

Specifications FOR TOOLS

1. Multimeter Testers (x2)

- **Type:** Digital Multimeter (DMM), True RMS.
- **Safety Rating:** CAT III and CAT IV 600V (essential for industrial environments and local safety standards).
- **Measurement:** AC/DC Voltage (up to 1000V), AC/DC Current (up to 10A direct, higher with clamp accessory), Resistance, Continuity with audible alert, Diode Test, Capacitance, Frequency.
- **Features:** Auto-ranging, backlight, Min/Max/Average recording, Low Input Impedance (LoZ) to prevent ghost readings, data hold.
- **Durability:** Robust casing, often IP-rated for dust/water resistance.

2. Current Testers (x2)

- **Type:** Digital Clamp Meter, True RMS.
- **Safety Rating:** CAT III 600V and CAT IV 300V (minimum for local standards).
- **Current Measurement:** AC/DC Current (up to 600A fixed jaw, up to 2500A AC with flexible probe).
- **Voltage Measurement:** AC/DC Voltage (up to 600V/1000V).
- **Features:** Inrush current measurement, resistance, continuity, capacitance, backlight, data hold, often Bluetooth connectivity for logging.
- **Jaw Opening:** Sufficient for common cable sizes in SA.

3. Pliers Compound 3 Piece Set 200mm (x2)

- **Types (Typical Set):** Combination Pliers, Long-Nose Pliers, Side Cutter
- **Insulation:** VDE-certified 1000V AC / 1500V DC
- **Material:** High-grade special tool steel, oil-hardened.
- **Cutting Edges:** Induction hardened for long life and precision.
- **Joint:** Precision, smooth operation.
- **Ergonomics:** Multi-component, non-slip handles.

4. Lugs Crimper (x2)

- **Range:** 6 – 50mm²
- **Weight:** 1.2kg
- **Length:** 390mm
- Must be a range adjustment
- Rotate 360

5. Screwdrivers Insulated Magnetic Tips (x2)

- **Type:** VDE Insulated Screwdriver Set (Magnetic tip in flat and hexagonal types).
 - **Insulation:** VDE-certified 1000V AC / 1500V DC insulation, often integrated into the blade.
 - **Tips:** Magnetic for screw retention, precision-machined from high-alloy steel (Chrome Vanadium Molybdenum).
 - **Handle:** Multi-component ergonomic design for comfort, power transmission, and anti-roll.
 - **Set Content:** Includes common Slotted, Phillips, Pozidriv, and Torx sizes relevant to local electrical fittings.

6. Socket Set from 8-24 (x2)

- **Type:** Metric Socket Set (likely 1/2" and 3/8" drive).
 - **Drive Size:** 1/2-inch drive for robustness in the 8-24mm range, suitable for common fasteners in electrical enclosures/mountings.
 - **Material:** High-performance Chrome Vanadium Steel or Chrome Molybdenum Steel.
 - **Sockets:** 6-point (preferred for better grip and less stripping).
 - **Ratchet:** Fine-tooth mechanism (72-tooth+), quick-release.
 - **Accessories:** Includes various extensions, universal joint, possibly a sliding T-bar.
 - **Case:** Durable, well-organized case for tool control.

7. Cordless Grinder (x2)

- **Type:** Angle Grinder (Cordless, typically 18V and 20V system).
 - **Voltage/Motor:** 18V/20V Li-ion battery system, **Brushless Motor** (essential for power, runtime, durability).
 - **Disc Diameter:** 115mm (4.5") and 125mm (5").
 - **RPM:** High RPM (8,500 - 9,000 RPM no-load).
 - **Safety Features:** Electronic brake (stops wheel quickly), Kickback Control, Restart Protection, No-lock paddle switch (preferred by some).
 - **Battery System:** Includes at least two high-capacity batteries (5.0 Ah+) and a fast charger compatible with the brand's platform.

8. Cordless Drill (x2)

- **Type:** Cordless Drill/Driver (18V and 20V Li-ion battery system).
 - **Voltage/Motor:** 18V/20V Li-ion, **Brushless Motor**.
 - **Chuck:** 13mm (1/2") all-metal keyless chuck.
 - **Torque:** High max torque (60-120 Nm) with multiple clutch settings.
 - **Speed:** Two-speed all-metal gearbox (0-550 / 0-2000 RPM).
 - **Function:** Hammer drill function (highly recommended for electrical for masonry drilling).
 - **Features:** LED work light, compact and ergonomic design.
 - **Battery System:** Includes at least two high-capacity batteries (5.0 Ah+) and a fast charger.

9. Hacksaw (x2)

- **Type:** Hand Hacksaw.
 - **Frame:** Robust, high-tension frame (tubular steel) for rigidity and straight cuts.
 - **Blade Tension:** High-tension mechanism (up to 100kg).
 - **Blade Compatibility:** Accepts standard 12-inch (300mm) hacksaw blades.
 - **Ergonomics:** Comfortable, non-slip handle.
 - **Blades:** Include high-quality bi-metal blades (24 TPI and 32 TPI), suitable for cutting conduit and trunking.

10. Hammers (Ball Peen Hammer, Claw Hammer) (x2)

- **Ball Peen Hammer:**
 - **Weight:** 16 oz and 24 oz (versatile for electrical fitting work).
 - **Construction:** One-piece forged steel (Estwing) or high-quality fiberglass handle.
 - **Face:** Hardened and polished.
 - **Grip:** Shock-reducing, ergonomic grip.
- **Claw Hammer:**
 - **Weight:** 16 oz and 20 oz (16 oz for general purpose, 20 oz for slightly heavier tasks).
 - **Construction:** One-piece forged steel and durable fiberglass handle.
 - **Claw:** Curved claw for nail pulling.
 - **Face:** Smooth face (to prevent marring).
 - **Grip:** Ergonomic, shock-absorbing grip.

11. Shifting Spanners, 300mm (x2)

- **Type:** Adjustable Wrench (300mm / 12-inch).
- **Material:** High-grade Chrome Vanadium steel.
- **Jaw Capacity:** Sufficient opening for large nuts/bolts (up to 34-40mm).
- **Design:** Slim jaw design for access in confined spaces.
- **Ergonomics:** Comfortable handle, precise jaw mechanism (minimal play).
- **Durability:** Hardened jaws, corrosion-resistant finish.

13. Water Pump Pliers 250mm (x2)

- **Type:** Water Pump Pliers (250mm / 10-inch).
- **Material:** High-grade tool steel, oil-hardened.
- **Jaw Design:** Self-locking on pipes and nuts, aggressive teeth for strong grip.
- **Adjustment:** Multi-position quick adjustment for various opening widths.
- **Ergonomics:** Non-slip, comfortable handles.
- **Safety:** Pinch guard to prevent operators' fingers from being pinched.

14. Long Nose Pliers (x2)

- **Type:** Long-Nose Pliers (Needle-Nose Pliers), often with cutting edges.
 - **Insulation:** (Crucial for electrical) VDE-certified 1000V insulation.
 - **Length:** 200mm (8-inch) and 160mm (6-inch) for finer work.
 - **Material:** High-grade tool steel, oil-hardened.
 - **Jaws:** Fine, long, precision-machined jaws for gripping small components and bending wires in tight spaces.
 - **Cutting Edges:** (If included) Induction hardened for cutting wires.

15. Rapper Tester (x2)

- § Basic circuit continuity check, audible beep, LED indicator, robust leads, battery-powered.
- § Non-contact voltage detection (90-1000V AC), audible and visual indicators, pen-style for portability, CAT IV 1000V safety rating.

16. Cable Knife (x2)

- **Type:** Cable Stripping Knife or Cable Dismantling Tool.
- **Blade:** Hook blade or straight blade with a protective cap.
- **Safety:** VDE-certified insulated handle (for safety when working on potentially live circuits, although always de-energize first).
- **Design:** Ergonomic handle, often with a slip shoe or adjustable cutting depth for precise scoring without damaging inner conductors.

17. Rotary Drill (x2)

- **Type:** Rotary Hammer Drill (essential for drilling into concrete, masonry).
 - **Power:** Corded (800W+) and Cordless (18V/36V/54V Brushless).
 - **Chuck:** SDS Plus (most common for concrete drill bits).
 - **Modes:** Rotary only, Hammer only (for chiseling), Rotary-hammer (for drilling concrete).
 - **Impact Energy:** High impact energy (2.5 Joules+ for SDS Plus).
 - **Features:** Vibration control, LED light, depth gauge.

18. Spanners (8 – 24) (x2)

- **Type:** Combination Spanner Set (one open end, one ring end).
 - **Range:** Metric 8mm to 24mm.
 - **Material:** High-grade Chrome Vanadium Steel, polished and satin finish for corrosion resistance.
 - **Ring End:** 12-point for better grip.
 - **Design:** Slim profile for access in tight spaces, optimized jaw geometry.
 - **Durability:** Precision-forged for strength and long life.

19. Concrete Drill Bits 5mm, 6mm, 8mm, 10mm and 20mm x 250mm (x2)

- **Type:** SDS Plus Carbide-Tipped Hammer Drill Bits.
- **Diameter:** 5mm, 6mm, 8mm, 10mm, 20mm.
- **Length:** 250mm (working length should be sufficient for required depth).
- **Material:** High-quality carbide tip (4-cutter design for clean holes and less jamming), hardened steel body.
- **Design:** Flute design for efficient dust removal.
- **Compatibility:** Must be SDS Plus shank for the Rotary Hammer Drill.

20. Normal Drill Bits for Steel Set from 1.5mm – 12mm (x2)

- **Type:** HSS-Co (Cobalt) or HSS-G (Ground) Drill Bit Set. Cobalt is superior for stainless steel and harder metals.
- **Diameter:** 1.5mm to 12mm (incremental sizes).
- **Material:** High-Speed Steel (HSS) with Cobalt alloy (HSS-Co) for heat resistance and durability when drilling steel. Alternatively, Titanium Nitride (TiN) coated HSS.
- **Shank:** Cylindrical shank for standard drill chucks.
- **Point Angle:** 118° or 135° split point (135° split point is self-centering and good for hard materials).
- **Case:** Durable and organized metal or plastic case.

21. Torches 1800 Lumens 20v Ps work Lamp. (x2)

- **Type:** Cordless LED Work Light/Lamp.
- **Lumen Output:** Minimum 1800 Lumens (or higher for bright work areas).
- **Voltage:** 18V or 20V (compatible with existing cordless tool batteries).
- **Features:**
 - **Adjustable Head/Stand:** For directing light where needed.
 - **Durability:** Robust, impact-resistant casing, often IP-rated for dust/water.
 - **Run Time:** Long run time with a large capacity battery.
 - **Portability:** Compact and easy to carry.
 - **Mounting Options:** Integrated hook, tripod mountable.

22. Bolt Cutter 24" (x2)

- **Type:** Bolt Cutter (600mm / 24-inch).
- **Material:** High-grade chrome vanadium steel jaws, drop-forged for strength.
- **Cutting Capacity:** Specify max cutting diameter for different material hardnesses (soft, medium-hard, hard wire).
- **Leverage:** High leverage design for easy cutting.
- **Handles:** Sturdy handles with comfortable grips.
- **Application:** Cutting threaded rods, heavy gauge wire, small bolts, chains (within capacity).

23. Allen Key Set (x2)

- **Type:** Hex Key Set (often called Allen Keys).
- **Set Type:** L-key set (most common) or Fold-up set.
- **Material:** High-grade steel (Chrome Vanadium Steel or Protanium steel for Bondhus).
- **Tips:** Ball-end on the long arm (highly recommended for angled entry), regular hex on the short arm.
- **Finish:** Black oxide, chrome, or colored for easy identification.
- **Sizes:** Comprehensive metric set (1.5mm to 10mm).
- **Holder:** Durable plastic holder for organization.

General Groundwork & Site Tools (Essential for Electrical Crews on-site):

24. Pick (x4)

- **Type:** Pickaxe (often with a pick/mattock head).
- **Head Weight:** 2.5kg - 3.5kg (5-7 lbs).
- **Material:** Forged, hardened steel head.
- **Handle:** High-quality wooden (Hickory) or fiberglass handle for durability and shock absorption.

25. Shovel (x4)

- **Type:** General Purpose Shovel (Round Mouth)
- **Blade:** Hardened steel, often tempered for strength.
- **Handle:** Long, sturdy wooden or fiberglass handle with a "D" handle or straight handle.
- **Application:** Scooping and moving loose materials (soil, gravel, sand) for trenching or backfilling.

26. Lopping Pruner 770mm (x2)

- **Type:** Bypass or Anvil Lopping Pruner (770mm / ~30-inch length for leverage).
- **Blade:** Hardened, high-carbon steel blades (bypass for clean cuts on live wood, anvil for dry/dead wood).
- **Handles:** Strong, lightweight handles (aluminum) with comfortable grips.
- **Cutting Capacity:** Specify maximum branch diameter (35-50mm).
- **Application:** Trimming branches obstructing overhead lines, clearing vegetation around electrical infrastructure for safety and access.

27. Manual Chain Block 1,5 Ton (1500kg) (x2)

- **Lift Height:** Standard **3 meters (10 feet)** is usually sufficient.
- **Load Chain:** Grade 80 (G80) and Grade 100 (G100) manganese alloy steel, heat-treated and **fine tolerance hoist chain**. This guarantees extreme strength and wear resistance.
- **Braking System:** Double Pawl Fail- Safe brake Mechanism: Essential for maximum safety. If one pawl fails, the other holds the load.
- **Reliable fiction brake:** Ensures consistent and secure load holding.
- **Hooks:** Drop-forged, heat-treated alloy steel hooks on both top (suspension) and bottom (load)
- **Robust safety latches:** On both hooks to prevent accidental unhooking
- **360 – degree** swivelling load hook for easy load positioning.

28. Telescopic Link Stick (x2)

- Voltage level: 3KW/132KV
- Length 15 meters
- Materials: Fiberglass,
- Must come with a yellow bag and end piece, with two operating hook.