

Fully Automated NGS Library Preparation

In need of an automated NGS workflow? IAB automates all kinds of NGS workflows using [Hamilton's](#) world-leading technology.

Introduction

The workflows of NGS library preparation are complex liquid handling steps combining PCR cycling, incubated shanking, or bead-based clean-ups. Automating such workflows is possible only with top-notch equipment such as Hamilton liquid-handling instruments that are well-known and trusted worldwide for their reliability.

In collaboration with the most advanced Hamilton automated liquid handlers, IAB delivers tailored and flexible automation of any NGS workflow with desired sample throughputs and no human error. IAB automates whole genome sequencing, methylation sequencing, whole exome sequencing, and much more.

Method

The IAB automated NGS solutions are powered by the following Hamilton NGS platforms (Fig 1,2,3):

For smaller throughput labs, the Clinical NGS STARlet is a perfect solution. This condensed but powerful robot is IVD-R compliant, making it the ideal equipment for any diagnostic lab. It is designed to handle even [TSO500 workflow](#).



Figure 1

The normal-sized NGS STAR is the right choice for a wide variety of sample throughputs. NGS STAR handles all the most advanced NGS protocols like Illumina AmpliSeq, TSO500 and Illumina DNA prep with Enrichment, [IAB Exome](#), [Twist Exome 2.0](#), or [Twist Methylome](#).



Figure 2

NGS VANTAGE is the best solution for the high throughput NGS labs requiring the most advanced automation levels. Delivered in two sizes and with optional consumables and reagent cabinets, NGS VANTAGE levels up the performance of any high-throughput NGS lab that uses [NovaSeq 6000](#) or [NovaSeq X Plus](#).



Figure 3

Conclusion

With IAB, anyone can become an NGS star! No need to be a robotic geek or NGS expert. IAB delivers fully operational automated NGS solutions powered by the world's most trusted Hamilton liquid-handling technology.