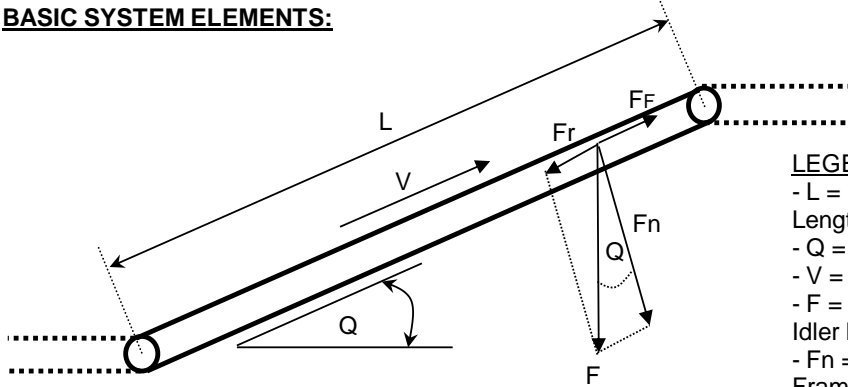


# INFORMATION SPECIFICATION SHEET

## IDLER-BRAKE QUANTITY CALCULATION MODEL

**BASIC SYSTEM ELEMENTS:**



**LEGEND:**

- $L$  = Pulley-to-Pulley Belt Length
- $Q$  = Incline Angle
- $V$  = Belt Speed
- $F$  = Resultant Force/ Idler Frame
- $F_n$  = Normal Force/ Idler Frame
- $F_r$  = Radial Force/ Idler

During Braking  $F_f = F_r$  (thus the belt remains)

### CONVEYOR SYSTEM INPUT DATA:

Client Name: \_\_\_\_\_

Conveyor ID: \_\_\_\_\_

Material Conveyed: \_\_\_\_\_

Idler & Frame Make: \_\_\_\_\_

Conveyor Belt Type: \_\_\_\_\_

$L$	- Pulley-to-pulley belt length along conveyor incline	(metres)	
$Q$	- Angle of conveyor belt incline	(degrees)	
$V$	- Average belt speed under load	( $m.s^{-1}$ )	
$C$	- Maximum system capacity at the average belt speed	(tons/ hour)	
$B$	- Conveyor belt width	(mm)	
$IS$	- Average idler spacing along conveyor incline	(metres)	
$I$	- Number of idlers per idler frame	(units)	
$ID$	- Idler unit outside diameter	(mm)	
$IF$	- Idler unit face length	(mm)	
$IT$	- Idler frame trough angle	(degrees)	

TOTAL UNITS: \_\_\_\_\_