



MSM 86 Rod Breakdown Machine

Expertise, Customer Driven, Service – in Good Hands with NIEHOFF



Overall integration for superior performance

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

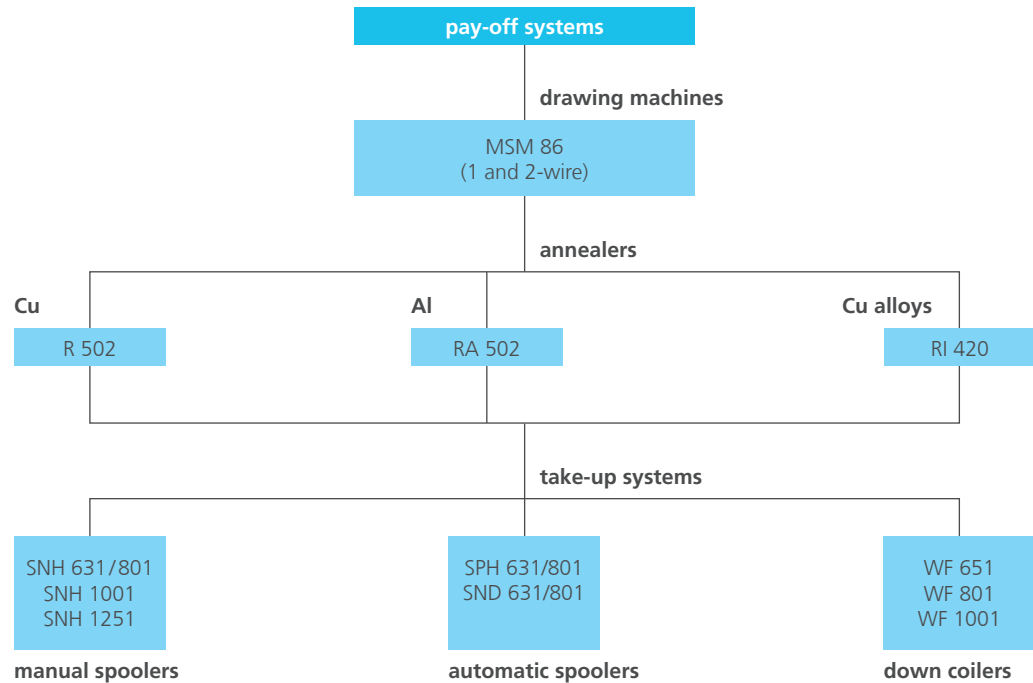
- convincing combinations of individual NIEHOFF components and the excellent quality standards guarantee superb line availability
- due to freely programmable control systems (PLCs) and standardized interfaces, the line can be combined very effectively with many spooling and coiling systems.

The MSM 86 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!

Suitable for combination and integration



(Further pay-off systems on request)

MSM 86

Design:

- optimized wire cooling/lubrication (due to the fully submerged drawing basin)
- flexible machine drafting
- individually driven capstans in horizontal tandem layout
- three-phase AC drives, water-cooled and maintenance-free
- ergonomic and user-friendly machine design, with easy maintenance (large opening for changing complete drawing chains)
- no sound enclosure cabin required up to 85 dB (A)
- highly reliable separation of drawing emulsion and gear oil via mechanical sealing (long maintenance intervals)

Increase in quality:

- high surface quality of the wires due to the optimized wire path (inclination of the gearing/drawing capstans)
- innovative drawing die holders with high-pressure cooling of 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:

- long service life of drawing tools (drawing capstans, drawing dies) with minimized-slip operation
- energy savings of up to 20 % by multi-motor drive technology
- reduced consumption of oil and drawing lubricant
- additional energy saving due to the elimination of gears in the fast section – no gear losses

Optional:

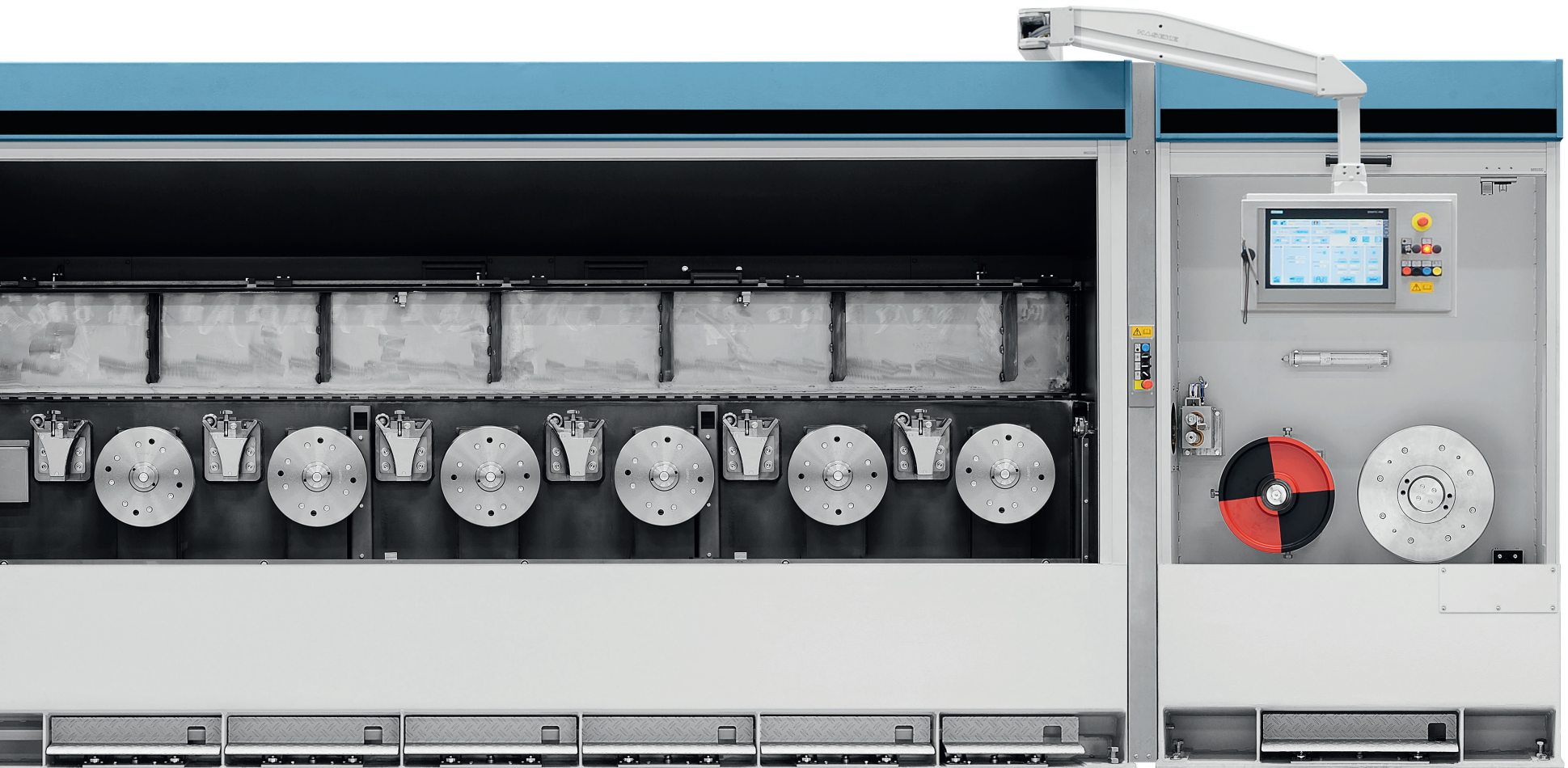
- three-phase drives, air-cooled

Technical data											
type		MSM 86		MSM 86		MSM 86		MSM 86		MSM 86	
material		Cu		Al		Al-Legierung		CuZn37, CuZn40		CuSn	
max. production speed	m/s	40	40	40	40	40	40	20	15		
production output (7,000 h and 80 % utilization)	t/a	25.000	50.000	8.500	16.000	7.200	14.000	18.000	16.000		
no. of wires		1	2	1	2	1	2	1	1		
max. inlet dia.	mm	10,0	12,0	8,0	10,0	12,5	12,5	9,5	9,5	8,0	6,5
for max. inlet strength	N/mm ²	450	250	450	250	120	120	220	220	400	450
finish-Ø (haul-off capstan Ø 450)	mm	0,8...5,0		0,8...3,6		1,2...6,0	1,2...6,0	1,5...5,5	1,5 ... 3,6	1,0...3,6	1,0...3,6
finish-Ø (haul-off capstan Ø 560)	mm	1,5...7,35		1,5...4,5		1,8...7,35	1,8...7,35	1,5...7,35	1,5 ... 4,5	1,2...4,5	1,2...4,5
numbers of drafts		5 ... 15		5 ... 15		5 ... 15		5 ... 15		5 ... 15	
wire elongation per draft	%	variable		variable		variable		variable		variable	
drive technology / AC motors		individual drives		individual drives		individual drives		individual drives		individual drives	



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The modular NIEHOFF system

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

- system modules can be added horizontally in order to vary the number of drafts (5...15)
- extended variant diversity due to optional use of drawing capstan with 450 mm dia. or 560 mm dia. (3- or 4-draft-drawing-block and haul-off capstan module)
- single and two-wire versions

Future-oriented machine construction technology for optimized system availability and reliability.

Module variants:

Module with drawing capstan dia. 450 mm



4-draft drawing block



6-draft drawing block



Haul-off capstan module

Module with drawing capstan dia. 315 mm



4-draft drawing block



6-draft drawing block



7-draft drawing block



8-draft drawing block



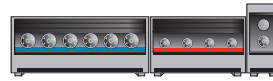
No. of drafts:

9



No. of drafts:

9



11



11



13



13



14



15



15

We reserve the right to modify technical specifications according to technical improvement and advances. 05.2022