

VANTAGE®

CHANGING THE NAME OF THE GAME

Truth In Numbers... Output at a Glance

Comparing welding machines based solely on their model names has been a confusing process for many. When searching for a welder to purchase, what really matters is the **true amperage** and **horsepower**. That's why we are making it clear that you're getting what you pay for with our new Vantage® engine driven welder nameplates.



LINCOLN ELECTRIC **VANTAGE® 549X** **OUTPUT**
525 A / 41 V / 100%
575 A / 38 V / 60%

www.lincolnelectric.com



500 Amperage Class
Amperage class rating determined at 100% duty cycle based on the IEC formula.



IEC Formula
The International Electrotechnical Commission formula is the industry-standard rating method for CC/CV diesel-powered welders.



CrossLinc® Technology
Greater control of the arc at the weld without the need for additional cables.



49 Engine Horsepower
Horsepower drives output. Indicating horsepower on our nameplates ensures you are getting the output you need.

LINCOLN®
ELECTRIC

Get What you Pay for

A Direct Comparison

If you take a closer look, our competitors do not consistently display important product information on their nameplates. This can cause customers to make misguided decisions based solely upon the machine's name, instead of the true specifications. This will negatively affect your ability to perform the job. Don't believe us? Look beyond the names and compare the specs to see for yourself.



Amperage	Volts	Duty Cycle		Amperage	Volts	Duty Cycle
300	32V	100%	IEC	300	32V	100%
400	23V	100%	Max	400	24V	100%
Horsepower				Horsepower		
22 HP Kubota®				20.2 HP Kubota		

What it Means for You

The Vantage 322 and Big Blue® 400 Pro welders are similar, but you are getting more output information with the Lincoln machine. The Big Blue 400 Pro welder is not a true 400 class machine, it is a 300 class machine by IEC standards.



Amperage	Volts	Duty Cycle		Amperage	Volts	Duty Cycle
525	41V	100%	IEC	500	40V	100%
575	38V	60%	Max	500	40V	100%
Horsepower				Horsepower		
49.4 HP Deutz				48.9 HP Kubota		

What it Means for You

Both of these machines are true 500 class machines since they align with the IEC formula, but only one displays its features most accurately, and that's the Vantage 549X welder. You will be getting more amperage, voltage, and horsepower by welding with the Lincoln model.

Quick Reference Guide

Which Machine Do You Need?

Below you can compare more machines head-to-head and see what you are really getting out of your welders. Notice that the Lincoln model names have been revised in order to provide more accuracy to the machines' capabilities, while most of the competitor model names are not based on the IEC output standard.

EPA TIER 4 FINAL COMPLIANT

Lincoln Model

Competitor Model

Previous Name

New Name

Vantage 300

300A/32V/100% - IEC
350A/28V/100% - Max
22hp Kubota
K2409-4

Vantage 322

300A/32V/100% - IEC
400A/23V/100% - Max
22hp Kubota
K2405-5

Big Blue 400 Pro

300A/32V/100% - IEC
400A/24V/100% - Max
20.2hp Kubota

Vantage 520 SD

400A/36V/100% - IEC
520A/30V/60% - Max
34.8hp Deutz
K4107-1

Vantage 435X

400A/36V/100% - IEC
520A/30V/60% - Max
34.8hp Deutz
K4107-3

No Tier 4 Final Model

No Tier 4 Final Model

Vantage 549X

525A/41V/100% - IEC
575A/38V/60% - Max
49.4hp Deutz
K3534-2

Big Blue 500 Pro/ Big Blue 600 Pro

500A/40V/100% - IEC
600A/42V/40% - Max (Big Blue 600 Only)
48.9hp Kubota

Vantage 600 SD

575A/43V/100% - IEC
600A/40V/60% - Max
65.7hp Deutz
K3239-1

Vantage 566X

575A/43V/100% - IEC
600A/40V/40% - Max
65.7hp Deutz
K3239-3

No Tier 4 Final Model

Air Vantage® 600 SD

575A/43V/100% - IEC
600A/40V/60% - Max
65.7hp Deutz
K3242-1

Air Vantage 566X

575A/43V/100% - IEC
600A/40V/60% - Max
65.7hp Deutz
K3242-3

Big Blue 600 Air Pak™

575A/43V/100% - IEC
600A/44V/60% - Max
65.7hp Deutz

Air Vantage® 600 SD Hydraulic

575A/43V/100% - IEC
600A/40V/60% - Max
65.7hp Deutz
K4343-1

Air Vantage 566X Hydraulic

575A/43V/100% - IEC
600A/40V/60% - Max
65.7hp Deutz
K4343-3

No Tier 4 Final Model

Frequently Asked Questions

Aren't all machine names consistent with their true output?

Not necessarily. A machine may be called a 400, for example, but really only be a 300 amp machine by industry ratings. That's why the IEC (International Electrotechnical Commission) adopted the ratings method that they use. IEC is the accepted rating for CC/CV diesel engine powered welders. Recently, contractors have purchased or rented the wrong machine based on name alone. We want to provide complete transparency so that correct decisions are made on the front end.

What should I look for when comparing machines?

It is best to compare the IEC rating of each machine. Sometimes the current ratings of two machines will match but the voltage or duty cycles are different. Higher voltages, duty cycles, and horsepower mean more output.

What is the IEC formula and how is it calculated?

The IEC formula for stick (CC) ratings is actually a very simple formula, stating $0.04 \times (\text{Current}) + 20 = \text{Voltage}$. It says that the welding voltage at 100% duty cycle should be the welding current multiplied by 0.04, add 20. For example, at 300 amps the welding voltage should be $(300 \times 0.04) + 20 = 32\text{V}$. Therefore, in this example, a rating on any machine lower than 300A/32V/100% would not meet IEC criteria for this machine.

What is changing in these Lincoln machines?

The only physical changes to these machines are the new nameplates. The machine is still the same as the previous model, but the nameplates have been updated. The only other change is the ordering number, which is required to order any machine. For example, if you typically ordered a K2409-4 Vantage 300 welder in the past, you will now order the K2409-5 Vantage 322 welder. The Quick Reference Guide outlines the ordering numbers for each machine.

Why not compare CV ratings instead of CC?

That is acceptable as long as both machines are rated using the same method. Again, using the IEC ratings is the best way to assure you get what you pay for.

What about comparing auxiliary output ratings?

Engine welders also generate auxiliary power that can be used to run lights, pumps, power tools, and more. The two ratings often used are peak power and continuous power. Peak power is higher than continuous but can only be sustained for a short time, about 30 seconds or less. It is needed for certain applications like starting pumps or some appliances. Continuous power is just that, sustainable as long as the machine is running. Always be sure you are comparing peak ratings to peak ratings and continuous to continuous.

To view the online version, visit the site at www.lincolnelectric.com/VantageRename

CUSTOMER ASSISTANCE POLICY

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