



WALLRAM GROUP

for excellent results



GRINDING MACHINES



LIZZINI
defines grinding

WALLRAM Grindtec is a company of ZK Holding, an international group with core competences in sintered hard materials, ultra precision tools and precision grinding machines.

Under the brand LIZZINI WALLRAM GRINDTEC develops, manufactures and sells high precision grinding machines for external-, internal- and unround as well as profile grinding.

Our dedicated team of highly qualified staff ensures the quality, precision and reliability of our products - forming the sound basis of our success and long term relationships with our business partners.

We define grinding – relentlessly and professionally.

LIZZINI
following the footsteps of our tradition

With great pride LIZZINI can look back on a well established company history, starting with the company foundation by the brothers Giacomo and Arturo LIZZINI in 1945.

For more than 60 years LIZZINI has been the symbol for precision grinding technology of the highest standard. It is LIZZINI's tradition to nurture innovative solutions for market needs and requirements.

We follow our tradition – with a clear vision of the future.



1945

The founding of LIZZINI in Brescia

1972

Presentation of the first internal grinding machine

1981

Introduction of the universal hydraulic grinding machine SIRIOSYSTEM

1983

Market introduction of the numeric grinding machine MITO

1991

Development of grinding software MICRON®

2004

Introduction of linear technology

2006

Opening of the new technology centre in Montichiari

2011

LIZZINI becomes part of the WALLRAM Group



LIZZINI
a global partner

More than 600 international companies are using Lizzini grinding machines for manufacturing. Our consistent presence at international trade fairs, affords us the opportunity to engage with our customers about our latest innovations and their future needs.

Operating internationally – serving our customers.

LIZZINI
lives precision

LIZZINI stands for bespoke product and service portfolios.



PRECISION



RELIABILITY



SAFETY



USERFRIENDLY

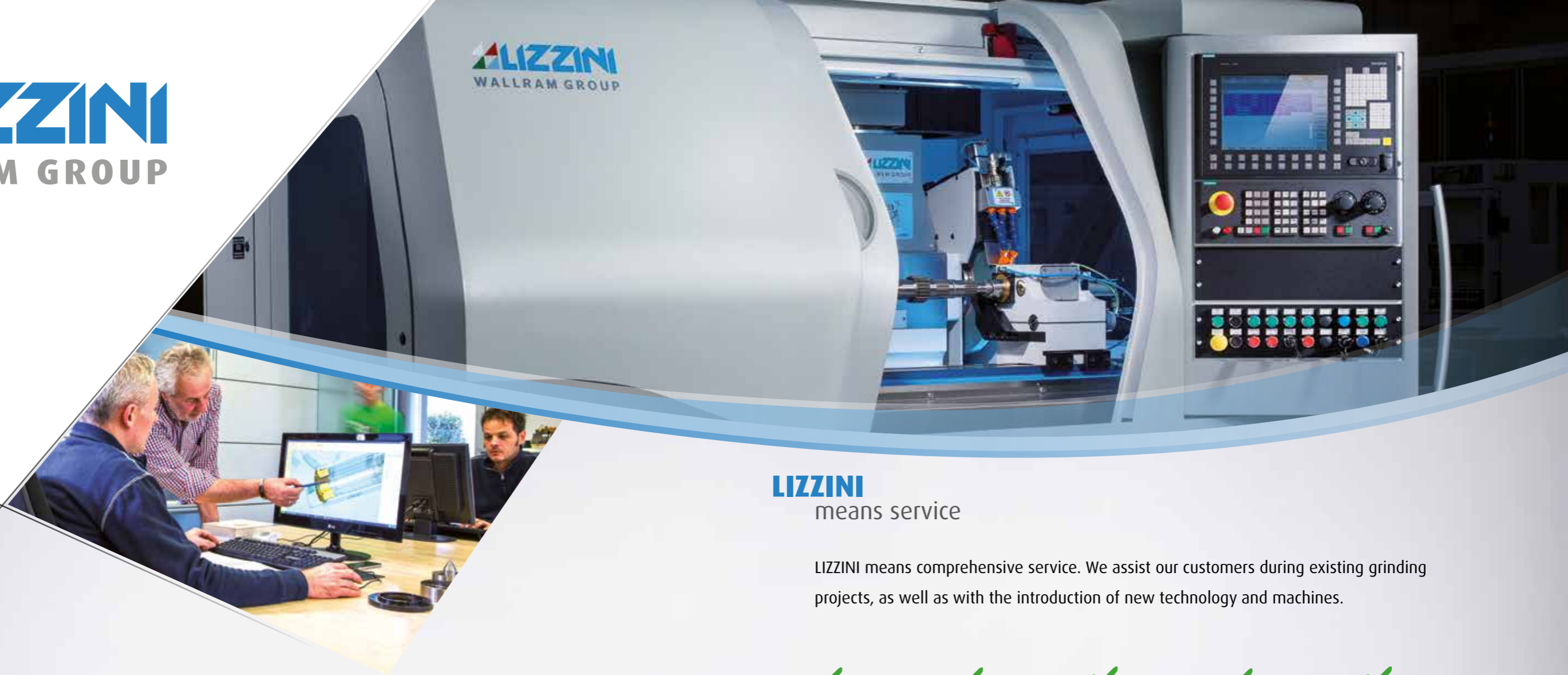


IMPLEMENTATION
OF THE LATEST
TECHNOLOGY

These are the foundations of LIZZINI's optimal grinding performance.

We live precision – with each new grinding task.





LIZZINI means service

LIZZINI means comprehensive service. We assist our customers during existing grinding projects, as well as with the introduction of new technology and machines.



TECHNICAL SUPPORT



INDIVIDUAL CUSTOMER TRAINING



TELE SERVICES



SOFTWARE UPDATES



MODERN STORAGE SYSTEM FOR QUICK PART SUPPLY SERVICE

Furthermore, a consistent dialog with our customers represents the basis for a reliable service and a successful cooperation.

We attach utmost importance to service – prompt, competent and comprehensive.



LIZZINI develops solutions

The challenge of bringing together global production requirements with individual customer needs, is one our development engineers are taking up with great engagement. Our highly experienced staff are specialised in developing precise solutions tailored to our customer needs. Expect innovations from LIZZINI in the future.

We develop innovative solutions – clearly defined and future-oriented.



LIZZINI

what we produce

Innovative grinding machines for external, internal and non-circular processing.

Modern mechanical engineering materials and visionary constructions are combined with variable B-axis, which can be fitted with several external and internal grinding spindles.

Grinding machines for excellent grinding results.



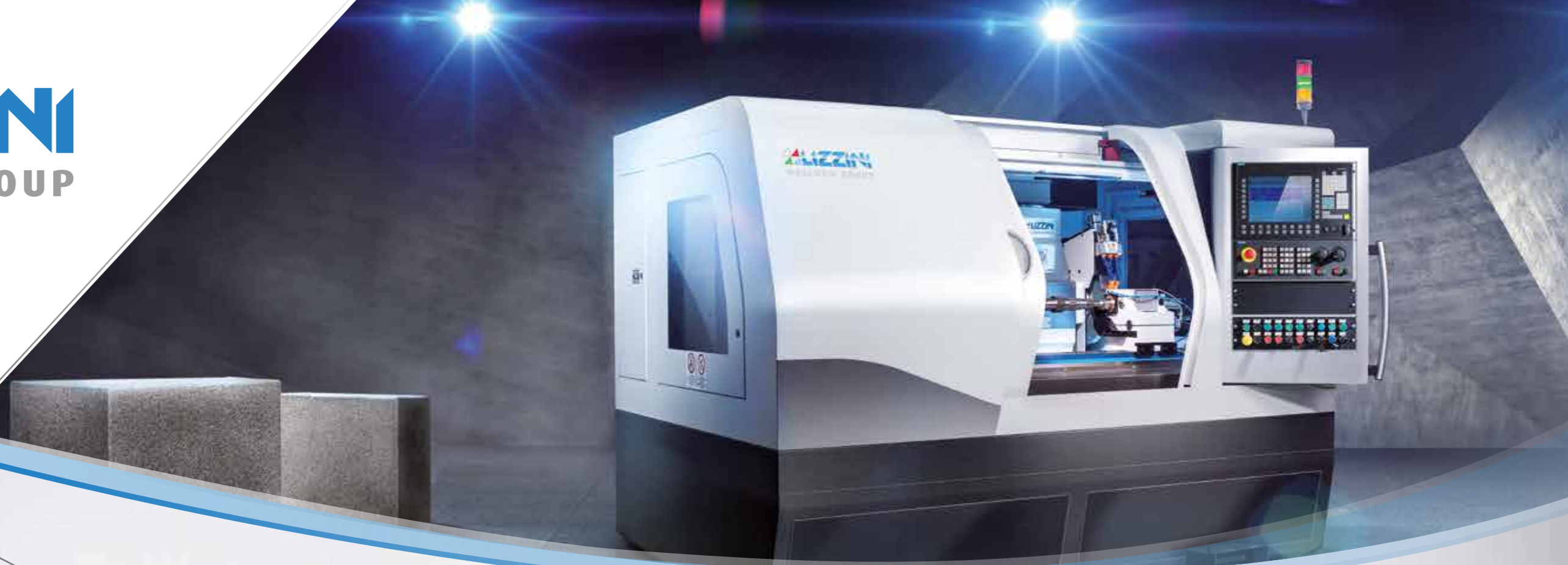
LIZZINI

the customers we produce for

We develop and produce unique grinding solutions that can be ideally modified for individual part manufacturing and small and large series production in a wide range of industries, such as aviation, automotive, mechanical engineering, tool construction, medical technology, contract manufacturing companies, chemical industry, etc.

The right concept for each grinding task.





LIZZINI

what you can expect from us

Over 600 companies worldwide manufacture their products on LIZZINI machines.

This is precisely why we, at LIZZINI, make sure we have contacts near you.

We have national and international sales representatives and service outlets.

We regularly showcase our new developments and machine concepts at trade shows and exhibitions.

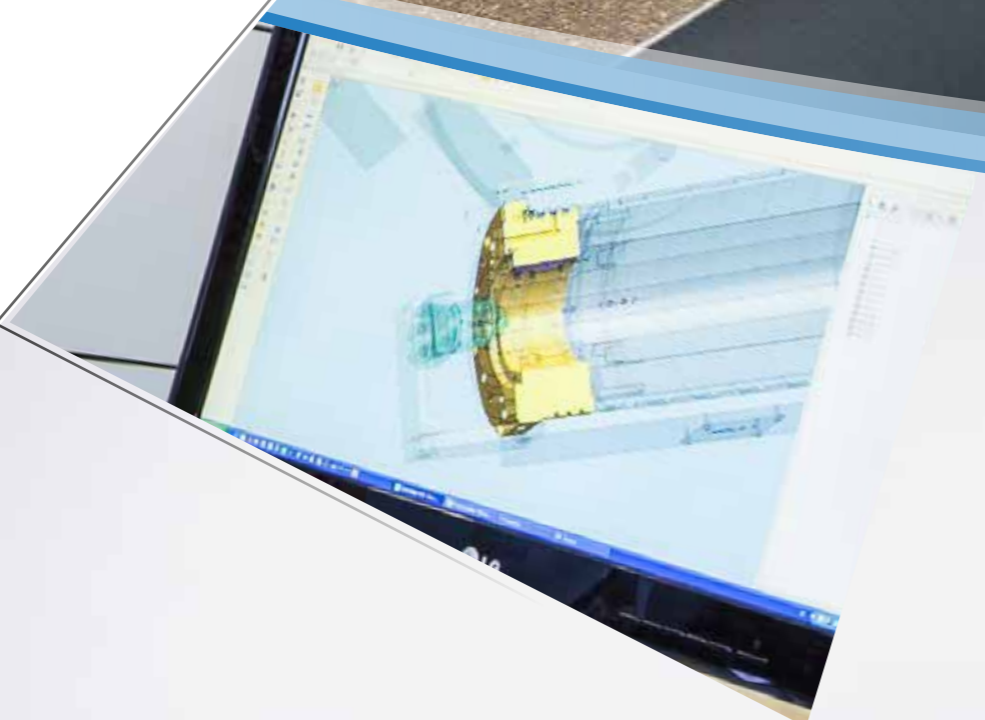
We provide high-quality international customer service.

LIZZINI

is known for

- Modern design
- Linear technology
- SIEMENS controllers
- Mineral and granite bed
- User-friendly **grindSELECT** software





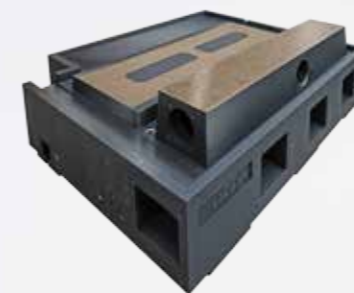
LIZZINI

construction features

We offer our customers different variation options from our modular construction system. All components are designed on our high-developed CAD-systems and the CAM-manufactured parts are then integrated in our machines.

We place the utmost emphasis on ...

- ... optimum implementation of your requirements in terms of technology and cost-effectiveness
- ... taking into account operator and service friendliness
- ... compliance of the applicable safety regulations and CE standards
- ... selecting the supply companies in terms of quality and adherence to deadlines
- ... using renown brand-name products

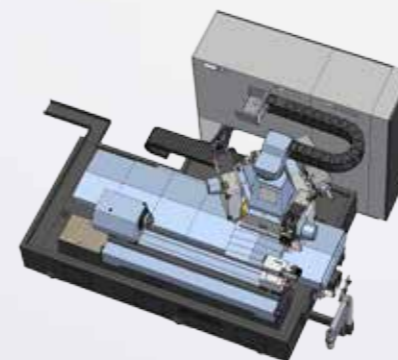


Machine base stands

We use **cast mineral composite or granite base stands** as the basis for our precision grinding machines.

Advantages:

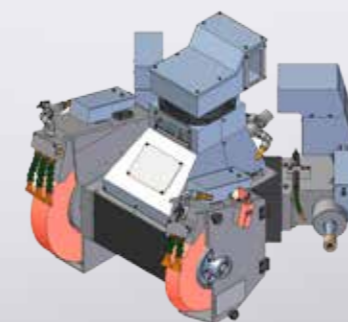
- Low expansion coefficients
- Optimum vibration dampening
- No material residual stress



Drive system

The following advantages are achieved for your production process by using **linear technology**:

- High traversing speed
- High positioning accuracy
- Non-wearing drive



Grinding spindle head

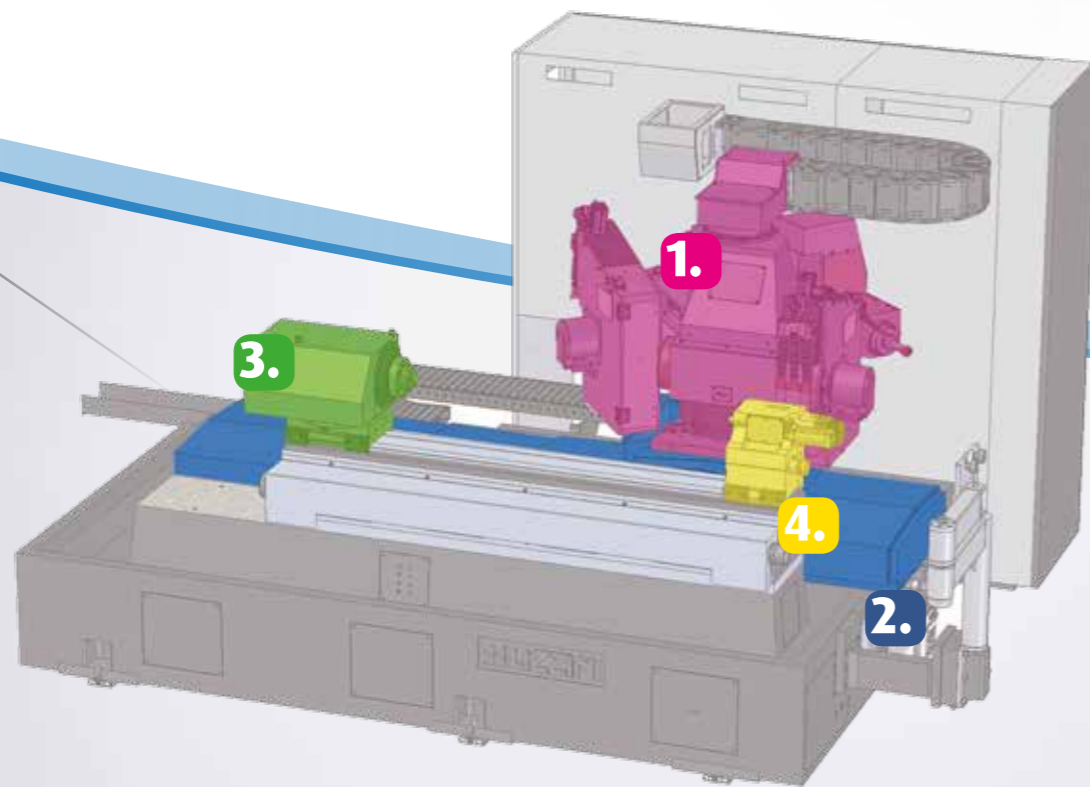
Optional with several external and internal grinding spindles, B-axis with torque motor.

Advantages:

- Complete machining in one operation
- Grinding process optimisation
- Reduction of machining time

CNC GRINDING MACHINES

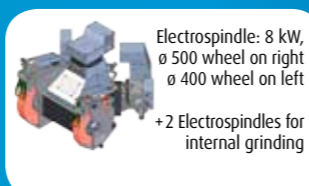
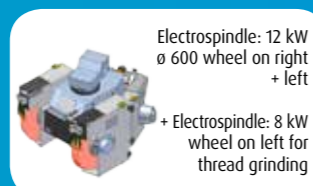
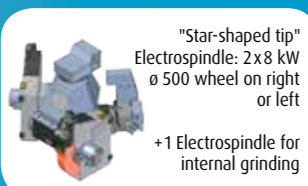
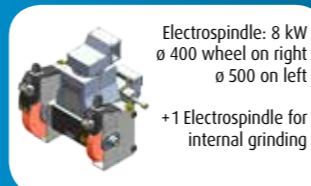
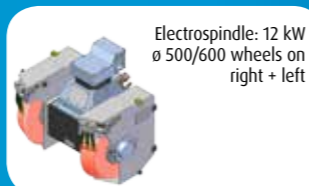
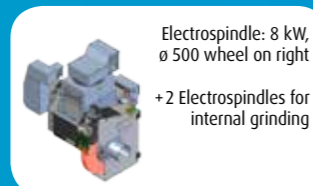
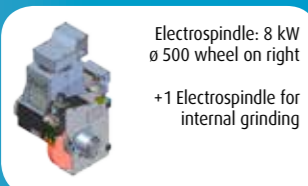
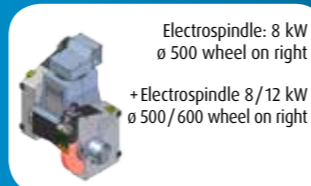
External - internal - unround



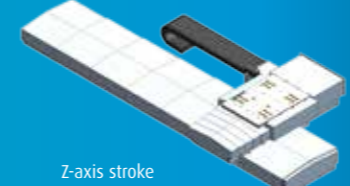
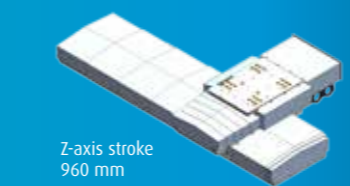
IG-FXL IG-FL IG-FS/IG-FM

THE PERFECT MACHINE IN ONLY 4 STEPS

1.



2.



3.



4.



CNC EXTERNAL CIRCULAR GRINDING — INTERNAL CIRCULAR GRINDING — NON-CIRCULAR GRINDING



TECHNICAL DATA	IG FXS	IG FS	IG FM	IG FL	IG FXL
Center height	200 mm	200 mm	200 mm	200 mm	200 mm / 255 mm
Grinding length	250 mm	500 mm	800 mm	1000 mm	1500 mm
Grinding wheels ø	500 mm	500/600 mm	500/600 mm	500/600 mm	500/600 mm
Electrospindle power	8/18 kW	8/12/18 kW	8/12/18 kW	8/12/18 kW	8/12/18 kW
Kinematic drive type	Ball screw spindle, optional linear technology	Ball screw spindle, optional linear technology	Ball screw spindle, optional linear technology	Ball screw spindle, optional linear technology	Ball screw spindle, optional linear technology
B-axis	optional (torque motor)	optional (torque motor)	optional (torque motor)	optional (torque motor)	optional (torque motor)
peripheral speed	max 125 m/sec	max 125 m/sec	max 125 m/sec	max 125 m/sec	max 125 m/sec

OPTIONS

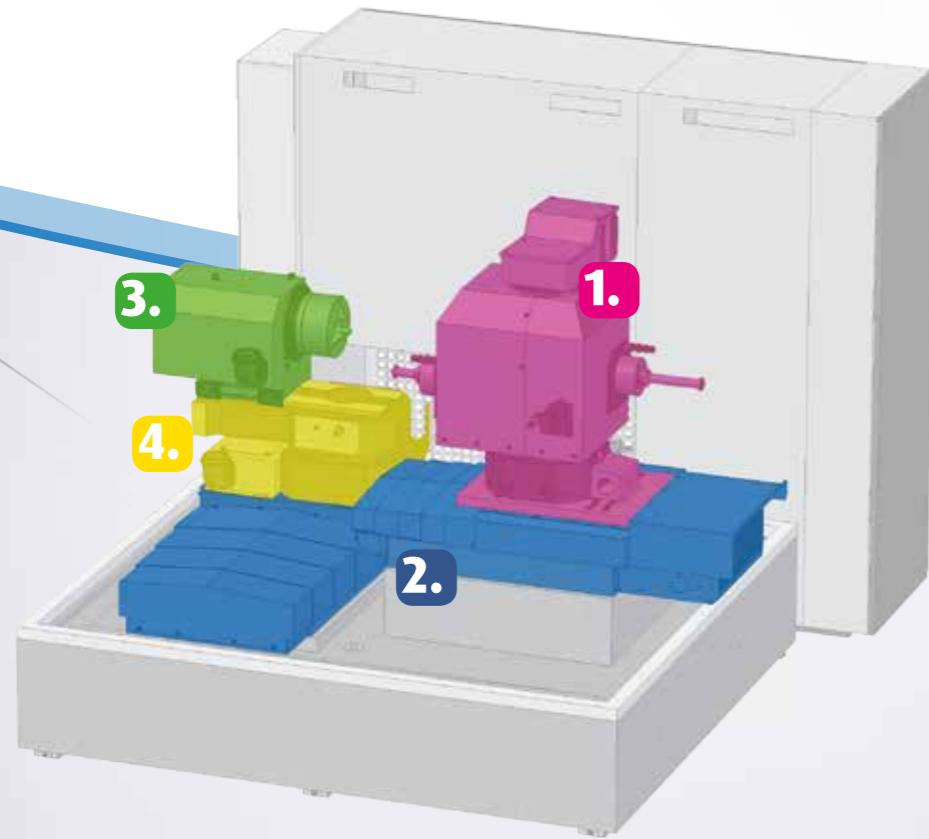
According to task / grinding requirement

- LONGITUDINAL POSITIONER/DIAMETER MEASURING EQUIPMENT
- BALANCING SYSTEMS
- DRESSING ROLL
- STEADY RESTS
- CLAMPING DEVICE
- AUTOMATIC LOADING-UNLOADING SYSTEMS
- WORKPIECE-DEPENDENT ACCESSORIES
- STANDARD/SPECIAL TOOLS
- OIL/EMULSION COOLANT SYSTEMS
- AIR EXTRACTION SYSTEMS



CNC CIRCULAR GRINDING MACHINES

internal circular grinding – internal non-circular grinding – radius grinding

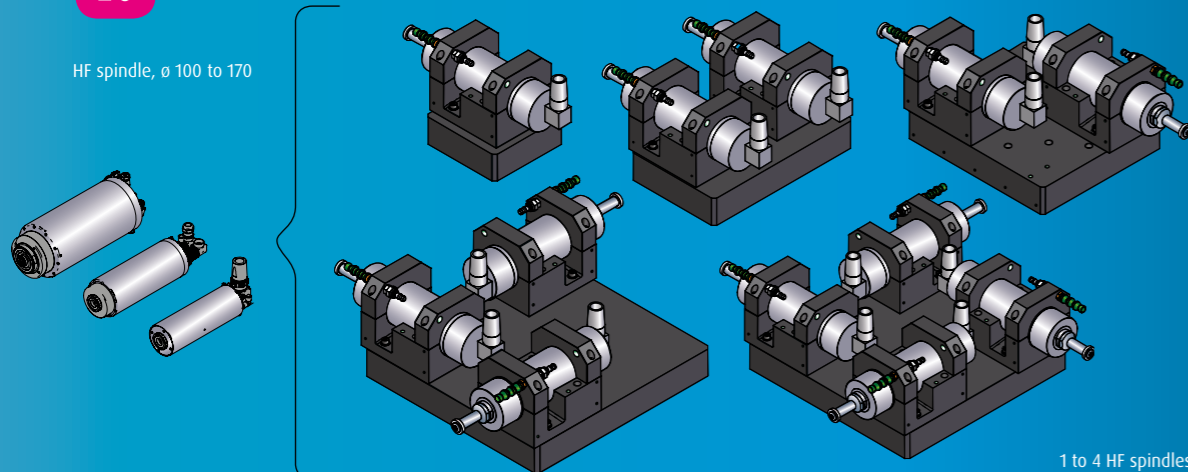


IG-IL **IG-IS/IG-IM**

THE PERFECT MACHINE IN ONLY 4 STEPS

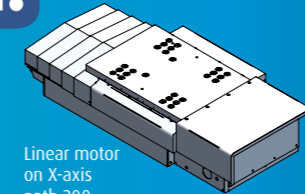
1.

HF spindle, ø 100 to 170

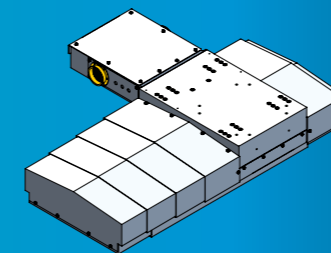


1 to 4 HF spindles
in various configurations

2.



Linear motor
on X-axis
path 300

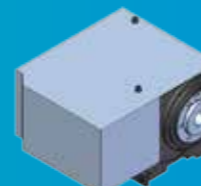


Linear motor on Z-axis
path 490

3.



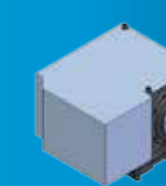
Morse taper 4, ASA taper 5
circular tip



Morse taper 6, ASA taper 8
circular tip

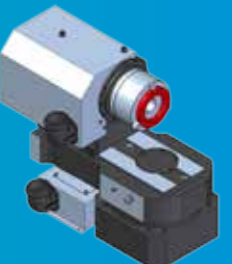


Morse taper 6, ASA taper 6
circular tip
Direct drive

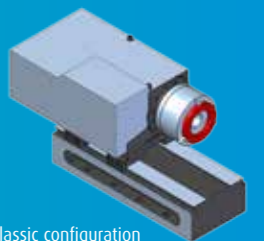


Morse taper 6, ASA taper 8
circular tip

4.



B1-axis, with torque motor



Classic configuration

INTERNAL CIRCULAR GRINDING MACHINES



TECHNICAL DATA	IG IS	IG IM	IG IL
Center height	230 mm	230 mm	230 mm
Grinding length	170 mm	170 mm	300 mm
Grinding \varnothing min./max.	5/200 mm	5/250 mm	5/400 mm
HF Spindle Power	3 - 25 kW	3 - 25 kW	3 - 25 kW
Kinematic drive type	Ball screw spindle, optional linear technology	Ball screw spindle, optional linear technology	Ball screw spindle, optional linear technology
B/B1-axis	Torque motor	Torque motor	Torque motor

OPTIONS

According to task / grinding requirement

DRESSING ROLL

CLAMPING DEVICE

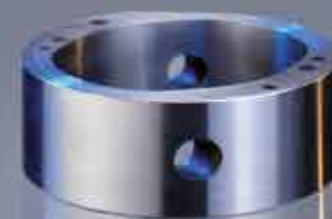
AUTOMATIC LOADING-UNLOADING SYSTEMS

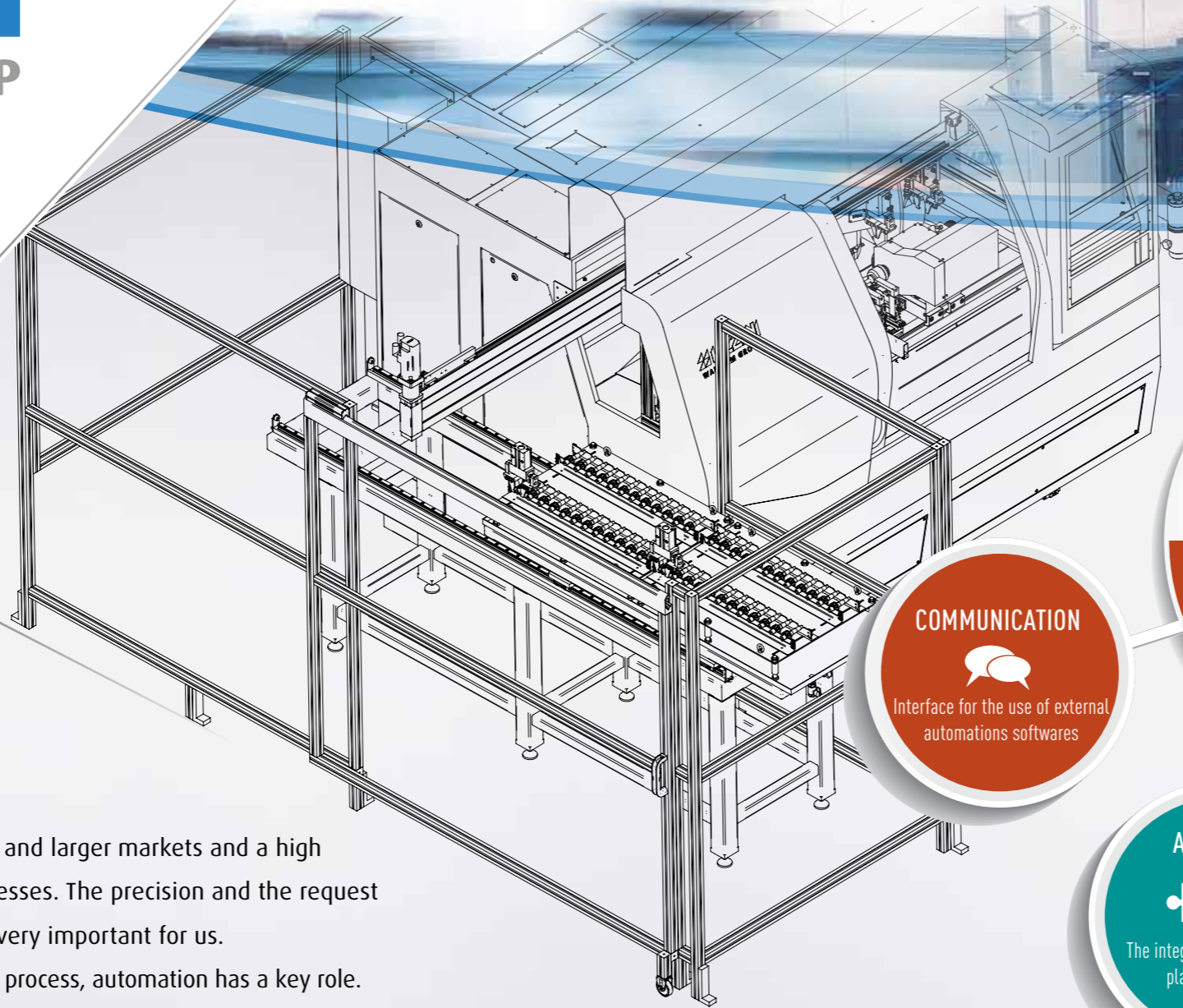
WORKPIECE-DEPENDENT ACCESSORIES

STANDARD/SPECIAL TOOLS

OIL/EMULSION COOLANT SYSTEMS

AIR EXTRACTION SYSTEMS





LIZZINI
UNROUND GRINDING AND
AUTOMATION

are the basis for the conception
of your internal and
external automation

COMMUNICATION

Interface for the use of external
automations softwares

FLEXIBILITY

Strengthening of existing
machines thanks to the
modular concept

ASSEMBLY

The integration of automation
plants is possible

**WORKING
PROCESS**

Other operation with a
defined geometry
(milling/boring etc.)

LIZZINI

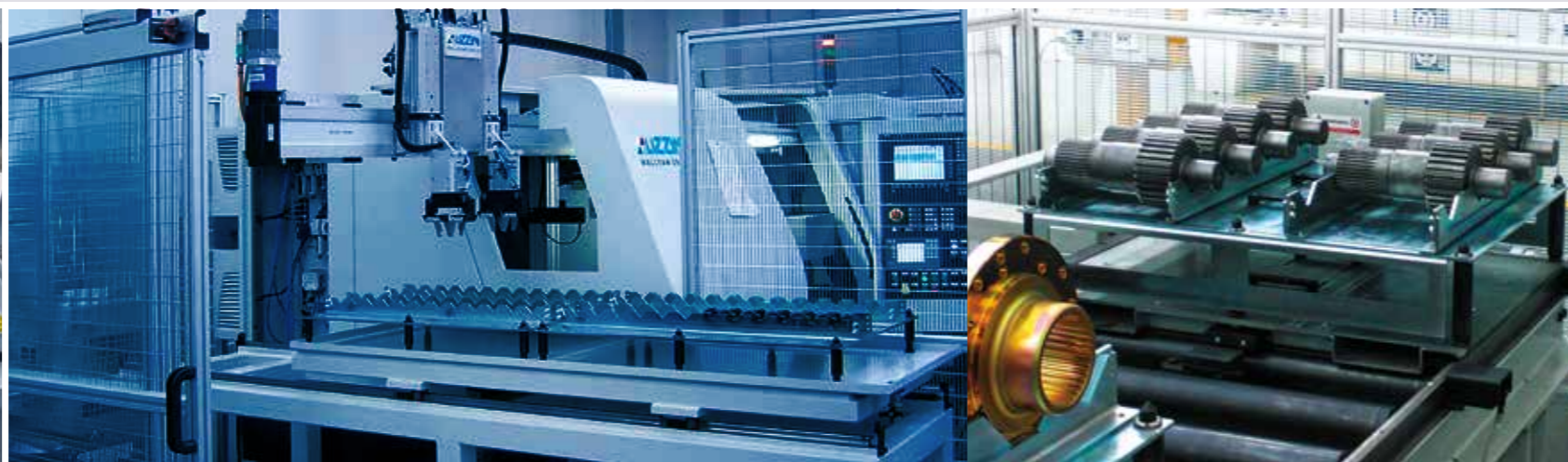
automation

The need of competition in larger and larger markets and a high flexibility require short cycle processes. The precision and the request to give high-quality products are very important for us.

In order to optimize the production process, automation has a key role.

Grinding machines with integrated loading/unloading are for WALLRAM GRINDTEC a daily work.

We automate the grinding process - in an economic, modern and durable way.





SPECIAL SOLUTIONS

High speed grinding

High speed grinding up to 125 m/sec



Adjustable axis

For vertical and horizontal grinding operations



Additional operations

Other operation with a defined geometry (milling/turning etc.)



Hydrostatic management

Slideway optimization to reduce wear



Green solutions

Eco-save technologies, motors/pumps set in high-efficiency class



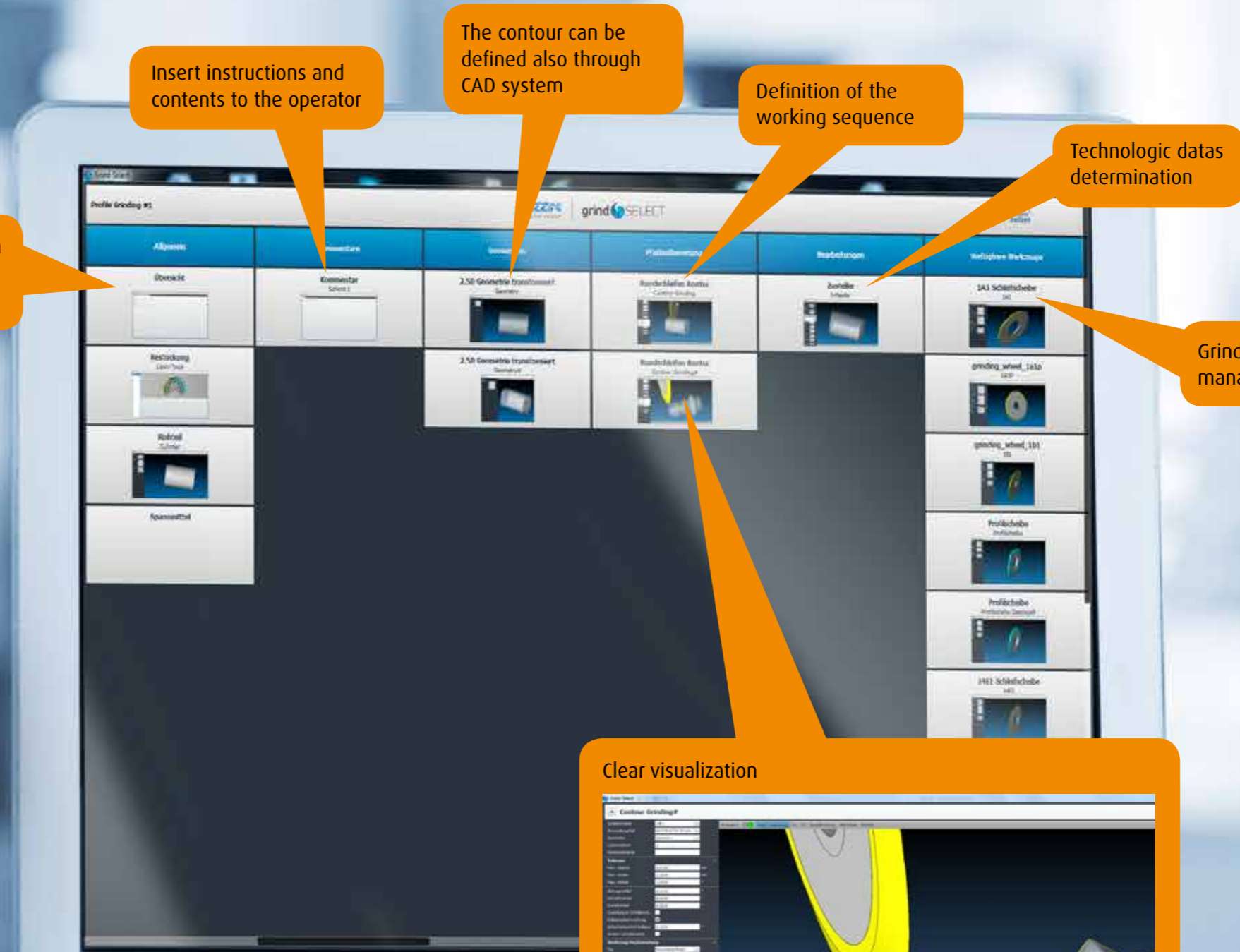
LIZZINI

special solutions

For cheap processes, the implementation of shaving devices or adjustable axis are required. So complex pieces can be worked without any substitution. WALLRAM GRINDTEC is open to your requests, and we will be glad to give you high-quality special solutions. Trust us.

We are flexible - Engineering visions by LIZZINI.



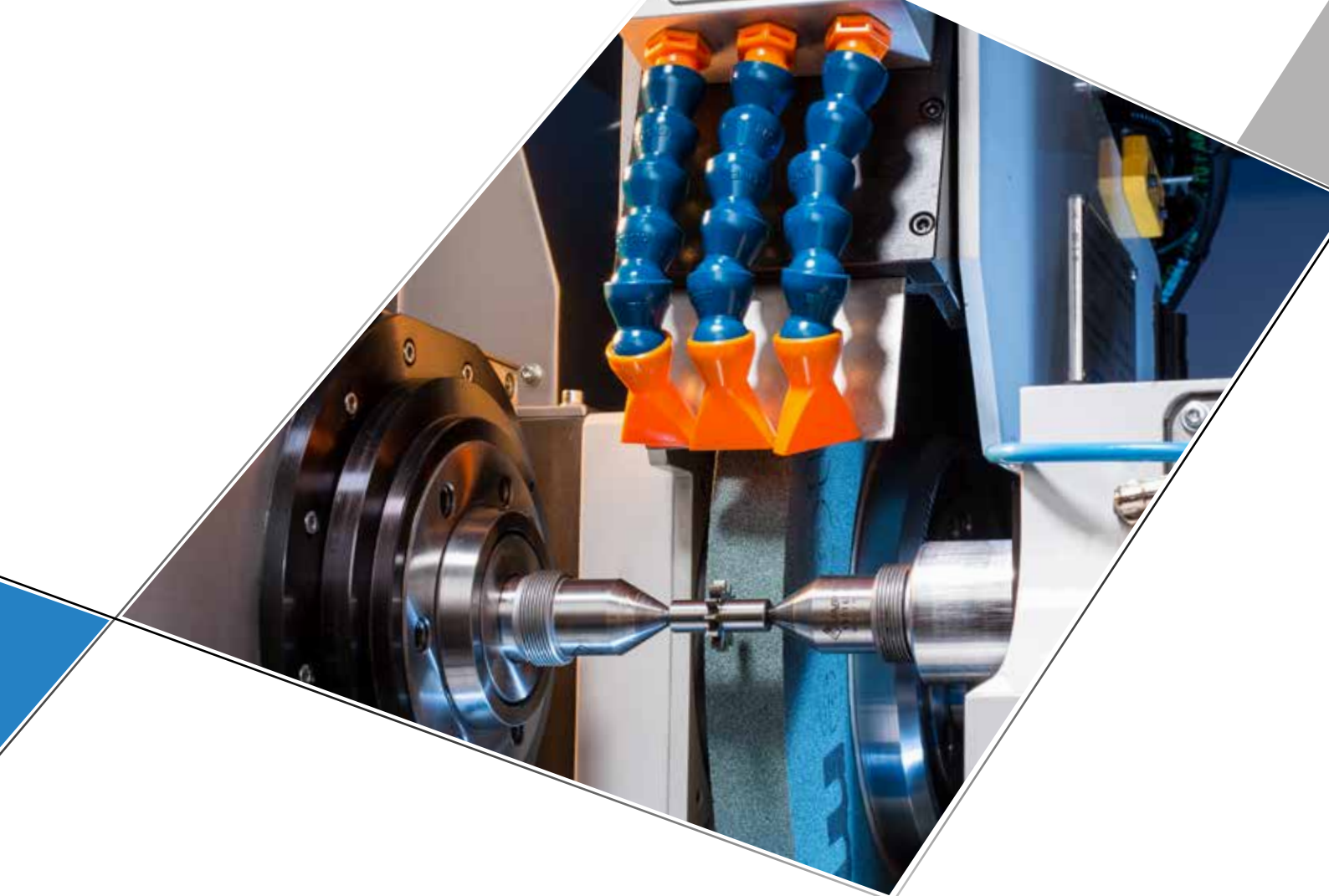


SIMULATION AND VISUALIZATION

In addition to the visualization of every function, grindSELECT offers four different simulations:

1. real-time grinding on rough piece
2. rough piece positioning simulation in the machine
3. simulation of stock removal
4. process simulation; all data is taken by the machine control and then edited as 3D

We follow our tradition – with a clear view of the future.



**LIZZINI**
WALLRAM GROUP

Wallram Grindtec srl
Via Leonino da Zara, 54
25018 Montichiari (BS) ITALY
Tel. +39 030 9672582
Fax +39 030 9672983
www.lizzini.de
grindtec@wallram.com