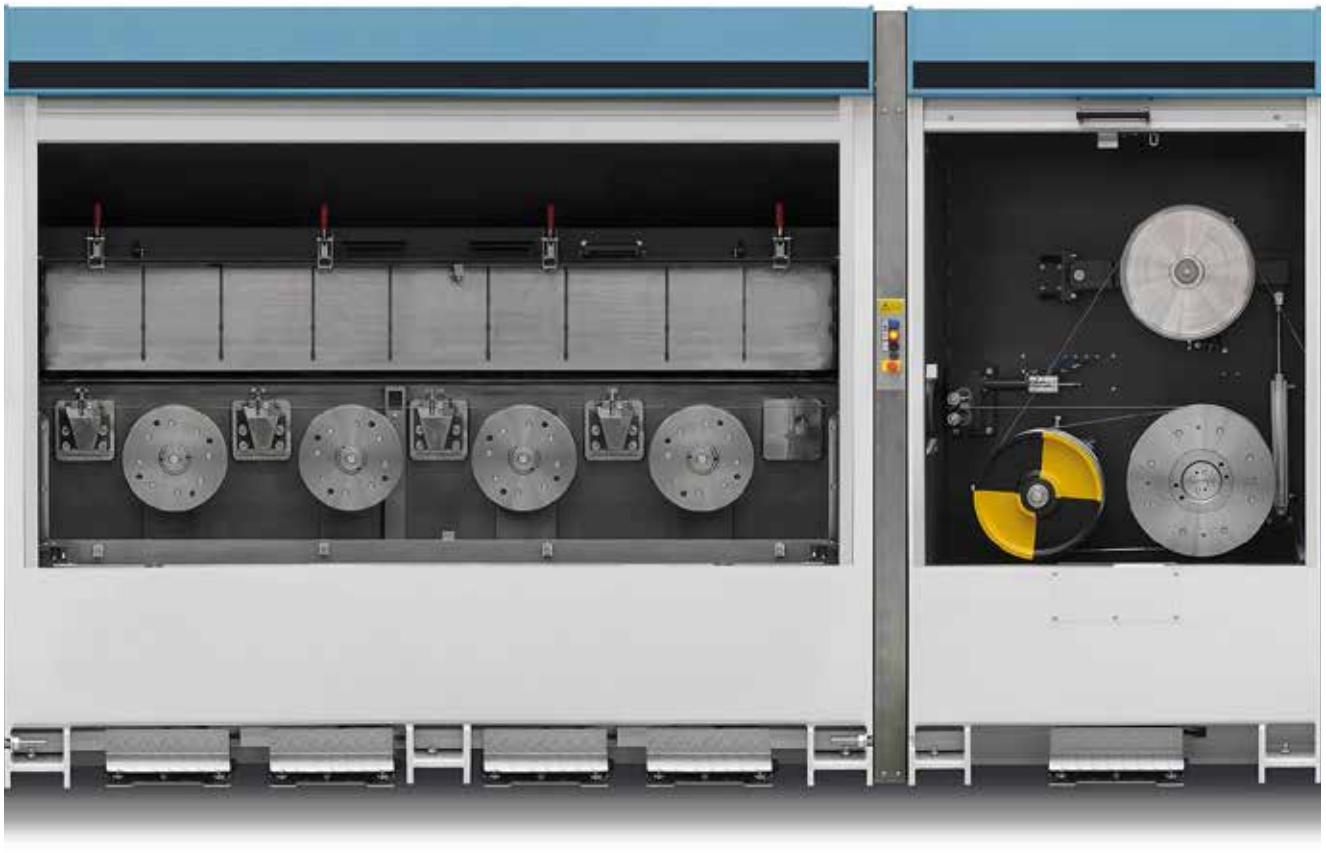


MSM 88
Rod Breakdown Machine

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

NIEHOFF GRUPPE

MSM 88

Design:

- optimized wire cooling/lubrication (due to the fully submerged drawing basin)
- flexible machine drafting
- individually driven capstans in horizontal tandem layout
- synchronous torque motors or asynchronous 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 savings by eliminating the gearbox - no gearbox losses, approx. 3-4% energy savings compared to MSM 86
- higher production output compared to MSM 86

Examples:
· 2 x 2.60 mm Cu 32.5 m/s instead of 24.0 m/s
· 2 x 3.00 mm Cu 24.4 m/s instead of 14.0 m/s
· 2 x 2.30 mm Cu 37.2 m/s instead of 30.5 m/s

Technical data

type		**MSM 88**		**MSM 88**		**MSM 88**		**MSM 88**
material		Cu		Al		Al-Alloys		Cu-Alloys
max. production speed	m/s	40	40	40	40	40	40	20
production output (7,000 h and 80 % utilization)	t/a	31,000	62,000	23,000	40,000	13,000	20,000	18,000
no. of wires		1	2	1	2	1	2	1
max. inlet dia.*	mm	10.0 12.5	8.0 8.0	12.5	12.5	12.5	9.5	8.0
for max. inlet strength	N/mm²	450 250	450 250	110	110	220	220	400
finish-Ø (haul-off capstan Ø 450)*	mm	0.8...5.5	0.8...3.8	1.2...6.0	1.2...6.0	1.5...5.5	1.5 ... 3.8	1.0...4.0
finish-Ø (haul-off capstan Ø 560)*	mm	1.5...7.35	1.5...4.5	1.5...8.5	1.5...7.35	1.5...7.35	1.5 ... 4.5	1.2...6.0
numbers of drafts		5 ... 15		5 ... 15		5 ... 15		5 ... 15
wire elongation per draft	%	variable		variable		variable		variable
drive technology / AC motors		individual drives		individual drives		individual drives		individual drives

*Other dimensions on request.

Overall integration for superior performance

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

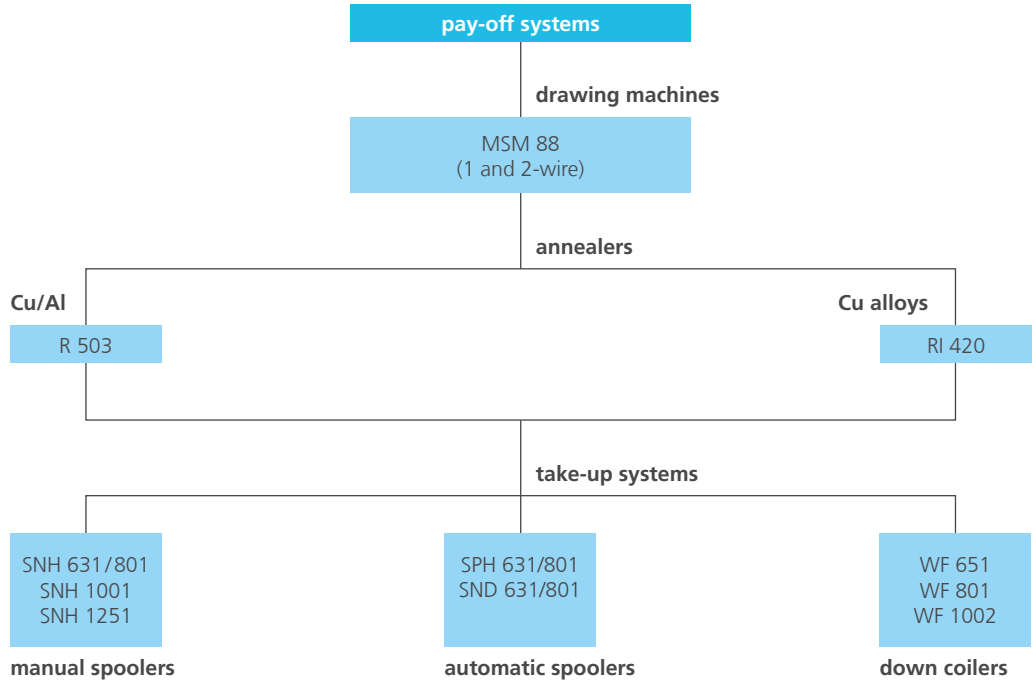
- convincing combinations of individual NIEHOFF components and the excellent quality standards guarantee superb line availability
- due to freely programmable control systems (PLCs) and standardized interfaces, the line can be combined very effectively with many spooling and coiling systems.

The MSM 88 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:

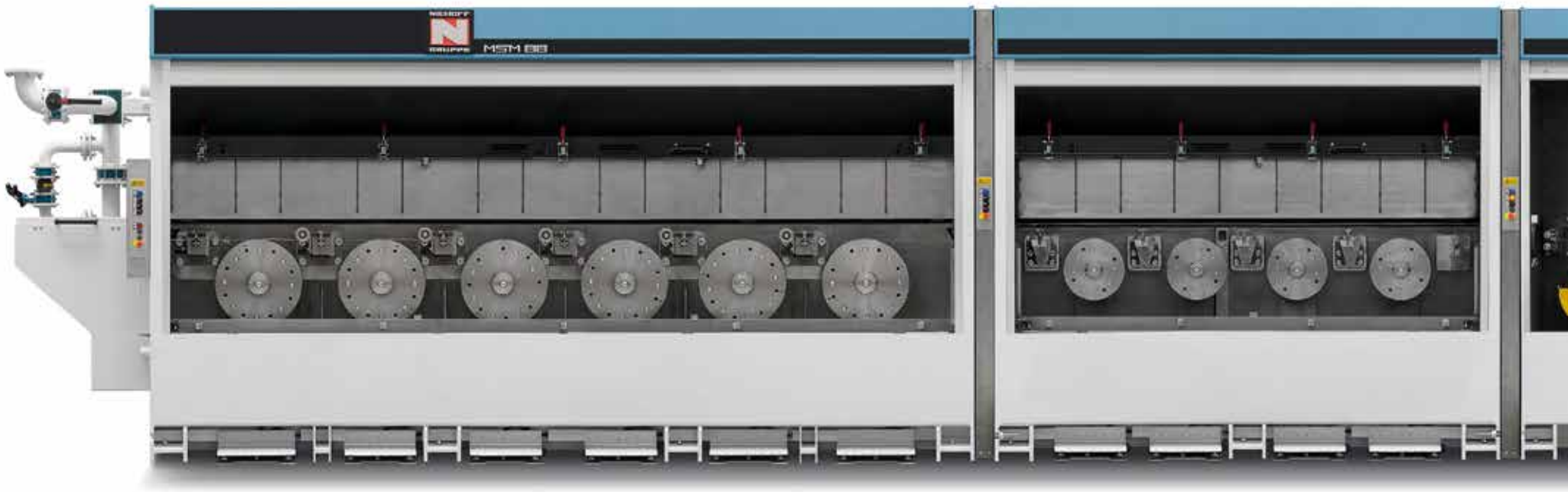
- quality assurance
- operational data acquisition
- materials flow control

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

Suitable for combination and integration



(Further pay-off systems on request)


NEMOFF
GRUPPE
MSM 88


F503

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)
- optional dummy drafts possible, allowing 10, 12 or 14 drafts to be realized
- single and two-wire versions

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

Module variants:

Module with drawing capstan dia. 560 mm


3-draft drawing block


4-draft drawing block

Module with drawing capstan dia. 450 mm


4-draft drawing block


6-draft drawing block


Haul-off capstan modul

Module with drawing capstan dia. 315 mm


4-draft drawing block


6-draft drawing block


8-draft drawing block

Examples: No. of drafts:


9


11


13


15

No. of drafts:


9


11


13


15

www.niehoff.de

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