INVERTER TYPE PLASMA CUTTING MACHINE

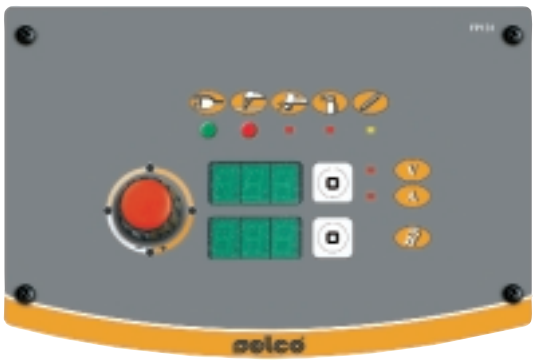
GENESIS 90

Powerful, lightweight and extremely compact!

The new portable plasma cut generator in the genesis range by Selco features a modern innovative design. Exploiting the inverter principle, this system is even more compact and lightweight and offers excellent quality up to 30 mm on carbon steel. Electricity and compressed air consumption are limited and make this plasma cut generator a useful cutting tool for maintenance, work on site and in the workshop; it is more versatile, safer, quicker and more practical to use than the conventional mechanical systems and oxyacetylene torch.
The innovative technology adopted and the particular attention paid to construction have **reduced the weight (to 25 kg)** and **overall dimensions** without affecting dependability and performance.
The generator is the most powerful one in its weight category and is provided with ergonomic handle for easy transport.
Genesis 90 fully complies with the European regulations **IEC974-1, EN50192, and EN50078** concerning electrical safety and the stringent European regulation **EN50199** concerning electromagnetic compatibility; application of these regulations endures compliance with the **Community Directives** and maximum operator **safety** during work.
Selco is a company with **ISO9001** certification and a highly qualified distribution network, a further confirmation of the product and service quality it offers its customers.

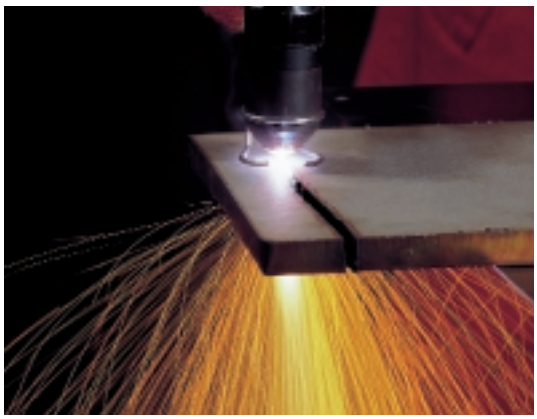
USE

Inverter technology and quality construction ensure **safety, dependability and stable accurate cutting arc** in all operating situations.
If used beyond the rated parameters a **thermal device** and a **mains voltage protection,** protect the internal components from malfunctioning.
Two alarms are also provided, one to cut off the output voltage when the torch is not completely assembled and the other to prevent operation with incorrect compressed air pressure.
Correct setting of the air flow for the cutting arc is easily obtained by means of the gas test button and the flow meter provided and the digital pressure gauge.



The control panel shows how easy the Genesis 90 is to use.

Plasma cutting



Plasma cutting is a process in which, **using compressed air, an electric arc** is forced to pass through a nozzle, from the electrode to the piece to be cut.
Although the process may appear to be complex, implementation is extremely simple and the result is a **metal cutting tool which is more versatile, simpler and safer than oxyacetylene cutting and the conventional mechanical systems.**

ADVANTAGES

- ✔ Low electricity consumption: **only 12 kW** required.
- ✔ Inverter technology ensures high efficiency and energy consumption proportional to cutting current.
- ✔ Can be used in harsh ambient conditions: electronic circuits protected from dust and protection class **IP23.**
- ✔ Possibility of cutting 30 mm mild steel **with electricity and compressed air only.**
- ✔ **External parts made of shockproof polycarbonate.**
- ✔ Easy to transport: **weight 25 kg** with carrying handle.
- ✔ **Extremely easy** to adjust due to the digital control front panel.
- ✔ Parameters controlled 10,000 times per second by **microprocessor**.
- ✔ **Digital reading** of air pressure and cutting current setting and measurement of the actual cutting voltage and current.
- ✔ Possibility of cutting grid-type and irregular structures.

Genesis 90
Ready for use

Starting switch, pressure gauge and electrical and compressed air connections.

APPLICATIONS

- LIGHT AND HEAVY STRUCTURAL WORK
- BUILDING
- ALIMENTARY CHEMIST
- SHEET METAL WORKERS
- MAINTEINANCE
- TRANSPORT

Structural work: various thickness sheet metal…

Building: corrugated sheet metal, steel-cage construction, section bars…

Alimentary chemist: thin sheet metal, ducts, tanks…

Sheet metal workers: sheet metal in the workshops and on site…

Transport: lorries, trains, aeroplanes, containers…








MILD STEEL

Thickness (mm)	Current (A)	Speed (mm/min)
1	30	3400
3	30	950
6	30	450
1	60	12000
3	60	3300
6	60	1550 *
10	60	850
15	60	500
1	90	20000
3	90	6300
6	90	3200
10	90	1500
15	90	900
20	90	650 *
25	90	400 *
30	90	250 *
35	90	160

STAINLESS STEEL

Thickness (mm)	Current (A)	Speed (mm/min)
1	30	2500
3	30	500
1	60	14000
3	60	3200
6	60	1200 *
10	60	900
15	60	400
1	90	21000
3	90	7200
6	90	3200
10	90	1400
15	90	900
20	90	400 *
25	90	250 *
30	90	200

ALUMINIUM

Thickness (mm)	Current (A)	Speed (mm/min)
1	30	5700
3	30	1000
1	60	15000
3	60	5200
6.5	60	2300 *
10	60	1200
15	60	650
1	90	20000
3	90	8400
6.5	90	4500
10	90	2200
15	90	1400
20	90	900 *
25	90	500 *
30	90	250

*** High quality cut**

GENESIS 90

POWER SUPPLY VOLTAGE		3X400 V 50/60 Hz
DELAYED FUSE		16 A
RATED POWER		12.0 kW
CUTTING CURRENT	X=60%	90 A
	X=100%	70 A
CUTTING VOLTAGE	X=60%	136 V
NO-LOAD VOLTAGE		260 V
PILOT ARC CURRENT		22 A
OPERATING PRESSURE		5 bar
FLOW RATE		180 l/min
PROTECTION CLASS		IP 23
INSULATION CLASS		H
CONSTRUCTION REGULATIONS		IEC974-1; EN50199
		EN50078; EN50192
DIMENSIONS (L X P X H)		215x604x407 mm
GENERATOR WEIGHT		25 kg

ARTICLES CODES

GENESIS 90 3X400V	56.01.090
PLASMA TORCH A90 6 m	81.20.018
KIT FOR PLASMA TORCH	73.10.023
EARTH CABLE 25 mm 4 m	71.05.016

SELCO 90.07.00601

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FLASH OF GENIUS

SELCO s.r.l. - Via Palladio, 19 - 35010 ONARA di TOMBOLO (PADOVA) ITALY
Tel. + 39 049 9413111 - Fax + 39 049 9413311
http://www.selco.it • **E-mail: selco@selco.it**