NEW!

Vantage® 580

Powerful. Dependable. Safer.

If you are looking for a rugged, reliable and capable welder for a demanding mining or construction site, a dependable hire fleet or for a quick turnaround repair job, the Vantage® 580 has all the power you need and the safety features modern standards demand. New standard features include a battery isolator switch for safer maintenance procedures and a engine stop button to quickly shut the Vantage® 580 down in the event of an emergency.

Simple controls and Chopper Technology® deliver the low maintenance, long service life, easy operation and great arc performance every owner demands in these environments.

This multi-process powerhouse features 500 amps at 100%, or 525 amps at 60% duty cycle, tested at temperatures up to 40°C. Plenty of AC 240V & 415V auxiliary power – this unit delivers 20,000 watts.

You can depend on legendary engine reliability from Perkins® and superior Lincoln arc performance.

Processes

Stick, TIG, MIG, Flux-cored, Gouging

Description

CC CV | DC | 20 kW | D | VRD

Advantage Lincoln

- **Simple to operate**

– Select one of five Process Modes, including CC-Stick, CC-Pipe, CC-Gouging, Touch-Start™ TIG or CV Wire, and then dial in the desired output.

- **Optimised CC-Stick mode**

- CC-Stick mode is optimised for general purpose and E7018 low hydrogen electrodes.

- **Arc control adjustment**

- Produces a soft, buttery arc or a more forceful, digging arc to suit your requirements.

- **Touch-Start™ DC TIG welding**

- Provides easy arc starting that avoids tungsten contamination and the use of high frequency.

- **20kVA of auxiliary power**

- Able to power up to three inverter power sources to give you up to four stick electrode welding arcs for higher productivity. 240V and 415V IP66 rated outlets.

- **Digital Volt/Amp meters**

- Built-in preset function makes it easy to precisely set your procedures.

- **Arc gouging**

- Arc gouging with up to 13mm carbons.

- New carbon arc gouging waveform delivers improved gouging performance including VRD

- **Full instrumentation**

- Fuel, oil pressure, engine temperature gauges and hour meter keep you on top of monitoring engine performance.

- **Perkins® 404D-22T Turbo diesel engine**

- 43 horsepower, liquid-cooled, 4 cylinder Perkins® engine, includes automatic engine idler for greater fuel economy and reduced noise.

- **VRD Device**

- Factory-fitted, built-in voltage reduction device (VRD) offers additional protection for the operator. The VRD operates in the CC mode reducing the OCV to a safer <20 volts, increasing operator safety when welding is performed in environments with increased hazard of electric shock.

- **Stainless steel enclosure**

- Standard stainless steel roof, side panels and engine access door deliver added protection and durability.

- **Lincoln Electric's 3-year, parts and labour warranty**

Order

K2963-1	Vantage® 580

TECHNICAL SPECIFICATIONS

Model	Output Range	CV Output	AC Aux Power*	Rated Output*	Engine Model	No of Cylinders	HP & Speed (rpm)	Weight Kg	Dimensions H x W x D mm
K2963-1	Continuous Control 30-580 Amps CC/CV Range 15 - 200 Amps Touch Start™ TIG Range	14-40 volts	20kW Receptacles 2 x 240V, 15A 1 x 415V, 32A	500A, 40V @ 100% 525A, 39V @ 60% 20-250A DC TIG	Perkins ® 404D-22T Turbo liquid cooled disel engine	4	43 @ 1850	586	913 x 642 x 1524

*Suitable for powering 50/60 Hz equipment

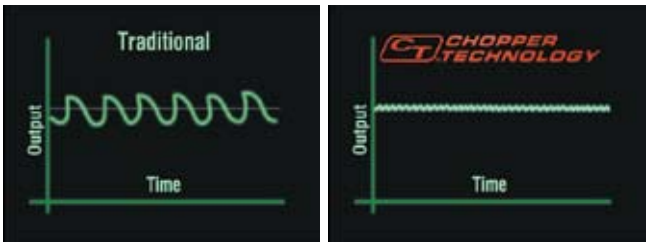
LINCOLN ELECTRIC
THE WELDING EXPERTS®

PERFORMANCE

Arc Performance

- **500 amps @100% duty cycle** and capable of 525 amps at 60% duty cycle with all the benefits of Chopper Technology®. All ratings are at temperatures of 40°C.

WHAT IS CHOPPER TECHNOLOGY®?



Patented and award-winning Lincoln CT Chopper Technology® delivers superior DC arc welding performance for general purpose stick, Downhill Pipe, DC TIG, MIG, cored-wire and arc gouging.

Benefits of Chopper Technology® include:
- Easy arc starting
- Smooth arc action
- Low spatter levels
- Excellent bead appearance

- **Arc Gouging with up to 13mm carbons,** Arc gouging mode is optimised to deliver a more powerful gouging arc, including VRD functions.
- **VRD (Voltage Reduction Device)** reduces OCV (open circuit voltage) in CC-stick welding mode for added safety.
- **CC-Stick mode is optimised** for general purpose stick using E7018 low hydrogen electrode.
- **Built-in "hot" start** for easier starts and restrikes which minimises the electrode "sticking" to the work.

- **Standard Touch-Start™ DC TIG welding,** not scratch start, for easy arc starting that avoids tungsten contamination and the use of high-frequency equipment.
- **Excellent CV wire welding** with cored-wire and MIG (CO_2 and mixed gas). 2.4mm E70T-6 up to 260 IPM, 27V. Includes reduced OCV >20 volts for improved safety with across-the-arc feeders.

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WHAT IS TOUCH-START™ TIG?

Touch-Start™ TIG uses a very low voltage to sense when the tip of the tungsten electrode is touched to the work piece. When this occurs, a complete circuit is established. When the tungsten is then raised from the work piece, the circuit senses a change in voltage and initiates the appropriate welding current and voltage to support the TIG welding process.

Enjoy the added benefits of Lincoln's Touch-Start™ TIG when DC TIG welding. Not only do you avoid tungsten contamination when arc starting, but you also don't need extra high frequency equipment.

WHAT IS VRD?

The VRD (Voltage Reduction Device) provides additional safety in the CC-Stick weld mode, especially when working in an environment with a higher risk of electrical shock such as wet areas and hot, humid sweaty conditions. The VRD reduces the OCV (open circuit voltage) at the welding output terminals to less than 32 volts DC when not welding.

Indicator lights monitor the voltage: green for less than 32 volts while not welding, and either red (greater than 32 volts) or green while welding, depending on the actual voltage of the arc.

GENERATOR PERFORMANCE

- The Vantage® 580 provides added value at the job site by delivering up to 20 kVA of AC auxiliary power for equipment such as a Lincoln Invertec® PC210 Plasma cutter. Also use for lights, grinders and other common construction tools. You can simultaneously weld and have access to AC power – the full 20,000 watts can be delivered while welding at up to 90 amps.
- Compare this to the common competitive standard of 4,000 watts. No expensive options are required to add significant generator capacity.
- Two 240V and one 415V receptacles with circuit breaker protection and IP66 rated.

SIMULTANEOUS WELDING & POWER LOADS

Welding Output (Amps)	Permissible Power (Watts)
0	20,000
90A/24V	18,000
150A/26V	16,000
200A/30V	12,000
350A/34V	8,100
500A/40V	0

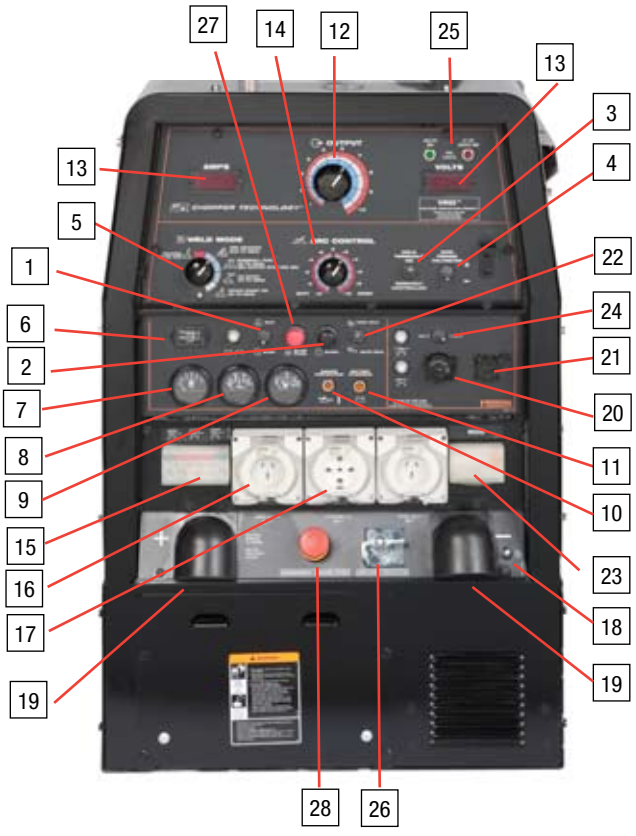
FEATURES

- **Large 76 litre fuel tank** provides run time for an extended day – 9 hours of welding at 500A / 40V / 100% duty cycle output.
- **Simple controls** – Keep training time to a minimum with the straight forward control panel of the Vantage® 580. The flip-down control panel door keeps less frequently used dials out of the way.
- **Output at welding terminals controlled by electronic contactor** - Can be switched to "Weld Terminals On" or to "Remotely Controlled".
- **Automated remote control capability** – Output control is automatically switched from the machine to the remote mode when a remote device is connected. (Standard 6 pin connector).
- **14-pin connector for Lincoln wire feeders** LF-72, LF-74 and LN™-8. Also compatible with the NA-3 Control, LT-7 Tractor, Multi-Weld® 350 and LN™-25 PRO Dual.
- **Sliding Engine-Access Door** - Lockable engine-access door slides open for easy access in tight spaces.
- **Lockable battery disconnect** switch provides lockout/tagout capability.
- **Oil drain valve and tube** to direct used engine oil away from base into pan.
- **Two Vantage® 580 units can be paralleled** in the CC-Stick Mode to increase output.
- **Sound rating** - No load 76 dBA @ 7m, Loaded 80 dBA @ 7m

QUALITY AND RELIABILITY

- **Printed circuit boards are trayed and potted** to provide a robust environmental shield.
- **Simple wire harnessing** keeps connections to a minimum for greater reliability. Lead and harness strain reliefs on all control connections help ensure trouble-free performance.
- **Engine protection system** includes automatic shutdown for low oil pressure, high engine temperature or low engine alternator voltage.
- **Indicator light** turns on for low oil pressure or high engine temperature. A second indicator light turns on if the engine battery charging system malfunctions.
- **Circuit breaker protection** on the battery ignition system provides added component protection.
- **Engine camshafts** are gear driven – no timing belt maintenance.
- **Closed breather system** to keep the engine compartment and ground clean. This system eliminates oil mist from collecting inside the engine compartment, especially on surfaces that would lower engine cooling efficiency.
- **Self-bleeding engine** simplifies startup if your fuel tank runs dry. Manual fuel line bleeding is usually not necessary.
- **Perkins® 404D-22T gear driven engines** - no timing belt maintenance.
- **3-year, Lincoln parts and labour warranty.** (Engine is warranted separately by the manufacturer.)

KEY CONTROLS



1. Run/Stop Switch
2. Start Pushbutton
3. Welding Terminals Control Switch
4. Wire Feeder Voltmeter Polarity Switch
5. Weld Mode Selector Switch
6. Hour Meter
7. Fuel Level Gauge
8. Engine Temperature Gauge
9. Oil Pressure Gauge
10. Engine Protection Light
11. Engine Battery Charging Light
12. Output Control Dial
13. Digital Amps and Volts Output Meters
14. Arc Force & Inductance Pinch Control Dial
15. Circuit Breakers
16. 240 Volts
17. 415 Volts
18. Ground Stud
19. Covered Weld Output Terminals + and -
20. 14-Pin Wire Feeder Connector
21. 6-Pin Remote Control Connector
22. Idler Switch
23. RCD
24. 42V/115V Wire Feeder Voltage Switch
25. VRD indicator lights
26. Battery isolator Switch
27. Glow Plug
28. Engine stop

STICK OPTIONS

Welding Leads

Electrode lead 50mm² 10m c/w twist-lock holder
Order **KA1452-8**

Work return lead 50mm² 9m c/w work clamp
Order **KA1452-7**

Pigtail 50mm² c/w lug & female mechconnector
Order **KA1452-1**

Electrode lead 70mm² 10m c/w twist-lock holder
Order **KA1452-10**

Work return lead 70mm² 9m c/w work clamp
Order **KA1452-9**

Extention lead 70mm² 10m c/w male & female mechconnector
Order **KA1452-4**

Pigtail 70mm² c/w lug & female mechconnector
Order **KA1452-12**

Remote Output Control
Permits remote adjustment of output.

Order **K857 8.5m lead & 6 pin plug**
K857-1 30m lead and 6 pin plug

WIRE FEEDER OPTIONS

LF-72 Wire Feeder
A heavy-duty, semi-automatic wire feeder designed for CV MIG and FCAW welding.

Order **K2327-7**

LN™-25 PRO Wire Feeder
Portable CC/CV unit for flux-cored and MIG welding. Includes gas solenoid & internal contactor.

Order **K2613-1A1 includes bonus K126 gun**
K2613-1A2 includes bonus Magnum® 400 gun

Magnum® 350 Innershield® Gun (for LN™-25 PRO)
For self-shielded wire with 4.5m cable. For 1.7 - 2.4mm wire. Now with replacable liner.

Order **K126-12**

TIG OPTIONS

Invertec® V205-T AC/DC
For AC TIG welding with square wave performance, use the AC generator of the engine-driven welder to supply the power.

Order **K1855-3**

Powercraft™ PC26G TIG Torch
Air-cooled 200 amp torch (2 piece) equipped with valve for gas flow control. 7.6m length.

Order **PC 26FS-8I-2**

Foot Amptrol™
Provides 7.6m of remote output control for TIG welding. (6 pin plug connection).

Order **K870**

Hand Amptrol™
Provides 7.6m of remote current control for TIG welding. (6 pin plug connection). Velcro straps secure torch.

Order **K963-3 (one size fits all TIG Torches)**

Medium Welder Trailer
For heavy-duty road, off-road, plant and yard applications and includes wheeled jack.

Order **K2637-1** Trailer
K2639-1 Mud guard

Spark Arrester Kit
Easily mounts to standard muffler.

Order **K1847-1**