





Specialization Advanced Materials Analysis

## **Autodesk Moldflow**

# **Certification program**

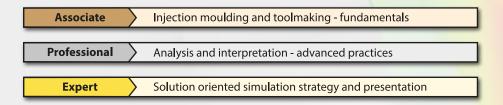
### MF SOFTWARE supports you on your way to becoming a Moldflow expert.

Demonstrate your expertise in Moldflow simulations to ensure a competitive advantage for your company.

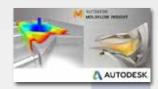
With Moldflow certifications, you can confirm your knowledge and skills at various levels. They serve as proof to your customers that you are working at a defined quality level.

MF SOFTWARE can help you prepare for the different levels of examination. After a knowledge test, you will receive professional coaching from experienced Moldflow users to get prepared for the certification exams.

#### The three levels of certification



All three levels require a high level of knowledge in the areas of injection moulding, component and tool design and are not limited to the use of the Autodesk Moldflow software.



## Leading by **Qualification!**





CERTIFIED PROFESSIONAL







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Specialization Advanced Materials Analysis

Value Added Services **Authorized Training Center Authorized Certification Center** 

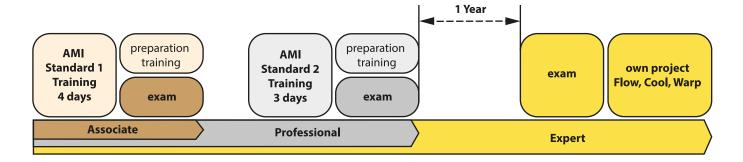
#### Facts:

- 1st Certified Autodesk® Training Center for Moldflow®
- over 25 years training of more than 3,000 people in Moldflow® software products
- 2 mobile computer labs with 8 workstations each





## **Autodesk® Moldflow® Insight - Certification**



## **Conditions of certification**

Associate	Injection moulding and toolmaking - fundamentals

The "Autodesk Moldflow Insight Fundamentals" training materials are the basis for the exam questions.

Requirement: Participation in the Autodesk Moldflow Insight Standard 1 training course within the last

2 years or working with the training documents mentioned above.

Preparatory training: ½ day

Duration of the exam: ½ day

#### Professional Analysis and interpretation - advanced practices

The examination questions are based on the training materials "Autodesk Moldflow Insight Advanced Flow" and "Autodesk Moldflow Advanced Cool and Warp".

Requirement: Associate certification and participation in Autodesk Moldflow Insight Standard 2 and

**Premium Training** 

Preparatory training: 1 day

Duration of the exam: 2 days

### Expert Solution oriented simulation strategy and presentation

The Expert Certification exam includes a theoretical and practical part as well as a presentation of a customer-specific project.

The examination questions are based on the training materials "Autodesk Moldflow Insight Fundamentals", "Autodesk Moldflow Insight Advanced Flow" and "Autodesk Moldflow Advanced Cool and Warp".

Requirement: Professional certification for at least 12 months

Preparatory training: individual, on request

Duration of the exam: 3 days (theoretical and practical part) + Presentation of an own Project

To pass the individual certification levels, at least 80% of the points are required in all individual areas.







## **Associate Certification Exam**

**Associate** Injection moulding and tool design - fundamentals

The "Autodesk Moldflow Insight Fundamentals" training materials are the basis for exam questions.

Requirements: Participation in the Autodesk Moldflow Insight Standard 1 training

course within the last 2 years or working with the training documents

mentioned above

Preparatory training: ½ day

Duration of the exam: ½ day



The Associate Certification exam includes 60 multiple-choice questions on the following topics:

- · Workflow in simulation
- Gating systems
- · Guidelines for positioning the gate
- · Part and tool design
- Injection molding process
- Material properties
- Model modification
- Moldflow design principles
- Process window
- Display and interpretation of results

For a successful passing of the exam it is necessary to thoroughly study the training material on the above-mentioned topics and to practice what has been learnt.

The exam is passed at 80% of the points.



## **Examination success with system**

You will receive a final preparation training directly before the examination. The most important topics are addressed and you have the opportunity to clarify open questions.







## **Professional Certification Exam**

**Professional** 

Analysis and interpretation - advanced practices

The examination questions are based on the training materials "Autodesk Moldflow Insight Advanced Flow" and "Autodesk Moldflow Advanced Cool and Warp".

Requirement: Associate certification and participation in Autodesk Moldflow Insight

Standard 2 and Premium Training or review of training materials

Preparatory training: 1 day

Duration of exam: 2 days

The Professional Certification Exam includes a theoretical and a practical part with 300 multiple choice questions in total.



The questions of the **theoretical part** are multiple choice questions based mainly on the "Theory and Concepts" sections of Autodesk Moldflow training materials. Topics related to filling, packing, cooling and warpage:

- Use of Anchor Planes
- Cooling analyses: overview, modelling, theory, strategies, optimization
- Influence of the design on warpage
- Determination of the amount and cause of the warpage
- Multi-point gating, family tool
- Core shift analysis

- Fiber orientation
- DOE
- Database administration
- Overmolding of inserts
- Overmolding
- Optimization of pack pressure
- Result interpretation



The practical part of the exam deals with further multiple choice questions and software usage.

For a successful completion of the course, it is necessary to thoroughly process the training material on the above-mentioned topics and to practice the learned topics in several projects.

To pass the test, 80% of the points are required in total and in each individual subject area (flow, cooling and warpage).



## **Examination success with system**

The user profile of your daily work is checked by means of a pre-test and in a personal interview. A special training course right before the examination prepares you for the exam in the best possible way.







## **Expert Certification Exam**

**Expert** 

Solution oriented simulation strategy and presentation

Requirement: Professional certification for at least 1 year

Duration of the exam: 3 days (practical and theoretical part) + report +  $\frac{1}{2}$  day presentation

The Expert Certification Exam includes a theoretical and a practical part as well as a report on an existing project and a corresponding live presentation.



### theoretical part (about 225 questions)

The theoretical part of the questions refer to the quality requirements for the available model types, the solution-related analysis and result selection as well as on the interpretation of results using the example of given components and their requirement profiles

Most of the questions are multiple-choice questions. The BEST possible answer is asked.



### practical part (about 170 questions)

Only after the completion of this part the practical part can be started. This part involves the solution of warpage issues of a given component.

It is possible to choose between a mid-plane, two dual domain and a 3D meshed components. These components are already meshed. The work focuses on solving issues of warpage under given constraints. These problems may not be solved within the given time, but there must be clear progress in determining the cause of warpage (e. g. orientation effects, cooling differences, etc.) and the reasons for the warpage. The approaches used solution are evaluated in particular.



### report (customer project)

The report is based on a work carried out in previous years and for which real components are available. Simulation and component are compared. At minimum the report must include flow, cooling and warpage and should be structured as follows:

## Introduction

- Project description
- Workflow
- Model preparation and meshing
- Sequence of problems and questions
- Discussion of the results about the examination of the problems
- Discussion about the definition of warpage and evaluation

#### **Summary**

- Comparison of simulation vs. component
- What did you learn from the project



#### Live presentation of the customer project - in words and pictures

The presentation of the customer project takes place live via WebEx in front of a representative of the Autodesk certification team. In addition to the professional competence, the communication skills are also assessed. A comprehensible presentation and a qualified explanation of the results are important.



## **Examination success with system**

The user profile of your daily work is checked by means of a pre-test and in a personal interview. A training course is individually tailored to your needs in order to prepare you as best as possible for the exam.