

An Example of Sophisticated Manufacturing Diversity

The modular NIEHOFF system

This drawing machine is designed for maximum flexibility – the modular system enables all variations required in practice.

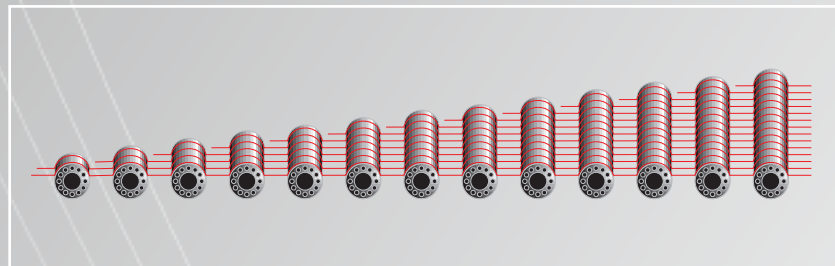
Advanced technology of machine design for optimum system availability and reliability.



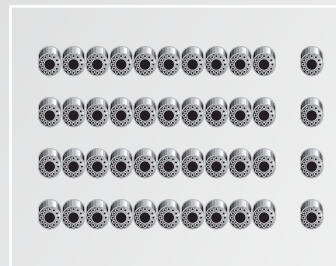
NIEHOFF – your partner with a worldwide service and sales network. Our experienced customer support team is always on hand.

Variable number of wires

- 2 to 14 wires per level

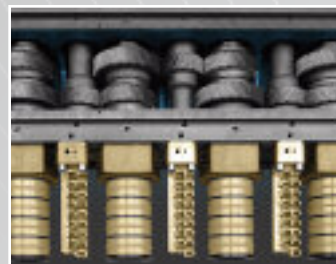


- System modules can be arranged in up to 4 levels above each other



Variable number of drafts through horizontal attachment of system modules

Basic unit with built-in haul-off capstan module



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

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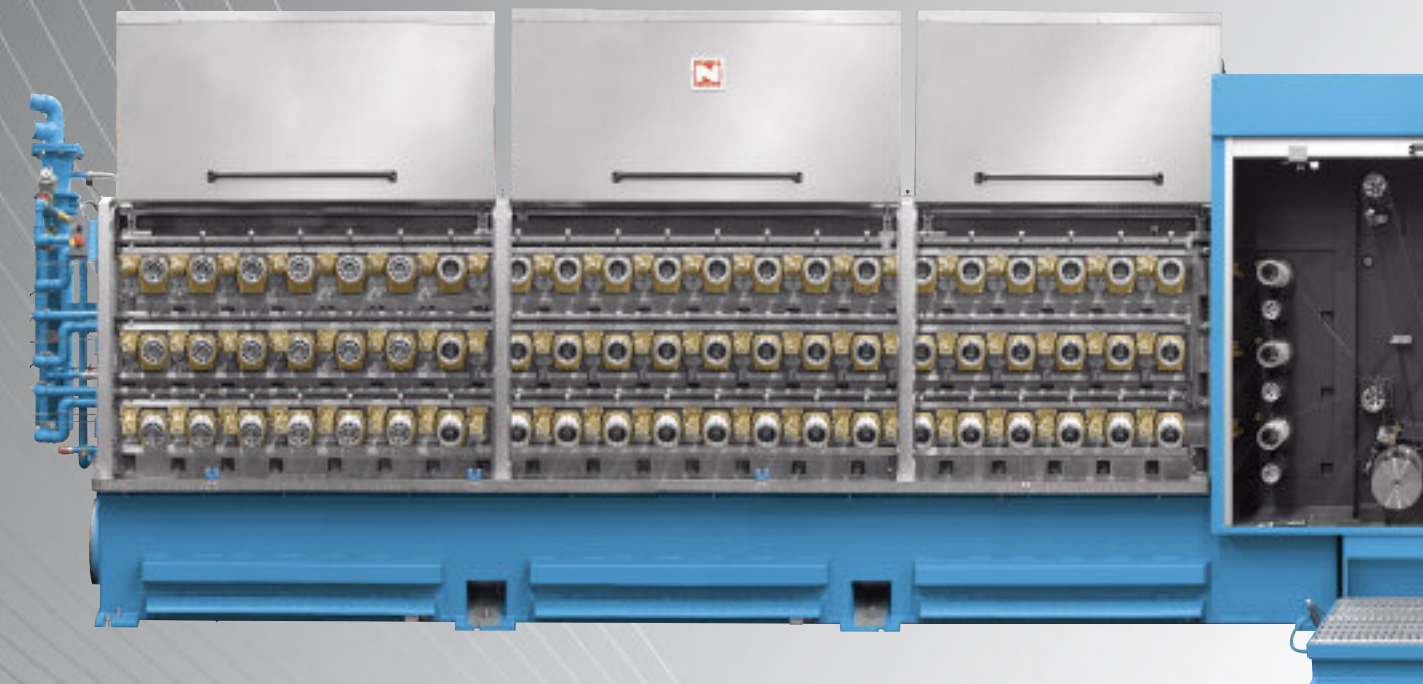
MMH

Multiwire Horizontal Drawing Machine

Systematic high efficiency – cost-effective and productive



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



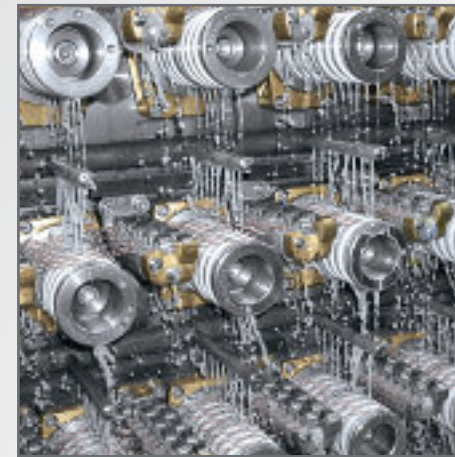
machines – systems – know-how – worldwide

MMH

High-tech Standard and Possible Variants

Technical data

type	MMH 50	MMH 101	MMH 101 (reinforced)	MMH 121
max. production speed (m/s):	31.5 (6201 fpm)	36 (7087 fpm)	36 (7087 fpm)	40 (7874 fpm)
max. no. of wires per level:	8	8	8	14
max. no. of wires per machine:	16	32	24	42
max. inlet dia. (mm):	1.2 1.0 (16 ½ AWG) (18 AWG)	1.8 1.6 (13 AWG) (14 AWG)	2.6 2.4 (10 AWG) (10 ½ AWG)	8 x 2.6 14 x 2.05 (8x10 AWG) (14x12 AWG)
for max. inlet tensile strength (N/mm²):	250 450	250 450	250 450	450 450
finished dia. (mm):	0.15 ... 0.05 (34 ½ ... 44 AWG)	0.50 ... 0.08 (24 ... 40 AWG)	0.50 ... 0.10 (24 ... 38 AWG)	1.35 ... 0.127 (15 ½ ... 36 AWG)
possible no. of drafts:	21/25/31/35	17/21/25/31	23/27/31	16/19/22/25
drawing capstan dia. (mm):	50	80	(6 x 100) + 80	100
haul-off capstan dia. (mm):	60	80	80	100



Advantages of this safe investment choice

Design:

- compact design for space saving use of the production area
- helically geared precision gearing for extremely smooth operation and uniform load transmission
- vibration-damping gray cast iron housing and rust-free drawing chamber cover for long service life
- highly reliable separation of drawing emulsion and gear oil via mechanical

- labyrinth seal (long service intervals)
- short downtimes due to integration of the capstans in the working chamber of the annealer
- user-friendly design
- Increase in quality:**
 - simultaneous production of multiple wires at same diameter tolerance
 - high surface quality of the wires due to the optimized wire path in the drawing machine and optimized coolant supply

- to the drawing dies
- Increase in productivity:**
 - reduced downtime when changing the machine setup for different dimensions via multi-motor drive technology (quick drawing die change system)
 - reduced downtime due to touchscreen-based user guidance and fault display
- Cost-effectiveness:**
 - significant copper savings due to improved, uniform electrical properties

- of the individual wires (individual wire guidance)
- reduced consumption of electric power per ton of manufactured wire
- cost savings for further processing due to the use of multiwire bundles
- long service intervals and extended drawing tool service life minimize the requirement to stock and use spare parts
- reduced consumption of oil and drawing lubricant

The NIEHOFF Line Philosophy

Overall integration for superior performance

The entire line delivers technically innovative solutions for your production tasks:

- Capable combinations of individual NIEHOFF components and the excellent quality standards guarantee superb line availability.
- Due to freely programmable control systems (PLCs) and standardized interfaces, the line can be combined very effectively with many spooling and coiling systems.

The MMH line concept already incorporates the potential for future integration of NIEHOFF machine systems in overall production processes – i.e. the automation of different production areas, including:

- quality assurance
- operational data acquisition
- materials flow control

All possible combinations will deliver the ultimate in terms of quality and performance!

Combination and integration capability

