



# CALCULATED DRYER/COOLER MASS FLOW RATES

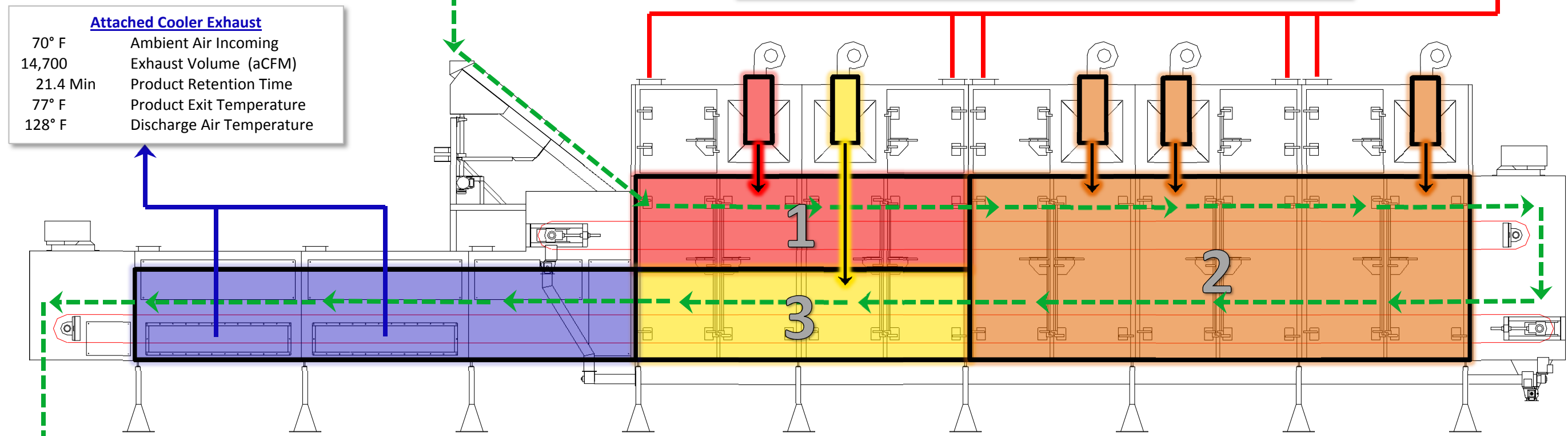
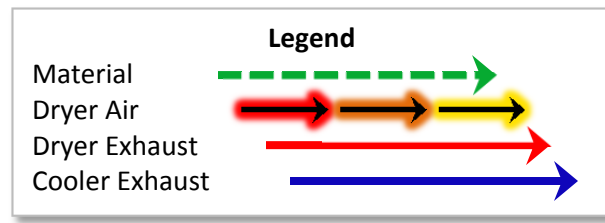
Dryer Exhaust	
14,000	Exhaust Volume (aCFM)
160° F	Product Exit Temperature
192° F	Dry Bulb Discharge Air Temperature
131° F	Wet Bulb Discharge Air Temperature
86.4 %	ASR Value

Raw Infeed	
37.0 %	Moisture Content
7,417	lb/hr Solids
4,353	lb/hr H <sub>2</sub> O
11,770	lb/hr Total
170° F	Product Temperature

	Dryer Zone 1	Zone 3	Zone 2
Process Airflow (aCFM)	19,600	14,723	71,400
Ambient Incoming Air (aCFM)	1,934	953	3648
Combustion Air (aCFM)	707	707	2121
Exhaust Air (aCFM)	3,672	2,308	8,020
Process Air Temperature	285° F	270° F	280° F
Dry Air Mass Flow (lb/hr)	55,134	59,089	163,332
Product Retention Time (Minutes)	8.9	14.3	34.8

Attached Cooler Exhaust	
70° F	Ambient Air Incoming
14,700	Exhaust Volume (aCFM)
21.4 Min	Product Retention Time
77° F	Product Exit Temperature
128° F	Discharge Air Temperature

Dry Finish Feed	
8.0 %	Moisture Content
7,417	lb/hr Solids
642	lb/hr H <sub>2</sub> O
8,060	lb/hr Total
77° F	Product Temperature



The quantities shown on this Heat and Mass Balance are presented for theoretical illustrative purposes only. They are not to be construed as and are not Performance Guarantees by Wenger Manufacturing Inc.

**EVAPORATION: 3710 lb/hr H<sub>2</sub>O**