LDi-P31

LDi PULSEVIEW PROGRAM INPUT DATA.

ANALYSIS AND PREVENTION OF PUMP PULSATION AND CAVITATION.

1 Liquid Parameters.		
(a) density of the liquid:		grams/cc
(b) compressibility of the liquid and any absorbed gas:		litres/bar
(c) effective vapour pressure at pump inlet temperature:		°C
2 Pipe Parameters		
(i) Suction Side		
(a) expected theoretical steady state suction pressure:		BarA
(b) length of pipe from supply to suction acceleration head loss preventer inlet:		meters
(c) inside diameter of pipe from supply to preventer inlet:		mm
(d) length of pipe from preventer to pump suction inlet:		meters
(e) inside diameter of pipe from preventer to pump suction inlet:		mm
(ii) Discharge Side		
(a) discharge pressure against which the pump must deliver:		BarA
(b) length of pipe from pump discharge check valve to discharge acceleration head preventer inlet:		meters
(c) inside diameter of pipe from pump discharge to preventer inlet:		mm
(d) length of pipe from preventer discharge to final resistance:		meters
(e) inside diameter of pipe from preventer discharge to final resistance:		mm
Pump Parameters		
(i) Pumping Mechanism		
(a) connecting rod length:		meters
(b) crankshaft radius - i.e. half the piston stroke:		meters
(c) piston diameter:		meters
(d) effective dead volume of pump chamber:		litres
(e) number of strokes of one displacer per minute:		
(ii) Suction Check Valves		
(a) valve seat diameter:	ID OD	mm
(b) valve stroke:		mm
(c) valve mass, plus half the weight of one valve spring:		Kg
(d) starting resistance to compression of spring:		Kg
(e) spring rate:		Kg/mm
(iii) Discharge Check Valves		
(a) valve seat diameter:	ID OD	mm
(b) valve stroke:		mm
(c) valve mass, plus half the weight of one valve spring:		Kg
(d) starting resistance to compression of spring:		Kg
(e) spring rate:		Kg/mm

ADDITIONAL INFORMATION: REQUIREMENTS FOR THE MATERIALS OF CONSTRUCTION:

A. Metal: B. Membrane/Seal Material

C. Liquid(s) Description:

D. Operating/Design Temperature:

E. Specified Design Pressure: PSI @ °F. M.D.M.T.: °F.

G. Connection Type, Size & Rating : Suction:

Discharge:

H. Any other Information that you believe may be relevant:

CUSTOMER:

CUSTOMER REF.:

ENGINEER NAME:

POSITION:

QUANTITY:

Q No.:

ISSUED BY:

CHECKED BY:

ISSUE DATE: [DAY MONTH YEAR]

Tech. License M. Packer since '63

LIQUID DYNAMICS INTERNATIONAL Inc.

Analysis, Diagnostics, Prediction by Software

Phone USA --910-270-2737 Color Fax --910-270-0320 UK (for EC) --44-161-442-6222 Color Fax --44-161-443-1486

Box 506 Hampstead NC 28443 www.liquid-dynamics.com Box 47, Stockport, SK3-0LH, UK

A Subsidiary of Liquid Dynamics International Ltd.