How big a capacitor does the solar container welder need

Can a spot welder use a Nichicon capacitor?
Currently this spot welder uses automotive grade Nichicon capacitors. It would be a good idea to check the feasibility of using cheaper capacitors,and test if it's better to use higher voltage ratings,or higher capacity. I managed to capture oscilloscope image of the pulse with an old analog Philips PM3226 oscilloscope.

Does a spot welder need a microcontroller?
This spot welder,unlike many available DIY projects,doesn't need a microcontrollerto work: the welding pulse is triggered using relay module and a timing capacitor. Welding current is switched with an old recycled industrial thyristor module. Pulse energy can be adjusted with a potentiometer,which changes the voltage of capacitor bank.

What power source does a spot welder use?
Other spot welders often use car batteries,microwave oven transformers,high-current li-po battery packs or supercapacitors as power source. All of these things seemed to be very powerful and somehow scary to me,so I decided to use an capacitor bank made of regular electrolytic capacitors.

Can a spot welder be used for a smoothing power supply?
Such a thing has a few practical uses, since the super low measured ESR of 0.6m? and large capacitance makes it ideal for smoothing power supplies in many applications, but could it be used to make a spot welder? Well, yes and no.

How much ESR does a capacitor have?
Each of these capacitors have ESR of 18 milliohms,which drops below 1 milliohm total after parallel connection. That will allow very high welding currents. To release this kind of energy,some kind of extremely high current switch will be required.

Can a capacitive discharge spot welder be used to weld nickel strips?
In this project I designed and built a prototype of USB-C powered capacitive discharge spot welder. It can be used to weld nickel stripsto battery packs. This allows re-building battery packs for various devices,especially ones that are no longer maintained by the manufacturers.

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I will need a 0.2 or 0.3mm weld capable welder. I am leaning toward a capacitor spot welder. I came across some high voltage capacitors: 550mFd @450VDC and 6,000UD @ 400VDC. I ...

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You"ll notice that there"s a large conveyor port on the back of the welder. it"s important that you have this properly connected to another large conveyor port of a cargo container, that way materials can be ...

There"s a limit resistor between the charging circuit and the capacitor so the charging circuit doesn"t get shorted out during the weld process. The switch between the capacitor and the ...

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Capacitive discharge is what is typically used for battery tab welding, and is what I used when I built my welder. A friend of mine needed something beefier so he got one of those K ...

You need low ESR super capacitors that can provide at least a couple hundred amps for a tab welder. If the super cap has tiny leads like the one in the amazon link, then it"s not going to provide the current ...