Bendex

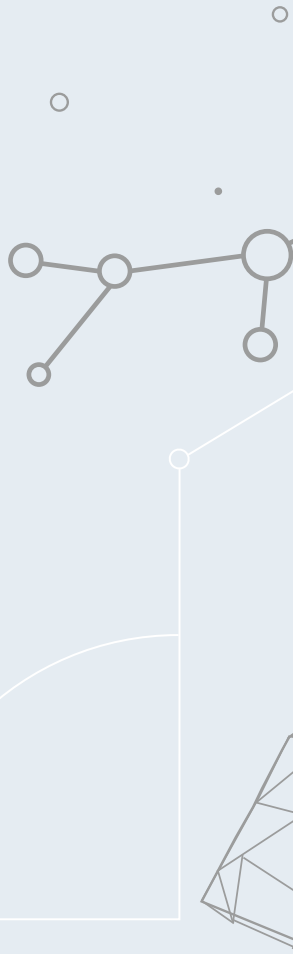# Sales and production solutions for bent parts and accessories.

www.bendex.at

Our philosophy

Progress requires competency, imagination, and the courage to innovate.

Together we are defining tomorrow's standards, today.

World leader

For more than ten years we've been collaborating with our partners to develop the world's leading software solution for bent parts and accessories.

> Available in **28 languages**
> More than **12.000 installations**
> Over **200 delighted customers**
> In more than **50 countries**

... and more than 3 million completed production orders!

01

For pros with profile

Bendex software solution

BENDEX IS THE MOST ADVANCED AND HIGH-POWERED SOFTWARE SOLUTION FOR PRODUCTION AND SALES MANAGEMENT OF BENT PARTS AND ACCESSORIES.

Bent parts can be planned or imported from a CAD system, displayed in 3D, then billed and ordered with just **a few mouse clicks.** Bendex automatically creates the necessary manufacturing documents and machine data.

This means you can deploy Bendex directly with your customer or sales partner as an **innovative sales tool,** or internally to capture part designs, produce cost estimates, and for process planning and production. You benefit from a tested, integrated, and scalable solution for your manufacturing

Bendex is available in a **range of product and license versions** to suit companies of any size and any application – from a single-user installation to corporate solutions involving hundreds of installations and manufacturing locations located around the world.

Your benefits

> Bendex is an **integrated e-business solution** for individual bent parts.

> Bendex supports your processes **from sales to production.**

> Bendex lets you create or import a bent part with **just a few mouse clicks.**

> Bendex checks the **production feasibility** within your company.

> Bendex calculates the cost of the part and **automatically creates a quote** for your customers.

> Bendex automatically creates **manufacturing documents** and **programs parts to be formed,** including all additional operations for the respective production facilities.

> Bendex **saves you time** by letting you copy over parts directly from a CAD system.

02 The past
Your current processes

BENDEX MAKES TYPICAL PROBLEMS THAT ARISE IN DAY-TO-DAY PROCESSES A THING OF THE PAST.

> Customers place orders by **fax or e-mail,** resulting in some illegible or ambiguous orders. Consultation with customers who ordered parts that cannot be manufactured can be time-consuming.

> **Manually calculating quotes and orders ties up personnel and takes time,** giving no opportunity to respond to short-term changes in the market or raw material prices.

> Calculating costs for special processing is **extremely time-consuming** and generally produces nothing more than estimates.

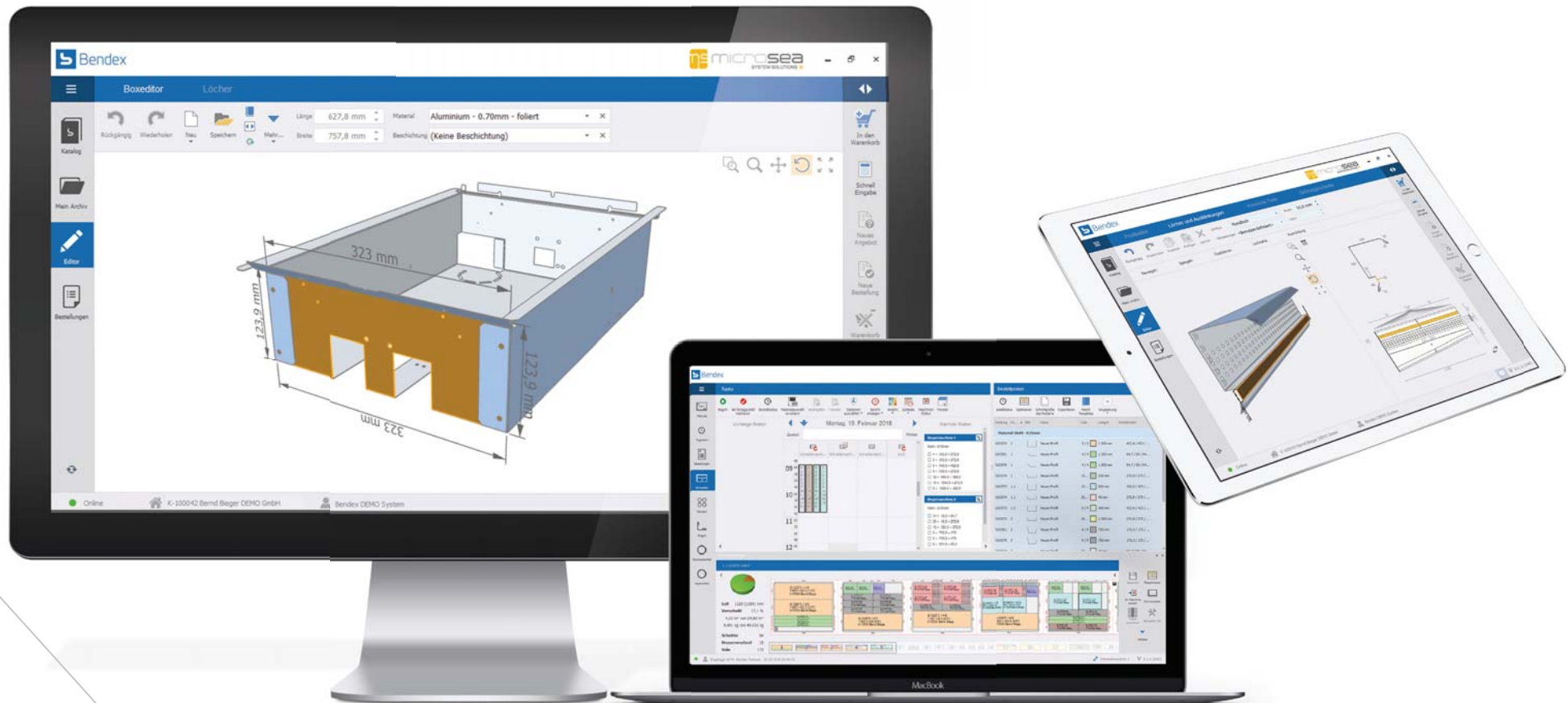> Creating manufacturing documents and machine data manually is inherently **prone to errors.**

> Data is entered into, and managed **in multiple systems.**

> Process, material, and resource optimization is a **massive time sink.**

> It is **practically impossible** to track or trace back orders and production parts through the entire process chain, from the initial request to delivery and billing.

03

The future
Bendex

- Customers and retailers can order **24 hours** a day, **7 days** a week.

- Installers, customers, and retailers can **only order products that can actually be manufactured.**

- Your customers can produce their own **quotes in just a few seconds.**

- You maintain **strong relationships with customers** thanks to a powerful yet easy-to-use system.

- It is extremely easy to **create quotes and orders** through automatic calculation of **prices and production time.**

- The manufacturing department works with **clear and complete production drawings.**

- **Fully automatic machine data** is produced for all production facilities.

- Easy to connect with **third-party software,** such as ERP or logistics systems.

- **Cutting-edge technology** with a state-of-the-art sales and production system for bent parts, which is constantly being improved and developed.

04 The functions

Your ideal all-in-one solution

ONLINE ORDERING SYSTEM

It takes just a few seconds to request and order individual bent parts and accessories in our online ordering system – 24 hours a day, 7 days a week. Bendex creates the necessary documents automatically, including production documents and detail drawings.
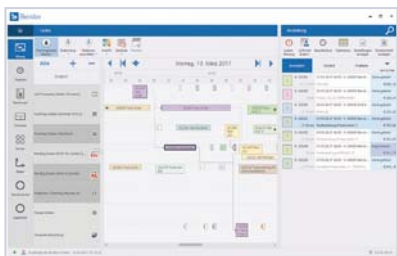
> **User groups:**
> Sales, customers, installers

PRODUCTION ORGANIZER

The production organizer gives you a constant overview of inbound orders alongside your machine and production capacities. Orders released for production can then be planned automatically or manually. Bendex automatically adds in the corresponding manufacturing data and cutting optimizations.

> **User groups:**
> Process planning, production

INTERNAL PLANNING, COSTING, AND QUOTE SYSTEM

Using the internal planning tool, you can create customer-specific quotes within a matter of seconds, accept orders, and release them for production. You can edit previously created quotes (e.g. change discounts, margins, quantities, and detailed plans) and make them available to the customer for further processing.

> **User groups:**
> Sales, customer service

REPORTING AND ANALYTICS TOOL

You can use the reporting and analytics tool to evaluate and visualize all company, sales, and production data documented in the system in extensive detail. Bendex generates insights into every aspect of your sales and production processes, delivering a clear basis for you to decide on next steps.

> **User groups:**
> Sales, management, controlling
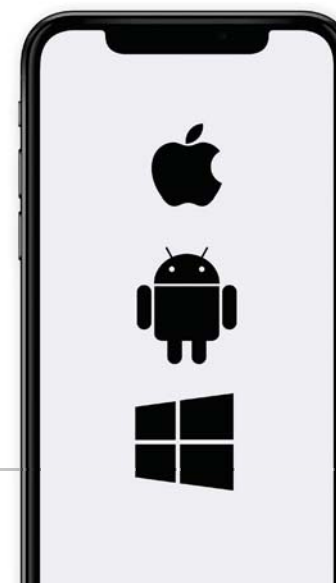
CONFIGURATION AND ADMINISTRATION TOOL

Using the configuration tool, you can configure the system to suit your requirements and maintain your data (materials catalog, material prices, printing types, logos, user data, customer-specific discounts, pricing schemes, etc.).

> **User groups:**
> Office staff, administration

BENDEX.WEB

Bendex.web is a web-based, platform-independent data entry and order system that is an easy and convenient way for you and your customers to create quotes and orders on the move using a smartphone, tablet, or computer.

05

Uses and benefits

A world of possibilities

INCREASE SALES AND REDUCE INTERNAL COSTS WITH A SINGLE TOOL: BENDEX.

Harness the **benefits of the market's leading** solution for bent part manufacturing that lets your customers order formed parts and accessories around the clock – faster and easier than ever before. **Reduce** your **internal staff outlay** and eliminate errors in order processing while **increasing** your **supply capacity.**

Your customers won't want to miss out on the innovative services that Bendex provides. Plus, Bendex also helps increase your own productivity.

Your potential benefits

> Establish an **additional sales channel.**

> **Increase customer loyalty** to your company.

> Offer **innovative customer service.**

> Increase **efficiency** in manufacturing.

> **Minimize mistakes** and manufacturing errors.

> **Increase your supply capacity.**

> **Cut down on material consumption** in manufacturing.

> **Optimize** machine utilization and production flow.

> Record **production times** and **analytics data** for the entire manufacturing process.

> Distribute order data and changes **in real time** to every workstation.

> Keep your customers updated on their **order status** along with **any changes.**

06 Typical users

Detail-oriented, innovative and productive

BENDEX BENEFITS CONVENTIONAL TRADE AND REPAIR BUSINESSES AS WELL AS INDUSTRIAL SUPPLIERS.

INDUSTRIES AND MARKETS

> Roofers and tinsmiths
> Facade engineering
> Industrial shed construction
> Installers
> Ventilation industry
> Door and window frame manufacturers
> Metalworking
> Construction component trade
> Special and system profiling
> Edging profile businesses
> Metal trade
> Steel service center
> Trapezoidal profiling
> Processors of multi-layer composite panels

CONTRACT MANUFACTURERS

Bendex helps you increase sales, cut internal processing costs to a minimum, and almost completely eliminate errors in production. You're delivering while your competition is still calculating!

INDUSTRIAL HALL CONSTRUCTION AND INSTALLERS

Bendex supports you in completing your construction project as quickly as possible. You can input the necessary bent parts on-site, and they are instantly available for production – so you don't lose any of your valuable time.

ROOFERS AND TINSMITHS

Bendex lets you capture parts and accessories directly while on-site, create project-specific delivery notes, and keep an eye on how much material is being consumed. All parts are immediately available for in-house production. You're delivering the product while your competition is still taking measurements!

MANUFACTURERS AND DEALERS OF STRUCTURAL ELEMENTS FOR ROOFS, WALLS, AND FACADES

Bendex covers a broad range of construction components that are produced and sold for roofs, walls, and facades. Thanks to the Bendex online ordering system, you can offer your office, sales reps, and customers a revolutionary tool that lets them calculate costs and order custom as well as standard parts.

07 Digitalization pioneers

Smart production, Industry 4.0, paperless production

WHAT STARTED AS A REVOLUTION IS A STANDARD FOR US – WE WANT TO SET NEW BENCHMARKS AND CONTINUE OUR EXPANSION.

As a **pioneer in the early days of digitalization** through **Industry 4.0** and the networking of smart production facilities, we have many years of experience and field-tested know-how to support you on your journey towards paperless production and modern sales models.

Thanks to our far-reaching and **overarching Bendex concept** and specially designed data models, we can offer individually tailored software systems to customers in diverse industries with unique requirements. Not only do these systems satisfy your requirements today, they also represent a solution platform for tackling future challenges.

Digitalization pioneers

08 Innovation and collaboration
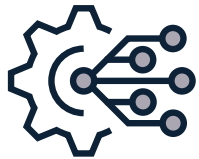## We develop with our partners tomorrow's solutions

CUSTOMERS AND USERS BENEFIT FROM OUR PARTNERSHIPS AND JOINT VENTURES.

MicroSea System Solutions GmbH maintains close relationships and exceptional partnerships with a number of machine manufacturers. We developed the **Bendex partner program** as a way to give our customers, and other interested parties, an easy-to-understand overview of the type and scope of each collaboration (Gold Partnership and Development Partnership).

The various standard **interfaces implemented** in Bendex, including DXF, DWG, STEP, and the individually configurable export formats (e.g. XML and CSV), make it possible to integrate almost any machine.

Do you want to know more about the possibilities for integrating and connecting your machines? Contact us today!

Connectivity in every direction, with every manufacturer

> **Universal interface** can connect any type of machine.

> **More than 40 export formats** already available for every machine type.

09 Success factors

Why Bendex is your ideal solution

AS AN ESPECIALLY INNOVATIVE SOFTWARE SYSTEM OFFERING THE BROADEST POSSIBLE ARRAY OF INDIVI-DUALLY CONTROLLABLE APPLICATIONS, BENDEX HAS BECOME A KEY SUCCESS FACTOR IN PRODUCTION FOR MANY COMPANIES AND INDUSTRIAL FIRMS.

1. Automatic costing
Automatic calculation of sales prices and parts costs including the associated production times for the respective parts.

2. CAD import and export
Drag-and-drop based 2D and 3D data import plus machine-specific export of more than 40 formats total (DXF, DWG, IGES, STEP, XML, and many more).

3. Parts that can be programmed based on scripts
You can use the fully integrated script language to turn profiles, complex boxes, and assemblies into easily programmable parts.

4. Most powerful machine connection
Bendex can be connected to various machines and manufacturers for the purpose of automatic data transfer – regardless of whether you use manufacturer-specific data formats, CAD data, or individual configurable export formats, or even directly executable machine programs.

5. Comprehensive material handling including automatic processing calculations
Bendex offers comprehensive materials management that helps you manage all the standard market materials, from thin to thick sheet metal, including optional coatings and additional features. Processing calculations based on material-specific and bending technology parameters are setting new benchmarks.

6. Cutting and handling optimization across orders and machines
Not only does Bendex optimize material consumption across all your orders, it also takes account of the related material manipulation cost. Plus, depending on your requirements, offers cutting strategies covering all your machines, such as lane-based nesting, freeform nesting, or rectangular nesting.

7. Single-part-based production planning and script-based individual production processes
Bendex automatically plans the entire production flow for you at the individual part level. You can intervene manually at any time. Special production activities such as welding, grinding, packing, or assembly can be individually controlled using scripts. You can see the current production and order status, including part tracking and notices of completion with production times, anywhere and any time.

8. Universal interface to third-party software
The integrated web service lets you connect Bendex to almost any current and future software system thereby allowing you to freely distribute processes, tasks, and data between your various systems.

10 The milestones
Innovation meets perfection

GROWTH RIGHT FROM THE START! WE FOCUS ON FUTURE REQUIREMENTS BASED ON FEEDBACK FROM CUSTOMERS TODAY.

2008
> First version released and live at the first production facility

2009
> Perforations, notches, and conical flanges
> Automatic generation of machine data for various manufacturers

2010
> Correct cut-size calculation, including individual material handling and thick metal sheet options

2011
> Fully automatic generation of bending sequences
> Editors for polygonal and complex bent parts

2012
> Universal interface to third-party software / ERP systems
> Task-based production planning for individual parts with production-specific interim storage

The milestones

2013

> Full support for QR codes

> Machine-specific cutting and parts handling optimization

> Cross-location production planning

2014

> First version of Bendex script language for free definition of profiles

> First Android version

> Production time tracking including analytics and statistics functions

> Individually programmable production processes via the script language, with free choice of station usage for individual parts

2015

> Script language expanded to include polygonal bent parts / boxes

> CAD tools (import / export) for DXF, DWG, STEP and IGES

> Enhanced cutting strategies (lane-based nesting, shear-based nesting) with various export formats (XML, DXF, etc.)

> Miter cuts (simple / orthogonal, single- and double-sided)

2016

> First version of Bendex / SAP integration framework

> Script language expanded to cover user-defined items

> Script language expanded to cover complex production processes with additional processing (welding, grinding, quality control, dispatch control, etc.)

> Configurators for items, profiles, and complex bent parts

2017

> Direct integration of Excel spreadsheets for all types of calculations

> Statistics module with target/actual comparisons and recalculation functions

> First SAP Business One / Bendex Enterprise Suite bundle released

> External import of quotations, orders and production workflows via the ERP interface

> Cutting optimization for sheets with remnant labeling

2018

> Parts list import (from MS Excel) and automatic generation of unfolded part geometry

> First web-based client version

> Special developments for the facade sector and multi-layer composite panels

> Enhanced cutting strategies (freeform nesting)

> Enhanced hole types with freely configurable die and matrix forms

> Enhanced bolt types with welding studs and threaded bolts, types of countersunk holes etc.

Bendex