Product description: intelliDivide

intelliDivide — optimization "software as a service," based on tapio

intelliDivide is a cutting optimization program for optimizing two-dimensional, panel-shaped materials
intelliDivide accelerates the cutting of panel-shaped materials through more efficient processes that reduce time requirements and waste. The software is compatible with a wide range of machines — from basic circular saws to pressure beam saws.

intelliDivide optimizes your cutting processes. The software uses modern technologies, such as machine learning (AI) and the Internet of Things (IoT).
intelliDivide is a cloud-based "software as a service" application (SaaS). The complex optimization calculations are carried out in the cloud on several servers at the same time.
intelliDivide uses servers hosted by HOMAG as well as the global Microsoft Azure cloud solution.

As a browser-based application, intelliDivide is platform-independent, so you can control the intelligent cutting solution across a wide variety of devices: Windows PCs and laptops, tablets, and even smartphones. However, functionality is somewhat limited on smartphones.
Apps for tablets and smartphones are in development.

A DSL internet connection is required to use intelliDivide.

intelliDivide, which was developed by HOMAG Plattenaufteiltechnik GmbH (based at Holzmastraße 3, 75365 Calw, Germany), is offered exclusively via the tapio ecosystem, meaning the system communicates with machines and other applications via tapio.

The possibility of integrating a machine depends on the manufacturer, model, technical features and potentially required options. Please contact the respective manufacturer to find out whether your machine is tapio-ready.

If machines that are not tapio-ready need to be parametrized, integrated and controlled, this may require additional work.

With intelliDivide, you can create cutting patterns for an unlimited number of machines.

Using intelliDivide, you can download cutting pattern data directly to your machines (depending on the machine and the manufacturer) or print the cutting patterns for further use.
The number of parts contained in the printed or downloaded cutting patterns is limited as follows:
intelliDivide basic monthly subscription = 10,000 parts per month
intelliDivide basic annual subscription = 120,000 parts per year (10,000 parts per month)

intelliDivide professional monthly subscription = 100,000 parts per month
intelliDivide professional annual subscription = 1,200,000 parts per year (100,000 parts per month)

Additional parts can be purchased for a fee as part of the packages available in tapio.

Multiple optimization algorithms make it possible to calculate a range of variants and create optimal cutting patterns simultaneously. The number of solutions displayed may vary depending on the cutting task.
intelliDivide recommends a "balanced solution." Solutions are presented as suggested variants.

For each optimization task, intelliDivide suggests additional, appropriate solutions with a different weighting. For example:

- Optimization with minimal waste
- Optimization with minimal offcuts
- Optimized user handling
- Optimization for minimal material requirements

The optimization algorithms suggest the ideal solution for your production order. This "balanced solution" is the best compromise between consumption of time and materials, and handling.
There may of course be occasions when you do not want to use the "balanced solution."
Simply select a different cutting variant and intelliDivide will automatically suggest more solutions.

The functional differences between intelliDivide Basic and Advanced are:

Feature	IntelliDivide Basic	IntelliDivide Advanced
Optimization „Balanced solution"	✓	✓
Optimization „Minimum scrap"	✓	✓
Optimization „Minimum Waste (scrap + offcuts)	✓	✓
Optimization „shortest cutting time"	✗	✓
Optimization „minimized handling" (head cuts, recuts, offcuts)	✓	✓
Data import of part- and board list (fixed configuration)	✓	✓
Import optimization result from Cut Rite (in order to compare results)	✗	✓
Data transfer to CADmatic 4.x / 5	✓	✓

Register and log in
Access intelliDivide here:
https://intellidivide.homag.cloud/

You can select your preferred language by clicking on the HOMAG logo in the top-right corner of the window at any time. The number of supported languages is constantly growing.
intelliDivide is able to support multiple clients. If you have the correct permissions, you can select a client in the settings.
First, you need to complete your tapio user registration. You can register from the login screen by clicking on the corresponding button on the right, **Register**. Or you can go to the tapio website and register there:

https://www.tapio.one/de/sales/register/as/customer

Already registered? Simply log in with your user details by clicking **Log In** .

Using API access

intelliDivide professional includes an API (Application Programming Interface), allowing you not only to manually enter parts and panels into intelliDivide, but also to enter standardized file formats for your

optimization processes. This means you can load parts lists and panel lists from upstream systems directly into intelliDivide and optimize them. Using the API, you can then save the results of your optimization from the cloud directly onto your computer or saw and continue to use them.

To use API access, you need to download and run the console application intellidivide.exe.

Please note that the console application may not be available for all intelliDivide variants.

Help and support

If you experience any technical problems with intelliDivide, the customer service team at HOMAG Plattenaufteiltechnik GmbH is available Monday to Friday, between 7 am and 6 pm and can be reached at: +49 (0) 7443 13-6000 or via service-holzbronn@homag.com