



WIAP®

MEMV®



Metall entspannen mit Vibration

Consolidated report

Photo report WN_980_WIAP

CNC Horizontal bed lathe WIAP DM4C

**Vibration Relaxed and reducing vibrations
VDSF®, VSR®, MEMV®**

The WIAP DM4C is a robust flatbed CNC - lathe. She has a wide bed. Outside the guide clearance is 1140 mm. The machine base is a welded construction. The bed is vibration relaxed and then filled with the filler WIAP and compacted by vibration. According to the Patent of WIAP, The guides X and Z are 90 x 50 mm.

The guides are interchangeable because screwed. For a revision after 20 years suitable, without the bed back into the delivery - factory needs. The hardened guides, min. 60 HRC are screwed. The slide guides in the X and Z axis are coated with a sliding coating. All axes have an air - support, so that a) the carriage runs better, b) the dirt does not come under the guides and c) the wear is reduced by several times compared to other guides. Lubrication is designed for short path; i.e., sufficient lubrication points.

Below: WIAP DM4C 1600 diameter produced in a Swiss customer



This WIAP DM4C has a swing - diameter of 2000 mm and two separate, movable turrets. 3 chip conveyors, machine number 10032, machine weight 23 tons.

Special two individually, movable turrets.
WN_900_10

Photo report WIAP DM



This WIAP DM4C was built for a Swiss customer. The machine has a swing - diameter of 2000 mm and there are 2 X-slide independently movable. WN_900_80



The machine has 2 chip conveyors. Guide - wide in X - and Z 90 x 50 mm and about 60 HRC hardened. The guides can be exchanged at most only turn that the worn part is behind. WN_900_120

Below: WIAP DM4C 1300 diameter produced in a Swiss customer



This WIAP DM4C has a swing - diameter of 1600 mm. A 15 degree tilted 12 - fold turret and 200 mm spindle bore. Machine weights 16 tons. Design and manufacture WIAP. Machine Nr.10025. WN_900_90



The machine is in the final assembly. Soon ready to rotate. Manufacturing time a WIAP machine is around 1 year. WN_900_150

Below: 2 machine WIAP DM4C 1300 diameter produced at a customer in Angola in the oil industry



This WIAP DM4C has a swing diameter of 1300 mm. A 12x turret and 265 mm spindle bore, machine weight 13 tons. Design and manufacture WIAP. Machine Nr.10020. WN_900_200

Photo report WN_910_WIAP DM2V

CNC vertical lathe WIAP DM2V

No. 10021, 10022, 10023, 10024

**Vibration relaxed and reducing vibrations
VDSF®, VSR®, MEMV®**



Small, compact CNC lathe as a skeleton. For chucking parts up to 200 mm diameter. The feed moves with the workpiece to the finished part - position. A precast slide comes into the engine room, picks up the workpiece. The precast pusher moves out of the machine and pushes the workpiece on the conveyor belt. The food gets at a deeper level the new blank. Then the traveling headstock moves to the fixed turret, where the rotary work is performed. Thanks to the arrangement includes all chips down into the chip - conveyor. The conveyor belt has space 200 mm x 4350 mm for raw - and finished parts. 2 x 0.87 m/2. From 100 mm diameter about 40 raw - and 40 finished parts. With a running time of 2 minutes the results in an unmanned operation for 80 minutes. Thanks to the vibration - insulation the machine has good durability because there minimal occur to no vibration. WN_910_30

Photo report WIAP DM



The WIAP Vertical CNC lathe. Compact and suitable for lining parts from 45 mm to 160 mm. Ideal 100 mm workpiece length. WN_910_340

Photo report WN_920_WIAP DM2A

CNC Horizontal bed lathe WIAP DM2A

No. 10010, 10012, 10014

Vibration relaxed and reducing vibrations
VDSF®, VSR®, MEMV®

Installation of WIAP DM2V. WN_910_140



The CNC control Sinumerik 810 T was the ideal CNC for this machine. Everything was programmed parameterized. The automation - program in the machine has been created that, improvements could be made without PLC programming. Even by the machine user. WN_910_310

Double sides-CNC-lathe WIAP DM2A. Two revolvers. Two movable headstocks. Private portal loader WIAP PL 2 for 2 x 7 kg Pallet weight. WN_920_10



Photo report WIAP DM



WIAP DM2A CNC lathe with gantry loader WIAP PL2 during the shooting tests. WN_920_50

The machine construction is designed so that it can be transported with minimal disassembly.



WIAP centering machine. Manufactured at the former license partner WEMA Zerbst. WN_930_10

Photo report WN_930_WIAP DM2A ZM

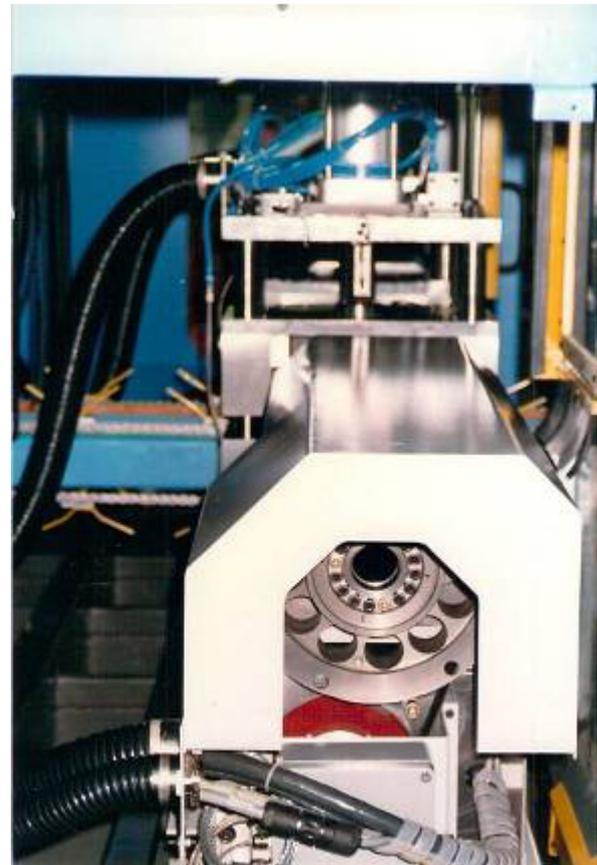
CNC Centering machine WIAP ZM 02

for the production of pipes, which are used as masonry drills - quick changeover

The WIAP DM2 ZM is a flatbed CNC lathe. She has a wide bed. The machine base is a welded construction. The bed is vibration relaxed and then filled with the filler WIAP and compacted by vibration, in accordance with the Patent of WIAP, dimension of the guides X and Z 30 x 50 mm.

The guides are interchangeable because screwed. For a revision after 20 years suitable, without the bed must return to the supplier. The hardened guides, about 60 HRC are screwed. The slide guides in the X - and Z - axis are coated with a sliding coating. All axes have an air support so that a) the carriage runs better b) does not reach the dirt under the guides and c) the wear is reduced by the multiple, compared with other guides. Lubrication is designed for short path; i.e., sufficient lubrication points.

Photo report WIAP DM



2 headstocks, moved in the Z - axis. The engine installed in the headstock. WN_930_30



Everything is quickly changeable. On both sides, the tube is rotated plan and on one side there is an agreement with a nose where a part is soldered on. The tolerance is small. WN_930_60

Photo report WN_940_WIAP HM 02

CNC horizontal lathe bed WIAP HM 02

for the production of pipes, which are used as masonry drills - quick changeover to 70 mm diameter. Fully automatic bar loading - magazine for 20 pieces 6 meter pipes.

The WIAP HM2 is a flatbed CNC lathe. She has a wide bed. The machine base is a welded construction. The bed is vibration relaxed and then filled with the filler WIAP and compacted by vibration, in accordance with the Patent of WIAP, dimension of the guides X and Z 30 x 50 mm.

The guides are interchangeable because screwed. For a revision after 20 years suitable, without the bed must return to the supplier. The hardened guides, about 60 HRC are screwed. The slide guides in the X - and Z - axis are coated with a sliding coating. All axes have an air support so that a) the carriage better not running b) of dirt under the guides come and c) the wear is reduced by the multiple, compared with other guides. Lubrication is designed for short path; i.e., sufficient lubrication points.

Photo report WIAP DM

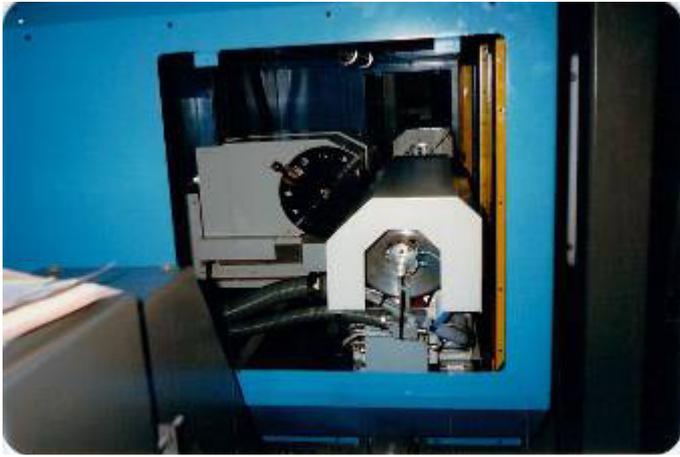
The machine construction is designed so that it can be transported with minimal disassembly.



The HM 02 was one of the biggest world - designed corporations masonry drill manufacturer. Everything is fully automatic. The machine was built by WIAP license partner Zerst. WN_940_10



The CNC control is a Sinumerik 810T GA2. WN_940_20



The workpieces are taken with a bezel and placed on a roller conveyor. WN_940_30



After commissioning. WN_950_10

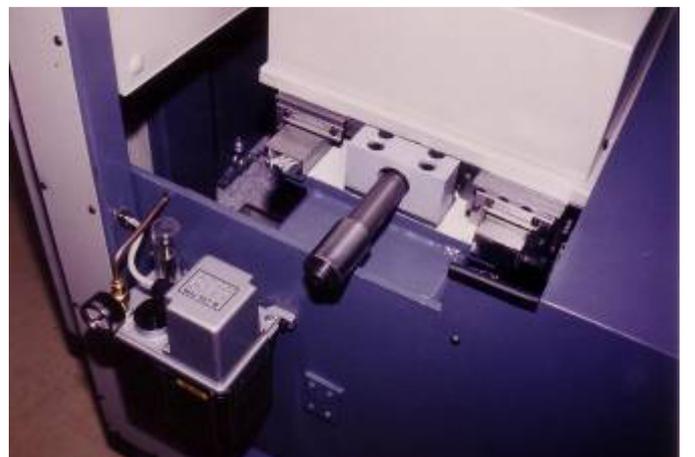
Photo report WN_950_WIAP DM02X

Turning machine WIAP for the electric - motor manufacturer Biral (Later in the Grundfos Group)

Turning machine WIAP DM02X for engines - housing

Client is a Swiss-pump motors manufacturer. The task was: Motor headquarters, which is distorted by the press-fitting of the inner part, reshoot, so that the seat and the concentricity is ok.

Built on the existing vertical lathe WIAP DM 02 the equipment was designed. So only the bed was created a special solution, the rest from existing structures.



The exact feed screw for position front, we made mechanically. The tolerance needed to be in diameter at 0.02 mm. The machine had no right CNC, accomplish the task. WN_950_40



Rotating workpiece. Headstock arranged below. WN_950_50

Photo report WIAP DM

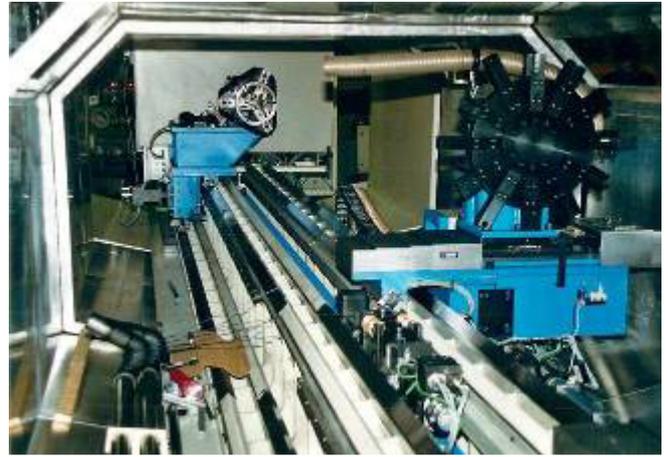
CNC Horizontal bed 10 axes 8 guide ways CNC Lathe

**WIAP DM2 XA for machining length 7000 mm
plastic pipes for power plants**

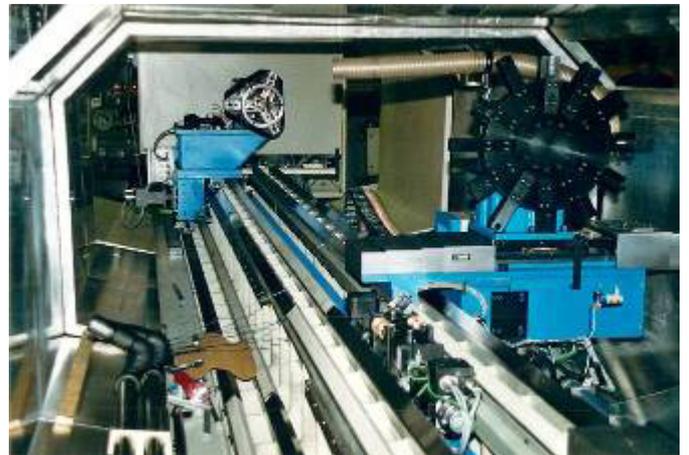
The WIAP DM2 XA is a robust flatbed CNC lathe. She has a medium wide bed. The guide outside clearance is 800 mm. The machine base is a welded construction. The bed is vibration relaxed and then filled with the filler WIAP and compacted by vibration, in accordance with the Patent of WIAP, The guides X and Z are 50x50 mm.

The guides are interchangeable because screwed. For a revision after 20 years suitable, without the bed must return to the supplier. The hardened guides min. 60 HRC are screwed. The slide guides in the X and Z axis are coated with a sliding coating. All axes have air support, that the carriage runs better, does not reach the dirt under the guides and the wear decreased by the multiple, compared with other guides. Lubrication is designed for short path, i.e. sufficient lubrication for a thread factory.

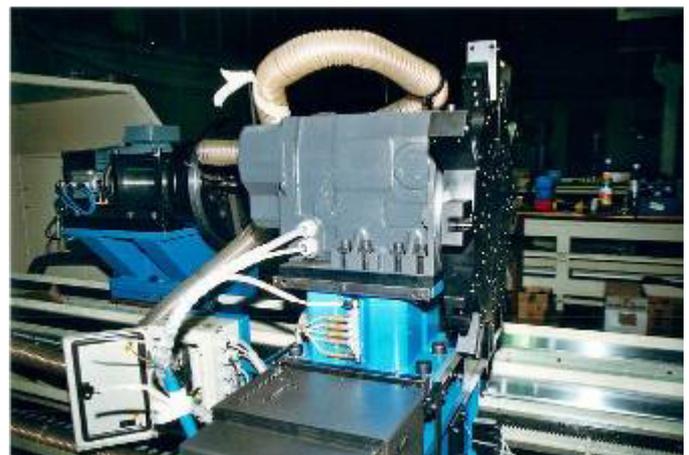
The machine structure is designed such that it can only be transported with minimal disassembly also by land.



The WIAP DM2 XA machine is a special version with 8 tracks. 4 carriages, which can drive past without collision. WN_960_10



8 guides for two headstocks; two Z - cross slide; two centering lugs. WN_960_40



Two turrets on the machine with two WIAP turret discs.

Construction of the whole machine of WIAP.
Hanspeter Widmer. WN_960_50

Photo report WN_970_WIAP DM02 XP

CNC Turned - milling machine

WIAP DM2 XP Nr. 10029

Vibration relaxed and vibration - dampened
VDSF[®], VSR[®], MEMV[®]

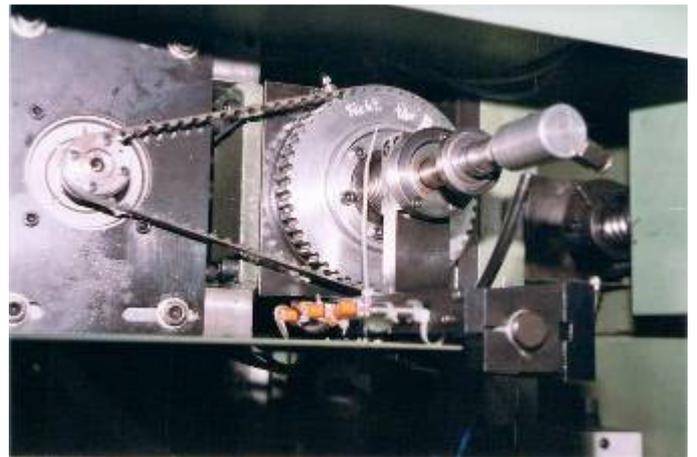
Made for a large company for the production of
tripods workpieces cycle time 2 seconds



This special rotary miller WIAP DM2_XP was for a large company. You could turn and mill with 20`000 revolution. At the same time a rotary spindle, this rotates with a facing head. The entire construction was from the WIAP. That was one of the overworked projects ever performed the WIAP. Clock time, a portion in 2 seconds. And a very exact customer who halved the seconds. WN_970_10



The whole bed system with tower vibrations - relaxed and vibration damping. WN_970_60



Here the self-developed plan turrets drive. It also has a coolant supply through the spindle. A good torque was required for the high speed of the facing tools. WN_970_70

Photo report WIAP DM

WIAP gantry loaders PL3

2 x 25 Kg 150 meters / min. Rapid



The gantry loader PL3 was sold, because the hall at the customer was very deep and other suppliers could not offer such deep passage.
WN_1220_10



The swivel hook with self-locking gripper when power failure, that the workpiece will not drop it. The gripper can be 0 and 90° plus 180° rotation.
WN_1220_40



A self-developed raw and finished part storage.
WN_1220_20



Through hole in automation. WN_1220_60