

Report date :02/08/2012

Technology Ultra test at Gelan factory for plastic molding machine. Test report

Ultra will be connected to plastic molding machine producing profile for window frames. Measurement of electric parameters were recorded with power analyzer **CHAUVIN ARNOUX C.A. 8332B**. Measurements were accomplished when the machine was working at similar conditions (with and without Ultra): using the same mold, working with same raw material and at the same speed.

First control measurement was made on 12 March 2012..

Recorded parameters before Ultra installation:

KW

Interval of data fixation : 1 s.

Purpose of record:

To see influence of Ultra for recorded parameters :kw.

Recorded figures (without Ultra):

Active power kw:	
Min.	66,98 kw
Ave.	84,68kw
Max.	135,6 kw



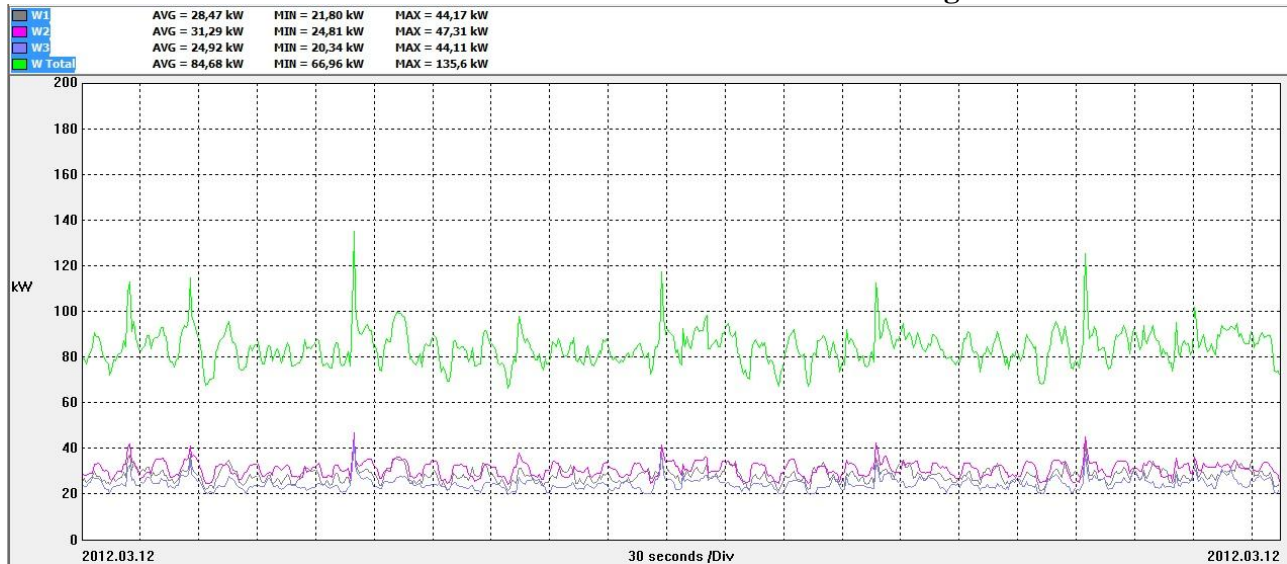
Comment

The working mode is very strongly rolling, activate power range is from 66,98 to 135,6 kW.

The suitable Ultra model for the machine is U-200. For the first test Model U-100 was selected.

Measured parameter charts:

Illustration 1 : Active Power chart with each phase values before Ultra Measured KW values before Ultra installation fluctuate like following:



Ultra was installed 6 may 2012, model U-100.

Ultra technology uses wave technology for improvement of flow of electric current.

Certified by TUV, SGS, TGM .

Main purpose of Ultra is to decrease values before Ultra installation of KW : min, max and average.

As kw parameter is directly connected with energy consumption kwh.

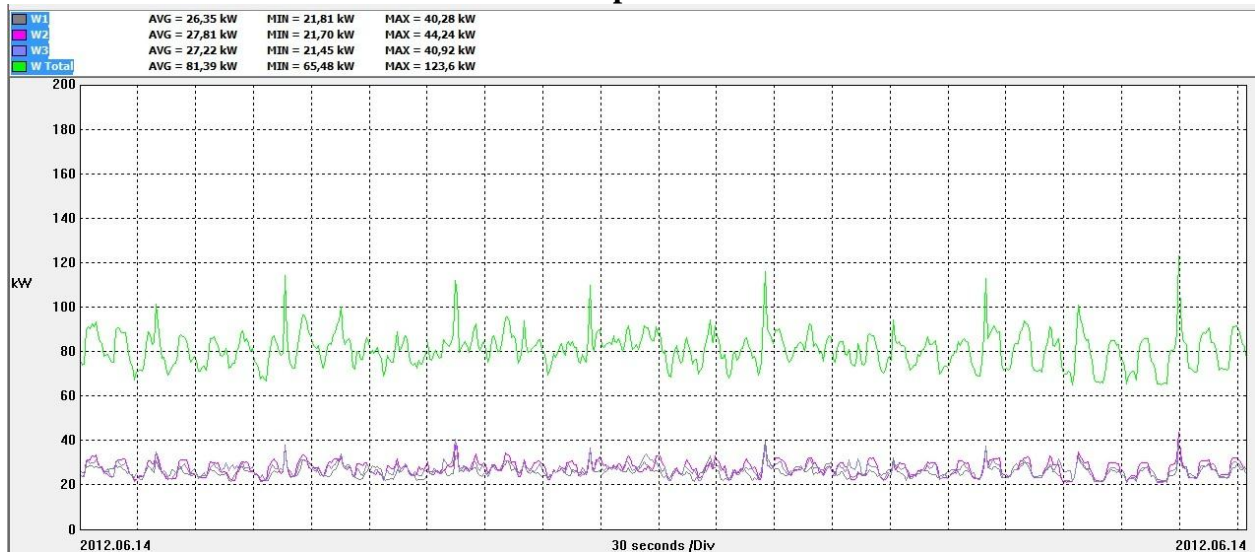
Controll measurement was made 14 July 2012.

Recorded figures (with Ultra U-100)

Active power kw:	
Min.	65,48 kw
Ave.	81,39 kw
Max.	123,46 kw

Measured parameter charts:

Illustration 2 : Active Power chart with each phase values with Ultra U-100



After test with model U-100, model U-200 was installed.

Achieved results after installation of U-200:

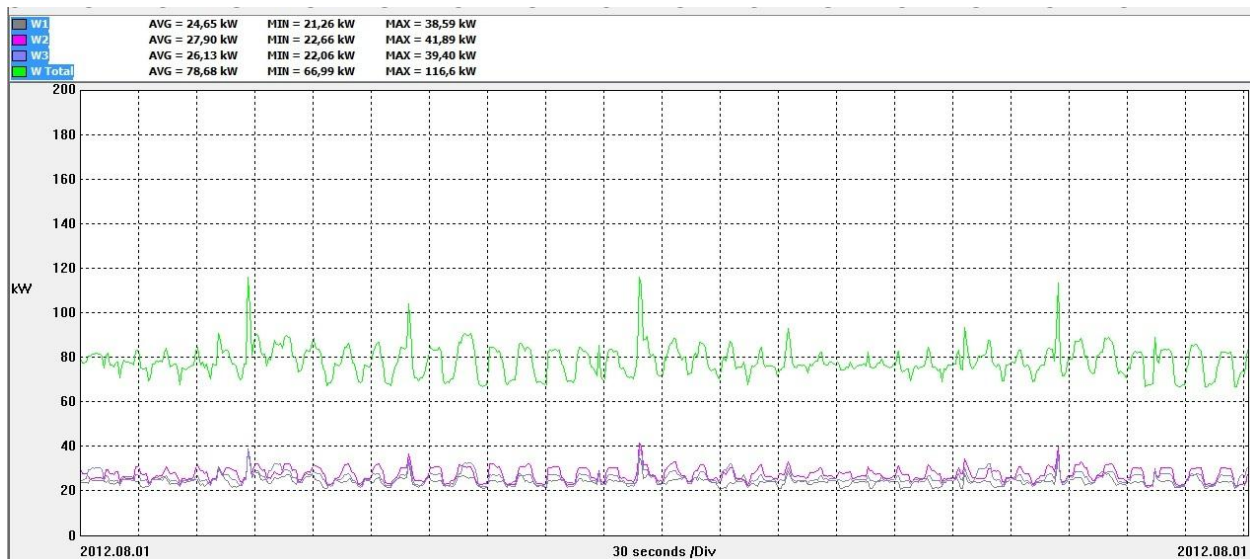
Controll measurement was made 1 august 2012.

Recorded figures (with Ultra U-200)

Active power kw:	
Min.	66,99 kw
Ave.	78,68 kw
Max.	116,6 kw

Measured parameter charts:

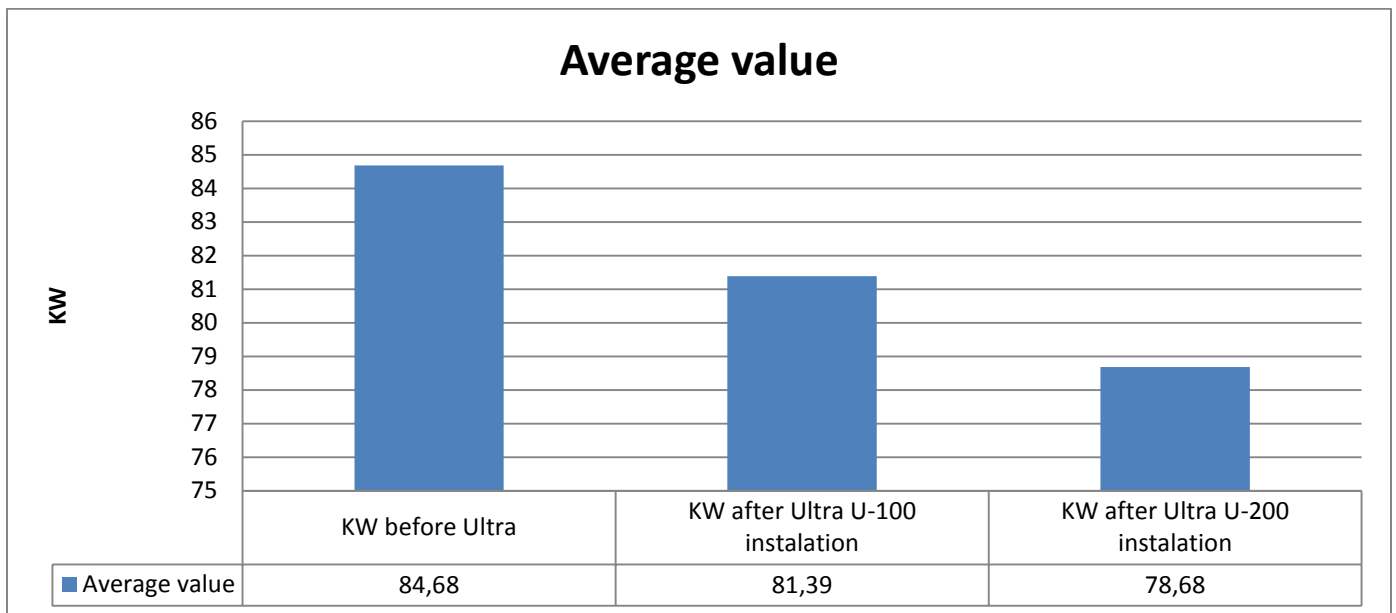
Illustration 3 : Active Power chart with each phase values with Ultra U-200



Conclusions.

Data comparison:

Measured parameter	KW average value
KW before Ultra	84,68 kw
KW after Ultra U-100	81,39 kw
KW after Ultra U-200	78,68 kw



Concluisions, comments and further recommendations :

Active power in study case decreased by 7,1% for the machine operating in the same mode, producing the same product using Ultra technology.

It is highly recommended for Gelan company to use Ultra technology for energy saving purposes for the whole factory.

Project manager Vaidotas Balčiūnas

SOME OF ULTRA CUSTOMERS



CERTIFICATION

EMC DIRECTIVE 2004/108/EC.

- Based on EN 61000-6-4:2007 , EN:61000-6-2:2005

- **EMI: Electromagnetic Interference Test**
- **EMC: Electromagnetic Compatibility Test**
- **ESD: Electrostatic Discharge Test**
- **EFT: Electrical Fast Transient Test**
- **Surge: Winding Insulation Test**
- **CE, ROHS**
- **CNAS (ilac-MRA), EMC**

SAVING TESTS

- **TGM test (Austria)**
- **TUV test (Austria)**
- **SGS test**