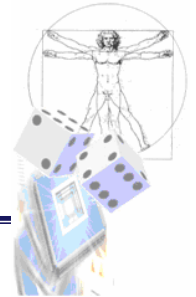# NDT – Overview

➢ Measurement input in row-format

➢ Corrosion rate calculation and remaining life prediction, based on:

▪ Linear prediction

▪ Linear prediction based on last 3 measurements

▪ 2nd Order Polynomial extrapolation

➢ Corrosion rate graph

(NDT) Row-Format Data Input

Equipment Name	P-2014-2
Equipment Type	Piping > 16"
Process Unit Name	RNP
Description	Cevovod
Service Start	1979

Component Data | **NDT** | Measuring points | Latest values | Documents

Insert new measuring points

Insert up to 'N' new number measuring points:	1 ▾		Add New MPs

Add New Measurement

Measuring Point	Measurement Date	1	2	3	4	5	6	7	8	9	10	Mesurement/Repair	Edit	Delete
Nominal value		9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53		✏	
Minimal value		6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7		✏	
Minimal Accepted value		0	0	0	0	0	0	0	0	0	0		✏	
Measurement Date	12/Oct/2006	9.5	9.2	9	8.8	8.9	8.5	9.8	9.5	8.3	7.7	Measurement	✏	✗
Measurement Date	14/Apr/2010	8.6									7.7	Measurement	✏	✗
Measurement Date	10/Jun/2014	8.6										Measurement	✏	✗

Add New Measurement

Measuring Point	Measurement Date	11	12	13	14	15	16	17	18	19	20	Mesurement/Repair	Edit	Delete
Nominal value		9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.27	9.53		✏	
Minimal value		6.7	6.7	6.7	6.7	6.7	6.5	6.7	6.7	6.5	6.7		✏	
Minimal Accepted value		0	0	0	0	0	0	0	0	0	0		✏	
Measurement Date	12/Oct/2006	7.4	8.3	8.8	8.4	9	9.1	13	8.5	9.6	8	Measurement	✏	✗
Measurement Date	14/Apr/2010	7.4									6.6	Measurement	✏	✗

(NDT) Corrosion Rate Graph and Calculation

Component: P-2014-2

MM24

Corrosion development and time prediction for MP 24
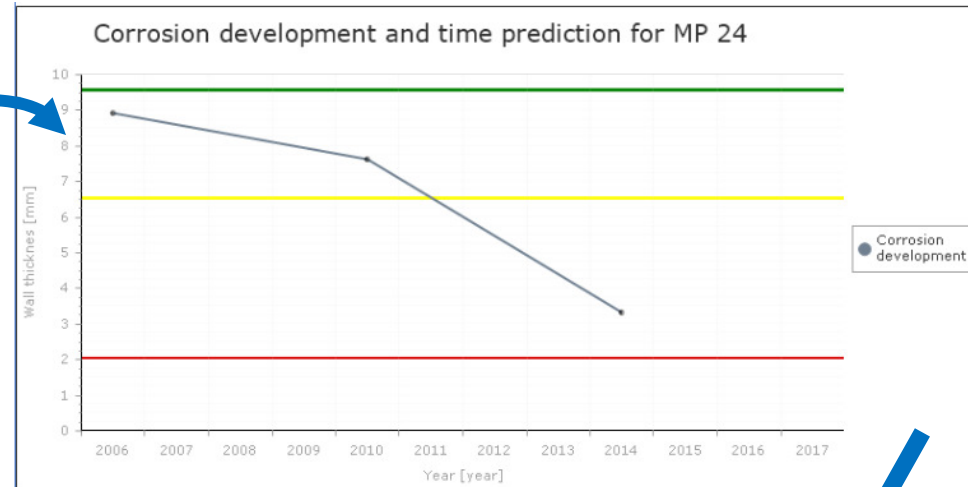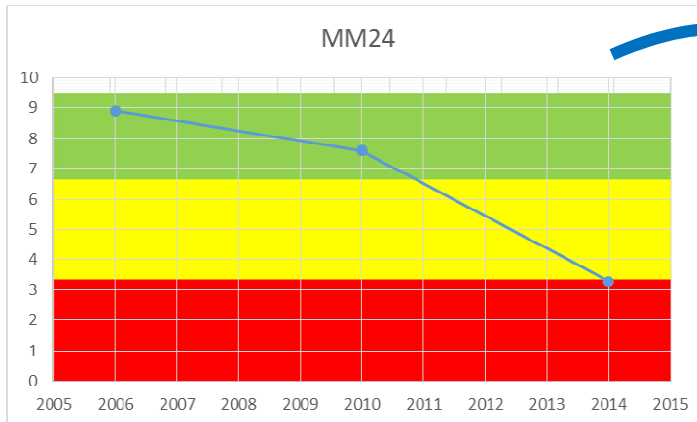
Measurement Date	Measuring Point	21	22	23	24					Mesurement/Repair	Delete
	Nominal value	9.27	9.53	9.27	9.53						
	Minimal value	6.5	6.7	6.5	6.5						
	Minimal Accepted value	2	2	2	2						
12/Oct/2006	Measurement	10.2	8.1	9.2	8.9					Measurement	✗
14/Apr/2010	Measurement				7.6					Measurement	✗
10/Jun/2014	Measurement				3.3					Measurement	✗

Next plan thickness measurement	
Remark	
Corrosion Rate [mm/year]	1.075
Life time [year]	2.6

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(NDT) Corrosion Rate Graph and Calculation
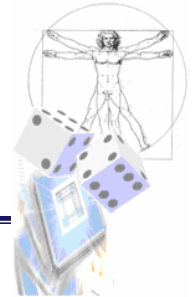
Component: P-2014-2 – Predictions

Predictions		
Name	Predicted calculation	Predicted year
Linear prediction	2015	2015
Linear prediction last 3 measurements	2016	2015
Polinomial extrapolation	2015	2014
Polinomial derivative extrapolation	2015	2014

☑ Linear prediction ☑ Linear prediction last 3 measurements ☑ Polinomial extrapolation ☑ Polinomial derivative extrapolation

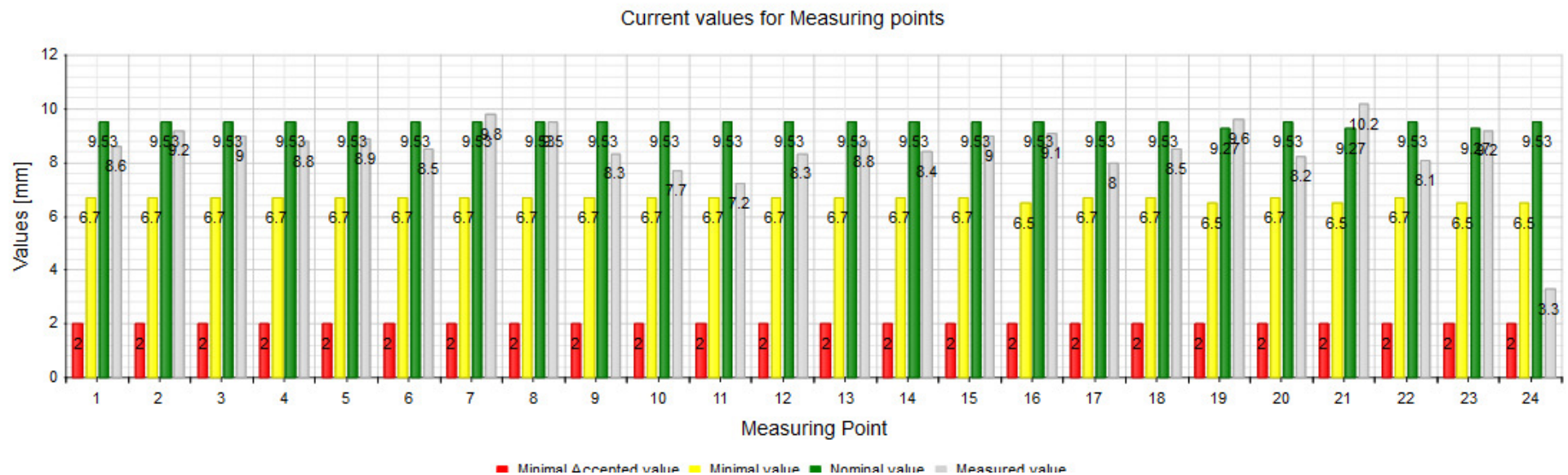Corrosion development and time prediction for MP 24
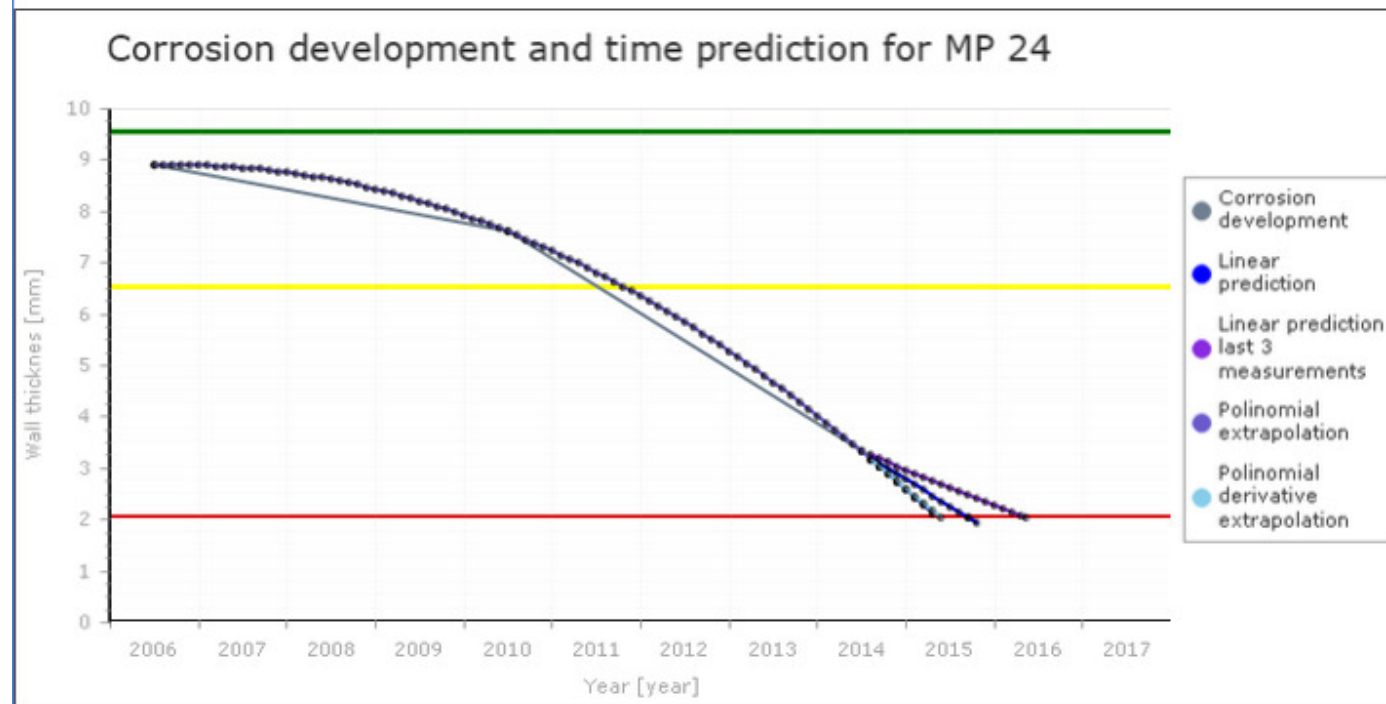
(NDT) Current Measuring Point Values
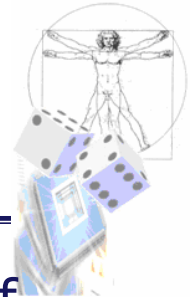
➢ One of the additional graphs is showing visualization of measured remaining wall thicknesses at the respective measurement points

NDT CURRENT MEASURING POINT VALUES

(NDT) Measurement point representation on drawings