



**MMH 104 / RMA 201**  
Multiwire Drawing Line

# MMH 104

## Design:

- compact design for space saving use of the production area
- vibration-damping cast iron housing for long service life
- stainless-steel drawing chamber cover and pipes
- safe and reliable separation of drawing emulsion and gear oil via mechanical labyrinth seal (long service intervals)
- integration of the capstans in the working chamber of the annealer
- user-friendly design

## Increase in quality:

- extremely smooth operation and uniform load transmission by helical precision gear
- high surface quality of the wires due to the optimized wire path inclination of the gearing/drawing rollers (6 x 100)

## Increase in productivity:

- reduced downtime when changing the machine setup for different dimensions via multi-motor drive technology (quick drawing die change system)
- NMI (NIEHOFF Machine Interface) color touchscreen for data entry, display of production parameters and maintenance instructions
- Slip reduction via three-motor drive technology

## Energy and cost efficiency:

- uniform electrical properties of the individual wires (individual wire path)
- reduced consumption of electric power per ton of manufactured wire
- cost savings for downstream processing due to the use of uniform wire bundles
- long service intervals and extended drawing tool service life minimize the requirement to stock and use spare parts
- reduced media consumption

## Technical data

type		MMH 104
material		Al, Al-alloy (for example 1350/1370/131050/8000)
max. production speed:		m/s 31.5 fpm 6201
max. no. of wires per level:		8
max. no. of wires per machine:		16
max. inlet dia.:		mm 2.6 AWG 10
for max. inlet tensile strength:		N/mm <sup>2</sup> 80 ... 200
finished dia. drawing machine:		mm 0.16 ... 0.72 (for example Al 99.5) AWG 34 ... 21
possible no. of drafts:		19/23
drawing capstan dia.:		mm (6 x 100) +80
haul-off capstan dia.:		mm 80

# RMA 201

## Design:

- DC multi-wire resistance annealer with single-wire path
- single unit comprising drawing machine and annealer
- ergonomic machine design with openly accessible wire paths

## Increase in quality:

- consistently high finished wire quality achieved through single-wire drying
- wire movement for longer life of the contact tubes
- individually driven contact pulleys for high wire surface quality and longer service life of the contact tubes
- encapsulated protective gas zone up to the end of the annealing process in order to avoid oxidation of the wire surface and smoke emission

## Increase in productivity:

- driven haul-off capstan (contact pulley) for constant wire tension in the annealer and reduced wire tension leading up to the downstream spooling system
- easy-to-change contact tubes with long service life
- residual lubrication layer on the annealed wires for a better subsequent processing

## Energy and cost efficiency:

- quick return on investment by a high cost-benefit ratio
- high machine availability
- low energy consumption
- reduced costs of production resources and high product acceptance achieved by perfect quality

### Technical data

type		RMA 201
material		Al, Al-alloy (for example 1350/1370/131050/8000)
max. production speed:		m/s 31.5 fpm 6,201
possible no. of wires:		8/16
finished dia. of the line:		mm 0.16 ... 0.72 AWG 34 ... 21
contact pulley dia.:		mm 200
max. annealing power:		kW 120
max. annealing current:		A 4,000
annealing principle:		2-zone
separately driven auxiliary pulley:		standard
individual drives:		standard
water-cooled slip rings:		standard