

# SK - SKM





| Torch  | Current     | Back Striking | HPC | Coaxial cable | Quick connector | Length   |
|--------|-------------|---------------|-----|---------------|-----------------|----------|
| SK25   | 25 A @ 60%  | ✓             |     | ✓             |                 | 4 m      |
| SK65   | 60 A @ 80%  | ✓             |     | ✓             | ✓               | 4 m      |
| SK75   | 70 A @ 50%  |               | ✓   | ✓             | ✓               | 6 m      |
| SK125  | 125 A @ 60% |               | ✓   | ✓             | ✓               | 6 m      |
| SK165  | 160 A @ 60% |               | ✓   | ✓             | ✓               | 6 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 - SK65**, 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** 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

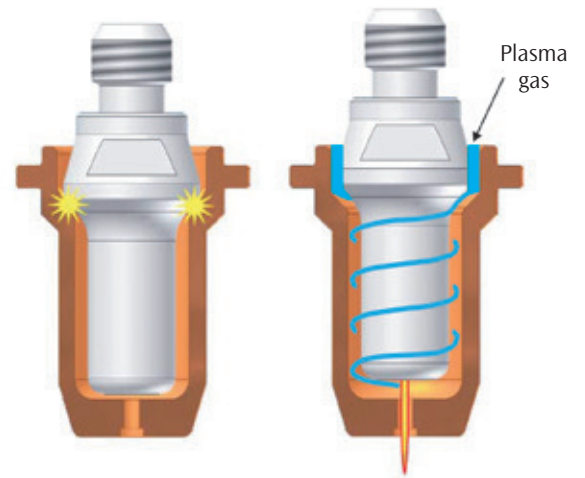
All SK and SKM torches are fitted with a **coaxial cable** which combines great flexibility to robustness and resistance to crushing.

## 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

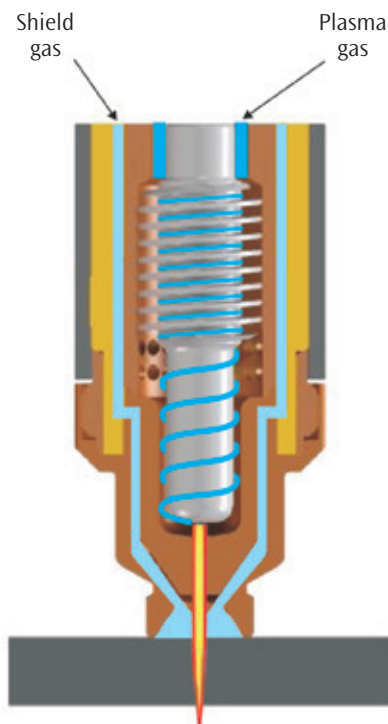


## HIGH PERFORMANCE CUTTING - HPC

**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