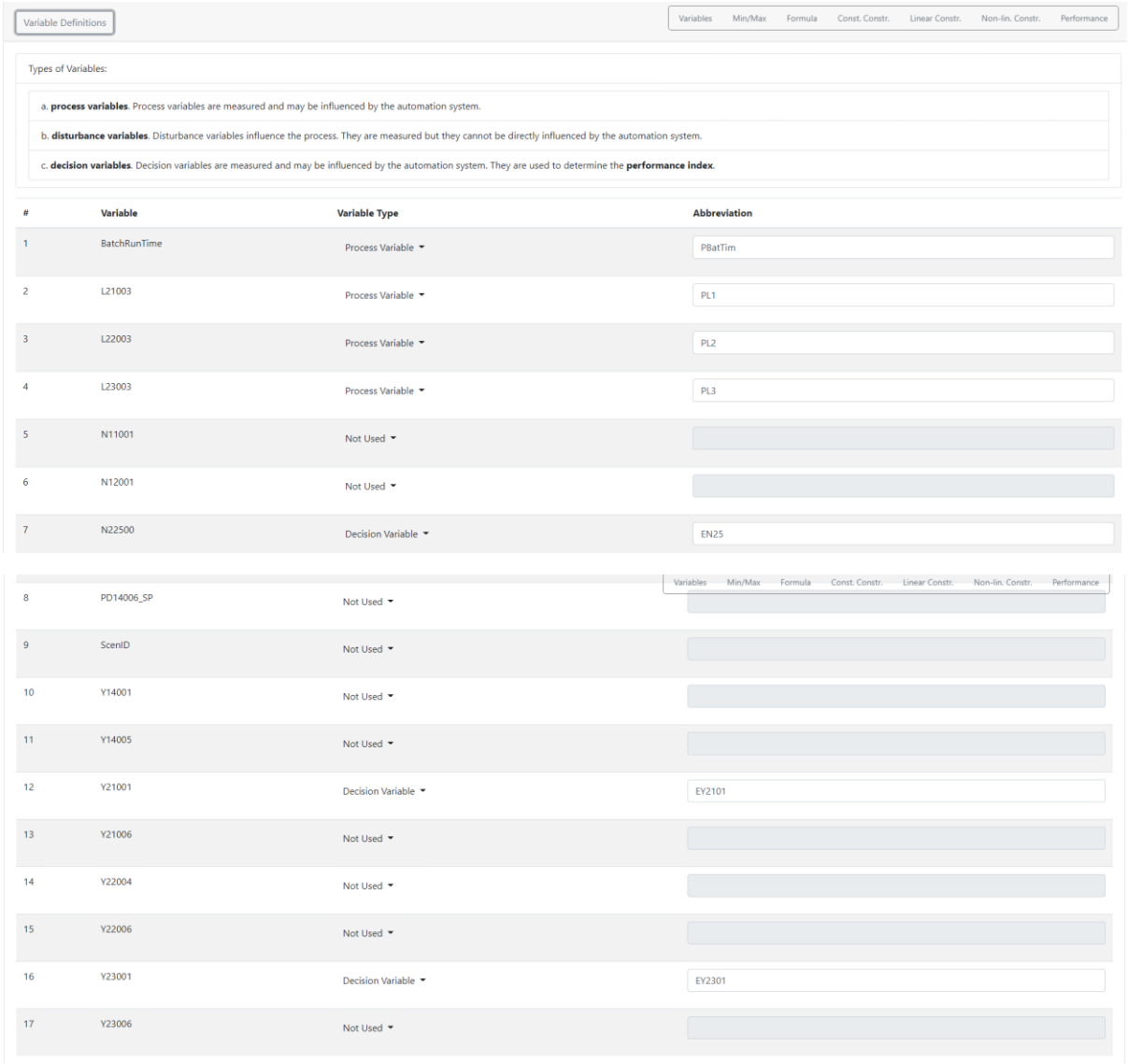
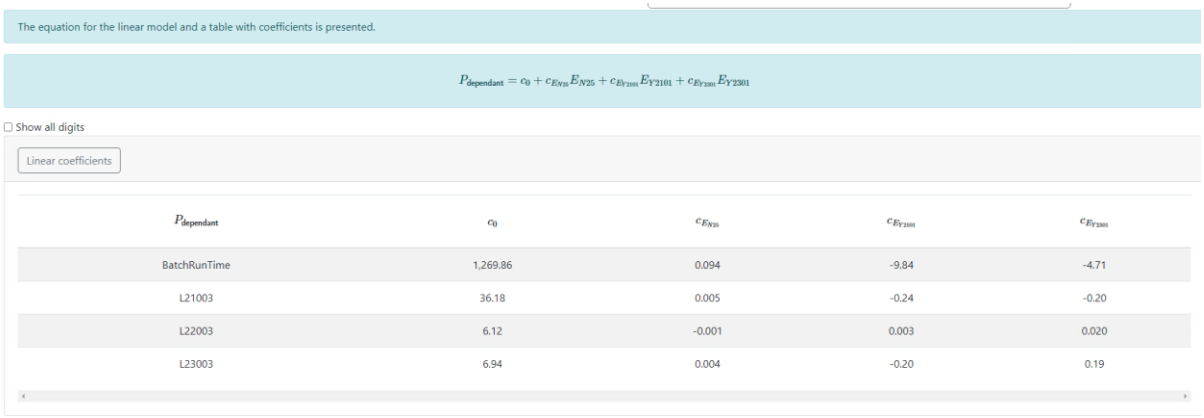
Optimierung

Datensatz VersuchsDatenSmA2020

Variablendefinition:



Lineares Modell:



The equation for the linear model and a table with coefficients is presented.

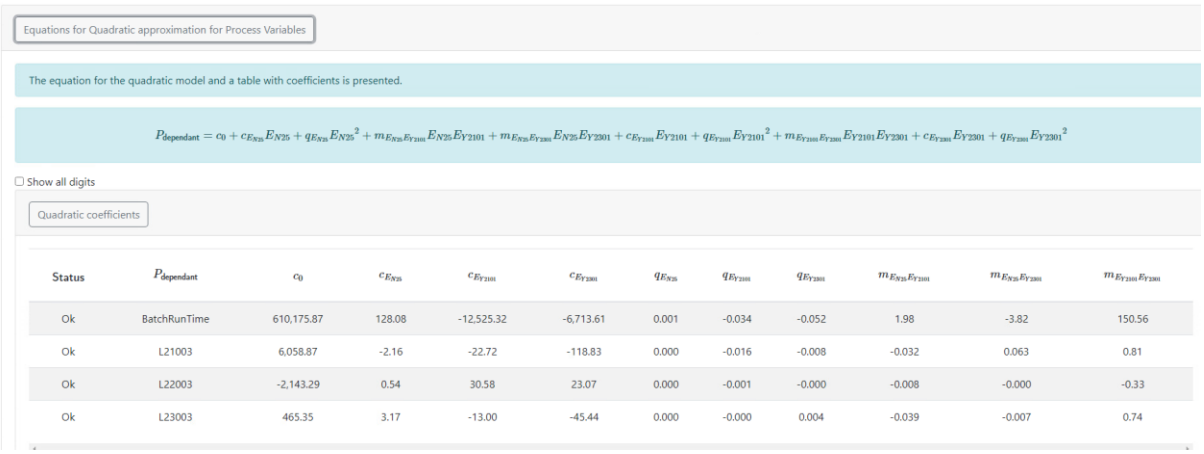
$$P_{dependant} = c_0 + c_{EN25} E_{N25} + c_{EY2101} E_{Y2101} + c_{EY2301} E_{Y2301}$$

Show all digits

Linear coefficients

$P_{dependant}$	c_0	c_{EN25}	c_{EY2101}	c_{EY2301}
BatchRunTime	1,269.86	0.094	-9.84	-4.71
L21003	36.18	0.005	-0.24	-0.20
L22003	6.12	-0.001	0.003	0.020
L23003	6.94	0.004	-0.20	0.19

Quadratisches Modell:



Equations for Quadratic approximation for Process Variables

The equation for the quadratic model and a table with coefficients is presented.

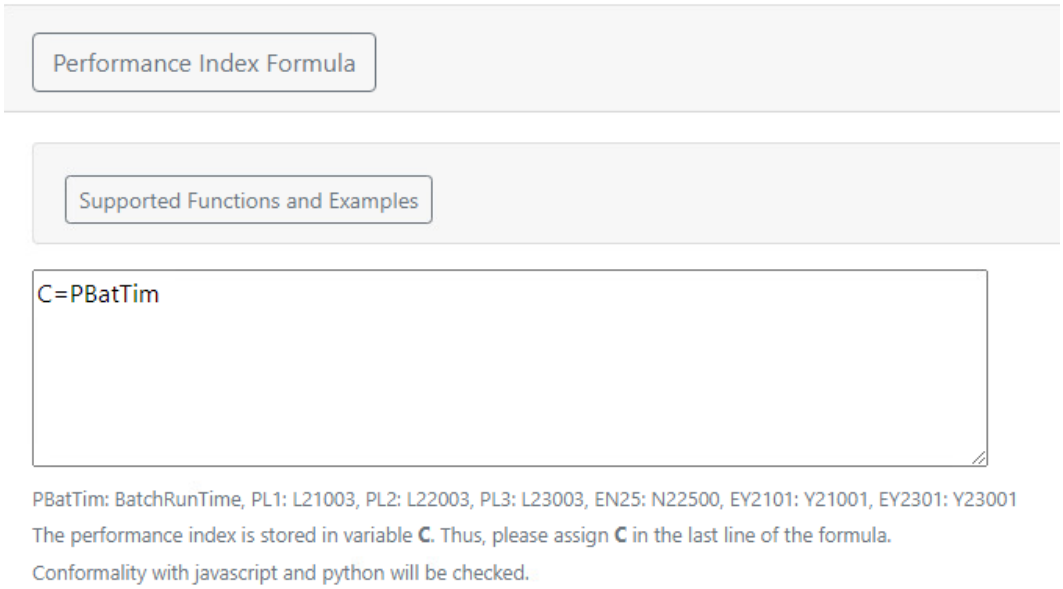
$$P_{dependant} = c_0 + c_{EN25} E_{N25} + q_{EN25} {E_{N25}}^2 + m_{EN25,EY2101} E_{N25} E_{Y2101} + m_{EN25,EY2301} E_{N25} E_{Y2301} + c_{EY2101} E_{Y2101} + q_{EY2101} {E_{Y2101}}^2 + m_{EY2101,EY2301} E_{Y2101} E_{Y2301} + c_{EY2301} E_{Y2301} + q_{EY2301} {E_{Y2301}}^2$$

Show all digits

Quadratic coefficients

Status	$P_{dependant}$	c_0	c_{EN25}	c_{EY2101}	c_{EY2301}	q_{EN25}	q_{EY2101}	q_{EY2301}	$m_{EN25,EY2101}$	$m_{EN25,EY2301}$	$m_{EY2101,EY2301}$
Ok	BatchRunTime	610,175.87	128.08	-12,525.32	-6,713.61	0.001	-0.034	-0.052	1.98	-3.82	150.56
Ok	L21003	6,058.87	-2.16	-22.72	-118.83	0.000	-0.016	-0.008	-0.032	0.063	0.81
Ok	L22003	-2,143.29	0.54	30.58	23.07	0.000	-0.001	-0.000	-0.008	-0.000	-0.33
Ok	L23003	465.35	3.17	-13.00	-45.44	0.000	-0.000	0.004	-0.039	-0.007	0.74

Performance Index (Gütekriterium):



Performance Index Formula

Supported Functions and Examples

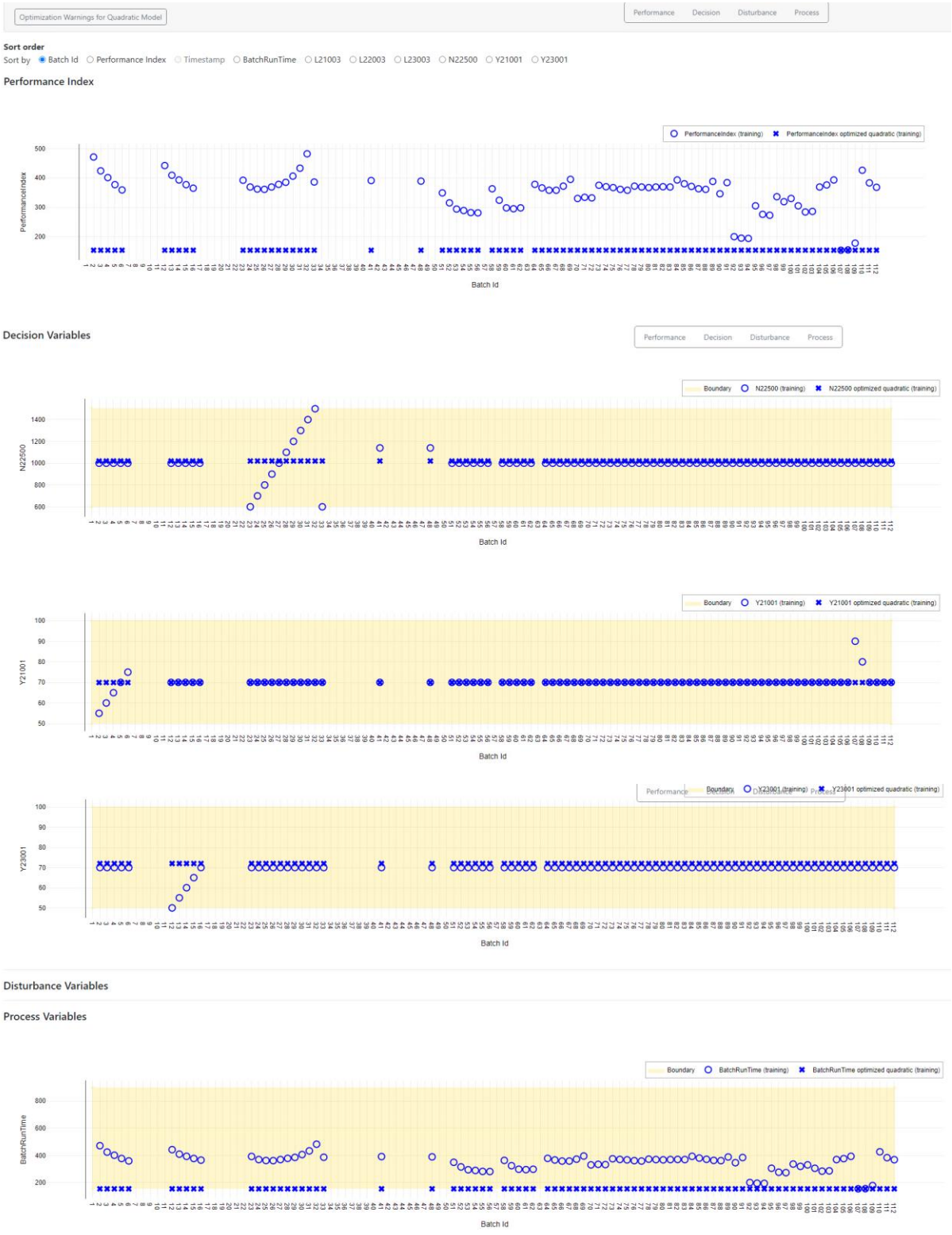
```
C=PBatTim
```

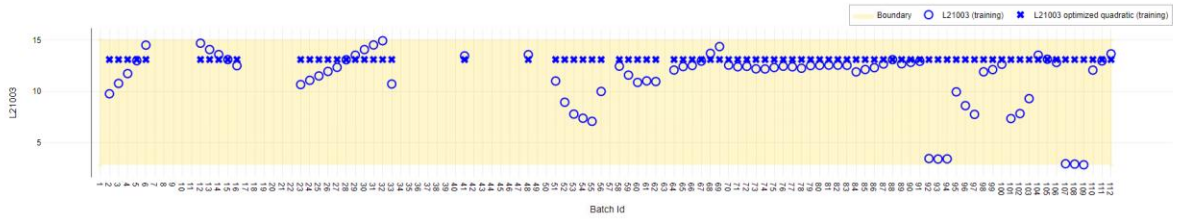
PBatTim: BatchRunTime, PL1: L21003, PL2: L22003, PL3: L23003, EN25: N22500, EY2101: Y21001, EY2301: Y23001

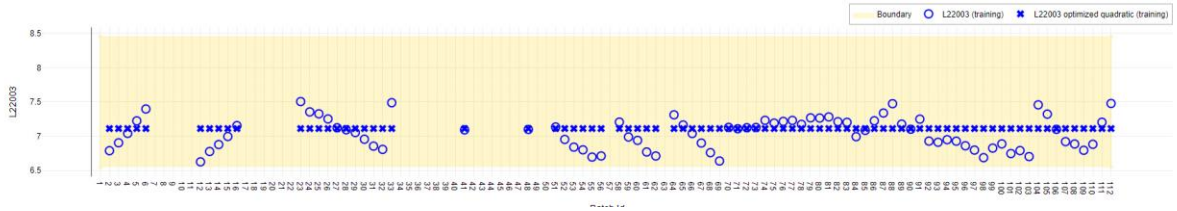
The performance index is stored in variable **C**. Thus, please assign **C** in the last line of the formula.

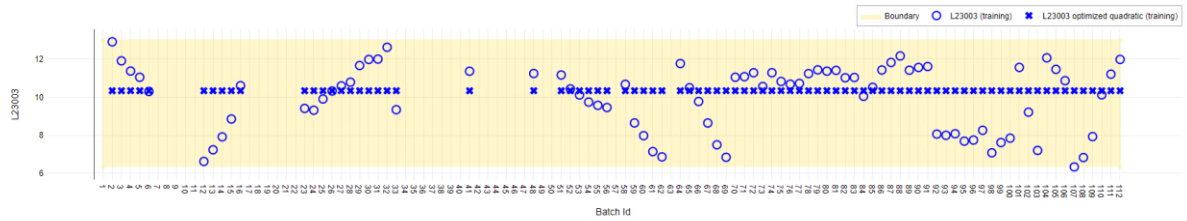
Conformality with javascript and python will be checked.

Optimiertes, quadratisches Modell:




Boundary
L21003 (training)
L21003 optimized quadratic (training)
L21003
Batch Id


Boundary
L22003 (training)
L22003 optimized quadratic (training)
L22003


Boundary
L23003 (training)
L23003 optimized quadratic (training)
L23003
Batch Id