

Peace of Moisture Mind[®]



A four-step proven
moisture damage prevention
process for all industries

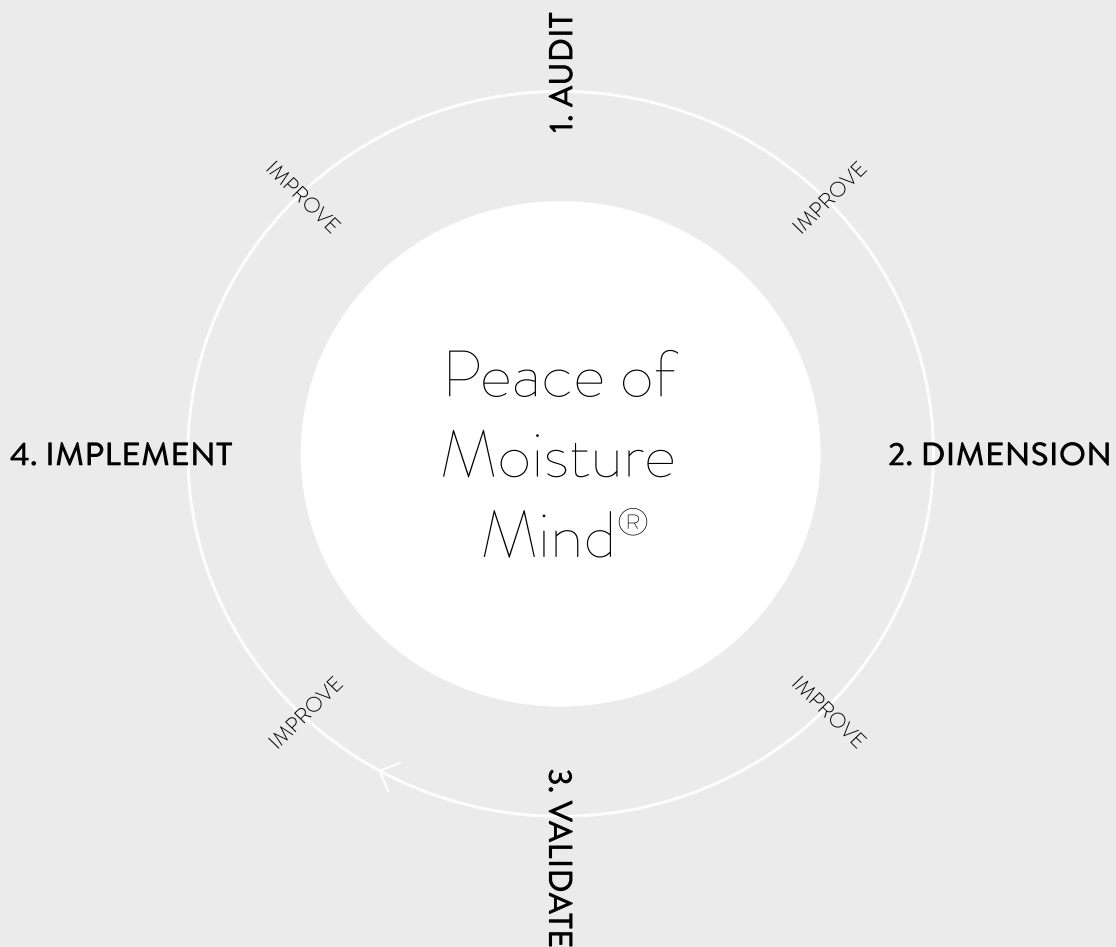
- To guide you on which desiccants to be used and how to install them to prevent excess moisture.
- Contains four steps with defined concepts and unique tools.
- Developed over decades of experience.
- Possible to use a single step or concept.

About Peace of Moisture Mind[®] (POMM)

A well-executed moisture damage prevention strategy is much more than “adding a few desiccants”. POMM is Absortech’s step-by-step process, based on knowledge gained over decades.

It covers the customer's entire Supply Chain from their upstream supplies through packaging, loading, and shipping. Amounts and types of desiccants to be used, how to ensure they are made available when needed and that loading, and packaging personnel are duly educated. All this to ensure goods arrive in perfect condition and that the buyer is satisfied.

The POMM steps can be used one-by-one, or seamlessly linked in an AbsorTotal™.



Step 1

AUDIT

The purpose of the audit is to ensure excess moisture is not added during the packaging process. Reduction of excess moisture may lead to less amounts of desiccants needed, and consequently gains in both cost and sustainability.

Furthermore, it is important to make sure the packaging and loading process is under control and systematized. If not, the desiccant dimensioning becomes more complicated.

Last, but not least, we control if the currently used protection(s) is still functional and sustainable. Neither over-, nor under dimensioned.

The AbsorAudit™ can be made in two ways:

- **COMPLETE – at site: An Absortech specialist will 'walk-the-packaging' together with a customer representative at the customer's site.**
- **LITE – web based: The customer will provide Absortech with a set of input data guided by a questionnaire in combination with web meetings.**

Regardless, findings will be presented in a report and followed up by a review meeting.

ABSORAUDIT™ LITE IS A COMPLEMENTARY OFFERING WHEREAS ABSORAUDIT™ COMPLETE IS QUOTED ON REQUEST.

Audit Input

- **Assessing the packaging process (from inbound via production and packaging to container loading).**
- **Evaluation of current solution.**
- **Using an audit questionnaire to document findings and complement with photographs.**

Audit Output

- **Audit report with corrective actions proposals.**
- **Provides data used in POMM Step 2: Dimensioning.**

Concepts used





Audit in practice



Assessment

AbsorAudit™ - Complete takes place at the customer's premises and the AbsorAudit™ Lite is completed online. Either way, a comprehensive audit questionnaire is used to review 13 areas. In total approx. 60 questions are evaluated, and the result is documented and backed up by photos.

Each question is scored by an impact weight, resulting in a score per department and a total for the company is created.

Report

An Absortech expert will review the results and propose corrective actions and a summary conclusion. In addition to the summary, documents shown below, the complete report will contain score per question, comments to scores and relevant photo documentation.

Review

The report is followed up with concerned stakeholders. Whether or not corrective actions need to be implemented will have bearing on POMM Step 2, DIMENSION. And consequently, the type and amount of desiccants needed.

THE REVIEW CAN BE CONDUCTED FACE-TO-FACE, BUT A WEB MEETING IS RECOMMENDED TO ENSURE STAKEHOLDERS CAN ATTEND REGARDLESS OF GEOGRAPHICAL LOCATION.

Step 2

DIMENSION

The purpose of DIMENSION is to determine the amount of desiccants needed to prevent moisture damage. There is an array of parameters to consider:

- **Type of goods loaded: will they release moisture or not?**
- **Packaging configuration.**
- **Moisture content of packaging material used: pallets, boxes, etc.**
- **Shipping container quality: floor, seals, and tightness.**
- **Container placing on vessel, above or below deck, inside stack or fully exposed.**
- **Weather conditions at loading and duration of journey, including transit times from container loading to container opening.**

In addition, the ability of implementing corrective actions found in an AUDIT can play a significant role. Given the above mentioned variable parameters, it is complicated to make a distinct formula-based proposal. We therefore combine theoretical and practical methods followed by a review meeting.

WHAT ABSORTECH DOES:

- **Calculates the expected amount of excess moisture that will likely need to be absorbed [Theoretical].**
- **Uses a set of data collected during historically validated field test shipments for a variety of goods and routings [Practical].**
- **Leverages on the customer's current solution – experience from existing protection. If any. [Practical].**

Dimension Input

- **Type of goods to be delivered.**
- **Transport or shipping duration.**
- **Mode of container loading (high or wide).**
- **Customer's current solution (incl. cost indications).**

Dimension Output

- **Type and quantity of suitable desiccant.**
- **Cost- and environmental (CO2) savings calculations.**
- **Quotation for proposed solution.**

Concepts used



ABSORDIM™

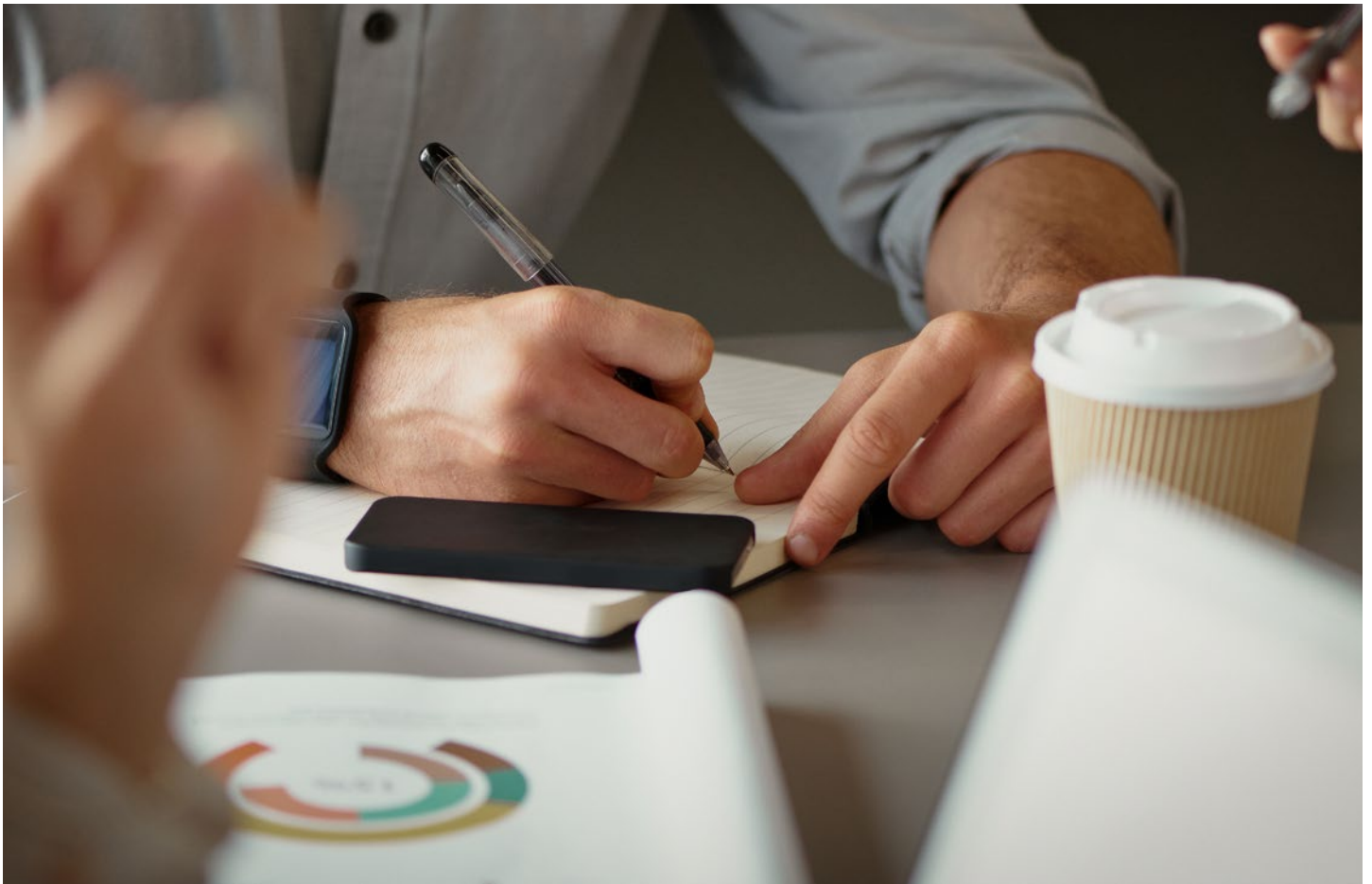


ABSORRANGE™

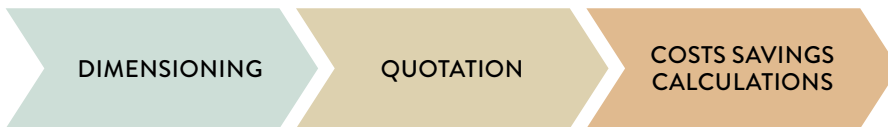


ABSORSAVE™





Dimension in practice



Dimensioning

Executed by an Absortech expert by utilizing the input data explained on the previous page.

Quotation

Submitted by the responsible Absortech salesperson:

- Price for each desiccant.
- Cost for the protection of one container.

Cost Savings Calculations

If the customer is willing to disclose below data, Absortech calculates a cost and environmental savings potential:

- Desiccant brand
- Desiccant type
- Desiccant quantity
- Price per piece

(Absortech can sign NDA for the above information)

ABOUT DIMENSIONING: THE LARGER THE VOLUME OF DESICCANTS NEEDED, THE MORE PRECISE THE DIMENSIONING NEEDS TO BE. FOR SMALLER VOLUMES, A RULE OF THUMB IS TO ADD MORE INSTEAD OF FEWER DESICCANTS AS THE COST FOR DESICCANTS IS LOW COMPARED TO THE VALUE OF THE POTENTIALLY IMPACTED GOODS.

ABSORRANGE™ CONTAINER DESICCANTS ARE CO₂ NEUTRAL AND HAVE 3RD PARTY VALIDATED CALCULATIONS CRADLE-TO-GATE. INEVITABLE OFFSET IS MADE VIA CERTIFIED GOLD STANDARD PROJECTS.

Step 3

VALIDATE

VALIDATE is to ensure the DIMENSION works. And the best way to bring clarity in this phase is to run field tests, installing desiccants in real containers in real shipping vessels.

1. SINGLE BRAND

Same desiccant, different configurations, in different containers

- This is to see which desiccant configuration proves to be the optimal.
- It is important to make the tests as similar as possible. The container in test should be loaded with the same goods, same loading configuration and shipped at the same time. Ideally, the containers should have the same placing on the vessel.

2. WITH / WITHOUT

Desiccants in one container, no desiccants in another

- This option is to analyze the difference the desiccants are doing

3. MULTI-BRAND

Testing the capacity of different desiccants brands. Here, the different desiccants should be placed in the same container. Upon arrival the weight of the desiccants is measured, and their respective absorption capacity can easily be calculated.

THE MORE CONTAINERS INCLUDED IN VALIDATE THE BETTER, AS THE IMPLICATIONS OF DIFFERENT AVAILABILITY TO MOISTURE AND DIFFERENT PLACING ON VESSEL WILL LEVEL OUT WHEN EVALUATING AVERAGE RESULTS. FURTHERMORE, A COMBINATION OF, 'WITH/WITHOUT' AND 'MULTI-BRAND' CAN BE DONE IN THE SAME VALIDATION PROJECT.

Validate Input

- Document the desiccants in the test and their start weight.
- Load containers according to configurations agreed upon.
- Install and start the AbsorTrack™ data loggers to collect important shipping data.

Validate Output

- Documented desiccant performance.
- Absortech will provide a comprehensive AbsorTest™ report.
- Recommendations.

Concepts used



Validate in practice



VALIDATE can be organized in different ways. Due to Absortech's global setup, we are often able to attend at both loading and opening of containers. However, loading and unloading activities can also be made by customer representatives.



Loading

At loading the, AbsorTest™ document 'At loading' should be completed. It includes data like: container number, data logger number, container ventilation open/closed, type of desiccants installed and their original weight, RH% level in container and surroundings, shape of container, etc. The loading process should be documented by supporting photos.

Shipping

During the entire journey, the AbsorTrack™ data logger continuously logs: temperature, RH%, dew point, location, lighting, and G-force. Through the web-panel, data can be reviewed in real time and/or alarm alerts can be e-mailed once a threshold is reached.

Arrival

At unloading, the AbsorTest™ document 'At unloading' should be completed. Following the document ensures all the data needed for composing the AbsorTest™ report is collected and documented. It includes: weighing desiccants, measuring moisture levels in container flooring, evaluate moisture in/on container walls and roof, etc.

Report

The data collected and inspections made will be gathered in an AbsorTest™ report. The report will contain:

- Moisture data analysis
- Overall findings
- Summary and recommendations

Review

The data in the report is followed up with concerned stakeholders.



REVIEW CAN BE CONDUCTED FACE-TO-FACE, BUT A WEB MEETING IS RECOMMENDED TO ENSURE STAKEHOLDERS CAN ATTEND REGARDLESS OF GEOGRAPHICAL LOCATION.

ABSORTECH

AbsorTest Report

Issued: 2020-04-23
By: Eva Jimenez



CUSTOMER CUSTOMER NAME
CUSTOMER REFERENCE NAME SURNAME
PROJECT NAME BOOK #
ORIGIN CITY, COUNTRY
DESTINATION CITY, COUNTRY
ABSORTECH HANDLER NAME SURNAME

ABSORTECH

ABSORTECH

Table of content

1. Background
2. Scope
3. Loading data
4. Loading photos
5. Unloading data
6. Unloading photos
7. Data loggers: moisture diagrams
8. Desiccant's performance
9. Summary
 - a. Container glazing
 - b. Container story
 - c. Conclusions
 - d. Recommendations

FILE NAME: ABSORTECH REPORT 2020-04-23

ABSORTECH

3. Loading data



LOADING DESTINATION _____
PORT OF ORIGIN _____
PORT OF DESTINATION _____
UNLOADING DESTINATION _____
DURATION, FROM LOADING TO UNLOADING (DAYS) _____

FILE NAME: ABSORTECH REPORT 2020-04-23

Step 4

IMPLEMENT

Absortech is a globally present desiccant company. When including our network of AbsorPartners and distributors there is pretty much no location we are unable to deliver to.

By IMPLEMENT, we outline how AbsorRange™ products are delivered in the best possible way. But, we also want to ensure that loading personnel and other stakeholders are informed about how to install the products and what to consider when designing internal packaging solutions.

AbsorDel™

We can combine deliveries from own Absortech companies and complete coverage by using a network of Partners and distributors.

AbsorCademy™

Is our educational package where we can educate users and packaging engineers in desiccant knowledge. Web-based or at site.

AbsorPartner™

Absortech has a developed network of AbsorPartners and distributors. Meaning, we can design a global supply chain.

Implement Input

- Customer point of use.

Implement Output

- Optimized supply chain solution (landed cost and sustainability optimized).
- Education of concerned stakeholders.

Concepts used



Implement in practice



Ramp up

Making sure all customer's invoice address, delivery addresses, customer P/N, forecasts, etc., are duly registered in Absortech's ERP-system. Applying initial samples approval if necessary.

Educate

Absortech can participate in writing customer's installation guidelines to ensure that all loading personnel is duly educated to correctly install the desiccants.

Each product in AbsorRange™ has self-instructive, animated installation guidelines.

Order & Delivery

Orders to Absortech can be provided in different ways. For quality reasons, we prefer having written orders, including order number and P/N.

Our outbound supply chain includes Group capabilities and is complemented by a strong network of partners and distributors. Allowing us to deliver to almost any place in the world.

Global Statistics

All companies in Absortech operate the same ERP-system. Apart from generating traditional statistics per invoice and/or delivery address, we can provide global statistics usage. When sales to the final customer are made via an Absorpartner or distributor, they are prompted to prove customer specific consumption via a web-application.





Absortech helps you prevent moisture damage during transport. Our promise is to protect your brand, increase your savings and lower the environmental footprint of your logistics processes. We are a pioneer in moisture damage prevention with headquarters in Sweden. Since 1996, we have been offering a wide range of inhouse developed and produced desiccants made from calcium chloride. Peace of Moisture Mind® is our moisture damage prevention concept, which includes steps like audits, tests and global supply chain solutions. We are committed to base our operations on sustainable principles and help businesses like yours implement sustainable solutions to prevent moisture damage.

LEARN MORE AT [ABSORTECH.COM](https://www.absortech.com)

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