

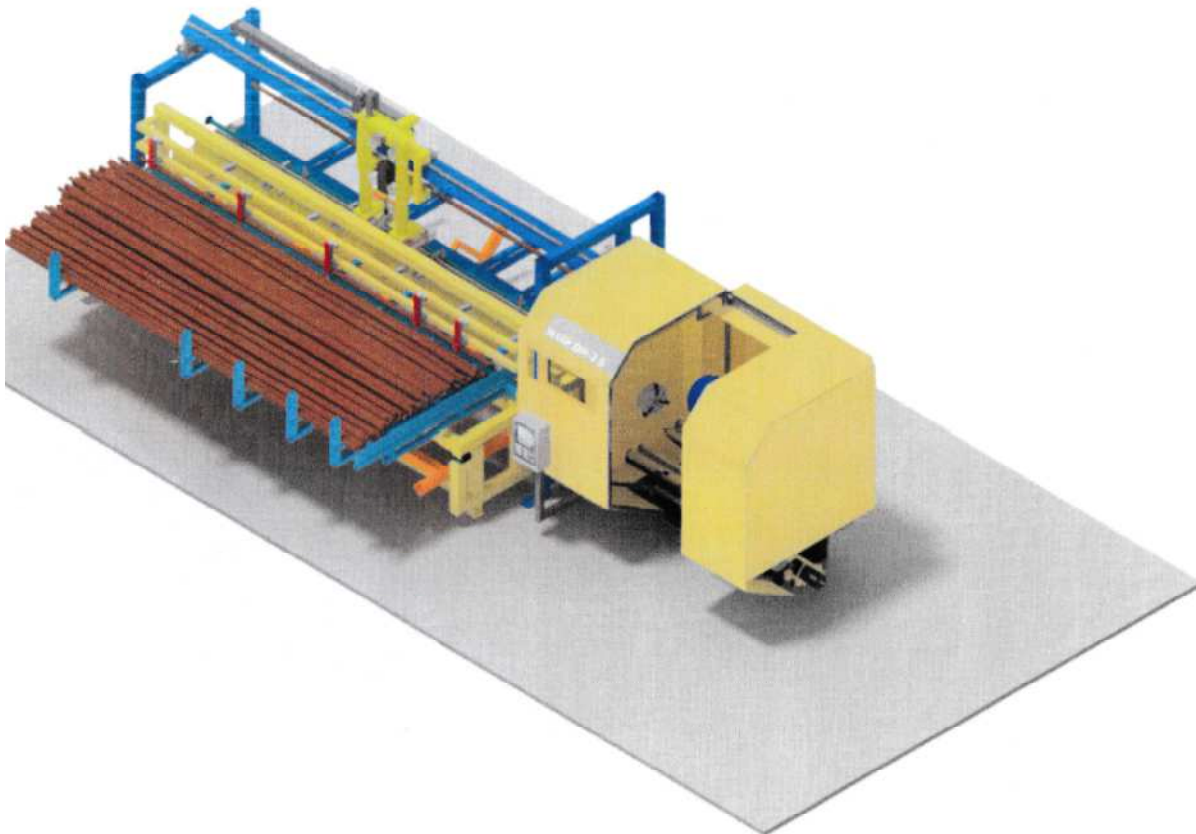


**WIAP<sup>®</sup> Werkzeugmaschinen**



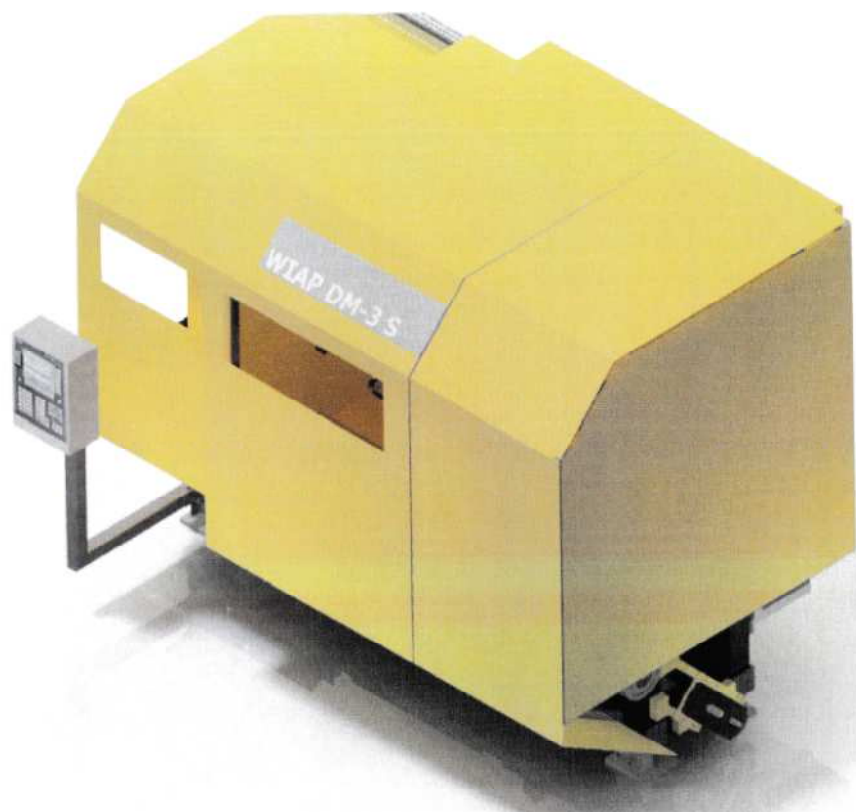
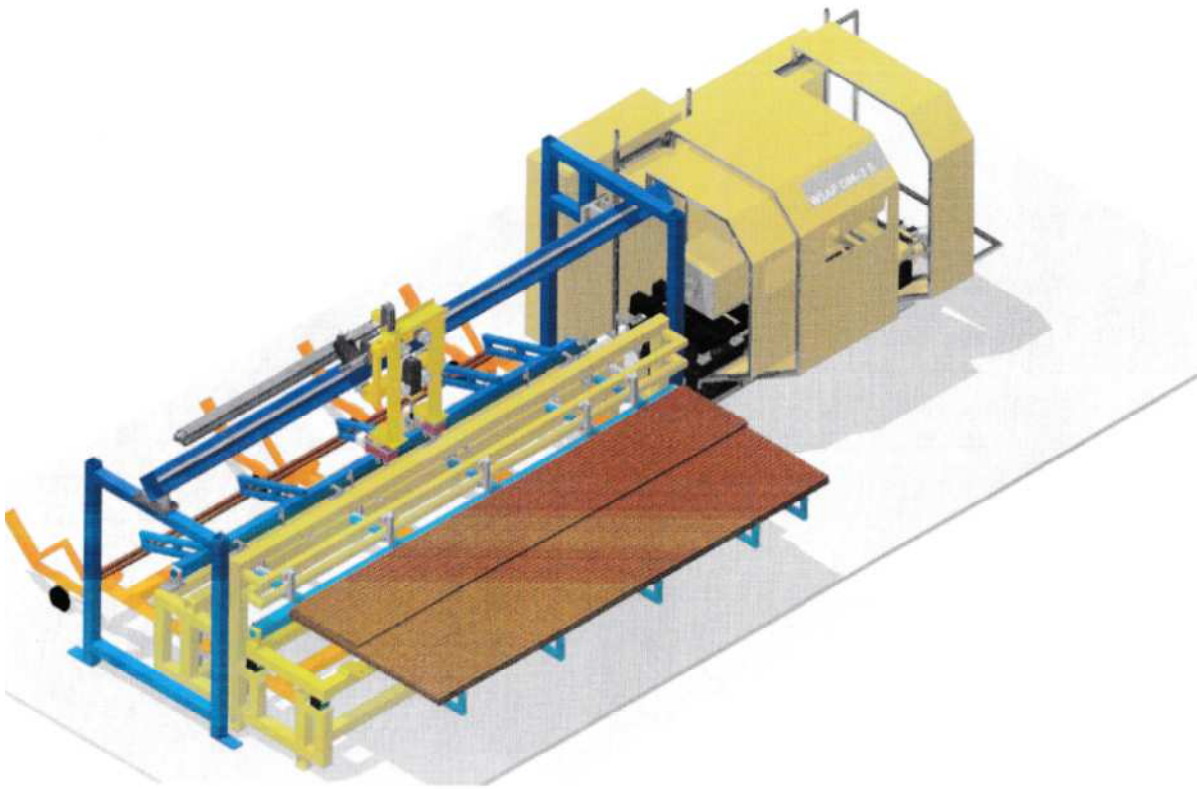
**Neumaschinen, Drehmaschinen, Sondermaschinen**

Stand 22042018 hpw

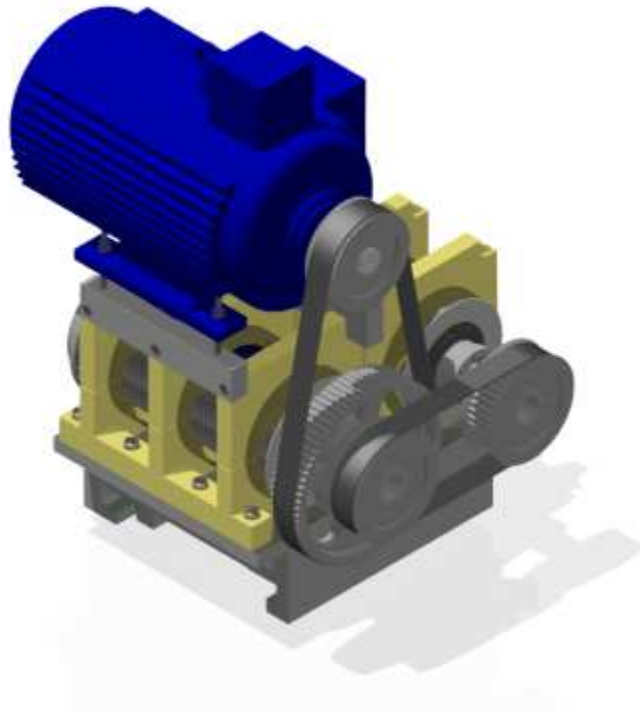
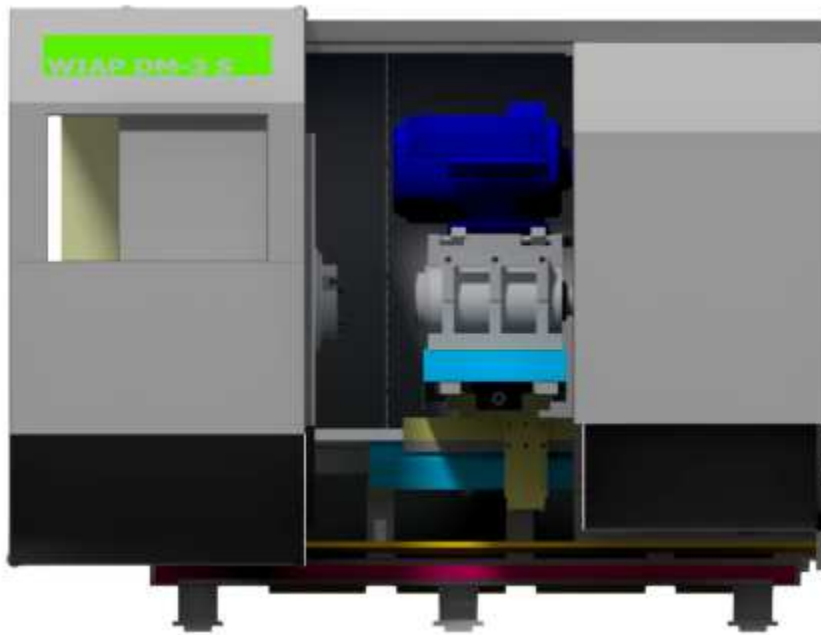


**CNC-controlled multifunction machine WIAP DM3S for processing rebar**

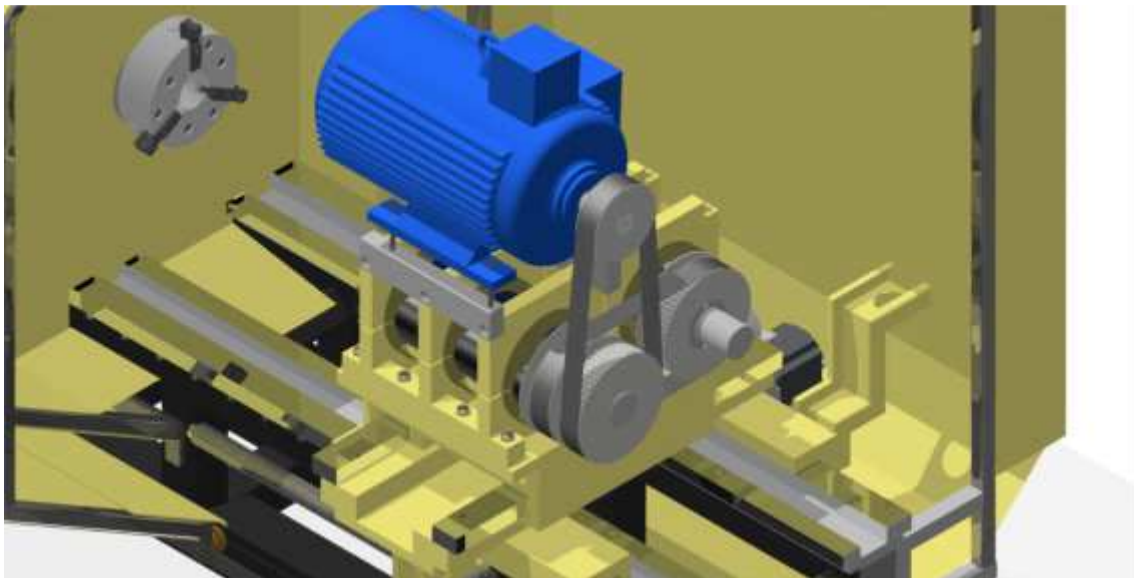
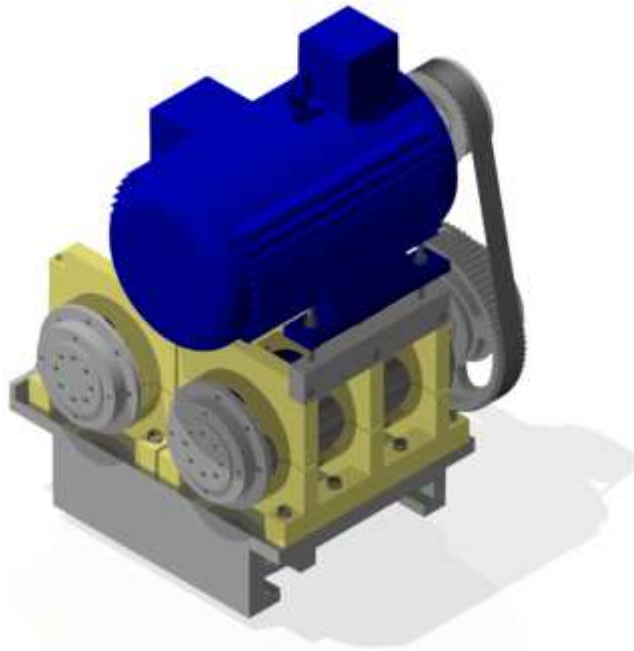
**WIAP DM3S multifunction machine vibration dampened MEMV treated**



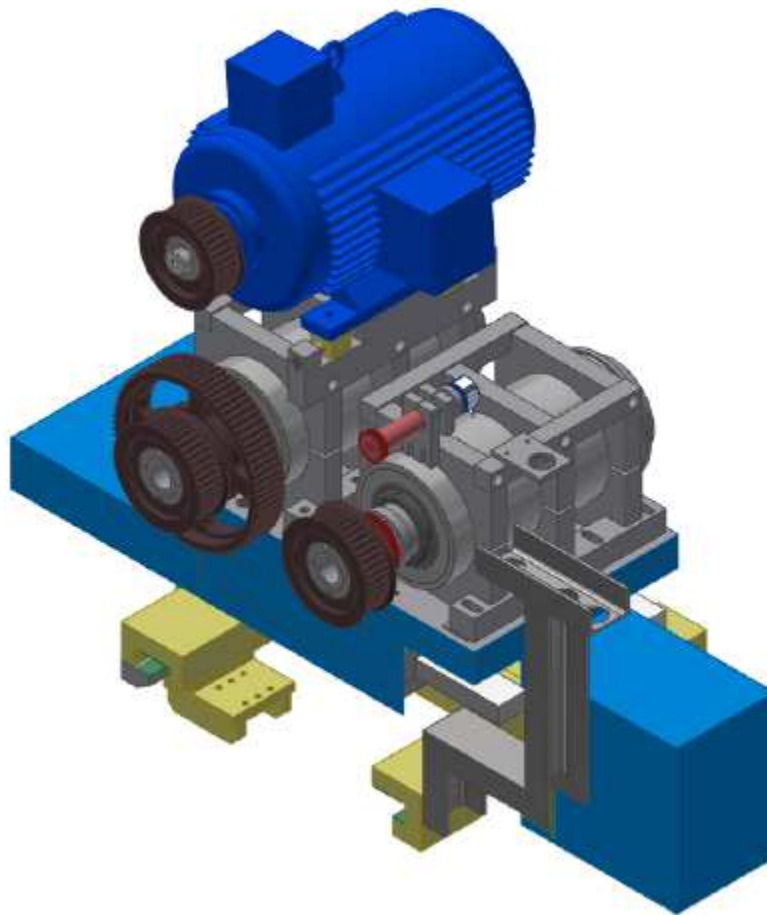
## WIAP DM3S multifunction machine vibration dampened MEMV treated



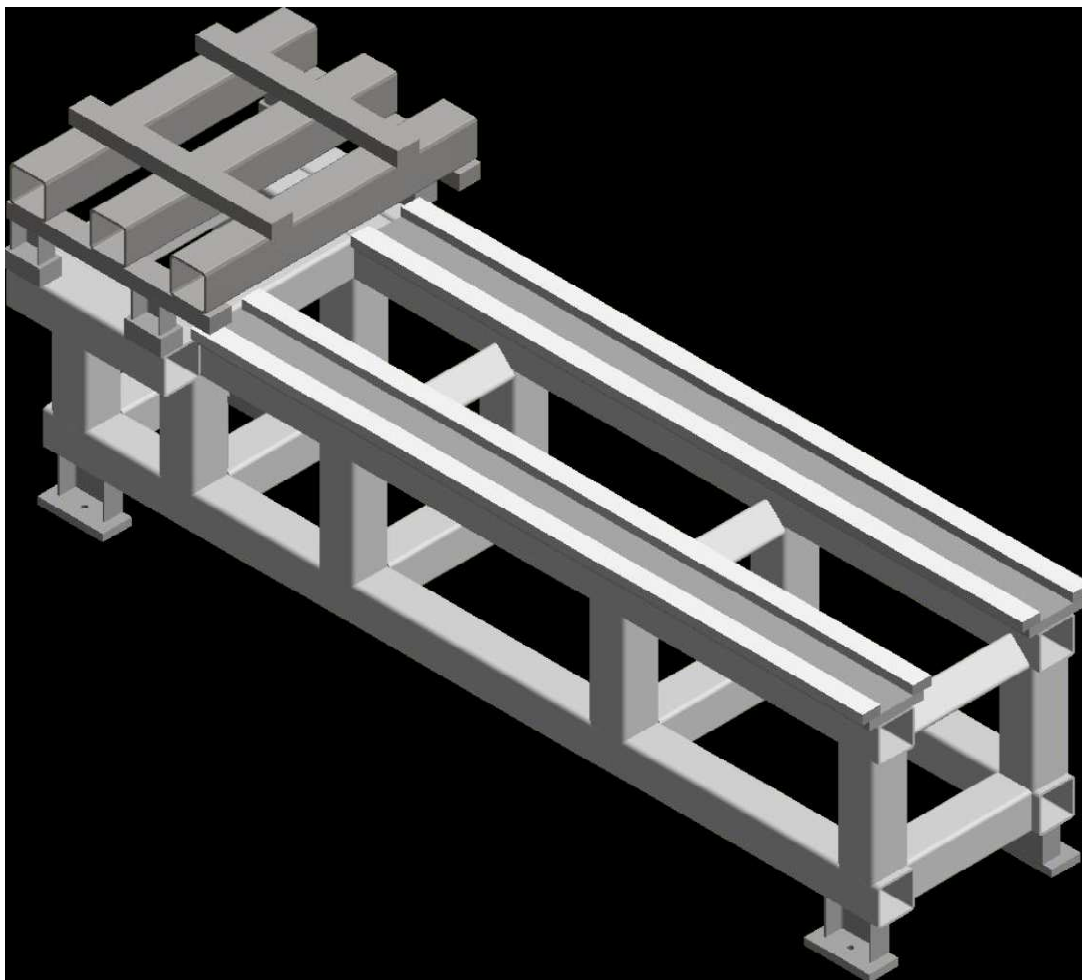
**WIAP DM3S multifunction machine vibration dampened MEMV treated**



Robust heavy construction. 70x40 guide, ball screw robust.



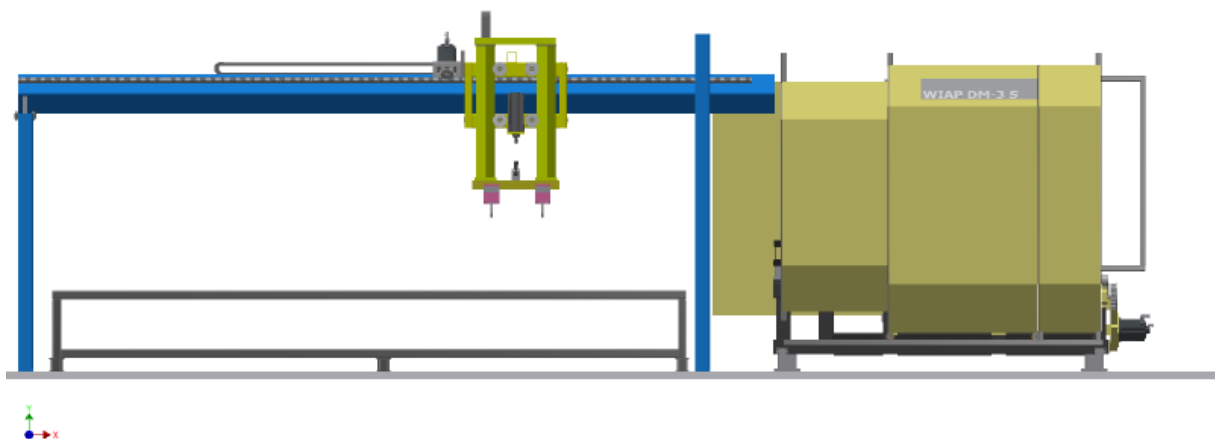
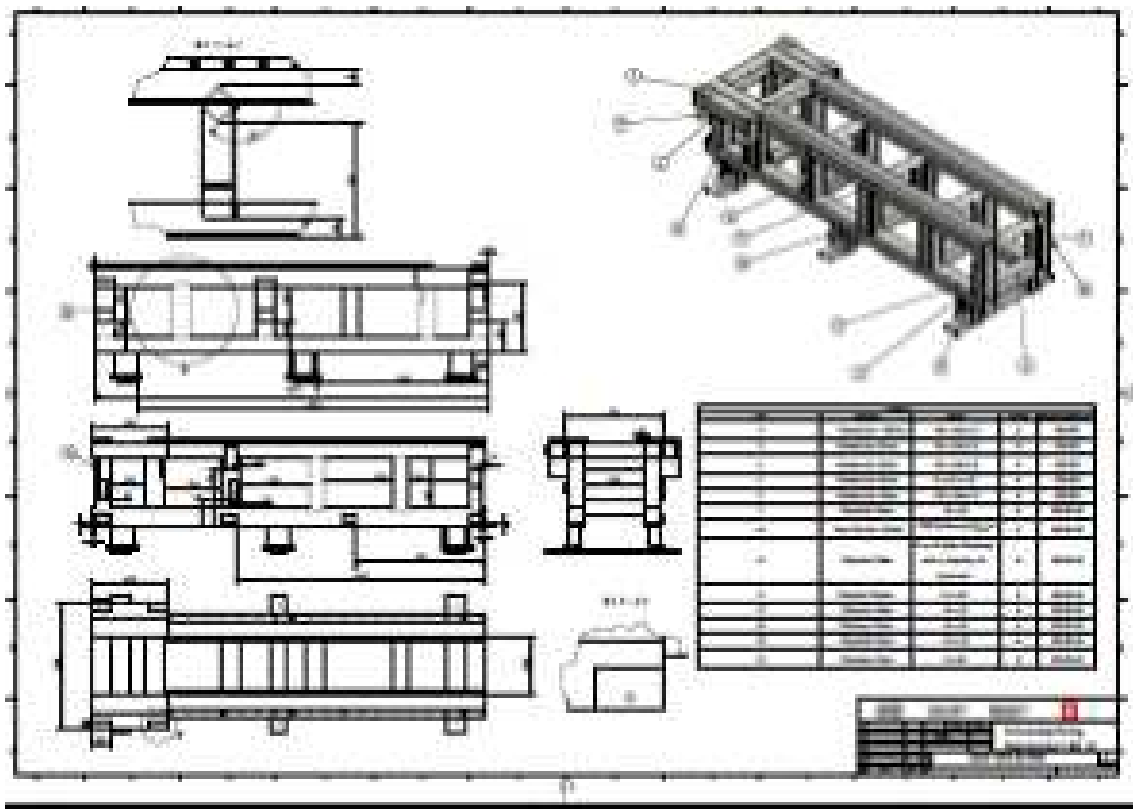
**Simultaneous spindle head and roller burnishing head, instead of burnishing head prepared for facing head**



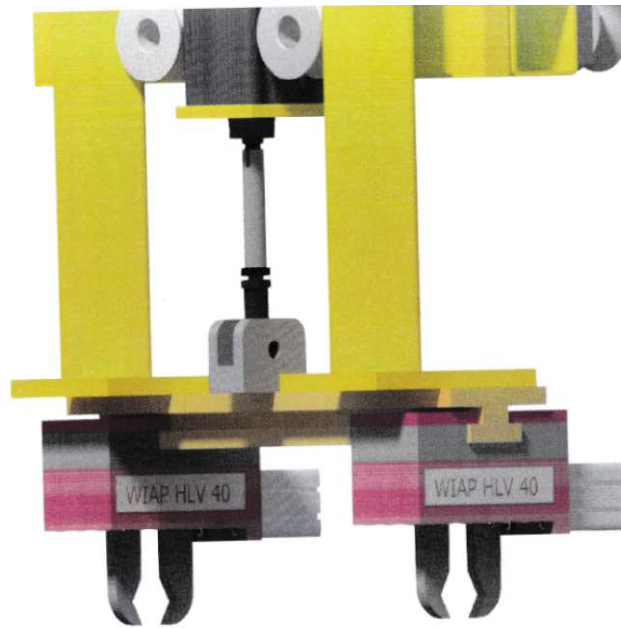
**Machine bed prepared by the method WIAP VDSF; 1250 kg MEMV relaxed and vibration dampened filled,**



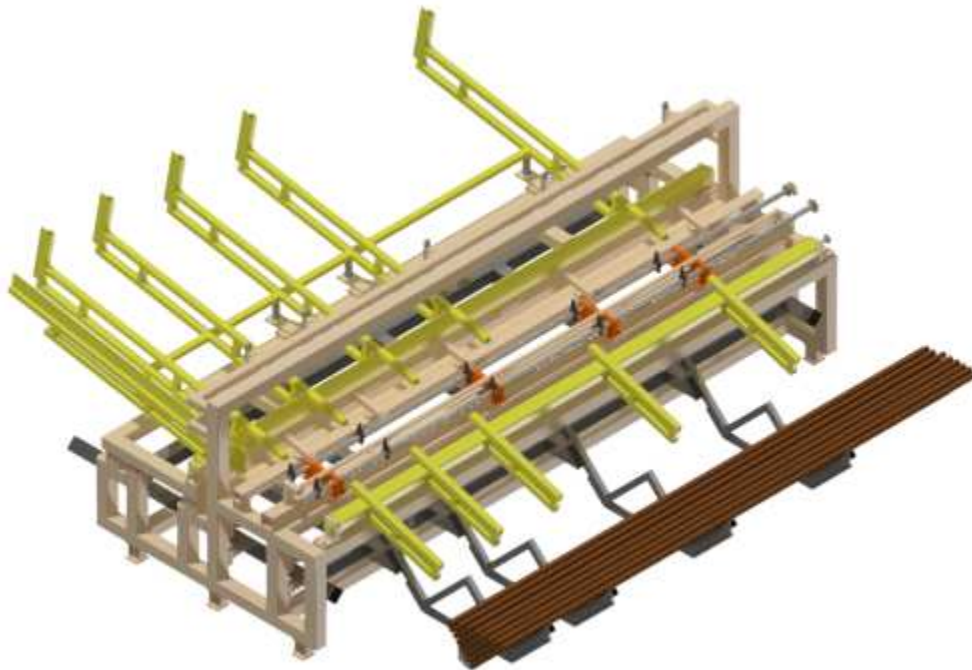
## WIAP DM3S multifunction machine vibration dampened MEMV treated



## Automation in the preliminary phase

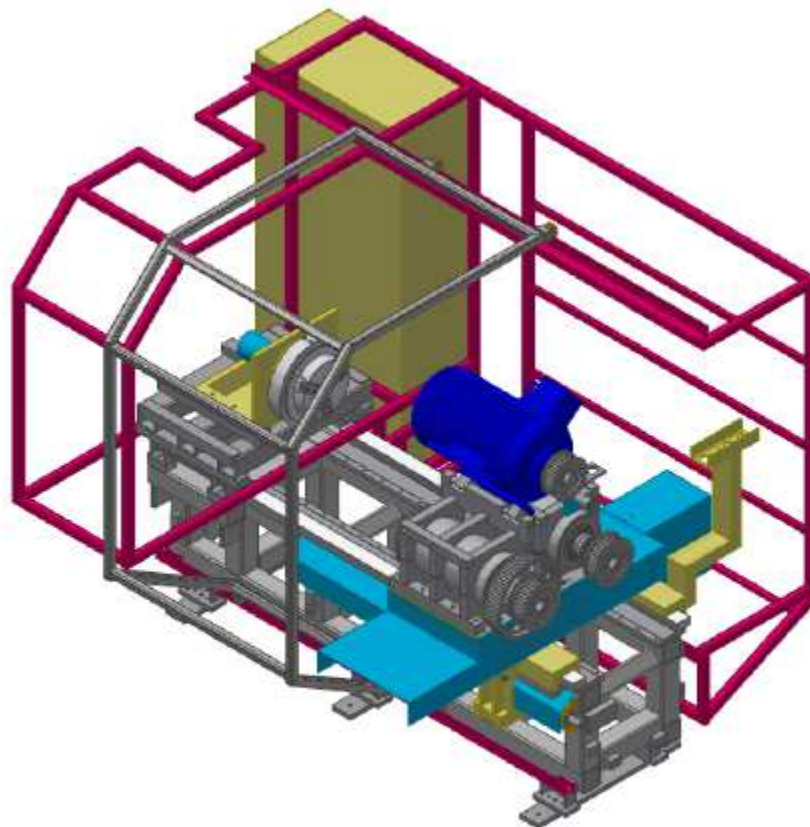


**Double gripper WIAP HLV 40 for 40 kg unit weight**

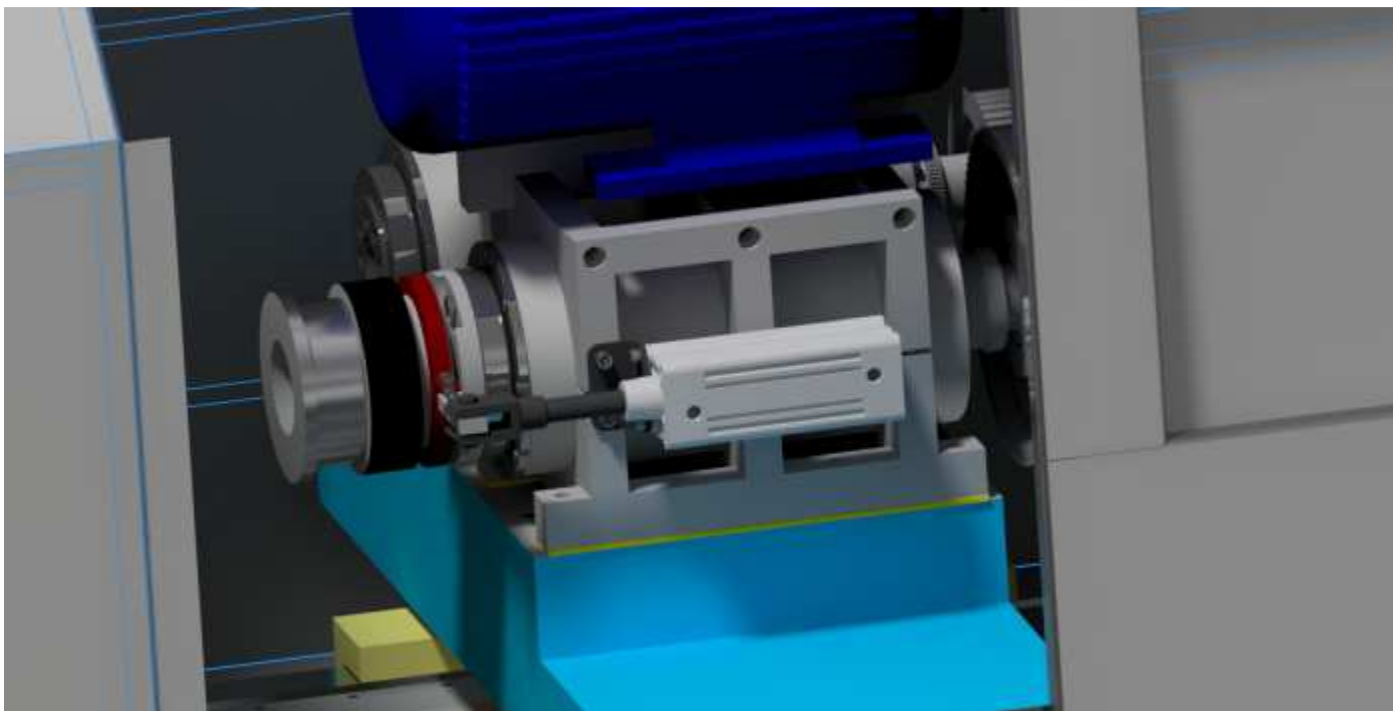


**Blank feeding and carrying away the finished part diameter to 40 mm in  
length up to 4100 mm**





## ROLLING HEAD



1 assembly machine bed DM3S; MEMV relaxed, vibration dampened VDSF.

## WIAP DM3S multifunction machine vibration dampened MEMV treated



Bild10

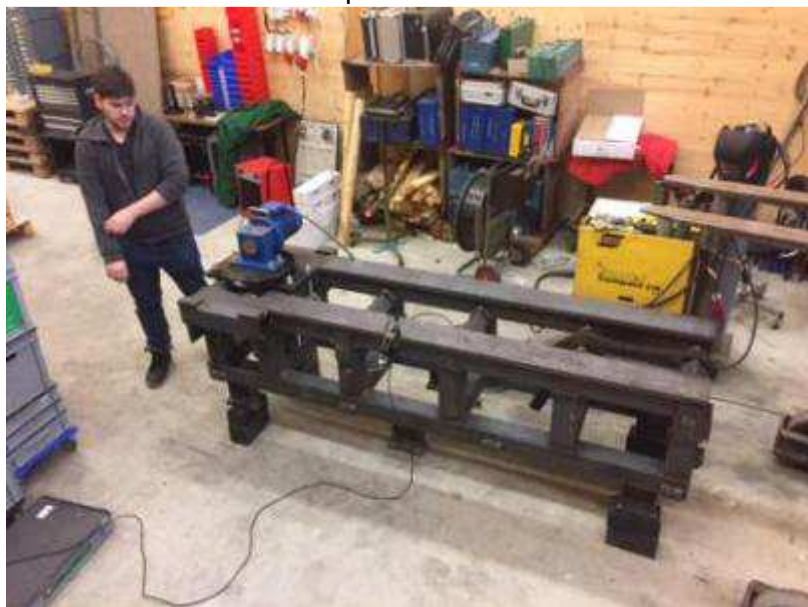


picture 12

## WIAP DM3S multifunction machine vibration dampened MEMV treated



picture 14



picture 16



**WIAP DM3S multifunction machine vibration dampened MEMV treated**



picture 18



picture 20

**WIAP DM3S multifunction machine vibration dampened MEMV treated**



picture 22



picture 24

**WIAP DM3S multifunction machine vibration dampened MEMV treated**



picture 26



picture 28



**WIAP DM3S multifunction machine vibration dampened MEMV treated**



picture 30



picture 32

**WIAP DM3S multifunction machine vibration dampened MEMV treated**



Figure 34 bed return delivery with console



**WIAP DM3S multifunction machine vibration dampened MEMV treated**







Figure 36 bed with headstock console

|                           |
|---------------------------|
| <b>Assembly 10 guides</b> |
|---------------------------|

**WIAP DM3S multifunction machine vibration dampened MEMV treated**



picture 50



picture 52



picture 54





## WIAP DM3S multifunction machine vibration dampened MEMV treated



Figure 38 Scraper Specially made for WIAP 40x70  
purchased for 3 machines in stock



buy scrapers for 3 more machines

|  |
|--|
| <b>Assembly 5 headstock on cross slide</b> |
|--|

**WIAP DM3S multifunction machine vibration dampened MEMV treated**



picture 56



picture 60

**WIAP DM3S multifunction machine vibration dampened MEMV treated**



picture 62



picture 64

**WIAP DM3S multifunction machine vibration dampened MEMV treated**



Bild66



welding spindle in Ausbrennplatten



**WIAP DM3S multifunction machine vibration dampened MEMV treated**



**WIAP DM3S multifunction machine vibration dampened MEMV treated**



Jim and Sven



## WIAP DM3S multifunction machine vibration dampened MEMV treated



Headstock in WIAP Welding



3 towards MEMV relax.  
Logging of relaxation of both headstocks

## WIAP DM3S multifunction machine vibration dampened MEMV treated



Jim at the G measure for the MEMV Protocol



Sven in MEMV data Rapport

## WIAP DM3S multifunction machine vibration dampened MEMV treated



2 headstocks DM3S from the processing back



Headstocks still plastered before painting, Linus third generation, has school holidays and exercise manual skill.



**WIAP DM3S multifunction machine vibration dampened MEMV treated**



paint priming and 2 K



Assembly 03 Z carriage



picture 80



picture 82



Photo 84



Figure 86 Here, the Z slide is in MEMV 4 Achsrichtungen Vibrationsentspannt



## WIAP DM3S multifunction machine vibration dampened MEMV treated



Here we get the slides back from processing



Mounting preflight whether the mass are also ok



## WIAP DM3S multifunction machine vibration dampened MEMV treated

Now comes the whole lubrication make the system.



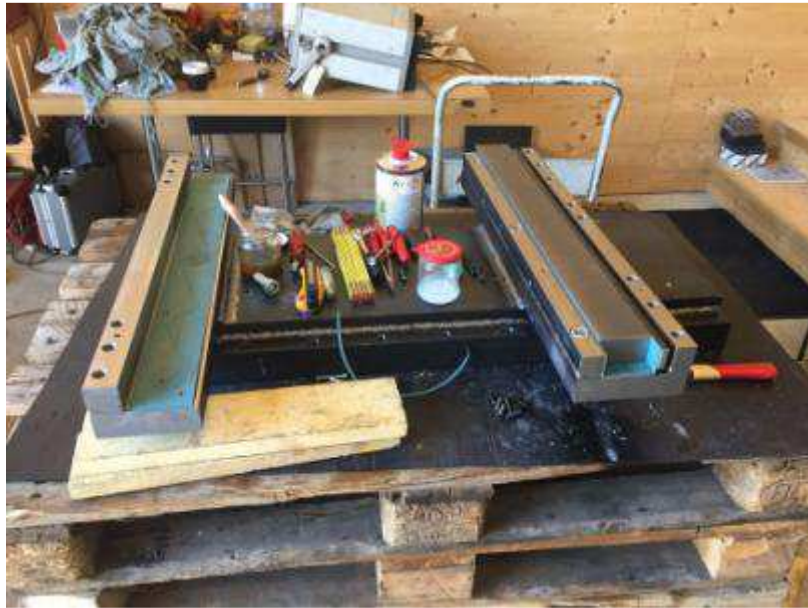
Per slide lining there are two lubrication points with single feed above the third that is, a carriage has Oelzuführungen above 4 for the lower grips and 4 for the front and rear Total = 14 Oelzuführungen per axis, ie, the x 2 nor for the X



drill several hundred mm lubrication channels that admission is only on one side per lane



## WIAP DM3S multifunction machine vibration dampened MEMV treated



be milled sliding coating test with lubrication paths before.



150 mm deep drilling for lubrication

## WIAP DM3S multifunction machine vibration dampened MEMV treated



Deep hole drilling with hand machine.



That takes strength as deep drilling and make an effort, that the drill does not break off.



## WIAP DM3S multifunction machine vibration dampened MEMV treated



The sliding coating bearing surface scrape, that adhesive has better engagement surface

## WIAP DM3S multifunction machine vibration dampened MEMV treated



Under handles are milled in the height adjusted that the 2 mm plastic also has its place. Taken into account that grows differently at higher temperatures than steel.



Jim CNC specialist. Much he makes himself with the Mikron CNC milling machine

## WIAP DM3S multifunction machine vibration dampened MEMV treated



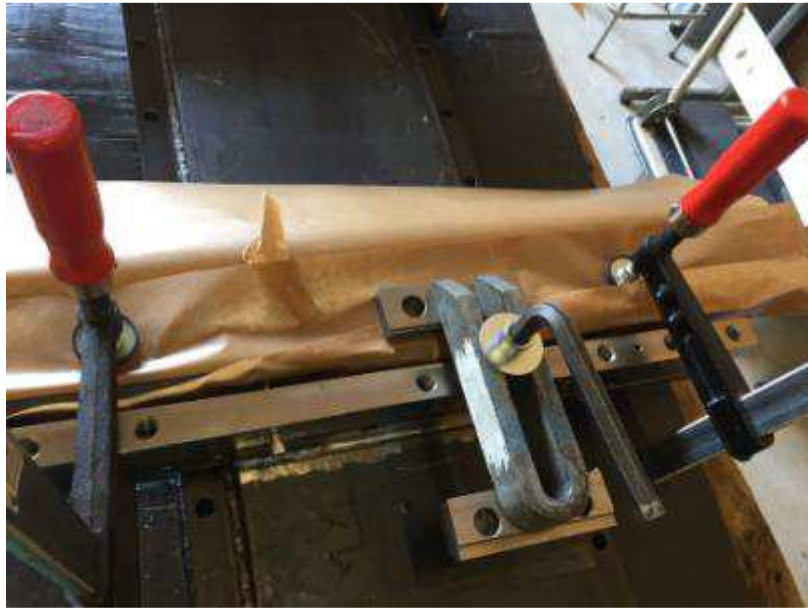
Sliding coatings stick a specialty. Mixing ratio of glue to hardener 1/4



The Z slide is made first, the X can then dry ending Z is eingeschabt.



## WIAP DM3S multifunction machine vibration dampened MEMV treated



A good press down the strip that the adhesive is displaced is important.



Z slide nut mount in the welding



## WIAP DM3S multifunction machine vibration dampened MEMV treated



Robust design that it does not move.

### Assembly 04 X carriage



Image Even the X carriage we covered in 4 axis directions MEMV 88

## WIAP DM3S multifunction machine vibration dampened MEMV treated



Delivery of the X carriage



Many M8x1 for the lubrication connections. On the X slide

## WIAP DM3S multifunction machine vibration dampened MEMV treated



### Assembly 20 HLV auxiliary charging device



picture 250



**WIAP DM3S multifunction machine vibration dampened MEMV treated**



picture 252



picture 254



**WIAP DM3S multifunction machine vibration dampened MEMV treated**

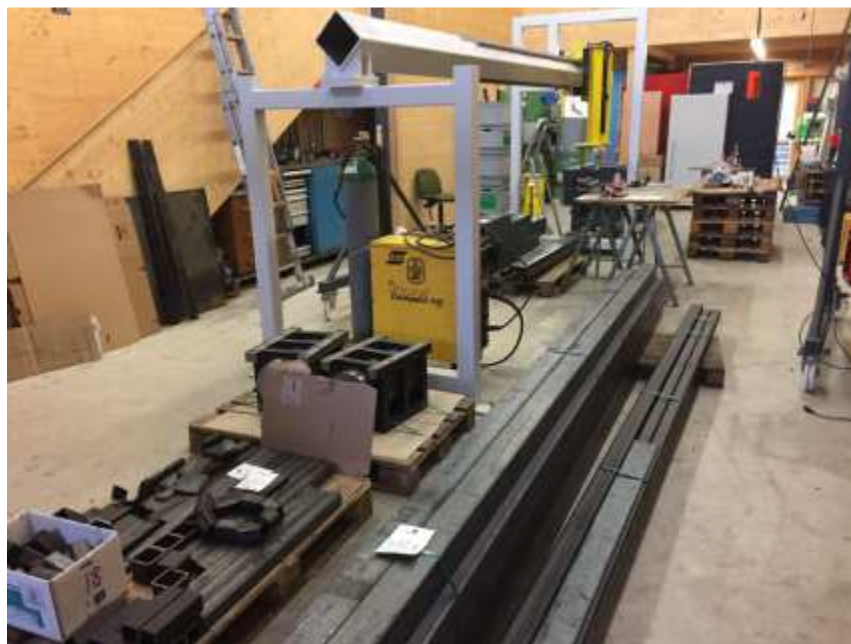
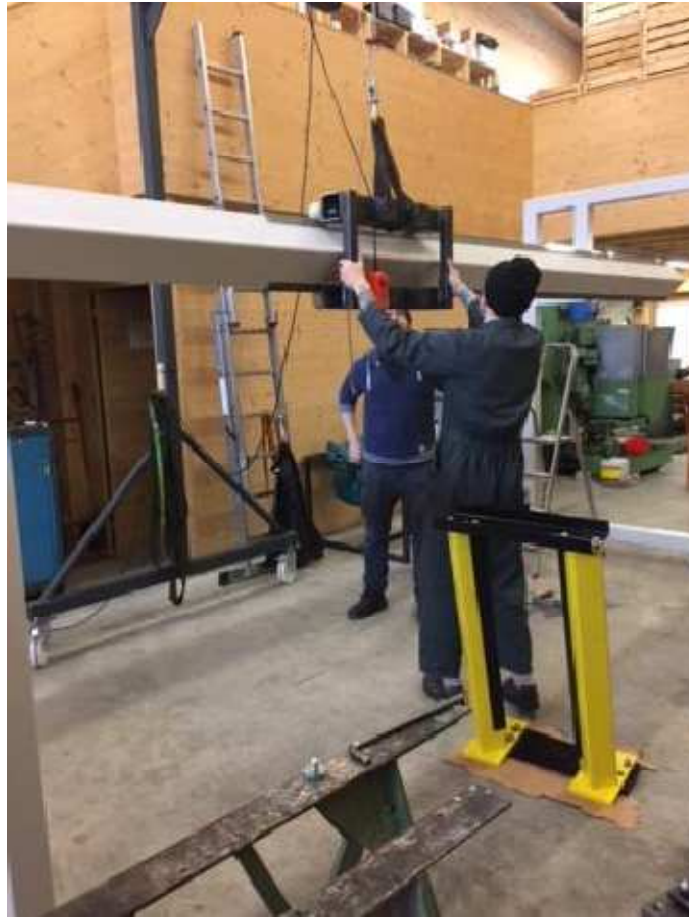


## WIAP DM3S multifunction machine vibration dampened MEMV treated





**WIAP DM3S multifunction machine vibration dampened MEMV treated**



## WIAP DM3S multifunction machine vibration dampened MEMV treated



Delivery of steel for automation ca, 2 tons.



Scheiss beginning of the HLV to and carrying away



**WIAP DM3S multifunction machine vibration dampened MEMV treated**



frame welding



HLV frame (HLV = auxiliary charging device)

**WIAP DM3S multifunction machine vibration dampened MEMV treated**



Sven he strives for every mm. Everything must be perfect just



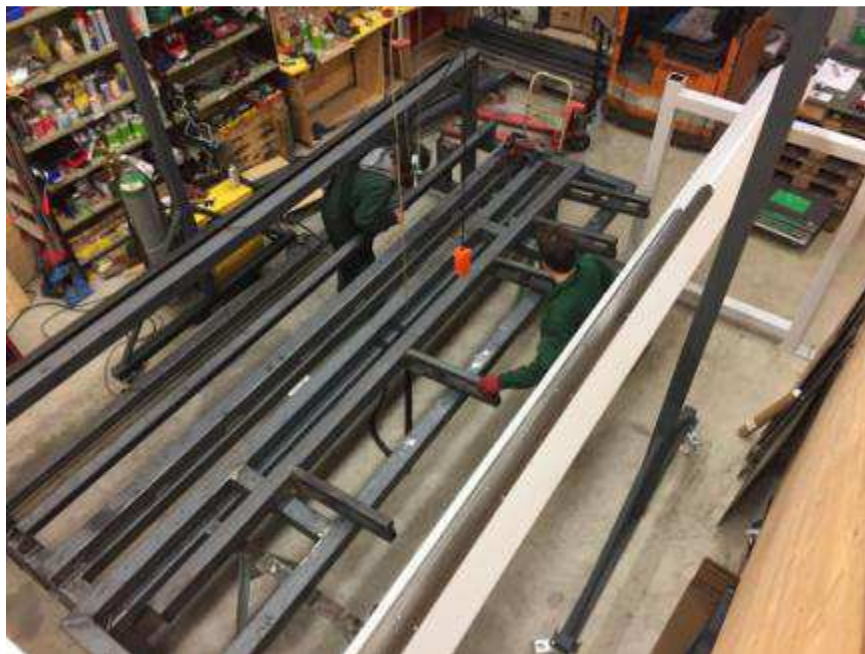
Jim and Sven during welding, which is almost not alone



## WIAP DM3S multifunction machine vibration dampened MEMV treated



Soon the HLV is frame ready



The place is already scarce anyway it comes.

## WIAP DM3S multifunction machine vibration dampened MEMV treated



View from the basic framework of the plant.



Workpiece depositing sliding webs



**WIAP DM3S multifunction machine vibration dampened MEMV treated**



## WIAP DM3S multifunction machine vibration dampened MEMV treated



Jim and Kim, the grandson has school holidays wants to help.



## WIAP DM3S multifunction machine vibration dampened MEMV treated



Kim weld on, he was proud that he could. Thanks to the automatic Helmets not as hard as before.



## WIAP DM3S multifunction machine vibration dampened MEMV treated



He plastered. Also, he does well. Think he will get the same profession as his two uncles and the mother.



Vibration test whether the material handling works as planned on paper.  
Depending on the response, the rods can be transported in place even down to the top.  
But it can obliquely, we still need an additional separation build that  
they only just can in the rotary claw first

## WIAP DM3S multifunction machine vibration dampened MEMV treated



So now the steel has come for the hinges of automation. Which can now be done soon. Once that is on them can be painted.

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Status of the plant beg. April 2018

### Assembly 31 electrical cabinet and control





## WIAP DM3S multifunction machine vibration dampened MEMV treated

Picture 300 Sven in cabinet installation in the electrical department



picture 302



picture 304

**WIAP DM3S multifunction machine vibration dampened MEMV treated**



picture 306



8th

picture 307

**WIAP DM3S multifunction machine vibration dampened MEMV treated**



picture 308



picture 309



## WIAP DM3S multifunction machine vibration dampened MEMV treated



Picture 310 The panel with the signs



program image 311 Sven the PLC. change language from English to German, integrate the new axes, etc.

## WIAP DM3S multifunction machine vibration dampened MEMV treated



Picture 312. Everything is set up to test that if we mechanically the machine  
Have done everything runs already and is preset.



Very interesting today. In previous years, the WIAP had let others do much externally. Especially electric. Today everything comes from a single source that simplifies much. Once it is recognized that an engine comes to that action can be taken quickly straightforward.

### Signs order:

- control off /
- Control voltage OK
- Security key
- Drives a

- gripper from loading on
- gripper from loading to  
lift gripper of loading -
- lower gripper of loading -

## WIAP DM3S multifunction machine vibration dampened MEMV treated

- Workpiece stop before
- Workpiece stop back
- Vib.Motor a
- Vib. engine off
- RT rotary claw forward
- FT rotary claw back
- FT carriage position forward
- FT carriage position center
- FT carriage position behind
- Fault active
- Horn zone front was active
- Horn zone back was active
- Reset Horn zone
- stamping Start

### workshop equipment



Photo 200



picture 202



## WIAP DM3S multifunction machine vibration dampened MEMV treated

*Created: sw-jw-iw-hp Widmer*

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