

## CMT SOLUTIONS OY

CMT Solutions Oy is an impartial expert service founded in 2002. Our services provide the means to maintain and improve the functionality of the client's processes.

The goals of our services are to improve;

- Cost-effectiveness
- Reliability
- Technical performance
- Quality of the product



Our services support the clients own production, maintenance, research and product development.

## SERVICES

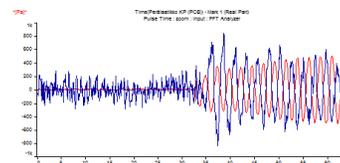
The following section introduces our company's primary services which are always tailored according to the goals and needs of the client.

### Troubleshooting

The long professional experience of our company's staff, up to date data acquisition systems and a large array of sensors create the basis to successfully solve various process problems.

Our most common assignments are;

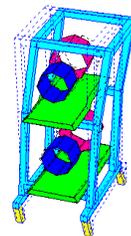
- Premature wearing or damaging of components or structures
- Problems in the products quality
- Problems in the functionality of the process
- Vibration problems



### Structural analysis

Our company has a vast experience in the structural analysis of structures and machines, in which the vibration dynamic properties and vibration behavior of the machine/structure is determined with thorough vibration analysis.

- Natural frequencies
- Modal analysis
- Operating deflection shape analysis (ODS)
- Speed tests

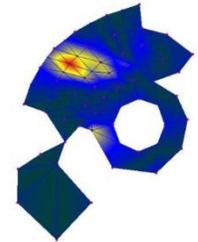


Structural analysis provides information to product development and existing process development.

### Product development

Nowadays the noise- and vibration standards of new machines are tightened all the time.

From time to time the product development faces a situation where the traditional FEM calculation and modelling needs a supportive empiric inspection and measurements.

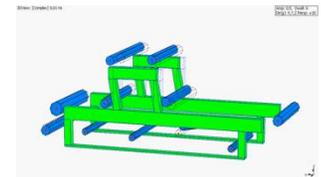


Empiric inspections provide significant cost savings when the structural and/or dimensional problems of the product are determined and fixed before it goes to production.

### Machine renewal / Capacity improvement

Structural analysis ensures cost effective machine renewal and capacity improvement, when the investments and modifications are focused to the right targets.

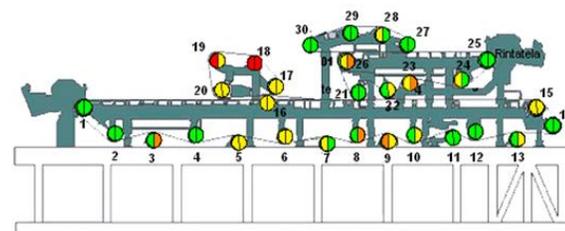
Structural analysis determines the vibrational suitability of the existing structures and components to the current- and target speed ranges, as well as their modification- and renewal needs.



### Condition monitoring

- Overall responsibility for a condition monitoring
- Condition analysis
- Measurement result analysis
- Training
- Remote diagnostics

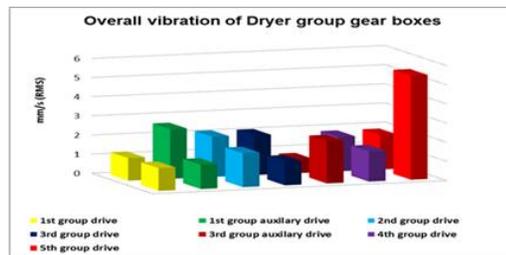
+	22027	- Hakeseuloin 1 pukuruuvi
+	22031	- Täskävalkuu 1
-	1X	- SM N-pää, vaaka
-	1P	- SM D-pää, vaaka
-	2X	- SM D-pää, vaaka
-	2P	- SM D-pää, vaaka
-	3V	- Tukiaskelet 1, vertikaali
-	3P	- Tukiaskelet 1, Peakkuve
-	4V	- Tukiaskelet 2, vertikaali
-	4P	- Tukiaskelet 2, Peakkuve
+	22029	- Hakeseula 1 pukuruuvi
+	22030	- Hakeseula 1 jakoruuvi
+	221	- Haketuuliripa 2
+	223	- Kuoren ja punun käsittely
+	23_1	- Kuoren ja punun käsittely (alko)
+	224	- Kiertovesijärjestelmä
+	181	- Jätevesikäs. 1810, 1812, 1813



## Acceptance tests

CMT Solutions Oy provides impartial acceptance tests. These tests and measurements determine if the device or system fulfills the properties and terms determined in the contract for delivery.

Impartial acceptance tests, made during the implementation of the new machine assist and clarify the clients and suppliers negotiations about the accountabilities and responsibilities during and after the guarantee period.



## Measurement equipment and tools for maintenance

CMT Solutions is authorized distributor to Schaeffler products. All high quality maintenance tools and measurement equipment of FAG are available thorough us from portable condition monitoring equipment to multichannel on-line systems including transducers and needed options.



## Ask about our other services

- Force measurements (nip loads, tension forces, etc)
- Non-destructive testing (Visual, Ultrasound-, magnetic- and penetrating liquid)
- Bearing current measurements
- Testing of hydraulic- and pneumatic systems.

## Our clients

### Paper- and pulp production

- Metsä Group
- UPM Kymmene
- Stora Enso
- BillerudKorsnäs
- Delfort Group
- Jujo Thermal
- Sappi
- Ahlstrom
- Mondi Paper
- Powerflute
- OOO Uralbumaga
- Segezha Group
- Sprick GmbH & Co.
- Kotkamills

### Machine- and structure suppliers

- Voith
- Valmet
- Andritz
- Metso
- Vaahto
- Moventas
- Kumera
- ABB
- Raumaster
- Kytölä
- Elomatic
- Zodiac
- Runtech

### Maintenance companies

- Efora
- Empower
- BMS
- YIT
- BKT Service
- Serviplan

### Other

- Aritzona Chemicals
- Nammo
- Valio
- Norilsk Nickel
- Luvata
- VTT
- Kemira Chemicals



## CMT Solutions Oy

Polttolinja 17 LH 43  
40520 Jyväskylä  
Finland

Mobile: +358 50 558 2114

Email: [cmtsolutions@cmtsolutions.fi](mailto:cmtsolutions@cmtsolutions.fi)

Web site : [www.cmtsolutions.fi](http://www.cmtsolutions.fi)