

# The NIEHOFF Line Philosophy

The perfect combination for any application

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

- Capable combinations of individual NIEHOFF components and the excellent quality standards guarantee superb line availability.
- The electric equipment with independent PLC suits for flexible integration of the pay-off systems.
- The NIEHOFF rewinding concept maximizes spooling quality for increased productivity during further processing.

DSA-4 E + CS 630 Separation of split wires



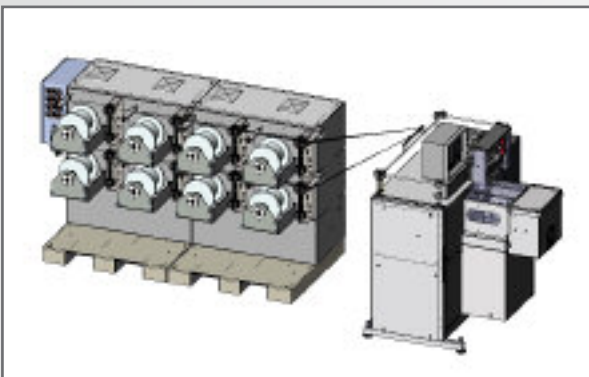
DSH-2 E + CS 630



DSA-4 + CS 630



DSH-2 + ARH 250



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

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## DSA / DSH

### NIEHOFF Rewinding Machine SYSTEM HACOBA



SYSTEM  
HACOBA



machines – systems – know-how – worldwide

DSA / DSH

# Highest Spooling Quality for Optimum Further Processing

## Technical data

type	DSA-4	DSA-4 E	DSA-2 / DSH-2	DSA-2 E / DSH-2 E
version:	automatic	automatic, single drive	automatic/semi-automatic	automatic/semi-automatic, single drive,
material*:	Al, Cu, Fe (annealed), stainless steel, textiles	Al, Cu, Fe (annealed), stainless steel, textiles	Al, Cu, Fe (annealed), stainless steel, textiles	Al, Cu, Fe (annealed), stainless steel, textiles
single wire dia.* (mm):	0.05 ... 0.40 (44 ... 26 AWG)	0.05 ... 0.40 (44 ... 26 AWG)	0.05 ... 0.40 (44 ... 26 AWG)	0.05 ... 0.40 (44 ... 26 AWG)
at max. production speed** (m/min):	800 (2625 fpm)	800 (2625 fpm)	800 (2625 fpm)	800 (2625 fpm)
max. wire splitting per braiding bobbin:	10 wires	10 wires	10 wires	10 wires
spool dimensions				
flange dia. (mm):	40 ... 80	40 ... 80	40 ... 120**	40 ... 120**
winding length (mm):	20 ... 110	20 ... 110	20 ... 110	20 ... 110
total length (mm):	25 ... 125	25 ... 125	25 ... 125	25 ... 125
max. spool weight (kg):	3	3	5	5
permissible wire bundle cross-section (Cu soft)				
min. (mm <sup>2</sup> ):	0.031 (32 AWG)	0.031 (32 AWG)	0.031 (32 AWG)	0.031 (32 AWG)
max. (mm <sup>2</sup> ):	0.370 (21 ½ AWG)	0.453 (20 ½ AWG)	0.844 (18 AWG)	0.288 (22 ½ AWG)
permissible wire bundle (Cu soft)				
min. (mm):	16 x Ø 0.05	16 x Ø 0.05	16 x Ø 0.05	16 x Ø 0.05
max. (mm):	5 x 0.30	6 x Ø 0.30	11 x Ø 0.30	4 x Ø 0.30
machine dimensions (W x D x H) in m:	1.5 x 1.4 x 2.15	1.5 x 1.4 x 2.15	1.5 x 1.4 x 2.15	1.5 x 1.4 x 2.15
weight (kg):	approx. 550	approx. 550	ca. 530	ca. 530

\* depending on the pay-off used, in some cases spooling tests may be required  
 \*\* depending on spool material, spool dimensions and the pay-offs used

Single drive (E): The spool spindles are driven by dynamic servo motors. Single drives are used to split the wire bundle from the feeder spool onto the individual spool spindles, and they are capable of keeping differences in lengths between the braiding bobbins within tight tolerances.

## Basic version

Each of our rewinding machines is mounted on a sturdy steel base frame and comes with:

- safety cover for the spooling zone
- wire length calculation

- automatic stop for wire break (bundle)
- helix winding in the last layer

- additional features of automatic machines:
- spool magazine

- spool buffer
- snap ring closure device

## DSA-L: automatic wire winding machine with 4 and 2 spindles



## DSH-L: semi-automatic wire winding machine with 2 spindles



### DSA-L

- user-friendly guidance and parameter input via touchscreen
- electronic laying with linear drive (low-wear)
- automatic spool change (with magazine)
- automatic trapping and initial winding of wires
- winding of the spool in accordance with the parameters stored in the recipe management
- removal of the wound spools from the spool spindles
- automatic cutting and fixing of the wire ends (snap ring)
- release of wound spools into a magazine and automatic restart of the spooling process

optional:

- single drive for spooling spindles for separation of split wires
- automatic stop for wire break (single wire)
- oil supply with or without heating device
- wire length measuring device with measuring roller

### DSH-L

- user-friendly guidance and parameter input via touchscreen
- electronic laying with linear drive (low-wear)
- after completion of the spooling process: opening of the counter presser latch via a switch, positioning of the wound spools on the lifting table
- manual removal of the spools, cutting and fixing of the wire ends (snap ring)
- manual insertion of the new spools, fixing of the wire start on the spool barrel and starting of the spooling process

optional:

- single drive for spooling spindles for separation of split wires
- automatic initial winding of the wires on the spool barrel
- automatic fixing of the wire ends (snap ring)
- automatic stop for wire break (single wire)
- oil supply with or without heating device
- wire length measuring device with measuring roller