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Figures - The Spiral Jet Mill Cut Size Equation

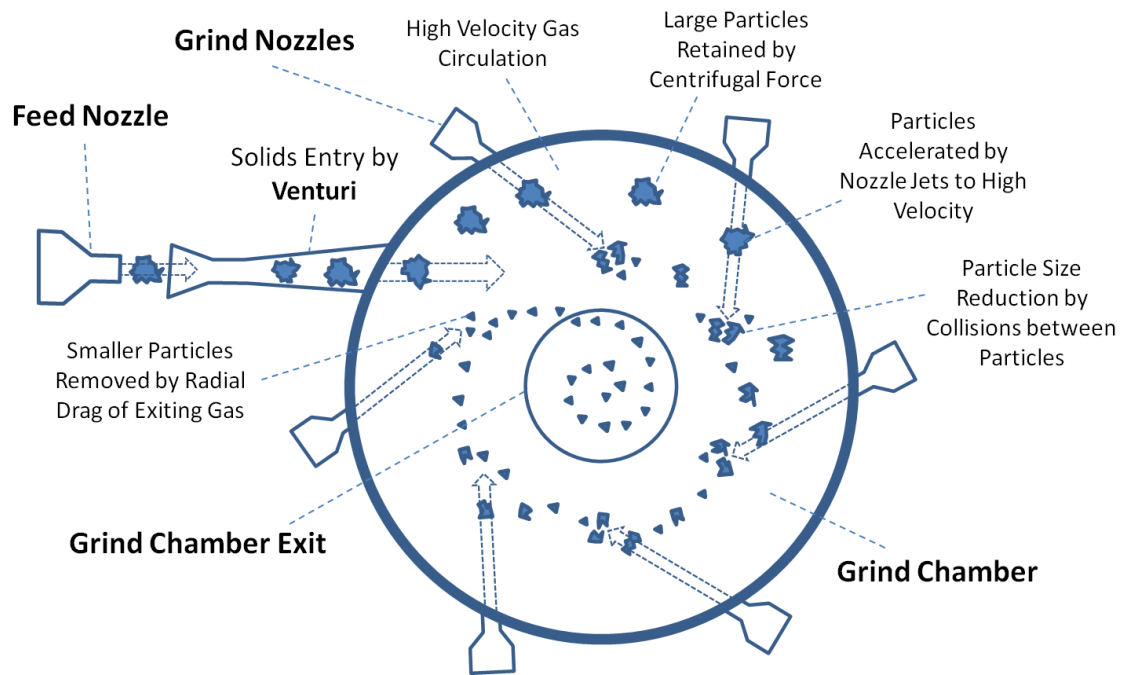


Fig. (1) Spiral Jet Mill Grind Chamber (Plan View)



Fig. (2) Spiral Jet Mill Grind Chamber (Side View)

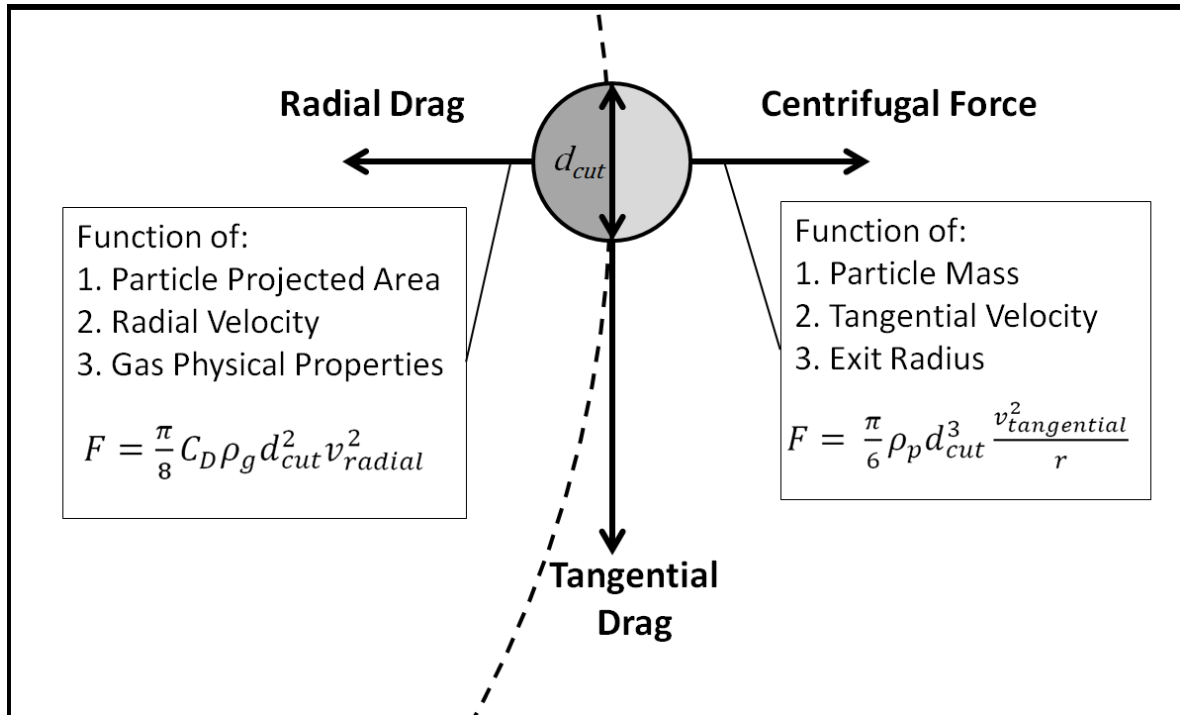


Fig. (3)

Particle Forces Balance

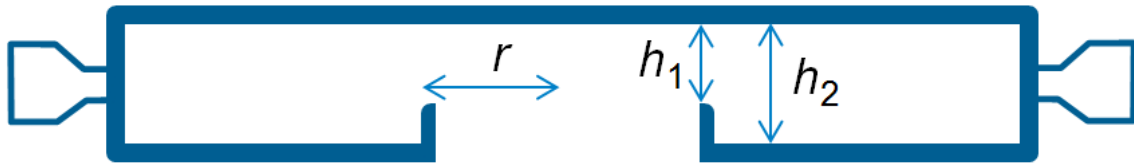


Fig. (4)

Grind Chamber Geometry

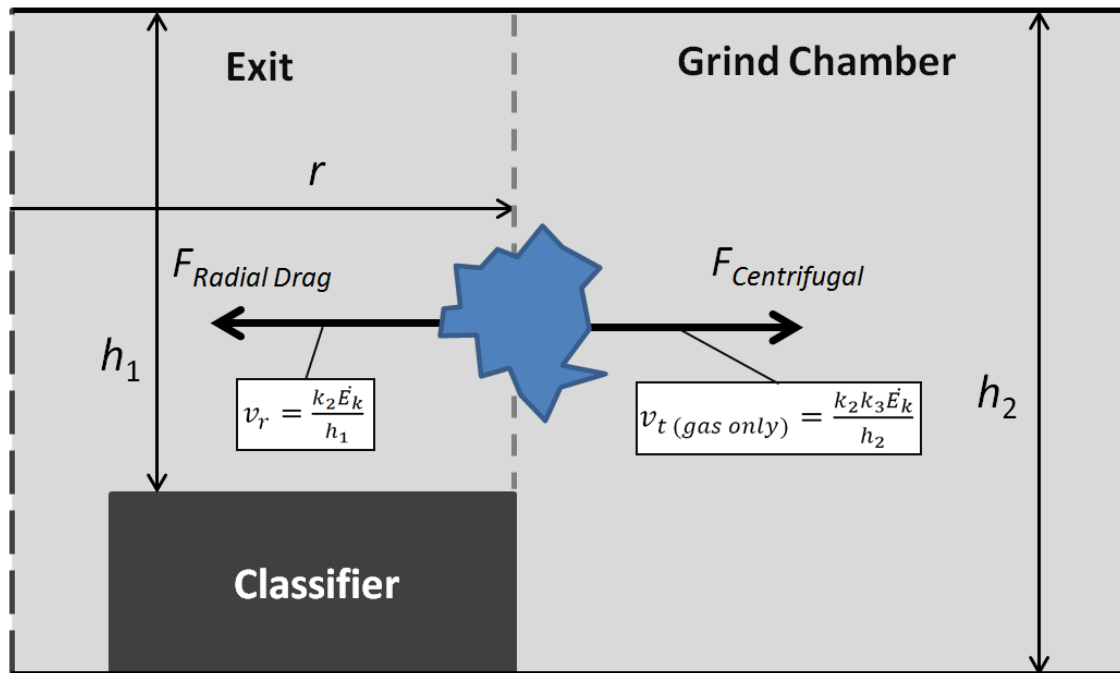


Fig. (5) Classifier to Grind Chamber Interface

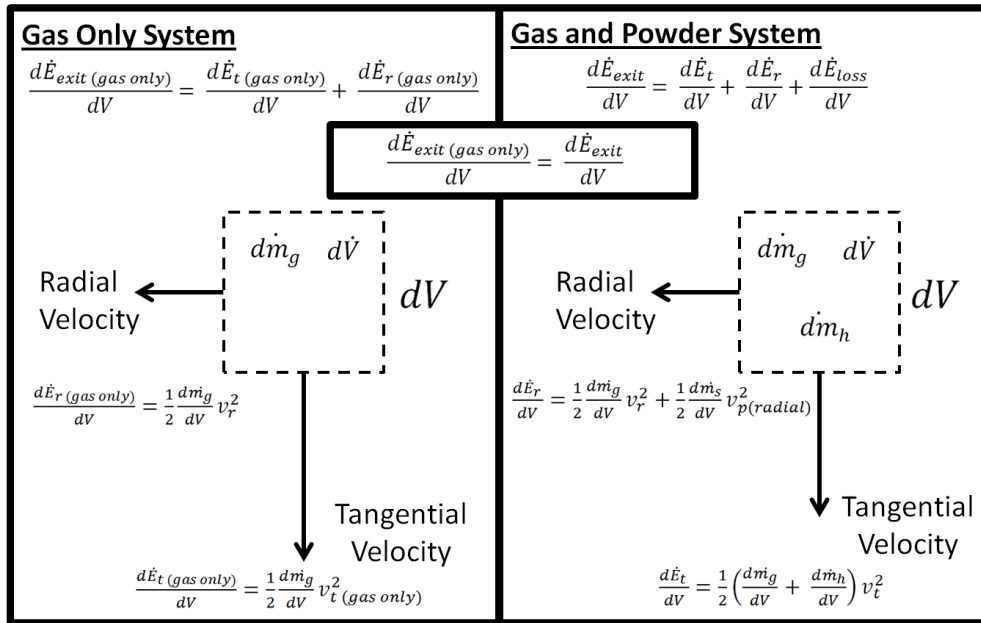


Fig. (6) Energy Rate Balance on a Unit Volume at the Grind Chamber Exit

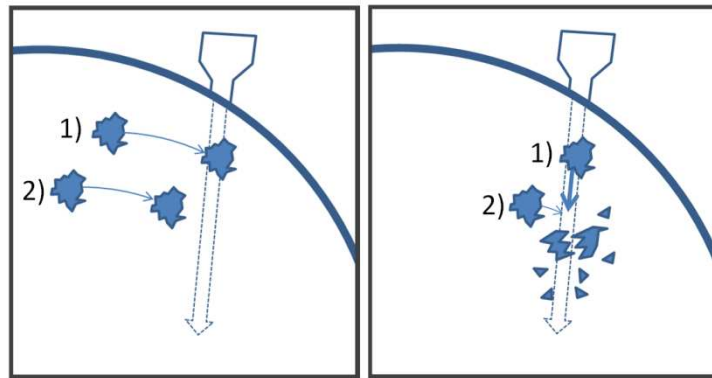


Fig. (7) Particle-Particle Collision Scenarios

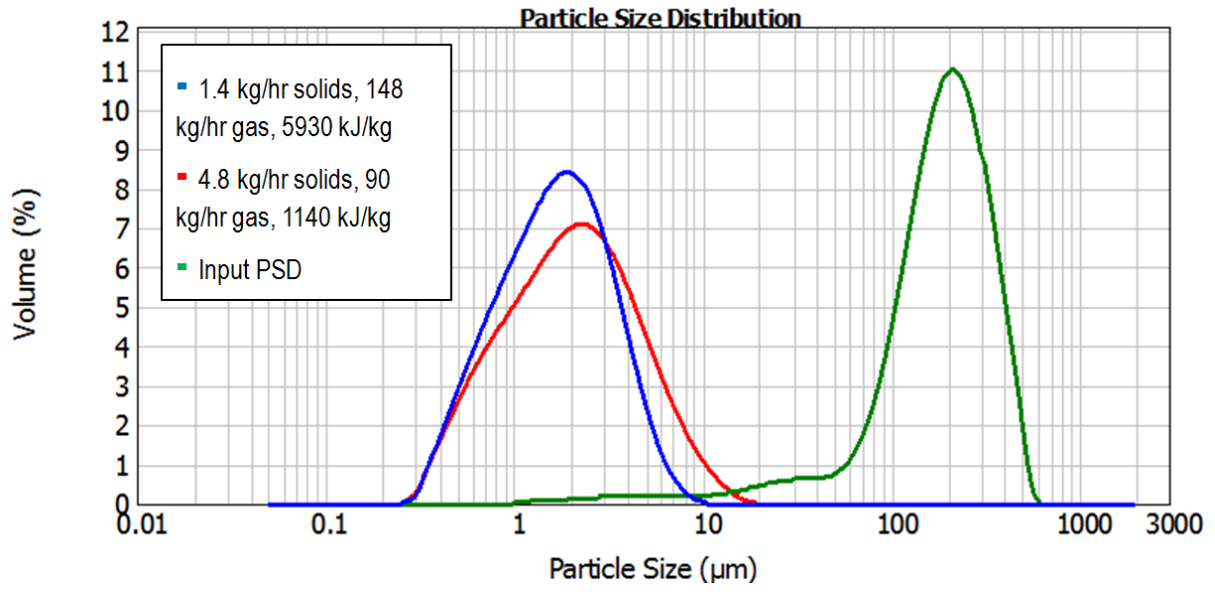


Fig. (8) Product A PSD Plots

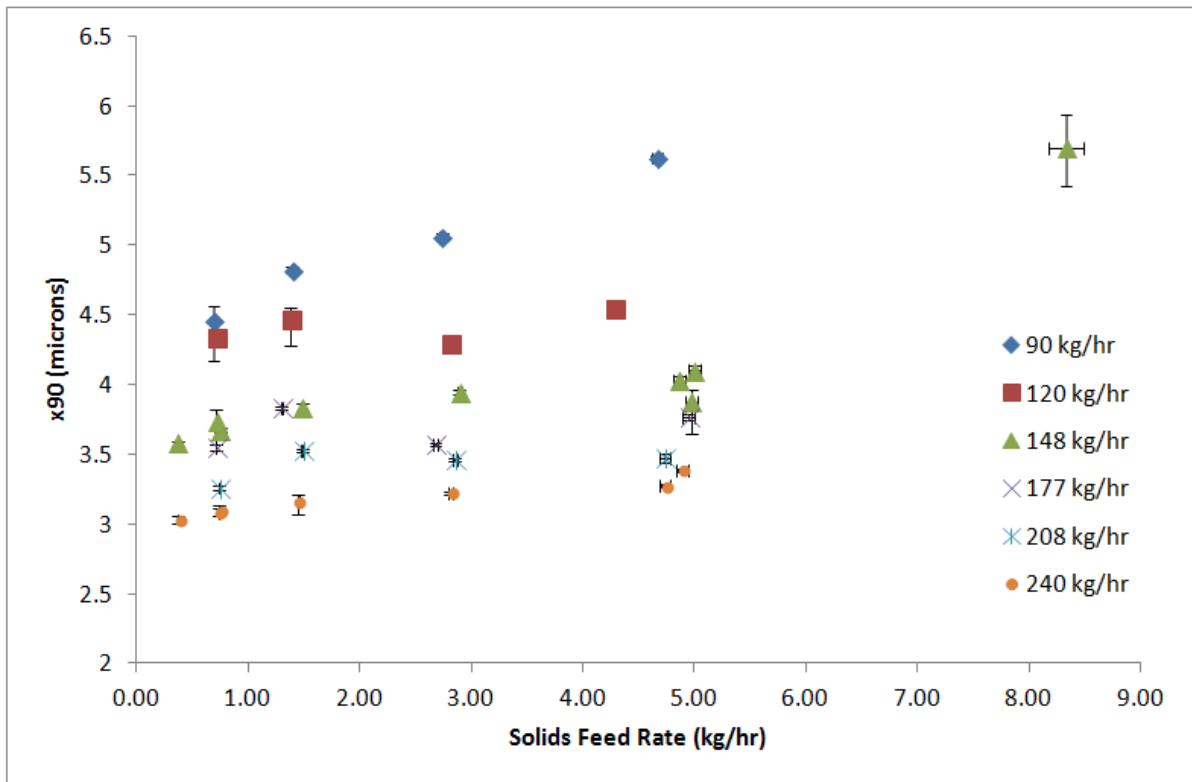


Fig. (9) Solids Feed rate against x90 with Lines of Constant Gas Mass Flow Rate

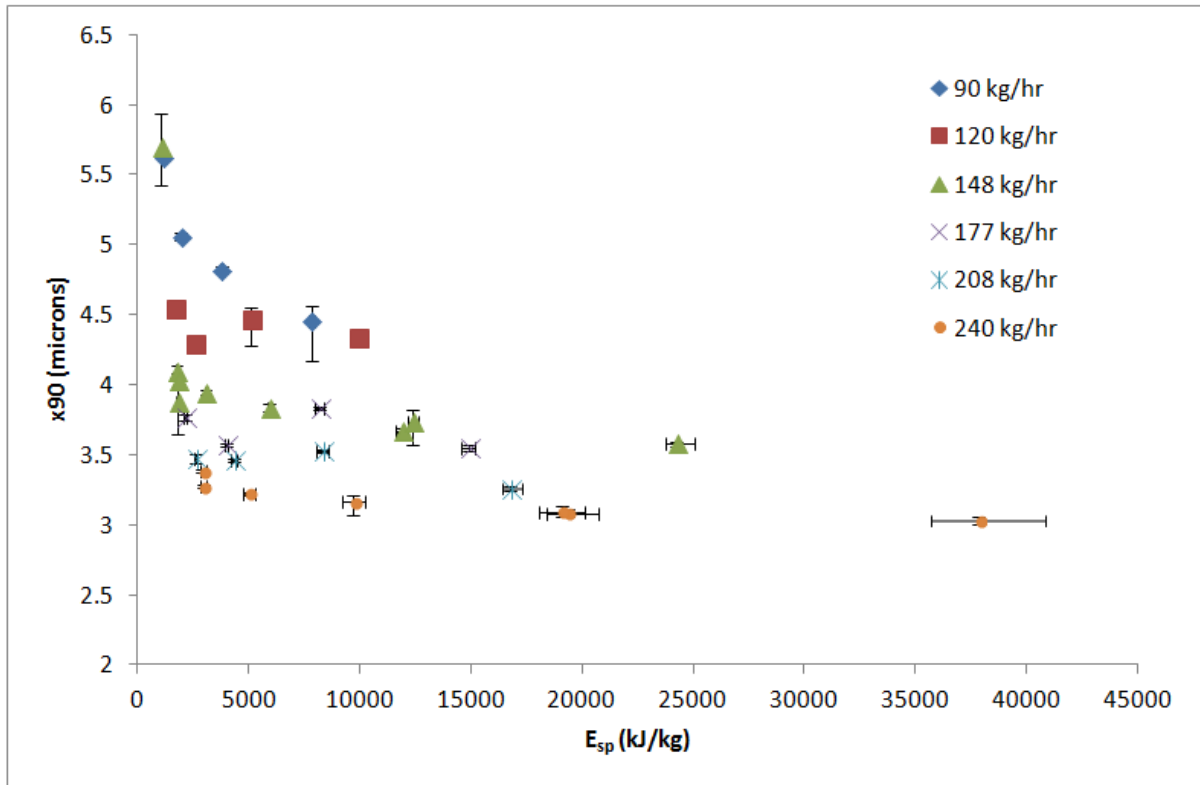


Fig. (10) E_{sp} against x90 with Lines of Constant Solids Feed Rate

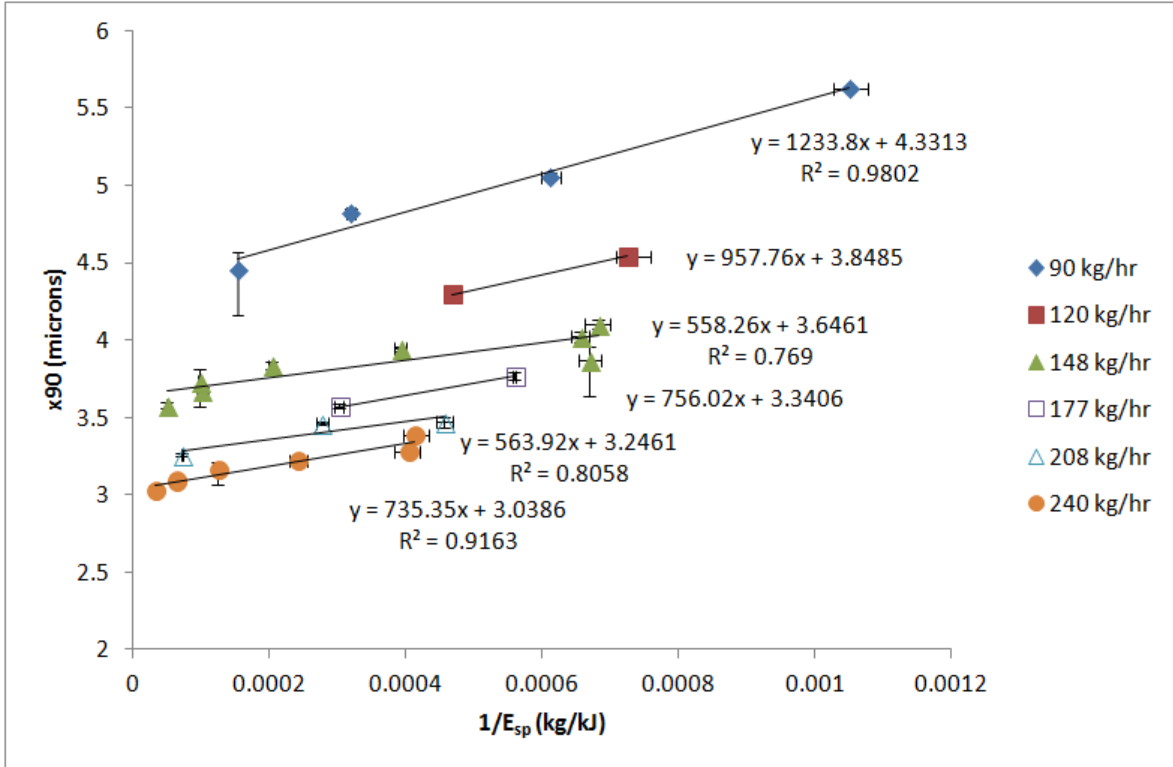


Fig. (11) $1/E_{sp}$ against x90 with Lines of Constant Gas Mass Flow Rate

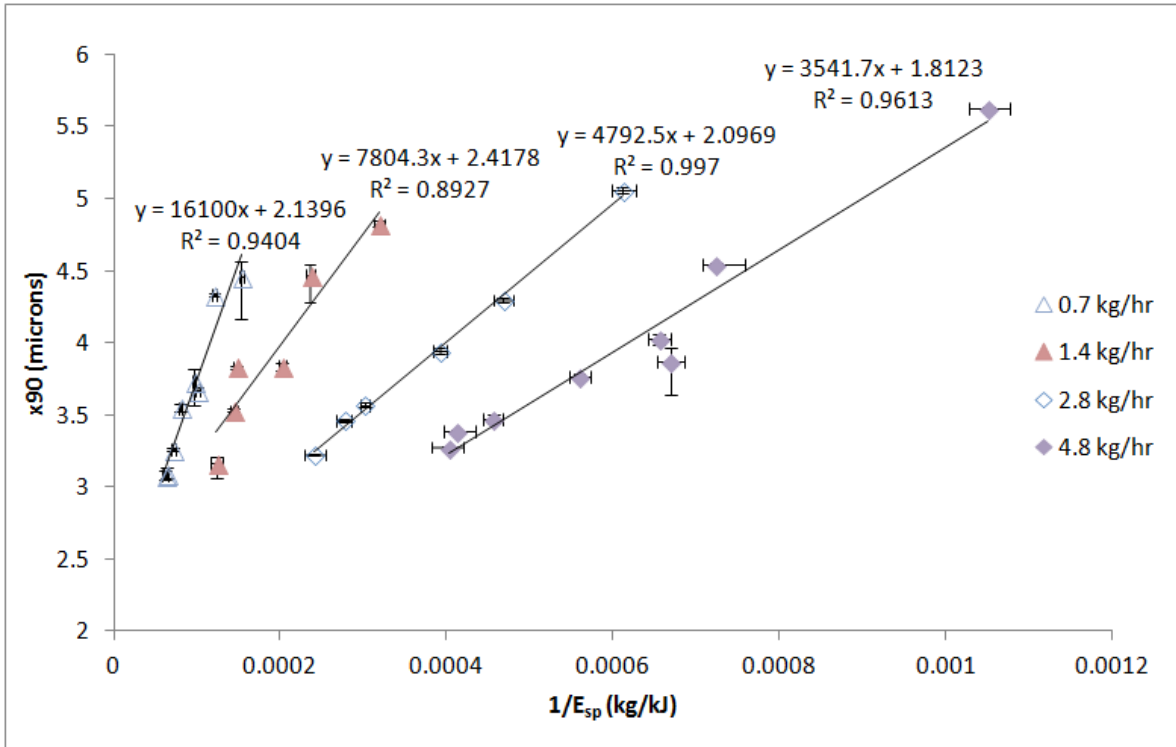


Fig. (12) $1/E_{sp}$ against x90 with Lines of Constant Solids Feed Rate

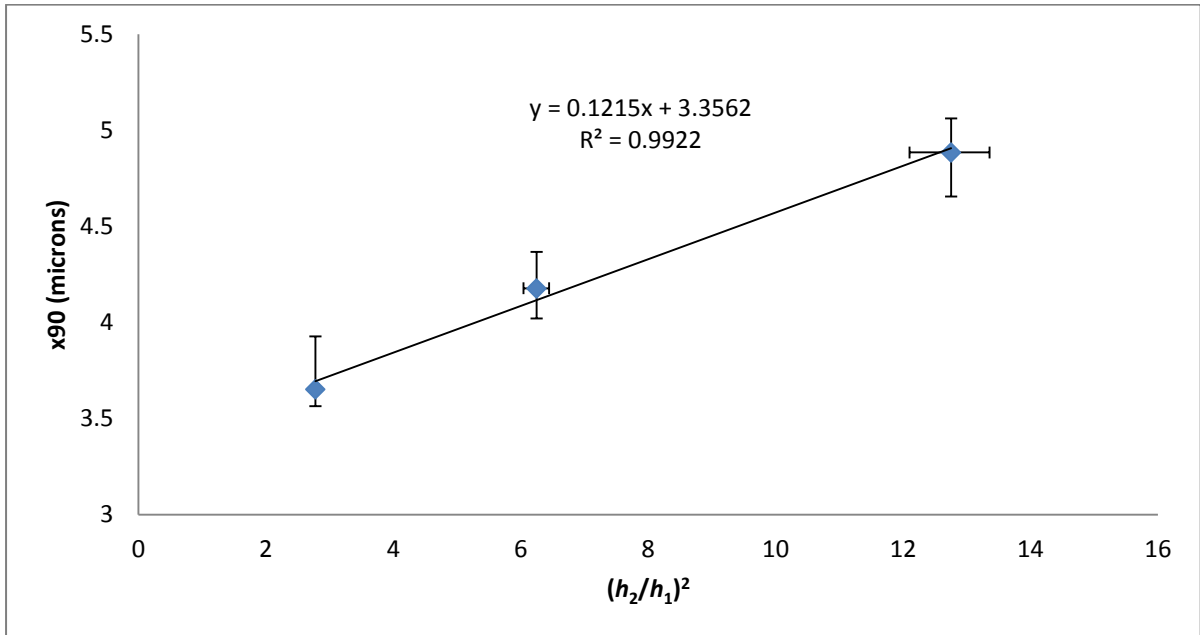


Fig. (13) $(h_2/h_1)^2$ against x_{90}

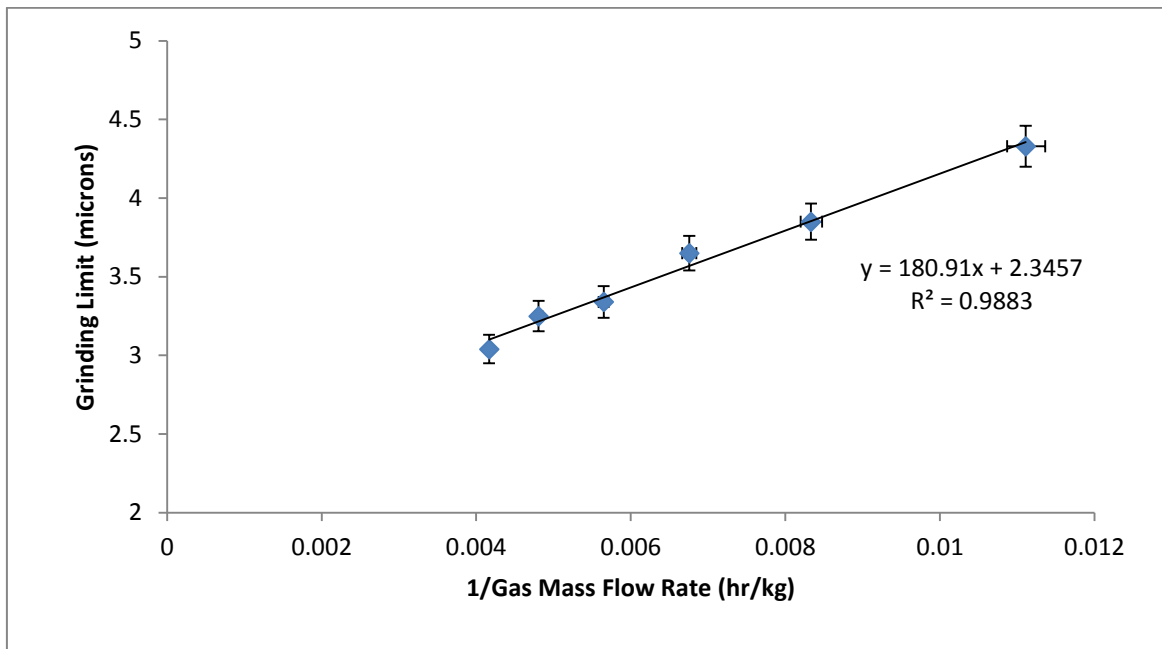


Fig. (14) 1/ Gas Mass Flow Rate against Feed Rate Reduction Grinding Limit

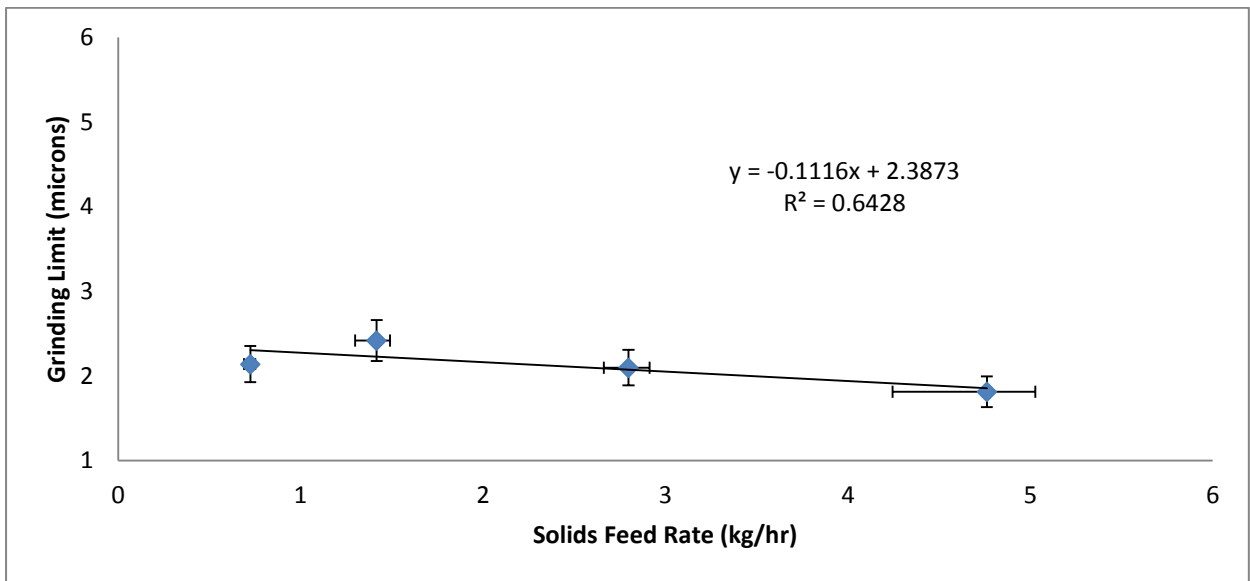


Fig. (15) Solids Feed Rate against Gas Mass Flow Rate Increase Grinding Limit

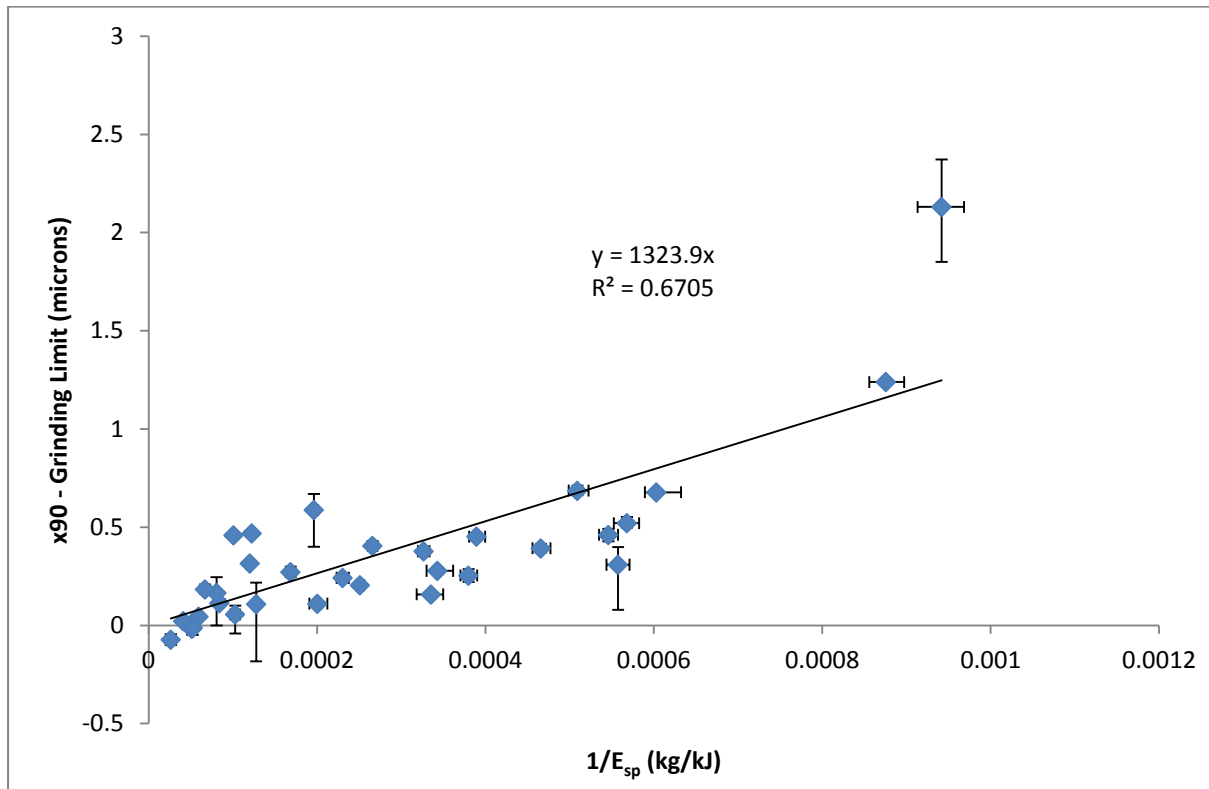


Fig. (16) $1/E_{sp}$ against x90 – Reduction in Feed Rate Grinding Limit

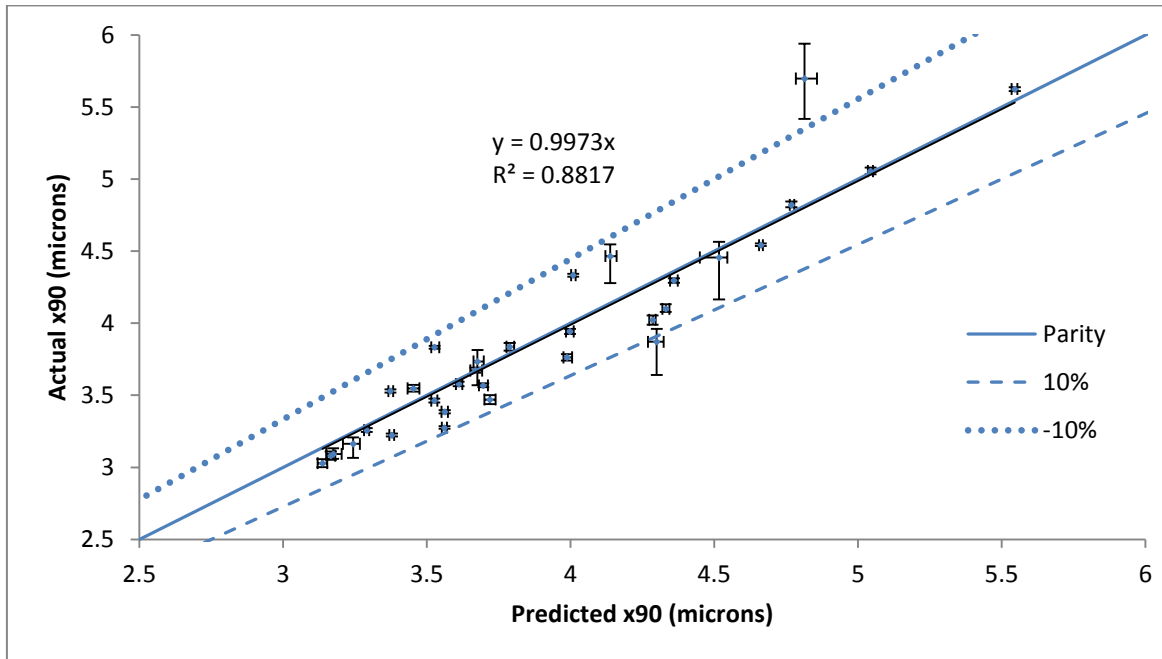


Fig. (17) Predicted x90 against Actual x90 for Product A using Eq. (34)

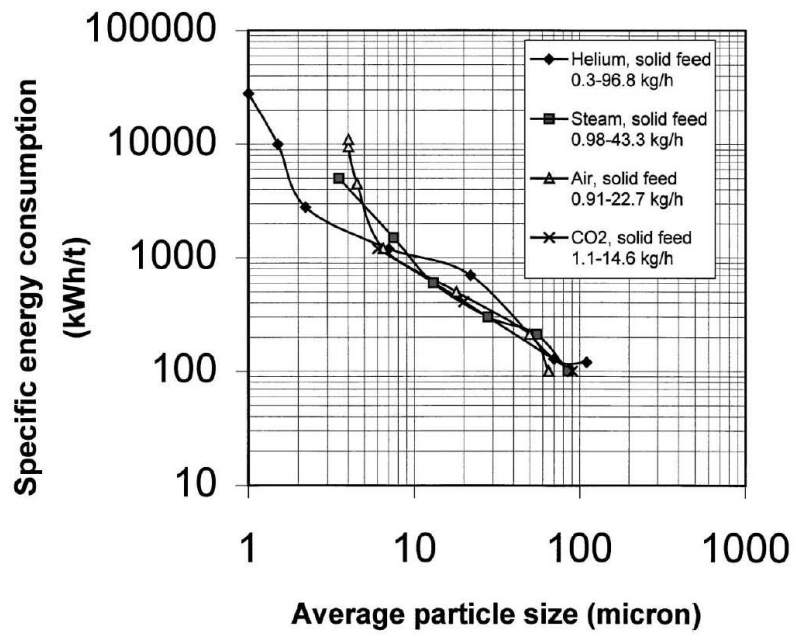


Fig. (18)

Average particle size against E_{sp} for various motive gases (Zhao and Schurr, 2002)

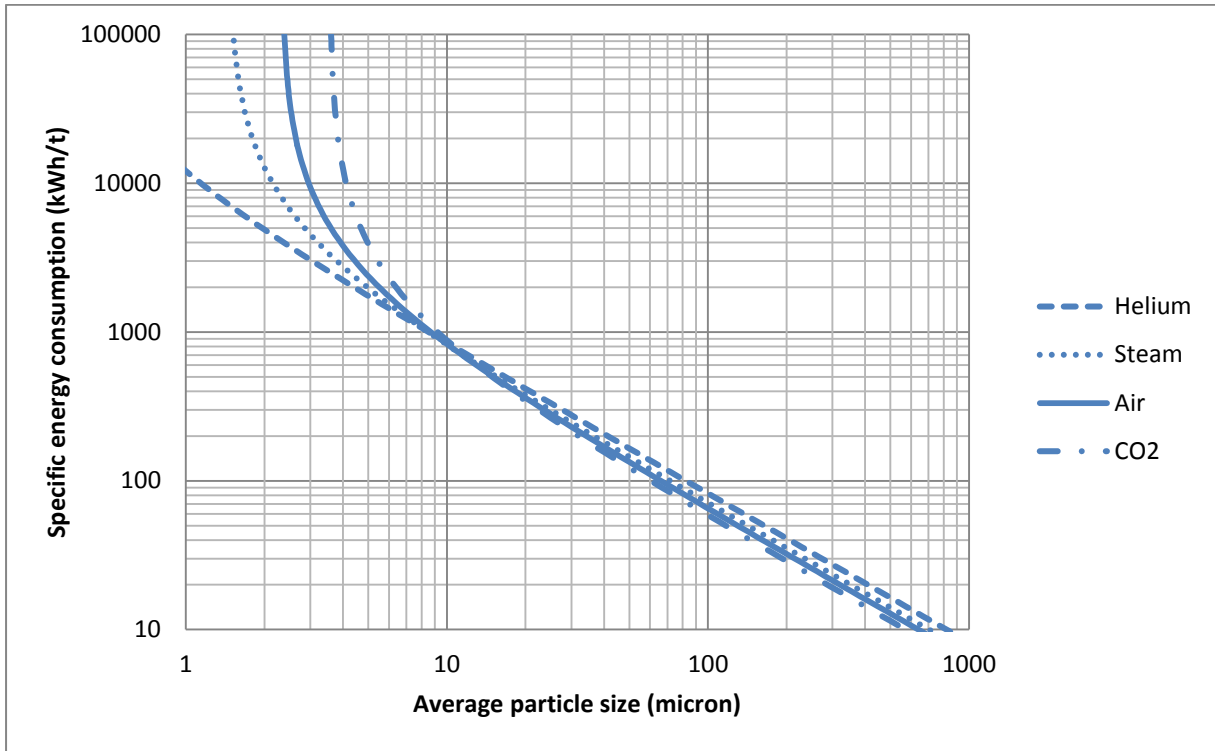


Fig. (19) Predicted cut size against E_{sp} for various motive gases

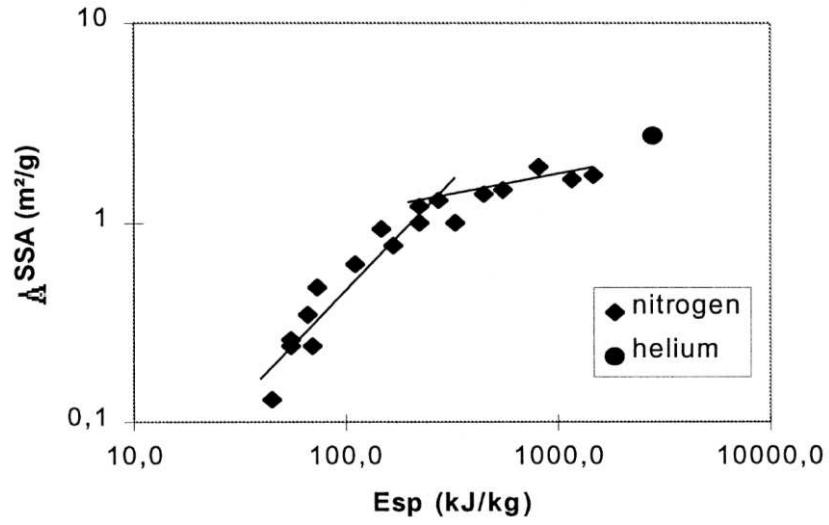


Fig. (20) E_{sp} against Change in Specific Surface Area (Midoux *et al.*, 1999)

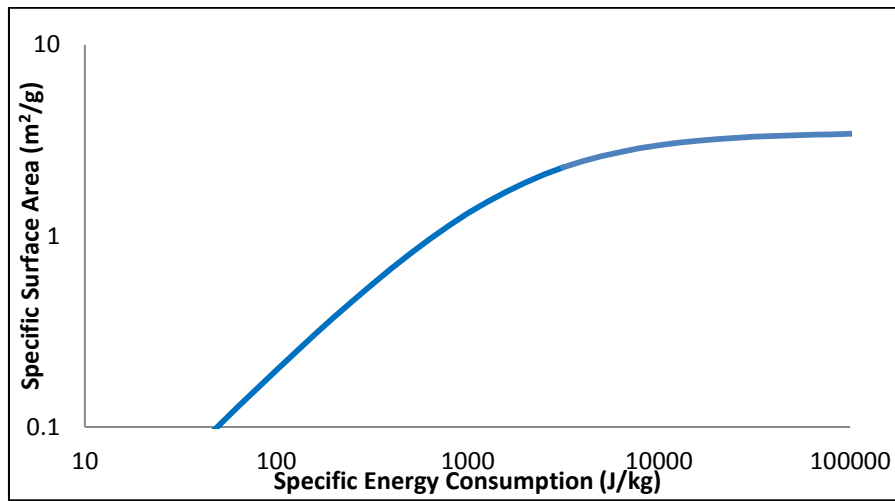


Fig. (21) E_{sp} against Spherical Specific Surface Area of Cut Size