**February 2019**

With this e-mail to inform you about an interesting technology, able to record significant savings to the companies matching application.

We deal with the issue of "Metal relax with vibration» since 1981. Over the last five years, we also tested since 2014 numerous enhancements and find ourselves on a high-current state of development.

We can now prove that our technology not only at comparatively smaller workpieces for an excellent relaxation, but is also effective used for very large components. Possibly are the following practical information of interest to you.

Use in well-known companies:

* Use "heavy rollers» produced at a forging manufacturer of the rolls. [Today, it vibrates the rollers with our technology before the finish turning](file:///C:\Webseiten\wiap.ch\Berichte\Berichte%20Englisch\Rollers.htm). Although the company has its own annealed factory. The results in the components are technologically identical to the annealing process. However, the Enterprising saves now several thousand euros compared to the previous energy-intensive annealing. Only a few study hours were needed to pinpoint the exact process flow.
* Siemens employs two WIAP metal relaxation facilities.

A plant relaxed [Vehicle undercarriages](file:///C:\Webseiten\wiap.ch\Berichte\Berichte%20Englisch\Vehicle%20undercarriage.htm): Here, the annealing process does not go in because the components following yet forgiven again. The use of our MEMV method, however, solves this problem.

Another plant relaxed gas [Turbine rings](file:///C:\Webseiten\wiap.ch\Berichte\Berichte%20Englisch\Turbinen%20rings.htm): Before finishing this be vibrated, then finished filming and finally lasered. Glow does not work in this case, however, vibrate and relax using the MEMV process already.

* Flame-related and / or hydraulically directed 12 meters long form tubes are often annealed after straightening. However, the long components often forgiven again in the curved position back! [They see a remedy at this link: WIAP MEMV relax with vibration.](file:///C:\Webseiten\wiap.ch\Berichte\Berichte%20Englisch\Flame%20straightening.htm)
* By 2014, we used the older method of vibration, which already was at that time already helpful in countless components used. Since 2014, we now relax with the more recent method "MEMV". Many sites on the component to be measured and in this case, the excitation is carried out in different directions. The results in the component relaxation are thus more effective than with the previously already proven vibration system.
* Our product range has been expanded extensively. There are now [4 different types vibrators](file:///C:\Webseiten\wiap.ch\Diverse%20Sprachen\Deutsch\10.%20Liefersortiment\Produkte\Englisch\Delivery%20range.htm), Customers can choose from five frame sizes:The smallest system is used to 5 tons unit weight. The type most commonly used is suitable for up to 20 tonnes, In addition, we now also have a 50 ton, 100 ton and 200 ton unit.
* In addition, we were able to expand extensively in the recent past, our expertise in heavy components ([look here](file:///C:\Webseiten\wiap.ch\Berichte\Berichte%20Englisch\WM877b%20Heavy-duty%20components%20110%20tons.htm)).

The next link is to our current brochure included various photos with a total of 12 pages in PDF format, which is also ideally suited for printing:

[Prospekt Produktmeldung MEMV 12 Seiten, Deutsch ](https://www.wiap.ch/MEMV%20Prospekt/Prospekt_Fachartikel_12S_DE_r20.pdf)

Brochure in English:

Flyer Product Information MEMV 12 pages, english

In the following link you will find a whole new report on the MEMV process "Metal relax with vibration» (PDF document with 13 pages).

[WC11510 Erfahrungsbericht WIAP MEMV 2019](https://www.wiap.ch/Ermittlungsberichte/Erfahrungsbericht%20WM%20836.htm)

You can find more information on our patents:

[Patente 2014](https://www.wiap.ch/patente%20neu/Patente%202014.htm)

Patent 3D vibrator (MEMV VS system called)

[Patente 2017/1](https://www.wiap.ch/patente%20neu/Patente%202017.htm)

Patent fairs

[Patente 2017/2](https://www.wiap.ch/patente%20neu/Patente%202017%202.htm)

Patent new MEMV automat

A sound analysis of 1986 already have revealed that time to prove that this unique vibration technology positively affects the components with corresponding usage. This report served as the basis when we in 2014 with much more detail and corresponding effort, the process metal relax further studied with vibration and has since improved significantly.

[Gnirrs Bericht    1986  Original deutsch](https://www.wiap.ch/Alte%20Literatur/WN_807_Original_Gnirss_01_1986_Band27_S439_442_orcTest.pdf)                   [Besser lesbare  Datei    vom Gnirrs   1986 Deutsch](https://www.wiap.ch/Alte%20Literatur/WM_807a_Original_Gnirss_01_1986_Band27_S439_442_r3hp%20(2).pdf)

[Gnirrs Bericht    1988  Original englisch](https://www.wiap.ch/Alte%20Literatur/WM_807b_Original_Gnirss_02_1988_en.pdf)                  [Besser lesbare  Datei    vom Gnirrs   1986 Englisch](https://www.wiap.ch/Alte%20Literatur/WM_807b_Original_Gnirss_02_1988_en_r1.pdf)

[Gnirrs Bericht    1988  Original französisch](https://www.wiap.ch/Alte%20Literatur/WM_807с_Original_Gnirss_02_1988_fr.pdf)             [Besser lesbare  Datei    vom Gnirrs   1985 Französisch](https://www.wiap.ch/Alte%20Literatur/WM_807c_Original_Gnirss_02_1988_fr_r1.pdf)

Today the WIAP AG observes further details the use of the system "MEMV Metal relax with vibration»:

* The older method, only two axial directions were excited, so only part of the component.
* When the vibrator on the dead zone and the node is placed, no stimulation can occur. A 12-meter-member has, for example, 4 dead zones, which can now be reliably identify.
* Only with a corresponding component analysis, a controlled vibration can relax, with best results can take place. So can also determine the optimal attachment of the exciter.
* Depending on the component stiffness corresponding Stimulator energy must be inserted into the component addition.
* to fix the vibrator only with clamps is not enough. This is a 2-point contact pressure, which can distort the readings.

We use this knowledge today targeted at diverse components - with the best results for our clients, who often achieve enormous savings with this optimized technology among other advantages.

Please contact us for further information at any time.

Kind regards / best regards

**Hanspeter Widmer**

**WIAP AG Ltd SA**

Industriestrasse 48L

CH 4657 Dulliken, Switzerland

Tel. +41 62 752 42 60

*+41 78 797 48 60*

Mail: [*hanspeter@widmers.info*](mailto:hanspeter@widmers.info)

Website: [www.wiap.ch](http://www.wiap.ch/)