From: Hindrik Koning
To: "Hindrik Koning"; "Darijus Strasunskas"; "Bjørn Berli"
Cc: "Nils Sandsmark"
Subject: RE: Reuse of Instruments modelling
Date: 10 November 2015 22:02:25

Dear All,

If we need to be specific, the table below may give some guidance. PCA is having additional ones in their possession.
If they are required in the discussion we can insert them

Kind Regards,

Hindrik

Reuse of Instruments modeling
What are the standards we have and what are their limitations to contents and ICT aspects

Type of library	Main charateristics	Instruments and control part	
STEPlib PCALibrary	for single items to be used for single items to be used	Quality Process control functions (Separate spreadsheet	
ISO 15926 Part4	Quality Process equipment Mechanical equipment stat/rot Piping needs to be revisited Instrument and controls Electrical Civel	Quality Process control functions (Separate spreadsheet	
PCA Lib	To be used in CR0006 Update of ISO 15926-4		
PCA for spreadsheets (as presented in Baltimore by Lilian Hella)	CR0006 Update of ISO 15926-4 Improvement of ISO 15926 Part4 For an updated version of Part 4, we will take advantage of the work done by PCA since the publication of the current Part 4 version I think the M.Rail work should also be part of this improvement	The instrument part to be taken from MRail	
MRail (started by Benjamin Robinson) In hands of Keigth, Hans, Victor, Onno		Instruments is improved or will be improved Hans, Hindrik	
RDL 2 In hands of Keigth, Hans, Victor, Onno		Instruments improved or to be improved Hans, Hindrik	
IEC CDD Measuring devices as to NAMUR NE 100, Prolist, eCl@ss an IEC 61987)			
IEC CDD (UoM--- NAMUR NE 100, Prolist, eCl@ss an IEC 61987)			

RDL 2
Initial load

flow transmitter	transmitter that outputs a signal representative of a flow	
mass flow transmitter	flow transmitter that outputs a signal that is directly representative of a mass flow	
coriolis mass flow transmitter	mass flow transmitter that measures by the Coriolis principle and outputs a signal representative of a mass flow	
thermal mass flow transmitter	mass flow transmitter that measures the heat transfer of a moving fluid and outputs a signal representative of a mass flow	
multiphase flow transmitter	flow transmitter that outputs signals representative of the flow rate of individual phases in a mixed phase fluid	
pressure-type flow transmitter	flow transmitter that measures the pressure exerted by a fluid in order to calculate its flow rate	
differential pressure flow transmitter	pressure-type flow transmitter that measures the differential pressure across a primary element in order to measure flow	
pitot tube flow transmitter	differential pressure flow transmitter that uses a pitot tube as primary element	
segmental wedge flow transmitter	differential pressure flow transmitter that uses a segmental wedge as primary element	
v cone flow transmitter	differential pressure flow transmitter that uses a conical body as primary element	
variable area flow transmitter	flow transmitter that throttles a stream through a constriction, the area of which changes to keep a constant differential pressure, in order to measure flow rate	
rotameter flow transmitter	variable area flow transmitter that uses a float confined within a vertical, tapered flow tube to measure flow	
venturi tube flow transmitter	differential pressure flow transmitter that uses a venturi tube as primary element	
force-balance flow transmitter	flow transmitter that measures the force exerted by a fluid in order to calculate its flow rate	
impact flow transmitter	force-balance flow transmitter that measures the impact force of a fluid on a plate and outputs a signal representative of flow	
target flow transmitter	force-balance flow transmitter that uses a target as primary element	
vane flow transmitter	force-balance flow transmitter that uses one or more vanes in a measuring chamber to measure flow	
head-type flow transmitter	pressure-type flow transmitter that measures the difference in head across an obstruction or restriction and outputs a signal representative of flow	
open channel flow transmitter	head-type flow transmitter that uses an obstruction or restriction in an open channel to output a signal representative of flow	
flume flow transmitter	open channel flow transmitter that uses a flume to generate a difference in head	
weir flow transmitter	open channel flow transmitter that uses a weir to generate a difference in head	
volume flow transmitter	flow transmitter that outputs a signal representative of a direct measurement of volume flow	
positive displacement flow transmitter	flow transmitter that divides a fluid into fixed, metered volumes in order to measure volumetric flow rate	
gear flow transmitter	positive displacement flow transmitter that uses gears to divide and meter the flow	
oval gear flow transmitter	gear flow transmitter that uses oval gears	
helix flow transmitter	positive displacement flow transmitter that uses helical rotors to divide and meter the flow	
nutating disc flow transmitter	positive displacement flow transmitter that uses a disc to divide and meter the flow	
piston flow transmitter	positive displacement flow transmitter that uses a piston to divide and meter the flow	
rotary flow transmitter	positive displacement flow transmitter that uses eccentrically mounted drums to divide and meter the flow	
velocity flow transmitter	flow transmitter that measures the velocity of a fluid in order to calculate its flow rate	
doppler flow transmitter	velocity flow transmitter that uses the Doppler effect to measure flow	
electromagnetic flow transmitter	velocity flow transmitter that uses electromagnetic principles to measure flow	
electromagnetic insertion flow transmitter	velocity flow transmitter that uses electromagnetic principles to measure flow at a point inside the process	
rotating element flow transmitter	velocity flow transmitter that uses the rotation of a shaped element to measure flow	
paddle flow transmitter	velocity flow transmitter that uses the rotation of a paddle wheel to measure flow	
paddle insertion flow transmitter	velocity flow transmitter that uses the rotation of a paddle wheel to measure flow at a point inside the process	
propeller flow transmitter	velocity flow transmitter that uses the rotation of a propeller to measure flow	
rotating vane flow transmitter	velocity flow transmitter that uses the rotation of a vane to measure flow	
turbine flow transmitter	velocity flow transmitter that uses the rotation of a turbine to measure flow	
swirl flow transmitter	velocity flow transmitter that uses swirls generated by fixed spiral vanes to measure flow	
ultrasonic flow transmitter	velocity flow transmitter that uses the propagation of a ultrasonic sound wave in a fluid to measure flow	

From: Hindrik Koning [mailto:hindrik.koning@xs4all.nl]
Sent: dinsdag 3 november 2015 19:41
To: 'Darijus Strasunskas'; 'Bjørn Berli'
Cc: 'Nils Sandsmark'
Subject: RE: Reuse of Instruments modelling

Dear All,

As said the telecon at 13:00-14:00 next Wednesday (11th of Nov) is fine to me.

Kind Regards,

Hindrik

From: Darijus Strasunskas [mailto:darijus.strasunskas@posccaesar.org]
Sent: dinsdag 3 november 2015 17:10
To: 'Hindrik Koning'; Bjørn Berli
Cc: Nils Sandsmark
Subject: Reuse of Instruments modelling

Dear Hindrik and Bjørn,

Is a telecon at 13:00-14:00 next Wednesday (11th of Nov) doable for you?

Best regards,
Darijus Strasunskas, PhD
Principal knowledge engineer
PCA Services – industrial data interoperability
http://www.posccaesar.com/
