PROCESSING ENGINEERING

PERFORATED PLATE PRESSURE HEAD LOSS

INPUT DATA 계산실행 ***V1.0 Pgm By Ryu-ChangMyong/P.E***

* ITEM NO.	E-1004		* DESCRIPTION	PES21	
FLUID CONDITION					
* Fluid Density, ρ	63.9	Kg/m^3	* Fluid viscosity, μ	0.0115	Cp
* Fluid Selection	GAS		* Fluid Flow rate, M	870000	Kg/hr
PERFORATED PLATE DESIGN					
* Plate thickness, t	3	mm	* Plate Width, D	1500	mm
* Hole diameter, d	15	mm	* Plate Length, L	15000	mm
* Total quantity, Q	5000	ea			
RESULT OF CALCULATION					
* Plate Area	22,500,000	mm^2	* Hole opening Area, OA	883,572	mm^2
* Prosity	3.93	%	*Viscosity, μ	0.000012	kg/m.s
* Specific Volume, Vs	0.01565	m^3/kg	* Volume Flow Rate, Vm	13,615.0	m^3/hr
* Velocity, V	4.28	m/s	* Re=ρVD/μ	356,753	
			* Flow type	Turbulent	
* Friction loss factor by Haaland's Equation for gas , by Blasius's Equation for Liquid, f	0.34600		* Pressure Drop, ΔP by Darcy-Weisbach's formula	64.62	mm
				6.33	mbar

MENU PAGE-->>

Copyright ⓒ 2001 피이에스21 All rights reserved.
Please contact E-mail ***pes21@pes21.com***