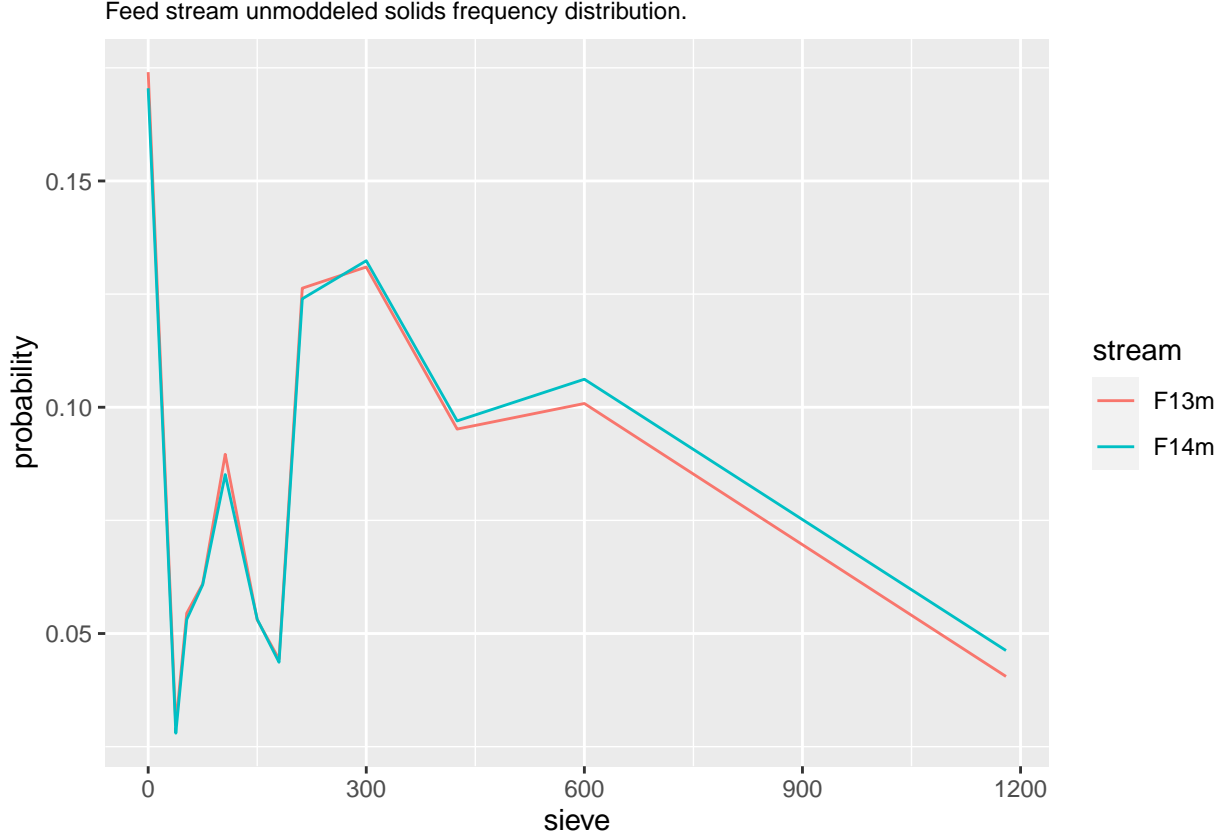


## Results and Discussion

Each test's feed stream PSD results were first compared to confirm that their distributions were similar to allow for comparative statistics.



The two most commonly used distributions in Geology and Mineral Processing and specifically comminution circuits are the Rosin-Rammler and the Gates-Gaudin-Schumann distributions.

Both models were used to model all PSD screening data to, and the subsequent best fit model was selected in each case. Model selection was determined by comparing each PSD's transformed linear model's determinant ( $R^2$ ). Interpolation between measured sizing points is conducted by the back-transformation of the model-fitted points along the respective model's distribution function.

Table 1: RR Model(formula)

stream	r.squared	adj.r.squared	pvalue	AIC
F13m	0.996	0.995	0	-26.0
F14m	0.996	0.995	0	-25.7
OS13m	0.935	0.928	0	11.2
OS14m	0.919	0.910	0	14.2
US13m	0.972	0.968	0	0.8
US14m	0.971	0.967	0	0.5

Table 2: GGS Model(formula)

stream	r.squared	adj.r.squared	pvalue	AIC
F13m	0.838	0.820	0.0001	14.4
F14m	0.839	0.821	0.0001	13.4
OS13m	0.682	0.646	0.0017	17.0
OS14m	0.655	0.617	0.0025	16.9
US13m	0.778	0.750	0.0007	38.8
US14m	0.764	0.735	0.0009	40.0

stream	r.squared	adj.r.squared	p-value	AIC	stream	r.squared	adj.r.squared	p-value	AIC
F13m	0.996	0.995	0	-26.0	F13m	0.838	0.820	0.0001	14.4
F14m	0.996	0.995	0	-25.7	F14m	0.839	0.821	0.0001	13.4
OS13m	0.935	0.928	0	11.2	OS13m	0.682	0.646	0.0017	17.0
OS14m	0.919	0.910	0	14.2	OS14m	0.655	0.617	0.0025	16.9
US13m	0.972	0.968	0	0.8	US13m	0.778	0.750	0.0007	38.8
US14m	0.971	0.967	0	0.5	US14m	0.764	0.735	0.0009	40.0