plasma cutting catalogue

SINCE 1950



PLASMATECH CEA PLASMA CUTTING DIVISION

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## **SK and SKM TORCHES**

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#### **A STORY WHICH STARTED IN 1950**

Even before its inception in 1950 CEA machines had garnered a reputation for quality craftsmanship prior to World War II and today CEA is renowned in the welding and plasma cutting sectors as a steadfast partner to its worldwide distributor network.



#### **HERITAGE AND PRIDE**

CEA being a well-structured company is ideally positioned to face the current global market challenges but also takes great pride in its roots and connection to the territory which has allowed for consistent growth in the years.



## KNOW-HOW AND VERTICALIZATION OF THE MANUFACTURING PROCESS

CEA takes great pride in the ability to control machine production, from research and design stages, to development and in-house manufacture of all parts up to final assembly of the finished product.



#### **SPECIAL APPLICATION EXPERIENCE**

Besides a wide range of standard products, CEA has always worked with its customers in the solutions and development of special applications. Now in partnership with TECNOROBOT we enter a new phase which allows us to offer advanced welding and cutting solutions to complex automation and robotized procedures.

# **Certification and standards**











#### ISO 9001

Always concerned about quality, CEA has its quality management system ISO 9001 certified since 1994. This is a guarantee of an ongoing commitment of the entire company for a continuous improvement in its products and business processes, leading to the full satisfaction of its customers.

#### **CE MARKING**

All CEA products are CE marked, therefore compliant with all EU Directives and Standards imposing such utilization from design, manufacture and installation of the equipment up to its final disposal. In particular CE marking implies the conformity to the following main Directives:

#### 2014/35/EU (LVD)

The Low Voltage Directive (LVD) defines the compliance with numerous regulations to safeguard health and safety for the operator and also regarding the electrical dimensioning of the equipment.

#### 2014/30/EU (EMC)

The Directive on Electromagnetic compatibility (EMC) defines the effects of electromagnetic emissions and the immunity degree. This means that the equipment shall not emit any electromagnetic disturbances and, in turn, must be immune to any interference from other equipment or from the mains supply.

CEA power sources are designed for use in industrial environments: EMC (CISPR 11) A Class.

#### 2011/65/EU (RoHS)

The Directive defines the restriction of certain hazardous substances in electrical and electronic equipment.

#### 2009/125/EU (Eco-Design)

CEA products have been designed and built according to the following harmonised standards:

- IEC 60974-1 EN 60974-1 Welding and Cutting power sources
- IEC 60974-7 EN 60974-7 Torches
- IEC 60974-10 EN 60974-10 Electromagnetic compatibility (EMC)

#### **CEA: A LOW-ENERGY IMPACT FIRM**

Care for the environment has always been a fundamental value in the CEA corpo-

rate philosophy. This is proven by a keen attention towards an eco-sustainable production process, care in the selection of components, use of paints with low environmental impact and so on. The evolution of CEA's manufacturing trend, focusing towards inverter technology, has allowed to greatly improve the energy efficiency of the products. CEA GOES GREEN is the hallmark of this approach and is reflected into latest generation inverter power sources which, versus traditional equipment, ensure a considerable energy saving:

- · Low energy consumption
- Compliance with "green" environment-friendly norms (i.e. RoHS)
- Reduced weight and dimensions for lower shipping costs, disposal and recycling (WEEE)

An additional investment in the pursuit of "eco-sustainability" is represented by an important 350 kWp photovoltaic plant which has made the company virtually self-sufficient from an energetic perspective.



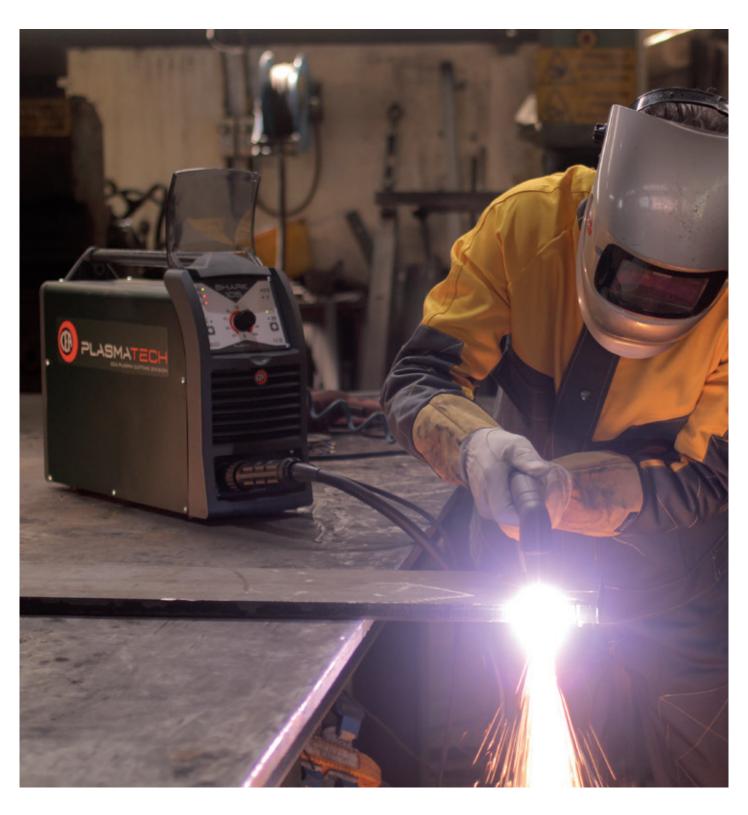
- ✓ Less energy consumption
- ✓ High efficiency
- ✓ High Power Factor
- ✓ Energy saving function

## **PLASMATECH**



**PLASMATECH** is the new CEA division dedicated to Plasma cutting technology. Thanks to over 30 years' experience in the cutting sector, **CEA PLASMATECH** will become your strategic partner, focused on the plasma cutting field, fully meeting all market needs in a most efficient way.

In this catalogue you will find accurate, genuine technical details who will allow you to easily choose the product best suited to your job.







The **SHARK** range of plasma cutting equipment is the result of very considerable investments of capital and resources dedicated to research. **SHARK** equipment is fitted with new technology torches, which have greatly contributed to a remarkable increase of both quality and speed throughout the entire cutting process. Quality is clearly reflected in neat cuts, lack of dross, minimal heat-affected zone and sufficiently squared edges.

**SHARK** power sources represent an efficient solution for the cutting of any metal and perforated lamination sheets. Electronic control, coupled with inverter precision and flexibility, always provides the most correct parameters in order to obtain the highest quality cut depending on the thickness and type of material being cut. **SHARK** range new **SK** torches for manual cutting and **SKM** for CNC automation allow cuts without high frequency for arc striking, thus reducing external disturbances to the environment.

SHARK power sources, powerful and fitted with professional high flow air circuit, ensure perfect cuts.

- Electronic control for excellent cutting quality
- · Professional high flow air circulation
- · Pilot arc torch
- Possibility of cutting grates and perforated lamination sheets
- · Possibility of contact cutting with currents lower than 50 A, without any guiding device or other spacers.
- Regulator group with built-in filter and air impurity automatic expulsion
- Easy to read and adjust sloping front control panel, highly visible from any direction
- Metallic main structure with shockproof fibre compound front frames and control panel protected against accidental impact
- Electrical protection device on the torch to ensure operator's maximum safety

SHARK TECHNICAL DA	TA	SHARK 35 compressor	SHARK 46	SHARK	<b>46 SV</b>	SHARK 55	SHARK 75	SHARK 105	SHARK 125	SHARK 155
Input Voltage 50/60 Hz	V	230-1ph	230-1ph	115-1ph	230-1ph	400-3ph	400-3ph	400-3ph	400-3ph	400-3ph
Current range	А	10 ÷ 30	20 ÷ 40	20 ÷ 30	20 ÷ 40	20 ÷ 55	20 ÷ 70	20 ÷ 100	25 ÷ 120	25 ÷ 150
100%	А	-	20	-	20	35	55	70	100	100
Duty Cycle at (40°C) 60%	А	25	30	20	30	45	65	90	120	120
x%	Α	30 (40%)	40 (35%)	30 (25%)	40 (35%)	55 (40%)	70 (40%)	100 (40%)	-	150 (30%)
Recommended	mm	8	12	10	12	15	20	30	40	45
Cutting Maximum	mm	10	15	12	15	20	25	35	45	50
Capacity Severance	mm	15	20	18	20	25	30	40	50	60
Piercing	mm	-	10	-	10	12	15	20	25	25
Cutting power (*)	KW	3,3	5	3,7	5	6,8	9,8	17	21	26,3
Weight	Kg	20,5	16	1	6	15	23	24	48	48

SHARK-M T DATA (MAC			SHARK 46-M	SHARK 55-M	SHARK 75-M	SHARK 105-M	SHARK 125-M	SHARK 125-MR	SHARK 155-M	SHARK 155-MR
Input Voltag	ge 50/60 Hz	V	230-1ph	400-3ph	400-3ph	400-3ph	400-3ph	400-3ph	400-3ph	400-3ph
Current rang	ge	А	20 ÷ 40	20 ÷ 55	20 ÷ 70	20 ÷ 100	25 ÷ 120	25 ÷ 120	25 ÷ 150	25 ÷ 150
	100%	Α	20	35	55	70	100	100	100	100
Duty Cycle at (40°C)	60%	Α	30	45	65	90	120	120	120	120
	x%	Α	40 (35%)	55 (40%)	70 (40%)	100 (40%)	-	-	150 (30%)	150 (30%)
	Quality	mm	8	12	15	25	30	30	32	32
Cutting	Production	mm	10	15	20	30	35	35	40	40
Capacity @ I <sub>2</sub> Max	Maximum	mm	15	20	25	35	45	45	50	50
	Piercing	mm	10	12	15	20	25	25	25	25
Cutting pow	er (*)	KW	5	6,8	9,8	17	21	21	26,3	26,3
Weight		Kg	16	15	23	24	48	48	48	48

Technical features might change without notice.

(\*) This value is obtained by multiplying the maximum current by the cutting voltage, thus allowing to evaluate the effective cutting power of the equipment.





Innovative electronic circuit that allows an optimal and gradual transfer of the pilot-arc in the main arc, during the start of the cutting arc.

Compared to a traditional system of arc transfer, it has the following advantages:

- Guarantees immediate stability of the plasma flow
- Increases the cut start performance and also improves cutting quality
- Increases the life of the torch consumables



Innovative function that allows, at the end of the cut, a gradual and synergic decline of the current up to an optimal value.

Compared to traditional end-of-cut methods, it has the following advantages:

- Improved end-of-cut quality with permanent separation of parts
- Cutting end noise reduction
- Prevents the operator from manually separating pieces by ruining the final part of the cutting surface



Process able to produce a very thin cutting width to improve the cutting quality of thin metals with detailed details or complex shapes. With this process it is possible to replace expensive technologies like laser and wateriet.

It is possible to obtain detailed cuts with air plasma using the Clean-Cut consumables available for the SK125 torches for manual cutting and for those SKM125 mounted on automated systems. Clean-Cut consumables produce a narrower cutting width with a more concentrated arc ideal for cutting thinner materials (up to 2mm) with maximum cutting currents of 45A. The main uses and advantages are as follows:

- Cutting thin sheets with better cutting quality and sharp edges without burrs
- Cutting of sheets for which minimum tolerances are required
- Cutting of complex shapes.
- Cutting of sheets with many details



Plasma gouging is the fastes and cheaper metal-removing system ever.

Plasma gouging is suitable for every kind of conductive-metal, for example: carbon-steel, inox, aluminium and copper. Compare to traditional gouging by carbon-electrode, it has the following plus-points:

- It's easy to do and fast
- It's a low cost operation
- Does not require any trained and skilled operators
- Enables to clearly see the gouging area
- Reduces smoke emissions and noise at the workplace

Typical applications for plasma arc gouging are:

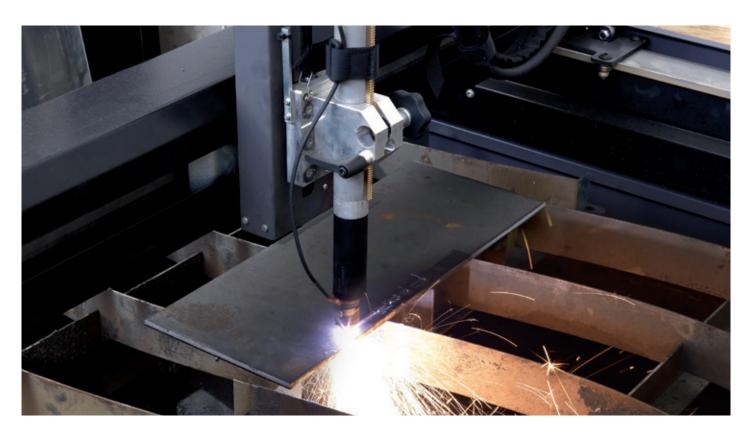
- Removals of cracks
- Repairing of mild steel, aluminium and stainless tanks
- Maintenance and repairing of vehicles
- Pipe and fixture edge preparation
- · Removal of defective welds and overwelds





# **AUTOMATION**





**SHARK 46-M**, **SHARK 55-M**, **SHARK 75-M**, **SHARK 105-M**, **SHARK 125-M** and **SHARK 155-M** equipment, when fitted with SMK machine torch, are suitable to be used for automated cutting.

These power sources can be easily connected to cutting pantographs, having the ability to manage the following signals:

- Power source ON/OFF
- Cutting arc control
- · Torch height



SHARK-M T			SHARK 46-M	SHARK 55-M	SHARK 75-M	SHARK 105-M	SHARK 125-M	SHARK 155-M
Input Voltag	ge 50/60 Hz	V	230-1ph	400-3ph	400-3ph	400-3ph	400-3ph	400-3ph
Current rang	ge	Α	20 ÷ 40	20 ÷ 55	20 ÷ 70	20 ÷ 100	25 ÷ 120	25 ÷ 150
	100%	Α	20	35	55	70	100	100
Duty Cycle at (40°C)	60%	A	30	45	65	90	120	120
	x%	Α	40 (35%)	55 (40%)	70 (40%)	100 (40%)	-	150 (30%)
	Quality	mm	8	12	15	25	30	32
Cutting	Production	mm	10	15	20	30	35	40
Capacity @ I <sub>2</sub> Max	Maximum	mm	15	20	25	35	45	50
	Piercing	mm	10	12	15	20	25	25
Cutting pow	er	KW	5	6,8	9,8	17	21	26,3
Weight		Kg	16	15	23	24	48	48

# **ROBOTIC**



**SHARK 125-MR** and **SHARK 155-MR** represent the best solution for setting all the functions and cutting current directly from CNC system without going back to the machine.

These machines make easier and more flexible the overall functionality; in fact, they allow you to set, for example, programs with different cutting currents, or even a programs that during the cutting process changes the current according to your needs. SHARK 125-MR and SHARK 155-MR allow you to change the cutting mode (solid, mesh or gouging) from CNC system too.



SHARK-MR TECHNICAL DATA (MACHINE CUT)			SHARK 125-MR	SHARK 155-MR
Input Voltage 50/60 Hz		V	400-3ph	400-3ph
Current range		А	25 ÷ 120	25 ÷ 150
	100%	А	100	100
Duty Cycle at (40°C)	60%	А	120	120
	x%	А	-	150 (30%)
	Quality	mm	30	32
Cutting Capacity @ I, Max	Production	mm	35	40
cutting capacity & 12 max	Maximum	mm	45	50
	Piercing	mm	25	25
Cutting power		KW	21	26,3
Weight		Kg	48	48



# **SHARK 35 compressor**





**SHARK 35** is a lightweight and handy compressor plasma cutting equipment. It is the ideal solution for all maintenance jobs thanks to its built-in compressor, single-phase input, portability and flexibility in use.

Shark 35 is the best solution for everyone who needs the maximum portability and power possible.

SHARK Compressor is the best choice also for light fabrication work, agriculture and car body repairs.

- ✓ SK25 Back Striking technology torch with coaxial cable
- ✓ 30A @ 40%
- ✓ Built-in compressor
- ✓ Portability and flexibility in the use
- ✓ Electronic control for an excellent cutting quality









- ▶ Possibility of cutting grids and perforated lamination sheets
- ► Contact cutting possibility
- ► Torch with pilot arc
- $\blacktriangleright$  Cutting parameter stability within  $\pm 15\%$  mains voltage fluctuations
- ► Air filter incorporated into the compressor
- ▶ Metallic main structure with shockproof fibre compound front frame
- ▶ Sloping front control panel, easy to read and adjust and highly visible from any direction
- ▶ Electric protection on the torch for the maximum safety of the operator













410681

## **TECHNICAL DATA**

			SHARK 35 compressor
Input Voltage 50/60 Hz		V	230-1ph
Input Power @ I <sub>2</sub> Max	kVA	6,05	
Delayed Fuse ( I eff )	А	16	
Power factor / $\cos \phi$			0,65 / 0,99
Efficiency Degree		%	80
Current range		A	10 ÷ 30
	100%	A	-
Duty Cycle at (40°C)	60%	A	25
	x%	А	30 (40%)
Motorgenerator require for full capacity	ment	kVA	8
	Recommended	mm	8
Cutting Capacity	Maximum	mm	10
Cutting Capacity	Severance	mm	15
	Piercing	mm	-
Gas supply			Air
Gas Pressure		bar	3,5 - 4,0
Gas Flow	l/min	70 ÷ 80	
Protection Class	IP	23 S	
Dimensions	Dimensions		
Weight		Kg	20,5

#### **ORDER INFORMATION**

CODE	MANUAL CUTTING
004412	SHARK 35 Compressor 230V-1 Ph. with SK25 torch, 6mm² / 4m ground cable & Consumable starting kit (343961)
PLASMA	A TORCH
022031	Torch <b>SK25</b> 4 m 30 A direct connection
343961	Consumable <b>Starting Kit</b> for SK25: 2 Electrodes, 1 Nozzle ø 0,65 (10-20 A), 2 Nozzles ø 0,80 (20-30 A)
ACCESS	ORIES
418485	Compass for SK25 torch
410681	Wheeled torch holder
234926	Transport Trolley CTP 10

## SK25



Other voltages available on request





Powerful and light SHARK 46 single phase plasma cutting equipment with PFC is the ideal choice for car body repairs, agriculture and maintenance.

PFC device ensures big cutting power coupled with a contained consumption.

- ✓ SK75 torch with HPC High Performance Cutting technology and coaxial cable
- ✓ PFC Power Factor Correction 16 A fuse
- ✓ High power professional air flow circulation
- ✓ Electronic control for an excellent cutting quality

#### PFC: POWER FACTOR CORRECTION

The wave shape of the current drawn from the mains is made sinusoidal by the PFC device with a consequent total lack of harmonic disturbances in the mains and consumption optimization, which enables to utilize the power source at full range on a 16 A fuse.









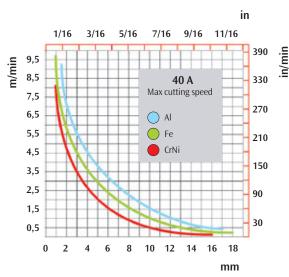


- ► Long life of consumable parts
- ► Possibility of cutting grids and perforated lamination sheets
- ► Contact cutting possibility
- ► Shockproof and dustproof control rack protection cover
- ► Torch with pilot arc

GOUGING

- ► Central connector for the torch
- $\blacktriangleright$  Cutting parameter stability within  $\pm 15\%$  mains voltage fluctuations
- ► Regulator group with built-in filter and air impurity automatic expulsion
- ▶ Metallic main structure with shockproof fibre compound front frame
- ► Sloping front control panel, easy to read and adjust and highly visible from any direction
- ▶ Electric protection on the torch for the maximum safety of the operator

#### **CUTTING SPEED CHART**



SK75 SKM75





Possibility of CNC automated cutting for SHARK 75-M power source when fitted with SKM75 machine torch



















#### **TECHNICAL DATA**

			SHARK 46	SHARK	46 SV
Input Voltage 50/60 Hz		V	230-1ph	115-1ph	230-1ph
Input Power @ I <sub>2</sub> Max		kVA	5	4,3	5
Delayed Fuse ( I eff )		А	16	20	16
Power factor / $\cos \phi$			0,99 / 0,99	0,99 /	0,99
Efficiency Degree		%	81	8	1
Current range		А	20 ÷ 40	20 ÷ 30	20 ÷ 40
	100%	A	20	-	20
Duty Cycle at (40°C)	60%	А	30	20	30
	x%	A	40 (35%)	30 (25%)	40 (35%)
Motorgenerator require capacity	ment for full	kVA	6	6	6
	Recommended	mm	12	10	12
Cutting Capacity	Maximum	mm	15	12	15
Cutting Capacity	Severance	mm	20	18	20
	Piercing	mm	10	-	10
Gas supply			Air / N <sub>2</sub>	Air	/ N <sub>2</sub>
Gas Pressure		bar	5,0 - 5,5	5,0 - 5,5	
Gas Flow		l/min	160 ÷ 180	160 ÷ 180	
Protection Class		IP	23 S	23 S	
Dimensions		mm	390x185x595	390x185x595	
Weight		Kg	16	16	

#### Other voltages available on request

#### **ORDER INFORMATION**

CODE	MANUAL CUTTING
004417	SHARK 46 230V-1 Ph. with SK75 - 6 m torch, 6mm² / 4m ground cable & kit of spares (343954)
004419	SHARK 46-SV 115-230V-1 Ph. with SK75 - 6 m torch, 6mm² / 4m ground cable & kit of spares (343954)
PLASMA	TORCH
022029	Manual torch <b>SK75</b> 6 m 70 A
343956	Consumable <b>Basic Kit Box</b> for SK75 (Page 27)
343954	Consumable <b>Starting Kit</b> for SK75: 1 Electrode, 2 Nozzles 50 A, 1 Shield cap
ACCESSO	DRIES
418487	Compass for SK75 torch
410684	Wheeled torch holder
418508	Bevel Tool Kit: guide carriage and circle attachment for straight and bevel cutting
234926	Transport Trolley CTP 10
427529	Compressed air filter
427530	Filter cartridge Package of 4 pcs
CODE	MECHANIZED CUTTING
004418	<b>SHARK 46-M</b> 230V-1 Ph. with <b>SKM75</b> torch <b>6 m</b> - 6mm <sup>2</sup> / 4 m ground cable
PLASM	A TORCHES
022073	Machine Straight Torch <b>SKM75 6 m</b> - 70 A with gear rack





Powerful and compact, SHARK 55 is the most efficient solution to fully meet the cutting needs of medium and light fabrication work. Its always precise cutting performance enables the achievement of the highest standards in all circumstances. Top quality cutting is achieved at high speed thanks to SK75 HPC High-Performance-Cutting technology torch, which offers a powerful and concentrated cutting beam.

- ✓ SK75 torch with HPC High Performance Cutting technology and coaxial cable
- ✓ Powerful, compact and light, only 15 Kg
- ✓ More productivity thanks to high quality and cutting speed
- √ Reduced operating costs granted by longer life of the consumable parts





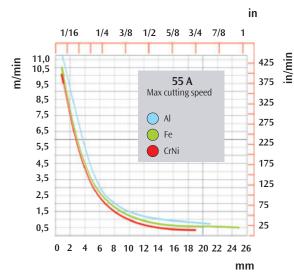






- ► Electronic control for an excellent cutting quality
- ► Professional high flow air circulation
- ► Pilot arc torch
- ▶ Possibility of cutting grids and perforated lamination sheets
- ► Contact cutting possibility
- "Energy Saving" function to operate the power source cooling fan only when necessary
- $\blacktriangleright$  Cutting parameter stability within  $\pm 15\%$  mains voltage fluctuations
- ► Shockproof and dustproof control rack protection cover
- ▶ Electric protection on the torch for the maximum safety of the operator

#### **CUTTING SPEED CHART**



SK75 SKM75





Possibility of CNC automated cutting for SHARK 75-M power source when fitted with SKM75 machine torch





### **TECHNICAL DATA**

Input Voltage 50/60 Hz				SHARK 55
Delayed Fuse (1 eff)A10Power factor / cos φ0,63 / 0,99Efficiency Degree%85Current rangeA20 ÷ 55100%A35Duty Cycle at (40°C)60%A45x%A55 (40%)Motorgenerator requirement for full capacitykVA16Recommendedmm15Maximummm20Cutting CapacitySeverancemm25Piercingmm12Gas supplyAir / N₂Gas Pressurebar5,0 - 5,5Gas FlowI/min170 ÷ 190Protection ClassIP23 SDimensionsmm390x185x595	Input Voltage 50/60 Hz	V	400-3ph	
Power factor / cos $φ$ $0,63 / 0,99$ Efficiency Degree%85Current rangeA $20 \div 55$ Duty Cycle at $(40^{\circ}\text{C})$ $60\%$ A $45$ A $55 (40\%)$ Motorgenerator requirement for full capacitykVA $16$ Recommendedmm $15$ Maximummm $20$ Cutting Capacitymm $25$ Severancemm $25$ Piercingmm $12$ Gas supplyAir / $N_2$ Gas Pressurebar $5,0$ - $5,5$ Gas Flow $1/\text{min}$ $170 \div 190$ Protection ClassIP $23 \text{ S}$ Dimensionsmm $390x185x595$	Input Power @ I <sub>2</sub> Max	kVA	10,5	
Efficiency Degree	Delayed Fuse ( I eff )		А	10
Current range A 20 ÷ 55  100% A 35  Duty Cycle at (40°C) 60% A 45  Motorgenerator requirement for full capacity kVA 16  Recommended mm 15  Maximum mm 20  Cutting Capacity Severance mm 25  Piercing mm 12  Gas supply Air / N <sub>2</sub> Gas Pressure bar 5,0 - 5,5  Gas Flow I/min 170 ÷ 190  Protection Class Dimensions mm 390x185x595	Power factor / $\cos \phi$			0,63 / 0,99
Duty Cycle at (40°C)  60%  A  45  A  55 (40%)  Motorgenerator requirement for full capacity  Recommended  Maximum  Maximum  Severance  Piercing  Mair / N <sub>2</sub> Gas Pressure  Gas Flow  I/min  170 ÷ 190  Protection Class  Dimensions  A  45  A  45  A  45  A  45  A  55 (40%)  MVA  16  Mm  15  mm  20  Air  Air  Air  Air  Air  Air  Air  Ai	Efficiency Degree		%	85
Duty Cycle at (40°C)  60%  A  45  A  55 (40%)  Motorgenerator requirement for full capacity  Recommended  mm  15  Maximum  mm  20  Cutting Capacity  Severance  Piercing  mm  12  Gas supply  Gas Pressure  Gas Flow  I/min  I70 ÷ 190  Protection Class  Dimensions  mm  390x185x595	Current range		А	20 ÷ 55
x% A 55 (40%)  Motorgenerator requirement for full capacity kVA 16  Recommended mm 15  Maximum mm 20  Cutting Capacity Severance mm 25  Piercing mm 12  Gas supply Air / N <sub>2</sub> Gas Pressure bar 5,0 - 5,5  Gas Flow I/min 170 ÷ 190  Protection Class IP 23 S  Dimensions mm 390x185x595		100%	А	35
Motorgenerator requirement for full capacity kVA 16  Recommended mm 15  Maximum mm 20  Severance mm 25  Piercing mm 12  Gas supply Air / N <sub>2</sub> Gas Pressure bar 5,0 - 5,5  Gas Flow I/min 170 ÷ 190  Protection Class IP 23 S  Dimensions mm 390x185x595	Duty Cycle at (40°C)	60%	A	45
Recommended mm 15  Maximum mm 20  Severance mm 25  Piercing mm 12  Gas supply Air / N2  Gas Pressure bar 5,0 - 5,5  Gas Flow I/min 170 ÷ 190  Protection Class IP 23 S  Dimensions mm 390x185x595		х%	А	55 (40%)
Cutting Capacity  Maximum mm 20  mm 25  Piercing mm 12  Gas supply Air / N <sub>2</sub> Gas Pressure bar 5,0 - 5,5  Gas Flow I/min 170 ÷ 190  Protection Class IP 23 S  Dimensions mm 390x185x595	Motorgenerator requiremen	nt for full capacity	kVA	16
Cutting Capacity $Severance & mm & 25$ $Piercing & mm & 12$ $Gas supply & Air / N_2$ $Gas Pressure & bar & 5,0 - 5,5$ $Gas Flow & I/min & 170 \div 190$ $Protection Class & IP & 23 S$ $Dimensions & mm & 390x185x595$		Recommended	mm	15
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Cutting Canacity	Maximum	mm	20
Gas supply	Cutting Capacity	Severance	mm	25
Gas Pressure         bar         5,0 - 5,5           Gas Flow         I/min         170 ÷ 190           Protection Class         IP         23 S           Dimensions         mm         390x185x595		Piercing	mm	12
Gas Flow         I/min         170 ÷ 190           Protection Class         IP         23 S           Dimensions         mm         390x185x595	Gas supply			Air / N <sub>2</sub>
Protection Class IP 23 S Dimensions mm 390x185x595	Gas Pressure		bar	5,0 - 5,5
Dimensions mm 390x185x595	Gas Flow		I/min	170 ÷ 190
	Protection Class		IP	23 S
Weight Kg 15	Dimensions		mm	390x185x595
	Weight		Kg	15

## Other voltages available on request

#### **ORDER INFORMATION**

CODE	MANUAL CUTTING
004480	<b>SHARK 55</b> 400V-3 Ph. with <b>SK75</b> torch <b>- 6 m</b> , 10mm <sup>2</sup> / 4m ground cable & kit of spares (343962)
004484	<b>SHARK 55</b> 400V-3 Ph. with <b>SK75</b> torch <b>- 12 m</b> , 10mm² / 4m ground cable & kit of spares (343962)
PLASM	A TORCH
022029	Manual Torch <b>SK75</b> 6 m 70 A
022033	Manual torch <b>SK75</b> 12m 70A
343956	Consumable <b>Basic Kit Box</b> for SK75 (Page 25)
343962	Consumable <b>Starting Kit</b> for SK75: 1 Electrode, 2 Nozzles 70 A, 1 Shield cap
ACCESS	ORIES
418487	Compass for SK75/SK125 torch
410684	Wheeled torch holder
418508	Bevel Tool Kit: guide carriage and circle attachment for straight and bevel cutting
234926	Transport Trolley CTP 10
427529	Compressed air filter
427530	Filter cartridge. Package of 4 pcs
CODE	MECHANIZED CUTTING
004481	<b>SHARK 55-M</b> 400V-3 Ph. with <b>SKM75</b> torch <b>6 m</b> - 10 mm <sup>2</sup> / 4 m ground cable
004482	<b>SHARK 55-M</b> 400V-3 Ph. with <b>SKM75</b> torch <b>12 m</b> - 10 mm <sup>2</sup> / 4 m ground cable
PLASM	A TORCHES
022073	Machine Straight Torch SKM75 6 m - 70 A with gear rack
022080	Machine Straight Torch  SKM75 12 m - 70 A with gear rack
I D COM	





Powerful and compact, SHARK 75 is the most efficient solution to fully meet the cutting needs of medium and light fabrication work. Its always precise cutting performance enables the achievement of the highest standards in all circumstances. Top quality cutting is achieved at high speed thanks to SK75 HPC High-Performance-Cutting technology torch, which offers a powerful and concentrated cutting beam.

Smart Start Transfer and Smart End Cutting functions permit both initial and final cutting phases in an optimal way.

- ✓ SK75 torch with HPC High Performance Cutting technology and coaxial cable
- √ Powerful, compact and light, only 23 Kg
- ✓ More productivity thanks to high quality and cutting speed
- √ Reduced operating costs granted by longer life of the consumable parts









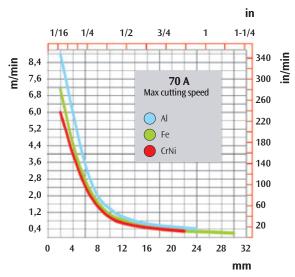






- ► Electronic control for an excellent cutting quality
- ► Professional high flow air circulation
- ► Pilot arc torch
- ▶ Possibility of cutting grids and perforated lamination sheets
- ► Contact cutting possibility
- "Energy Saving" function to operate the power source cooling fan only when necessary
- ► Cutting parameter stability within ±20% mains voltage fluctuations
- ► Shockproof and dustproof control rack protection cover
- ▶ Electric protection on the torch for the maximum safety of the operator

#### **CUTTING SPEED CHART**



SK75 SKM75





Possibility of CNC automated cutting for SHARK 75-M power source when fitted with SKM75 machine torch





## **TECHNICAL DATA**

			SHARK 75
Input Voltage 50/60 Hz	V	400-3ph	
Input Power @ I <sub>2</sub> Max		kVA	10,5
Delayed Fuse ( I eff )		Α	16
Power factor / $\cos \phi$			0,83 / 0,99
Efficiency Degree		%	87
Current range		А	20 ÷ 70
	100%	A	55
Duty Cycle at (40°C)	60%	А	65
	x%	А	70 (40%)
Motorgenerator requirement for full capacity		kVA	20
	Recommended	mm	20
Cutting Capacity	Maximum	mm	25
Cutting Capacity	Severance	mm	30
	Piercing	mm	15
Gas supply			Air / N <sub>2</sub>
Gas Pressure		bar	5,0 - 5,5
Gas Flow		l/min	180 ÷ 210
Protection Class		IP	23 S
Dimensions		mm	390x185x595
Weight		Kg	23

Other voltages available on request

#### **ORDER INFORMATION**

CODE	MANUAL CUTTING
004425	SHARK 75 400V-3 Ph. with SK75 torch - 6 m, 10mm² / 4m ground cable & kit of spares (343962)
004429	<b>SHARK 75</b> 400V-3 Ph. with <b>SK75</b> torch <b>- 12 m</b> , 10mm² / 4m ground cable & kit of spares (343962)
PLASM	A TORCH
022029	Manual Torch <b>SK75</b> 6 m 70 A
022033	Manual torch <b>SK75</b> 12m 70A
343956	Consumable <b>Basic Kit Box</b> for SK75 (Page 25)
343962	Consumable <b>Starting Kit</b> for SK75: 1 Electrode, 2 Nozzles 70 A, 1 Shield cap
ACCESS	ORIES
418487	Compass for SK75/SK125 torch
410684	Wheeled torch holder
418508	Bevel Tool Kit: guide carriage and circle attachment for straight and bevel cutting
234926	Transport Trolley CTP 10
427529	Compressed air filter
427530	Filter cartridge. Package of 4 pcs
CODE	MECHANIZED CUTTING
004426	<b>SHARK 75-M</b> 400V-3 Ph. with <b>SKM75</b> torch <b>6 m</b> - 10 mm <sup>2</sup> / 4 m ground cable
004427	<b>SHARK 75-M</b> 400V-3 Ph. with <b>SKM75</b> torch <b>12 m</b> - 10 mm <sup>2</sup> / 4 m ground cable
PLASM	A TORCHES
022073	Machine Straight Torch SKM75 6 m - 70 A with gear rack
022080	Machine Straight Torch  SKM75 12 m - 70 A with gear rack





Powerful, robust and compact, SHARK 105 absolutely grants high productivity in the toughest cutting operations without any compromise: cuts are always precise and ensure the highest cutting results in all applications.

Top cutting quality at high speed by means of SK125 HPC High-Performance-Cutting technology torch, granting a powerful and concentrated cutting beam.

Smart Start Transfer and Smart End Cutting functions permit both initial and final cutting phases in the best way.

- ✓ SK125 torch with HPC High Performance Cutting technology and coaxial cable
- ✓ Powerful, compact and light, only 24 Kg
- ✓ More productivity thanks to high quality and cutting speed
- √ Reduced operating costs granted by longer life of the consumable parts











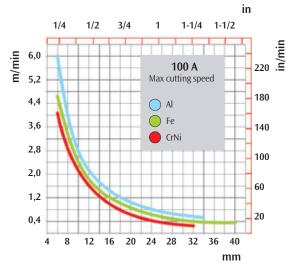






- ► Electronic control for an excellent cutting quality
- ► Professional high flow air circulation
- ► Pilot arc torch
- ▶ Possibility of cutting grids and perforated lamination sheets
- ► Contact cutting possibility
- ► Ability to gouging jobs
- "Energy Saving" function to operate the power source cooling fan only when necessary
- ► Cutting parameter stability within ±20% mains voltage fluctuations
- ► Shockproof and dustproof control rack protection cover
- ▶ Electric protection on the torch for the maximum safety of the operator

#### **CUTTING SPEED CHART**



#### SK125 SKM125





Possibility of CNC automated cutting for SHARK 105-M and SHARK 125-M power source when fitted with SKM125 machine torch.





### **TECHNICAL DATA**

			SHARK 105
Input Voltage 50/60 Hz		V	400-3ph
Input Power @ I <sub>2</sub> Max		kVA	15
Delayed Fuse ( I eff )		А	16
Power factor / $\cos \phi$			0,90 / 0,99
Efficiency Degree		%	89
Current range		А	20 ÷ 100
	100%	А	70
Duty Cycle at (40°C)	60%	А	90
	x%	А	100 (40%)
Motorgenerator requiren	nent for full capacity	kVA	30
	Recommended	mm	30
Cutting Conneity	Maximum	mm	35
Cutting Capacity	Severance	mm	40
	Piercing	mm	20
Gas supply			Air / N <sub>2</sub>
Gas Pressure		bar	5,0 - 6,0
Gas Flow		I/min	280 ÷ 330
Protection Class		IP	23 S
Dimensions		mm	390x185x595
Weight		Kg	24

## Other voltages available on request

### **ORDER INFORMATION**

CODE	MANUAL CUTTING
004430	<b>SHARK 105</b> 400V-3 Ph. With <b>SK125</b> - <b>6 m</b> torch, 10mm² / 4m ground cable & kit of spares (343963)
004434	<b>SHARK 105</b> 400V-3 Ph. With <b>SK125</b> - <b>12 m</b> torch, 10mm² / 4m ground cable & kit of spares (343963)
PLASMA	A TORCH
022028	Manual Torch <b>SK125</b> 6 m 125 A
022035	Manual Torch <b>SK125</b> 12m 125 A
343957	Consumable <b>Basic Kit Box</b> for SK125 (Page 25)
343963	Consumable <b>Starting Kit</b> for SK125: 1 Electrode, 2 Nozzles 105 A, 1 Shield cap 100-125 A
ACCESS	ORIES
418487	Compass for SK125 torch
410684	Wheeled torch holder guide
418508	Bevel Tool Kit: guide carriage and circle attachment for straight and bevel cutting
234926	Transport Trolley CTP 10
427529	Compressed air filter
427530	Filter cartridge Package of 4 pcs
CODE	MECHANIZED CUTTING
004431	<b>SHARK 105-M</b> 400V-3 Ph. with <b>SKM125</b> torch <b>6 m</b> - 10 mm <sup>2</sup> / 4 m ground cable
004432	<b>SHARK 105-M</b> 400V-3 Ph. with <b>SKM125</b> torch <b>12 m</b> - 10 mm <sup>2</sup> / 4 m ground cable
PLASMA	A TORCHES
022074	Machine Straight Torch SKM125 6 m - 125 A with gear rack
022081	Machine Straight Torch SKM125 12 m - 125 A with gear rack





SHARK 125 is equipped with display for managing all the digital control. In combination with the technology HPC High-Performance-Cutting of the torch SK125, it grants to every user a cutting beam very concentrated and hot. This feature allows a very high precision and speed in cutting for a wide range of thickness. Shark 125 has also the special function Smart Start Transfer and Smart End Cutting for a better management of the cut during the start and end.

- ✓ SK125 torch with HPC High Performance Cutting technology and coaxial cable
- ✓ Digital display for the digital control of all parameters
- √ High duty cycle: 120A @ 60%
- ✓ More productivity thanks to high quality and cutting speed











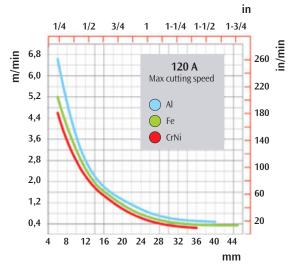






- ▶ Reduced operating costs granted by longer life of the consumable parts
- ► Electronic control for an excellent cutting quality
- ► Professional high flow air circulation
- ► Pilot arc torch
- ▶ Possibility of cutting grids and perforated lamination sheets
- ► Contact cutting possibility
- ► Ability to gouging jobs
- ► Cutting parameter stability within ±20% mains voltage fluctuations
- ► Shockproof and dustproof control rack protection cover
- ▶ Electric protection on the torch for the maximum safety of the operator

#### **CUTTING SPEED CHART**



#### SK125 SKM125





Possibility of CNC automated cutting for SHARK 105-M and SHARK 125-M power source when fitted with SKM125 machine torch.





## TECHNICAL DATA

			SHARK 125
Input Voltage 50/60 Hz	V	400-3ph	
Input Power @ I <sub>2</sub> Max		kVA	21
Delayed Fuse ( I eff )		А	32
Power factor / $\cos \phi$			0,89 / 0,99
Efficiency Degree		%	88
Current range		А	25 ÷ 120
	100%	А	100
Duty Cycle at (40°C)	60%	А	120
	x%	А	-
Motorgenerator requiremen	Motorgenerator requirement for full capacity		40
	Recommended	mm	40
Cutting Canacity	Maximum	mm	45
Cutting Capacity	Severance	mm	50
	Piercing	mm	25
Gas supply			Air / N <sub>2</sub>
Gas Pressure	Gas Pressure		5,0 - 6,0
Gas Flow		I/min	280 ÷ 330
Protection Class		IP	23 S
Dimensions	Dimensions		515x290x730
Weight		Kg	48

### ORDER INFORMATION

CODE	MANUAL CUTTING
004462	<b>SHARK 125</b> 400V-3 Ph. With <b>SK125</b> - <b>6 m</b> torch, 25 mm² / 4m ground cable & kit of spares (343955)
004467	<b>SHARK 125</b> 400V-3 Ph. With <b>SK125</b> - <b>12 m</b> torch, 25 mm² / 4m ground cable & kit of spares (343955)
PLASMA	A TORCH
022028	Manual Torch <b>SK125</b> 6 m 125 A
022035	Manual Torch <b>SK125</b> 12m 125 A
022083	Manual Long torch <b>5K165XL</b> 1,30 m / 45° - 7,5 m cable 160 A
343957	Consumable <b>Basic Kit Box</b> for SK125 (Page 25)
343955	Consumable <b>Starting Kit</b> for SK125 -125 A: 1 Electrode, 2 Nozzles 125 A, 1 Shield cap 100-125 A
ACCESS	ORIES
418487	Compass for SK125 torch
410684	Wheeled torch holder guide
418508	Bevel Tool Kit: guide carriage and circle attachment for straight and bevel cutting
234927	Transport Trolley CTP 15
427529	Compressed air filter
427530	Filter cartridge. Package of 4 pcs
CODE	MECHANIZED CUTTING
004463	<b>SHARK 125-M</b> 400V-3 Ph. with <b>SKM125</b> torch <b>6 m</b> - 25 mm <sup>2</sup> / 4 m ground cable
004464	<b>SHARK 125-M</b> 400V-3 Ph. with <b>SKM125</b> torch <b>12 m</b> - 25 mm <sup>2</sup> / 4 m ground cable
PLASMA	A TORCHES
022074	Machine Straight Torch <b>SKM125 6 m</b> - 125 A
022081	Machine Straight Torch <b>SKM125 12 m</b> - 125 A
CODE	MECHANIZED CUTTING BY ROBOT / PLC
004465	SHARK 125-MR 400V-3 Phwith torch 6 m torch SKM125 - 25 mm² / 4 m ground cable - complete with ROBOMAT 1 interface and 5 m cable for connected with automated equipment
004466	SHARK 125-MR 400V-3 Phwith torch 12 m torch SKM125 - 25 mm² / 4 m ground cable - complete with ROBOMAT 1 interface and 5 m cable for connected with automated equipment
LD.COM	

Other voltages available on request





With its stunning cutting force, SHARK 155 is the most powerful machine in the range. Robust and precise, it ensures extremely high quality cutting results also on very large thickness. Equipped with a display for the digital control of all the parameters, it grants the highest cutting quality at high speed by means of SK165 HPC High-Performance-Cutting technology torch, which combines the concentrated cutting beam to high power. Smart Start Transfer and Smart End Cutting functions permit both initial and final cutting phases in the best way.

- √ SK165 torch with HPC High Performance
  Cutting technology and coaxial cable
- ✓ Digital display for the digital control of all parameters
- √ Very high cutting power
- √ More productivity thanks to high quality and cutting speed









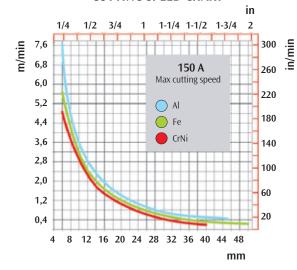






- ► Reduced operating costs granted by longer life of the consumable parts
- ► Electronic control for an excellent cutting quality
- ► Professional high flow air circulation
- ▶ Pilot arc torch
- Possibility of cutting grids and perforated lamination sheets
- ► Contact cutting possibility
- ► Ability to gouging jobs
- ► Cutting parameter stability within ±20% mains voltage fluctuations
- ► Shockproof and dustproof control rack protection cover
- ▶ Electric protection on the torch for the maximum safety of the operator

#### **CUTTING SPEED CHART**



### SK165 SKM165



## and for

Possibility of CNC automated cutting for SHARK 155-M power source when fitted with SKM165 machine torch





#### **TECHNICAL DATA**

			SHARK 155
Input Voltage 50/60 Hz		V	400-3ph
Input Power @ I <sub>2</sub> Max		kVA	27,5
Delayed Fuse ( I eff )		А	32
Power factor / $\cos \phi$			0,89 / 0,99
Efficiency Degree		%	88
Current range		A	25 ÷ 150
	100%	A	100
Duty Cycle at (40°C)	60%	A	120
	х%	A	150 (30%)
Motorgenerator requirement for full capacity		kVA	50
	Recommended	mm	45
Cutting Capacity	Maximum	mm	50
Cutting Capacity	Severance	mm	60
	Piercing	mm	25
Gas supply			Air / N <sub>2</sub>
Gas Pressure		bar	5,0 - 6,0
Gas Flow		I/min	360 ÷ 410
Protection Class		IP	23 S
Dimensions		mm	515x290x730
Weight		Kg	48

### **ORDER INFORMATION**

CODE	MANUAL CUTTING
004435	<b>SHARK 155</b> 400V-3 Ph. with <b>SK165</b> torch - <b>6 m</b> , 35 mm <sup>2</sup> / 4 m ground cable & kit of spares (343059)
004442	<b>SHARK 155</b> 400V-3 Ph. with <b>SK165</b> torch - <b>12 m</b> , 35 mm <sup>2</sup> / 4 m ground cable & kit of spares (343059)
PLASMA	A TORCHES
022032	Manual torch <b>SK165</b> 6 m 160 A
022034	Manual torch <b>SK165</b> 12 m 160 A
022083	Manual Long torch <b>5K165XL</b> 1,30 m / 45° - 7,5 m cable 160 A
343958	Consumable <b>Basic Kit Box</b> for SK165 (Page 25)
343059	Consumable <b>Starting Kit</b> for <b>SK165:</b> 1 Electrode, 1 Nozzle 105A, 1 Nozzle 125 A, 1 Nozzle 160 A, 1 Shield cap 105-160 A
ACCESS	ORIES
418488	Compass for SK165 torch
410686	Wheeled torch holder guide
418507	Bevel Tool Kit: guide carriage and circle attachment for straight and bevel cutting
234927	Transport Trolley CTP 15
427529	Compressed air filter
427530	Filter cartridge. Package of 4 pcs
CODE	MECHANIZED CUTTING
004436	<b>SHARK 155-M</b> 400V-3 Ph. with <b>SKM165</b> torch <b>6 m</b> - 35 mm <sup>2</sup> / 4 m ground cable
004437	<b>SHARK 155-M</b> 400V-3 Ph. with <b>SKM165</b> torch <b>12 m</b> - 35 mm <sup>2</sup> / 4 m ground cable
PLASMA	A TORCHES
022076	Machine Straight Torch <b>SKM165 6 m</b> - 160 A
022082	Machine Straight Torch <b>SKM165 12 m</b> - 160 A
CODE	MECHANIZED CUTTING BY ROBOT / PLC
004439	SHARK 155-MR 400V-3 Phwith torch 6 m torch SKM165 - 35 mm² / 4 m ground cable - complete with ROBOMAT 1 interface and 5 m cable for connection with automated equipment
004440	SHARK 155-MR 400V-3 Phwith torch 12 m torch SKM165 - 35 mm² / 4 m ground cable - complete with ROBOMAT 1 interface and 5 m cable for connection with automated equipment
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Other voltages available on request





Torch	Current	Back Striking	НРС	Coaxial cable	Quick connector	Length
SK25	30 A @ 40%	✓		✓		4 m
SK75	70 A @ 50%		✓	✓	✓	6 / 12 m
SK125	125 A @ 60%		✓	✓	✓	6 / 12 m
SK165	160 A @ 60%		✓	✓	✓	6 / 12 m
SK165XL	160 A @ 60%		✓	✓	✓	7,5 m
SKM75	70 A @ 50%		✓	✓	✓	6 / 12 m
SKM125	125 A @ 60%		✓	✓	✓	6 / 12 m
SKM165	160 A @ 60%		✓	✓	✓	6 / 12 m

## SK AND SKM TORCHES

SK and SKM torches used for SHARK equipment are the result of research carried out in the last decade, in order to improve the performance of the plasma cutting beam, thus increasing its control and its thermal energy.

**SK25** torches, used on single phase equipment, are based on back striking technology which produces consistently precise arc striking with a consequent longer life of the consumables.

**SK75 - SK125 - SK165 - SK165 - SK165xl** torches for manual cutting and **SKM75 - SKM125 - SKM165** machine torches for mechanized cutting are characterized by High Performance Cutting HPC technology which permits an increase in air quantity and speed, to better concentrate the plasma cutting beam and to stabilize the cutting arc, thus achieving:

- high cutting speed
- optimal quality and cleanliness of the cut surfaces
- · high concentration of the plasma cutting beam
- · lack of dross
- reduction in the heat affected zone
- longer life of the consumables
- · piercing on lamination achieved in shorter times

All SK and SKM torches are fitted with a **coaxial cable** which combines great flexibility to robustness and resistance to crushing.

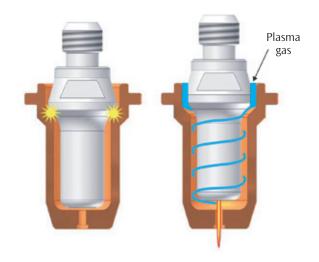
## TORCH TECHNOLOGY

#### **BACK STRIKING**

It represents the best solution for plasma torches up to 60 A. In conventional torches without high frequency, the arc striking is obtained by means of compressed air which moves away the electrode head from the inner part of the nozzle. This system causes, in the plasma flow exit area, both electrode and nozzle material deterioration because of burns and deformations subsequent to pilot arc striking between them. In contrast, the back striking system takes place in the rear side of the electrode and nozzle, thus leaving clean and unaltered the flow exit area.

Main advantages are:

- · Longer life of the consumables
- · Striking always precise and safe
- · Better cutting quality over time

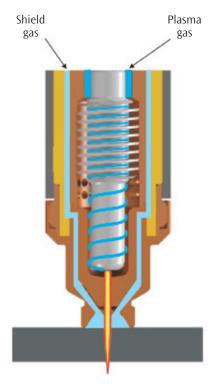


## **HIGH PERFORMANCE CUTTING - HPC**

**HPC – High Performance Cutting** technology permits the generation of radial and swirling gas flows to the cutting arc axis, thus creating a plasma beam at a very high temperature that melts and vaporizes the surface being cut in a more efficient way.

This technology also avoids the phenomenon of the double arc – formation of two arcs in series between the cathode and the workpiece surface – the main reason for damage to the nozzle and arc instability – by ensuring the highest quality and the best cutting performance together with a longer life of the consumables.

High Performance Cutting technology is the very best choice for plasma torches with nominal cutting currents above 60 A.



New **High Performance Cutting SK torches** increase the density of the plasma cutting beam and reduce the width of the arc cut area, by producing a narrower and less inclined cut. This is achieved by easily removing the molten material with a consequent improvement of the cutting quality, which shows neat cuts, lack of dross, minimal heat-affected zone and sufficiently squared edges.

Main advantages are:

- · Better cutting quality
- · High cutting speeds
- Narrower cuts
- Longer life of the consumables

Swirling gas flow and collimation of the beam



# **CS - ORIGINAL SPARE PARTS**

CS is our guarantee hallmark for CEA PLASMATECH consumables. All original consumables belonging to SK and SKM torches of SHARK equipment are CS marked to prove the origin. The CS mark, present on all consumables, is the guarantee that all declared performances can be achieved.

Geometric shape study of torch components, quality in their employed materials, precision in machining and coupling - the results of years of experience - form the basis of SK and SKM torch development and utilization with our cutting power sources.

The use of CS marked original consumables is strictly recommended.

The reason for this is that the use of non original parts, besides affecting the optimal performance of the equipment, will tend to generate overheating and changes in the electrical voltages with the consequent risk of:

- Overheating and damage to the torch
- Poor performance and damage to the power source
- Worsening in cutting quality
- · Compromised safety of the equipment

Considering the foregoing, using non original CS marked components will render void all warranty and CEA PLASMATECH can no longer be deemed responsible for any consequent accident or injury which might occur.











## BASIC CONSUMABLE KIT BOX

BASIC CONSUMABLE KIT BOX are the best solutions for having an easy and complete range of consumables for the torches: SK75; SK125; SK 165. We based this kit on our experience and we've included a wide range of consumable: nozzle, external nozzle, electrode, shield, swirl ring, o-ring and siliconic lubrificant for o-ring. We're sure that this kit will be very useful for all those who do not want to run out of consumable.

Kit Box for SK75

CODE 343956



POS.	CODE	DESCRIPTION	QTY.
1	433605	0-ring	2
2	425022	Electrode	20
3	482134	Swirl ring	1
4	408609	Nozzle 50 A	5
5	408610	Nozzle 70 A	15
6	486049	External nozzle	1
7	487630	Shield cap (manual cut)	2
8	425059	Extended electrode	3
9	408623	Extended nozzle 50 A	1
10	408624	Extended nozzle 70 A	2
11	424490	Extended Shield cap (manual cut)	1
12		Silicone lubrificant for O-Ring	1

Kit Box for **SK125** 

CODE **343957** 



POS.	CODE	DESCRIPTION	QTY.
1	433608	O-ring	2
2	482135	Swirl ring 45-85 A	1
3	482136	Swirl ring 100-125 A	1
4	425023	Electrode	10
5	408616	Nozzle 85 A	5
6	408612	Nozzle 105 A	5
7	408617	Nozzle 125 A	5
8	486028	External nozzle 45-85 A	1
9	486029	External nozzle 100-125 A	1
10	487632	Shield cap 45-85 A (manual cut)	1
11	487631	Shield cap 100-125 A (manual cut)	1
12		Silicone lubrificant for O-Ring	1

Kit Box for **\$K165** CODE **343958** 



POS.	CODE	DESCRIPTION	QTY.
1	433609	O-ring	2
2	425024	Electrode	10
3	482137	Swirl ring	1
4	408642	Nozzle 85 A	5
5	408645	Nozzle 160 A	5
6	486021	External nozzle 45-85 A	1
7	486022	External nozzle 105-160 A	1
8	487633	Shield cap 45-85 A (manual cut)	1
9	487634	Shield cap 105-160 A (manual cut)	1
10		Silicone lubrificant for O-Ring	1



## **CEA - PLASMA CAPSULES**

Unleash the full potential of your SHARK at the easiest and the fastest. The new CEA's plasma capsules allows you to take control of your cut saving you time and reduce set up mistakes with this innovative consumable management. A single cartridge contains a shield cap, external nozzle, nozzle, swirl ring and electrode ready to be used as soon as they are plugged in.

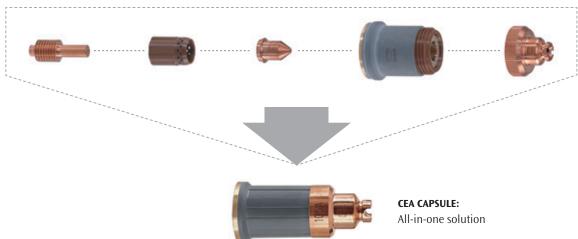
An application, a specific capsule. Thanks to the immediate colour differentiation it's possible to never miss the right combination of consumable for your specific application automatic cutting, manual cutting or gouging.

All CEA plasma capsules are compatible and interchangeable with our current SK/SKM torches without the need of any adaptor.



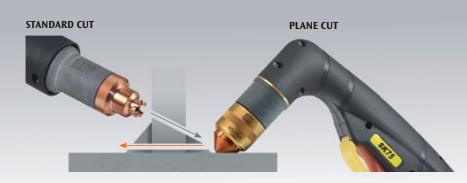
## **ALL-IN-ONE SOLUTION**

#### STANDARD CONSUMABLES



## **PLANE CUT**

Thanks to the dedicated plane cutting capsule, you can easily remove fins, nuts or plates without damaging the workpiece. The optimized plasma flow ensures consistent and precise cutting power throughout the entire operation.



NOT optimal angle for cutting

Optimal angle for cutting









### **CEA CAPSULES ADVANTAGES**

**EASY TO USE.** CEA PLASMA CAPSULE are user-friendly thanks to the clear distinction of colour used for each specific application. This significantly reduces the unlucky event of a mismatch, granting the perfect cut in any conditions.

**LOW MANAGEMENT COST.** Thanks to the new all-in-one CEA capsules the downtime for changing consumables and the operator training is reduced at the minimum. The clear colour system and the minimization of components grant the easiest and best workflow management ever.

**MAXIMIZED PERFORMANCE.** Using anytime the right set of consumables thanks to the simple all-in-one solution of CEA capsules, it is possible to achieve the best performance at any cut and reduce significantly operator error at the set-up of the torch.

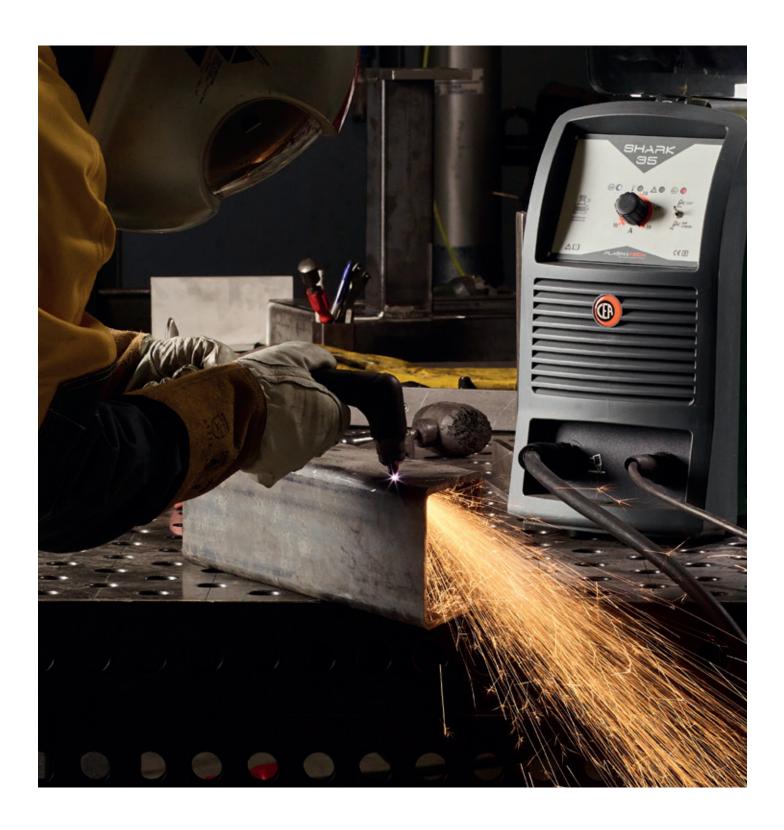
**RETROFITTABLE ON YOUR ACTUAL TORCH.** CEA CAP-SULES can be used without any additional adaptor on all SK75, SK125, SKM75 and SKM125. By this clever feature, you just need the standard capsule for retrofitting your existing equipment and you can anytime joint the enormous advantages of this incredible system.



### **ORDER INFORMATION**

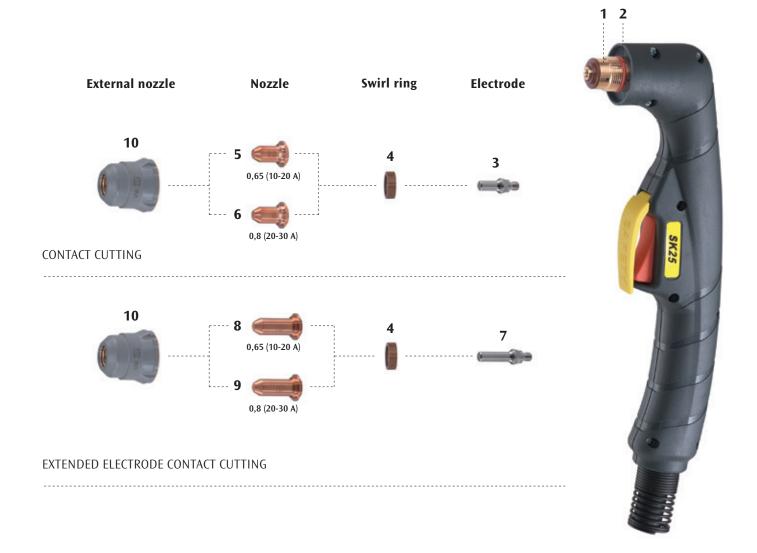
OKDEK INFOR							
CODE	DESCRIPTION	BLISTER QTY.	SK75	SKM75	SK125	SKM125	
408650	Capsule manual cut 50A	1	Manual cut				
408651	Capsule manual cut 70A	1	Manual cut				
408652	Capsule machine cut 50A	1		Mechanized cut			
408653	Capsule machine cut 70A	1		Mechanized cut			
408654	Capsule gouging 50A	1	Gouging				
408655	Capsule gouging 70A	1	Gouging				
408656	Capsule plane cut 40-70A	1	Plane cut				
408658	Capsule manual cut 85A	1			Manual cut		
408659	Capsule manual cut 105A	1			Manual cut		
408660	Capsule manual cut 125A	1			Manual cut		
408661	Capsule machine cut 65A	1				Mechanized cut	
408662	Capsule machine cut 85A	1				Mechanized cut	
408663	Capsule machine cut 105A	1				Mechanized cut	
408664	Capsule machine cut 125A	1				Mechanized cut	
408666	Capsule gouging 105A	1			Gouging		
408667	Capsule gouging 125A	1			Gouging		
408668	Capsule plane cut 40-70A	1			Plane cut		
408669	Capsule plane cut 80-125A	1			Plane cut		









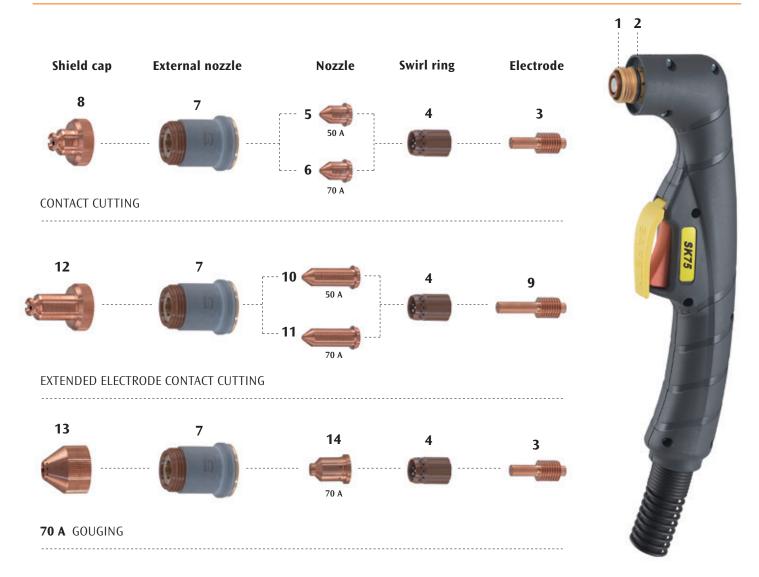


POS.	CODE	DESCRIPTION	BLISTER QTY.		
1	422665	Torch body	1		
2	433607	0-ring	10		
3	425021	Electrode	10	•	
4	482126	Swirl ring	5	•	
5	408600	Nozzle contact cutting ø 0,65 (10-20 A)	10		
6	408601	Nozzle contact cutting ø 0,8 (20-30 A)	10	•	
7	425058	Extended electrode	5		
8	408620	Extended nozzle contact cutting ø 0,65 (10-20 A)	5		
9	408621	Extended nozzle contact cutting ø 0,8 (20-30 A)	5		
10	486076	External nozzle	1	•	

• Assembled on SK25 torch when supplied with the equipment





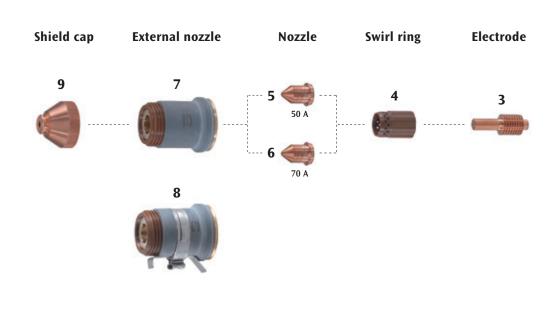


POS.	CODE	DESCRIPTION	BLISTER QTY.		
1	422674	Torch body	1		
2	433605	0-ring	20		
3	425022	Electrode	5	•	
4	482134	Swirl ring	2	•	
5	408609	Nozzle 50 A	10		
6	408610	Nozzle 70 A	10	•	
7	486049	External nozzle	1	•	
8	487630	Shield cap (manual cut)	2	•	
9	425059	Extended electrode	5		
10	408623	Extended nozzle 50 A	5		
11	408624	Extended nozzle 70 A	5		
12	424490	Extended Shield cap (manual cut)	2		
13	487642	Shield cap (gouging)	2		
14	408635	Nozzle for gouging 70 A	10		

• Assembled on SK75 torch when supplied with the equipment







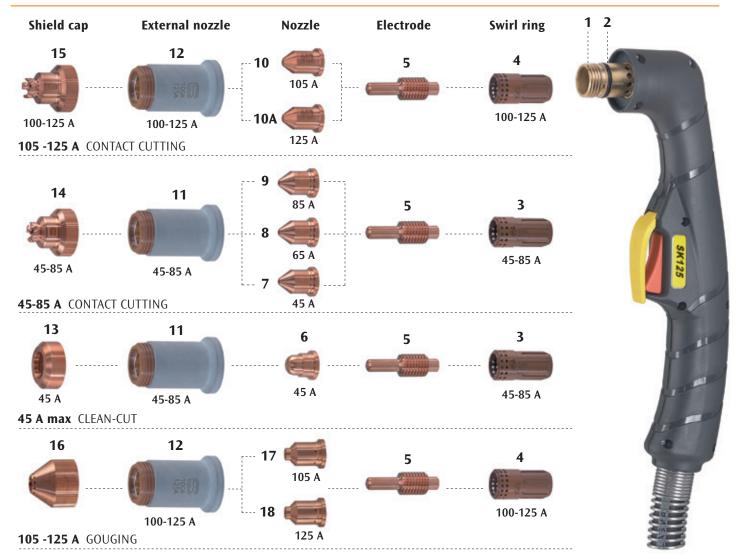


POS.	CODE	DESCRIPTION	BLISTER QTY.		
1	422676	Torch body	1		
2	433605	O-ring	20		
3	425022	Electrode	5	•	
4	482134	Swirl ring	2	•	
5	408609	Nozzle 50 A	10		
6	408610	Nozzle 70 A	10	•	
7	486049	External nozzle	1	•	
8	486027	External nozzle with ohmic sensor	1		
9	487629	Shield cap (mechanized cutting)	2	•	

• Assembled on SKM75 torch when supplied with the equipment

# **SK125**



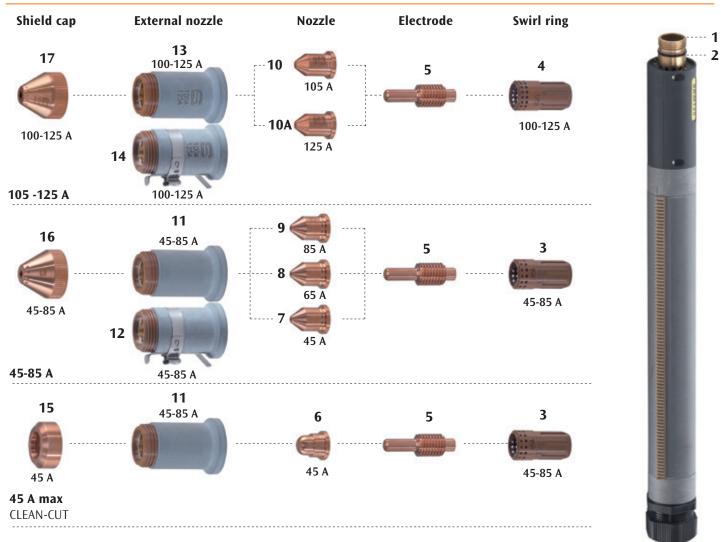


POS.	CODE	DESCRIPTION	BLISTER QTY.		
1	422675	Torch body	1		
2	433608	0-ring	20		
3	482135	Swirl ring 45-85 A	2		
4	482136	Swirl ring 100-125 A	2	• 🛦	
5	425023	Electrode	5	• 🛦	
6	408613	Nozzle 45 A, Clean-Cut	10		
7	408614	Nozzle 45 A	10		
8	408615	Nozzle 65 A	10		
9	408616	Nozzle 85 A	10		
10	408612	Nozzle 105 A	10	•	
10A	408617	Nozzle 125 A	10	<b>A</b>	
11	486028	External nozzle, 45-85 A	1		
12	486029	External nozzle, 100-125 A	1	• 🛦	
13	482030	Shield cap 45 A - Clean-Cut	3		
14	487632	Shield cap 45-85 A (manual cut)	2		
15	487631	Shield cap 100-125 A (manual cut)	2	• 🛦	
16	487640	Shield cap (gouging)	3		
17	408631	Nozzle 105 A (gouging)	5		
18	408634	Nozzle 125 A (gouging)	5		

- $\bullet$  Assembled on SK125 torch when supplied with the equipment SHARK 105-M/MR
- lack Assembled on SK125 torch when supplied with the equipment SHARK 125-M/MR

## **SKM125**

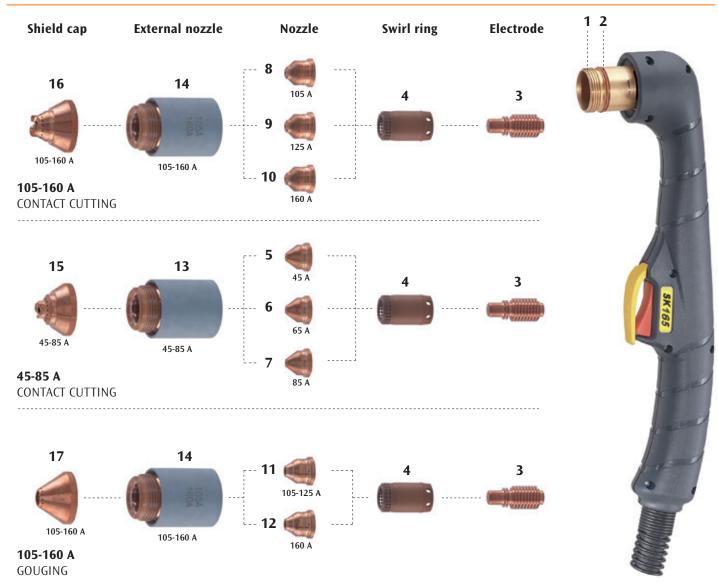




POS.	CODE	DESCRIPTION	BLISTER QTY.		
1	422677	Torch body	1		
2	433608	0-ring	20		
3	482135	Swirl ring 45-85 A	2		
4	482136	Swirl ring 100-125 A	2	• 🛦	
5	425023	Electrode	5	• 🛦	
6	408613	Nozzle 45 A, Clean-Cut	10		
7	408614	Nozzle 45 A	10		
8	408615	Nozzle 65 A	10		
9	408616	Nozzle 85 A	10		
10	408612	Nozzle 105 A	10	•	
10A	408617	Nozzle 125 A	10	<b>A</b>	
11	486028	External nozzle 45-85 A	1		
12	486025	External nozzle 45-85 A with ohmic sensor	1		
13	486029	External nozzle 100-125 A	1	• 🛦	
14	486026	External nozzle 100-125 A with ohmic sensor	1		
15	482030	Shield cap 45 A - Clean-Cut	3		
16	487635	Shield cap 45-85 A (mechanized cutting)	2	• 🛦	
17	487636	Shield cap 100-125 A (mechanized cutting)	2		

- Assembled on SKM125 torch when supplied with the equipment SHARK 105-M/MR
- lack Assembled on SKM125 torch when supplied with the equipment SHARK 125-M/MR

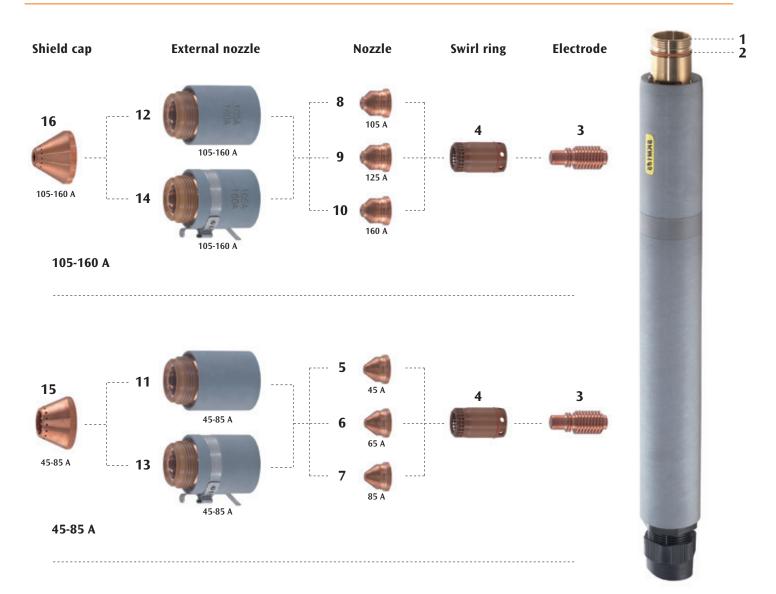




POS.	CODE	DESCRIPTION	BLISTER QTY.		
1	422678	Torch body	1		
1A	422681	Torch Body 45° (SK165XL)	1		
2	433609	O-ring	20		
3	425024	Electrode	5	•	
4	482137	Swirl ring	2	•	
5	408640	Nozzle 45 A	10		
6	408641	Nozzle 65 A	10		
7	408642	Nozzle 85 A	10		
8	408643	Nozzle 105 A	10		
9	408644	Nozzle 125 A	10		
10	408645	Nozzle 160 A	10	•	
11	408632	Nozzle for gouging 105-125 A	10		
12	408633	Nozzle for gouging 160 A	10		
13	486021	External nozzle 45-85 A	1		
14	486022	External nozzle 105-160 A	1	•	
15	487633	Shield cap 45-85 A (manual cut)	2		
16	487634	Shield cap 105-160 A (manual cut)	2	•	
17	487641	Shield cap (gouging)	2		

 $\bullet\,$  Assembled on SK165 torch when supplied with the equipment





POS.	CODE	DESCRIPTION	BLISTER QTY.		
1	422679	Torch body	1		
2	433609	O-ring	20		
3	425024	Electrode	5	•	
4	482137	Swirl ring	2	•	
5	408640	Nozzle 45A	10		
6	408641	Nozzle 65A	10		
7	408642	Nozzle 85A	10		
8	408643	Nozzle 105A	10		
9	408644	Nozzle 125A	10		
10	408645	Nozzle 160A	10	•	
11	486021	External nozzle 45-85 A	1		
12	486022	External nozzle 105-160 A	1	•	
13	486023	External nozzle 45-85 A with ohmic sensor	1		
14	486024	External nozzle 105-160 A with ohmic sensor	1		
15	487637	Shield cap 45-85 A (machine cut)	2		
16	487638	Shield cap 105-160 A (machine cut)	2	•	

 $\bullet$  Assembled on SKM165 torch when supplied with the equipment



#### **BEVEL TOOL KIT**

Necessary for beveling edges in a precise way, this accessory is composed by:

- · Compass for both straight and inclined cutting
- · Adjustable axle support for both straight and inclined cutting
- · Wheeled torch holder







### **COMPASS**

To perform circular cutting on all metals. The compass is standard equipped with the **wheeled torch holder** ideal for manual cutting jobs.



### **ULTRALUX MASK AND GOGGLES**



CODE **439232** 

Safe protection during cutting process from UV and IR rays, heat and sparks. DIN 9÷13 fully adjustable darkening level. EN 175 standard compliance.



CODE **439255** 

UV/IR 5.0 protection goggles recommended for cutting up to 50A. EN 166 standard compliance.

## **COMPRESSED AIR FILTER**

By reducing humidity from the compressed air, it permits to supply dry filtered air, which ensures a better performance during cutting operations.



#### **LONG TORCH SK165XL**



CODE **022083** LONG TORCH SK165XL - 1,30 m / 45° - cable 7,5 m





**CEA** PLASMATECH CATALOGUE

PLASMATECH.CAT.24.01.ENG

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