



**MSM 86**  
Rod Breakdown Machine

# 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
- fully submerged inlet block, sprayed outlet block, energy saving by less hydro-friction

Technical data												
type		MSM 86				MSM 86				MSM 86		MSM 86
material		Cu				Al / Al-alloy				CuZn37, CuZn40		CuSn
max. production speed	m/s	40	40	40	40	20	15					
	fpm	7,874	7,874	7,874	7,874	3,937	2,953					
production output (7,000 h and 80 % utilization)	t/a	25,000	45,000	8,500/ 7,200	16,000/ 14,000	18,000	16,000					
		1	2	1	2	1	1					
max. inlet dia.	mm	8.0	10.0	8.0	10.0	9.5	12.5	9.5	12.5	8.0	6.5	
	AWG	1	2/0	1	2/0	1/0	4/0	1/0	4/0	1	1	
for max. inlet strength	N/mm <sup>2</sup>	450	250	450	250	220	120	220	120	400	450	
finished dia.	mm	1.0 ... 4.5				1.0 ... 5.5		1.2 ... 4.5		1.0 ... 4.5		1.0 ... 4.5
	AWG	18 ... 5				18 ... 4		17 ... 5		18 ... 5		18 ... 5
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