

# RA 501

## Continuous Resistance Annealer

Single and two-wire versions for  
aluminium and aluminium alloys



NIEHOFF – worldwide  
most advanced technology for  
the wire and cable industry



## For combinations with rod break-down machines

- DC resistance annealer in single or two-wire version for aluminium and aluminium alloys
- 2-zone annealing system, electrically neutral (no current flow to other machines)
- left and right-hand versions for NF metal wires with the highest quality requirements
- digital annealing voltage control for consistent wire annealing quality
- encapsulated protective gas zone up to the end of the annealing process in order to avoid oxidation of the wire surface and smoke emission
- freely accessible slip rings and carbon brushes
- coolant system integrated in the annealer (incl. tank, heat exchanger and pump)
- individual drives for all contact pulleys for long service life of the contact rings and best wire surface quality
- automatic contact pulley cleaning and oscillating wire movement (K1 and K2)
- single wire path with no crossover
- effective single-wire drying

## Technical data

	single-wire					two-wire				
material:	Al / Al alloy*					Al / Al alloy*				
max. single wire dia. (mm):	1.5 ... 2.3	3.0	3.5	4.14	5.0	1.5 ... 1.8	2.32	2.71	3.2	
	14 ½ ... 11	8 ½	7 ½	6	4 ½ AWG	14 ½ ... 13	11	9 ½	8	AWG
at max. production speed (m/s):	38.0	23.1	17.0	12.2	8.3	38.0	23.1	17.0	12.2	
	7480	4547	3346	2402	1634 fpm	7480	4547	3346	2402	1634 fpm
finished dia. (for Al 99.5) in mm:	1.5 ... 5.0					1.5 ... 3.2				
	14 ½ ... 4 ½	AWG				14 ½ ... 8	AWG			
contact pulley dia. (mm):	450					450				
max. annealing power (kW):	250					300				
(without transformer)	335 HP					400 HP				
max. annealing current (A):	8000					8000				
max. annealing voltage (V):	80					80				
water-cooled slip rings:	standard					standard				
machine dimensions (W x D x H) in m:	5.0 x 1.36 x 2.3					5.0 x 1.36 x 2.3				
(without motor and transformer)										
weight (kg):	approx. 8000					approx. 8000				
(without motor and transformer)										

\* values for Al-alloy available on request

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

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