



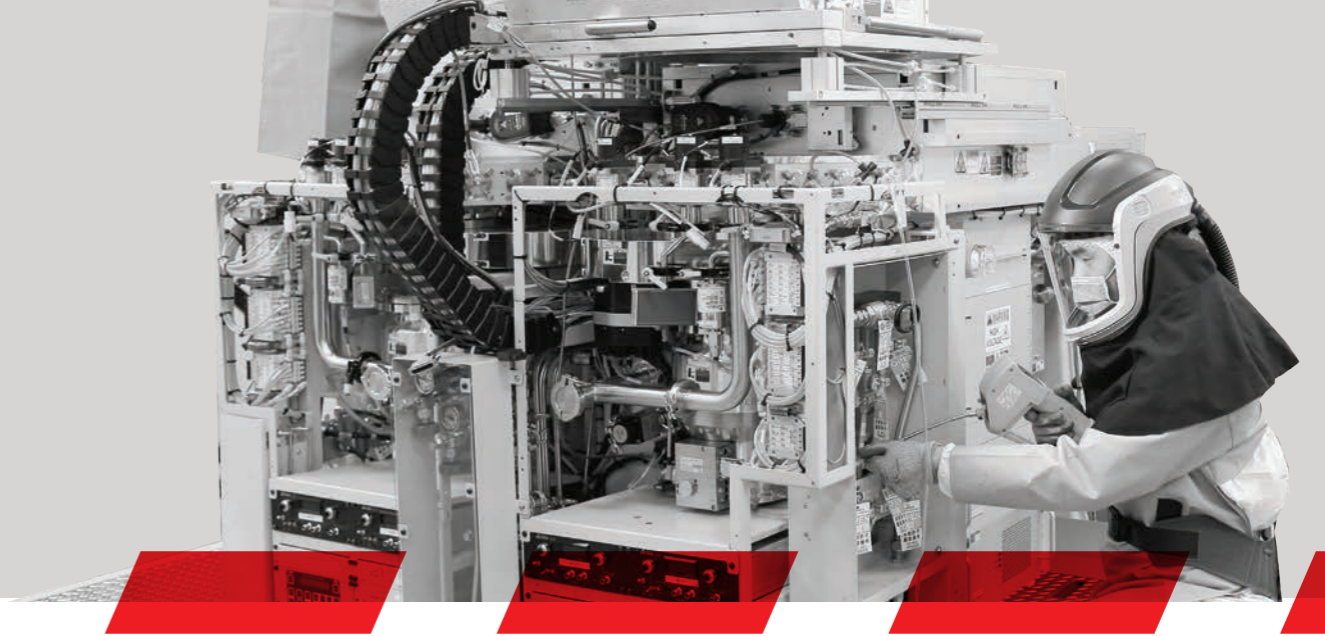
**GLOBAL LEADER IN DECONTAMINATION  
AND DISASTER RECOVERY**



**1-Stop  
Equipment  
Decontamination  
Service Center**

Semiconductor manufacturing is continually becoming more complex and requiring higher level of purity and precision. However, the manufacturing process is carried out using a variety of highly toxic chemicals and gases which contaminate the tools and equipment used during manufacturing. These tools, parts and equipment need to be decontaminated before maintenance, repair work or transportation can be carried out.

As a global leader in decontamination and disaster recovery, BELFOR can offer a range of solutions for different types of contamination with the aim of helping businesses resume operations as quickly as possible.



# 1-STOP EQUIPMENT DECONTAMINATION SERVICE CENTER

We are able to respond to the needs of our semiconductor customers and to make their operations as seamless as possible, by providing a one-stop service for evaluation, assessment, decontamination, testing, providing a comprehensive test report, and associated logistics. We do all of this whilst ensuring compliance to the relevant regulatory standards and any additional client requirements.



## Contamination Assessment

An evaluation will be carried out using our testing equipment to assess the condition of the contaminated tool or part. The evaluation will determine the work required for effective decontamination. Additionally, a more comprehensive test suite is available on request and is carried out, using test samples, at our R&D laboratories based in Munich, Germany.



## Decontamination

BELFOR has a rigorous and proven set of decontamination procedures for different types of parts and tools, which we have trained our staff to conform to. BELFOR can also offer customized procedures if a client requires.

BELFOR has a network of experts in decontamination of semiconductor equipment across the globe. We can tap on these technical experts to find suitable solutions in the case of new tools and technologies or a unique contamination in order to find a solution.



## Certification & Documentation

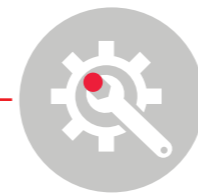
Testing will be done after decontamination work is completed to ensure that the decontaminated tool or part meet the SEMI S12 guidelines or the client's requirements. A test report will be issued, and a declaration statement will be prepared to indicate that the tool or part has complied with the requirements.

The test report and the declaration statement can be sent to a freight forwarder, appropriate regulatory authority and the party receiving the equipment.



## Logistics Services

BELFOR can provide rigging, crating and point to point transportation services. These services are performed by BELFOR's logistics partners as part of a turn-key solution.

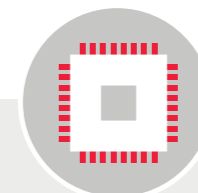


## Tool Upgrading or Refurbishment

Our specialists have the technical knowledge and experience to

- Refurbish tool\*
- Modify tool\*
- Fabricate a new part\*
- Replace a part

\*This is done in collaboration with the client's technical representative or supplier.



## Disaster Recovery for Semiconductor plants

Cleanrooms, unlike other production facilities, must comply with many regulations. Regulations are being continually tightened to ensure that safety is maintained. However, there are no binding regulations or standards (Internationally or domestically) on how restoration should be carried out after an incident such as chemical spill, gas leak, water ingress or fire in a cleanroom and other parts of a semiconductor plant. Decontamination for cleanrooms and other parts of a semiconductor plant cannot be carried out using the standard methods for normal production facilities.

BELFOR has years of experience in the successful decontamination and recovery of semiconductor equipment and facilities. We have a proprietary cleanroom cleaning agent which can effectively remove contaminants from semiconductor facilities. We also have a set of standard operating procedures for decontamination of cleanroom and semiconductor facilities.



**Singapore (Regional Head Office)**

BELFOR (Asia) Pte Ltd  
Email: [inquiries@sg.belfor.com](mailto:inquiries@sg.belfor.com)  
Tel: +65 6848 1110

**China**

BELFOR Recovery Services  
(Shanghai) Co., Ltd  
Email: [inquiries@cn.belfor.com](mailto:inquiries@cn.belfor.com)  
Tel: +86 21 5427 0099

**Japan**

BELFOR (Japan) Co., Ltd  
Email: [inquiries@jp.belfor.com](mailto:inquiries@jp.belfor.com)  
Tel: +81 3 5667 3150

**Korea**

BELFOR (Asia) Pte Ltd  
Email: [inquiries@kr.belfor.com](mailto:inquiries@kr.belfor.com)  
Tel: +82 32 675 8500

**Taiwan**

BELFOR (Asia) Pte Ltd – Taiwan Branch  
Email: [inquiries@tw.belfor.com](mailto:inquiries@tw.belfor.com)  
Tel: +886 2 2620 1200

**Thailand**

BELFOR (Thailand) Ltd  
Email: [inquiries@th.belfor.com](mailto:inquiries@th.belfor.com)  
Tel: +66 2 182 5186

[www.belfor.com](http://www.belfor.com)

