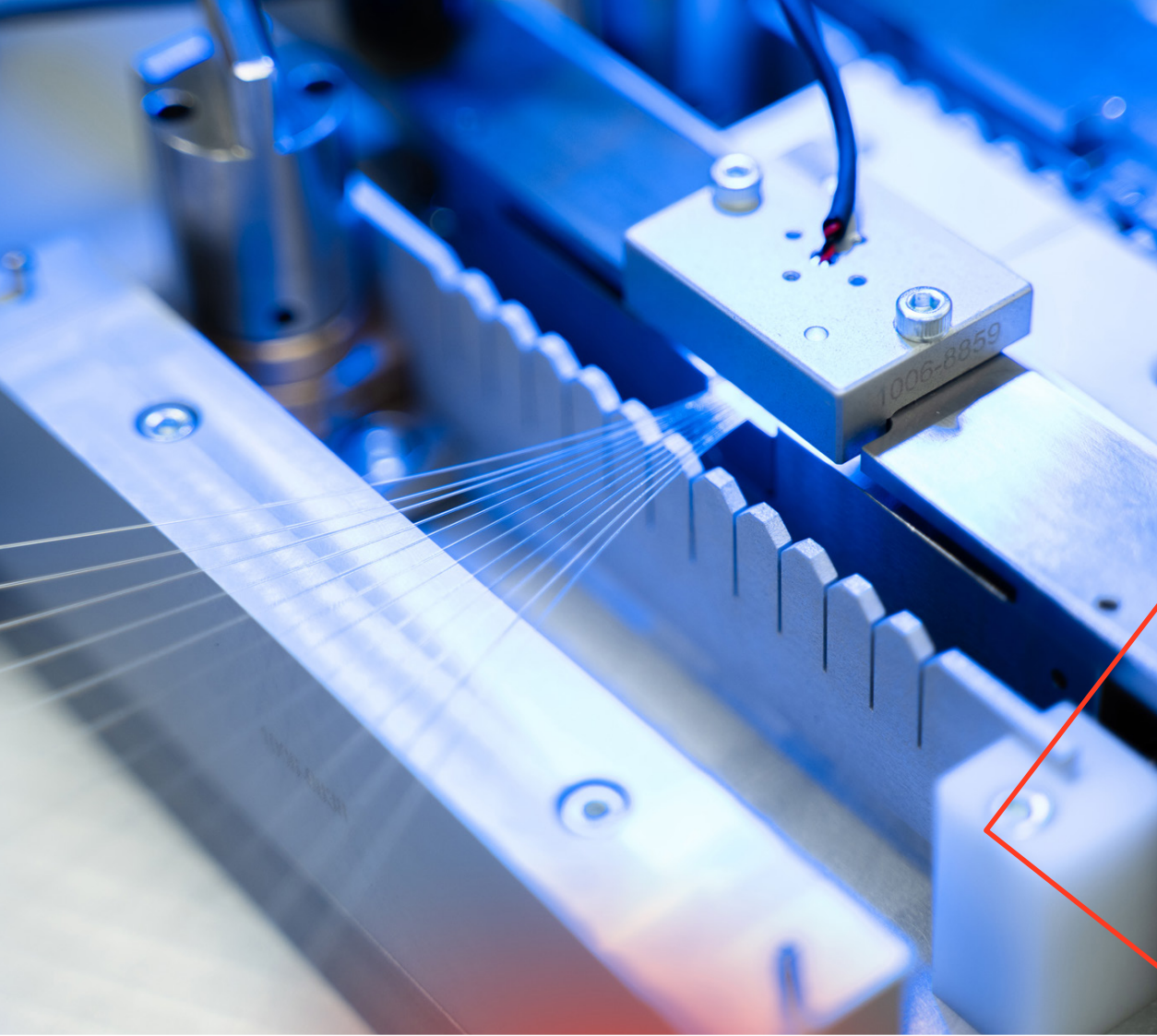




ARRAY

Optical Fiber Alignment

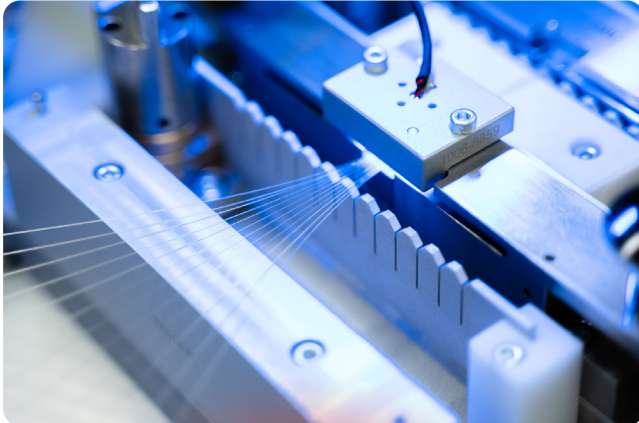


TAKING YOU
STEPS AHEAD

ARRAY

Optical Fiber Alignment

ARRAY is built for dedicated and reliable positioning and alignment of optical PM and SM fibers. ARRAY is a manual alignment tool that uses high-end hardware and custom-built software to produce high performing fiber arrays. Whether you are looking for Fiber to Ribbon, Ribbon to Substrate or Fiber to Substrate. ARRAY is the best solution for low-volume high-mix production of (long) PM and SM fibers.



Fiber to Ribbon

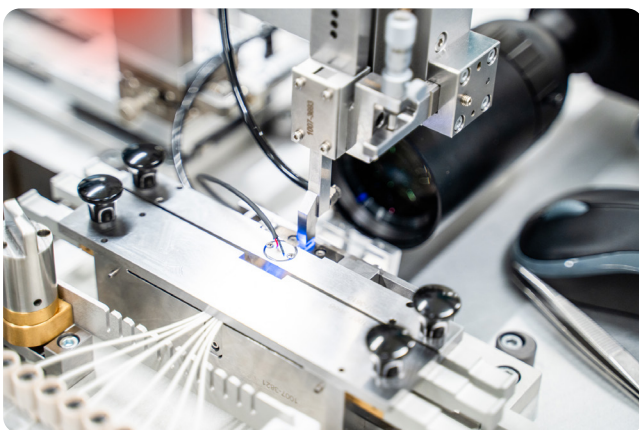
ARRAY R260 / up to 12 channels

Precision alignment and fixation of up to 12 fibers into a ribbon. In this case, a predetermined V-groove offers a 260 μm pitch to place SM and PM fibers into their correct position. Orientational alignment precision of $< 1^\circ$ makes ARRAY R260 a particularly great tool for producing PM fiber ribbons. Predominantly used in Data communication, Medical applications and MT-Ferrules.

Ribbon to Substrate

ARRAY RV127 / up to 24 channels

ARRAY RV127 offers precision alignment of two Ribbons to Substrate of up to 24 channels at a 127 μm pitch. Two Ribbons are combined onto a V-groove substrate and closed with a lid. You are always in control of both ribbons. You can rotate and align the fibers until the product is cured. Including loading of the ribbons, it only takes 15 minutes for 16 PM fibers to align with $< 1^\circ$ precision. ARRAY RV127 is used in Data Communication, PIC, Glass V-Grooves and Custom Substrates.



Fiber to Substrate

ARRAY V250 / up to 12 channels

Looking for a solution to directly insert your fibers into a substrate to connect to a PIC? Then you are looking for ARRAY V250. With a pitch of 250 μm , this tool is capable of aligning up to 12 fibers directly onto a Substrate. ARRAY V250 is used for Data Communication and PIC-applications.

System specifications

Optical Fiber Alignment

Below are three setups for different Optical Fiber products. We have developed systems for Fiber to Ribbon, (two) Ribbons to Substrate and Fiber to Substrate. ARRAY is fully customizable to your exact production requirements and challenges.

ARRAY R260: Fiber to Ribbon	
Channels	2 – 12
Pitch	260 µm
Used in domains	Data Communications, Medical Applications and MT Ferrules
Type of Fiber	SM and PM
Jacket/Tubing	No jacket/tubing
Orientalational precision	< 1 – 3°
Cycle time for product including loading	20 – 45 Minutes

ARRAY RV127: Ribbon to Substrate	
Channels	16 – 24
Pitch	127 µm
Used in domains	Data Communications, Photonic Integrated Circuits, Glass V-groove and Custom Substrates
Type of Fiber	SM and PM
Jacket/Tubing	No jacket/tubing
Orientalational precision	< 1 – 3°
Cycle time for product including loading	15 – 20 Minutes

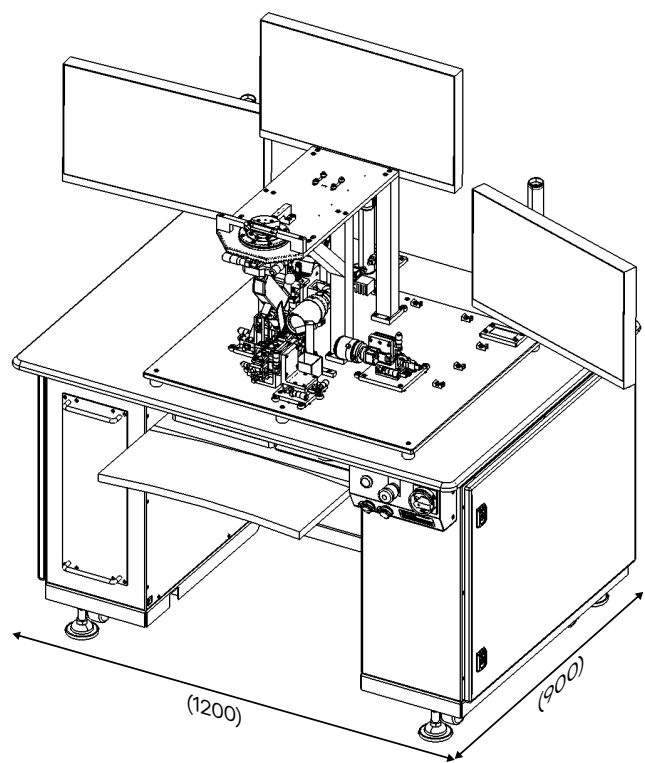
ARRAY V250: Fiber to Substrate	
Channels	8 – 12
Pitch	250 µm
Used in domains	Data Communications, Photonic Integrated Circuits
Type of Fiber	SM and PM
Jacket/Tubing	With jacket/tubing and connector
Orientalational precision	< 1 – 3°
Cycle time for product including loading	30 – 40 Minutes

System specifications

Optical Fiber Alignment

Environment requirements	
Cleanliness	ISO 7 or better
Voltage	230V
Machine footprint	1.2 m x 0.9 m (excluding 1 m free space around)
Voltage	230V, 50 Hz
Max. power usage	2.8 kW

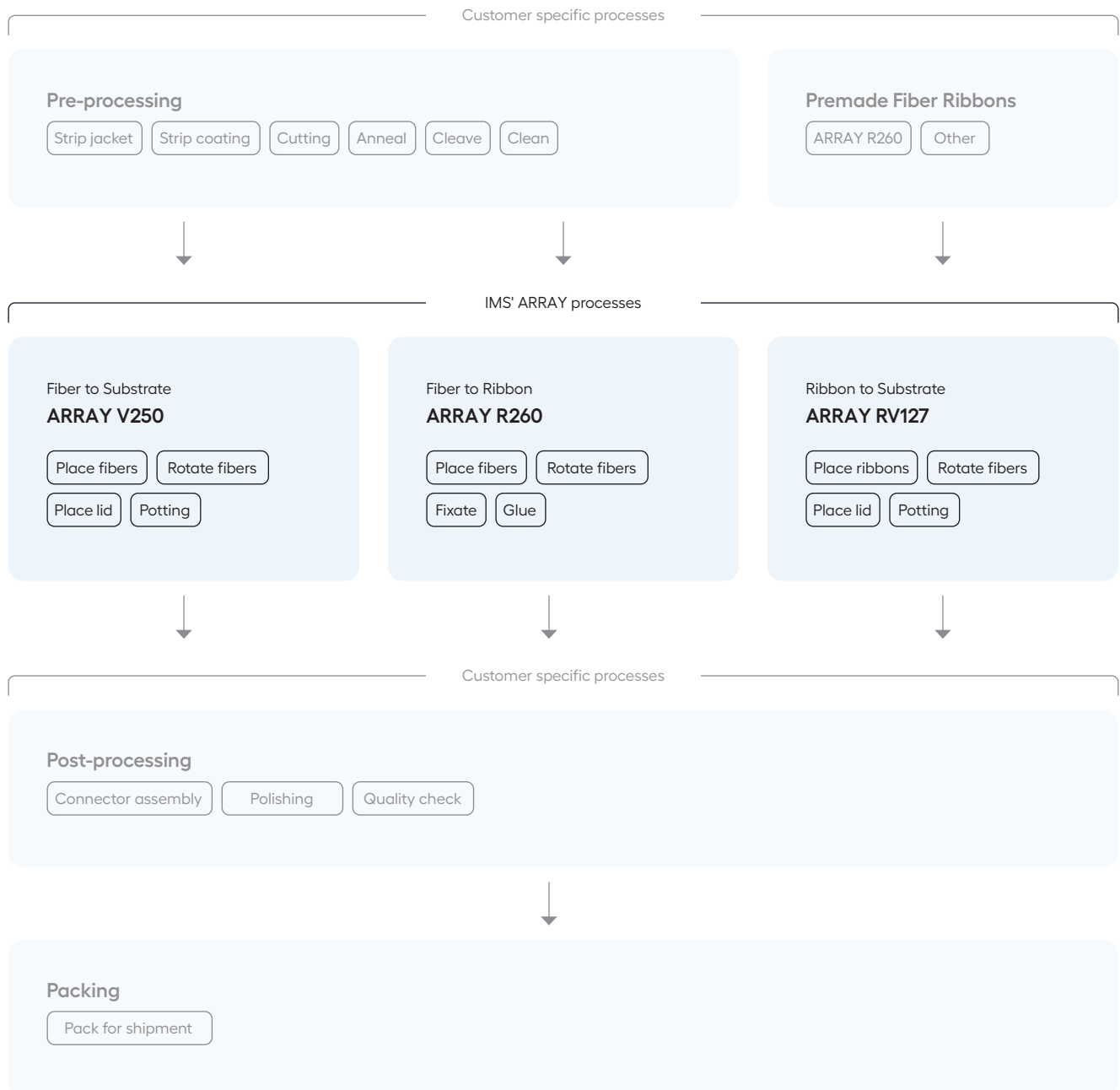
Dimensions of ARRAY for your production floor*



*Dimensions may vary, depending on specific configurations. The below above is based on a Ribbon to Substrate setup (ARRAY RV127).

Where and when to use Optical Fiber Alignment

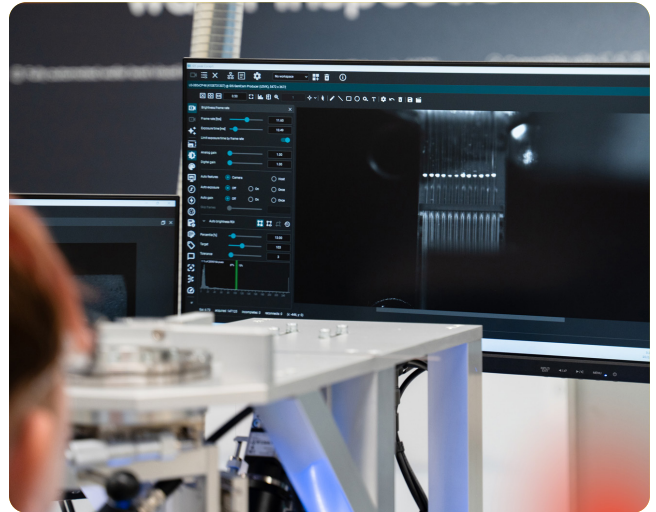
When you are looking for reliable production of fiber arrays, alignment of fibers is one of the most crucial steps in the process. ARRAY currently offers three setups to assemble very high quality fiber products within a competitive timeframe. ARRAY is fully customizable to your (process) requirements. Below are typical processes for creation of fiber arrays.



Everything you need to know

Optical Fiber Alignment

Minimize optical loss with a dedicated and bespoke solution. With ARRAY you are certain of creating very high quality fiber products. Our three configurations can be fully customized to your production needs. ARRAY offers easy handling for operators and requires minimal training.



KEY BENEFIT

Take full control

With ARRAY it is possible to adjust every single fiber until the very last moment. Fibers can be oriented after dispensing, drastically lowering rejects and improving yield.

KEY BENEFIT

Improve production speed

With decreased cycle times, more products can be assembled. With ARRAY, there is less labor needed for the same amount of products.

KEY BENEFIT

Improve product quality

The product quality of SM and PM fibers increase due to ARRAY's precision. Fibers are oriented and aligned within 1 degree precision. With ARRAY, work becomes reproducible and operator independent.

KEY BENEFIT

Customizable to your product

We understand like no other that every micron matters. That is why ARRAY is fully customizable to your exact production needs.

Take full control of your Fiber Array Production

Ready to take a step ahead in Fiber Assembly? We are looking forward to test your fibers on ARRAY. Get in touch with us through sales@ims-nl.com or [+31 546 805 580](tel:+31546805580) and we will help you out.

