SECOND DESK

INTERNATIONAL ADVISORY

Resource recovery & reuse

Recovery of drainage water and controlled reuse

GREENHOUSE & AGRI-TECH



AI-generated illustration | not an actual project reference

Product scope and commercial role

TECHNICAL SCOPE

- Drainage collection
- Filtration
- Disinfection
- Storage
- Controlled blending

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

- Drainage volume and variability
- Sanitation target
- EC and nutrient composition
- Crop constraints

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

Engineering and component selection

DESIGN REVIEW POINTS

- Segregation
- Balancing volume
- Measurement and treatment points
- Reuse and purge plan

Selection trade-off

Check cyclic volume, dissolved salt accumulation and sanitation objectives. Establish monitoring and purge criteria with the grower.

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

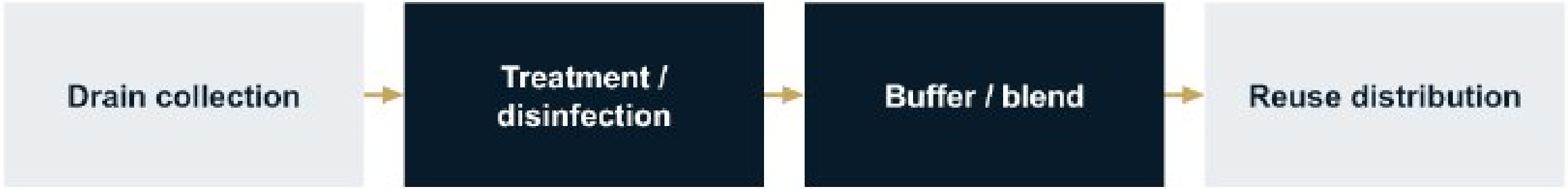
DETAILS TO CONFIRM WITH QUALIFIED SUPPLIER

- Segregation
- Balancing volume
- Measurement and treatment points
- Reuse and purge plan

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

Drainage volume and variability / EC and nutrient composition

Operating and output boundary

Water quality and recovery flow under agreed conditions / Stable control and purge logic

Fabrication and assembly sequence



AI-generated manufacturing scene; illustrative only

TYPICAL CONTROLLED WORKFLOW

01 Tank and piping assembly

02 Collection manifold

03 Filter and treatment skid

04 Controls

Inspection and quality control

TYPICAL QUALITY CONTROL POINTS

01 Leak tests

02 Valve operation

03 Sensor calibration

04 Water quality sampling plan



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

- Leak tests
- Valve operation
- Sensor calibration
- Water quality sampling plan

SAT / performance verification

- Water quality and recovery flow under agreed conditions
- Stable control and purge logic

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 Verify collection slope

02 Clean and flush tanks

03 Calibrate monitoring

04 Coordinate agronomic decisions

Packing, logistics and delivery

PRODUCT-SPECIFIC PACKING CHECKS

01 Drain all vessels

02 Protect instruments

03 Label reuse and drain connections

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



AI-generated logistics scene; illustrative only

Technical and commercial risk review

Keep treated and untreated streams identifiable; review overflow and make-up options.

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 • FAO: good agricultural practices for greenhouse vegetables • ICC Incoterms® guidance

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