

### DATA, FACTS



- More than **1,5** billion Huf won hungarian and EU tender grant
  - Machine investments
  - Property investments
  - Deployment of renewable energy sources
  - Research and development
- Industry **4.0** Gold qualification
- over **6,6 B** Huf annual turnover
- 30 years of experience
- Modern machining centre
- **10.000** orders per year
- **3.500** tonnes of steel and aluminium processing per year



Portfolio expansion



- Vacuum heat treatment furnace
- Size range: 800 x 800 x 1200 mm
- 1,5 t load capacity
- Spectrometer Material Test, surface preparation provided
- Also tempering in vacuum



### CVD COATING

- Coating of spatial shaping active elements
- Chemically bonded coatings with high wear resistance (TiN, TiC coatings)
- Continuous development of the type of coatings
- Own material testing lab layer thickness-, layer hardness-, bond strength-, coefficient of friction-measurement
- Polishing after coating is provided
- Test run from June 2023

### CUTTINGTOOL MANUFACTURING

- Asset investment:
  - 6 axis cnc tool grinder
  - measuring machine
  - automat polishing machine
- Goal: provision of own cutting tools
- Bringing new types of cutting tools to market
- For individual tools (profile cutter) reducing long delivery deadline









### 3D METAL PRINTING

- Controlled by CNC with 5 axis, large welding machine
- Supply of precision welding works
- Unique equipment in Europe
- High alloy steels, aluminum, printing heat- and corrosion-resistant steels



Portfolio expansion

### CIRCULAR SEGMENT CUTTER

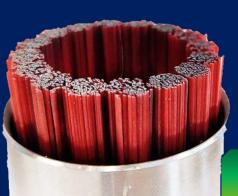
 6-8 mm (Ap) with cutting depth capable of smoothing side walls

• It can be used for 5-axis machining centers



### POLISHING CERAMIC BRUSH

- Burring, Polishing
- On flat surfaces and in holes
- Surface repair in 0,002 mm domain



• Portfolio expansion

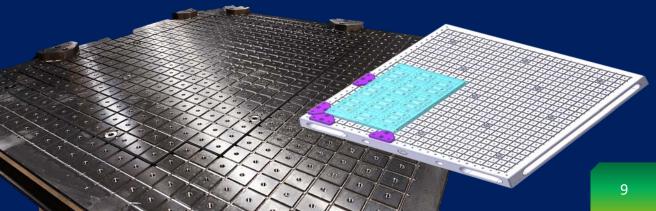
### VACUUM TABLE

- For holding workpieces, which are
  - cannot be magnetized
  - cannot be fixed with a side clamp
- expandable panels
- It can be used during processing of wood, glass and plastic industrial products
- A) and B) prototype



A) D75 mm discs provide suction and support

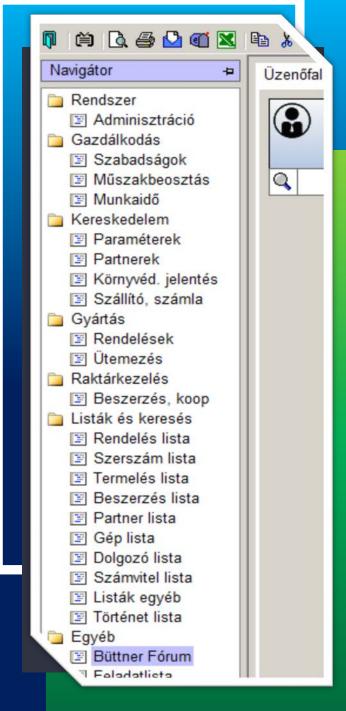
B) 25×25 mm raster distribution can be changed along the contour, on which the suction points can be adjusted by adjusting the screws





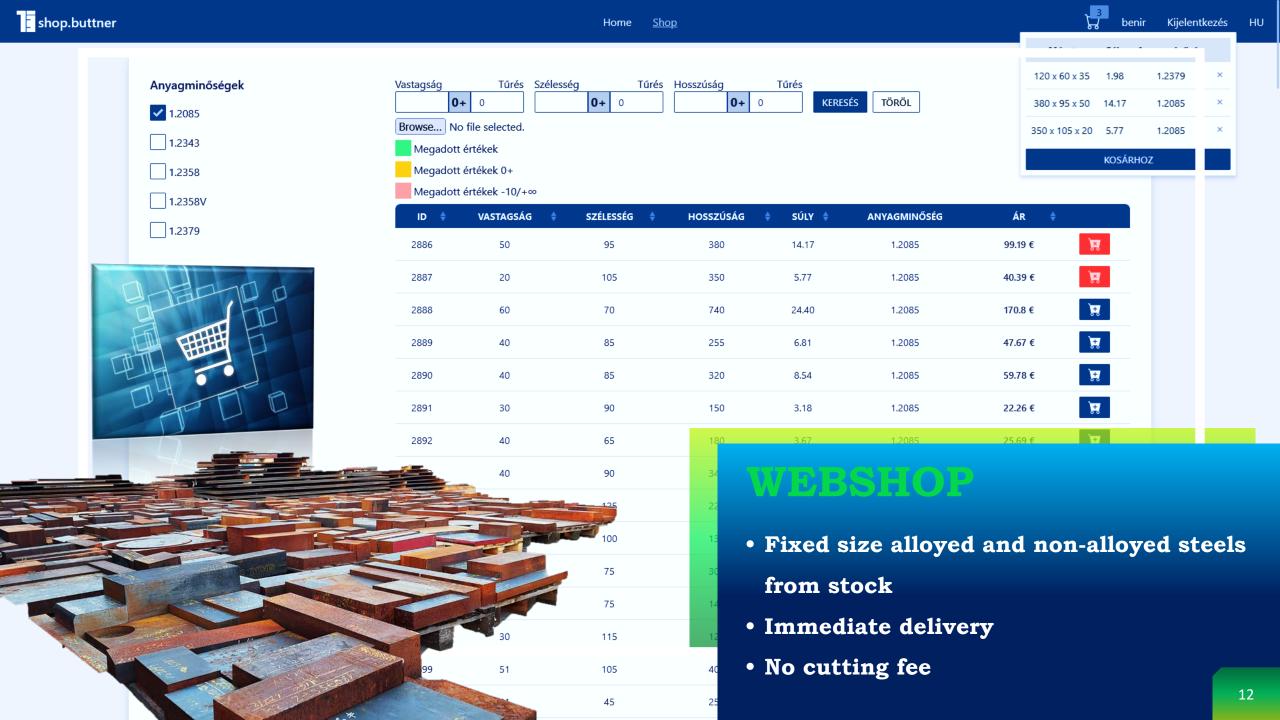
### Own corporate governance system- "BMS"

- Identification option for unification sets of information
- Many plugins
- All company activities can be coordinated in one software
- Also, for individual manufacturers



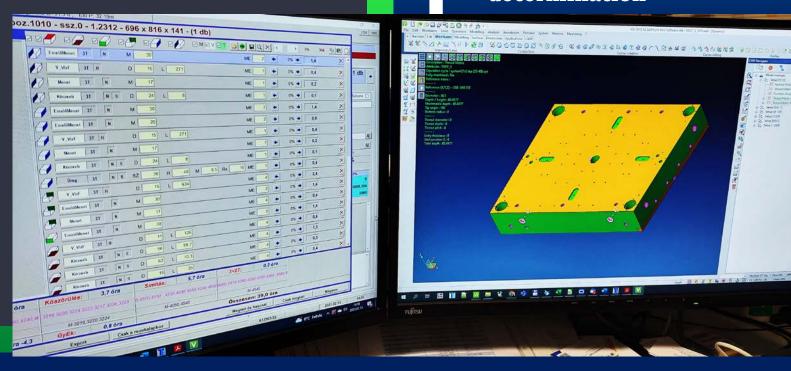
It- and technological developments

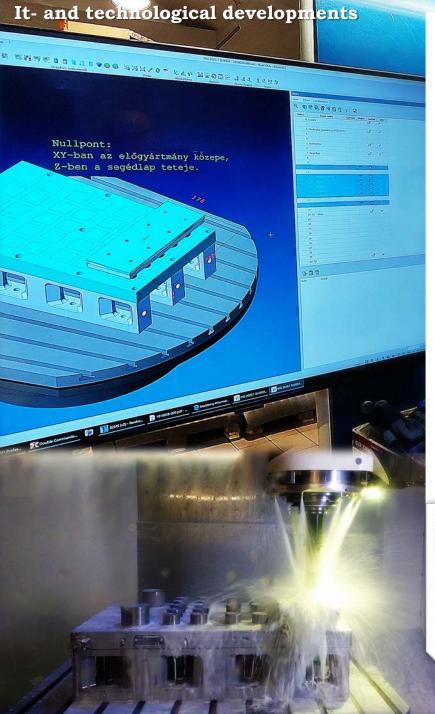
- Easily transparent processes
- Individual authorizations can be set per user
- It does not require IT background knowledge
- Online connection with NAV software (invoicing)



## AUTOMATION OF CALCULATION MODULE

- Automatic selection of hole types with the CAM design program, input into own calculation module
- Automated aggregation of the number and depth of holes
- 80% time savings, less human resource requirements for calculations
- Objective calculation based on machine time determination





# PRODUCTION WITHOUT DRAWINGS, WORKSHEETS OR LISTS

- Instead of printed drawings, place large monitors near CNC machines
- Instead of printed drawings, use printed label in magnetic label holder
- Instead of printed delivery, acquisition lists coordinated system use

Utolsó info	B.Megjegyzés	PCV	VigD.	EXTRA	
2023.02.13 Kiadva -	LT - csak p-plap rádiusszal	0,6	Lieferter	VÁG+LAPOT!!	
2023.02.08 Kiadva -		0	Szállítási	7/1 P KÉSZ	
2023.02.07 Kiadva -		0	Lieferter	7/7 Fizetett KIAD	
2023.02.07 Kiadva - tm	Ajánlati doksi érvényes!	0,9	Lieferter	7/1 Fizetett	
2023.02.09 Kiadva -	NORM beszerezve!	1,2	Szállítási	8/1	
`123.02.07 Kiadva -	Ajánlati doksik érvényesek!	0,9	Szállítási	7/3-4	

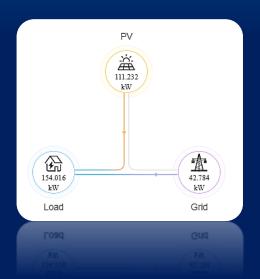


# 1000 KWH ESTABLISHMENT OF A SOLAR PARK

- Cheap, provision of green energy
- Minimizing exposure to market pricing
- Reducing the ecological footprint



Since October of 2022...





57 saved tree



41,57 tonnes of CO2 emissions are avoided



35,01 tonnes of cole are saved

### **120 KWH HPC ELECTRIC CAR CHARGER**

- Six times the performance of conventional chargers
- Common electric car can be charged under 20 minutes from 20% to 80%
- Simultaneous charging of 2 cars
- Can be used on day and night
- It is also provided for external partners





### **HEAT PUMP SYSTEM**

- 3 × 60 kWh power
- Air / water operation
- 1200 m2 hall cooling / heating
   with wall mounted thermal fan
- Goal: Elimination of exposure to gas heating





#### Organized blood donation



- Family friendly workplace
- Demanding, hygienic work environment
- Anniversary reward
- Corporate events, trainings, race,
   organize and transact family
   friendly events
- Digital photo magazine,
   interactive news feed in the halls



#### Büttner family day



Büttner Santa Claus



