Figures - The Spiral Jet Mill Cut Size Equation

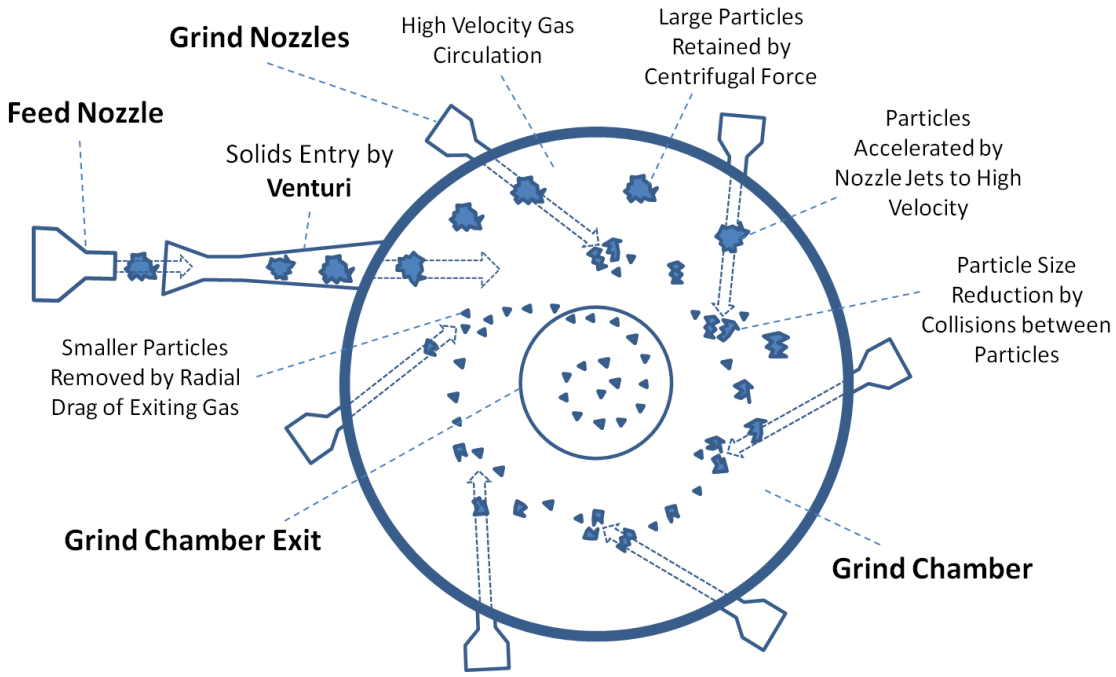

Fig. (1) **Spiral Jet Mill Grind Chamber (Plan View)**

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

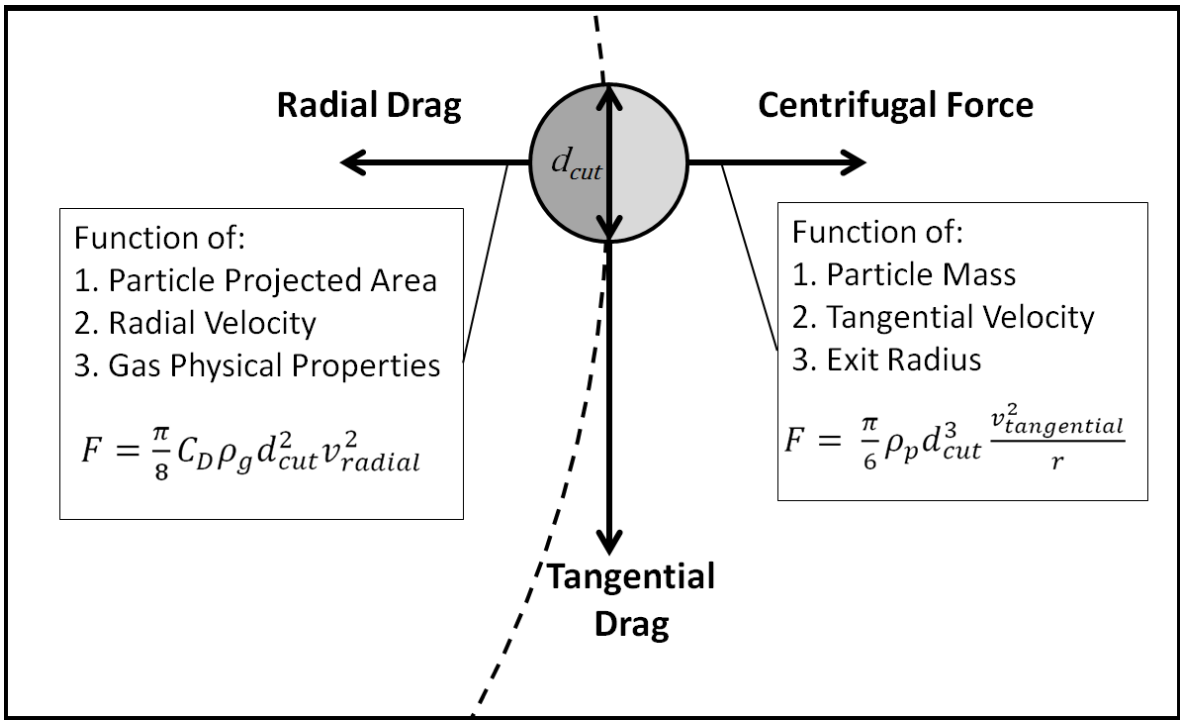

Fig. (3) Particle Forces Balance

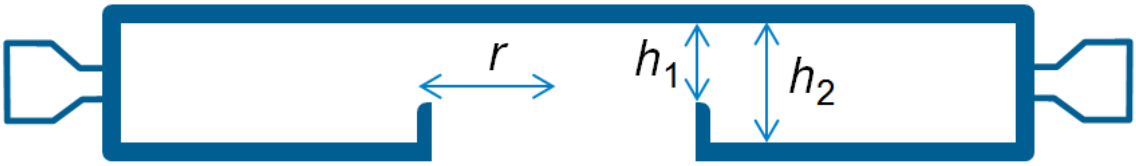

Fig. (4) **Grind Chamber Geometry**

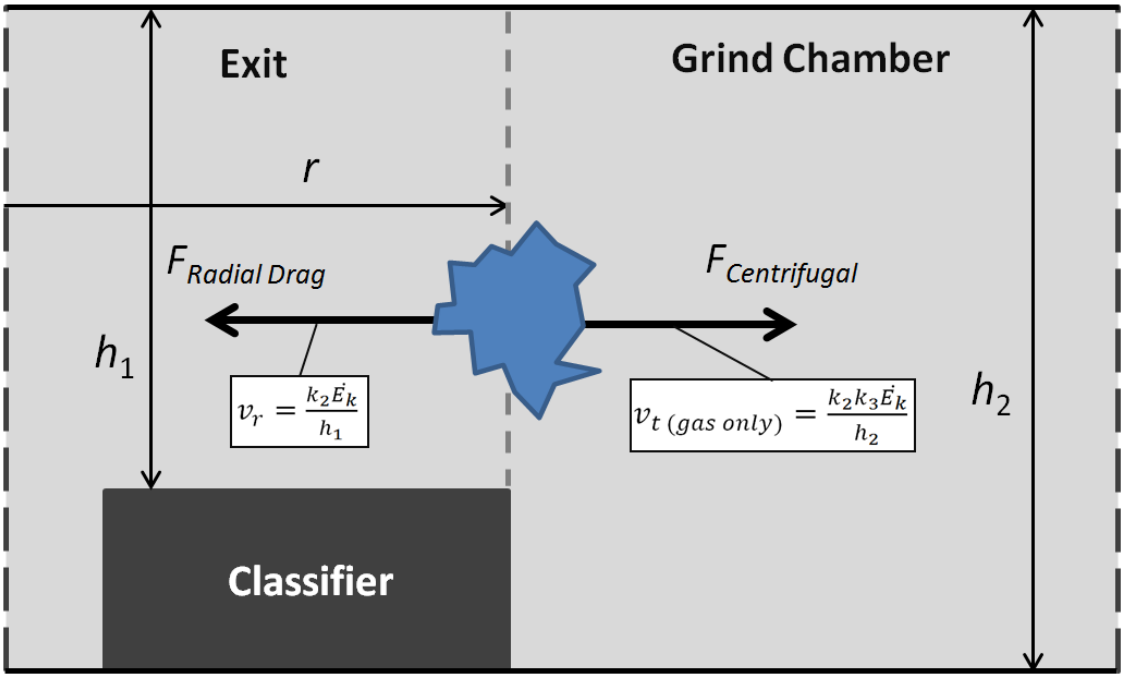

Fig. (5) **Classifier to Grind Chamber Interface**

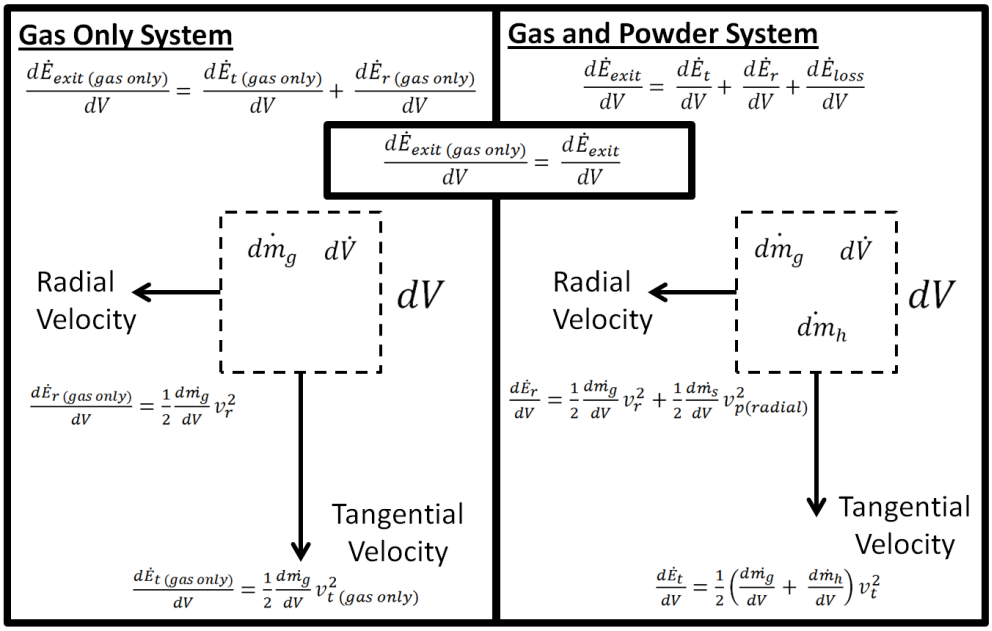

Fig. (6) **Energy Rate Balance on a Unit Volume at the Grind Chamber Exit**

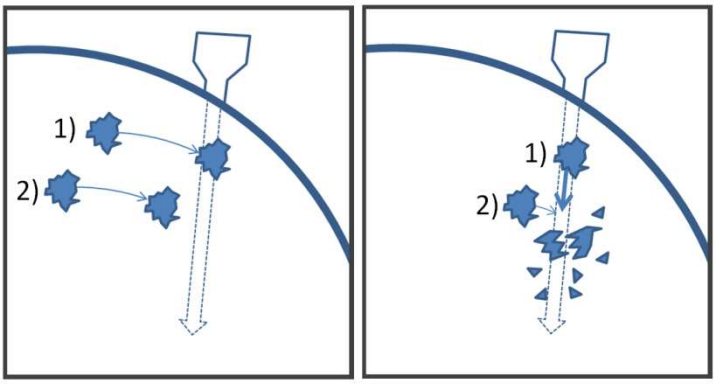

Fig. (7) **Particle-Particle Collision Scenarios**

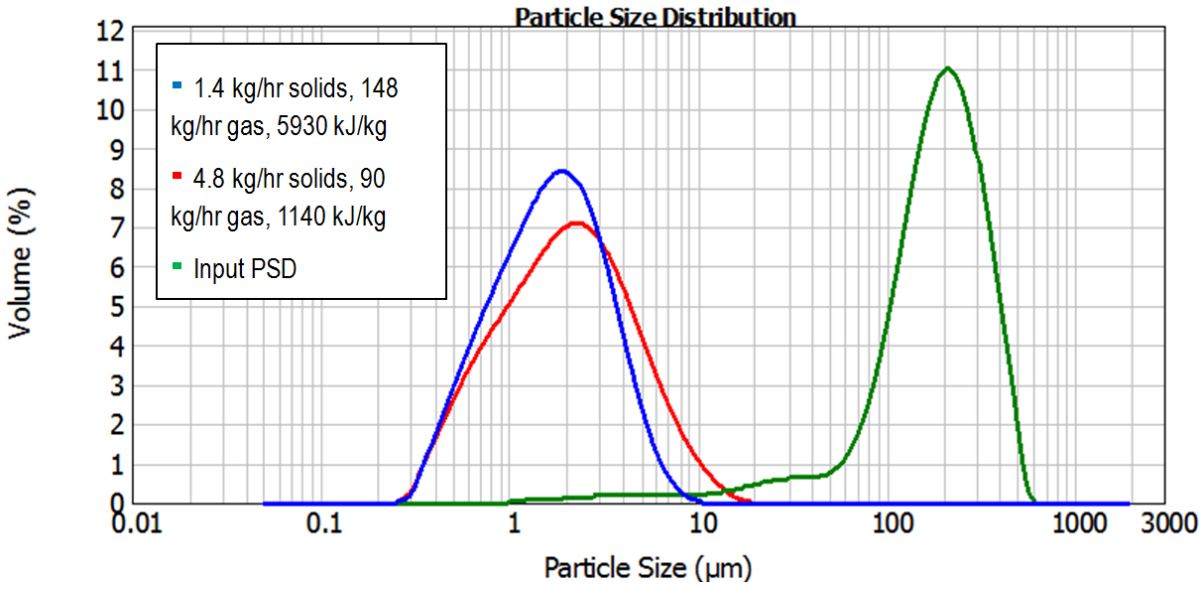

Fig. (8) Product A PSD Plots

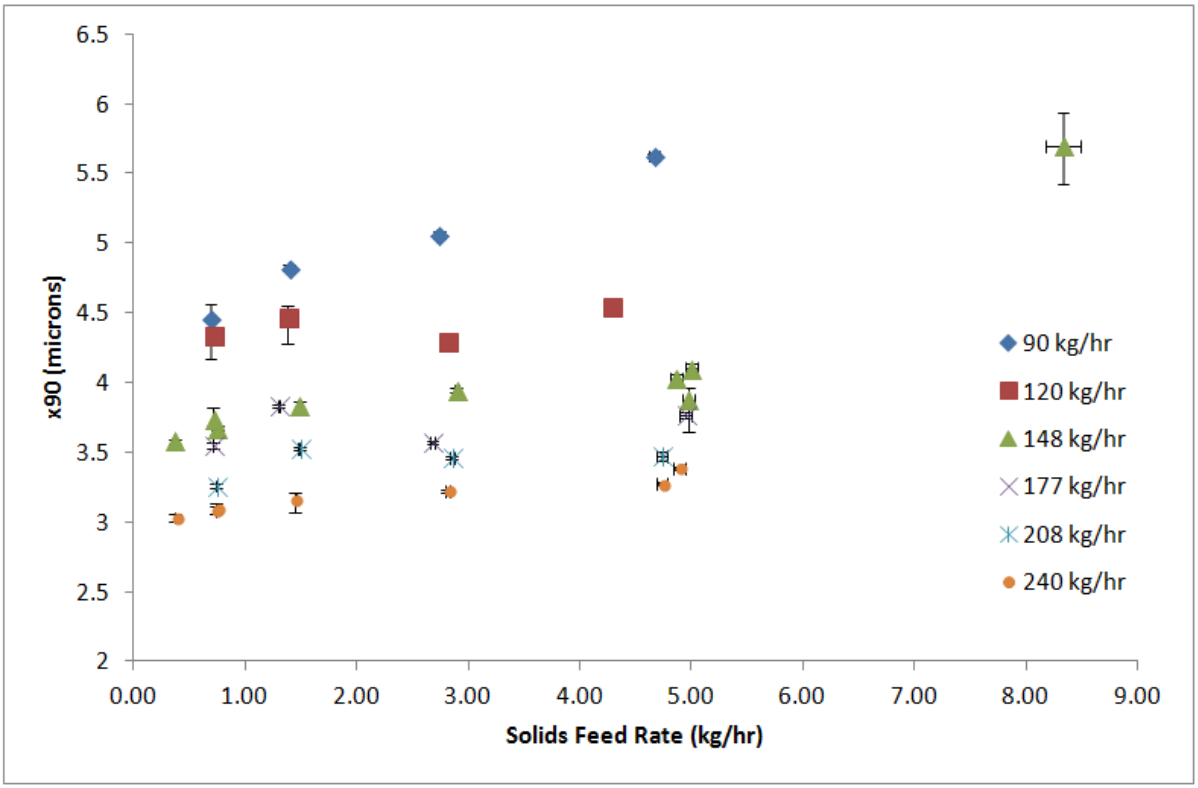

Fig. (9) Solids Feed rate against x90 with Lines of Constant Gas Mass Flow Rate

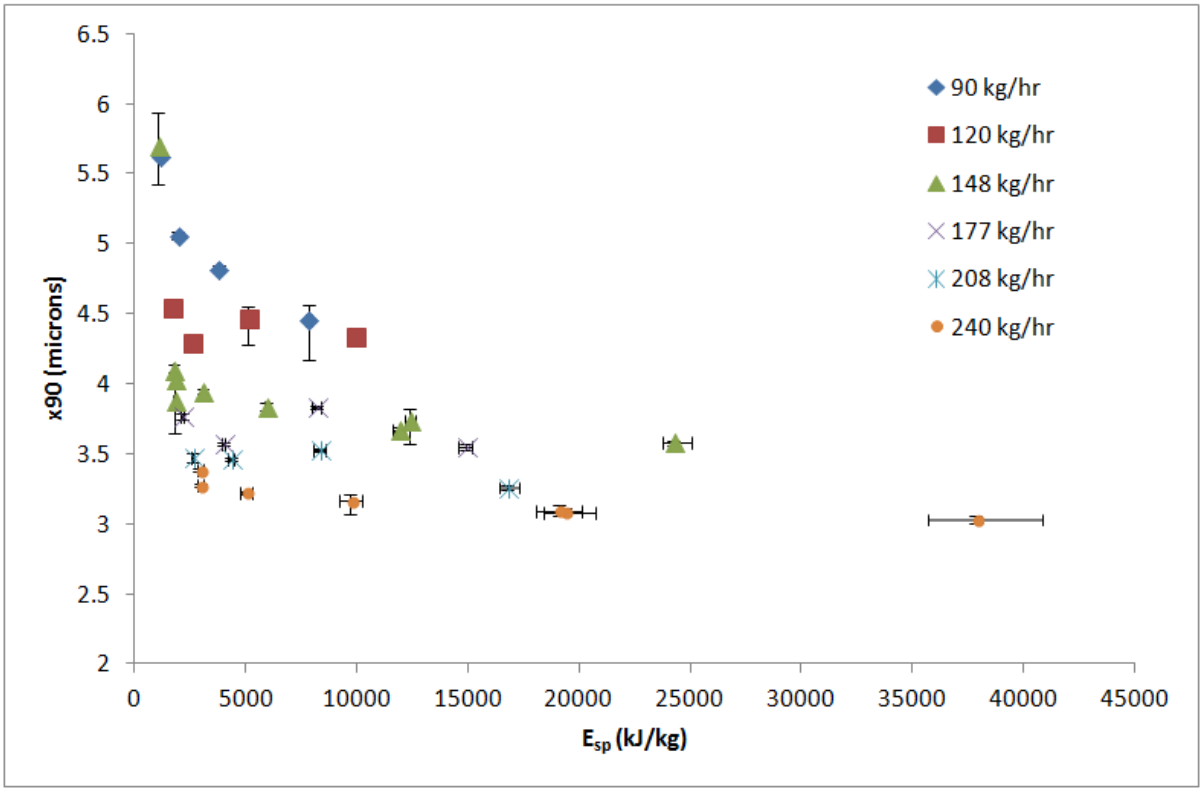

Fig. (10) E_{sp} against x90 with Lines of Constant Solids Feed Rate

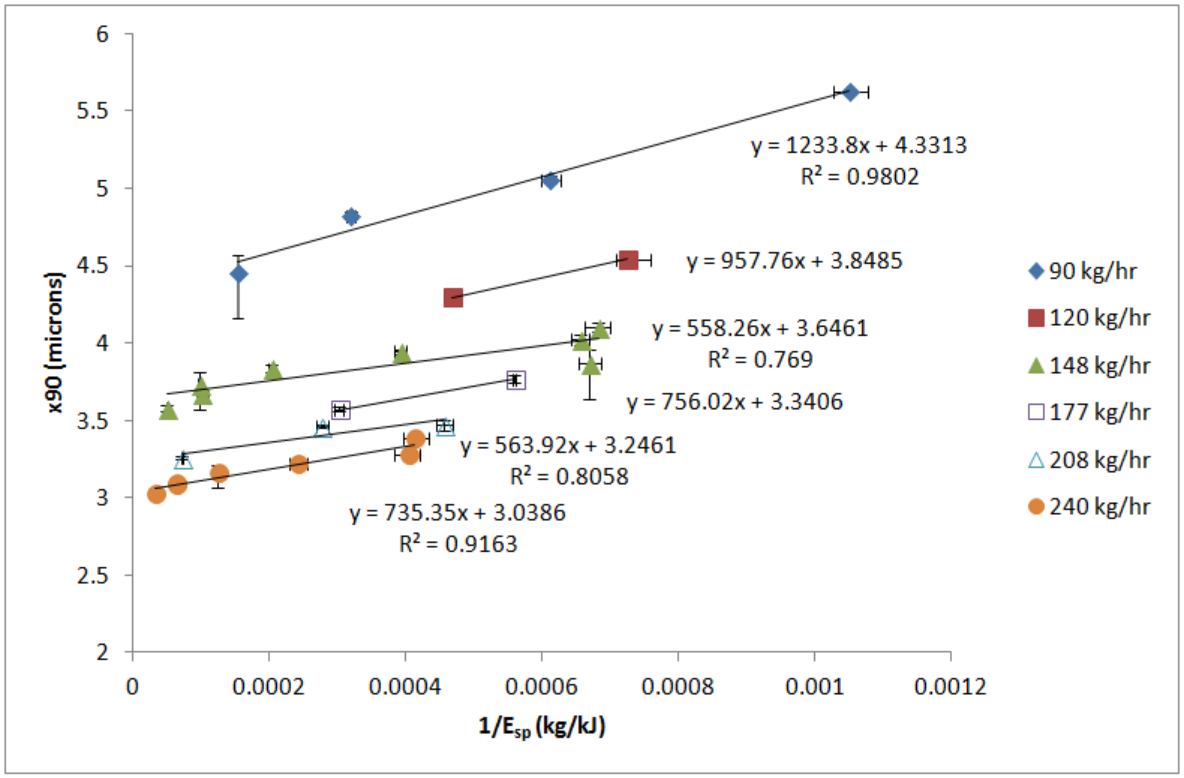

Fig. (11) **1/ E_{sp} against x90 with Lines of Constant Gas Mass Flow Rate**

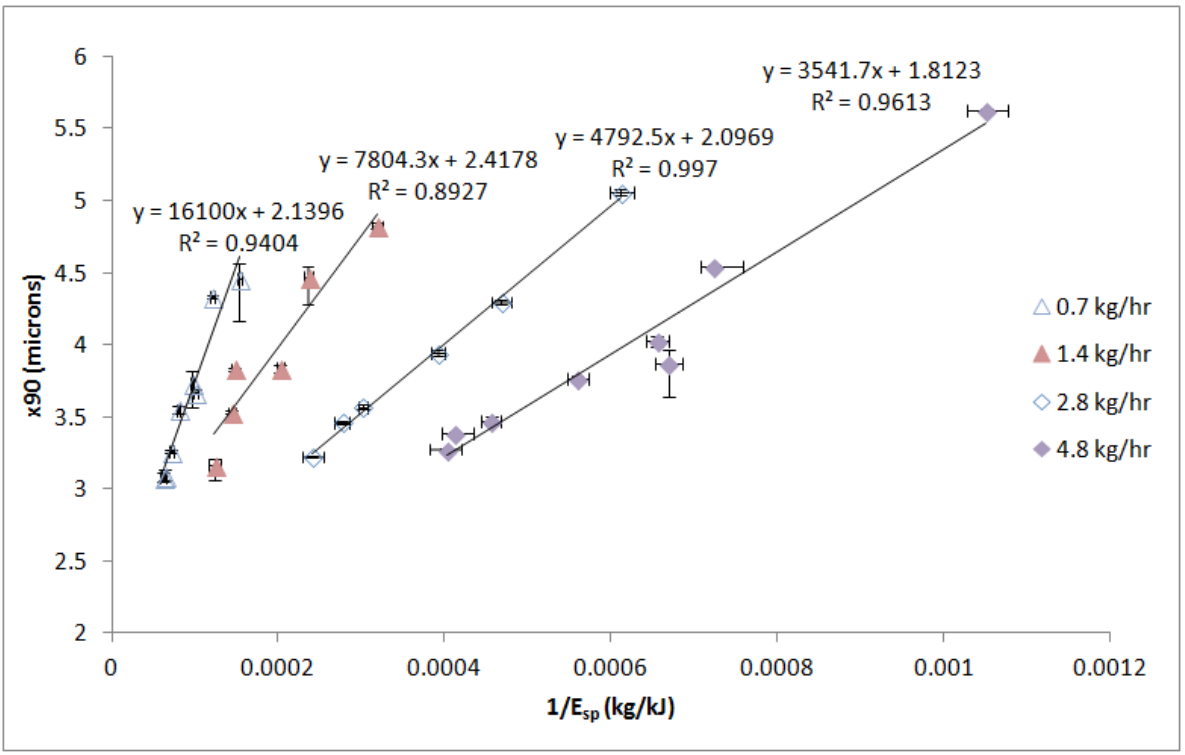

Fig. (12) **1/ E_{sp} against x90 with Lines of Constant Solids Feed Rate**

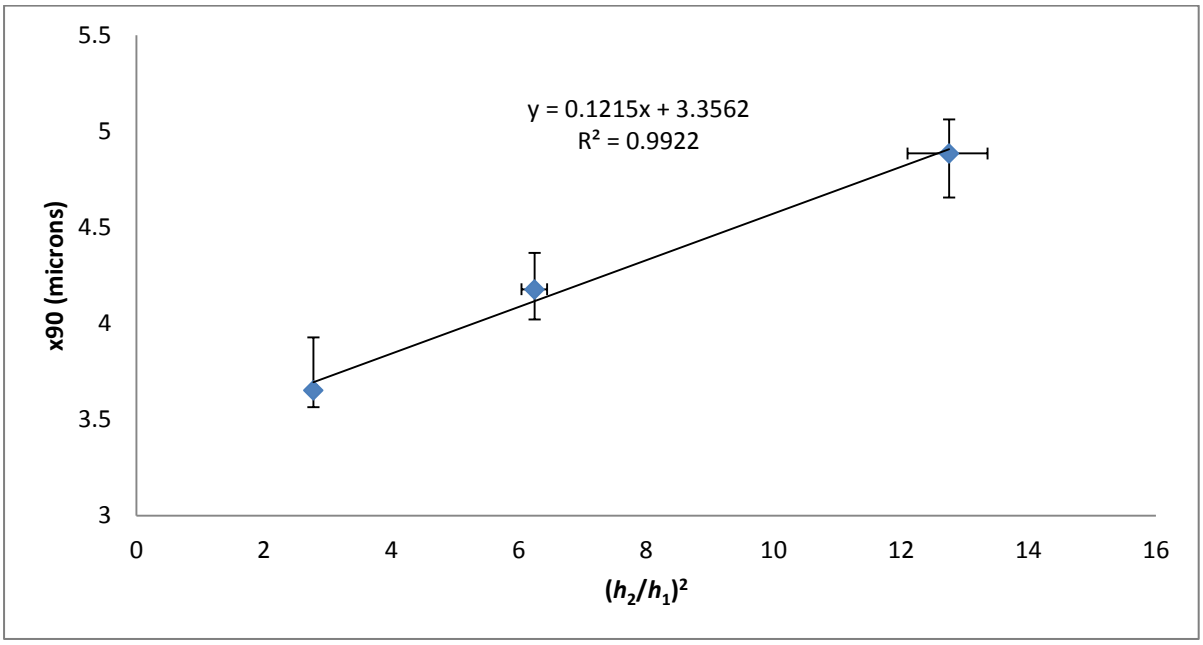

Fig. (13) **$(h_2/h_1)^2$ against x90**

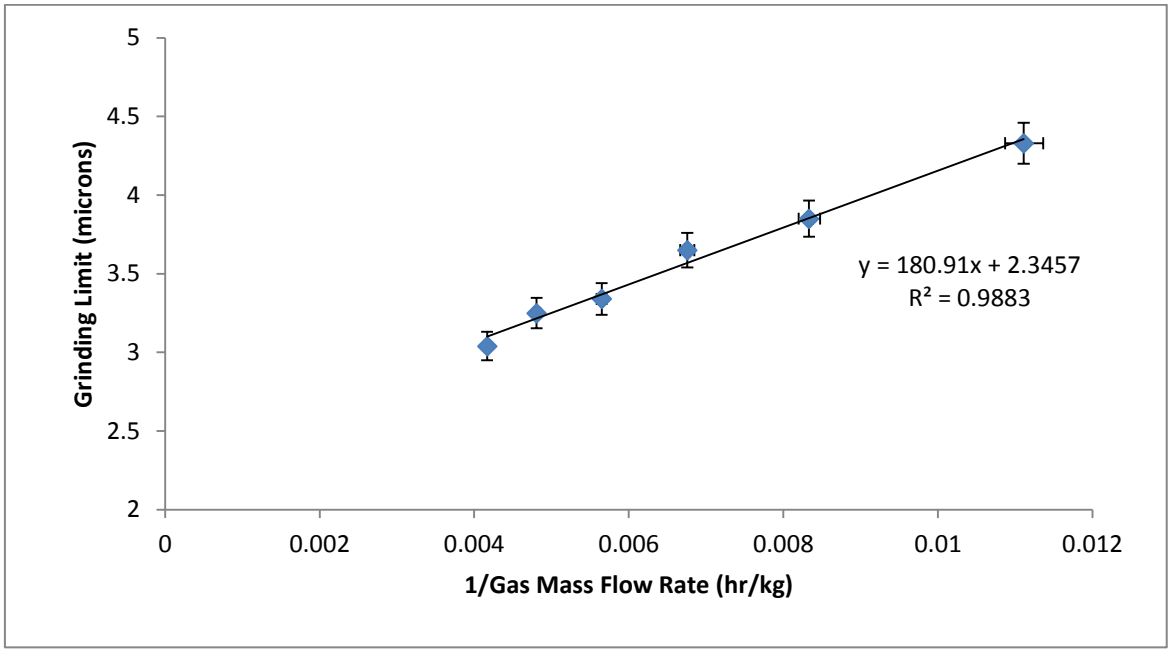

Fig. (14) **1/ Gas Mass Flow Rate against Feed Rate Reduction Grinding Limit**

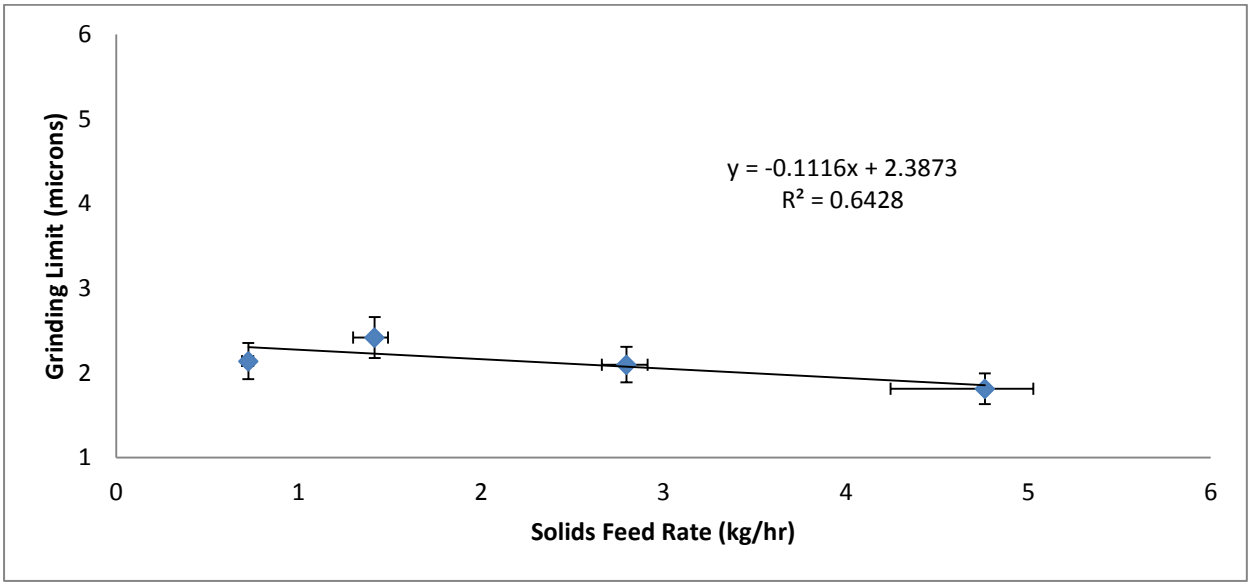

Fig. (15) Solids Feed Rate against Gas Mass Flow Rate Increase Grinding Limit

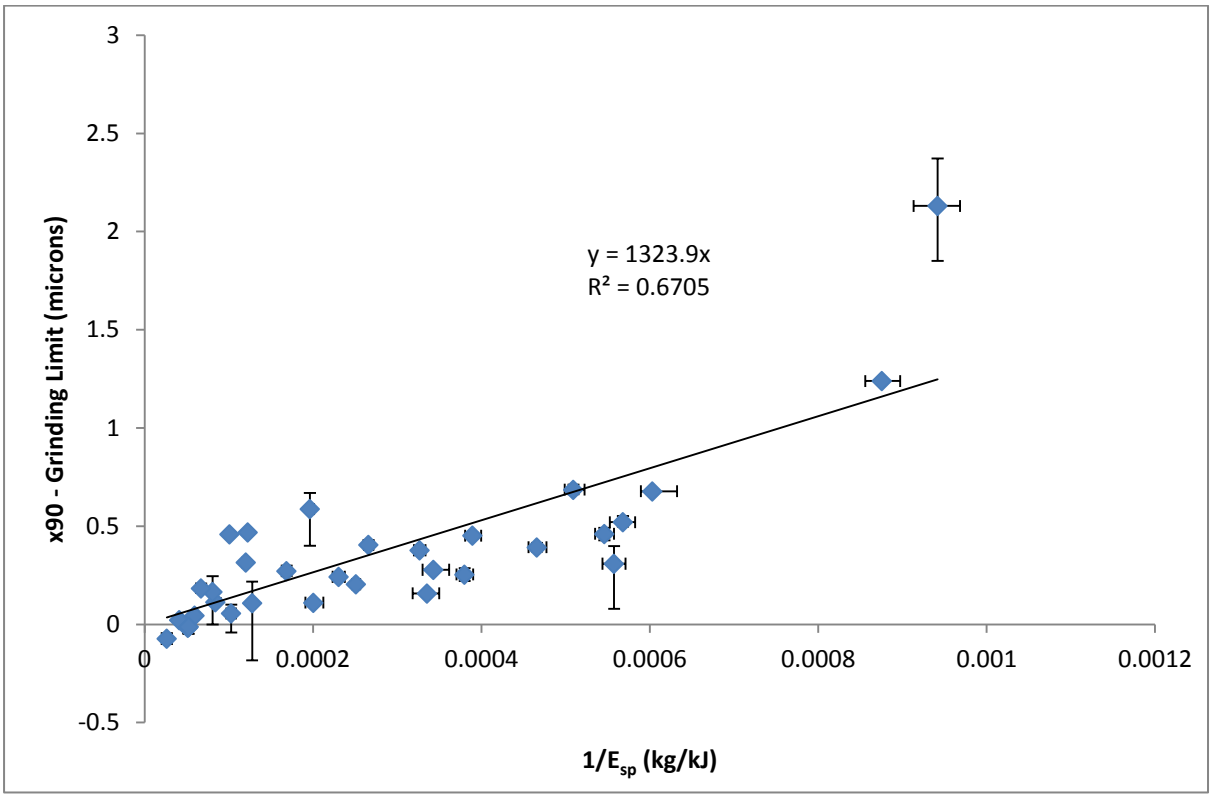

Fig. (16) **1/ E_{sp} against x90 – Reduction in Feed Rate Grinding Limit**

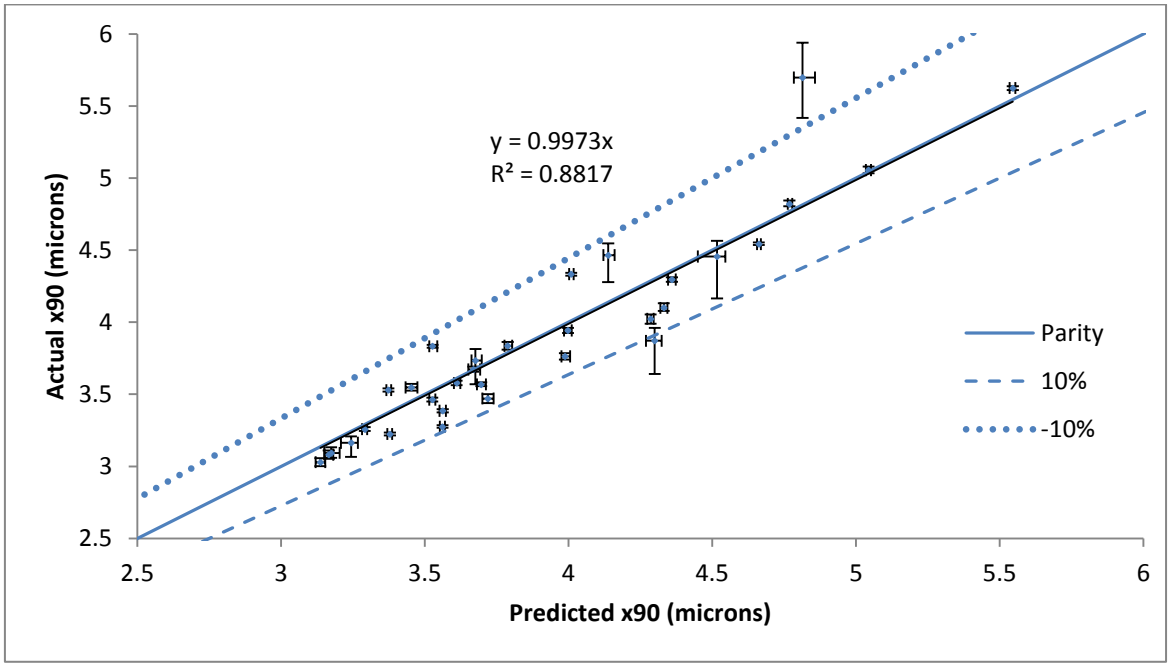

Fig. (17) **Predicted x90 against Actual x90 for Product A using Eq. (34)**

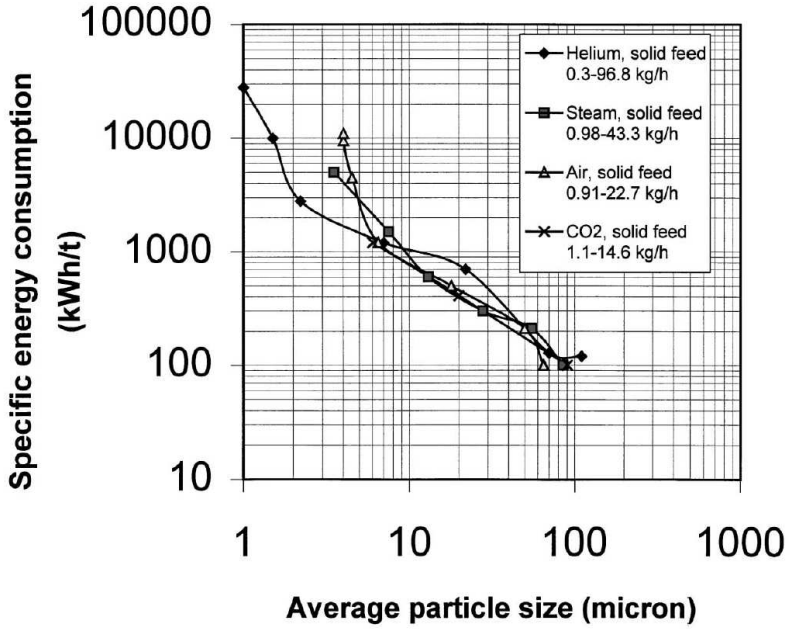

Fig. (18) **Average particle size against E_{sp} for various motive gases (Zhao and Schurr, 2002)**

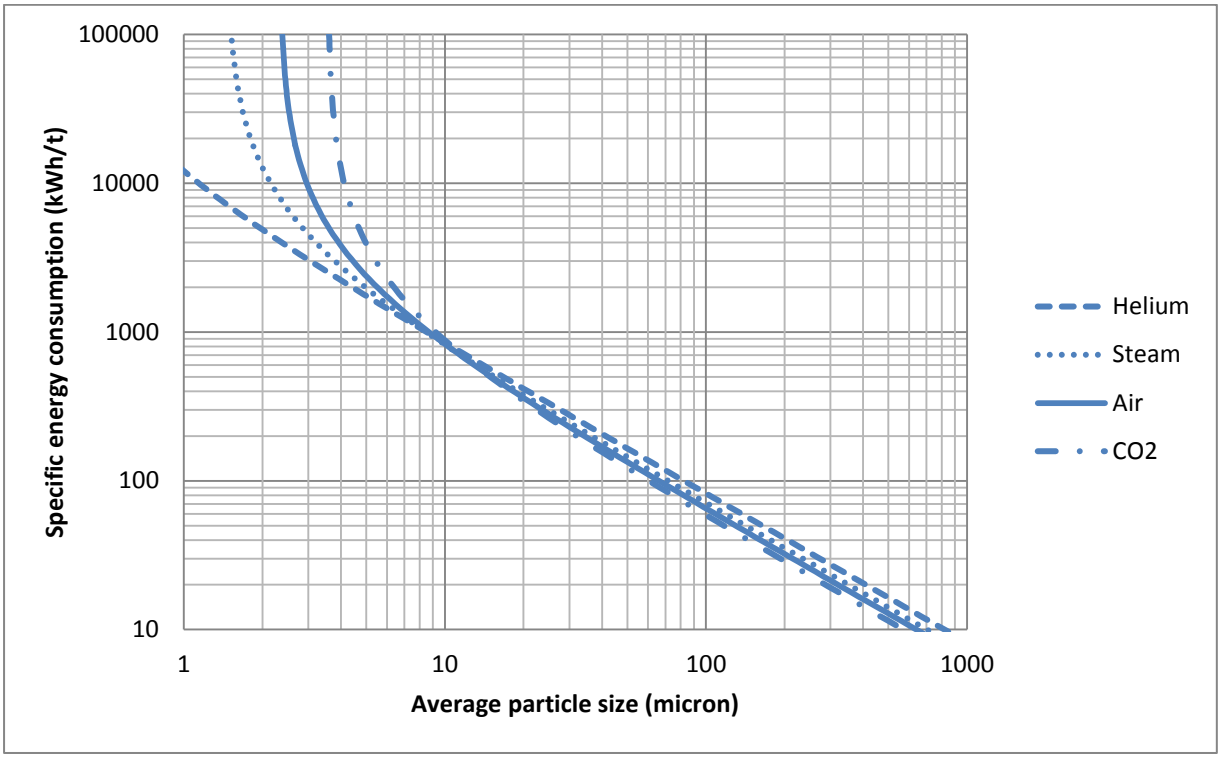

Fig. (19) **Predicted cut size against E_{sp} for various motive gases**

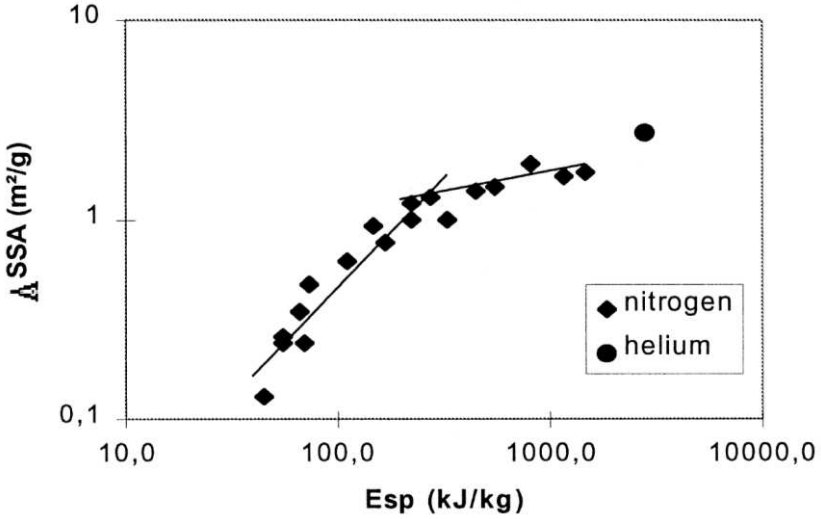

Fig. (20) E_{sp} against Change in Specific Surface Area (Midoux *et al.*, 1999)

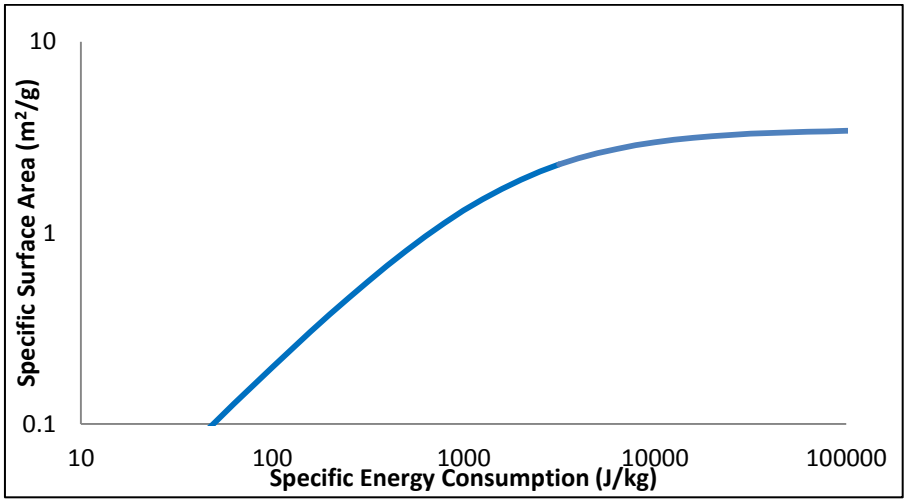

Fig. (21) E_{sp} against Spherical Specific Surface Area of Cut Size