



SUBJECT: SETTLING P14 FLUORESCENT SCREENS
Process Specifications

1. EQUIPMENT As specified in 34-17-14.
2. MATERIALS
 - Z30 Zinc sulfide suspension at 240 mg/cc
 - Z603 Zinc-cadmium sulfide suspension at 53.3 mg/cc.
 - W7K Distilled, W7J Distilled, or *W60D Deionized Water.
 - P264B Potassium silicate, purified, 10%.
 - P69B Potassium sulfate, purified, 1N.
 - H7 Hydrofluoric acid

MAY 1958



HYDROFLUORIC ACID SAFETY PRECAUTIONS: See 33-2-7A

3. PREPARATION OF FINAL SCREEN SUSPENSIONS

- a. Z603 Suspension:
Empty stock solution bottle (3000 cc) as prepared from mill, at a concentration of 53.3 mg/cc, into agitator jar and dilute with 1000 cc distilled or deionized water used to rinse stock solution bottle to bring concentration to 40 mg/cc.
- b. Z30 Suspension:
Use stock suspension as prepared for P7 screens (240 mg/cc) and dilute 300 cc of this stock suspension with 3300 cc distilled or deionized water to bring the concentration to 20 mg/cc

4. PROCEDURE

- a. Rinse bulbs with distilled or deionized water.
- b. Place bulbs on settling table.
- c. Apply screen material as specified in Part 5 below.
- d. Use 0.5-1.0% hydrofluoric acid for neck and face plate washing.
- e. Alternate bulb cleaning process. See 34-17-4P.

SCALE—
DIMENSIONS IN

UNLESS OTHERWISE SHOWN. (Continued on page 2)
DIMENSIONS SHOWN WITHOUT TOLERANCES ARE DESIGN CENTERS

25-541-6-62 PCL22989-133JD

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13D26-R1



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5. SCREEN APPLICATION SPECIFICATIONS

Tube Type	Layer Number	Fluorescent Material mg.	Screen Weight, mg/cm.2	Cushion Water, cc.	Phosphor Volume, cc.	Phosphor Concentration mg./cc.	Silicate Binder, cc.	Sulfate Electrolyte, cc.	Suspension Water, cc.	Suspension per Bulb, cc.	Funnel Type	Minimum Settling, hr.	Operations
→ 5FP14	1	760 Z603	7	-	38	20	*29	45	*163	275	Open	1	Apply 2nd layer
	2	420 Z30	4	1st layer	21	20	-	-	125	146	Underwater	4	Pour, wash neck, dry, wash face
→ 7MP14	1	1560 Z603	7	500	78	20	*44	65	*163	350	Open	2	Apply 2nd layer
	2	890 Z30	4	1st layer	45	20	-	-	Ca.105	Ca.150	Underwater	3	Pour, wash neck, dry, wash face

ENGINEERING SECTION
 STANDARDIZING

24-552-2-64 PCL26696-126JD

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