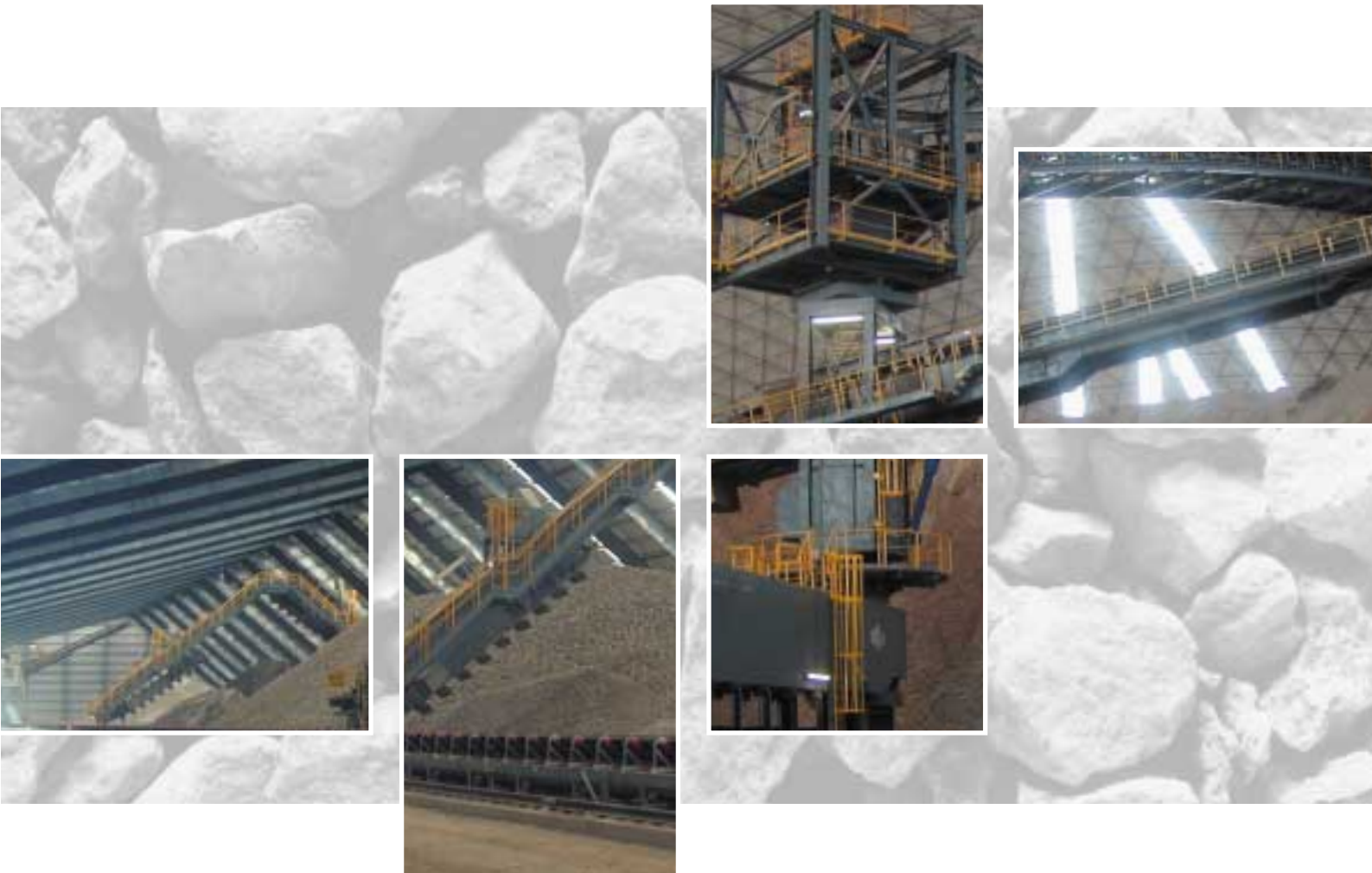


Storage and blending bed technology.



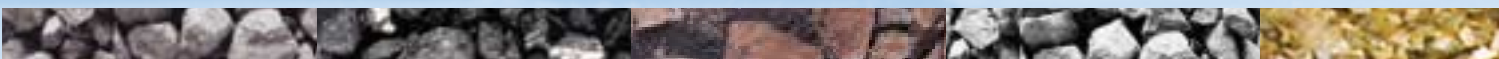
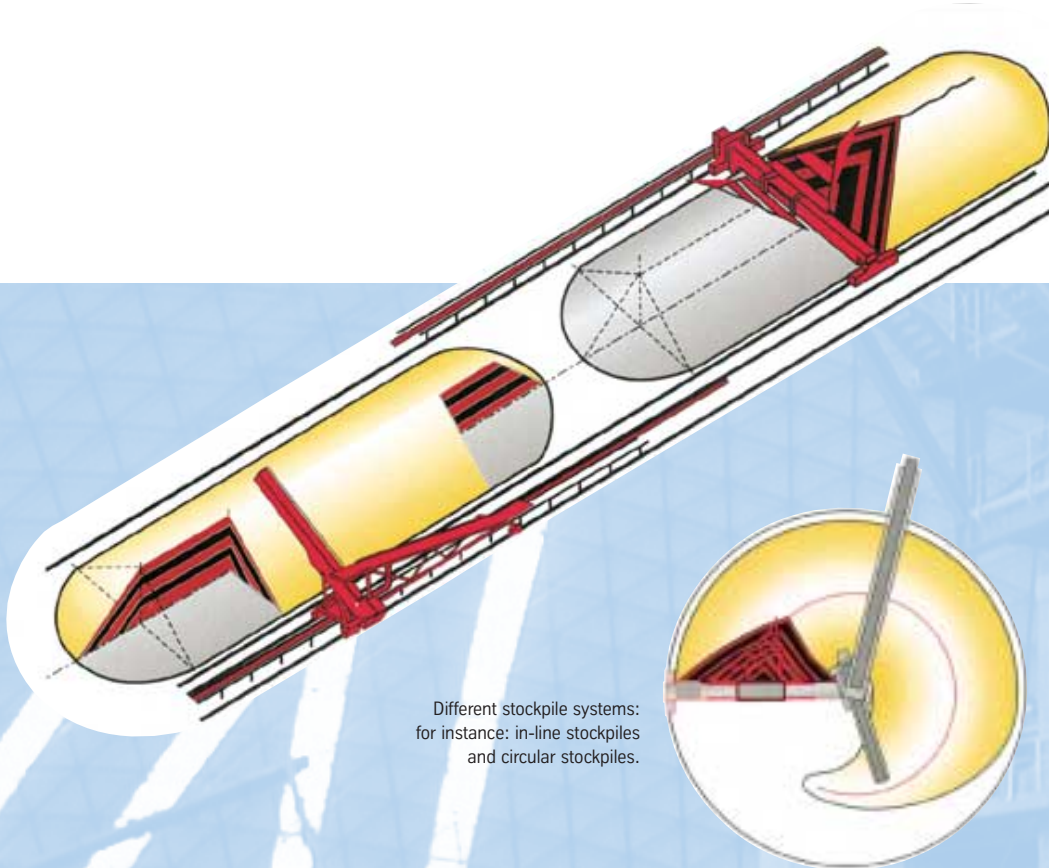
A company of
ThyssenKrupp
Technologies

Polysius



ThyssenKrupp

Storage and blending bed technology. Universal – economical – robust.



For decades now, Polysius systems for the economical and energy-saving storage and blending of crushed and heapable bulk materials in open-air and roofed stores have proven themselves admirably.

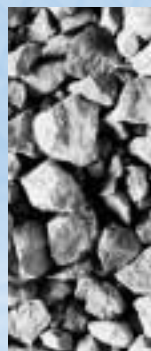
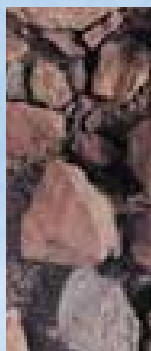
Harmonised stacking and reclaiming processes are essential for effective blending bed systems.

Whether for installation in the quarry or in the plant itself, the broad range of blending bed systems from Polysius satisfies all requirements for the efficient storage and blending of raw materials prior to further processing.

Controlled stockpile stacking is ensured by the POLAB® CNA from Polysius, a continuous raw material analyser whose results permit early quality control of the input materials.

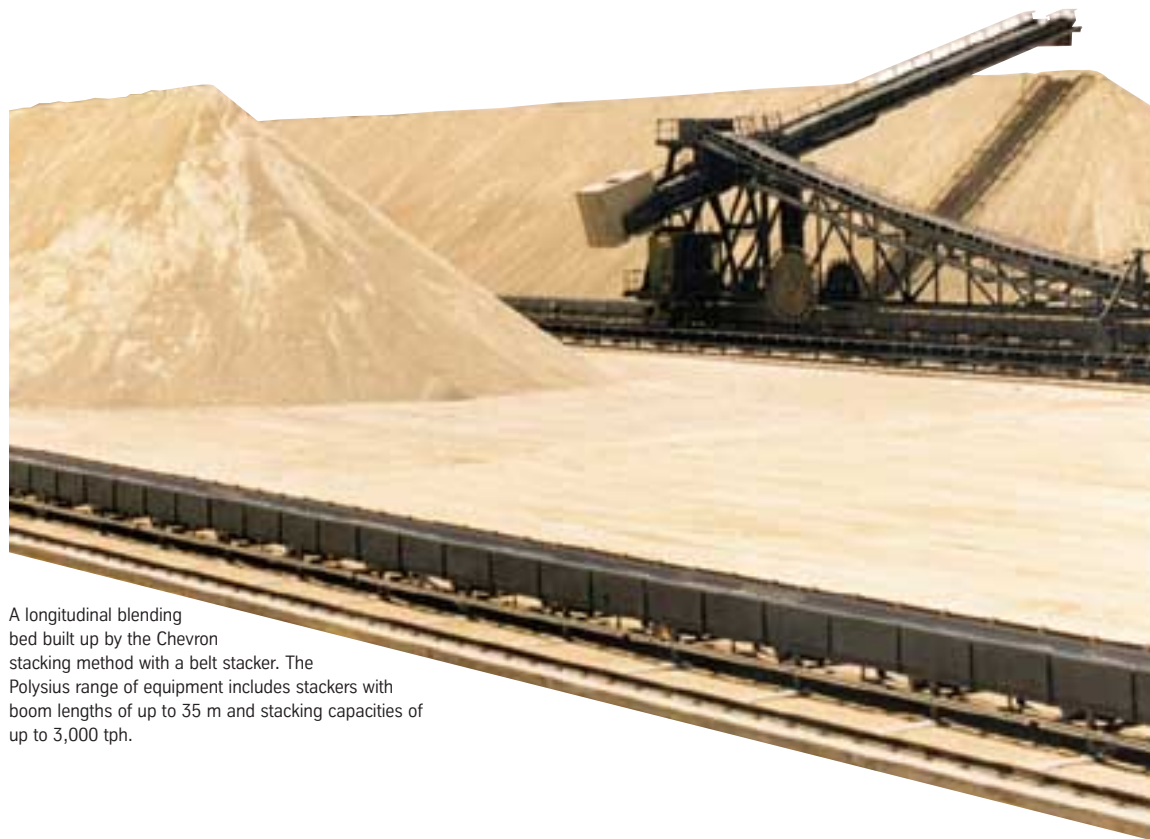
Polysius stockpile applications include bauxite, ores, gypsum, limestone, coal, coke, petroleum coke, clinker, slate, wood chips, clay, quartz and quartzitic rock.

For the on-line chemical analysis of raw materials, POLAB® CNA uses an electronically regulated neutron tube that can be simply switched on and off. POLAB® CNA determines the process-relevant oxide concentrations in the entire stream of material passing the analyser, without requiring any preparation of the material.





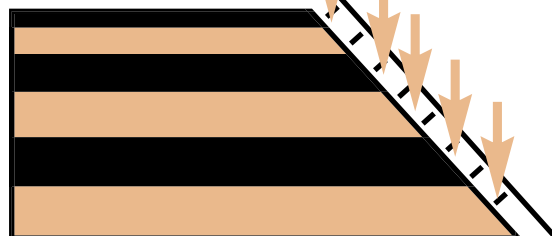
Longitudinal storage and blending bed systems. For any quantity of bulk material.



A longitudinal blending bed built up by the Chevron stacking method with a belt stacker. The Polysius range of equipment includes stackers with boom lengths of up to 35 m and stacking capacities of up to 3,000 tph.

Polysius portal scrapers have span widths of up to 60 m and reclaiming capacities of up to 1,500 tph.

The stockpile stacking control system from Polysius builds up stepped end faces, minimising problems with the end cones.



Polysius supplies suitable stacking and reclaiming machines for storage and for blending large quantities of bulk materials.

Automatically controlled belt stackers build up the stockpiles, which are generally arranged in-line.

The highest mixing and blending effects are achieved by using bridge scrapers reclaiming from the end face of the stockpile. If only a low

degree of blending is required, the side face of the stockpile can be reclaimed, using semi-portal, portal or side scrapers.

The Chevron stacking method is used for longitudinal blending bed stockpiles.

The machines' wear-resistance and low maintenance requirement assure high availability, even when operating under rough application conditions.



Side scraper at a limestone stockpile.



Polysius bridge scrapers have span widths of up to 55 m and reclaiming capacities of up to 1,500 tph.





Circular stockpiles and circular blending beds.
For compact and cost-saving storage.



Material discharge
via the central column.

Typical Chevron
stacking in a limestone
blending bed.

In the cement manufacturing process, it has become standard practice to store lumpy raw materials in single or multi-component blending beds. Polysius provides the engineering and the mechanical equipment, including respective process schemes, for individual machines and systems and for complete cement plants.

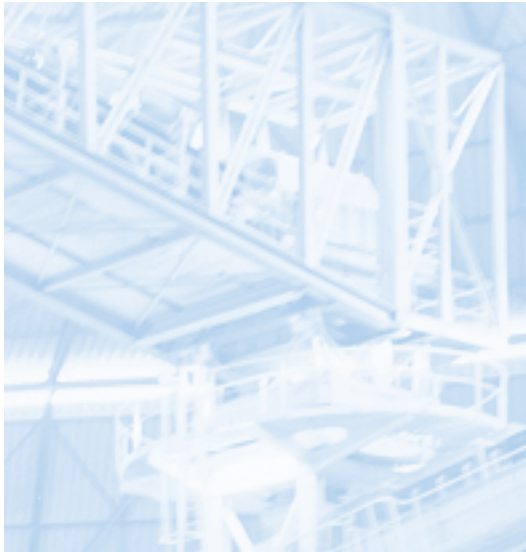
Circular stockpiles and circular blending beds provide a high storage capacity in relation to the floorspace.

Compared to the longitudinal blending bed arrangement, the circular version offers lower costs for the civil construction work, shorter conveyors and smaller capital expenditure for the machines and electrical equipment. The cost advantage of the circular stockpile becomes still more substantial if it is accommodated in a roofed building.

The machines used for circular stockpiles and circular blending beds pro-

vide the same high availability and proven design features as the equipment used for longitudinal stockpiles and longitudinal blending beds.

The continuous Chevcon stacking method assures the highest possible blending effect. However, if storage with only a small blending effect is required, the cone-shell stacking method can be used.



Coal stockpile with cone-shell stacking method. The smallest stockpile so far installed: diameter only 25 m.



Circular blending bed with Chevcon staking method for limestone:
Storage capacity: 60,000 t
Stockpile diameter: 91 m
Stacking capacity: 2,640 t/h
Reclaiming capacity: 650 t/h



Roofed circular blending bed for limestone.