

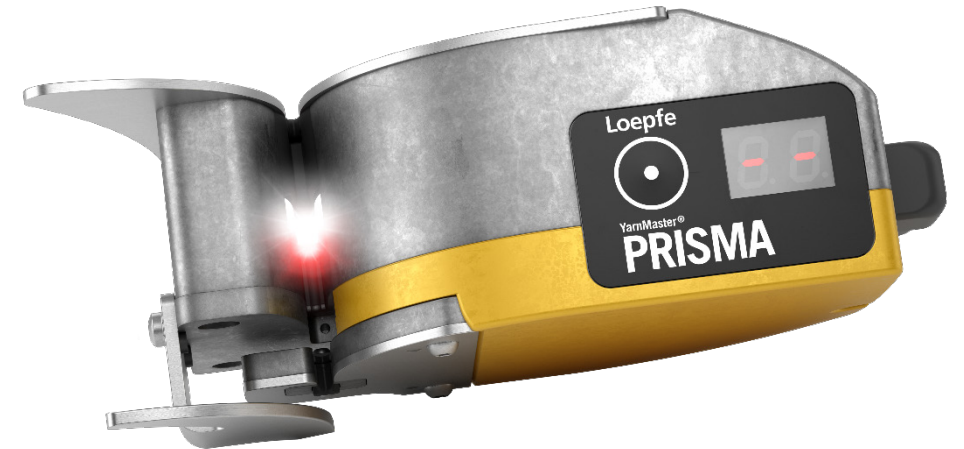
Better quality with less cuts!

Field Study 200-07_November 2022
PRISMA compared to ZENIT+, Ne 20

Field study results with **YarnMaster® PRISMA** shows a better performance. Higher quality in the fabric was achieved with less cuts.

The study took place in **India** at a Loepfe customers plant to compare **YarnMaster® PRISMA** to **YarnMaster® ZENIT+** on their clearing performance.

PRISMA proves to be the right choice for profitable yarn clearing in the application of **100% cotton Ne 20 carded core yarn** produced for highest requirements.



Better quality with less cuts!

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1. Overall summary

Field Study 200-07_November 2022
PRISMA compared to ZENIT+, Ne 20

Significantly fewer cuts with PRISMA

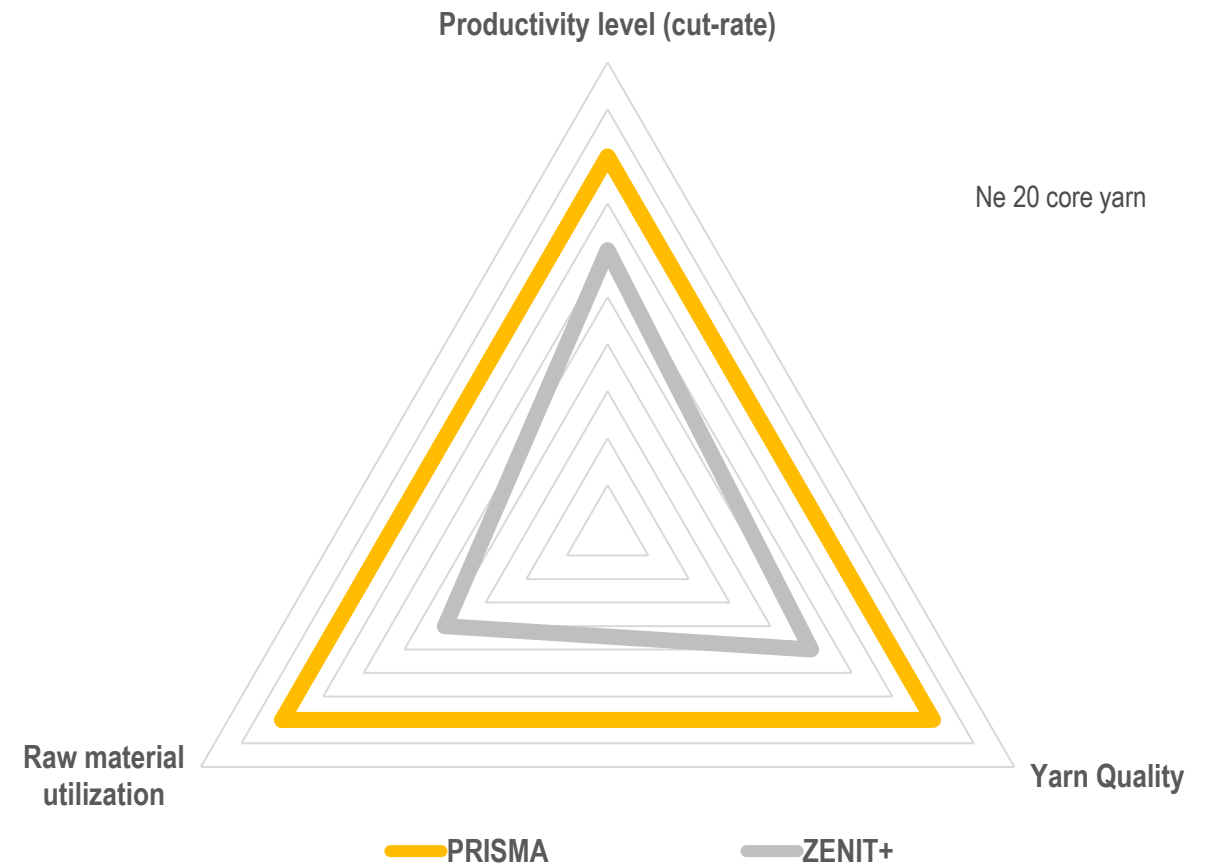
- PRISMA reached higher machine efficiency through lower cut level
- Cut level on PRISMA more than **20 % lower**
- Organic filtering with PRISMA much more effective which leads to less cuts

Fabric Quality

- PRISMA reduces the disturbing contaminations in the fabric significantly
- Higher contamination with organics in the tested fabric shows a more effective organic filtering of PRISMA

Total cost savings / year / winding machine

- **USD 4744.22 cost savings with PRISMA DMFP**
- The **payback period of PRISMA vs. ZENIT+ is less than 2 months!**
- PRISMA reaches also better fabric quality



2. Study set-up

Sensors:

- PRISMA DMFP* compared to the ZENIT+ DFP* on clearing performance

Location:

- Loepfe Customer India

Raw Material

- 100% cotton from India, core yarn Ne 20 carded

Winder:

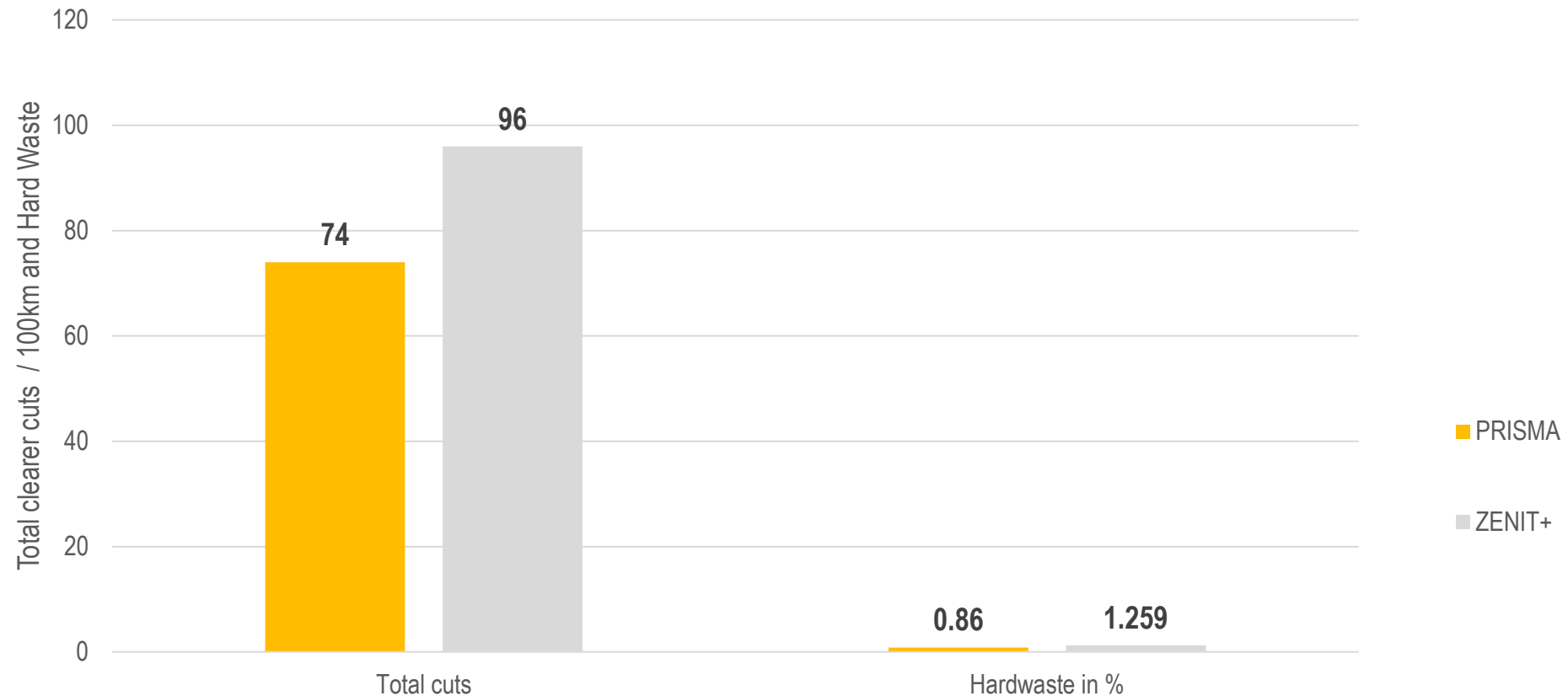
- Schlafhorst winding machine

Goal:

- Best performance of clearing

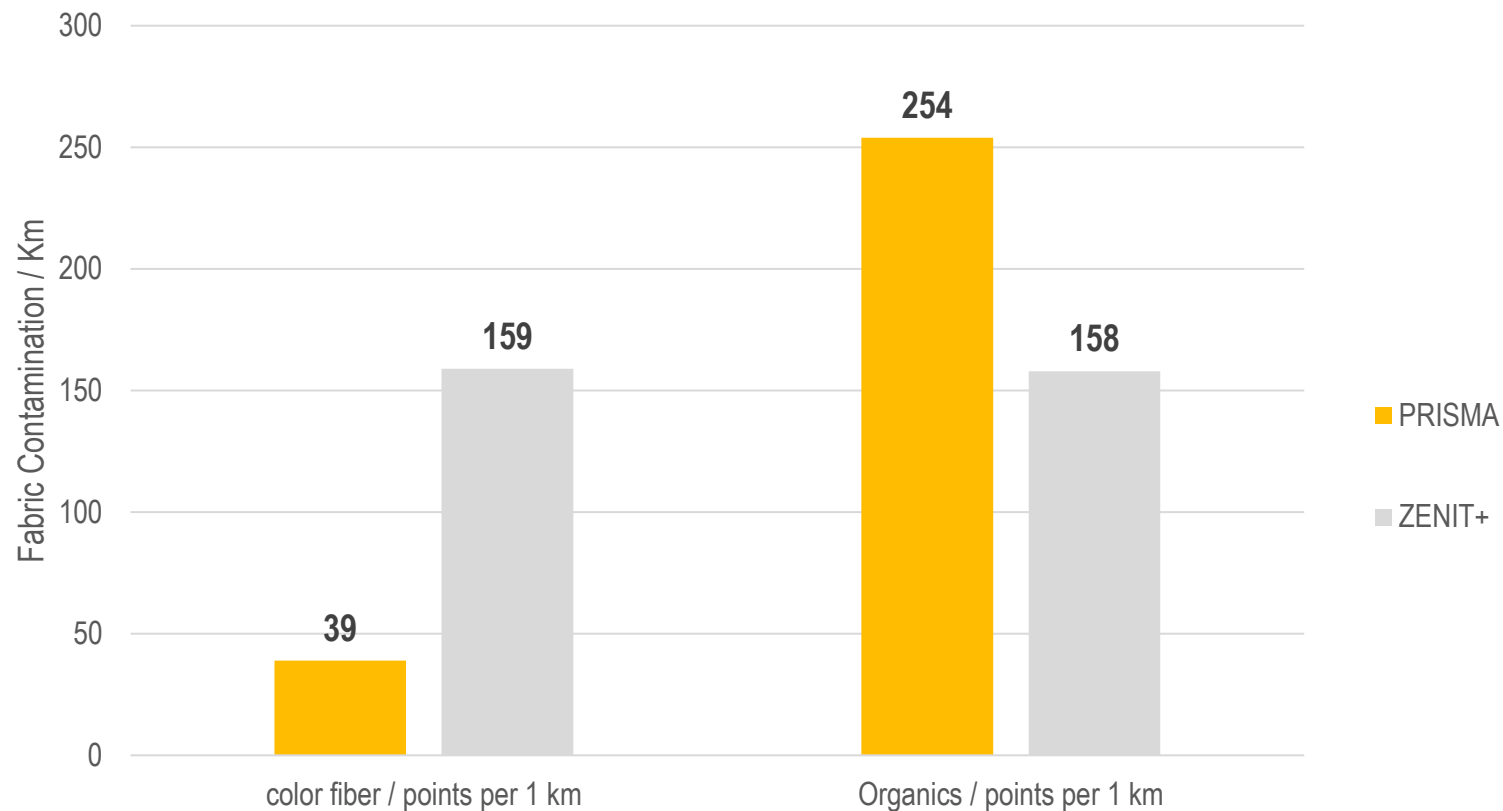
3. Results on yarn clearers

- Over an observation of 5 days, PRISMA reached higher machine efficiency through lower cut level
- The cut level is more than 20 % lower on PRISMA



4. Results on final fabric

- PRISMA can reduce the disturbing contaminations in the fabric significantly
- Organic filtering with PRISMA is much more effective which leads to less cuts
- Higher contamination with organics in the tested fabric shows a more effective organic filtering



5. Cost savings

USD 4744.22 Cost savings per winding machine per year

| Cost savings | Ne 20 core yarn, carded compact | |
|---|---------------------------------|----------------|
| | ZENIT+ | PRISMA |
| Total Cuts | 96 | 74 |
| Cut Savings /100 km | - | 22 |
| Waste cost savings / Year in USD / winding machine | - | 2440.10 |
| Energy and air cost savings / year in USD / winding machine | - | 1452.10 |
| Savings through higher productivity / year in USD / winding machine | - | 852.02 |
| Total savings / year in USD / winding machine | - | 4744.22 |

Basis for calculation Ne 20 core yarn: Winding speed 1100 and 26 winding positions

5. Cost savings

- In a market segment where PRISMA is the first choice, the overall benefits are clearly shown in this trial
- Besides lower cut level PRISMA reaches also better fabric quality
- The **payback period** of PRISMA vs. ZENIT+ is less than **2 months!**

