

# 6 | CLEANROOM

Move-In | Hook-Up | Assembly | Maintenance | Cleaning Services



**KLOSE** | INDUSTRIAL  
SERVICE  
YOUR TOTAL SOLUTION PARTNER IN ASIA-PACIFIC

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## SCOPE OF SERVICE:

# CLEANROOM

Working inside a cleanroom places the highest requirements on both staff and the equipment used. This becomes obvious when machines weighing in excess of 20 tons that operate with the precision of mere nanometers have to be relocated without affecting other on-site production. Additionally, depending on the cleanroom classification, strict regulations regarding airborne particles have to be observed. With over 10 years of experience, **KLOSE** is your ideal partner. We handle everything from planning to move-in, assembly, and commissioning for all your machines and systems, such as steppers, implanters, stockers, trackers, etchers, platers, polishers, and sinkers in clean- and ultra-cleanroom environments. With proven protocols, our experienced technicians know how to ensure minimal disruption and avoid contamination.

## SPECIAL EQUIPMENT

Thanks to our specialised equipment, **KLOSE** can guarantee the contamination-free, temperature-controlled, and vibration-free transport of your sensitive machinery. Our airpad system and aluminium lifting frames allow for precise equipment positioning, and our high degree of digitalisation and deep understanding of Industry 4.0 ensures a complete and spotless documentation.

## HOOK-UP & FACILITY

Since 2008 and with our partners, we have been involved in engineering, manufacturing, and executing piping and hook-up for facility-related connections in high-tech environments for technical and biological clean- and ultra-cleanrooms. Our customers range from semiconductor and electronics manufacturers to pharmaceutical and medical companies.

## DID YOU KNOW?

Today's trends of automation, digitalisation, and networking are accelerating technological innovation. More and more high-tech products are manufactured in highly sensitive environments that are classified as cleanrooms. Being a highly dynamic market, manufacturer requirements change frequently. Our service concept for cleanrooms bundles all our specialist knowledge regarding the move-in, positioning, hook-up, assembly, and maintenance of highly sensitive machines operating in such demanding environments.



## OUR SCOPE IN DETAIL

- > Project planning, including simulation of transport path and methodology as well as milestone definition.
- > Erecting temporary storage and transition spaces with controlled environmental conditions.
- > Unloading and unboxing of arriving equipment and thorough delivery inspection.
- > Acclimatisation and wipe-down using pre-defined methodology.
- > Monitoring and measuring of surface and core temperature as required.
- > Mechanical, electrical, pneumatic, and hydraulic assembly of components and subsystems.
- > Move-in using specialised equipment for cleanroom such as zinc-plated/stainless steel robot skates.
- > Positioning as per provided layout. We can also execute floor marking, elevation benchmarking, and more.
- > Facility hook-up and last-mile connection as per engineering drawings.
- > Involving machinery OEM or customer specialists using Remote Field Team virtually.
- > Power on and startup testing, including basic I/O.
- > (Preventive) Maintenance and 24/7 breakdown support as well as scheduled cleaning services.