The Nikolaev and Dmitriev formula is one of the best semi - empirical formulas for Carbon Stripper Foils for medium/high Z values and energy of few MeV/A.

The Sayer empirical formula provides speculations on the passage of ions with Z > 36 through Gas or Carbon foils. The asymmetric distribution gives substantial improvement over previous expressions for prediction of small F(q) values for heavy ions in dilute gases. Recent systematic data accumulations however has revealed that the observed values are not always well reproduced with this formula.