

## AutoCleaver S2

## Advanced cleaver for air-clad fiber



- Fully automatic
- Low cleave angles
  - < 0.5 degrees
- Very flat end faces
- Operator independent
- Automatic fiber waste collection
- Long-lasting diamond
- PC controllable



The AutoCleaver S2<sup>TM</sup> is a modified version of the NYFORS automatic fiber cleaver, designed for the cleaving of air-clad fibers. It provides outstanding cleaving performance for fibers from 125  $\mu$ m up to 1000  $\mu$ m in diameter. A unique and patent pending cleaving process generates typical cleave angles of less than 0.5 degrees.

Special fiber clamps with air pressure controlled clamping forces and modified software enable the AutoCleaver  $S2^{TM}$  to cleave air-clad fiber with high accuracy. The clamping force of the fiber clamp is set by changing the air pressure with built in regulators. Fiber v-grooves are available in stainless steel, brass and polycarbonate.

A built-in microprocessor controls all parameters and settings, such as clamping, tension and the exact position and speed of the diamond blade. This control of sensitive parameters guarantees a high cleaving repeatability and accuracy.

The fiber is held in place by a NYFORS LD fiber holder which is used to load the fiber into the cleaver. The NYFORS LD fiber holder is selected to match the diameter of the fiber coating or jacket. The v-groove clamp block, the distance plate and the fiber height adjuster are selected to match the diameter of the fiber cladding.

The NYFORS LD fiber holder, the distance plate as well as the v-groove clamp block and the height adjuster work together as a fiber handling kit to ensure optimum cleaving performance for a particular fiber. These parts have to be selected from the Selection Guide Matrix when you purchase the cleaver. The parts are easily exchanged by the operator to set the cleaver up for a different fiber size.

The cleaver is designed to generate a minimum amount of fiber waste, typically less than 20 mm. An automatic waste disposal system removes any hazardous fiber scraps. The cleaver can be connected to a PC that gives access to all programmable parameters and settings.

The AutoCleaver S2<sup>™</sup> comes in a small bench top design.

TECHNICAL DATA	
Cycle time	Typical < 14 seconds
Cladding diameter	125-1000 μm*
Coating diameter	250-1500 μm*
Cleave angle	Typical < 0.5 degrees
Fiber waste length	Typical < 20 mm, automatic disposal
Power supply**	External 12 V DC, 15W
Compressed air supply	External compressor**, 6-8 bar, 4 mm instant push-in fitting
PC Interface	RS-232
Dimensions	175 mm (W) x 138 mm (D) x 104 mm (H)
Weight	2.5 kg

NYFORS part number: 50100030-31 & 92-93.

Included in delivery: AutoCleaver  $\mathsf{S2^{M}}$  unit, PC software, RS-232 cable, Manual and Tools.

- \* Fiber specfic handling parts required. See Selection Guide Matrix for more information.
- \*\* Not included in delivery.

## Selection Guide Matrix - AutoCleaver S2™

A fiber handling kit is required for cleaver operation and should be selected when purchasing the cleaver. Select the v-groove clamp block, the distance plate and the fiber height adjuster to match the fiber cladding. Select the fiber holder to match the fiber coating. The fiber handling kits are easily interchanged by the operator to set the cleaver up for a different fiber dimension.

## ARTICLE

V-Groove	Cladding diameter (µm)	Article number	Article Description	Label
	125-199	50100085	V-Groove, STD, Cla 125-199 μm	Yellow
	200-349	50100086	V-Groove, LD, Cla 200-349 μm	Orange
	350-699	50100087	V-Groove, LD, Cla 350-699 μm	Green
	700-1000	50100088	V-Groove, LD, Cla 700-1000 μm	Red

Note: The AutoCleaver S2 v-grooves are available in stainless steel, brass and polycarbonate upon request.

Height Adjuster	Cladding diameter (µm)	Article number	Article Description	Label
	200-349	50100048	Height Adj. LD, Cla 200-349 μm	Orange
7	350-529	50100049	Height Adj. LD, Cla 350-529 μm	White
	530-699	50100050	Height Adj. LD, Cla 530-699 μm	Black
	700-1000	50100051	Height Adj. LD, Cla 700-1000 μm	Red

Distance Plate	Cladding diameter (µm)	Article number	Article Description	Label
	200-349	50100034	Distance Pl. LD Cla 200-349 μm	Orange
60	350-699	50100035	Distance Pl. LD Cla 350-699 μm	Green
	700-1000	50100036	Distance Pl. LD Cla 700-1000 μm	Red

Fiber Holder LDF	Coating diameter (µm)	Article number	Article Description	Label
	200-299	50100059	Holder, LD, Coa 200-299 µm	250 μm
	300-399	50100060	Holder, LD, Coa 300-399 µm	350 μm
	400-499	50100061	Holder, LD, Coa 400-499 μm	450 μm
	500-599	50100062	Holder, LD, Coa 500-599 µm	550 μm
	600-699	50100063	Holder, LD, Coa 600-699 µm	650 μm
	700-799	50100064	Holder, LD, Coa 700-799 μm	750 μm
	800-899	50100065	Holder, LD, Coa 800-899 µm	850 μm
	900-999	50100066	Holder, LD, Coa 900-999 µm	950 μm
	1000-1099	50100054	Holder, LD, Coa 1000-1099 μm	1050 μm
	1100-1199	50100055	Holder, LD, Coa 1100-1199 μm	1150 μm
	1200-1299	50100056	Holder, LD, Coa 1200-1299 μm	1250 μm
	1300-1399	50100057	Holder, LD, Coa 1300-1399 μm	1350 μm
	1400-1499	50100058	Holder, LD, Coa 1400-1499 μm	1450 μm

Depending on fiber sizes the customer can choose from a small or a large v-groove cylinder.

Please contact your sales representative for more information.

Power Supply	Туре	Article number	Article Description	
	AutoCleaver Power Supply	50100075	Power Supply, 100-240 V, 15W	

Power Supply Adaptors	Туре	Article number	Article Description	
	Adaptor for AU	50100006	Adaptor for Power Supply, AU	
	Adaptor for EU	50100007	Adaptor for Power Supply, EU	
	Adaptor for UK	50100008	Adaptor for Power Supply, UK	
	Adaptor for US	50100009	Adaptor for Power Supply, US	