

MMH 101/RM 161 Multiwire Drawing Line



MMH 101

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 pipe
- safe and reliable separation of drawing emulsion and gear oil via mechanical labyrinth seal (long service intervals)
- 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 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)
- NMI (NIEHOFF Machine Interface) color touchscreen for data entry, display of production parameters and maintenance instructions

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
- optimal media consumption

Technical data					
type			MMH 101		
max. production speed:	m/s	36			
	fpm	7087			
max. no. of wires per level:		8			
max. no. of wires per machine:		24			
max. inlet dia.:	mm	1.8	1.6		
	AWG	13	14		
for max. inlet tensile strength:	N/mm²	250	450		
finished dia. drawing machine:	mm	0.10 0.50			
	AWG	38 24			
possible no. of drafts:		17/21/25/31			
drawing capstan dia.:	mm	80			
haul-off capstan dia.:	mm	80	80		

RM 161

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
- optimum wire drying by patented 2/3-zone-system (with reheating)
- individually driven contact pulleys for high wire surface quality and longer service life of the contact tubes (optional)

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

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		RM 141	RM 161	RM 201			
max. production speed:	m/s	36	36	36			
	fpm	7,087	7,087	7,087			
possible no. of wires:		8/16/24	8/16/20	8/16/24/32			
finished dia. of the line:	mm	0.10 0.50/0.40/0.32	0.10 0.64/0.50/0.40	0.15 1.05/0.72/0.55/0.48			
	AWG	38 24/26/26	38 22/24/26	34 18/21/23.5/24 ½			
contact pulley dia.:	mm	140	160	200			
max. annealing power:	kW	60	80	180			
max. annealing current:	А	2,000	2,000	5,000			
annealing principle:		switchable between 2/3 zones	switchable	switchable between 2/3 zones			
		between 2/3 Zones	between 2/3 zones	between 2/3 Zones			
separately driven auxiliary pulley:		standard	standard	standard			
individual drives:		optional	optional	optional			
water-cooled slip rings:		standard 2,000 A optional < 1,500 A	standard	standard			