

WE CONVEY QUALITY

More than 90 years experience in bulk material handling
Over 18.000 conveyors worldwide



Materials Handling Solutions



Overview – Main Applications

Materials Handling Solutions

Conveying

- Bucket Elevators (BWG, BWZ, BWD)
- Pan Conveyors (KZB, KZB-Q, BZB, SPB, KZB-R, FPB)
- Chain Conveyors (TKF)

Extraction/Feeding

- Samson
- BPB, BPB-SF, DPB
- Centrex, Rotor
- RDM
- Chain Conveyors (TKF, PKF)

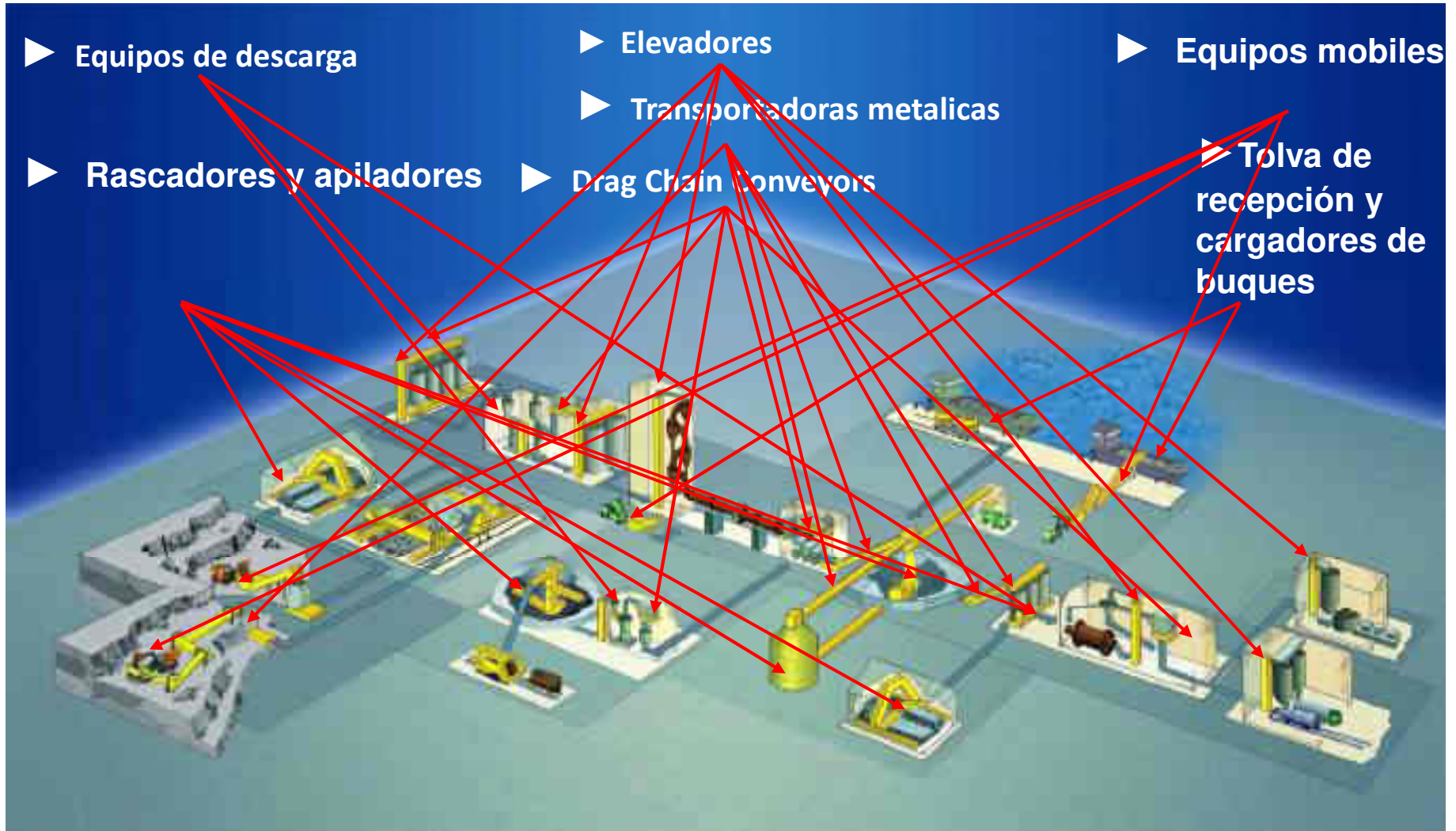
Processing / Special Customized Solutions

- Hot Fe-Sinter Transport
- HotDRI Charging under seal gas
- Patented HBI Cooling
- Fe-Pellet Cooling

Aumund equipment for the Cement Industry

- 1. Raw materials handling – Mining+Storage**
- 2. Raw Mill – Raw meal storing+feeding+recirculation+conveying**
- 3. Kiln Section – Raw meal feeding+clinker conveying/storage**
- 4. Solid fuel and additives intake – Coal+alternative fuels(C.A.S.)**
- 5. Cement Mill – Clinker+additives feeding+cement conveying**
- 6. Cement delivery – Packing machines feeding**

Aumund equipment for the Cement Industry



1. Raw Material Handling

Quarry equipment

BPB – Primary Crusher feeding

Samson equipment – Samson Feeders, Link Conveyors Stormajor –

Material piling-up, truck loading

Storage Equipment (Schade equipment)

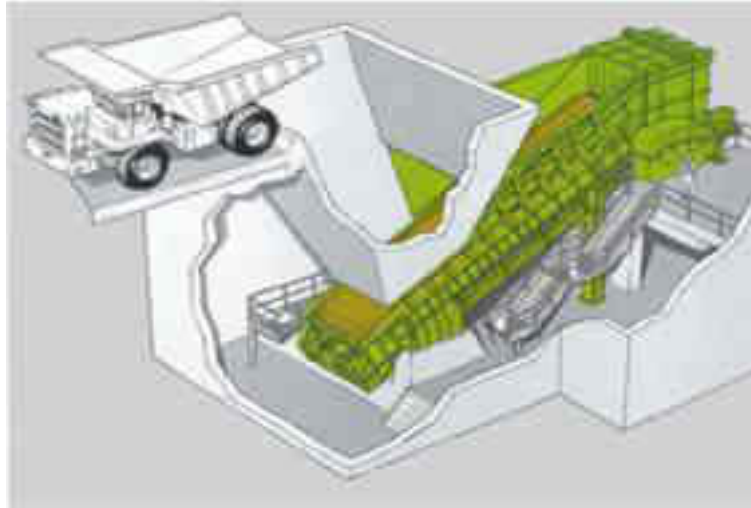
Stackers

Reclaimers

Raw material storage types, features, comparison

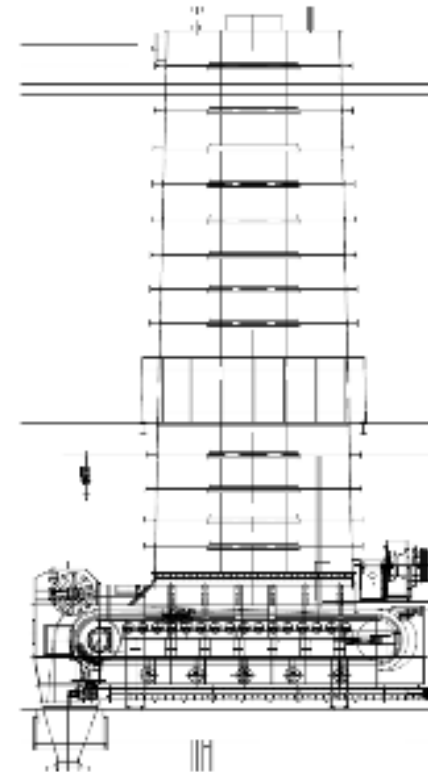
Coal and Additives storage

Quarry equipment - BPB – Primary Crusher feeding



Feeding or Extraction

- Gypsum
- Coal
- Limestone
- Clay
- Marl
- Clinker
- Iron Ore
- Filter Cake
- FE-Sinter
- HBI



Quarry equipment - BPB – Primary Crusher feeding



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Quarry equipment - Samson Feeders



Quarry equipment - Samson Feeders



Link Conveyors



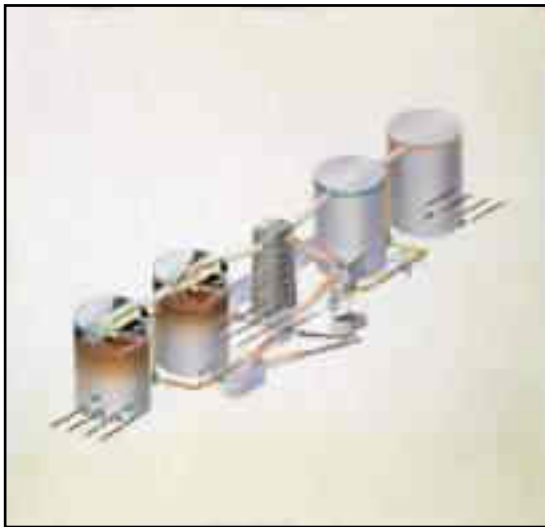
Provides a Flexible Connection between
Mobile Equipment and Fixed Conveyor
plant



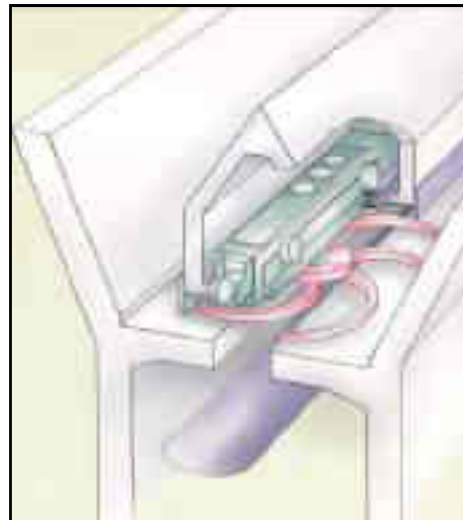
- Alternative to Fixed Conveyors.
- Fully Mobile.
- Flexible in Operation.
- Reduced Capital Cost.
- Reduced Operating Cost.
- No Truck Haulage.
- Easily Relocated.

Rotary Discharge Machine (BEW)

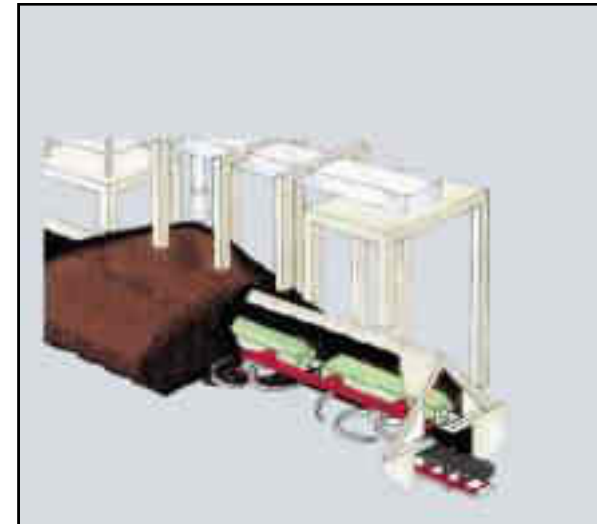
Bunker discharge machines ensure reliable discharge of even difficult bulk materials from storage, stockpiles, bunkers and silos



Silo Batteries



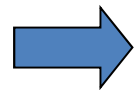
Long Hoppers



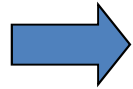
Open Stockpiles

Blending Stockyards

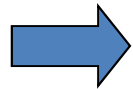
There are several types of stacking methods



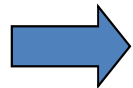
Coneshell Method



Strata Method

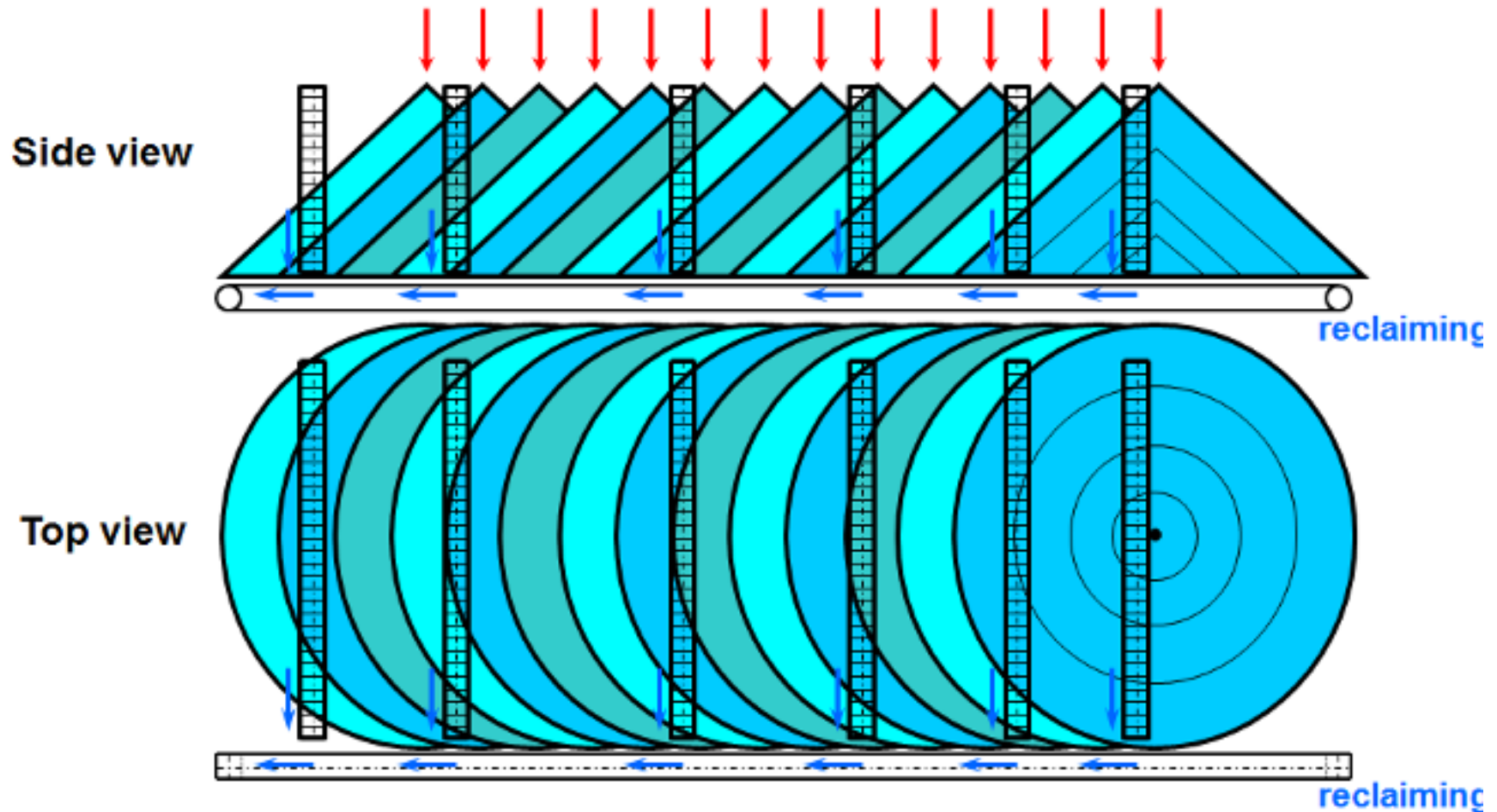


Chevron Method



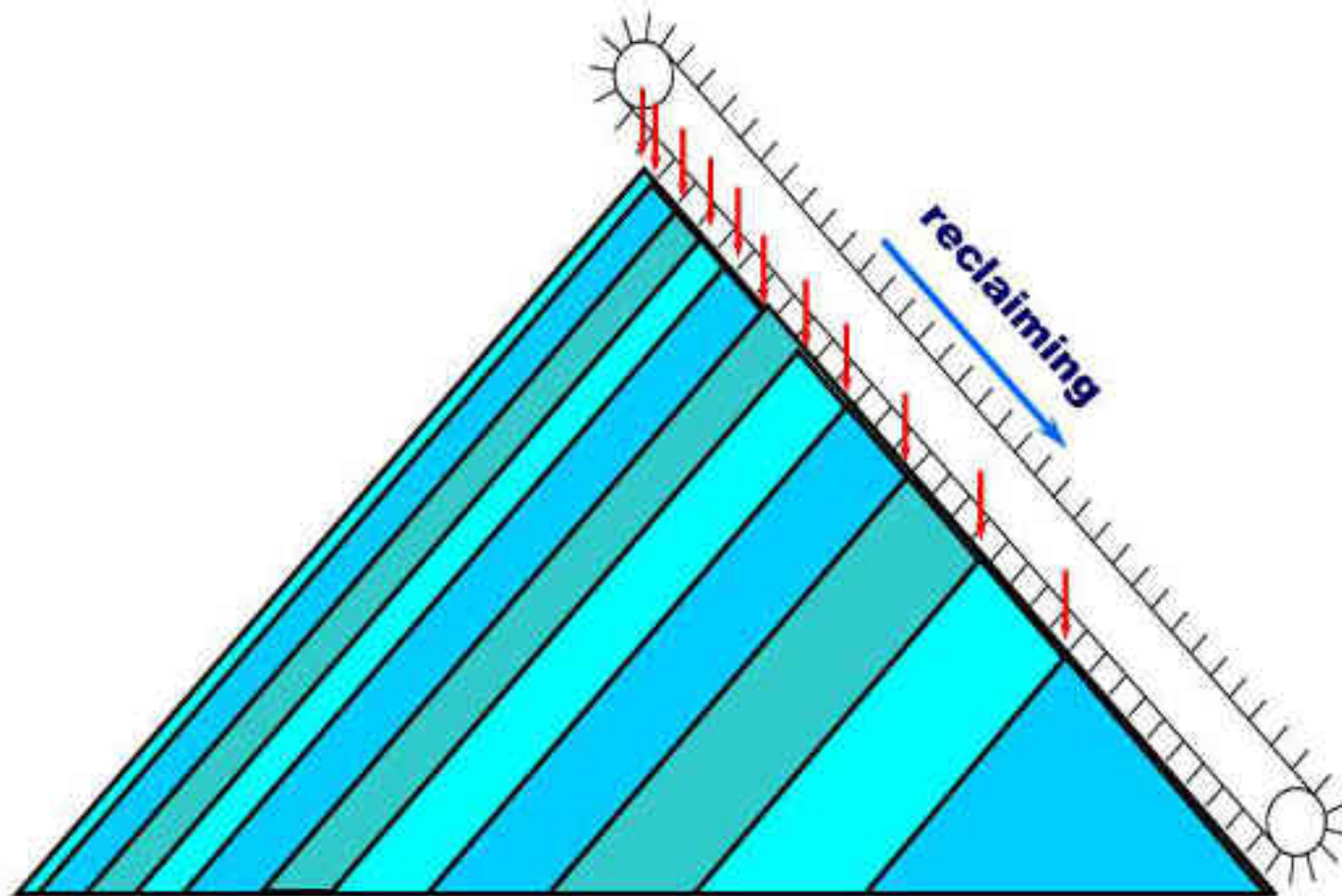
Chevcon Method (for circular stockpiles)

Blending Stockyards



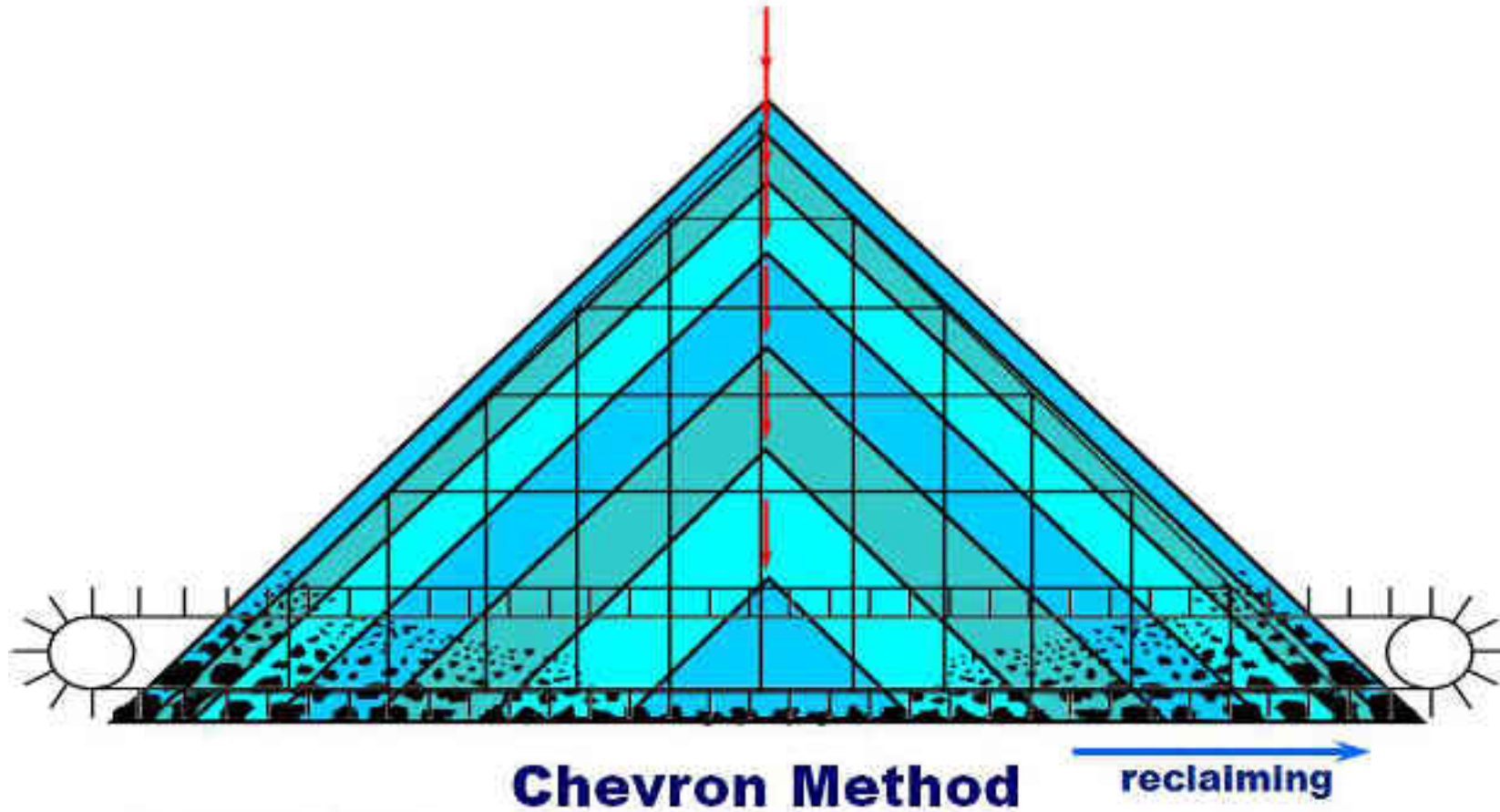
Coneshell Method

Blending Stockyards

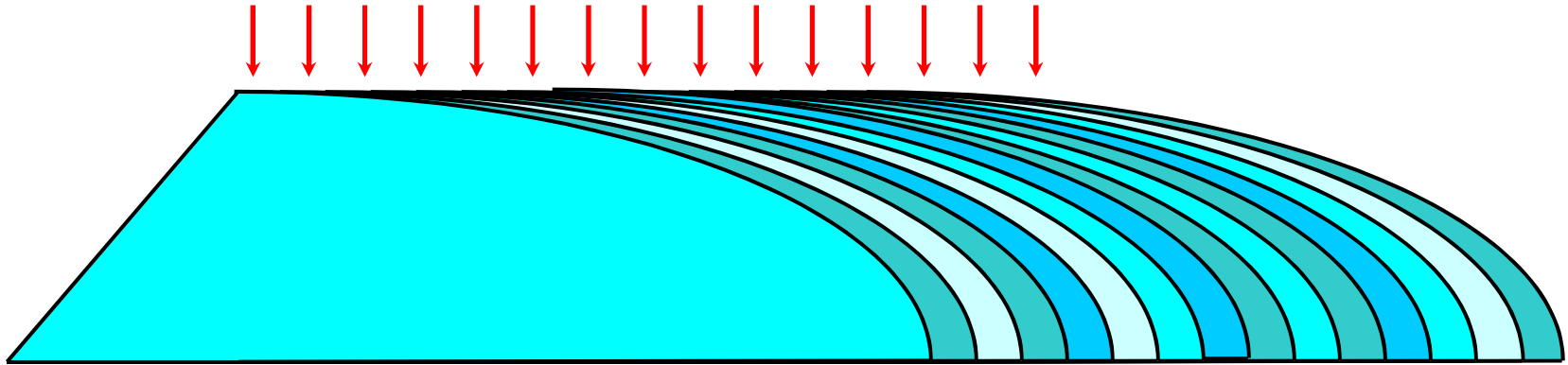


Strata Method

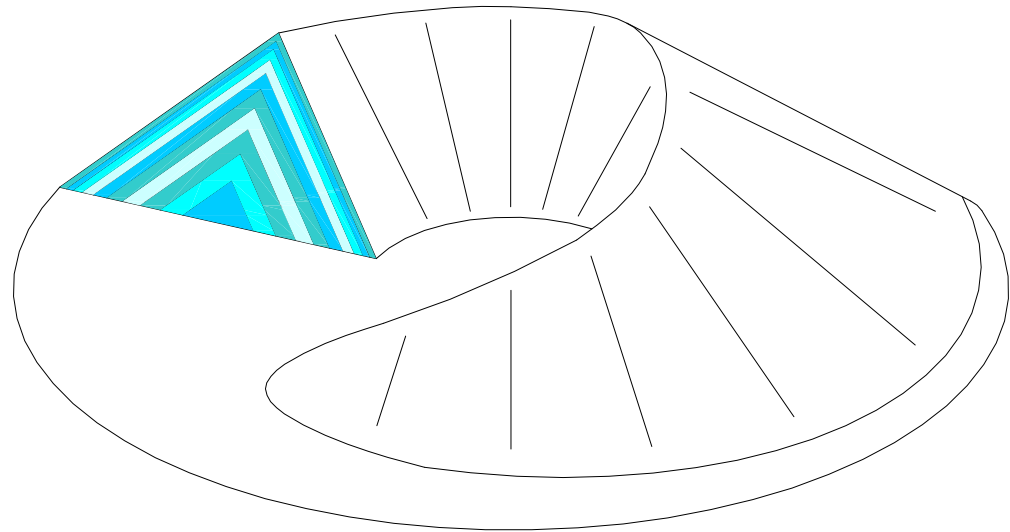
Blending Stockyards



Blending Stockyards

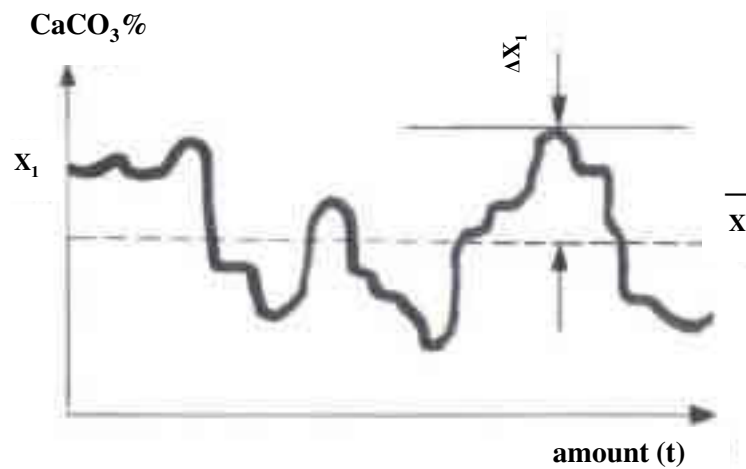


Chevcon Method
(used for homogenizing)

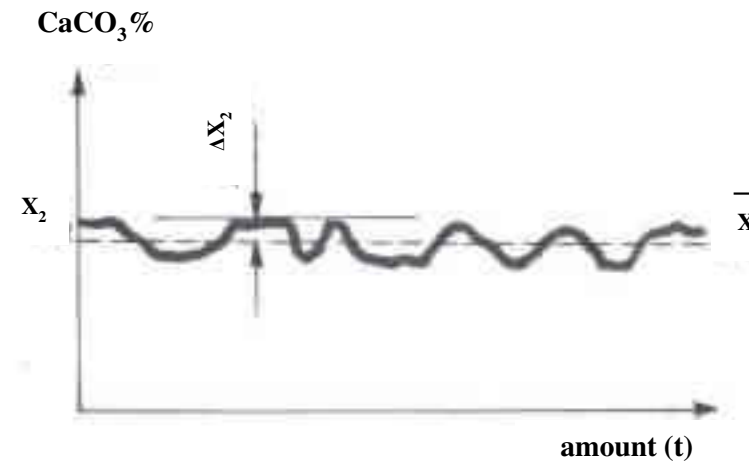


Blending Stockyards

Standard deviation S_1 of CaCO_3 (Calcium Carbonate) for stacking material flow



Standard deviation S_2 of CaCO_3 (Calcium Carbonate) for reclaiming material flow



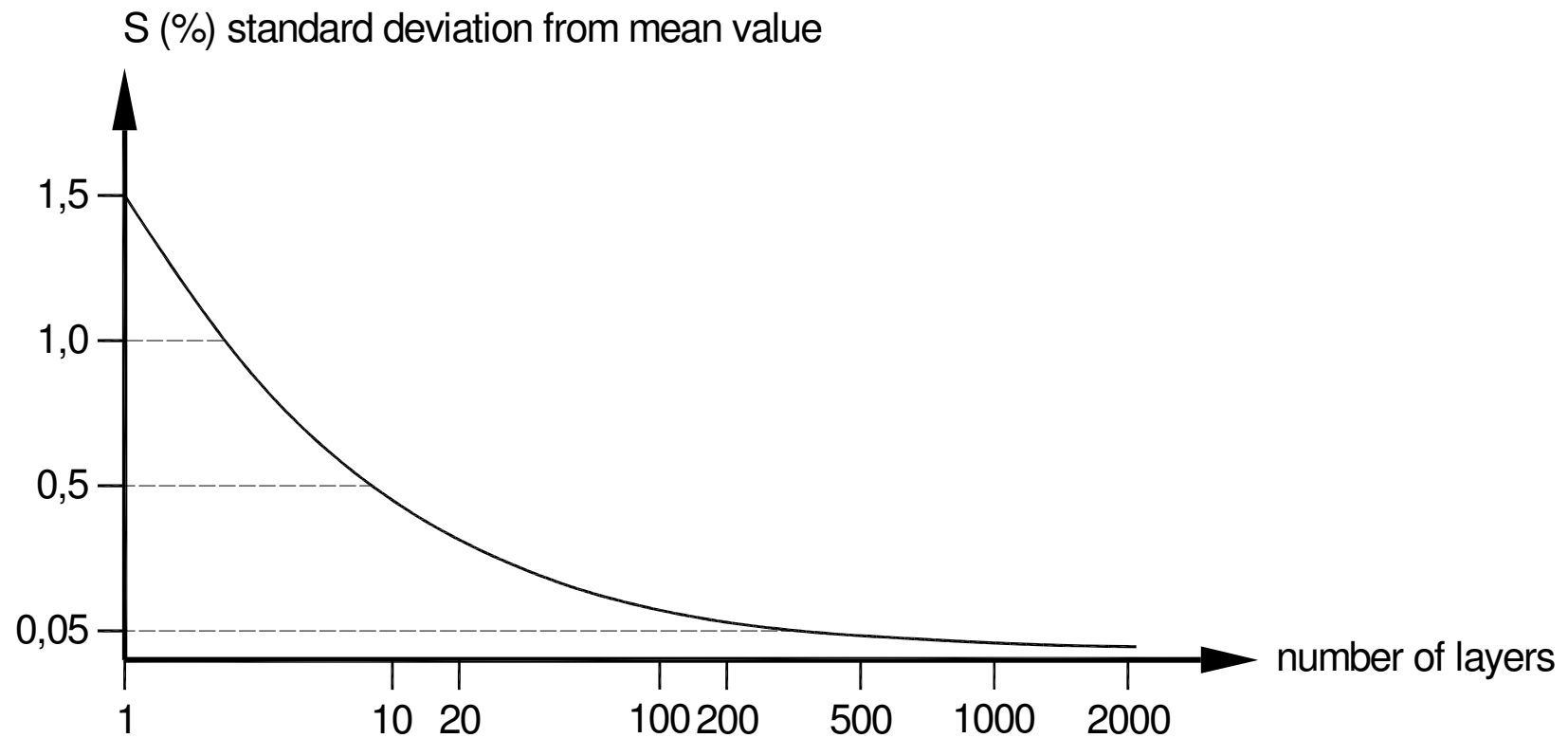
Blending effect is

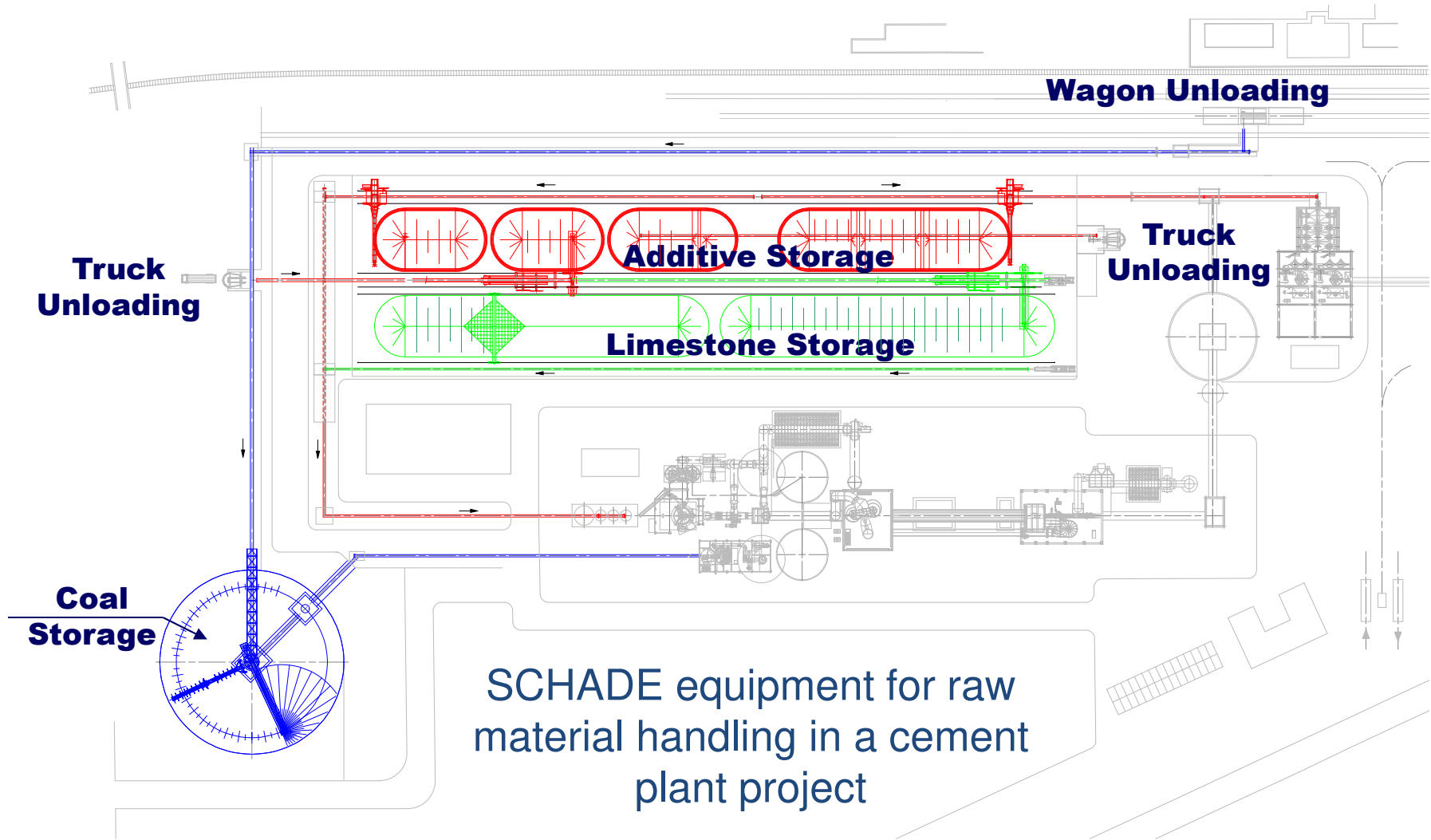


$$e = S_1 / S_2$$

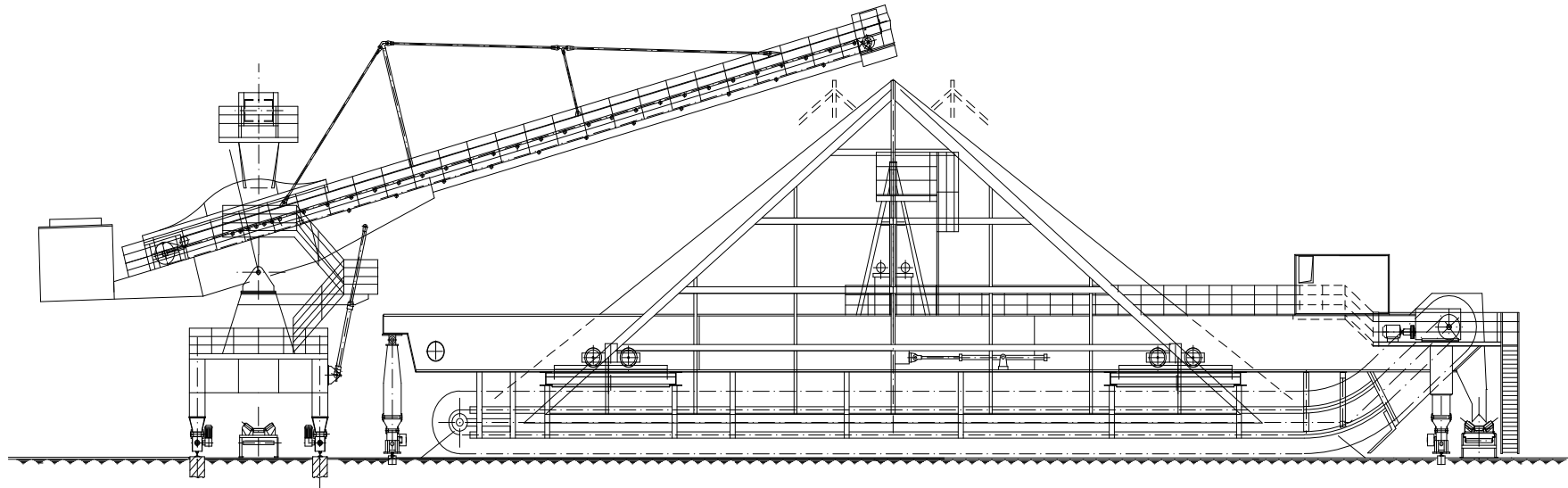
Blending Stockyards

Blending effect

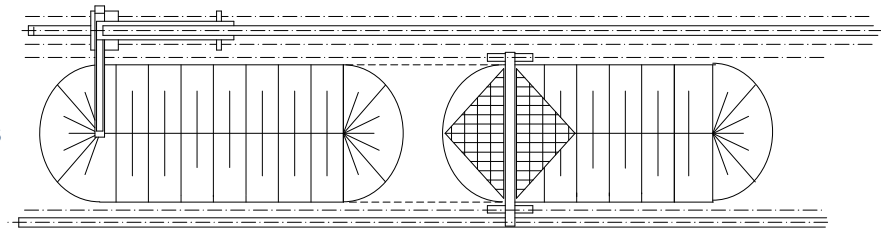




Typical Storage Arrangements for the Cement Industry

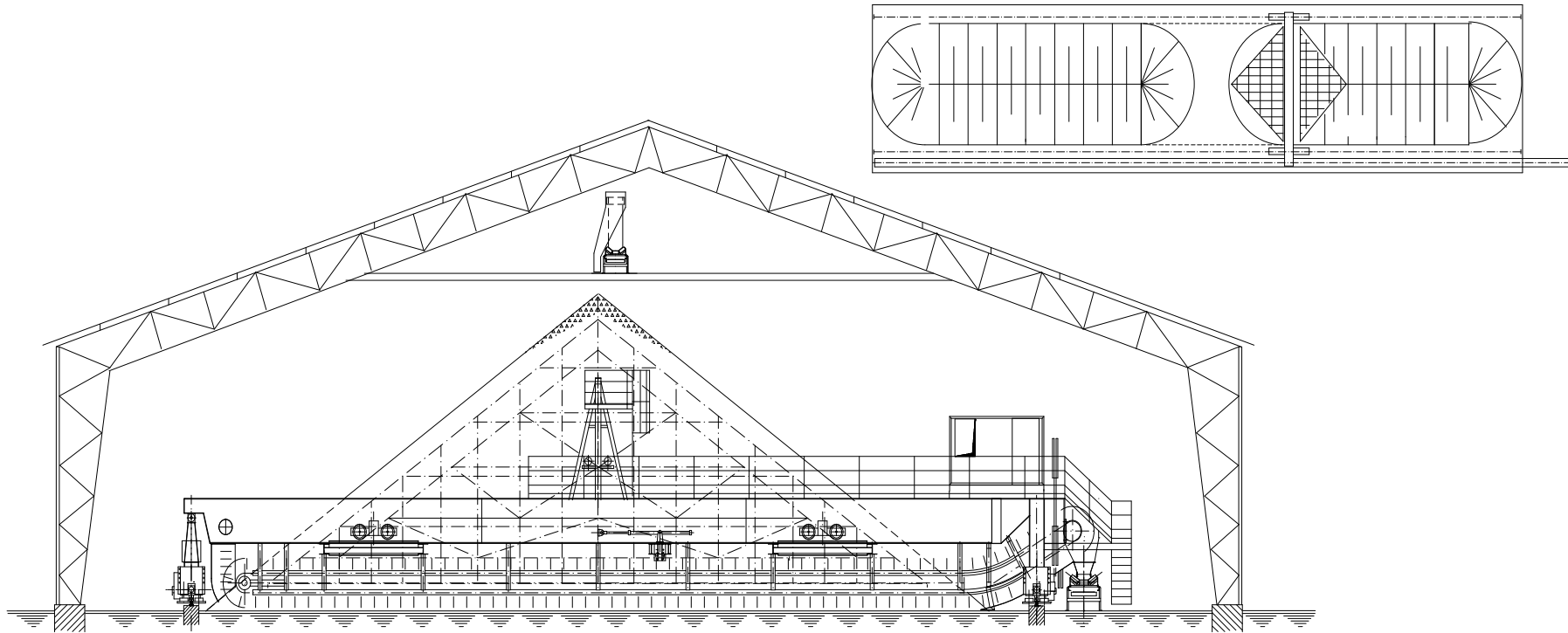


- Stockpile built up by travelling / luffing Stacker in Chevron Method
- Reclaiming from the front of the pile by Bridge type Scraper Reclaimer
- Perfect homogenization and blending of segregated bulk materials
- Automatic operation
- Simultaneous stacking and reclaiming by operating with two piles



Blending Bed of Longitudinal Shape

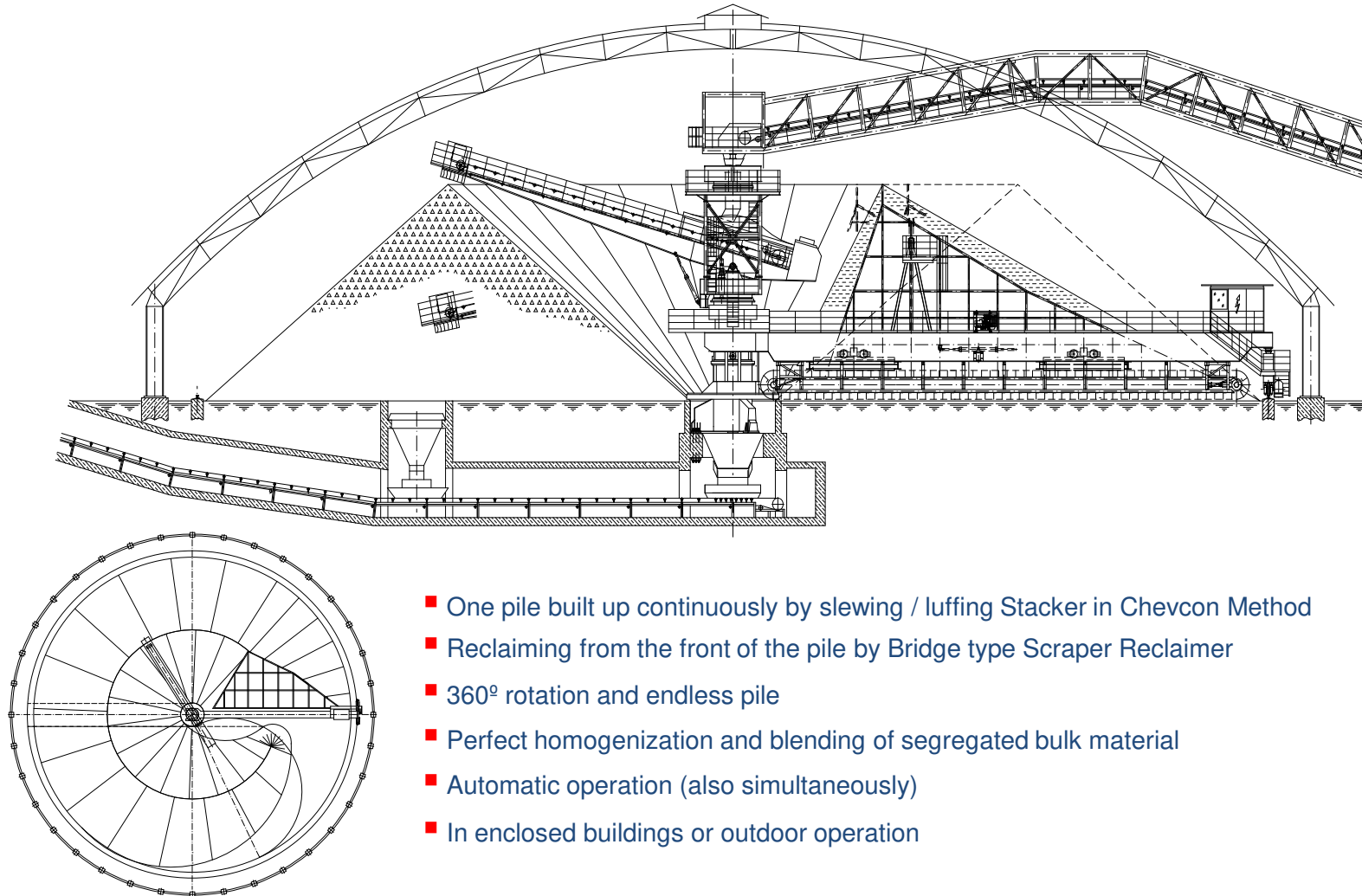
Typical Storage Arrangements for the Cement Industry



- Reclaiming from the front of the pile by Bridge type Scraper Reclaimer
- Automatic operation
- Simultaneous stacking and reclaiming by operating with two piles
- Stockpile built up by travelling Tripper Car in Chevron Method
- Perfect homogenization and blending of segregated bulk material

Blending Bed of Longitudinal Shape

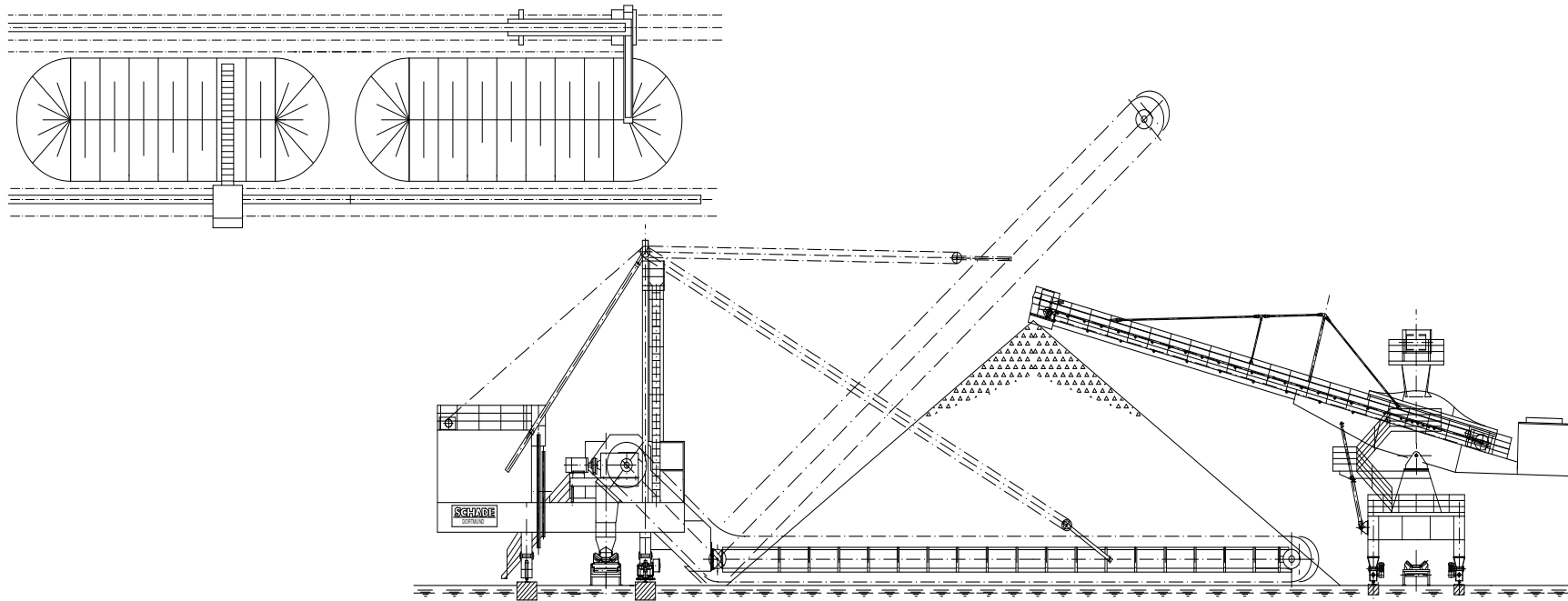
Typical Storage Arrangements for the Cement Industry



- One pile built up continuously by slewing / luffing Stacker in Chevcon Method
- Reclaiming from the front of the pile by Bridge type Scraper Reclaimer
- 360° rotation and endless pile
- Perfect homogenization and blending of segregated bulk material
- Automatic operation (also simultaneously)
- In enclosed buildings or outdoor operation

Blending Bed of Circular Shape

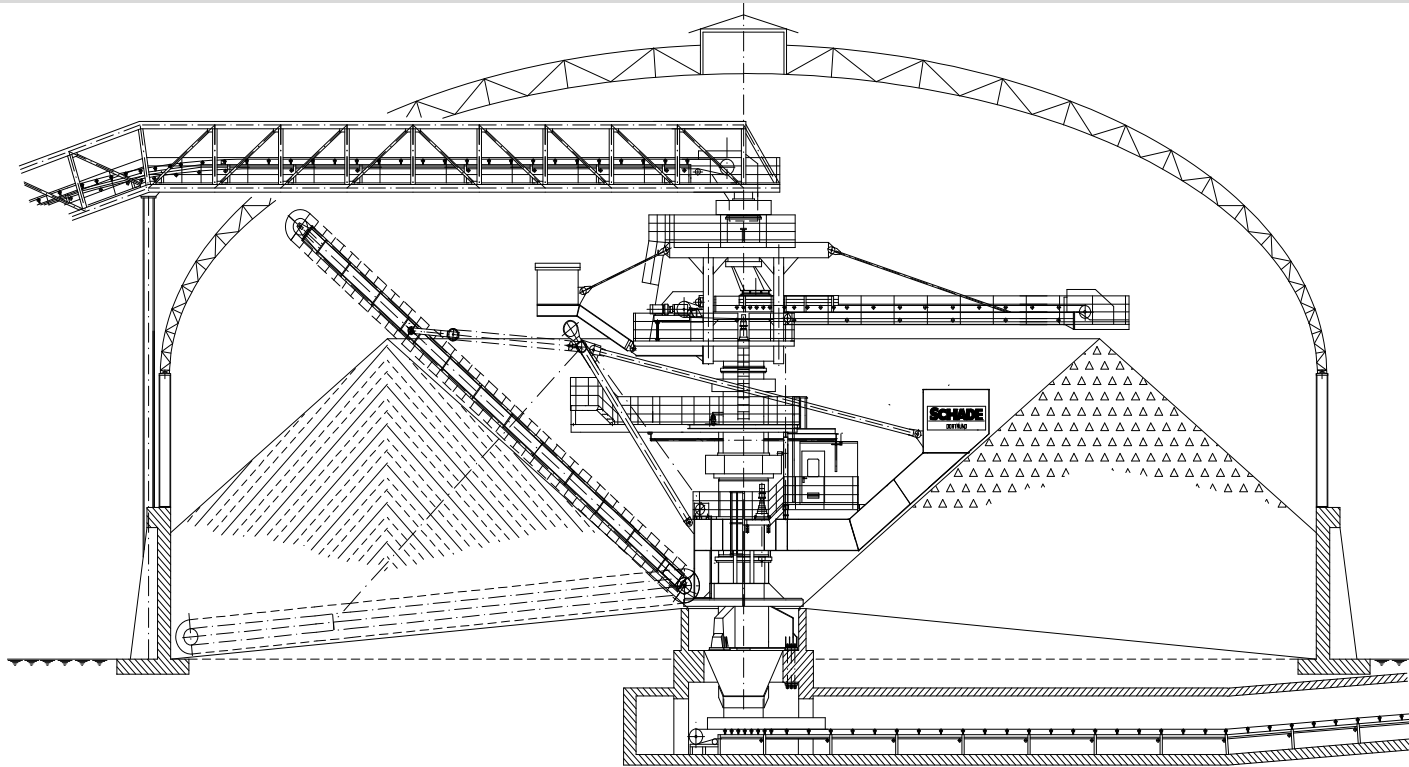
Typical Storage Arrangements for the Cement Industry



- Stockpile built up by travelling and luffing Stacker
- Reclaiming from the side slope of the pile by Cantilever Scraper Reclaimer (for pile widths up to 30 m)
- Operating along the whole length of the stockpile or pre-selected sections
- Automatic operation
- Quick travelling between different working locations

Buffer Storage of Longitudinal Shape

Typical Storage Arrangements for the Cement Industry



- Less space required as with storage units of longitudinal shape
- Large storage capacities on small base area
- Stockpile built up by Slewing Stacker
- Reclaiming from the inner side slope of the pile by slewing/luffing scraper boom
- Automatic operation (also simultaneously)

Buffer Storage of Circular Shape

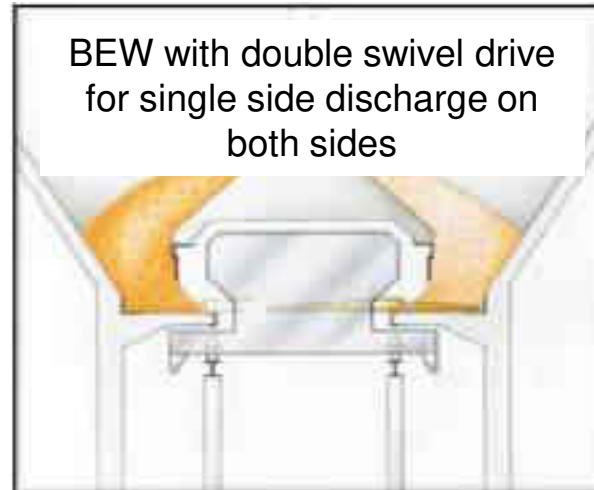
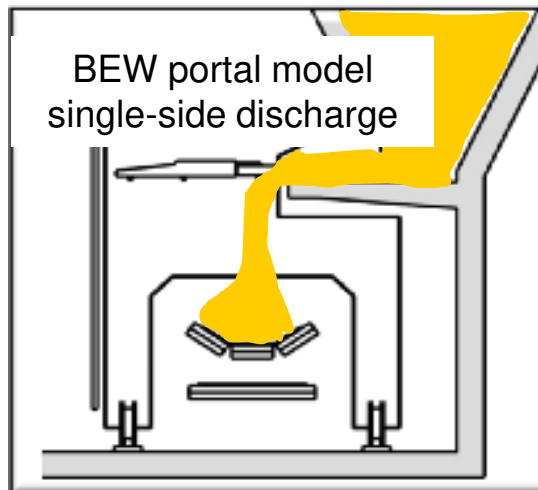
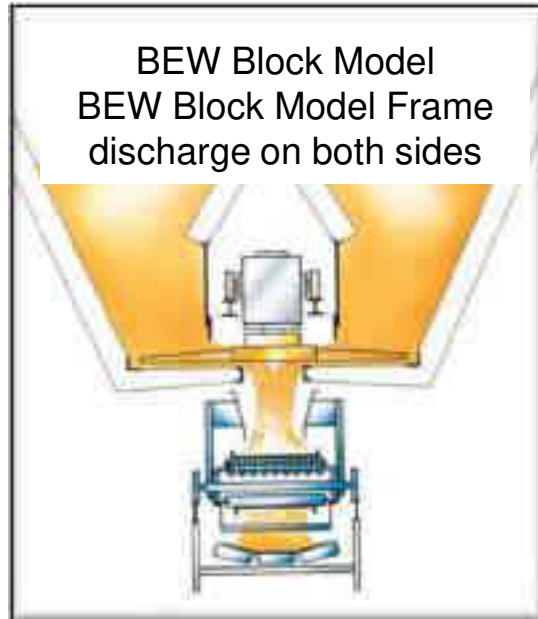
Typical Materials for BEW

- Anhydrite
- Barium Carbonate
- Bauxite
- Blast Furnace Coke
- Blast Furnace Slag
- Coal
- Dolomite
- FGD Gypsum
- Filter Salt
- Fluorspar
- Iron Ore
- Limestone
- Marl
- Natural Gypsum
- Pot Ash
- Quarzit
- Sand
- Volcanic Earth

and many more materials



Rotary Discharge Machine Installation Options



Various Discharge
Configurations to
suit the particular
site layout and
access
requirements

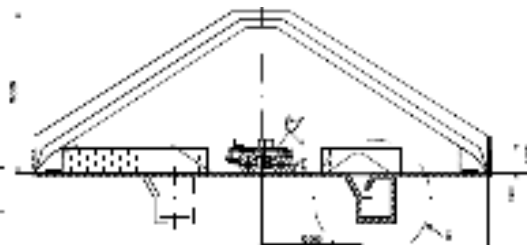
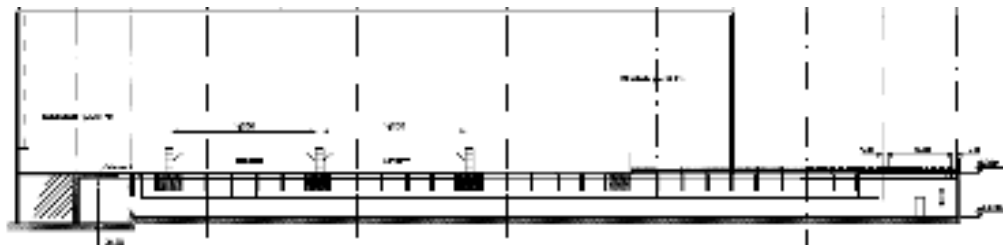
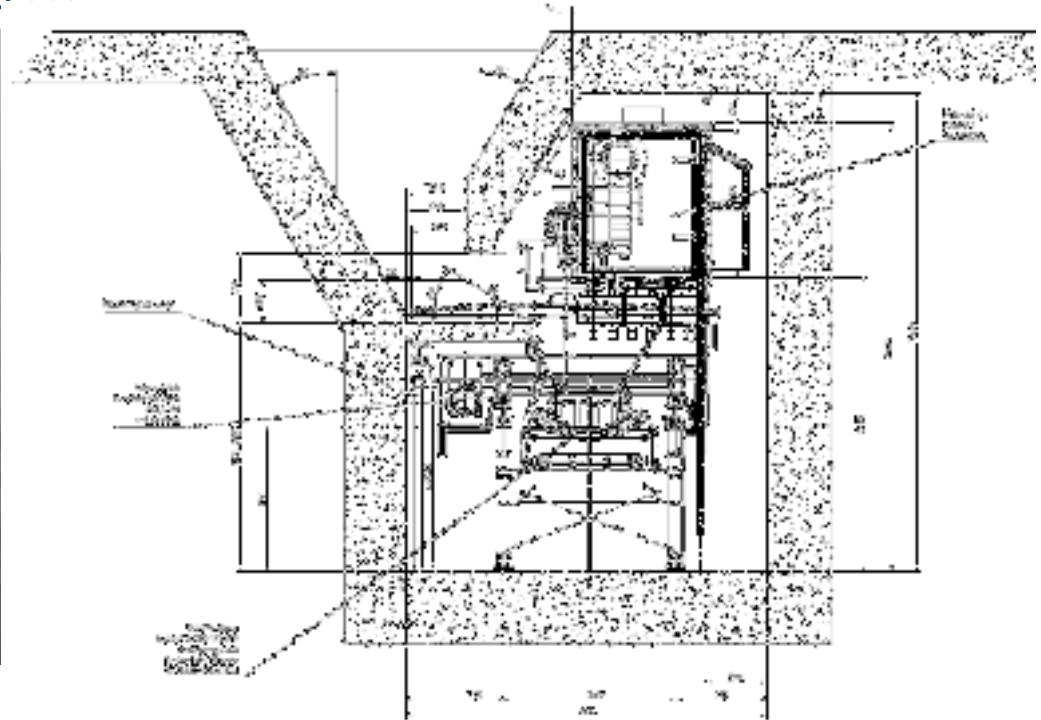
Functions & Features

- First in – First out
- Simultaneous Feeding and Discharging
- Material Blending Possible
- Combination of Multiple Machines in one Row possible
- Controlled Reclaiming of Material
- For Every Sticky and Poor Flowing Material
- Discharge Capacity Infinitely Adjustable
- For Discharge Capacities up to 5.000 m³/h
- Low Power Demand
- 2 - 6 Discharge Arms - Low Torque of Each Arm
- Travel distance up to 300 m
- Maintenance with Filled Silo Possible
- Easy Access



Examples with BEW in Cement Plants

Additive Feeding & Dosing Cement Mill - Dyckerhoff Göllheim – Germany
„BEW with integrated dedusting system“



2. Raw Mill Section

Raw mill feeding - BW-Z, PKF

Dosing - DPB

Raw meal conveying - BW-G

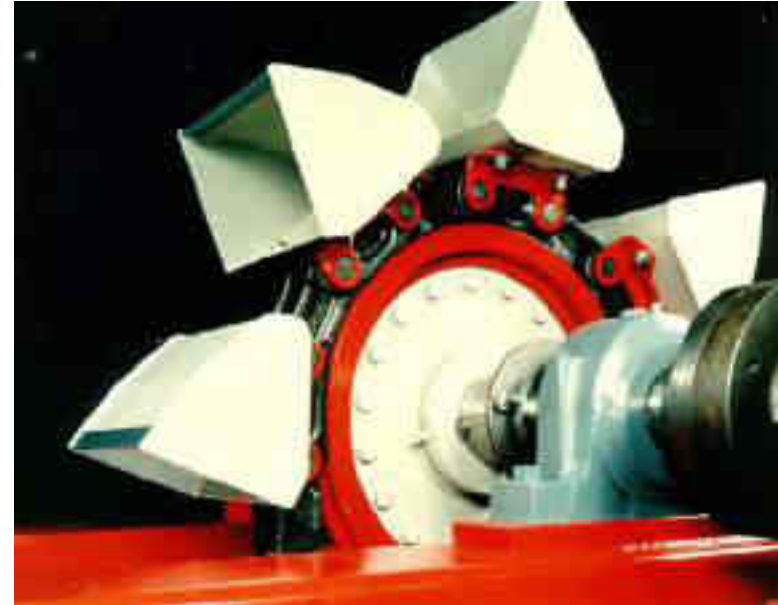
Recirculation - BWG-GK, BW-Z (higher temperature)

Dust conveying - TKF

Raw mill feeding – Chain Bucket Elevator BW-Z



Raw mill feeding – Chain Bucket Elevator BW-Z



Raw mill feeding – Chain Bucket Elevators**Centrifugal discharge****BW-ZL Low capacity single strand chain bucket elevators**

Bucket width 210 – 500mm
Central chain, single leg casing design

**BW-Z High capacity single strand chain bucket elevators**

Bucket width 400 – 1100mm
Central chain, double leg casing design

**BW-D Double strand chain bucket elevators**

Bucket width 2x400 – 2x1100mm
2 Central chains, double leg casing design

**BW-T Triple strand chain bucket elevators**

Bucket width 3x800 – 3x1100mm
3 Central chains, double leg casing design

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Raw mill feeding – PKF



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Dosing – DPB



Raw meal conveying - Belt Bucket Elevators Type BW-G

Centrifugal discharge



BW-GL

Low capacity belt bucket elevators

Bucket width 250 - 500 mm



BW-G

High capacity belt bucket elevators

Bucket width 400 - 1600mm



BWG-GK

High capacity belt bucket elevators for

Coarse material. Bucket width 400 - 1250 mm

Belt Bucket Elevator BW-GL

Conveying Capacity		
BW-GL	speed [m/s]	theoretical capacity ¹⁾ [m ³ /h]
250	1,34	140
315	1,34	176
355	1,34	200
400	1,34	225
450	1,34	253
500	1,34	281

¹⁾ at 100 % water level filling
recommended bucket filling = 85%



Belt Bucket Elevator BW-G (HC)

Conveying Capacity		
BW-G	speed [m/s]	theoretical capacity ¹⁾ [m ³ /h]
400	1,54	387
500	1,54	484
630	1,54 – 1,76	610 - 726
800	1,76 – 1,94	923 - 1157
1000	1,76 – 1,94	1150 - 1447
1250	1,76 – 1,94	1437 - 1811
1400	1,94	2029
1600	1,94	2318

¹⁾ at 100 % water level filling
recommended bucket filling = 85%



Recirculation - Belt Bucket Elevator for Coarse Material BWG-GK

An alternative solution to chain elevators for materials up to 80mm grain sizes!

Conveying Capacity – BWG-GK		
BWG-GK	speed [m/s]	Theoretic. capacity ¹⁾ [m ³ /h]
400	1,38 - 1,54	239 - 339
500	1,38 – 1,54	298 – 424
630	1,54 – 1,72	477 – 641
800	1,54 – 1,72	607 – 814
1000	1,72	1018
1250	1,72	1272

¹⁾ at 100 % water level filling
recommended bucket filling = 75 %



Recirculation - Chain Bucket Elevator BW-ZL

Conveying Capacity		
BW-ZL	speed [m/s]	theoretical capacity ¹⁾ [m ³ /h]
250	1,23	104
280	1,23	116
315	1,23 – 1,49	130 – 164
355	1,23 – 1,49	147 – 185
400	1,23 – 1,49	166 – 208
450	1,49	234
500	1,49	260

¹⁾ at 100 % water level filling recommended bucket filling = 85%



Single Strand Bucket Elevator BW-Z

Conveying Capacity		
BW-Z	speed [m/s]	theoretical capacity ¹⁾ [m ³ /h]
400	1,40 – 1,90	266 - 365
450	1,40 – 1,90	300 - 410
500	1,40 – 1,90	333 – 457
560	1,40 – 1,90	373 - 511
630	1,40 – 1,90	420 - 576
710	1,40 – 1,90	473 - 649
800	1,40 – 1,90	533 - 731
900	1,40 – 1,90	600 - 823
1000	1,40 – 1,90	666 - 913
1100	1,40 – 1,90	733 - 1005

¹⁾ at 100 % water level filling
recommended bucket filling = 75 % (85%)



Double Strand Bucket Elevator BW-D High Capacity

Conveying Capacity

BW-D	speed [m/s]	theoretical capacity ¹⁾ [m ³ /h]
630	1,40 – 1,90	840 - 1152
710	1,40 – 1,90	946 - 1298
800	1,40 – 1,90	1066 - 1462
900	1,40 – 1,90	1200 - 1646
1000	1,40 – 1,90	1332 - 1826
1100	1,40 – 1,90	1466 - 2010

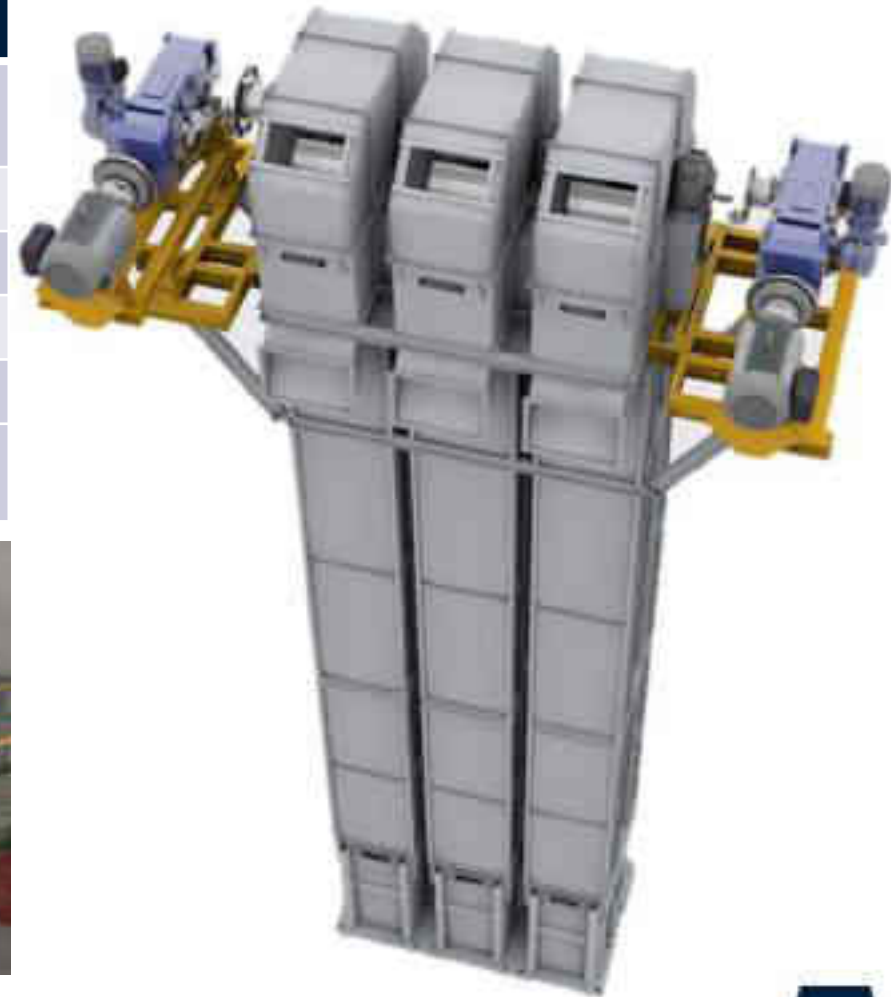
¹⁾ at 100 % water level filling
recommended bucket filling = 75 % (85%)



Triple Strand Bucket Elevator BW-T High Capacity

Conveying Capacity		
BW-T	speed [m/s]	theoretical capacity ¹⁾ [m ³ /h]
800	1,56 – 1,90	1827 - 2193
900	1,75 – 1,90	2277 - 2469
1000	1,75 – 1,90	2526 - 2739
1100	1,75 – 1,90	2781 - 3015

¹⁾ at 100 % water level filling
recommended bucket filling = 75 % (85%)



Bucket Elevators Applications

		Granulation		
		< 1-10 mm	10-80 mm	10-100 mm
Centers Distance	high up to 200 m (belt) up to 90m (chain)	BW-G	BWG-GK	BW-T BW-D BW-DK
	low	BW-GL		BW-Z / BW-ZS BW-ZL
		Belt Bucket Elevators		Chain Bucket Elevators
		up to 150°C (with EPDM belt)		up to 450°C
		Temperature		
		low		high

high
up to 2600 m³/h

Capacity

low



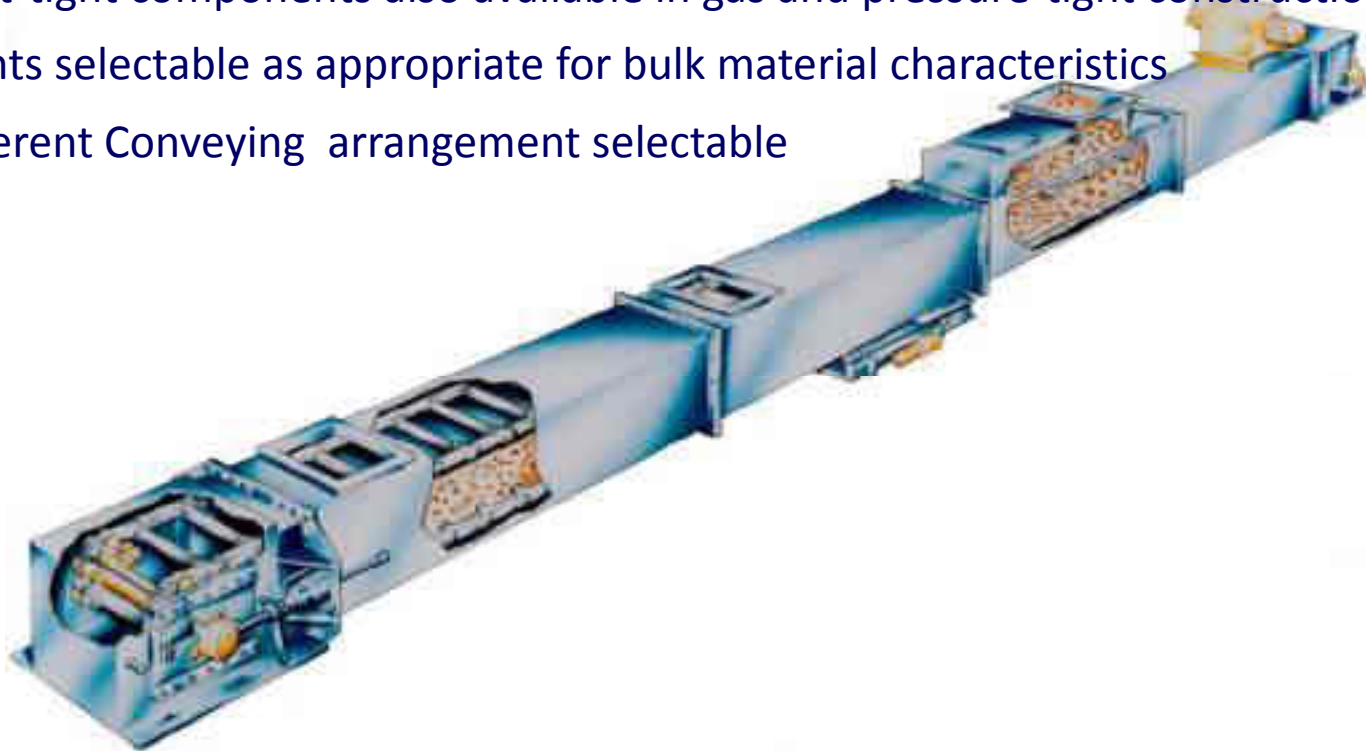
Dust conveying - TKF - Applications

The “en masse” conveyor one of the key products for many Industries



Chain Conveyor Applications - TKF

- conveying width up to 2000mm
- capacity up to 630 t/h (material depending)
- lengths of 50m and more
- forged and surface-hardened forged fork-linked chains
- single or double strand chain depending on the application
- Dust-tight components also available in gas and pressure-tight construction
- flights selectable as appropriate for bulk material characteristics
- different Conveying arrangement selectable



TKF Standard Width

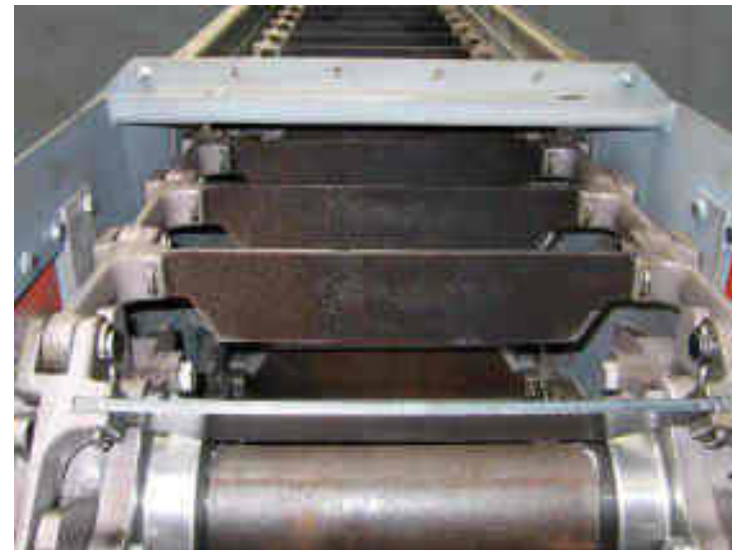
Single strand

- 250mm
- 315mm
- 400mm
- 500mm



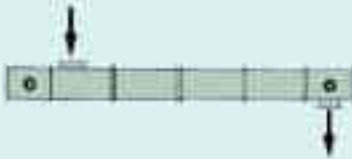
Double strand

- 400mm
- 500mm
- 630mm
- 800mm
- 1000mm
- 1200mm
- 1400mm
- 1600mm
- 2000mm

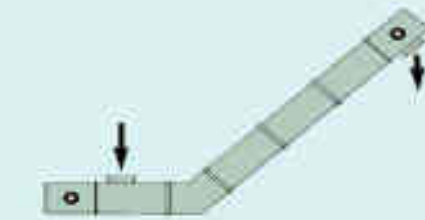
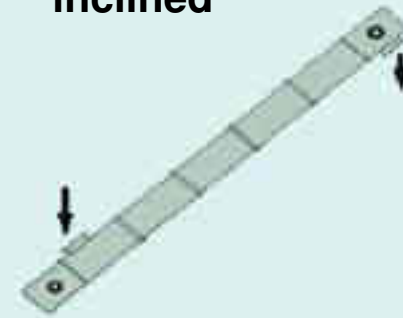


TKF Arrangement

horizontal



inclined

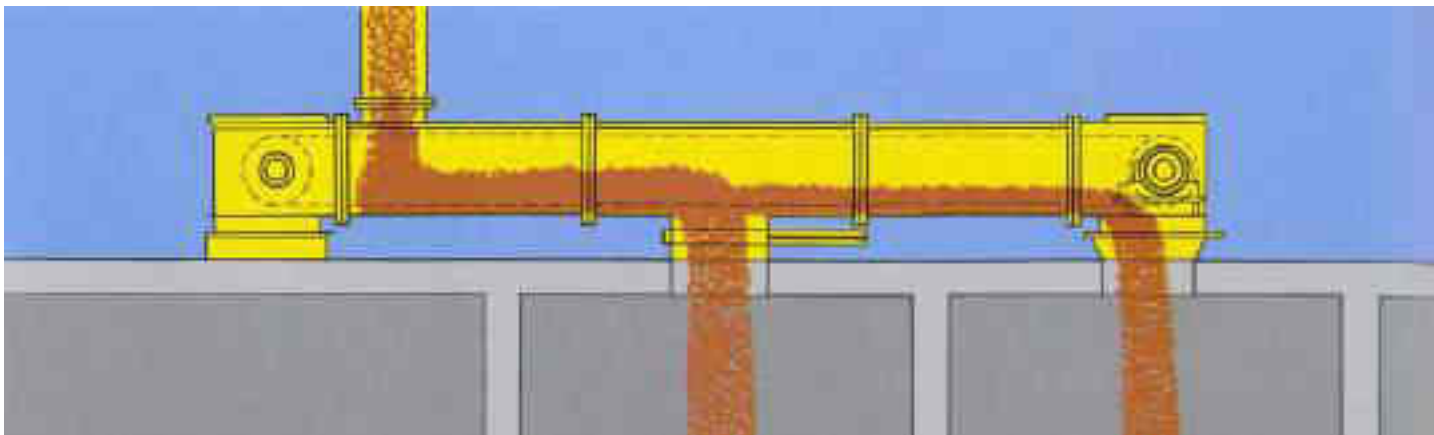


horizontal and inclined



Chain Conveyor Applications - TKF

- Cement
- Raw meal
- Filter dust
- Coal
- Limestone & Burnt lime
- Blast furnace slag
- Natural & FGD gypsum
- Fertilizer
- Ash
- Iron Ore, Copper Ore
- Alternative fuel eg. RDF
- Sewage sludge
- Cereal grains



3. Kiln Section

Pan Conveyors KZB/KZB-Q

Aumatic

Bucket Apron Conveyors – BZB

Pivoting Pan Conveyor SPB

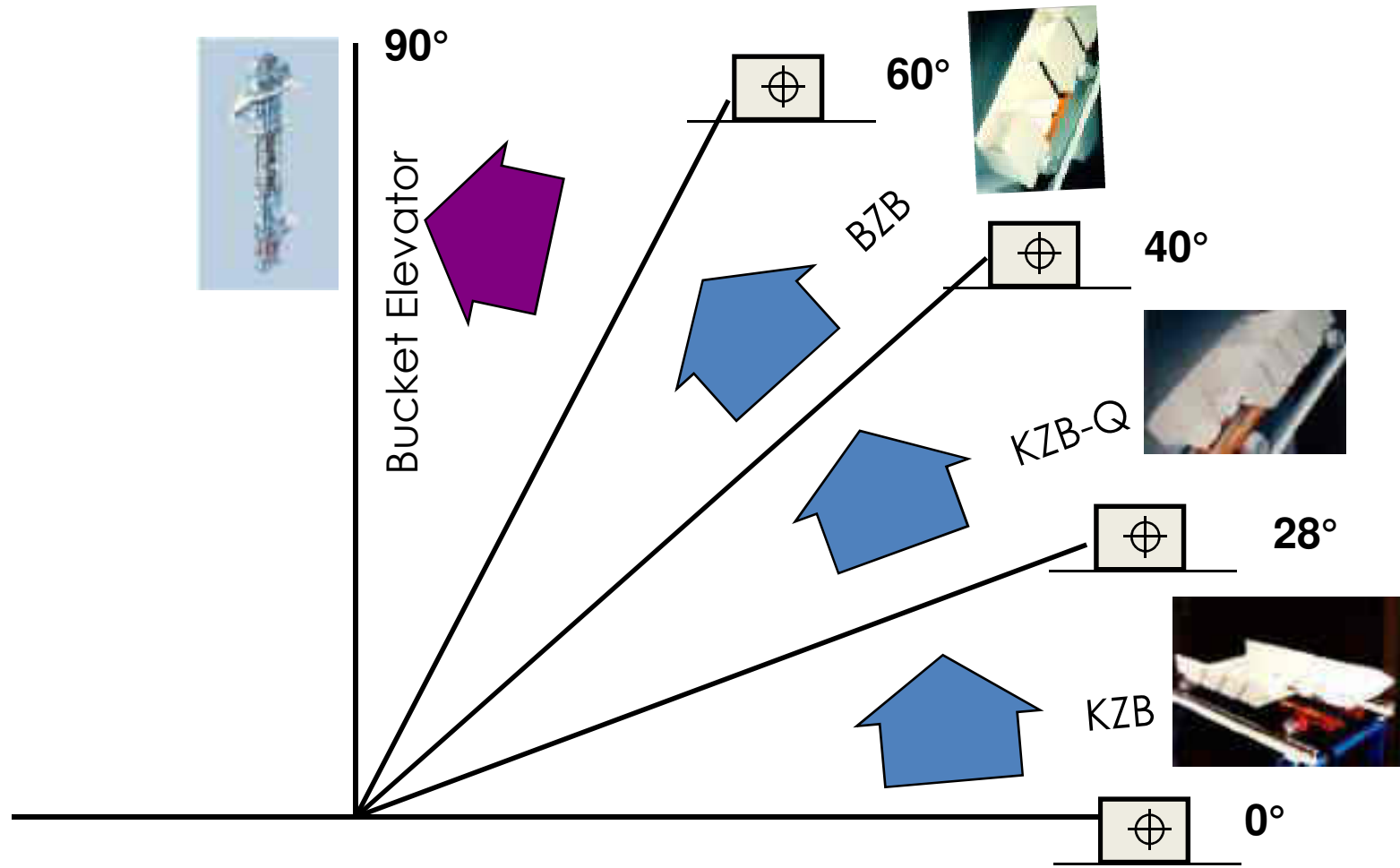
Reversible Pan Conveyor KZB-R

Telescopic Chute – TS

Silo Discharge



Application limits for clinker conveyors



Pan Conveyors KZB/KZB-Q



KZB

- Up to 30° slope
- Pan sizes 400-2400mm
- Capacities up to 1500t/h



KZB-Q

- Up to 45° slope
- Pan sizes 400-2400mm
- Capacities up to 1300t/h

Pan Conveyor KZB

Conveying Capacity		
KZB	Side wall height ¹⁾ (mm)	theoretical capacity ^{1) 2)} [m ³ /h]
400	200 - 300	70 - 100
600	200 - 350	110 - 200
800	200 - 450	180 - 370
1000	200 - 450	250 - 490
1200	200 - 450	380 - 620
1400	200 - 450	460 - 740
1600	200 - 450	530 - 850
1800	200 - 450	600 - 970
2000	200 - 450	680 - 1090
2200	200 - 450	750 - 1210
2400	200 - 450	830 - 1320

¹⁾ at $v=0,3\text{m/s}$ & max. filling „Qmax.“

The indicated capacities applies to an angle of repose of $\beta_{\text{dyn.}} = 25^\circ$

²⁾ recommended conveyor inclination for clinker = 28°



Pan Conveyor KZB-Q

Conveying Capacity

KZB-Q	Side wall height ¹⁾ (mm)	theoretical capacity ¹⁾ [m ³ /h]
400	250 - 400	90 - 165
600	250 - 400	150 - 250
800	250 - 450	200 - 370
1000	250 - 450	250 - 460
1200	250 - 450	300 - 560
1400	250 - 450	350 - 650
1600	300 - 450	480 - 740
1800	300 - 450	540 - 840
2000	300 - 450	600 - 930
2200	300 - 450	665 - 1020
2400	300 - 450	720 - 1115

¹⁾ at v=0,3m/s & max. filling „Qmax.“

The indicated capacities applies to an angle of repose of $\beta_{dyn.} = 25^\circ$



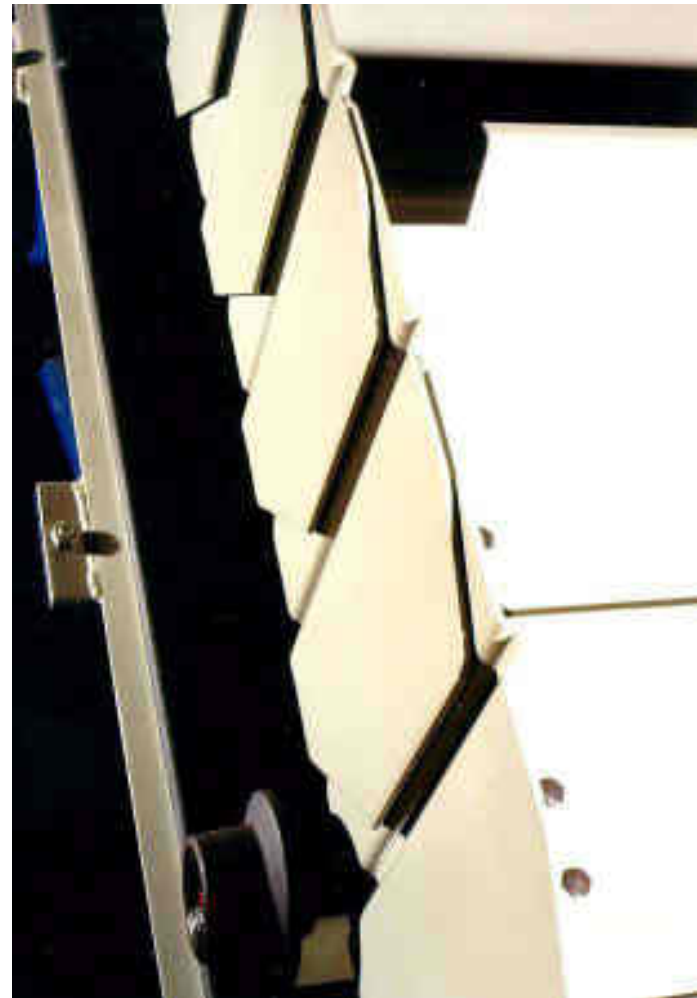
Reduction factor for angle of inclination, up to:

Side wall height	30°	35°	40°	45°
250	0,949	0,822	0,701	0,602
300	0,960	0,863	0,769	0,690
350	0,968	0,888	0,812	0,711
400	0,973	0,905	0,841	0,775
450	0,976	0,918	0,863	0,811

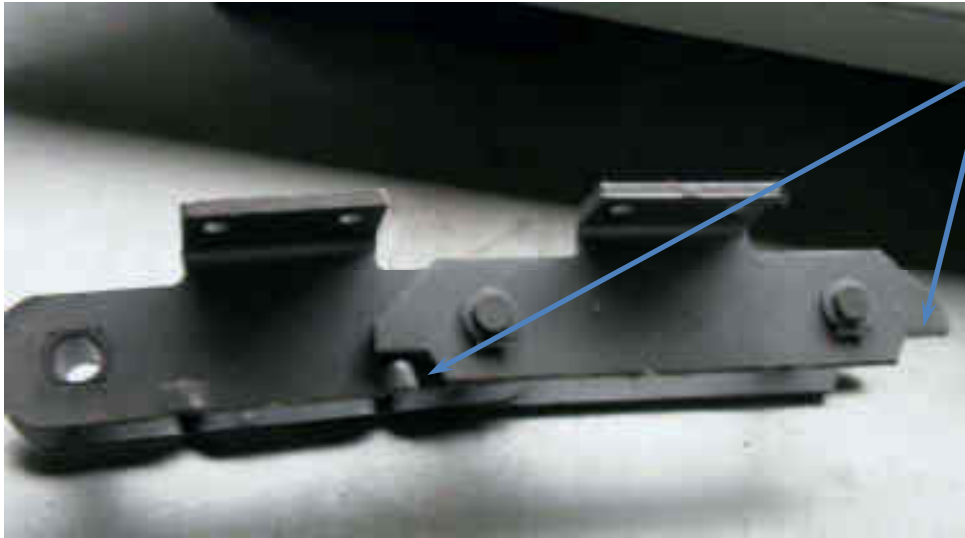
Recommended inclination for clinker = max. 40°



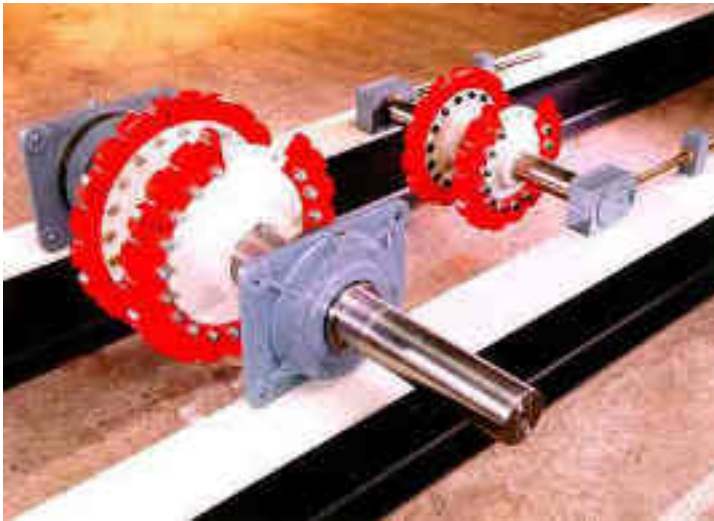
Special Pan Conveyors features



Special Pan Conveyors features

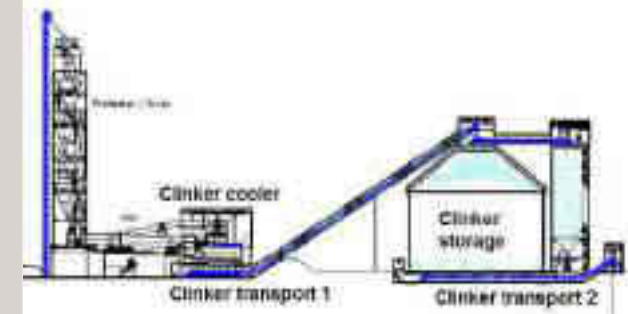
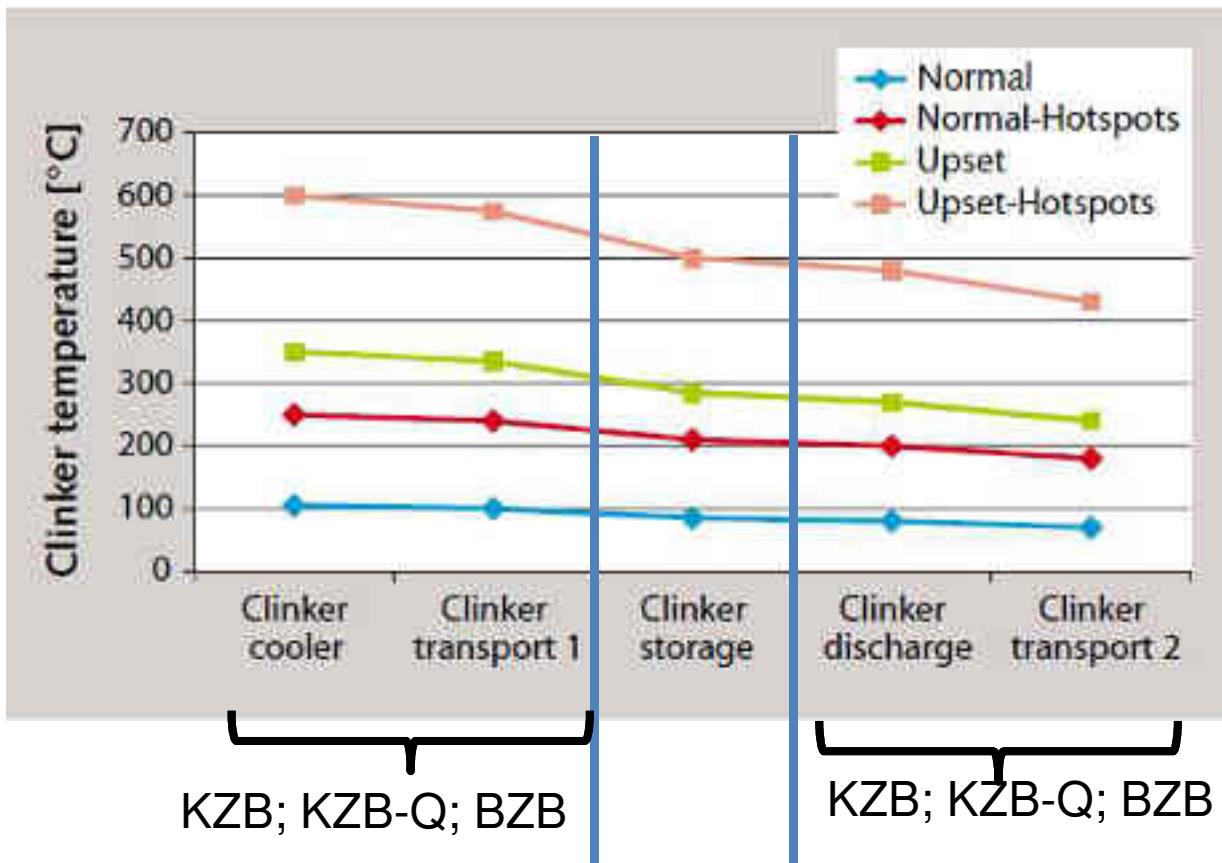


Cames
and lugs



Conveyor Solutions for Clinker Handling

- Using of more and more alternative fuels in the kiln, increases the risk of upset conditions!
- Under upset conditions the rated clinker end temperature can increase to about 350°C, while the hot spot clinker will increase to 600°C!



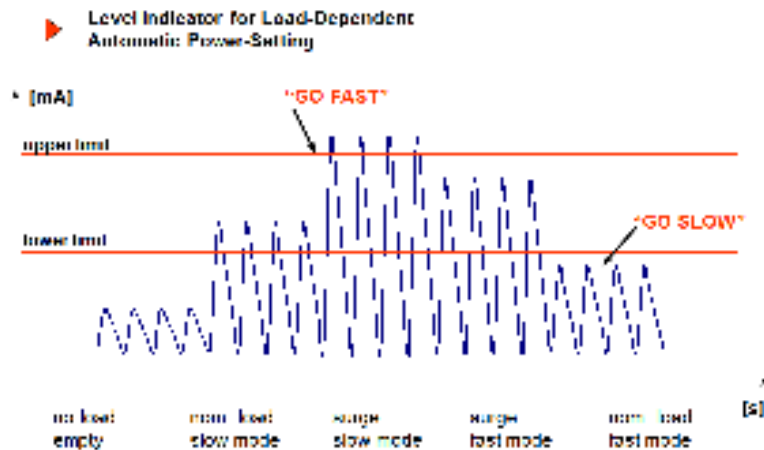
Aumatic

Aumatic => increases speed & capacity only when necessary!



- ⇒ Reducing wear
- ⇒ Reducing spillage

Load Cell



Bucket Apron Conveyor BZB



BZB

- Up to 60° slope
- Bucket sizes 400-1600mm
- Capacities up to 600t/h

Bucket Apron Conveyor BZB

Conveying Capacity

BZB	Side wall height ¹⁾ (mm)	theoretical capacity ^{1) 2)} [m ³ /h]
400	200 – 250	80 - 110
600	200 – 300	100 - 185
800	250 – 400	165 - 334
1000	300 – 400	244 - 385
1200	350 – 400	338 - 422
1400	350 – 400	348 - 446
1600	350 - 400	345 - 458

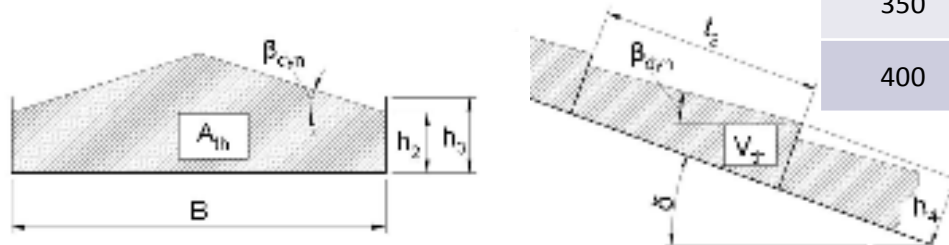
¹⁾ at v=0,3m/s & max. filling „Qmax.“
The indicated capacities applies to an angle of repose of $\beta_{dyn.} = 25^\circ$

²⁾ recommended filling underneath Clinker cooler = 80%



Reduction factor for angle of inclination, up to:

Side wall height	30°	35°	40°	45°	50°	55°	60°
250	0,971	0,898	0,828	0,764	0,706	0,658	0,619
300	0,976	0,915	0,857	0,803	0,756	0,716	0,684
350	0,979	0,927	0,878	0,832	0,791	0,757	0,730
400	0,982	0,936	0,893	0,853	0,817	0,787	0,764



Pivoting Pan Conveyor SPB

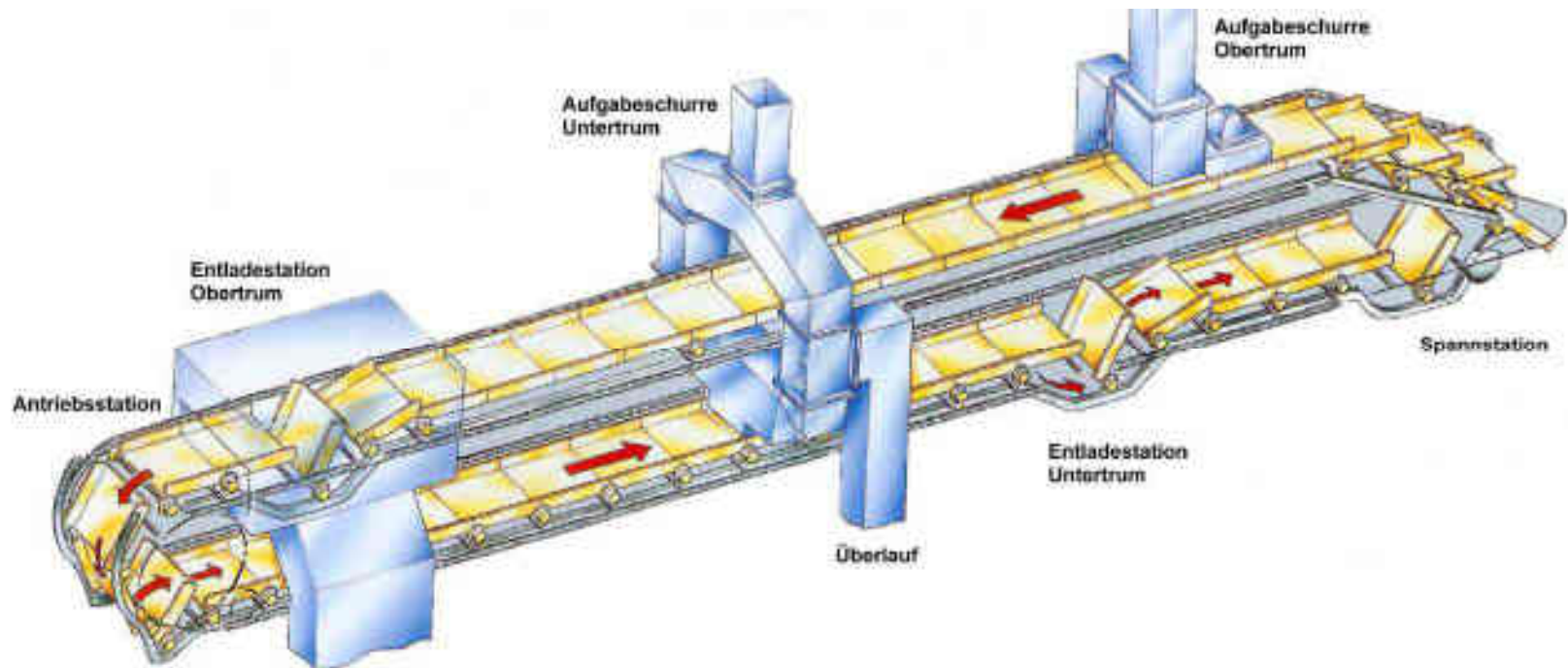
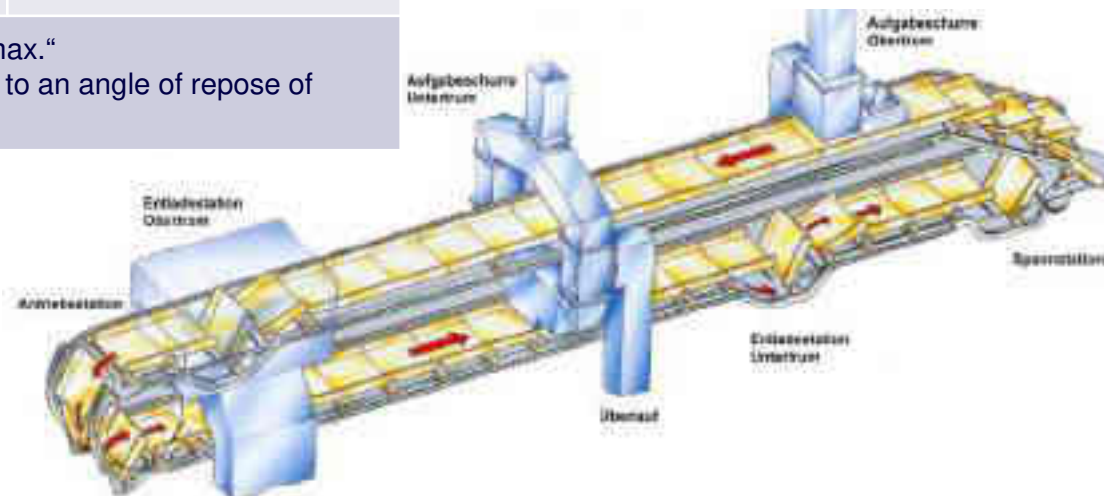


Plate width from 400 - 1600 mm
CC distance of 400 m already installed
More than 140 installations world wide

Pivoting Pan Conveyor SPB

Conveying Capacity		
SPB	Side wall height ¹⁾ (mm)	theoretical capacity ¹⁾ [m ³ /h]
400	150 – 200	65 - 96
600	150 – 200	100 - 150
800	150 – 200	140 - 204
1000	150 – 200	180 - 264
1200	150 – 200	225 - 330
1400	150 – 200	275 - 396
1600	150 – 200	325 - 468

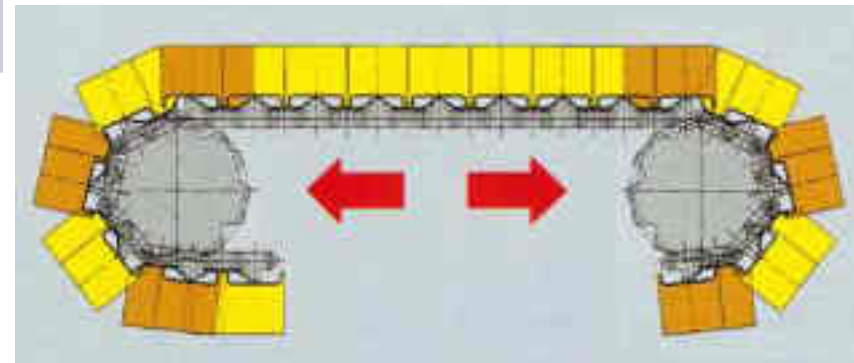
¹⁾ at v=0,28m/s & max. filling „Qmax.“
The indicated capacities applies to an angle of repose of $\beta_{dyn.} = 10^\circ$



Reversible Pan Conveyor KZB-R

Conveying Capacity		
KZB-R	Side wall height ¹⁾ (mm)	theoretical capacity ¹⁾ [m ³ /h]
400	200 - 300	70 - 100
600	200 - 350	110 - 200
800	200 - 450	180 - 370
1000	200 - 450	250 - 490

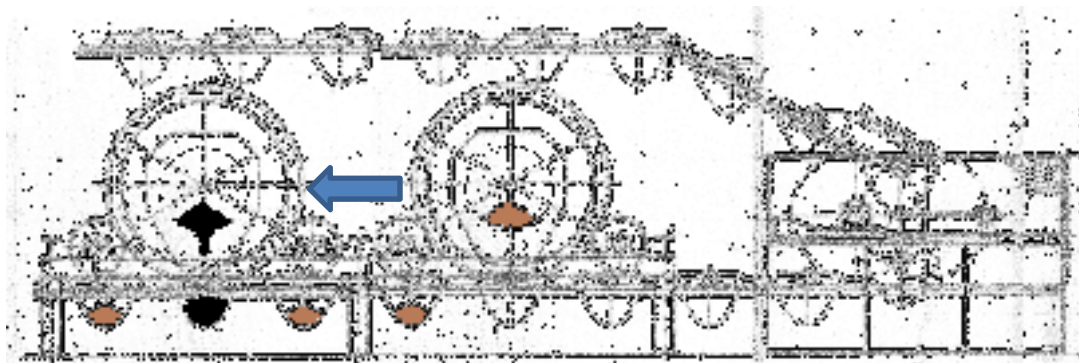
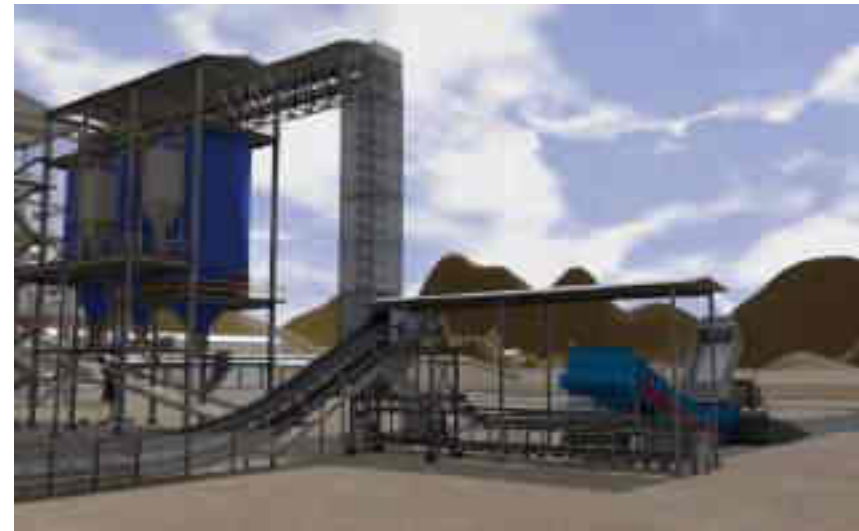
¹⁾ at $v=0,3\text{m/s}$ & max. filling „Qmax.“
The indicated capacities applies to an angle of repose of $\beta_{\text{dyn.}} = 25^\circ$



Pendulum Bucket Elevator BWP

Conveying Capacity		
BWP	bucket pitch [mm]	theoretical capacity ¹⁾ [m ³ /h]
600	1000	158
800	1000	211
1000	1000	264
1200	1000	316
1400	1000	369
1600	1000	422
1800	1000	475

¹⁾ at v=0,3m/s & 100 % water level filling
recommended bucket filling = 85 %



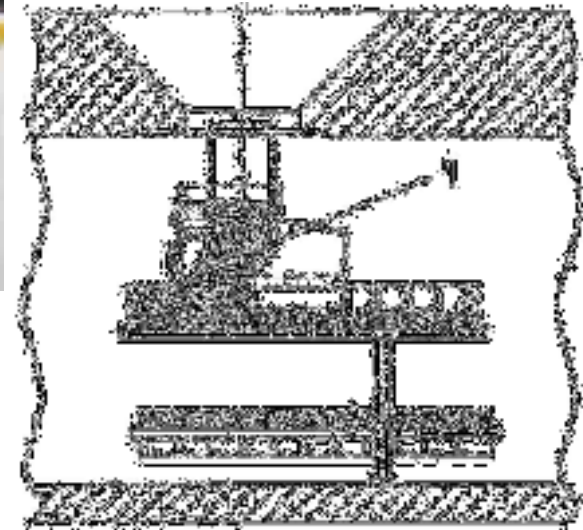
Telescopic Chute - TS



- for clinker truck loading
- from 300t/h up to 700t/h
- possible lifts:
 - 2.650mm
 - 3.400mm
 - 4.100mm
 - 4.820mm
 - 7.580mm

WE CONVEY QUALITY

SILO DISCHARGE



WE CONVEY QUALITY

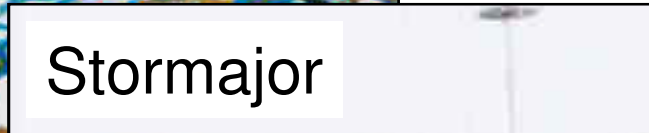
Clinker storage systems



4. Solid fuel (CAS) and additives intake - SAMSON MH Products



Shiploaders



Stormajor



Link Conveyors



Eco-Hoppers

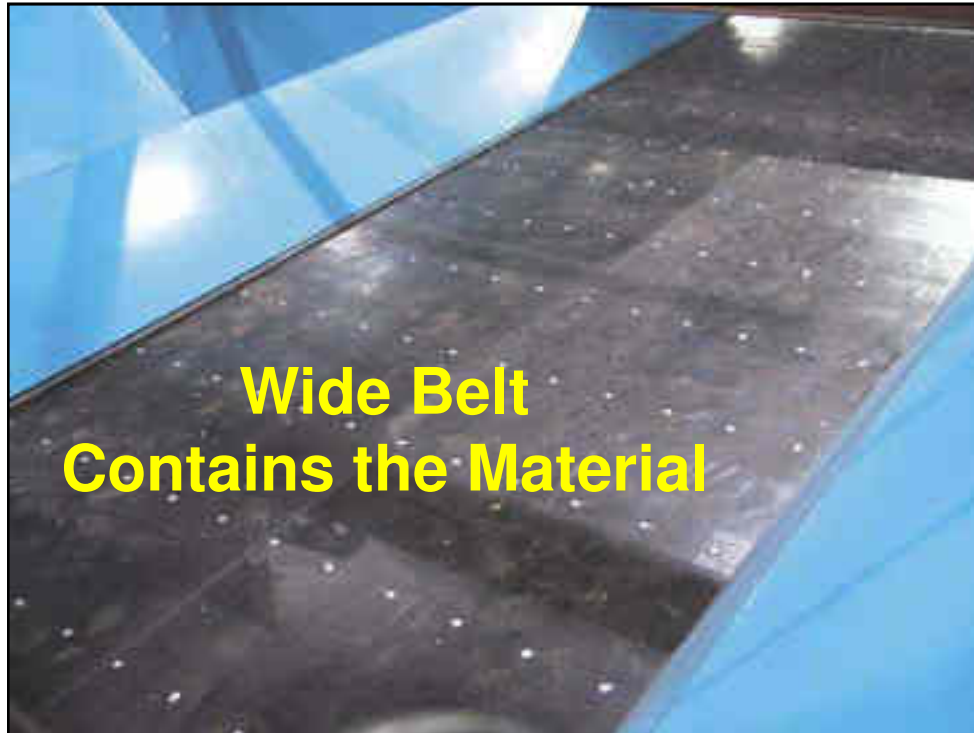


Samson Feeders

Flexible Solutions for Bulk Materials Handling

**Economical Alternatives
Fast Track Availability
Minimum Civil Works**

Critical Features



The Samson comprises steel apron bars, to contain the load, and a rubber conveyor belt fixed to the apron bars to contain the material

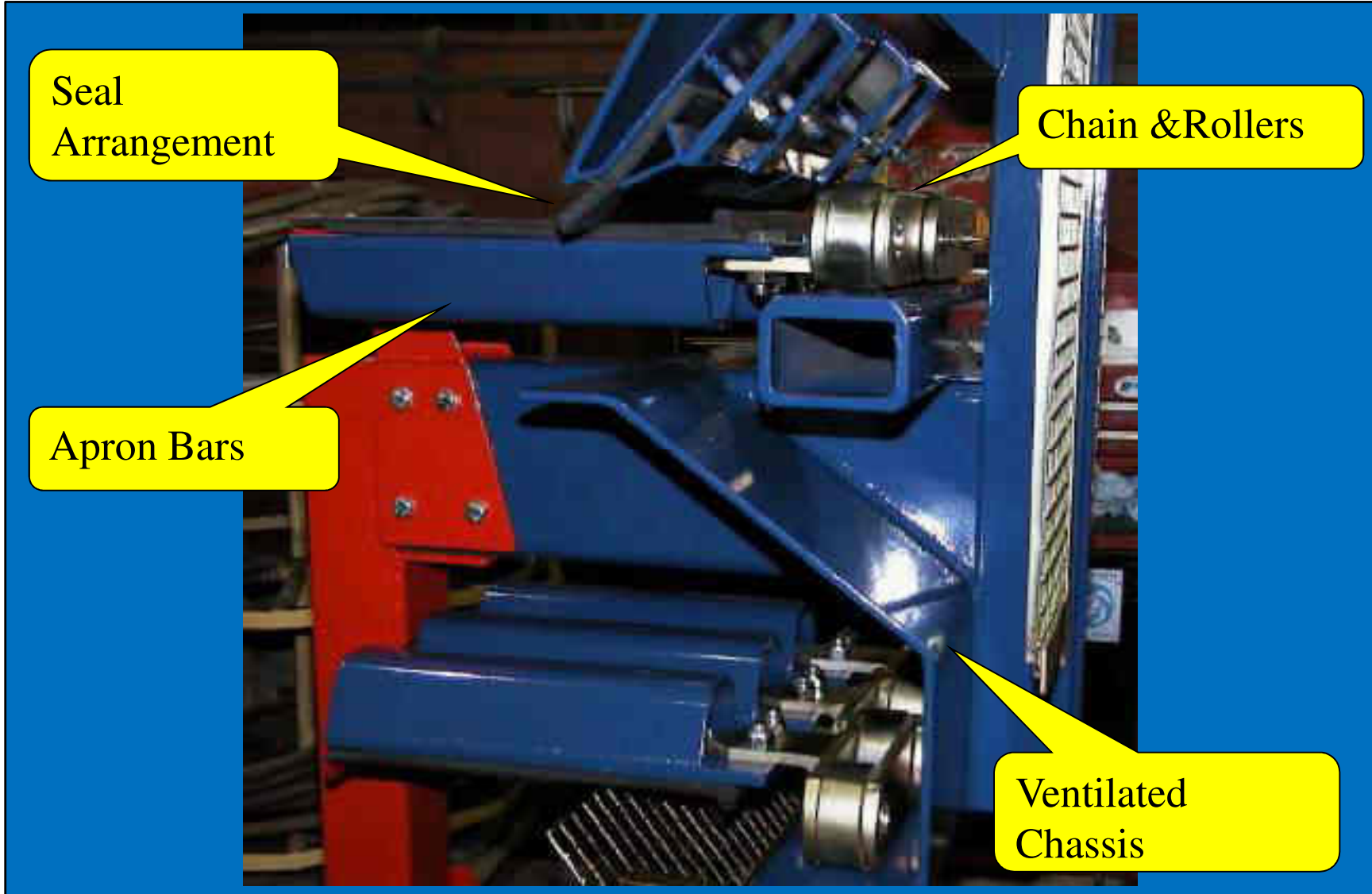
Critical Features

Seal
Arrangement

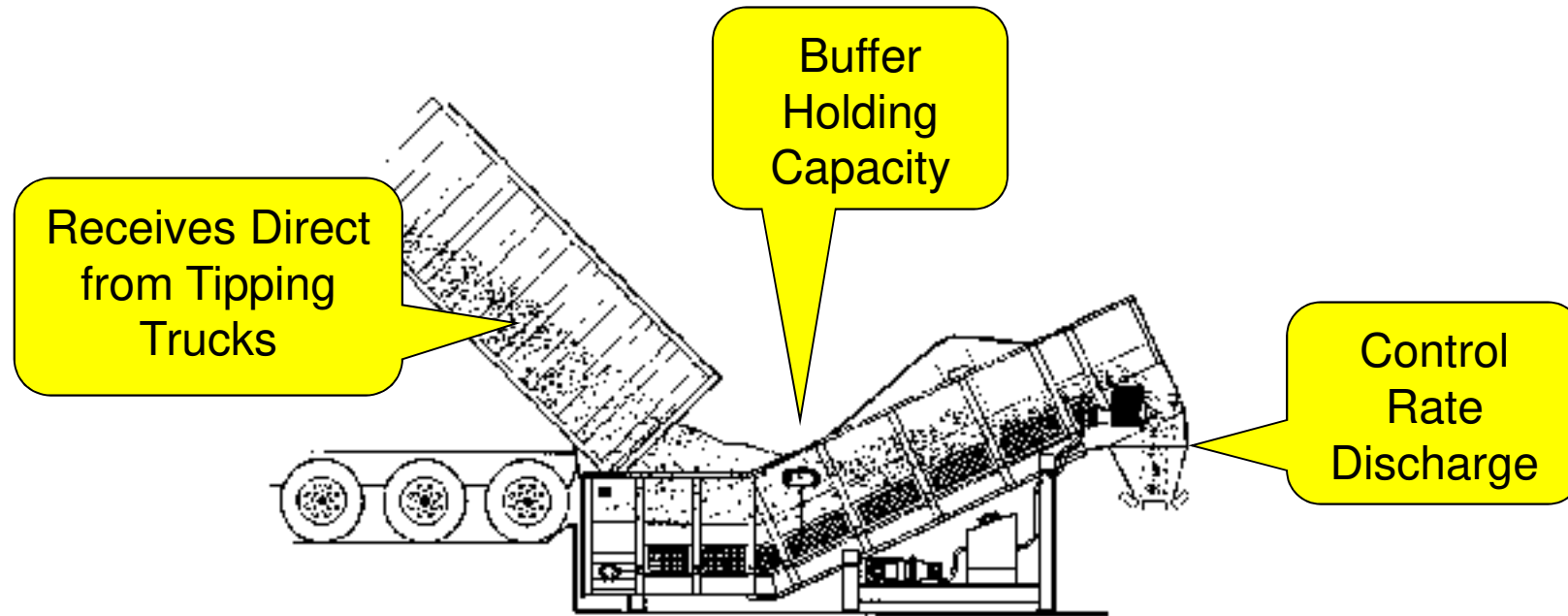
Chain & Rollers

Apron Bars

Ventilated
Chassis



Operating Principle – Direct Material Transfer



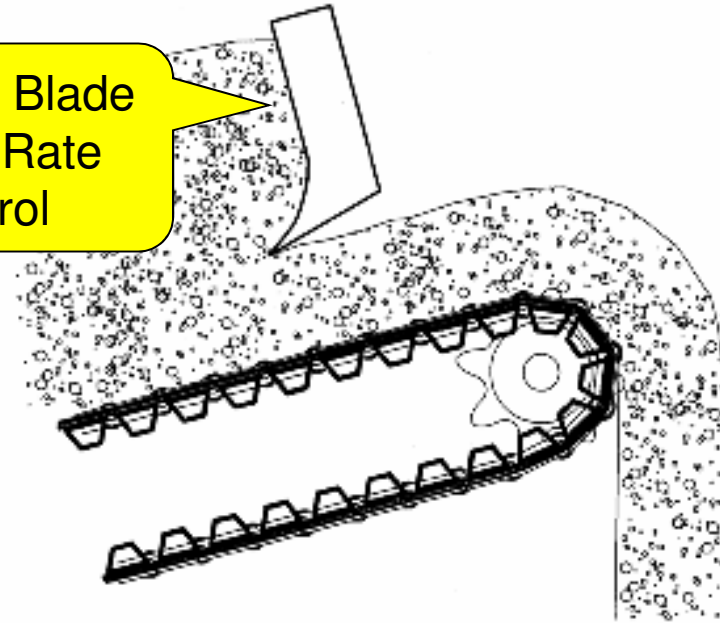
The Samson Receives Materials direct from trucks or loading shovels providing a buffer holding capacity and a controlled rate discharge to ongoing conveyors

Levelling Blade Discharge Rate Control



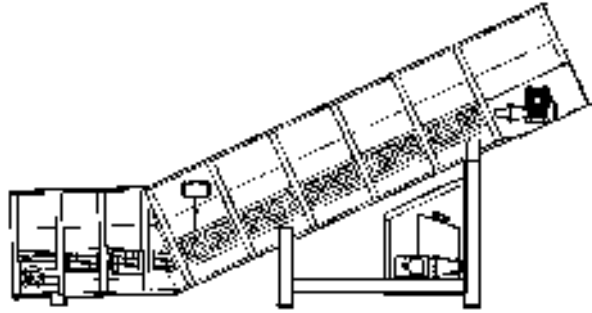
Samson
Buffer
Storage
Capacity

Levelling Blade
Output Rate
Control

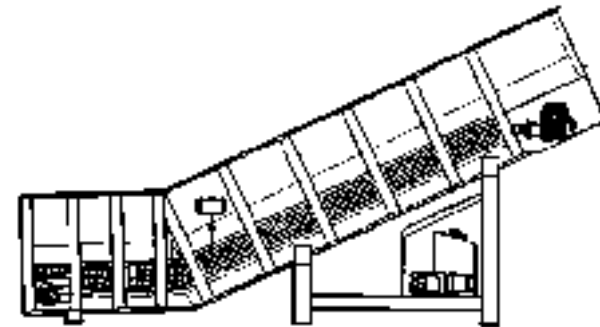


Suitable for handling rates generally above 50 t.p.h. the Levelling Blade system provides a controlled bed depth at the Samson discharge making the discharge rate directly proportional to the Samson belt speed

Samson Design Series

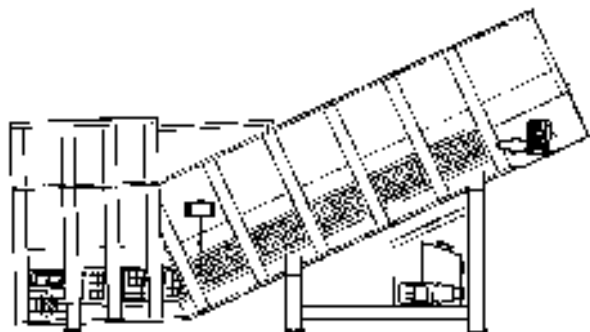


Samson 380 – Light Duty

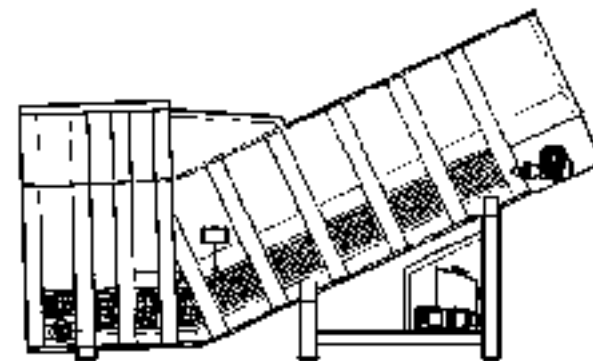


Samson 450 – Medium Duty

The Design Series = Chain Strength in kN.

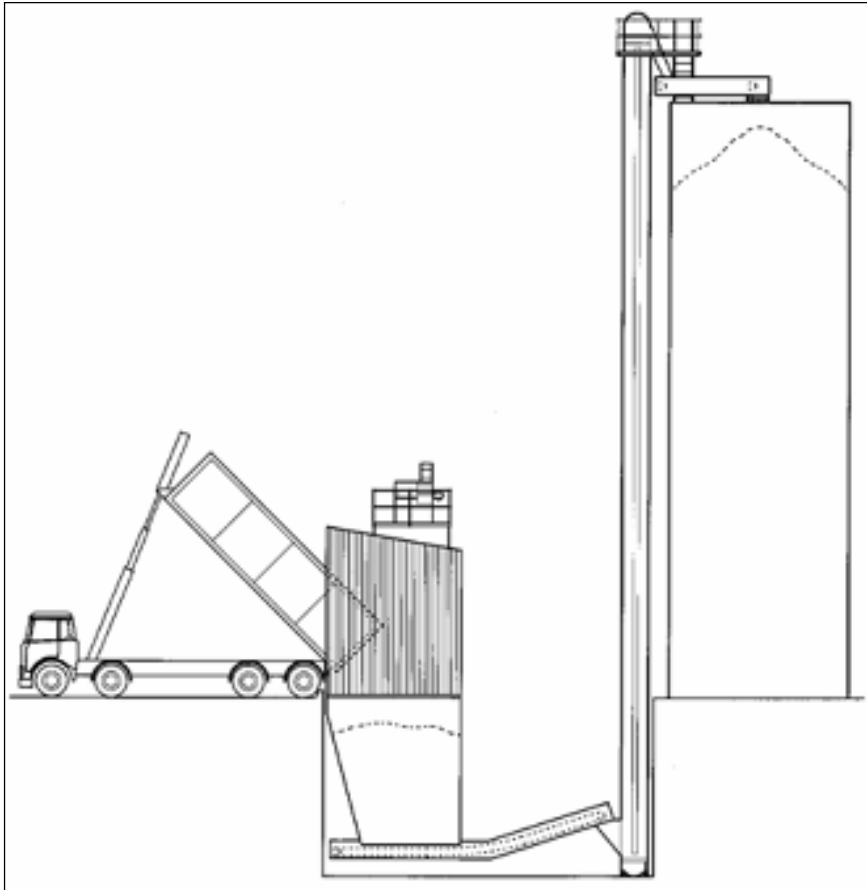


Samson 800 – Heavy Duty



Samson 1600 – Extreme Duty

Classical Solution For An Intake System



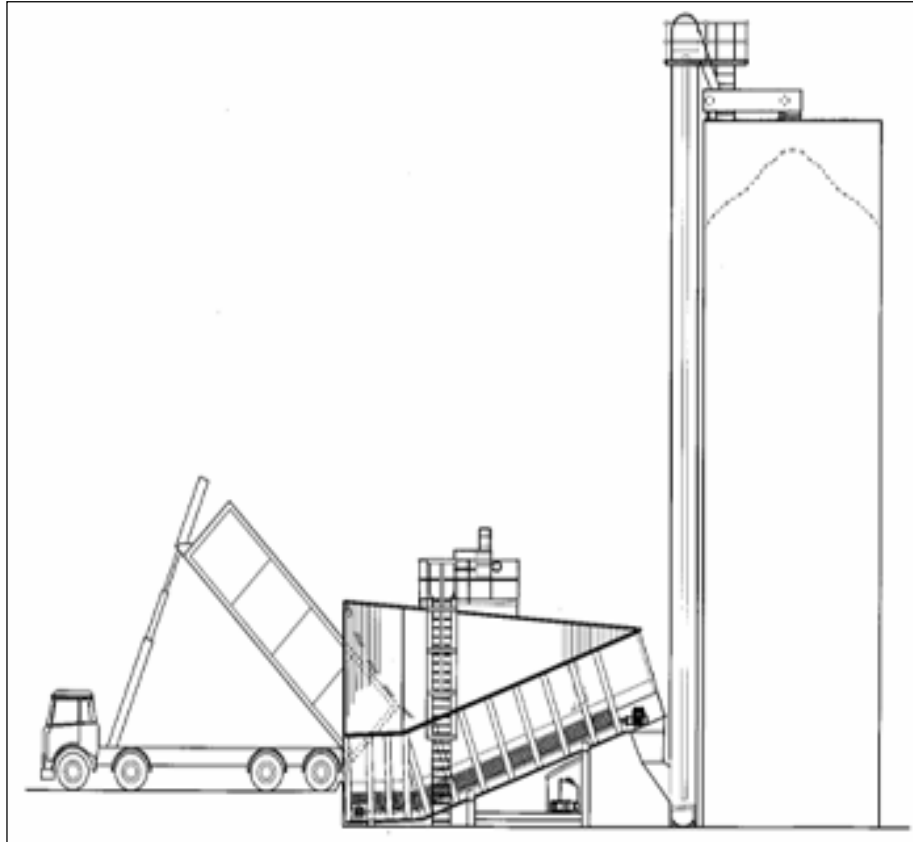
High Initial Capital Cost

- Extensive Civil Works
- Large Dust Extraction
- High Bucket Elevator

Operating

- Restricted Access for Inspection/Maintenance
- Potential Water ingress Resulting in Flooding

Samson Solution For An Intake System



Lower Initial Capital Cost

- No Excavation
- Smaller Dust Extraction
- Shorter Bucket Elevator

Operating

- Easy Access for Inspection/Maintenance

Holcim – Carboneras (Spain)



Samson Feeder receives imported Coal & Pet-Coke direct from trucks and discharges at up to 500 tph to ongoing belt conveyor for feeding a radial stacker



Lafarge – Hope Works (UK)



Tyre Chips received from tipping trucks and front end loaders providing 50 tons of storage - metered output into elevator via screw conveyor



Irish Cement - Platin



Samson feeder receiving Shale from the primary intake via crushers and providing a controlled discharge rate of 500 tph

Holcim Theodore USA

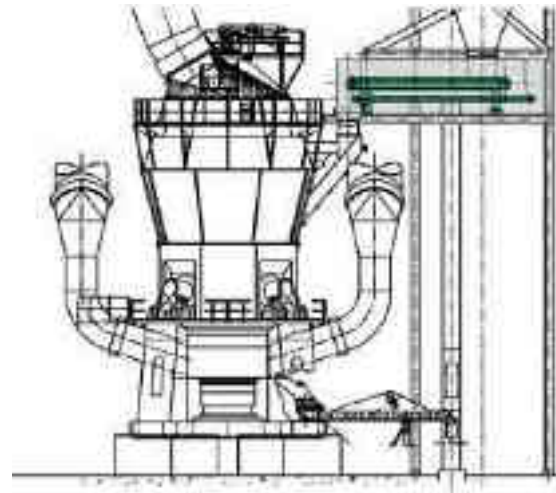


Tyre Chip received from tipping trucks and shovels with 100 tons of storage

5. Cement Mill



Dosing apron feeder - DPB



Chain Bucket Elevator - BWZ



Characteristic features of AUMUND Bucket Elevators with Central Chain

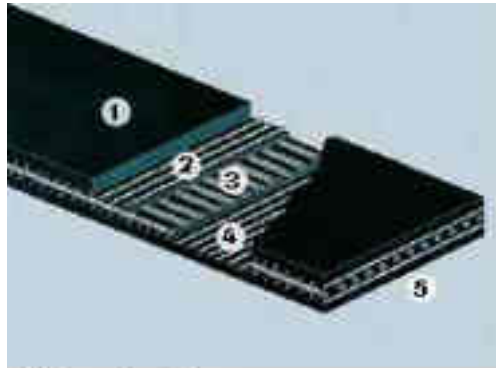
- Conveying capacities exceeding 1,100 m³/h
- Lifting heights to 90 m
- Forged central chain with large link surface (AU06 - AU19)
- Angular brackets for easy bucket fixing (AU04 - AU19)
- Segmented drive ring
- Assembly casing for easy access
- Outstanding service life – in continuous operation
- Low maintenance
- High degree of availability

Central Chains for Type BWZ and BWZ-D

Type	Chain pitch (mm)	Breaking load (kN)
AU01	140.0	400
AU02	152.4	540
AU04	177.8	800
AU06	177.8	1,200
AU13	177.8	1,500
AU15	177.8	1,800
AU19	200.0	2,450



Belt Bucket Elevator - BWG

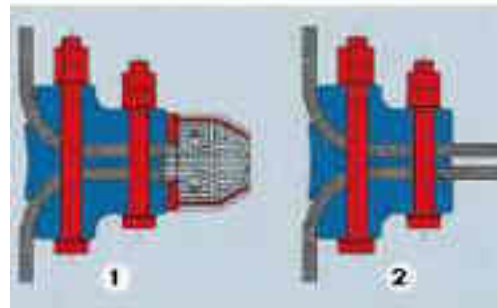


Belt construction

- 1 Upper cover - carrying side
- 2 Upper cross rope
- 3 Longitudinal rope (traction element)
- 4 Bottom cross rope
- 5 Bottom cover - backing



Belt splicing



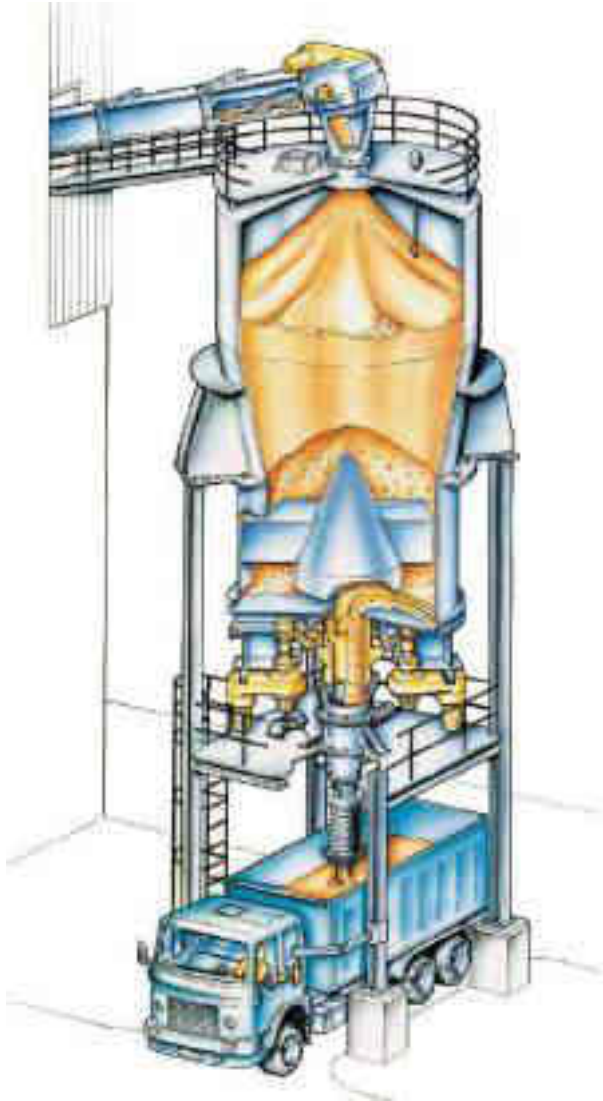
Belt clamp connection

- 1 Steel-reinforced belt
- 2 Textile belt



Elevator boot with parallel tensioning device

CENTREX® / BEW-K



- **FGD Gypsum**
- **Gypsum**
- **Coal**
- **Limestone**
- **Clay**
- **Marl**
- **Wet ash**

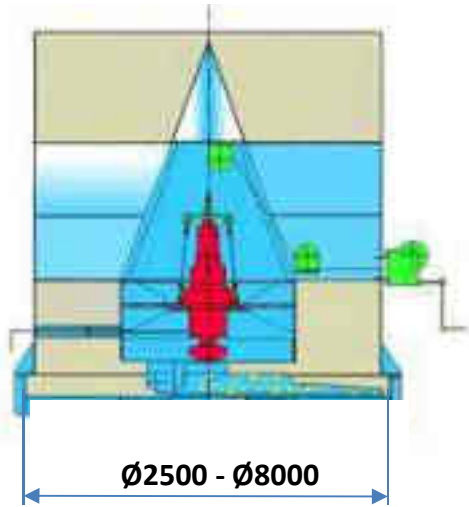
Functions & Features

- First-in-First-out concept
- 100% live capacity (mass flow)
- No segregation or bridge formation
- provide reliable extraction of the most difficult materials including FGD Gypsum
- Capacity up to 3000 t/h
- Silo diameter from 2 m up to 12 m
- Logarithmically shaped, sheathed discharge arm
- frequency controlled drive unit
- Simultaneous feed and extraction (BEW-K)

CTX Application

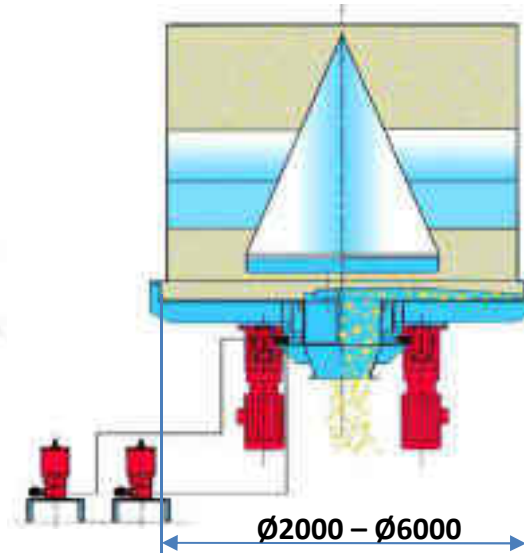
Centrex-IV

I = inner drive
V = stationary cone



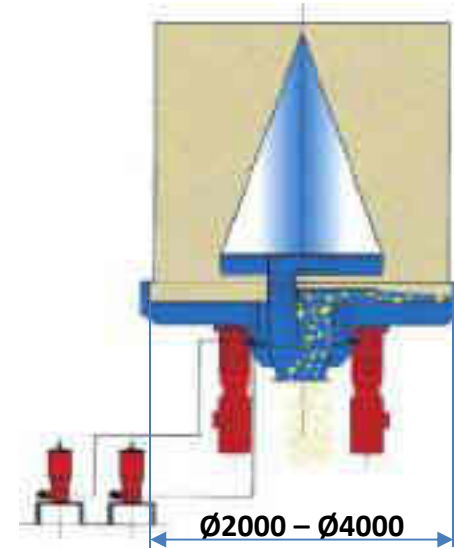
Centrex-AV

A = external drive
V = stationary cone



Centrex-AFW

A = external drive
F = rotating cone
W = cone fixed with roller bearing mounted to the rotating chute
2. rotary joint

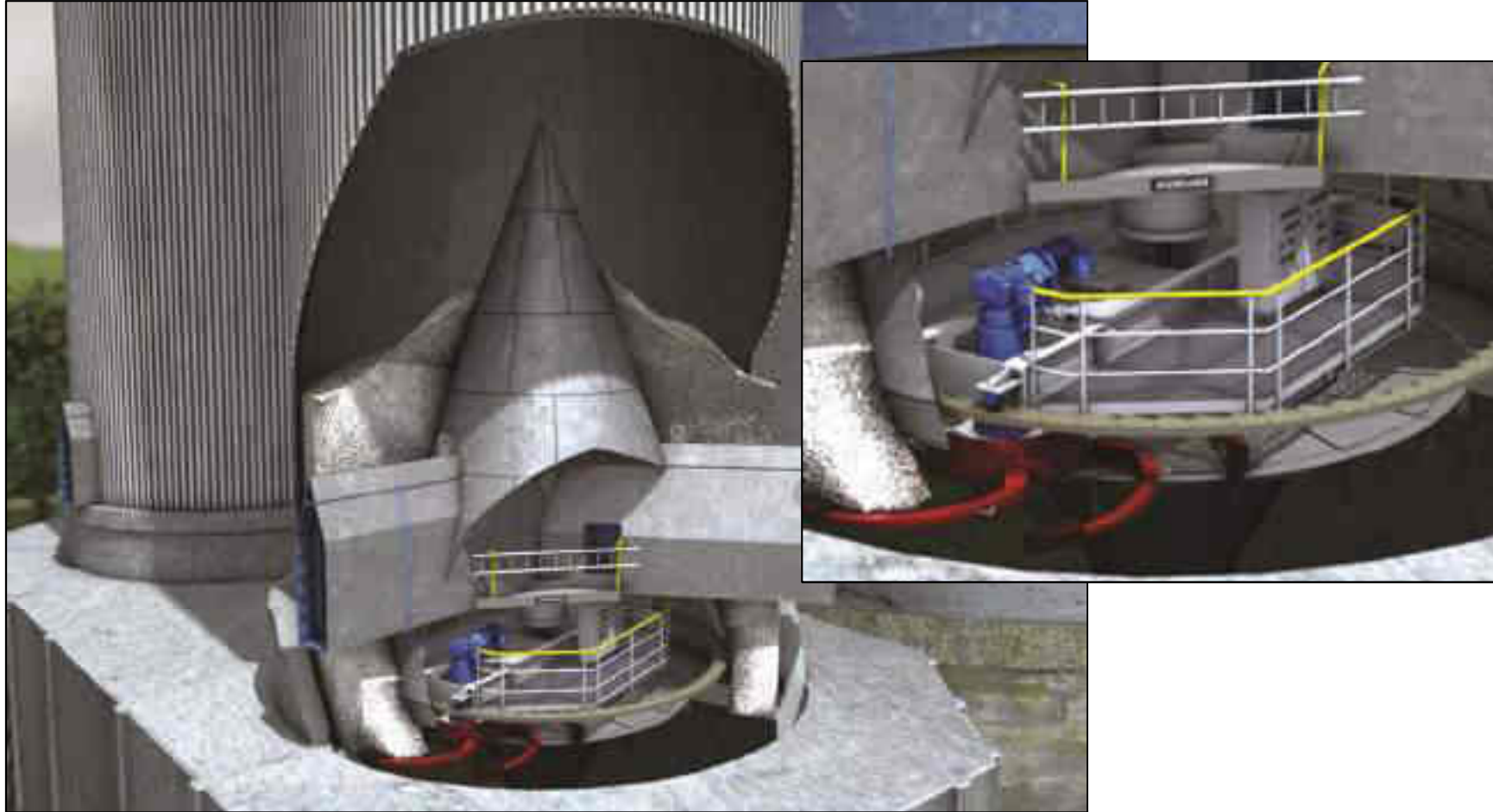


diameter
Over Ø8000



BEW-K

Rotating Rotary Discharge Machine RRDM (BEW-K)



For Discharge Capacities up to 3.000 m³/h

6. Cement delivery



Bucket Elevator for cement silo feeding

WE CONVEY QUALITY



Thank you for your attention!