WEAP WAP<sup>®</sup> Werkzeugmaschinen



## Photo report: WU\_100 **Roll lathe MFD WKD 850 revised by the WIAP AG** Created hpw09\_07\_2016 Use: Year Task:

Task: The roll lathe must get control no new CNC. However, it should be totally revised. The operators were accustomed to copy itself, so no CNC. The transmission had a damage. The tailstock guidance was lowered by several mm and had to be re eingeschabt. totally revise the cross slide, all with a new sliding layer.



Figure 1: After the conversion of the WDK 850 MFD roll lathe, by WIAP AG.



Figure 1a: Before the reconstruction of the 150 tons of machine Waldrich WDK 850 machine MFD. Before: The machine could only partially be delivered to Switzerland, for the revision. The breakdown of the 150 tons of machine was more expensive than to revise locally.



Figure 2: The machine has a spindle drive with 220 KW. The whole electrical system was renewed by us incl. The spindle drive.



Figure 3: The claws box revised from scratch.

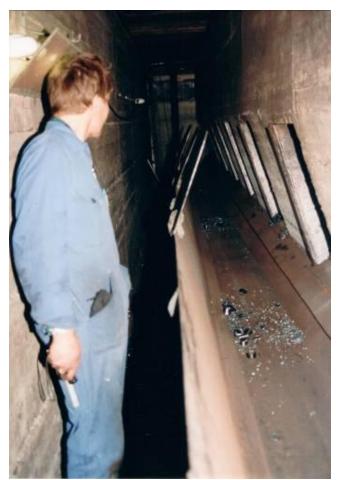


Figure 4: Under the machine is the chip tray. 220 KW and the large torque chips are so large as flat iron, removed here.



Figure 5: These professionals of skilled workers, which rotate these rollers are unlikely talents.



Figure 6: The headstock is almost as big as a child's bedroom. The 220 kW engine very strong.



Figure 7: The guide to the tailstock had expired several mm.



Figure 8: The dismantling of the Z-carriage, which went on the revision to us in Switzerland.



Figure 9: The machine is equipped with a copying device. The tracer by the company Heid. The electronics of tracer point from Siemens. This electronic device was no longer available. The WIAP AG had 4 new WIAP produce copy cards, according to the model Siemens. With new components, because the old ones were no longer to buy.

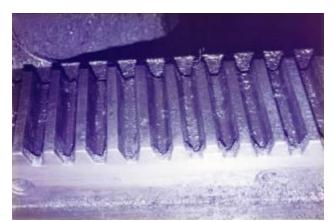


Figure 10: The rack of the Z axis was high above 150 mm. Erupted teeth; 3 racks had to be re-established after pattern.



Figure 11: Here again the roll lathe before dismantling.

## Rough mill bed before scraping



Image 11: Installation of WIAP Sonderfräsvorrichtung.



Figure 12: The leadership of the machine bed was at the customer site, milled by the reference to the Z axis. The milling device was fitted with a

headstock of a WIAP DM2A and the feed drive was made via a chain drive. The milling arm, prepared according to the method WIAP VDSF, reducing vibrations.



Figure 12a: As a portable milling device is processed here. For reference, the front, not worn sled is taken leadership. It was re-milled heavily worn tailstock guide which went several mm from the center. disassemble the machine with 150 tons and be edited externally, would have been complex and expensive.

## sled revision



Figure 13: The whole cross slide of the roller turning machine was in a very bad condition.



Figure 14: The carriage, who was about 20 tons, was brought to Switzerland for revision. Here, the decomposition of the carriage.



Figure 15: sled during the audit.



Figure 16: The sword holder of the roller turning machine is a very robust construction. He, too, had to be completely overhauled since it has experienced through the years of production, very large wear. The carriage was continuously loaded with a thrust of 20 tons.



Figure 17: The carriage guide was re-occupied by SKC. The whole lubrication improved and renewed. The complete revision sled in Switzerland lasted 6 weeks.



Figure 18: The whole longitudinal slide feed drive, which drive the rack was completely phased out.



Figure 19: The leaked spindle was honed with a WIAP Hohn device.



Figure 20: until the spindle again had the same measure, so that the spindle could be set backlash between the central zone and the outer zone two days had to be honed. The game was virtually gone.



Figure 21: Thanks to good tact and patience, the result was excellent.



Figure 22: This, more than 20-ton sled was finally a revised sleigh with new SKC shows ect new eingeschabten gears, lubrication system.



Figure 23: This longitudinal slide worm shaft expired in mm range. After the revision back in the 0.1 mm range backlash.



Image 23a from the feed gear shaft



Figure 24: Finally, after two months, the slide could be relaunched again. The customer was very happy.

*transmission revision* Photo report roll lathe MFD revised by the WIAP AG



Figure 25: The transmission of the machine also had gear stages, which were no longer working. In addition, the spindle was not round.



26: Because of the damage in the headstock was not pre-calculated, it was agreed only open the gear, then the prices.



Figure 27: The separation was very expensive. Almost everything Press Associations where we needed the 2500 Bar Abpressvorrichtung. But it all went very well.



Figure 28: Finally, could be lifted out of the main transmission shaft. Then we were able to offer the defective gear. Thanks to a Swiss gear manufacturer, we quickly had everything organized. The customer ordered within 1 day. Two weeks later, we had the gear to pattern.



Figure 29: The installation worked very well. The transmission of the MFD, hats off, we can only praise the manufacturer. Sensational, like the whole structure was made accessible from above. Perfect, thanks to MFD, which is one of the best machines we've ever seen.

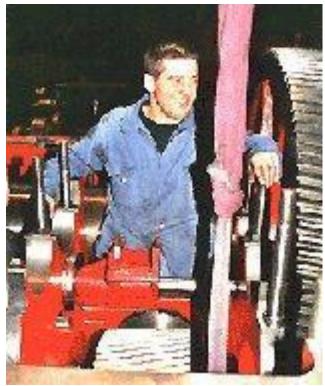


Figure 30: The size of the headstock is impressive. The whole reconstruction with the revision, lasted all in all, less than 6 months. After delivery no guarantee had to be made. The machine was run continuously after start-up, without interference.

The planning and execution were so ok



Figure 31: New electrical cabinet for the 220 KW Copying lathe



Figure 32: pavers electrical cabinet for the revised converted MFD roll lathe WDK 850 220 Spndelantrieb.



Figure 33: scoreboard for the status display.



Figure 34: Ready-to-end user machine at



35: 150 tons of machine revised completed



Figure 36: MFD roll lathe WDK converted 850 of WIAP

The WIAP AG continues to expand its machine tools and has a subcontractor base. Whether for new machines or conversions; there are usually used everywhere the same internal components. Thus, the spare parts warranty is secured.

When WIAP AG are not only the old who can do that. For years, the WIAP this training, intensified for the cockroaches. There are always two shaving machines at hand.

The cost of a retrofit (conversion with revision) to a new machine is about 40 to 60% of a new machine, because the basic meat is available. Only an exchange of CNC without drives what is possible today, with analog drives, can not be held rare even among 10 to 20% of the machines new purchase value. Even then, you have the built latest CNC control on the machine so that the operator does not feel he has an old machine.

Manufacturers and sales, design electrically and mechanically everything from one source

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