Performance Evaluation

M-I SWACO
A Schlumberger Company

Equipment Information

Name	Make & Model	Serial Number	Calibration	Expiration Date
Test Centrifuge	518 HV (Fully Variable)	07CF124/07FR270	n.a.	n.a.
Screw Conveyor	Quasi Axial Flow	11SC232	n.a.	n.a.
Bowl	CF315/CF319/CF318/C274/M244	06BW183	n.a.	n.a.
Centrifuge Main Drive Motor	Marelli, P = 37 kW	SD5C 2212A00016	n.a.	n.a.
Centrifuge Back Drive Motor	Marelli, P = 11 kW	Z011652	n.a.	n.a.
Gearbox	SWACO, type 9610130	/	n.a.	n.a.
(1)Flow Meter-TAG 748	Endress+Hauser	9306CE02000	20/07/2011	19/07/2012

(1) The flow meter was calibrated with water density value of 0,9995 kg/dm^3

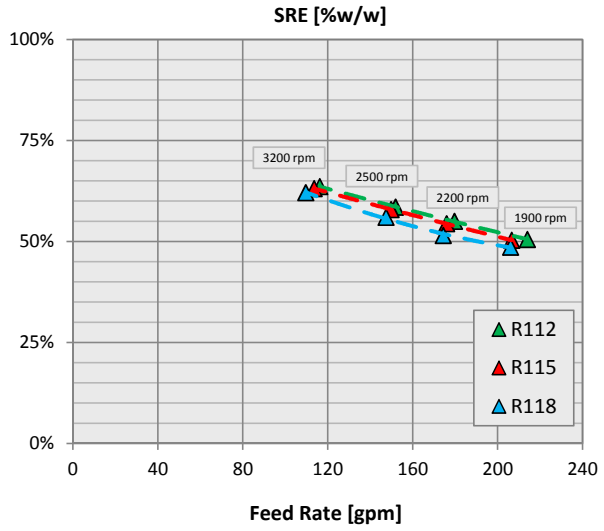
Test Factors

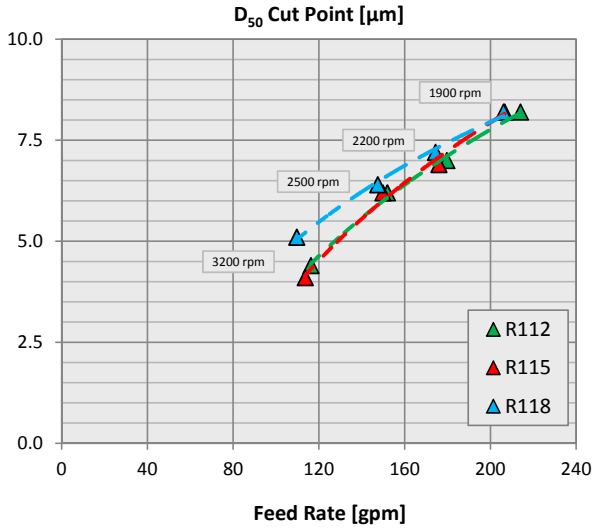
Bowl Speed [rpm]: 1900 - 3200
Pond Dams: R112 - R115 - R118
Feed Tube Type: Open Ended (Axial Flow)

Test Fluid Type: Water Based Mud
Test Fluid Temperature [°C]: 24°C
Test Fluid Density [ppg]: 10.1

Test Results

518 HV (Fully Variable)





Bowl Speed	Differential Speed	G-Force	Pond Radius	Current Absorbed		Feed Flow Rate	Liquid Return Density	Solid Discard Density	SRE %	D_{50} Cut Point
				Main Drive	Back Drive					
				Max ≤ 67 A	Max ≤ 22.1 A					
[rpm]	[rpm]	[g]	[mm]	[A]	[A]	[gpm]	[ppg]	[ppg]	[%w/w]	[µm]
1899	51	696	112	67	16	214	9.0	20.6	50.5%	8.2
2199	56	934	112	67	16	180	9.0	20.9	55.0%	7.0
2499	57	1205	112	67	17	152	8.9	20.7	58.5%	6.2
3199	63	1974	112	67	17	116	8.9	21.2	63.6%	4.4
1899	51	696	115	67	16	207	9.1	20.6	50.3%	8.2
2199	56	934	115	67	17	176	9.0	20.8	54.4%	6.9
2499	57	1205	115	67	17	150	9.0	20.9	57.9%	6.2
3199	63	1974	115	67	17	114	8.9	21.2	63.1%	4.1
1899	51	696	118	67	16	206	9.0	20.8	48.6%	8.2
2199	56	934	118	67	17	174	9.0	20.9	51.5%	7.2
2499	57	1205	118	67	17	147	8.9	21.0	56.0%	6.4
3199	63	1974	118	67	17	110	8.9	21.2	62.1%	5.1

SRE% evaluated at maximum feed rate; higher SRE% can be reached with lower feed rates

Cut Point evaluated at maximum feed rate; lower Cut Points can be reached with lower feed rates