Application Data Sheet
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Pulp and Paper Industry

Common Conductivity Applications in the Pulp and Paper Industry

The purpose of this guide for selecting conductivity equipment is to assist you in making the best choice for any given application. These common applications are seen on many pulp and paper mill design projects, although, there will be exceptions and applications not included on this list. Furthermore, the sensors specified can be selected with different mounting configurations and cell constants depending on the particular application need.

	APPLICATION	SENSOR	FULL SCALE RANGE
DEMINERALIZER:	Process Input Water	402-13	40-4,000 µS/cm
	Process Output Water (DI)	402-12	20-200 µS/cm
	Acid/Caustic Cleaning	228-02-56	0-10% NaOH or HCl
DIGESTER:	Fouled Condensate	228-02-56	1-10 mS/cm
	White Liquor (Alkali)	228-02-54-62, 242-SS-A4-F4	500-1000 mS/cm
BROWN STOCK WASHERS	Filtrate Lines	228-02-56	1-500 mS/cm
EVAPORATORS:	Fouled Condensate	228-02-56	1-100 mS/cm
	Reused Condensate	400-11-54	2-200 µS/cm
BLEACH PLANT:	Stock Lines	228-02-56	10-100 mS/cm
RECOVERY:	Green Liquor	228-02-56	100-1,000 mS/cm
	Caustic Tanks	226-02-56-80	500-1,000 mS/cm
WASTEWATER:	Sewers	226-02-56-80	1-50 mS/cm
	Fouled Condensate	228-02-56	1-10 mS/cm
PAPERMACHINE:	Stock Prep	226-02-56-80	10-100 mS/cm
	Whitewater Makeup	402-13	40-4,000 µS/cm

All analyzers from the following table are compatible:

	400 series	200 series
AC powered:	54eC, 1055-01-20	54eC, 1055-01-21
Non-loop DC powered:	1055-02-20	1055-02-21
Loop DC powered	5081-C, Xmt-C	5081-T, Xmt-T

Notes:
1. All analyzer models use the HART protocol except the Models 1055 and 1181.
2. Units for Conductivity are micromhos/cm (µmho/cm) or microsiemens/cm (µS/cm). At higher ranges the units are millimhos/cm (mmho/cm) or millisiemens/cm (mS/cm). 1.0 mmho/cm = 1.0 mS/cm = 1000 µS/cm = 1000 µmho/cm.


MODEL 54eC


MODEL 1055


MODEL 5081-C


MODEL Xmt-C

Emerson Process Management

Rosemount Analytical Inc.
2400 Barranca Parkway
Irvine, CA 92606 USA
Tel: (949) 757-8500
Fax: (949) 474-7250

http://www.raihome.com

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