

Air-Separator

Nitrogen -
just in time



NIEHOFF – worldwide
most advanced technology for
the wire and cable industry



machines – systems – know-how – worldwide

Air-Separator

Your profit

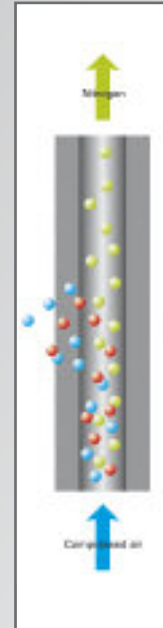
- Far lower investment costs and overheads compared to the use of steam.
- Availability of nitrogen guaranteed at all times.
- Generation of nitrogen on demand – no need for storage.
- Users are independent from gas suppliers – no more orders for nitrogen.
- The machine can be controlled from a central unit and supply several annealers simultaneously.
- The Air Separator generates nitrogen with exactly the purity you require.



For a safe and economical supply of inert gas

The annealing process

An inert atmosphere is required during the annealing of wire in order to prevent the wire surface coming into contact with air. Without this protective atmosphere, the surface would oxidize and the wire would be rendered useless. It is vital to provide the protective atmosphere at the right place, in the required quantity and with the correct specifications. Steam or nitrogen are normally used as the protective atmosphere for continuous annealers. The drawback with steam is that it consumes a great deal of energy – and hence money – and needs to be stored. Nitrogen is an attractive alternative. It is available in large amounts – air consists to 78% of nitrogen – and is easy, safe and cheap to filter out of the air using the Air Separator.



The mode of operation

The Air Separator exploits a scientific phenomenon: Pressurized gases react in different ways when they flow through an oxygen-permeable hollow fiber that acts like a membrane. While oxygen, hydrogen and carbon dioxide molecules diffuse through the wall of the fiber and return to the ambient air, the nitrogen particles remain in the hollow fiber and can be collected and stored at the end of the fiber. The gas decomposition module of the Air Separator has thousands of such hollow fibers.

The Air Separator is suitable for all wire annealers



(We reserve the right to modify technical specifications according to technical improvement and advances.)

MASCHINENFABRIK NIEHOFF GmbH & Co. KG
Fürther Str. 30
91126 Schwabach, Germany
Telephone: +49 9122 977-0
Telefax: +49 9122 977-155
E-Mail: info@niehoff.de
Internet: www.niehoff.de

MASCHINENFABRIK NIEHOFF GmbH & Co. KG
Schwendener Str. 25
87616 Marktoberdorf/Leuterschach,
Germany
Telephone: +49 8342 7008-0
Telefax: +49 8342 7008-40

NIEHOFF ENDEX NORTH AMERICA INC.
1 Mallard Court
Swedesboro, NJ 08085, USA
Telephone: +1 856 803 1800
Telefax: +1 856 467 0584
E-Mail: sales@niehoffendex.com

MASCHINENFABRIK NIEHOFF GmbH & Co. KG
Dubai Branch
DAZFA Free Trade Zone
P.O. Box 293821
Dubai, United Arab Emirates
Telephone: +971 4 2045-153
Telefax: +971 4 2045-154
E-Mail: m.dalal@niehoff.de

NIEHOFF-HERBORN MÁQUINAS Ltda.
CP 84 (Rua Mar Vermelho, 1092)
06412-140 Barueri, S.P., Brazil
Telephone: +55 11 4199-3600
Telefax: +55 11 4199-3624
E-Mail: info@niehoff.com.br

MASCHINENFABRIK NIEHOFF GmbH & Co. KG
Shanghai Representative Office
Room 2302, Hong Kong Plaza,
283 Huai Hai Zhong Road
Shanghai 200021, P.R. China
Telephone: +86 21 61202800
Telefax: +86 21 63906192
E-Mail: info@niehoff.cn

Branch of Maschinenfabrik NIEHOFF
GmbH & Co. KG in the Russian Federation
Storozhevaya Ulitsa 4/1
Moscow, 111020, Russian Federation
Telephone: +7 495 23055-37, -38
Telefax: +7 495 23055-39
E-Mail: info@niehoff.de

MASCHINENFABRIK NIEHOFF GmbH & Co. KG
Singapore Representative Office
122 Middle Road, # 04-04 Midlink Plaza
Singapore 188973, Singapore
Telephone: +65 6336 9936
Telefax: +65 6336 4070
E-Mail: niehoff@pacific.net.sg

NIPPON NIEHOFF Co., Ltd.
Repro Kanda Building
17, Kanda Tomiyama-Cho
Tokyo, 101-0043 Japan
Telephone: +81 3 3257 0911
Telefax: +81 3 3257 0910

NIEHOFF of INDIA Private Limited
Plot No. 186-194, Industrial Park, Phase III
Pashamylaram, Patancheru 502307,
Medak District, AP India
Telephone: +91 8455 224-391, -392, -393
Telefax: +91 8455 224-394
E-Mail: info@niehoff.in