

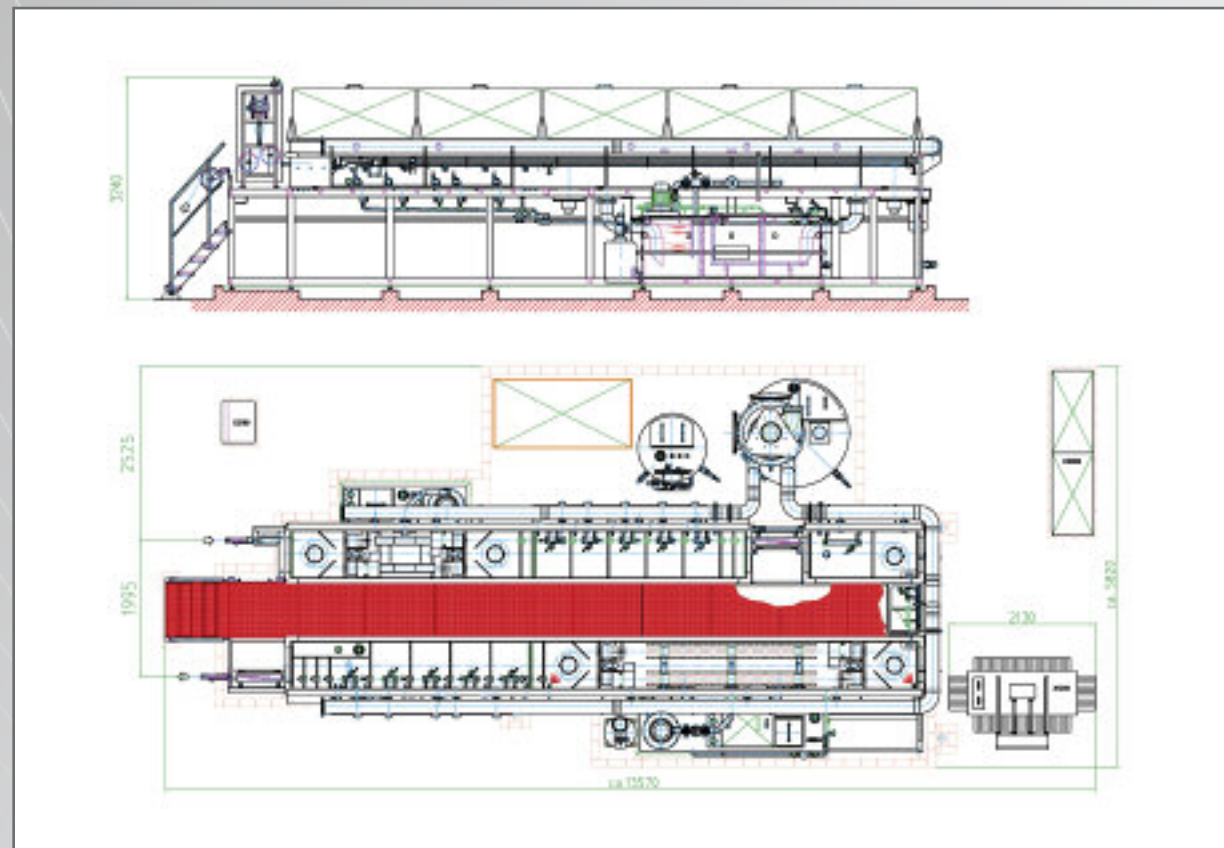
Quality and service – the top priorities for NIEHOFF-STEULER

Galvanic wire plating lines made by NIEHOFF-STEULER satisfy all of our customers' requirements in terms of homogeneity, permeability, concentration and firm adhesion of the metallic coating. Stable operating conditions through automatic dosing of chemicals (additives) together with high current density result in constant and high surface quality.

The worldwide aftersales service provided by NIEHOFF together with its affiliates and agents for more than 50 years ensures the durability and quality of the equipment well beyond the initial warranty period.

The availability of spare parts and wearing parts for more than 10 years is another advantage in favour of machinery made by NIEHOFF-STEULER.

If requested, our lines can be equipped with NTS-PROF (NIEHOFF TELESERVICE PROFESSIONAL) for remote maintenance. Please ask for information about our service contract.



(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

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

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

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
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

STEULER Anlagenbau GmbH & Co. KG
Georg-Steuler-Str. 1
56203 Höhr-Grenzhausen, Germany
Telephone: +49 2624 13-302
Telefax: +49 2624 13-300
E-Mail: service@steuler.de

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

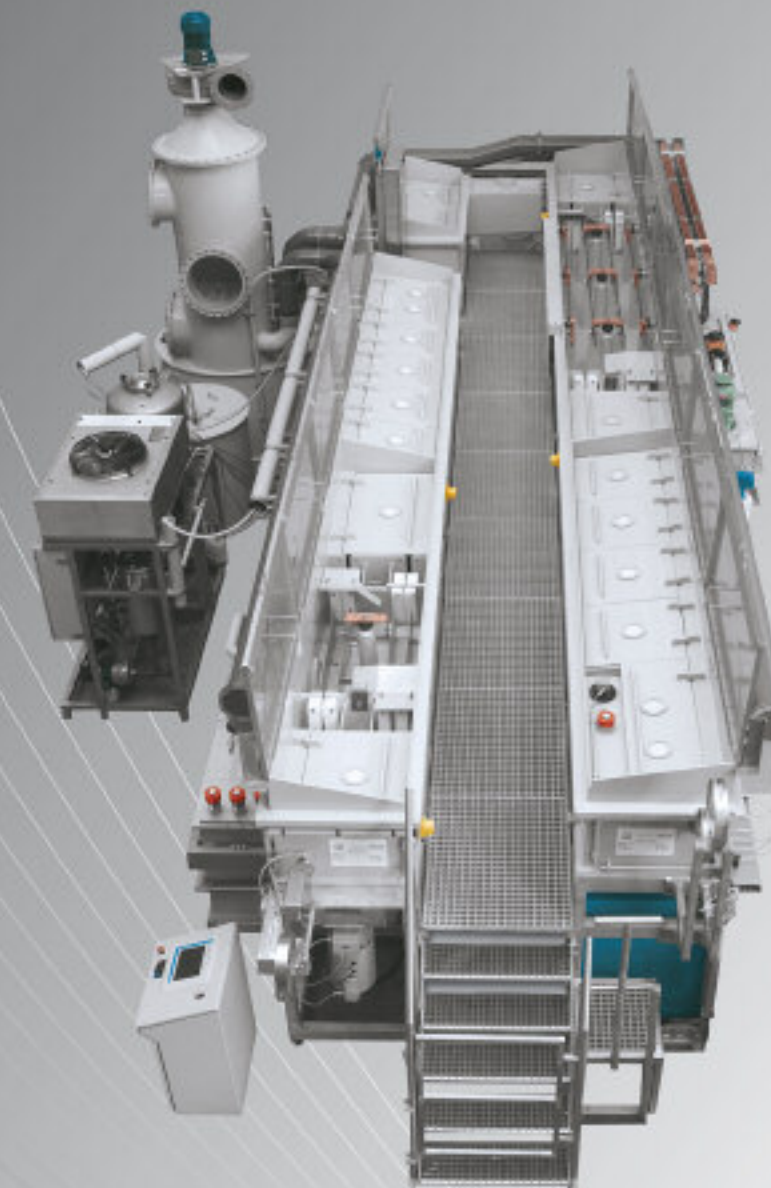
NIPPON NIEHOFF Co., Ltd.
Repro Kanda Building
17, Kanda Tomiyama-Cho
Tokyo, 101-0043 Japan
Telephone: +81 3 3257 0911
Telefax: +81 3 3257 0910

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

WPT

Galvanic Wire Plating Lines

Based on a modular concept



machines – systems – know-how – worldwide

WPT

NIEHOFF-STEULER – Cost-Effective Wire Plating Technology

Custom-built lines

NIEHOFF-STEULER manufactures and supplies complete galvanic wire plating lines based on tried and tested components for coating Non Ferrous metal wires with Sn, Ni, Ag and Zn. Special lines for double coating (e.g. nickel coating followed by tin coating) in continuous operation are also available.

Built-in environmental protection lowers operating costs and improves quality

Thanks to many years of operating experience with integrated regeneration and environmental technologies, NIEHOFF-STEULER delivers complete and environmentally responsible solutions: Multiple cascade units reduce the accumulation of rinsing water and the consumption of chemicals and water. The recommended use of a vacuum evaporator enables “waste waterfree” operation and thus minimizes production costs.

A modular concept for flexible production systems

Quick module change enables a flexible production planning. This allows NIEHOFF-STEULER to offer maximum flexibility for changing market situations.

Complete solutions

NIEHOFF-STEULER offers complete solutions from a single source. Our range of products includes all of the equipment required for the production of plated wires (e.g. pay-offs, drawing machines, annealers, spoolers or barrel coilers). NIEHOFF-STEULER also manufactures the complete electrical line control system in-house to ensure the perfect synchronization of all the components among each other

Vacuum evaporator for avoidance of waste water



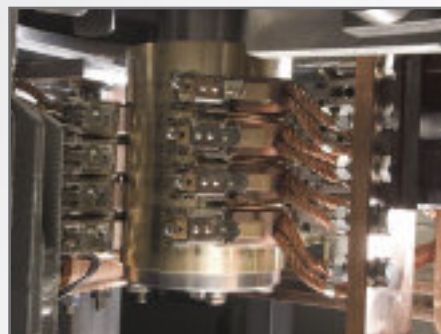
Washing system for purification of exhaust air



Titanium baskets



Slip rings and carbon brushes



Technical data

type	WPT 400.SN.1.3000	WPT 400.SN.1.6500	WPT 400.SN.1.13000	WPT 400.ZN.1.6500	WPT 400.ZN.1.13000	WPT 400.NI.1.4000	WPT 400.NI.1.8000	WPT 400.AG.1.3000	WPT 400.AG.1.3000
material									
basic material:	Cu	Cu	Cu	Cu/Cu-Alloy	Cu/Cu-Alloy	Cu/Cu-Alloy	Cu/Cu-Alloy	Cu	Cu
plating material:	Sn	Sn	Sn	Zn	Zn	Ni	Ni	Ag	Ag
max. production speed (m/min):	420 (1378 fpm)	900 (2953 fpm)	900 (2953 fpm)	420 (1378 fpm)	900 (2953 fpm)	420 (1378 fpm)	420 (1378 fpm)	420 (1378 fpm)	420 (1378 fpm)
wire dia. (mm):	1.2 ... 2.6 (16 ½ ... 10 AWG)	1.0 ... 2.6 (18 ... 10 AWG)	1.0 ... 2.6 (18 ... 10 AWG)	1.0 ... 2.6 (18 ... 10 AWG)	1.0 ... 2.6 (18 ... 10 AWG)	1.0 ... 2.6 (18 ... 10 AWG)	1.0 ... 2.6 (18 ... 10 AWG)	1.0 ... 2.6 (18 ... 10 AWG)	1.0 ... 2.6 (18 ... 10 AWG)
max. plating current (A):	3000	6500	13000	6500	13000	4000	8000	3000	3000

Advantages

- complete solutions with no interface problems
- minimized consumption of energy, water and chemicals
- modular design for flexible, compact and space-saving lines
- stainless steel and plastics used throughout for corrosion prevention
- stable operating conditions, constant surface quality and low manpower requirements due to automatic dosing of additives and rinsing water
- good accessibility for minimized service and maintenance requirements
- more than 30 years of experience for highest reliability

