

STAINLESS  
STEEL  
NITTY-GRITTY.IT  
SPECIALISTS<sup>®</sup>



# NITTY-GRITTY MAKE IT SHINE

The company's extraordinary experience and knowhow in the stainless steel field have turned Nitty-Gritty into a one-stop stainless steel specialist committed to improving its machines on an ongoing basis and to designing and building electrolyte weld cleaning machines for its customers.

Nitty-Gritty: stainless steel specialists.



06  
Clinox Surface X2



08  
Clinox Power X2



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Clinox Pro X2  
Clinox Air X2



12  
Clinox Eco X2



#### INVERTER TECHNOLOGY

Inverter technology, powered by a microprocessor, cuts off any short circuits, thus avoiding micro-pitting.

#### IN-BUILT TANK

The first to have integrated an automatic pump to dose pickling liquid.

#### VAPOUR SUCTION/BLOWING SYSTEM

The only machines with a patented fumes suction/blowing system.

14  
Inserts and brushes

16  
Clinox Surface Plus X2

17  
E-Polishing box

18  
Marking

19  
Multi Mark

19  
Inox Mark

20  
Tester

21  
Passi Test Plus  
Inox test

22  
Finishing

23  
Pick&Clean

23  
Deox&Fit

24  
Custom machines  
Applications

#### TORCH WITH TANK

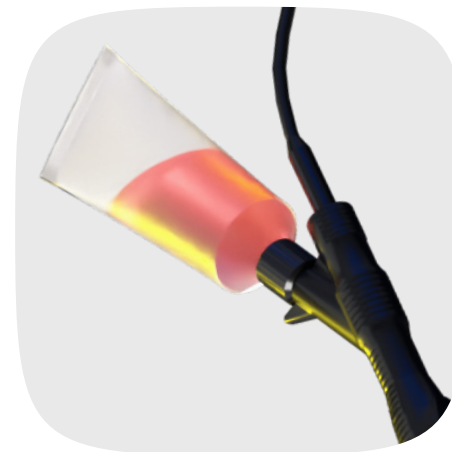
The only ones to have a patented secondary torch with in-built tank.

#### ADJUSTABLE BRUSH

Adjustable brush with fast connection and flow-through system.

#### TECHNOPOLYMERIC PAD

The only machines that use a patented technopolymeric pad.



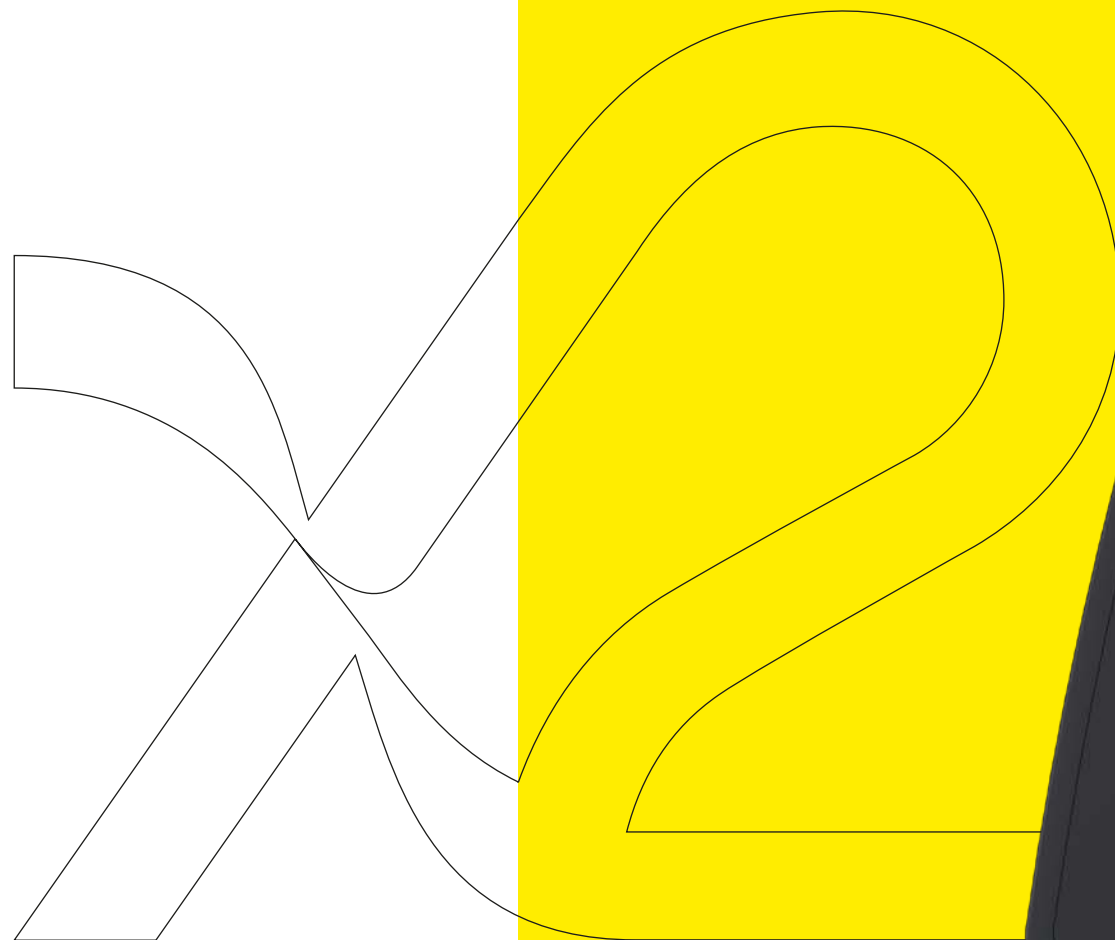
# PICKLING POLISHING PASSIVATION

Nitty-Gritty's Clinox line, born for weld cleaning on stainless steel, is the most complete, most advanced range of pickling machines available today in the world.

By drawing on their inverter technology, all Clinox machines can control the flow of current. This ensures optimal working conditions, on any type of surface, and avoids irreparable damage to the stainless steel. All Clinox machines ensure the best result without wasting time because they can both pickle and passivate. Pickling means removing ferric oxide - the typical blue or bronze-brown colour - thus protecting the steel's look and avoiding corrosion. Passivation is the restoration of the chromium oxide layer that protects the stainless steel from corrosion.

The process of weld polishing needs particular care when treating steel with special finishing. There are mainly two reasons why the polishing process is so important: the need to uniform the surface of the stainless steel after pickling, and the need to favour and improve the process of steel passivation.

Neutralization is the process that will stop the action of the chemical used for pickling and restores the original neutral pH, helping to start the passivation process. This process is actuated with Inox Fit, a chemical solution developed by Nitty-Gritty, which is sprayed after the pickling operation.



## NATURAL EVOLUTION

Discover the X2  
weld cleaning machine:  
**gentle when you need,  
powerful as you want.**





POWER&  
CONTROL



Clinox Surface X2 is the perfect solution to deal with all types of weld: TIG, TIG with added material, MIG/MAG, Arc MIG, Submerged Arc (SAW), Laser, Resistance, Orbital, plasma. Clinox Surface's advanced technology, with an immediate electrochemical reaction, grants pickling, passivation and polishing on any weld on stainless steel, independently from the finishing, without wasting time, not leaving any halo and offering full safety for the operator. Clinox Surface X2 the professional system, designed for companies with big applications.

With a 2500W inverter, the stronger in the Clinox line, a range of inserts and pads up to 100mm wide and a 6 meter long cable, Clinox Surface X2 can be easily used also on big and heavy structures. In addition you can connect to the machine a big telescopic tool with a 300mm electrode, to remove oxidations on big areas, such as on silos used in the food or wine industry.

The machine is equipped with an air compressed fume abatement system.

power output	2400W			
power selection	30A	50A	100A	
tank	1,8l			
dimensions lxxh - weight	543 mm	228 mm	315 mm	18,5kg
included torch	blowing torch with 6m cable			
optional torches	small	dip&work	marking	



clinox  
POWER



ENERGY &  
ELEGANCE

Clinox Power X2 is the ideal solution for the immediate eco-friendly treatment of TIG, TIG with filler metal, MIG/MAG, pulsed-arc MIG, submerged arc, laser, resistance, orbital, and plasma welding. The advanced technology of Clinox Power X2, through an immediate electrochemical reaction, ensures the pickling, passivation and polishing of any stainless steel

weld, irrespective of the finishing, without wasting time, without leaving haloes, and in complete safety for the operator.

**The machine is equipped with an air compressed fume abatement system.**



power output	1500W			
power selection	15A	30A	50A	
tank	1,8l			
dimensions lxwxh - weight	543 mm	228 mm	315 mm	16,5kg
ilncluded torch	blowing torch with 4m cable			
optional torches	small	dip&work	marking	

# SKILL& EFFICIENCY

Clinox Pro X2 performs immediate ecofriendly treatment of TIG, pulsed-arc MIG, submerged arc, laser, resistance, orbital, plasma, and tack welding. The advanced technology of Clinox Pro X2, through an immediate electrochemical reaction, ensures pickling, passivation and polishing of any stainless steel weld, irrespective of the finishing, without wasting time, without leaving haloes, and in complete safety for the operator.

The machine is equipped with a fume abatement system through suction.



clinox  
PRO

power output	900W			
power selection	15A	30A		
tank	1,8l			
dimensions lwxh - weight	543 mm	228 mm	315 mm	18kg
included torch	torch through suction with 3m cable			
optional torches	small	dip&work	marking	

# FAST& PERFORMING

Clinox Air X2 performs immediate ecofriendly treatment of TIG, pulsed-arc MIG, submerged arc, laser, resistance, orbital, plasma, and tack welding. The advanced technology of Clinox Air X2, through an immediate electrochemical reaction, ensures pickling, passivation and polishing of any stainless steel weld, irrespective of the finishing, without wasting time, without leaving haloes, and in complete safety for the operator.

The machine is equipped with an air compressed fume abatement system.



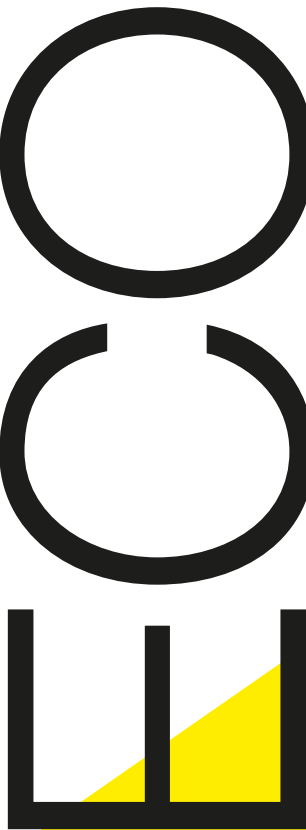
clinox  
AIR

power output	900W			
power selection	15A	30A		
tank	1,8l			
dimensions lwxh - weight	543 mm	228 mm	315 mm	16,5kg
included torch	blowing torch with 4m cable			
optional torches	small	dip&work	marking	

LIGHT & EASY

Clinox Eco X2 performs immediate eco-friendly treatment of TIG, pulsed-arc MIG, laser, resistance, orbital, plasma, and tack welding. Clinox Eco X2, through an immediate electrochemical reaction, ensures pickling, passivation and polishing of any stainless steel weld, irrespective of the finishing, without wasting time, without leaving haloes, and in complete safety for the operator.

clinox



power output	900W			
power selection	30A			
tank	-			
dimensions l x w x h - weight	410 mm	170 mm	238 mm	6,8kg
included torch	small torch with integrated tank and 2m cable			
optional torches	dip&work	marking		





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make it shine

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via dei Marmorari 36  
41057 Spilamberto  
Modena  
Italia

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t +39 059 785210  
f +39 059 7861612  
info@nitty-gritty.it  
VAT IT02316620364

