



FALCON.

**THE ECONOMICAL SOLUTION.
RELIABLE AND EFFICIENT.**





FALCON.

The best cost-benefit ratio
for your success.

The robust FALCON machine can be used for plasma, oxyfuel, or combined plasma and oxyfuel cutting. This makes the FALCON a remarkably versatile machine that can meet the needs of your current production but with the

opportunity to upgrade in the future if your cutting demands change. This together with a competitive cost ensures that the FALCON delivers the best price-performance ratio in its class.



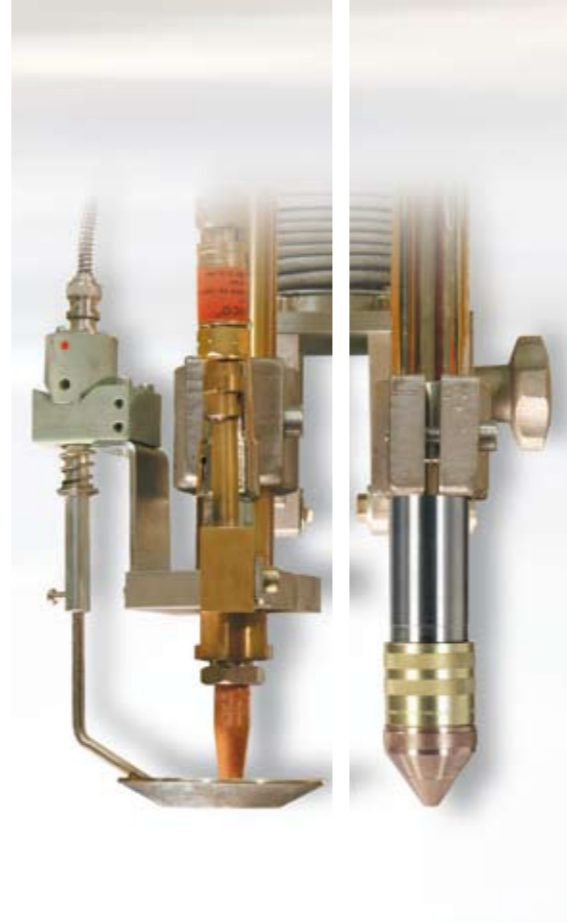
FALCON. New Dimensions in Oxyfuel and Plasma Cutting.

The machine consists of a solid, reinforced main beam. This ensures perfect stiffness over the entire machine width. The low level outboard rail is mounted below the height of the cutting table. This allows for easy loading and unloading of the table with forklifts and

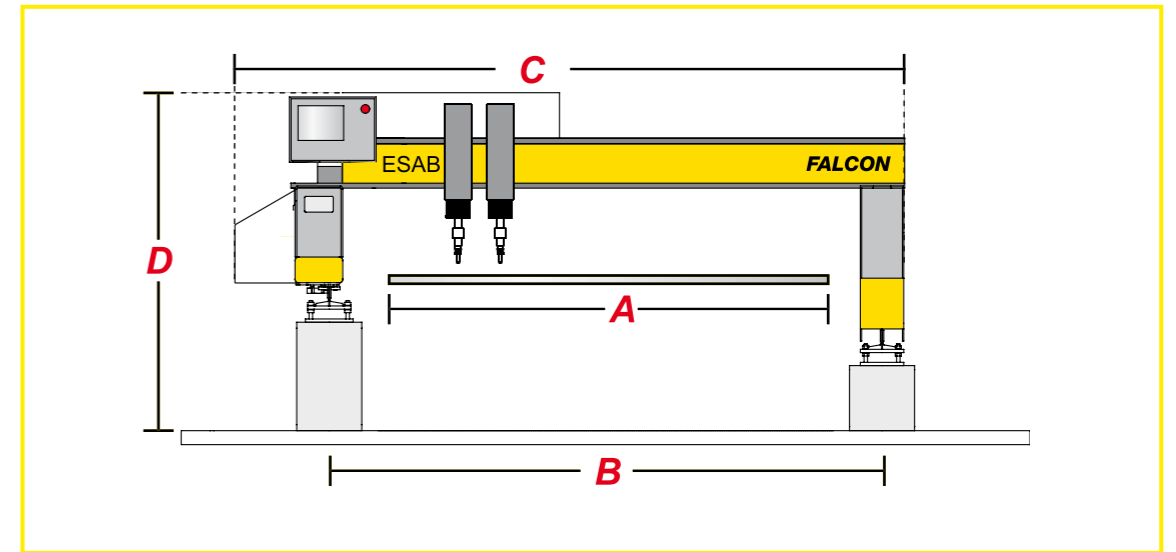
minimises the risk of collision with the machine. The transverse and longitudinal drive system with AC drives offers the highest accuracy throughout the entire cutting area.

The Falcon features a transverse drive motor with precision rack and pinion gear, together with backlash-free gears and drives which give high cutting and positioning speeds. The linear guiding with AC motors ensures accurate travel of the torch carriage with smooth, rapid acceleration. The design and high build

quality reduce maintenance costs and ensure a long mechanical service life. Two tool carriages are attached to a zero-backlash steel band which – unlike conventional steel ropes – is not susceptible to slag deposits. The rapid-action coupling allows for efficient manual positioning of the tool carriages.



Operating data and specifications.



Plasma Cutting.

Various ESAB plasma cutting systems are available for cutting mild steel, stainless steel and aluminium. The precise setting of the cutting torch height is achieved automatically by means of an initial height sensing and maintained by an arc voltage height control

during the cutting process. This ensures optimum cutting quality at all times. The ESAB collision protection system will immediately stop the cutting process and shut down the machine in case of a collision or crash.

Oxyfuel Cutting.

The FALCON can be fitted with two oxyfuel cutting torches for cutting mild steel plates with thicknesses of up to 150 mm. Each tool carriage is equipped with a reliable automatic ignition device. Solenoid valves

on the carriages allow for automatic piercing. The cutting height is determined by a capacitive ring, which automatically maintains the torch height to ensure the optimum cut quality.

Numerical Control System.

The FALCON is a highly versatile machine for oxyfuel cutting and plasma. All processes are controlled from the CNC system. Extensive control functions, interfaces and an integrated cutting database with 65 fixed programs

deliver a high degree of reliable, reproducible quality of cutparts. The CNC systems are also easy to use, resulting in low costs but with high productivity.

FALCON technical data

Machine size (B)	3,000 mm
Cutting with one torch (A)	2,000 mm
Max. piercing one torch	100 mm
Cutting with two torches (A)	2 x 1,000 mm
Max. piercing two torches	60 mm
Base rail length	8,000 mm
Rail height	950/500 mm
Cutting thickness with 1 torch	150 mm
Cutting thickness with 2 torches	100 mm
Recommended process speed	50 – 6,000 mm/min
Position speed	9,000 mm/min
Number of tool carriages	2
Fuel gases	propane
Main voltage	230 / 50 V/Hz
Power input	~ 2,000 VA
Machine length	1,950 mm
Machine height (D)	1,900 mm
Cutting table height	700 mm
Machine width (C)	3,400 mm
Power of Plasma (refer to ESP-150 brochure)	

ESAB. Your Partner in Welding and Cutting.



Seven decades of experience and consistent focus on the needs of our customers form the basis of our successful and comprehensive range of cutting machines. In accordance with thermal cutting processes – plasma cutting, oxyfuel cutting and laser cutting – ESAB has developed a range of machines that efficiently combines top-quality cutting with high cutting rates and allows intelligent integration into automated manufacturing processes.

In many industries the FALCON also contributes to optimising production and raising the profitability of our customers.



Includes manufacturing facilities of ESAB North America, a wholly owned subsidiary of Anderson Group Inc.



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