Permit Required Confined Space
Requested in procedure

ASML

General information

The permit is only valid for the specified date & time (max. 1 shift)

Requestor:		Requestor phone:		Date [m/dd/y]:	

Permit required Confined Space:

Confined Space:

- ☐ Source-Vessel
- ☑ Drive Laser compartments (full body)
- ☐ Scanner Source area (SISO), service area
- ☐ Area under the Source in the SBF (EXE)

Procedure name and purpose of the entry:

Procedure(s) name:

Purpose of entry:

PTW Service Order Number: PTW-SO#

Customer and Fab info

Customer & Fab:		Machine Type: EUV, Source:		Machine Number:	
Customer Notified:	☐ Yes ☐ No	Cust. Name/Phone:		Date [m/dd/y]:	
Indicate activity duration [hr]:	Expected start date [m/dd/y]:	Time start:	Expected end date [m/dd/y]:	Time end:	Multiple Shifts: ☐ Yes ☐ No

Personell and Communication

Only authorized entrants can enter the Confined / Hazardous Space

Entry Supervisor	
Attendant(s):	
Entrant(s):	
Atmospheric tester:	

Method of communication between Entrant and Attendant
- ☐ Verbal/Visual
- ☐ Radio
- ☐ Extraction plan reviewed
- ☐ Other

Hazards

Physical Hazards	Physical hazard control:		
☐ Mechanical / Electrical	☐ Lockout/Tagout		
☐ Lasers	☐ Lockout/Tagout		
☐ Gasses	☐ Lockout/Tagout	☐ Ventilation via opposite doors	☐ Vacuum out gasses
☐ Sharp edges	☐ Bumpcap	☐ Cut resistant gloves	☐ Gloves
☐ High Temperature	☐ Measure before entry with …………		
☐ Dust/particles hazards - Tin/Thorium	☐ Respirator, full face mask or half face mask with goggles + P100 cartridge		
☐ Enter and exit (egress)	☐ Attendant to assist in helping going in/out		
☐ Ergonomics ((awkward postures, bending, lifting, reaching etc.)	☐ Frequent breaks/green pads/ergoplate/vessel entry tool		
☐ Tight Spaces (Entrapment Hazard)	☐ Verify that Space is compatible with Body Type for Entry		
☐ Working at Height (working above 1.2 meter or 4 feet	☐ Ladder ☐ Platform		
☐ Others	☐ ASML in Lead Action TRUMPF assistance: EMO Shrounds- LOTO Requred + LMR		
Atmospheric Hazards	**Atmospheric control**		
☐ Asphyxiation gas/Oxygen Deficiency - (Argon/Nitrogen\Helium)	☐ Oxygen area monitor (initial and continuous) - record every 15 min		
☐ Toxic gas - (Carbon-Dioxide, Carbon-Monoxide)	☐ Carbon-Dioxide area monitor (initial and continuous) - record every 15 min		
☐ Others	☐ Carbon-Monoxide area monitor (initial and continuous) - record every 15 min		

Tools

☐ Personal gas monitor	☐ Yellow Canary for Oxygen	☐ Orange monitor for Carbon-Dioxide
☐ LOTO equipment	☐ Personal Locks and Tags	
☐ Ergonomics	☐ Ergoplate / Vessel Entry Tool (VET)	
☐ Lighting	☐ LED Flashlight	
☐ Controlled Access Zone	☐ Barricades and signage	
☐ Others	☐ Others	

Emergency plan

Emergency Response Team (ERT)
- ☐ Phone number ………………………..
- ☐ Radio
- ☐ Date, time & phone number Confirmed by …………………………….
- ☐ Other ……………………………………………………..

Potential Extraction situation	Methof of extraction
☐ Entrapment	☐ ASML trained Employee(s)
☐ Fire/Explosion	☐ Customer Site ERT Team as back-up available only for Confined Space
☐ Engulfment	☐ Other
☐ Hazardous Atmosphere	**Extraction equipment**
☐ Working at height	☐ Ergoplate / Vessel Entry Tool (VET)
☐ Electrical	☐ Align the extraction "how" to be performed
☐ Hazardous Chemicals	☐ Platform
☐ Other	☐ Ladder
Medical equipment in cleanroom available	☐ EXE Vessel Extraction Toolkit
☐ First AID kit	☐ Backboard
☐ Emergency shower/eyes	☐ Other
☐ AED	
☐ Other	

Permit to Work sign-off

Safety mitigation Reviewed and Approved	Task Sign-off:

Local EHS Spec./EUV Safety eng.:	Local Responsible Manager:
Date:	Date:
Name: Sign:	Name: Sign:

All Safety risks need to be mitigated reviewed/approved by local EHS and signoff the task by local responsible manager before activity can be started. Add PTW-form to PTW-SO in SMS.