

Chapter 4

Plasma cutting



Portable installations



A complete range of heavy duty plasma cutters from the specialist of plasma process. The worldwide recognized SAF-FRO plasma range is the solution for all the on-site applications with a set of machine simple, robust and ready to use. The inverter microprocessor controlled units provide the cut quality thanks to SAF-FRO patented consumables.

SAXOJET with JET CP 0.5 torch and wear parts

Cutting capacity:

- Severance cut: 8 mm
- Quality cut: 4 mm

The portable solution with built-in compressor for manual plasma cutting

6 decisive advantages:

- Built-in air compressor.
- Cut up to 8 mm (severance cut on carbon steel).
- Light weight: 12 kg.
- Primary consumption < 16 A.
- Digital display of the parameters.
- High operator safety thanks to the new JET CP 0.5 torch.

SAXOJET	Power supply	Primary consumption (I max)	Air pressure and flowrate	Duty cycle 10 min. cycle (at 40 °C)	Dimensions (l x w x h)	Net weight	Protection index	Standards
	230 V ± 10 % 50-60 Hz single-phase	16 A	built-in compressor	20 A at 50%	420 x 175 x 300 mm	12 kg	IP 23	EN 60974-1;-7;-10

To order

- Installation ready to use including:
 - 1 SAXOJET,
 - 1 JET CP 0.5 cutting torch,
 - 1 earth cable with a clamp,
 - 1 set of wear parts,
- Cat. no. W 000 263 708**



To order

- Add-ons:
 - 1 cutting compass, Cat. no. W 000 302 512,
 - FASHION goggles Cat. no. W 000 011 061,
 - NERTAZIP gloves T9 Cat. no. W 000 010 425,
 - NERTAZIP gloves T10 Cat. no. W 000 010 426.

JET CP 0.5 torch for drag cutting

Maximum current at 50%: 20 A
Supplied ready to use fitted with:

- FL electrode
- L 0.65 nozzle
- TN Skirt
- Mixt wrench

Plasma gas: air



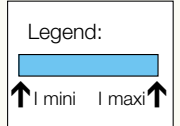
Wear parts for JET CP 0.5 torch

To order

- Air-cooled 4 m torch:
 - JET CP 0.5 Cat. no. W 000 265 234
- Wear parts:
 - 1 Torch body Cat. no. W 000 266 532
 - 2 FL electrode Cat. no. 0408-9223
 - 3 L 0.65 nozzle Cat. no. W 000 050 045
 - 4 TN skirt Cat. no. W 000 260 605
 - 5 Wrench Cat. no. 0408-9240

Choice criteria

Power supply	Cutting capacity		Cutting current						Number of setting positions (range)	Adapted torch	Weight kg	Product name
	Quality	Separation	20	40	60	80	100	120				
single-phase	4 mm	8 mm	[Bar chart showing current range 20-40]						∞	JET CP 0.5	12	SAXOJET
single-phase	8 mm	10 mm	[Bar chart showing current range 20-60]						∞	JET CP 1.0	8	PRESTOJET 1
three-phase	20 mm	25 mm	[Bar chart showing current range 40-100]						∞	Z 1.0	29	PRESTOZIP 2.0
three-phase	20 mm	25 mm	[Bar chart showing current range 40-80]						2	CP 40 R	85	ZIP 2.0
three-phase	35 mm	40 mm	[Bar chart showing current range 60-140]						4	CP 100 R	147	ZIP 4.0
three-phase	40 mm	50 mm	[Bar chart showing current range 80-140]						5	Z 5.0	260	NERTAJET 50



PRESTOJET 1 with JET CP 1.0 torch and wear parts

Cutting capacity:

- Severance cut: 10 mm
- Quality cut: 8 mm

The high-tech portable solution for manual plasma cutting

4 decisive advantages:

- Compact and light (8 kg).
- Severance cut up to 12 mm (carbon steel).
- Digital display of the parameters.
- More safety thanks to the new JET CP 1.0 torch.

PRESTOJET 1	Power supply	Primary consumption (I max)	Air pressure and flowrate	Duty cycle 10 min. cycle (at 40 °C)	Dimensions (l x w x h)	Net weight	Protection index	Standards
	230 V ± 10 % 50-60 Hz single-phase	23 A	5,5 bars 120 l/min.	25 A at 60% 30 A at 35%	415 x 170 x 310 mm	8 kg	IP 23	EN 60974-1;-7;-10

To order

- Installation ready to use including:
 - 1 PRESTOJET 1,
 - 1 JET CP 1.0 cutting torch,
 - 1 earth cable with a clamp,
 - 1 set of wear parts,**Cat. no. W 000 263 706**



To order

- Add-ons:
 - 1 cutting compass, Cat. no. W 000 302 512,
 - FASHION goggles Cat. no. W 000 011 061,
 - NERTAZIP gloves T9 Cat. no. W 000 010 425,
 - NERTAZIP gloves T10 Cat. no. W 000 010 426.

JET CP 1.0 torch for drag cutting

Maximum current at 30%: 30 A
Supplied ready to use fitted with:

- FL electrode
- L 1.0 nozzle
- TN Skirt
- Mixt wrench

Plasma gas: air



Wear parts for JET CP 1.0 torch

To order

- Air-cooled 5 m torch:
 - JET CP 1.0 Cat. no. W 000 265 237
- Wear parts:
 - 1 Torch body Cat. no. W 000 266 533
 - 2 FL electrode Cat. no. 0408-9223
 - 3 FL 0.8 nozzle (0.5 mm to 12 mm) Cat. no. 0408-9217
 - 4 TN skirt Cat. no. W 000 260 605
 - 5 Wrench Cat. no. 0408-9240

Portable installations

PRESTOZIP 2.0 with Z 1.0 torch and wear parts

The quality and reliability

5 decisive advantages:

- Unequalled quality cut on 20 mm thickness.
- Powerful - maximum cut up to 25 mm (carbon steel).
- Digital display of the parameters.
- 3 cutting modes.
- Compact.



Cutting capacity:
• Severance cut: 25 mm
• Quality cut: 20 mm

PRESTOZIP 2.0	Power supply	Primary consumption (l max)	Air pressure and flowrate	Duty cycle 10 min. cycle (at 40 °C)	Dimensions (l x w x h)	Net weight	Protection index	Standards
	400 V ± 10 % 50/60 Hz three-phase	21.9 A	5.5 bars 180 l/min.	65 A at 35% 55 A at 60% 45 A at 100%	640 x 260 x 410 mm	29 kg	IP 23	EN 60974-1;-7;-10

To order

• Installation ready to use including:

- 1 PRESTOZIP 2.0,
 - 1 Z 1.0 cutting torch,
 - 1 earth cable with a clamp,
 - 1 set of wear parts,
- Cat. no. 0408-2660**



To order

- Add-ons:
 - 1 cutting compass, Cat. no. W 000 302 512,
 - FASHION goggles Cat. no. W 000 011 061,
 - NERTAZIP gloves T9 Cat. no. W 000 010 425,
 - NERTAZIP gloves T10 Cat. no. W 000 010 426.

Z 1.0 torch for drag cutting

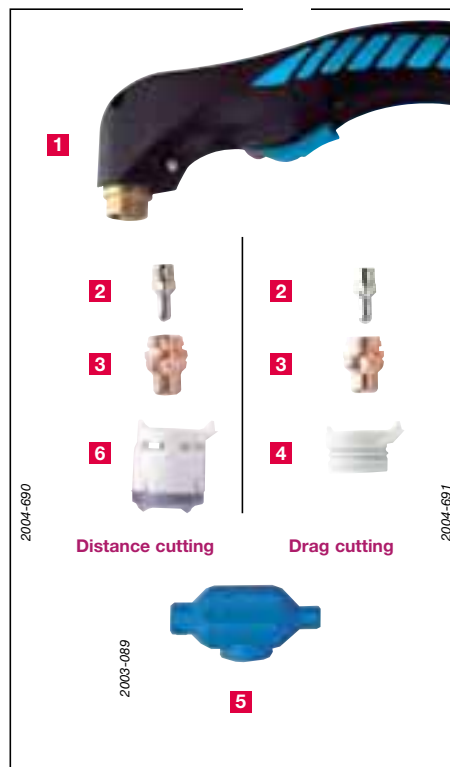
Maximum current at 35%: 65 A
Supplied ready to use fitted with:

- FL electrode
- L 1.2 nozzle
- TI Skirt
- Mixt wrench

Plasma gas: air

To order

- Air-cooled 5 m torch:
 - Z 1.0 Cat. no. 0408-9270
- Air-cooled 12 m torch:
 - Z 1.0 Cat. no. W 000 235 189



Wear parts for Z 1.0 torch

To order

Wear parts:

- 1 Torch body Cat. no. W 000 266 533
- 2 FL electrode Cat. no. 0408-9223
- 3 L 1.2 nozzle Cat. no. 0408-9214
- 5 Wrench Cat. no. 04089240

- Wear part for drag cutting :
 - 4 TN skirt Cat. no. W 000 260 605
- Wear part for distance cutting :
 - 6 TI skirt Cat. no. W 000 050 052

On site and workshop installation



Cutting capacity:
 • Severance cut: 25 mm
 • Quality cut: 20 mm

ZIP 2.0 with CP 40 R torch and wear parts

Work of high quality and large precision.

7 decisive advantages:

- On wheels installation,
- Universal cutting installation of all metals,
- Very fast quality cutting up to 25 mm,
- 2 ranges of power setting,
- Delivered complete with torch maintenance kit,
- Torch wear parts optimisation device,
- Simple and multi-use. The ideal tool for cutting from 0.5 to 20 mm.

ZIP 2.0	Power supply	Primary consumption (I max)	Air pressure and flowrate	Duty cycle 10 min. cycle (at 40 °C)	Dimensions (l x w x h)	Net weight	Protection index	Standards
	230 / 400 V ± 15 % 50 Hz three-phase	35.5 A (230 V) 20.5 A (400 V)	5.5 bars 130 l/min.	60 A at 40% 30 A at 100%	615 x 530 x 885 mm	85 kg	IP 23	EN 60974-1;-7;-10

To order

- Installation ready to use including:
 - 1 ZIP 2.0 three-phase 230/400 V 50 Hz,
 - 1 cutting torch length 6 m,
Cat. no. 0408-2926



CP 40 R torch

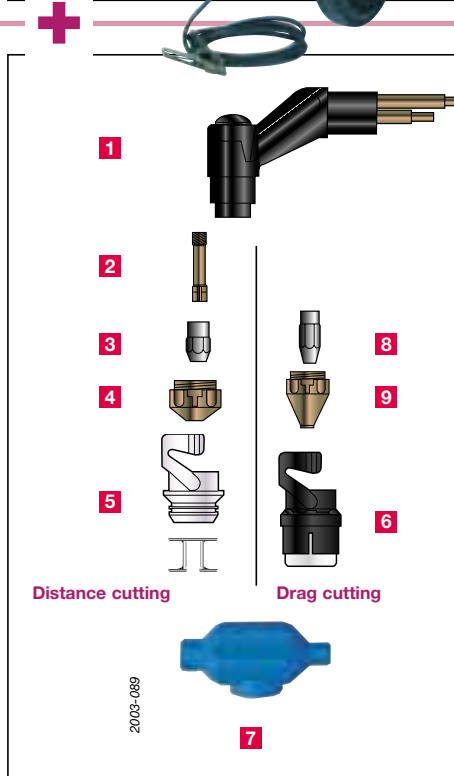
Maximum current at 60%: 65 A
 Supplied ready to use fitted with:

- C Hafnium electrode
- M D1.2 nozzle
- TN Skirt
- Skate
- Mixt wrench

Plasma gas: air

To order

- Air-cooled 6 m torch:
 - CP 40 R Cat. no. 0408-2050
- Air-cooled 15 m torch:
 - CP 40 R Cat. no. 0408-2253



Wear parts for CP 40 R torch

To order

• Wear parts:

- 1 Torch body Cat. no. 0408-2056
- 7 Wrench Cat. no. 0408-9240

• Wear parts for distance cutting:

- 2 Immersion tube Cat. no. 0408-2381
 - 3 C Hafnium electrode Cat. no. 0408-2404
 - 4 M D1.0 nozzle Cat. no. 0408-2261
1 to 8 mm
 - 4 M D 1.2 nozzle Cat. no. 0408-2262
8 to 25 mm (severance cut)
 - 5 TN Skirt Cat. no. 0408 2267
+ Skate Cat. no. 0408-2053
- or
- 6 TI 40 skirt Cat. no. 0408-2268

• Wear parts for drag cutting with conical nozzle:

- 8 L Hafnium electrode Cat. no. 0408-9122
- 9 L conical nozzle Cat. no. 0408-9123
- 5 TN skirt Cat. no. 0408-2267

On site and workshop installati

ZIP 4.0 with CP 100 R torch and wear parts

Work of high quality and large precision

5 decisive advantages:

- On wheels installation,
- More power to cut large thicknesses,
- Delivered complete with torch maintenance kit,
- Torch wear parts optimisation device,
- Simple and multi-use. The ideal tool for cutting from 0.5 to 30 mm.

Cutting capacity:

- Severance cut: 40 mm
- Quality cut: 35 mm

4 ranges of power setting for ZIP 4.0:

- range 1: 0.5 to 15 mm
- range 2: 3 to 25 mm
- range 3: 8 to 35 mm
- range 3: 8 to 40 mm

ZIP 4.0	Power supply	Primary consumption (I max)	Air pressure and flowrate	Duty cycle 10 min. cycle (at 40 °C)	Dimensions (l x w x h)	Net weight	Protection index	Standards
	230 / 400 / 415 V ± 10 % 50 Hz three-phase	75,3 A (230 V) 43 A (400 V) 41,7 A (415 V)	5.5 bars 170 l/min.	35 A at 100% 69 A at 55% 100 A at 25% 125 A at 20%	615 x 530 x 1 165 mm	147 kg	IP 23	EN 60974-1;-7;-10

To order

- Installation ready to use including:
 - 1 ZIP 4.0 (220/400/415 V)
 - 1 cutting torch length 6 m,
- Cat. no. 0408-2945.**



CP 100 R torch

Maximum current at 40%: 125 A
Supplied ready to use fitted with:

- C Hafnium electrode
- M D1.6 nozzle
- TI 100 Skirt
- Mixt wrench

Plasma gas: air

Wear parts for CP 100 R torch

• Wear parts:

- 1 Torch body Cat. no. 0408-2056
- 7 Wrench Cat. no. 0408-9240

• Wear parts for distance cutting:

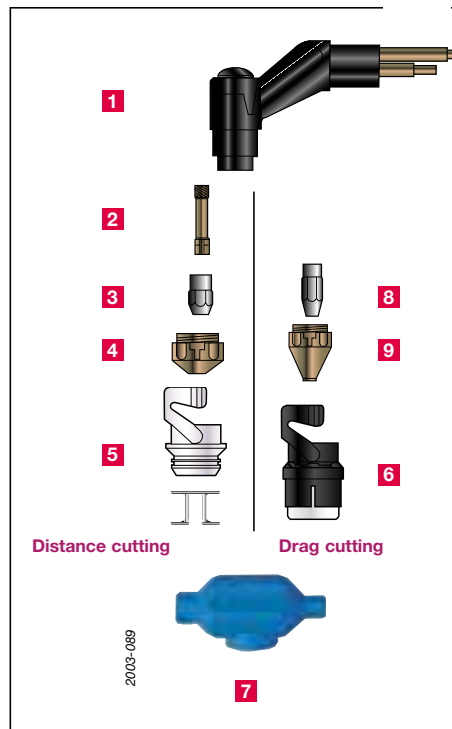
- 2 Immersion tube Cat. no. 0408-2381
- 3 C Hafnium electrode Cat. no. 0408-2404
- 4 M D1.0 nozzle Cat. no. 0408-2261 1 to 8 mm
- 4 M D 1.2 nozzle Cat. no. 0408-2262 8 to 25 mm (severance cut)
- 4 MD 1.6 nozzle 25 to 40 mm Cat. no. 0408-2385
- 5 TN Skirt Cat. no. 0408 2267 + Skate Cat. no. 0408-2053

or

- 6 TI 40 skirt Cat. no. 0408-2268
- 6 TI 100 skirt Cat. no. 0408-2405

• Wear parts for drag cutting with conical nozzle:

- 8 L Hafnium electrode Cat. no. 0408-9122
- 9 L conical nozzle Cat. no. 0408-9123
- 5 TN skirt Cat. no. 0408-2267



To order

- Air-cooled 6 m torch:
 - CP 100 R Cat. no. 0408-2375
- Air-cooled 15 m torch:
 - CP 100 R Cat. no. 0408-2407



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NERTAJET 50 with Z 5.0 torch and wear parts

**Work of high quality and large precision
with contact cutting**

7 decisive advantages:

- multi-voltage three-phase,
- intensive work,
- 100% duty cycle,
- well suited for stainless steels and light alloys with Ar/H₂ up to 50 mm,
- plasma gouging,
- assistance gas use possible to improve quality cutting in large thickness,
- manual or automatic applications.

Cutting capacity:
• Severance cut: 50 mm
• Quality cut: 40 mm

NERTAJET 50	Power supply	Primary consumption (I max)	Air pressure and flowrate	Duty cycle 10 min. cycle (at 40 °C)	Dimensions (l x w x h)	Net weight	Protection index	Standards
	230 / 400 / 415 / 440 V ± 10 % 50-60 Hz three-phase	108,8 A (230 V) 62,6 A (400 V) 60,3 A (415 V) 56,9 A (440 V)	6 bars 170 l/min.	150 V - 180 A at 100%	1 170 x 710 x 1 200 mm	260 kg	IP 23	EN 60974-1;-7;-10

To order

- 1 NERTAJET 50 three-phase 50/60 Hz,
Cat. no. 0408-2950.
- Installations ready to use:
- Installation pack air:
NERTAJET 50 with torch length 6 m,
Cat. no. 0408-2955.
- Installation pack Ar/H₂ and N₂:
NERTAJET 50 with torch length 6 m,
Cat. no. 0408-2956.



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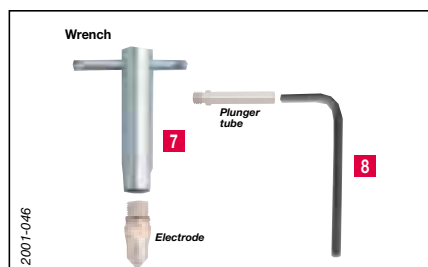
Z 5.0 torch for drag cutting
Maximum current at 100%: 150 A
Supplied ready to use fitted with:

- Hafnium electrode
- 1.8 nozzle
- P Skirt
- Electrode Key

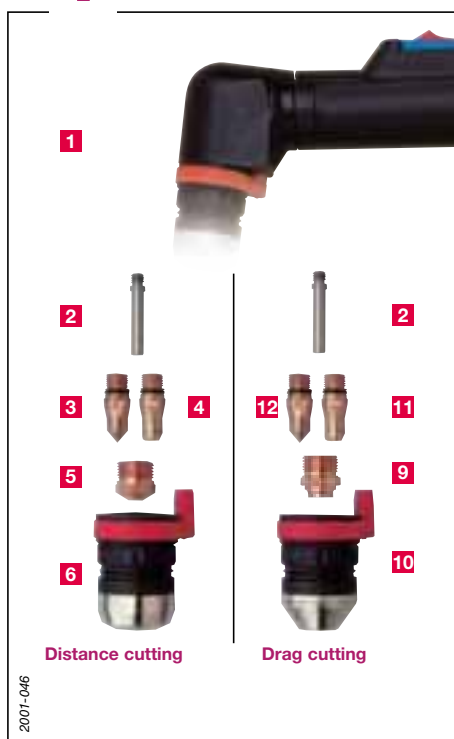
Plasma gas: air, Nitrogen, Ar/H₂

To order

- Water-cooled 6 m torch:
- Z 5.0 Cat. no.0408-9258
- Water-cooled 15 m torch:
- Z 5.0 Cat. no. 0408-9260



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Wear parts for Z 5.0 torch

• Wear parts:

- 1 Torch body Cat. no. W 000 302 513
- 2 Plunger tube Cat. no. 0409-1202
- 7 Electrode key Cat. no. 0409-1203
- 8 Wrench Cat. no. 0408-9240

• Wear parts for distance cutting:

- 3 Argon Hydrogen electrode Cat. no. 0409-1206
- 4 Air Compressed electrode Cat. no. 0409-1204
- 5 Nozzle Diam 1.0 40 A Cat. no. 04091210
- 5 Nozzle Diam 1.0 60 A Cat. no. 0409-1212
- 5 Nozzle Diam 1.6 100 A Cat. no. 0409-1216
- 5 Nozzle Diam 1.8 150 A Cat. no. 0409-1218
- 6 P flat skirt Cat. no. W 000 302 516

• Wear parts for gouging (air, N₂, Ar/Ar₂):

- 9 Gouging nozzle Cat. no. W 000 302 515
- 10 C Conical skirt Cat. no. W 000 302 517
- 11 Nitrogen electrode Cat. no. 0409-1205
- 12 Argon Hydrogen electrode Cat. no. 0409-1206