SECOND DESK

INTERNATIONAL ADVISORY

Disinfection & ozonation

Microbiological control and oxidative treatment

WATER & ENVIRONMENTAL TECHNOLOGIES



AI-generated illustration | not an actual project reference

Product scope and commercial role

TECHNICAL SCOPE

- UV reactors
- Chlorination and dosing
- Ozone
- Advanced oxidation packages

SECOND DESK ROLE

Technical-commercial qualification, market development and manufacturer or partner coordination.



Source: Second Desk website | sector image, not project evidence

Design basis and operating envelope

INPUTS REQUIRED BEFORE A COMPARABLE QUOTATION

- Water quality and transmittance
- Target treatment objective
- Flow range
- Contact requirements
- Downstream materials

The owner and qualified manufacturer confirm operating conditions and applicable design basis before engineering release.

Engineering and component selection

DESIGN REVIEW POINTS

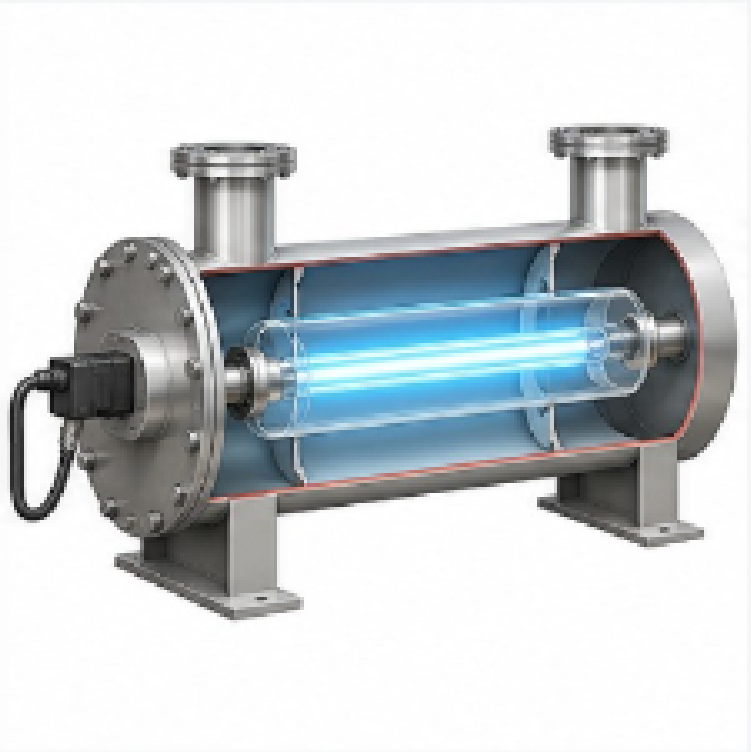
- UV dose basis and monitoring
- Contact chamber
- Chemical compatibility
- Ozone off-gas management
- Safeguards

Selection trade-off

UV selection depends on UV transmittance and validated dose basis; chemical methods require compatible materials and controlled residual.

Project drawings, tolerances and design details remain subject to the responsible supplier or engineer.

Representative technical section



AI-generated technical concept | not to scale or for fabrication

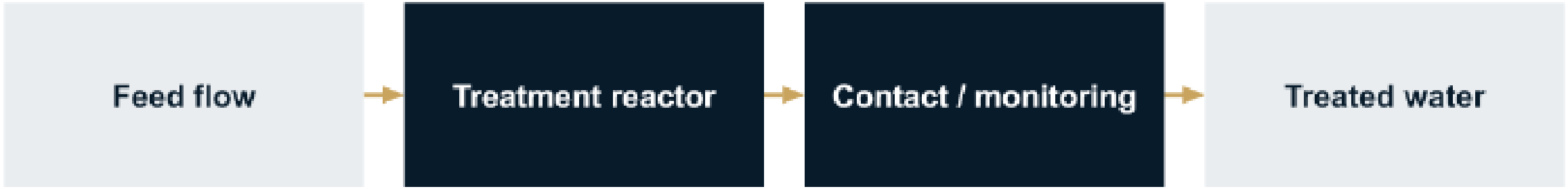
DETAILS TO CONFIRM WITH QUALIFIED SUPPLIER

- UV dose basis and monitoring
- Contact chamber
- Chemical compatibility
- Ozone off-gas management

Confirm the actual construction and dimensions from controlled supplier drawings or approved samples.

Representative functional arrangement

Conceptual sequence for technical discussion. Actual layout and interfaces depend on the approved specification.



Input boundary

Water quality and transmittance / Target treatment objective

Operating and output boundary

Validate agreed treatment performance and alarms with representative feed / Record residual or UV intensity

Fabrication and assembly sequence



AI-generated manufacturing scene; illustrative only

TYPICAL CONTROLLED WORKFLOW

01 Reactor and skid assembly

02 Dosing lines

03 Interlocks and containment

04 Instrument calibration

Inspection and quality control

TYPICAL QUALITY CONTROL POINTS

01 Verify lamp and sensor records

02 Leak test

03 Alarm and shutdown checks

04 Dosing pump calibration



AI-generated sector inspection scene; illustrative only

Inspection methods, sampling, hold points and sign-off depend on the order and approved quality plan.

Factory acceptance and site acceptance

FAT / manufacturing release

- Verify lamp and sensor records
- Leak test
- Alarm and shutdown checks
- Dosing pump calibration

SAT / performance verification

- Validate agreed treatment performance and alarms with representative feed
- Record residual or UV intensity

Agree test conditions, tolerances, witness authority and punch-list closeout before testing. SAT is distinct from factory release.

Site integration and commissioning readiness



AI-generated application scene; illustrative only

SITE PREREQUISITES

01 Confirm ventilation and safety systems

02 Establish flow

03 Calibrate online measurements

04 Verify controls

Packing, logistics and delivery

PRODUCT-SPECIFIC PACKING CHECKS

01 Secure lamps and sensitive components separately

02 Cap chemical lines

03 Include SDS and handling notes



AI-generated logistics scene; illustrative only

Define the Incoterms® rule, named place, export documents, insurance responsibilities and site receipt process in the commercial agreement.

Technical and commercial risk review

Review local requirements, operator safety, ventilation and safeguards. Define treatment verification before procurement.

Design compliance

Compare the same data sheets, duty and explicitly agreed exclusions.

Technical evidence

Request relevant engineering documents, inspection plan and test records.

Execution risk

Check site access, spares, service scope and the manufacturer's support plan.

Responsibilities across the supply chain

OWNER / EPC	SECOND DESK	MANUFACTURER / CONTRACTOR
Defines duty, project constraints, site interfaces and acceptance authority.	Clarifies the opportunity, identifies suitable suppliers and coordinates technical-commercial communication.	Owns engineering, production, testing, guarantees, site execution and contractual obligations as agreed.

Supplier names, manufacturing capability, certificates, references and country-specific approvals are verified for each enquiry; no standing partner or factory is implied.

RFQ and evidence package

01	**Technical definition**	Duty and design basis, data sheets, scope boundaries and tie-in information.
02	**Supplier evidence**	Capability, drawings, applicable compliance, inspection plan and relevant references.
03	**Commercial offer**	Scope and exclusions, lead time, payment, Incoterms® rule, optional services.
04	**Handover plan**	FAT/SAT where applicable, documentation, spares, training and after-sales.

SECOND DESK

INTERNATIONAL ADVISORY

Discuss your next requirement

Share the application, target market or project, technical specification and expected delivery scope.

seconddeskinternational.com

Contact form: seconddeskinternational.com/#contact | Denizli, Türkiye | Meetings by appointment

SOURCE AND EVIDENCE NOTES

Second Desk sector page • US EPA: drinking-water treatment technologies • ICC Incoterms® guidance

Visuals: generated sector illustrations and Second Desk website imagery. Project provenance, supplier capabilities and certification remain unverified unless separately confirmed.