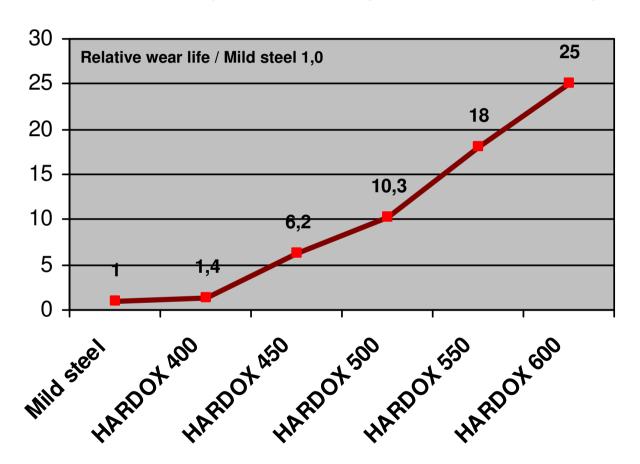
Relative wear life



Estimated relative wear life provided sliding wear and abrasive glass, 750 HV.







Contamination





- A high degree of purity is required in glass cullet.
- Wear plates made of ceramics or steel contributes to the contamination.
- Going from a mild steel to HARDOX 500 reduces the contamination by 90%.





Contamination – an example

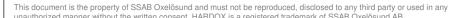




- A glass recycling plant is processing 100 000 tonnes per year.
- The contamination separators are placed in the middle of the process.
- An wear plate can be considered as consumed when 30 % is worn.
- By using wear plates in 400 HBW hardness, the yearly consumption will be about 20 tonnes.
 - 3 tonnes of steel is added to the recycled glass, equivalent to 30 g / ton.
- By changing to 500 HB wear plates, the consumption is reduced to 10 tonnes.
 - 1,5 ton is added to the process, equivalent to 15 g / ton.



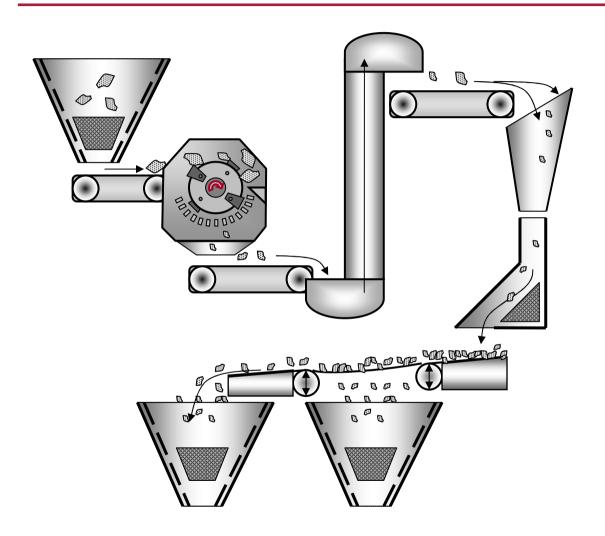






Schematic flow of recycling plant





- Hoppers
- Chutes
- Feeders
- Contamination
 Separators
- Conveyor system
- Crusher
- Sieves

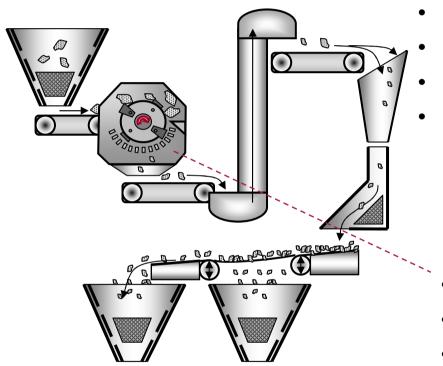






Crusher – design solution





- Jaw crusher.
- Hammer crusher.
- Rolling crusher.
- Disc crusher.



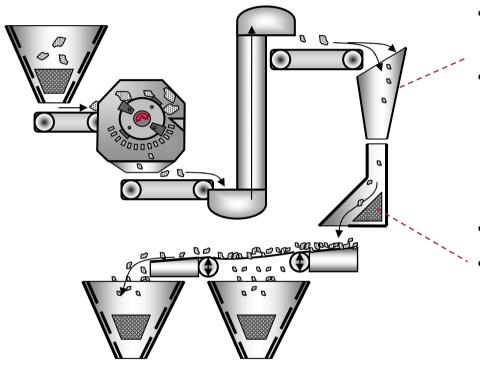
- Impact wear.
- Liner plates HARDOX 450
- Hammers HARDOX 500.





Liner plates – design solution





- Very high impact wear.
- High speed due to the conveyor band.
- Incident angle between 45 and 90°.
 - → **HARDOX** 500-600
- Impact wear.
 - Design with a deed pocket of abrasive material. The glass material shelters the surface from wear.

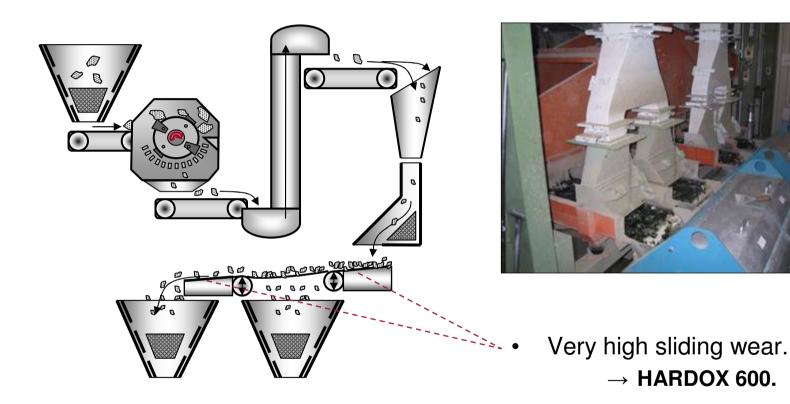
→ HARDOX 500





Feeder table – design solution





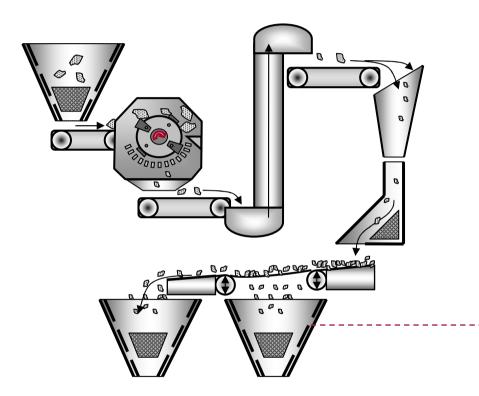


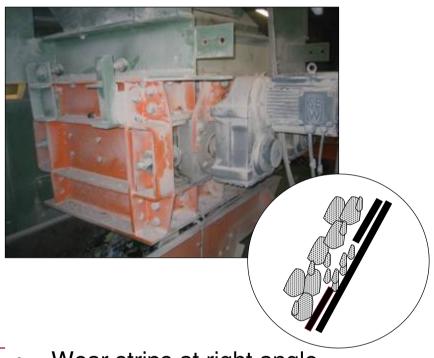




Hoppers - design solution







- Wear strips at right angle to the flow. The material wears on itself.
 - \rightarrow HARDOX 500.







Advantage HARDOX

HARDOX®
TechSupport

Information from SSAB Oxelosund. #28

Chutes, hoppers, feeders, crusher hammers, anvils, liner plates, containers, buckets ...



- Advantage HARDOX due to:
- Excellent wear resistance.
- Homogenous mechanical properties.
- Work shop friendliness: cutting, welding and bending.
- Professional technical support.
- Good availability of plate









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