

ChemIndustrial BATCHING SYSTEM questionnaire

Instructions:

1. Complete ALL contact and project information requested on this sheet (Page 1).
2. Complete a separate BATCH INGREDIENT sheet (Page 2) for each batch ingredient.
3. Complete one BATCH SYSTEM CONFIGURATION sheet (Page 3) for the whole system.

See on-line examples of completed forms.

Need help with this questionnaire? Call, fax or e-mail us using ChemIndustrial's contact information at the bottom of this page.

Customer contact information

Person: JOHN DOE
 Company: ACME INC
 Title: PROJECT ENGINEER
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 Address 2: PO BOX #24
 City, State, Zip: ANYVILLE, WI 53088
 Country: USA
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 e-mail: jdoe@acme.com
 website: www.acme.com
 Date this form was completed: 15-JULY-05


Project information

Project name: PICNICVILLE FLAVORED SYRUP
 BATCH AUTOMATION
 Project location: ACME PLANT IN PICNICVILLE IA
 Project needs to be in operation by (date): 10-JAN-06

Please provide a short description of what you want the **Batching System** to accomplish:
 (Attach a sketch or drawing if needed for clarity)

SYRUPS ARE BATCHED ACCORDING TO ANY ONE OF
 50 RECIPES. RECIPES ARE MAINTAINED ON A PC
 THE RECIPES ALWAYS HAVE WATER, SWEETENER
 AND FLAVOR CONCENTRATE. WATER IS FROM THE
 PLANT'S EXISTING CITY WATER SYSTEM. 3 KINDS
 OF SWEETENER ARE USED IN VARYING QUANTITIES
 6 FLAVOR CONCENTRATES ARE USED, 1 OR 2 AT A
 TIME

Batch ingredient information
(complete one sheet for each ingredient)

Customer project name: PICNICVILLE FLAVORED SYRUP BATCH AUTOMATION				
Name of ingredient (may be omitted for process secrecy): SWEETENERS (3 TYPES)				
Letter designation of ingredient: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z				
Ingredient characteristics: (circle as many as needed) (Add more as needed)	Liquid	Gas	Slurry	Solid
	Aqueous solution	Acid	Base	Organic solvent
	Food Ingredient	Lubricant	Fuel	Cleaning Agent
	Granular Chunks	Powder	Paste	Block
Temperature range: Minimum: = 70 ⁰ Normal = 70 ⁰ Maximum = 90 ⁰ °F or °C				
Viscosity (provide value if known): Or is like (describe by marking scale):Water.....Motor Oil..... BETWEENMolasses..... 				
Density or Specific Gravity : 1.17 - ALL ARE STANDARDIZED TO THIS VALUE				
Batch Quantity:	Minimum: = 70	Normal = 90	Maximum = 130	Units US GAL
Batch Proportion:	Minimum: = 10 %	Normal = 15 %	Maximum = 20 %	W/W
Source of ingredient:	Existing tank	New tank	Plant pipework	
	Tote	Drum	Hand addition	
3 TANKS @ 550 US GAL Other (describe below)				
Other notes about this ingredient: B, C, D ARE ALL TREATED THE SAME. EACH BATCH USES ONLY ONE OF THEM. B = CANE SUGAR SWEETENER C = CORN SUGAR SWEETENER D = MALT SYRUP SWEETENER				

Batch ingredient information
(complete one sheet for each ingredient)

Customer project name: *PICNIC VILLE FLAVORED SYRUP
BATCH AUTOMATION*

Name of ingredient (may be omitted for process secrecy): *FRUIT CONCENTRATES*

Letter designation of ingredient: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Ingredient characteristics:	Liquid	Gas	<u>Slurry</u>	Solid
(circle as many as needed)	Aqueous solution	Acid	Base	Organic solvent
(Add more as needed)	Food Ingredient	Lubricant	Fuel	Cleaning Agent
	Granular	Powder	Paste	Block
	Chunks			

*FRUIT PARTICLES
IN WATERY SYRUP*

Temperature range: Minimum: = *40*⁰ Normal = *40*⁰ Maximum = *50*⁰ (F) or °C
ALL STORED IN COOLER

Viscosity (provide value if known):
Or is like (describe by marking scale):Water.....*↓* Motor Oil.....Molasses.....

Density or Specific Gravity: *1.15*

Batch Quantity: Minimum: = *5* Normal = *10* Maximum = *15* Units
US GAL

Batch Proportion: Minimum: = *1* % Normal = *2* % Maximum = *4* %

Source of ingredient: Existing tank New tank Plant pipework
Tote Drum Hand addition
Other (describe below)

Other notes about this ingredient:
*E THRU J ARE ALL CONCENTRATED
FRUIT FLAVORS. SOMETIMES TWO FLAVORS
(SUCH AS ORANGE AND PINEAPPLE) ARE
USED IN THE SAME BATCH*

Instructions:

Please review the on-line example before completing this sheet.

Batch system configuration information

Customer project name: **PICNICVILLE FLAVORED SYRUP BATCH AUTOMATION**

Ingredient Letter	Ingredient source	Ingredient valve	Ingredient Manifold	Ingredient pump	Finished batch manifold	Finished batch valves	Finished batch destination
A	PIPE	AUTO					
B	TANK	AUTO		GEAR			
C	TANK	AUTO					
D	TANK	AUTO					
E	TOTE	AUTO		GEAR			
F	TOTE	AUTO		GEAR			
G	TOTE	AUTO		GEAR			
H	TOTE	AUTO		GEAR			
I	TOTE	AUTO		GEAR			
J	TOTE	AUTO		GEAR			
						AUTO	TANK
						AUTO	TANK
						AUTO	TANK
	GEAR = GEAR PUMP						

Process to be installed:

Process subject to temperature above 0C/32F:

Process subject to temperature above 40C/105F:

Indoors

Yes

Yes

Outdoors

No

No

Special concerns:

Sanitary?

Washdown?

Explosion proof (XP)?

Other?: Please explain:

Notes:

1. MINIMIZE DEAD POCKETS IN PIPEWORK
2. WATER RUNS LAST TO FLUSH FINISHED BATCH MANIFOLD.