS Trading Corporation | 8 | 75 | 600 |
| 35 | Heating Furnace | TAS Trading Corporation | 1 | 32000 | 32000 |
| TIN SMITHY | | | | | |
| 36 | Straight snips | TAS Trading Corporation | 15 | 250 | 3750 |
| 37 | Curved Snips | TAS Trading Corporation | 6 | 250 | 1500 |
| 38 | Scribers | TAS Trading Corporation | 12 | 25 | 300 |
| 39 | Nylon tip hammers | TAS Trading Corporation | 12 | 120 | 1440 |
| 40 | Hand shearing machine | TAS Trading Corporation | 1 | 3500 | 3500 |
| 41 | Mandrels | TAS Trading Corporation | 10 | 250 | 2500 |
| 42 | Leg shearing machine | TAS Trading Corporation | 1 | 39000 | 39000 |
| WELDING SECTION | | | | | |
| 43 | Wire brush | TAS Trading Corporation | 17 | 51 | 867 |

| | | | | | |
|---|-----------------|-------------------------|---|----------|-------------------|
| 44 | Goggles | TAS Trading Corporation | 5 | 30 | 150 |
| 45 | Gloves | TAS Trading Corporation | 5 | 50 | 750 |
| 46 | Chipping Hammer | TAS Trading Corporation | 5 | 100 | 500 |
| 47 | Hand Shield | TAS Trading Corporation | 5 | 200 | 1000 |
| 48 | Lathe Machines | Anil Engineering | 1 | 1,80,000 | 1,80,000 |
| Total Cost (Rs.) | | | | | 4,93,857/- |
| <i>(In Words: Rupees Four lakhs ninety-three thousand eight hundred and fifty-seven only)</i> | | | | | |

HOD, ME



INSTITUTE OF AERONAUTICAL ENGINEERING

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DEPARTMENT OF MECHANICAL ENGINEERING

ENGINEERING WORKSHOP-II LABORATORY

The Engineering Workshop Practice for engineers is a training lab course spread over entire semester. The modules include training on different trades like Fitting, Carpentry, Black smithy which makes the students to learn how various joints are made using wood and other metal pieces.

List of Equipment

| S. No | Item | Make | No. of Units | Cost per Unit (Rs.) | Total Cost (Rs.) |
|------------------|---|-------------------------|--------------|---------------------|------------------|
| CARPENTRY | | | | | |
| 1 | Carpentry vice | TAS Trading Corporation | 24 | 2900 | 69,600 |
| 2 | Metal Jack plane | TAS Trading Corporation | 10 | 825 | 8250 |
| 3 | Try Square (150 mm) | TAS Trading Corporation | 12 | 140 | 1680 |
| 4 | Hand Saw (300 mm) | TAS Trading Corporation | 10 | 140 | 1400 |
| 5 | Firmer chisel 1 | TAS Trading Corporation | 12 | 200 | 2400 |
| 6 | Firmer chisel 2 | TAS Trading Corporation | 12 | 220 | 2640 |
| 7 | Steel Rulers (300 mm) | TAS Trading Corporation | 20 | 30 | 600 |
| 8 | Wooden mallet (round) | TAS Trading Corporation | 10 | 105 | 1050 |
| 9 | Wooden rasp files | TAS Trading Corporation | 12 | 390 | 4680 |
| FITTING | | | | | |
| 10 | Wire brushes | TAS Trading Corporation | 12 | 45 | 540 |
| 11 | Flat rough files (300 mm) | TAS Trading Corporation | 12 | 350 | 4200 |
| 12 | Flat files (smooth) Single cut (250 mm) | TAS Trading Corporation | 12 | 200 | 2400 |
| 13 | Surface plate, Angle Plate, Vernier Height gauge | TAS Trading Corporation | 1 | 12500 | 12500 |
| 14 | Try Square (100 mm) | TAS Trading Corporation | 12 | 150 | 1800 |
| 15 | Hammers (1 lb) Ball peen | TAS Trading Corporation | 15 | 150 | 2250 |
| 16 | Dot punch (4") | TAS Trading Corporation | 3 | 50 | 150 |
| 17 | Hacksaw Frames (Fixed) | TAS Trading Corporation | 12 | 150 | 1800 |
| 18 | Hacksaw blades | TAS Trading Corporation | 15 | 450 | 6750 |

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|------------------------|--------------------------|-------------------------|----|-------|-------|
| 19 | Flat round file (200 mm) | TAS Trading Corporation | 12 | 200 | 2400 |
| 20 | Round file (250 mm) | TAS Trading Corporation | 12 | 320 | 3840 |
| 21 | Scribers | TAS Trading Corporation | 15 | 22 | 330 |
| 22 | Bench Drilling Machine | Jafuji | 1 | 15000 | 15000 |
| 23 | Shaping Machine | OMEGA | 1 | 62560 | 62560 |
| HOUSE WIRING | | | | | |
| 24 | Cutting Pliers | TAS Trading Corporation | 8 | 200 | 1600 |
| 25 | Testers | TAS Trading Corporation | 15 | 50 | 750 |
| 26 | Screw Drivers | TAS Trading Corporation | 8 | 50 | 400 |
| 27 | Insulation cutters | TAS Trading Corporation | 8 | 160 | 1280 |
| 28 | Noise Pilers | TAS Trading Corporation | 5 | 150 | 750 |
| BLACK SMITHY | | | | | |
| 29 | Anvils | TAS Trading Corporation | 1 | 2000 | 2000 |
| 30 | Swage Block | TAS Trading Corporation | 1 | 2000 | 2000 |
| 31 | Sledge Hammer (10 lb) | TAS Trading Corporation | 8 | 250 | 2000 |
| 32 | Flatters | TAS Trading Corporation | 8 | 400 | 3200 |
| 33 | Flat tongs | TAS Trading Corporation | 8 | 400 | 3200 |
| 34 | Hand Gloves | TAS Trading Corporation | 8 | 75 | 600 |
| 35 | Heating Furnace | TAS Trading Corporation | 1 | 32000 | 32000 |
| TIN SMITHY | | | | | |
| 36 | Straight snips | TAS Trading Corporation | 15 | 250 | 3750 |
| 37 | Curved Snips | TAS Trading Corporation | 6 | 250 | 1500 |
| 38 | Scribers | TAS Trading Corporation | 12 | 25 | 300 |
| 39 | Nylon tip hammers | TAS Trading Corporation | 12 | 120 | 1440 |
| 40 | Hand shearing machine | TAS Trading Corporation | 1 | 3500 | 3500 |
| 41 | Mandrels | TAS Trading Corporation | 10 | 250 | 2500 |
| 42 | Leg shearing machine | TAS Trading Corporation | 1 | 39000 | 39000 |
| WELDING SECTION | | | | | |
| 43 | Wire brush | TAS Trading Corporation | 17 | 51 | 867 |

| | | | | | |
|---|-----------------|-------------------------|---|----------|-------------------|
| 44 | Goggles | TAS Trading Corporation | 5 | 30 | 150 |
| 45 | Gloves | TAS Trading Corporation | 5 | 50 | 750 |
| 46 | Chipping Hammer | TAS Trading Corporation | 5 | 100 | 500 |
| 47 | Hand Shield | TAS Trading Corporation | 5 | 200 | 1000 |
| 48 | Lathe Machines | Anil Engineering | 1 | 1,80,000 | 5,40,000 |
| Total Cost (Rs.) | | | | | 4,93,857/- |
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DEPARTMENT OF MECHANICAL ENGINEERING

ENGINEERING WORKSHOP-III (Manufacturing Practices)

The Engineering Workshop Practice for engineers is a training lab course spread over entire semester. The modules include training on different trades like Fitting, Carpentry, Black smithy which makes the students to learn how various joints are made using wood and other metal pieces. The student will also get exposure to that latest art of equipment's which include laser engraving cutting machine, five axis vertical CNC router, 3D printing machine and conventional machine tool equipment.

List of Equipment

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|------------------|---|-------------------------|--------------|---------------------|------------------|
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| 1 | Carpentry vice | TAS Trading Corporation | 24 | 2900 | 69,600 |
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| 8 | Wooden mallet (round) | TAS Trading Corporation | 10 | 105 | 1050 |
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| 14 | Try Square (100 mm) | TAS Trading Corporation | 12 | 150 | 1800 |
| 15 | Hammers (1 lb) Ball peen | TAS Trading Corporation | 15 | 150 | 2250 |
| 16 | Dot punch (4") | TAS Trading Corporation | 3 | 50 | 150 |

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| 17 | Hacksaw Frames (Fixed) | TAS Trading Corporation | 12 | 150 | 1800 |
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| BLACK SMITHY | | | | | |
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| WELDING SECTION | | | | | |
|---|-----------------|-------------------------|----|----------|-------------------|
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