Job Site Generator Sizing

Out on the construction site, electrical drops and power can be hard to come by. That's why engine-driven welder/generators are so important in this kind of environment. But many companies are looking for ways to reduce their carbon footprint by limiting the number of engines creating exhaust on their jobsites, and inverters are a popular option. Our Invertec® and Flextec® lines are rugged enough to endure the toughest environments and can be easily powered by an engine driven welder/generator on the jobsite. They also come in rack packages that combine multiple systems with one power input, limiting the number of power drops needed to run them.

This chart shows the generator requirements to run these great machines at various amperages

Generator Size Column - Power output of engine driven welder / generator.
Machine Row - Number of individual machines and max amperage that can be powered off of referenced generator size.
Example - You can run 2 Invertec V276 machines @ 150 Amp Max Output off of a 25kVA Generator size

GENERATOR SIZE

MACHINE	25kVA	40kVA	60kVA	75kVA	100kVA	125kVA	225kVA	250kVA
 **Invertec® V276**	2 @ 150A 4 @ 100A	4 @ 150A 8 @ 100A	4 @ 200A 8 @ 150A	**4 @ 250A** 8 @ 200A 12 @ 150A 16 @ 100A	12 @ 200A 16 @ 150A 20 @ 100A	-	–	–
 **Flextec® 350X**	3 @ 150A	4 @ 200A 6 @ 150A	4 @ 300A 6 @ 200A 8 @ 150A	**4 @ 350A** 6 @ 250A 8 @ 200A	6 @ 350A 8 @ 300A 12 @ 200A	8 @ 350A 10 @ 300A 12 @ 250A	–	–
 **Flextec® 350X PowerConnect®**	4 @ 150A	4 @ 250A 6 @ 200A 8 @ 150A	4 @ 300A 6 @ 250A 8 @ 200A	**4 @ 350A** 6 @ 300A 8 @ 250A	6 @ 350A 8 @ 300A 12 @ 250A	8 @ 350A 12 @ 300A 16 @ 250A	–	–
 **Flextec® 500X**	4 @ 150A	4 @ 200A 6 @ 150A	4 @ 300A 6 @ 250A 8 @ 200A	4 @ 400A 6 @ 300A 8 @ 250A	4 @ 450A 6 @ 400A 8 @ 300A	**4 @ 500A** 6 @ 450A 8 @ 400A	–	–
 **Flextec® 650X**	–	1 @ 500A	1 @ 650A 2 @ 400A	1 @ 750A 2 @ 450A	2 @ 550A	2 @ 650A	4 @ 650A	**4 @ 750A**

Items highlighted in **RED** represent a 4-pack rack welding at rated output (60% duty cycle)

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Commonly Used Electrodes

Electrode Type Row - Type and diameter of electrode being used.
Typical Current Column - Current needed for a given size/type of electrode
Example - To run 1/16 inch NR 232, you will need 300A of weld output.

ELECTRODE TYPE	TYPICAL CURRENT								
	100A	150A	200A	250A	300A	350A	400A	450A	500A
Stick Electrode 7018	3/32	1/8	5/32	–	3/16	7/32	–	1/4	–
Stick Electrode 6010	3/32	1/8	5/32	–	–	–	–	–	–
Self-Shielded Flux-Cored NR 232/233	–	–	–	–	1/16	5/64	–	–	–
Self-Shielded-Flux Cored NR 305	–	–	–	–	–	–	5/64	–	3/32
Gas-Shielded Flux-Cored	–	–	–	0.045	1/16	–	–	–	–
Gouging Rod	1/8	5/32	–	3/16	–	–	5/16	–	3/8

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