

IMPERFECTIONS

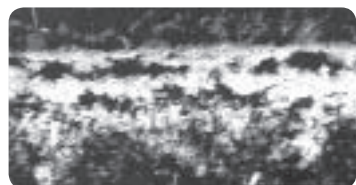


Problem / Aspect

Possible causes

Solution

Code for possible solutions



Print —>
Rubber blanket —>
Tape sample —>

Powder on the edges (fine fibrous powder)
Small imperfections in the image, which start at the edges and later spread over the whole image
Format boundary visible on the rubber blanket
Concentrated fine fibrous powder

B: ▪ Cartonboard very dry
▪ Wood pulp particles

1 2 3
4 5 6
7 8 9
10 11 12

- 1 Wash more frequently
- 2 Selection of pallets according to production time or drum number and machine position
- 3 Selection of pallets according to cut edges
- 4 Bad cross section in grippers
- 5 Aspirate cut edge and wash with water-glycerine mixture (50/50)
- 6 Trim sheets afterwards
- 7 Adapt ink (reduce tack)
- 8 Check/clean fountain solution
- 9 Change colour sequence
- 10 Clean printing machine
- 11 Inline stretching with varnish or fountain solution for the first unit or offline stretching
- 12 Scavenging with water on first unit and on-line or off-line sealing.



Print —>
Stack —>
Rubber blanket —>
Tape sample —>

Powder on edge of cut (bad cut)
Fine to medium-sized imperfections over the whole image
Fringy, unclean cut
Fine to medium-sized powder which covers the whole format of the rubber blanket
Fine to medium-sized fibres

B: ▪ Bad cross section
▪ Bad longitudinal section
P: ▪ Gripper contains fibres
▪ Loose fibres in the printing machine

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Print —>
Sheet —>
Rubber blanket —>
Tape sample —>

Imperfections
Individual imperfections deposited on the plate and rubber blanket
Particles on the coated side of the sheets
Irregular pattern of imperfections
Fine to large particles

B: ▪ Loose coating particles
P: ▪ Dirt in the printing machine
▪ Ink dried up
▪ Rubber particles from rollers
▪ Dirt from water cycle
▪ Dirty gripping system

1 2 3
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Important:

In order to analyse the errors, the cartonboard supplier needs:

- Printed sheets
- Unprinted sheets
- Tape samples from the rubber blankets or printing plates
- Printed sheets with errors (craters)

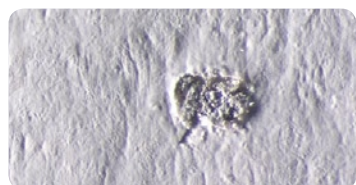
Corrective measures which involve high costs must be discussed first with the cartonboard suppliers.

Note:

The best way to combat a lot of imperfections is to wash the rubber blanket frequently. This only makes sense when the result of the printing meets the objectives.

Pros

- Delivery deadlines can be kept to
- No further organisation necessary
- No replacement

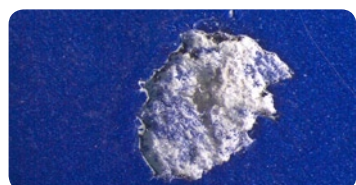


Print —>
Sheet —>
Rubber blanket —>
Tape sample —>

Sticky particles
Individual imperfections deposited on the plate and rubber blanket
Particles stick to the coated side of the sheets
Irregular pattern of imperfections
Fine to large particles

B: ▪ Sticky particles on the surface of the cartonboard
P: ▪ Dirt in the printing machine
▪ Ink dried up
▪ Rubber particles from rollers
▪ Dirt from water cycle
▪ Dirty gripping system

1 2 3
4 5 6
7 8 9
10 11 12



Print —>
Sheet —>
Rubber blanket —>
Tape sample —>

Coating particles (Scraper dirt)
Medium-sized to large particles which come from the coating. The error can be recognised by outbreaks (craters) on the printed sheet
Here, the printed stack must be checked
Particles can be scraped from the coating
Irregular pattern of coating particles (imperfections)
Medium-sized to large particles, which are white on top and black underneath

B: ▪ Dirt between fibres and coating means that the coating does not adhere fully to the fibre cover
P: ▪ Ink too quick

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This technical information is meant to help with increased imperfections. Solutions are possible thanks to the identification of the causes of the imperfections. Please be careful that the cartonboard manufacturer is in a position, with the help of complete documentation, to remedy the error in the long term.