

S&K KONSTANTELOS

Electromechanic Construction Company

- High Frequency Induction Heating Machines
- High Speed Nitrogen Hydraulic Presses
- New Generation Automations



Nitrogen Hydraulic Presses High Speed

Our company after years of development and construction experience on nitrogen hydraulic presses has available a new range of machinery covering a wide range of needs of its customers.

Unlike other nitrogen technology hydraulic presses ours presses have the following major advantages:

The frame is made from **special materials** properly treated machining without any use of welding.

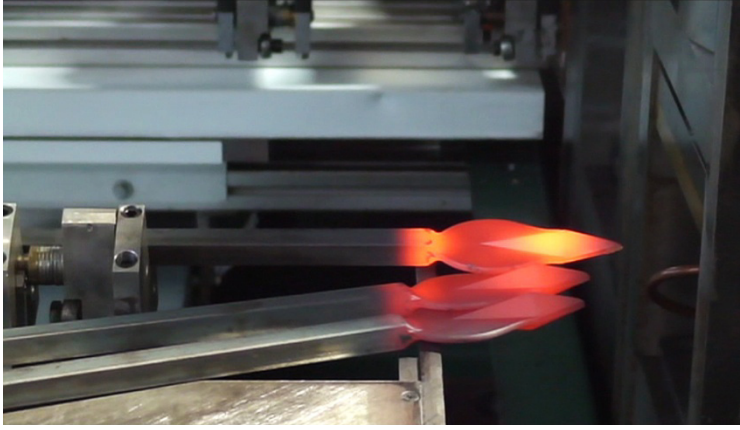
The speed motion of the piston is very high, for an example the time needed to press an iron rod 14x14mm with 250 tons power is about **1 tenth of second!** This is achieved by the special disposition of the hydraulic parts of oil unit and by the two big nitrogen accumulators are used. With this specific disposition of hydraulic circuits the **energy losses are very low**, so the oil temperatures are low and exceed the need of a cooling system.

The benefits of high speed motion of piston are the following:

The force required for the formation of the glowing iron is minimal because the iron does not have enough time to cool down in the molds and remains soft (fluid). Because of this, metal can penetrate easily into molds with difficult shapes producing **high quality monopolistic products** where other presses cannot succeed.

The life time of our molds is multi higher because **1.** the force required for the formation of the metal is lower, **2.** the contact time between molds and the glowing metal is minimal, **3.** the temperature of the metal glow does not need to be high because does not have enough time to cool down in the molds (due to the high speed pressing).





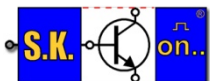
For these reasons, the molds would not heat up, not soften, not doing superficial damages such as small cracks, sags and other phenomena that are observed during the prolonged use of operation.

The design of the presses is so that the molds can be placed with precision in their place, on guides. The change of the molds is very easy and quick as you are able to attach these to the press only via a central screw and with the guides.

Our company can undertake and specialized structures beyond the standard models in order to provide integrated solutions to needs of its customers.

For more information and new updates please visit our website or contact us.

KONSTANTELOS BROS C.O.
Electromechanic Construction Company



Website: www.sk-konstantelos.gr

Email: info@sk-konstantelos.gr

Tel.: +30 2610 670325

Fax: +30 2610 321363

Headquarters: Greece - Patra

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