

# **PI ADD-IN FUNCTIONS FOR THE 20/20 SPREADSHEET**

by

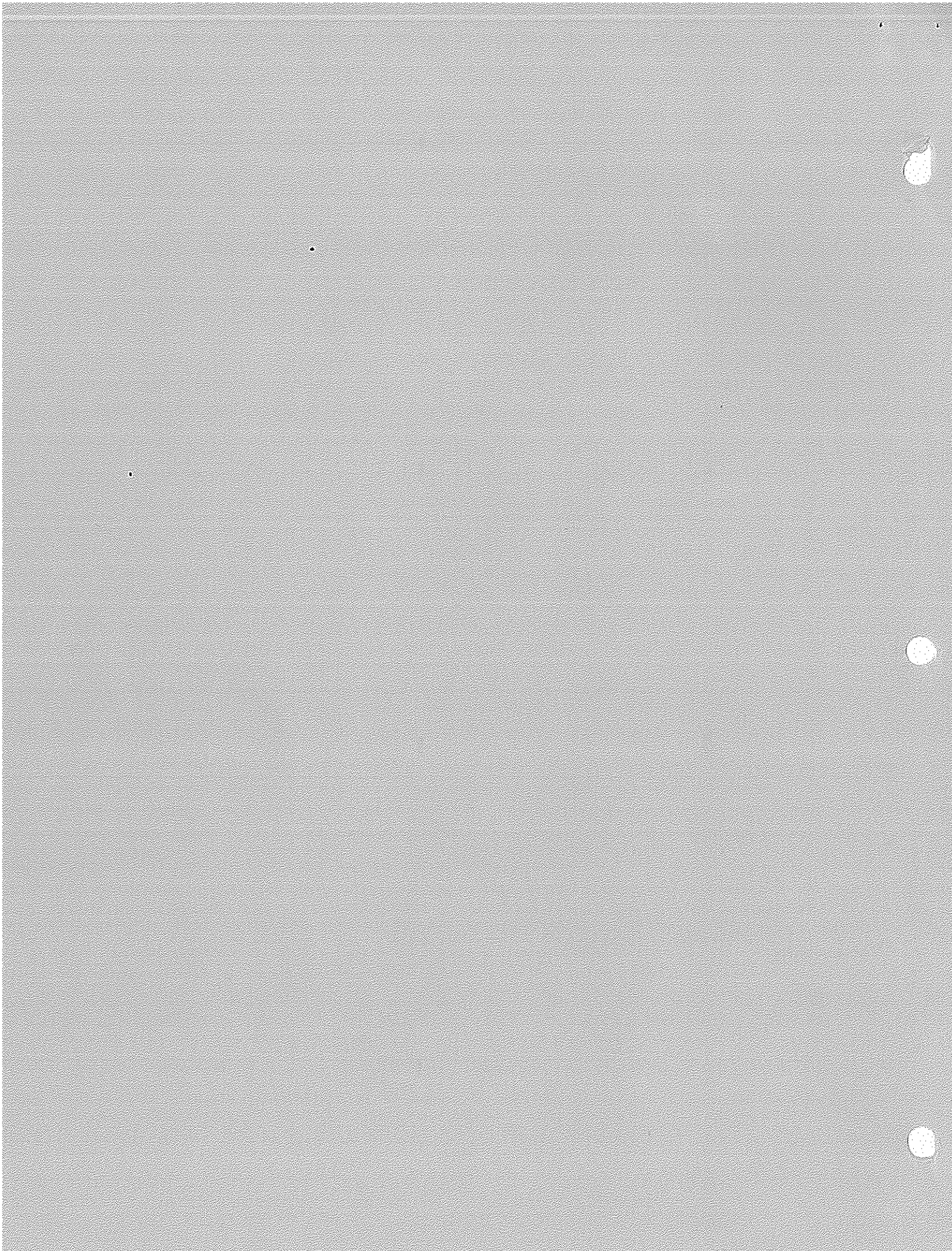
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Presented at the

**1993 PI SYSTEM  
USERS CONFERENCE**

March 1-3, 1993  
Hyatt Regency  
Burlingame CA

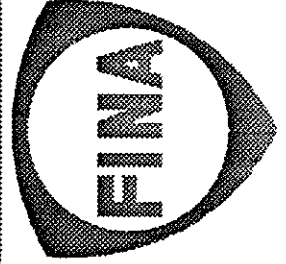
M22/W14



**David Patin**  
**Sr. Applications Programmer/Analyst**  
**Fina Oil and Chemical Co.**  
**Port Arthur Texas Refinery**

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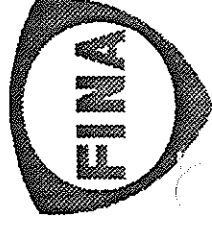
# **PI Add-In Functions for the 20/20 Spreadsheet**



# **What is 20/20?**

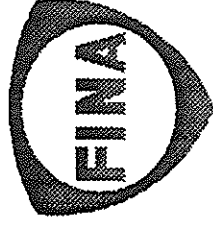
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20/20 is a VAX/VMS based spreadsheet  
from Computer Associates.



# **What is the PI - 20/20 Interface?**

The PI-20/20 interface is a live link between the 20/20 spreadsheet and the PI System. This interface was developed in house by the Information Systems Group at Fina's Port Arthur Texas Refinery.



# **Tools Used to Write the Interface**

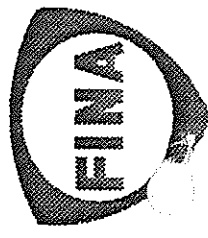
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20/20 Spreadsheet

20/20 Openlink

PI Programmer's Toolkit

VAX Fortran



## **PI-20/20 Functions**

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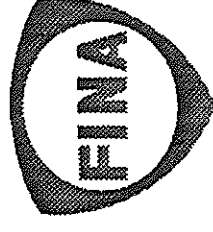
**@PI\_XA - User Defined Average for a Tag**

**@PI\_CUR - Snapshot value for a tag.**

**@PI\_DA - Daily average for a tag.**

**@PI\_DES - Tag description**

**@PI\_EU - Tag Engineering Unit**

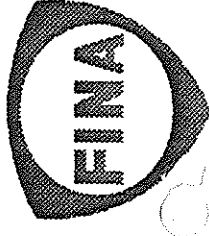


## **@PI\_XA**

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**@PI\_XA(TagName,StartTime,EndTime)**

Returns the average value of a tag for a specified time range.



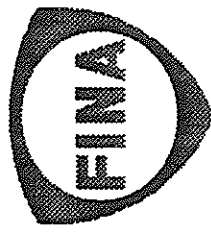


# **@PI\_CURR**

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**@PI\_CURR(TagName)**

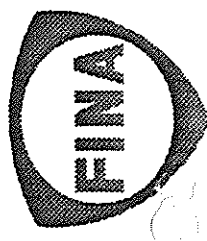
Returns the snapshot value for the specified tag.



# @PI\_DA

@PI\_DA(TagName,Date)

Returns the daily average value of a tag for the specified date.

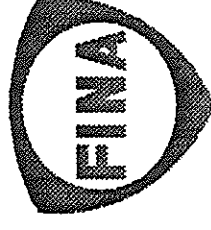


## **@PI\_DES**

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**@PI\_DES(TagName)**

Returns the description of the specified tag.

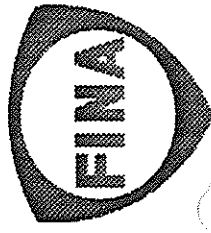


# **@PI\_ENG**

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**@PI\_ENG(TagName)**

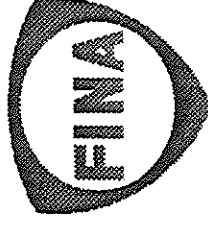
Returns the engineering units for the specified tag.



# How Fina Uses the PI-20/20 Interface

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Unit Monitoring  
Unit Heat and Material Balances  
Environmental Waste Water Reporting  
Calculations Using Raw Historical Data



# PI-20/20 Interface

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Questions?

