



# LOW DUST EMISSION CHUTES







### TRANSFER POINTS MODERN DESIGN BENEFITS:

- 1. Eliminate Wall Wearing
- 2. Avoiding blockage
- 3. Right direction of material flow
- 4. Decrease pollution by spillage
- 5. Protect receiving belt against impact







#### LOW DUST EMISSION CHUTES:

This system can permit **to minimize dust emission without to use the filter** for each retail discharge point.

Through a special calculation program we can direct the material flow into reception belt conveyor with same speed and minimize dust emission eliminating the sources (impact point).









## MATERIAL SPEED DISTRIBUTION DURING THE FALL:

#### Meters/Second 11 10 9.0 **HIGH SAFETY STANDARD** ... 7.8 **OPERATING COST REDUCTION** 6.0 ... **ENVIRONMENT EMPROVMENT** 4.0 3.0 2.0 1.0







#### MISSADVANTAGES:

- 1. Stone Box Wear
- 2. Three time impact
- 3. Three time dust generation and need filter
- 4. High spillage value
- 5. Energy Lost to accelerate material
- 6. High maintenance cost









#### **ADVANTAGES:**

- 1. Minimize dust generation reducing material degradation
- 2. Minimize material loss and spillage from skirt seals
- 3. Minimize belt wear and chute maintenance costs
- 4. Minimize noise generation
- 5. Minimize decentrated loading
- 6. Minimize energy consumption
- 7. Elimination of impact bars
- 8. Elimination of dedusting filter





#### CASE STUDY #1:

PLEASE SEE THE ATTACHED VIDED !!! Material = Limestone Specific weight= 1,6 t/m<sup>3</sup> (max 2 t/m<sup>3</sup>) Size=  $0 \div 200$  mm: Size distribution:  $0 \div 100$  mm = 75%  $100 \div 150$  mm = 15%  $150 \div 200$  mm = 10%

#### TN1 (feed conveyor)

Max Capacity =  $650 \text{ t/h} = 410 \text{ m}^3/\text{h}$ Min Capacity =  $450 \text{ t/h} = 285 \text{ m}^3/\text{h}$ Speed = 2,41 m/sec Belt width = 1000 mm Conveyor Slope = ~  $6^\circ$  TN2 (receiving conveyor) Max Capacity= 650 t/h = 410 m<sup>3</sup>/h Min Capacity = 450 t/h = 285 m<sup>3</sup>/h Speed = 1,88 m/sec Belt width = 1000 mm Conveyor slope = 17,7°





#### CASE STUDY #2:

### PLEASE SEE THE ATTACHED VIDED !!!

Speific Weight: 1,4 t/m3 Velocità nastro: 1,7 m/s Portata nastro: 600 t/h + 20% Pezzatura marna: 0÷30 mm Velocità nastro tripper: 2 m/s (71 rpm with drum diameter of 0,525 m) Belt width: 1.000 mm Installed Power:30 kW Humidity: 4÷7 %





# SAMMI DRAWINGS OF MODIFICATIONS ON EXISTING CONVEYORS:



















### **Main Customers**

### **THANK YOU FOR YOUR ATTENTION !**

