

CLIENT: SANTA BARBARA
 PROJECT: Charles Meyer Desalination Plant Reactivation
 JOB NO.: 8083B.60
 DATE: 1/19/2015
 BY: TFS
 COMMENTS: Calculate Max. Intake Through-Screen Velocity @ 10,000 AFY Based on 1991 Design

SIDE PANELS

Opening Length: 0.5625 inch 0.046875 ft
 Opening Width: 3.5625 inch 0.296875 ft
 No. of Vertical Openings: 96 per Panel
 No. of Horizontal Openings: 11 per Panel
 No. of Panels per Intake 16
 No. of Intakes 2
Open Area (Total): 470.25 ft²

TOP PANELS

Opening Length: 1.25 inch 0.104167 ft
 Opening Width: 1.25 inch 0.104167 ft
 Screen Opening Cross Member: 0.25 inch 0.020833 ft
 Panel Area 1 Screen Dim. 1: 46 inch 3.833333 ft
 Panel Area 1 Screen Dim. 2: 32 inch 2.666667 ft
 No. of Panel Area 1 2
Subtotal Open Area Panel Area 1: 14.2 ft²
 Panel Area 2 Screen Dim. 1: 57.5 inch 4.791667 ft
 Panel Area 2 Screen Dim. 2: 32 inch 2.666667 ft
 No. of Panel Area 2 2
Subtotal Open Area Panel Area 2: 17.7 ft²
 Panel Area 3 Screen Dim. 1: 69 inch 5.75 ft
 Panel Area 3 Screen Dim. 2: 72 inch 6 ft
 No. of Panel Area 3 1
 Panel Area 3 Obstruction Dim 1: 8 inch 0.666667 ft
 Panel Area 3 Obstruction Dim 2: 55 inch 4.583333 ft
 No. of Obstructions 2
Subtotal Open Area Panel Area 3: 17.8 ft²
 No. of Intakes 2
Open Area (Total): 99.6 ft²

TOTAL INTAKE OPEN AREA: 569.8 ft²
MAX INTAKE FLOW RATE: 15,898 gallons per minute (gpm)
35.4 ft³/second
INTAKE VELOCITY: 0.1 ft/second