

**M4C 250 XY  
Turret head**

**Jominy-  
Example for application**

**EMCO·TEST**  
YOUR FACTOR OF SAFETY.

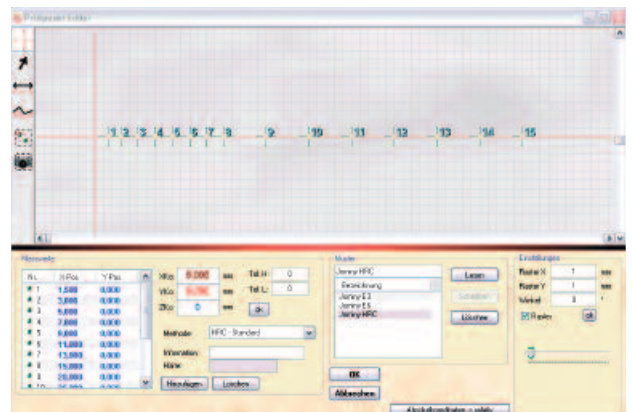
On this occasion we would like to thank these company for their cooperation and the trust they have put in us!

## Customer requirements to the hardness tester:

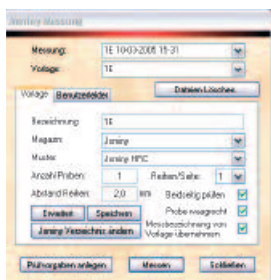
- The basic requirement for the purchase of the hardness tester was the 100% fully automatic sequence of testing at the component. The testing of one or more components (up to 6 samples) using the test method HRC and HV 30 was required. The difficulty with Jominy samples on basis of the HV 30 testing is that the hardness values may decline very much. They can be between 700 HV 30 at the surface and 200 HV 30 in a depth of 50 mm. It is not possible to deal with such a high decline in hardness with only one objective. In this case the solution is a turret head that makes it possible to carry out measurement sequences with several objectives in a fully automatic way.

## Execution of the hardness testing operation:

- In the test point editor you have the possibility to define any coordinates. Then any test methods as well as the required objectives are allocated. The next step is to choose the starting point of the measurement that refers to the predefined positions of the magazine, and start the measurement. This kind of measurement is mainly used in case only one sample is available.

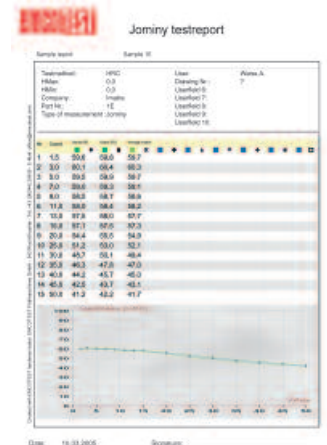


- The so-called mask operation is another possibility to carry out a fully automatic measurement. You call predefined parameters (coordinates, test method, measurement description, ...) in the program and save them as a mask. The operator only has to position the samples and then start the measurement. The results will be automatically saved in a predefined path. The mask operation is primarily used for several samples. In addition there is the possibility to travel along several rows per page.



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- Clearly structured measurement records. Exact listing of the test positions including the corresponding hardness values. Detailed illustration of the test run of several measurement series in a graphics. You can also determine the mean value of the measurement sequences and issue it as an average value.



Regarding the investment the hardness tester pays off within a relatively short time, since the testing is 100% fully automatic. This means that the operator can deal with his daily routine during the testing process.

## Technical Data:

- M4C 250 XY turret head
- M4Z 531 X/Y slide
- M4Z 537 CE - protective housing
- ecos 000-3 ecos BASIS
- ecos 050 ecos JOMINY
- ecos 051 ecos JOMINY multiple test specimens

- Additionally for HV 30:
- ecos 010 ecos IMAGE
  - M4Z 00A objective 130x (for HV 30 soft)
  - M4Z 00B objective 320x (for HV 30 hard)

- Workpieces to test: Jominy 1–6f fold  
 Test points: grinding surface of the sample  
 Test method: HRC and HV 30  
 Customers, e.g.: Asil Celik (Turkey)

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