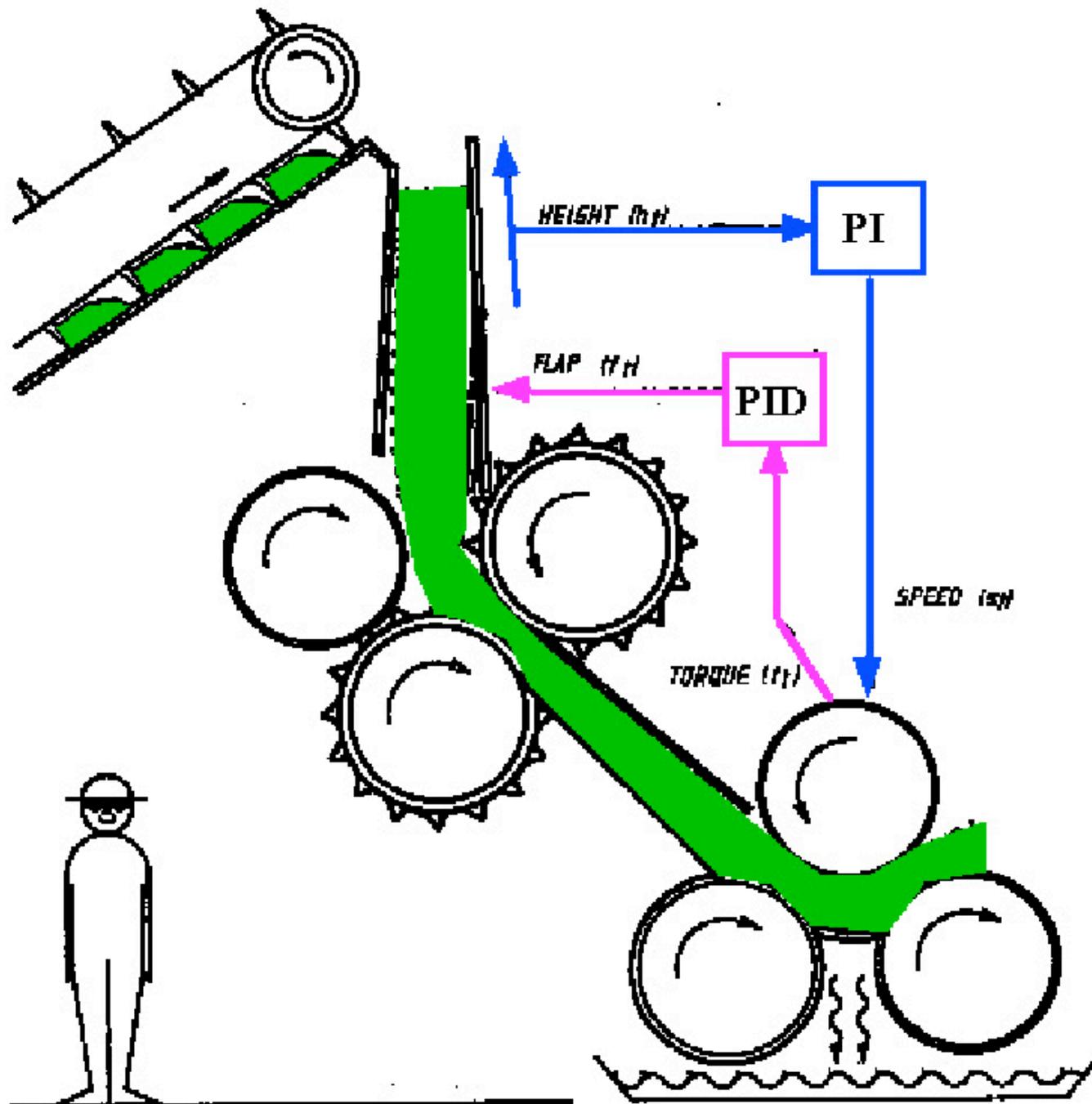


Introduction to the Sugar Cane Crushing Mill

A video extravaganza



Sugar cane crushing mill

Two-input two-output control problem

Part of a sequence of five mills crushing the same material

Separation of fiber and juice

Juice to clarifier and crystalizer, fiber to boiler

There is a complex reverse flow of juice

Optimize individual mills then process

Overall aim is to improve extraction efficiency

Tied to maximizing the average torque level

Work done in breaking the cell structure of the cane

Torque is an real-time performance measure

Water retention is a slower more reliable measure

Plane Creek Sugar Milling

July 28, 1998