Same cuts and better final fabric quality - focus on P-clearing

Field study results prove the majority of **YarnMaster® PRISMA** with its unique polypropylene clearing under all circumstances.

The study took place in **India** at a Loepfe customer plant to compare **YarnMaster® PRISMA** to the **former competitor model** on final fabric quality with a focus on P clearing.

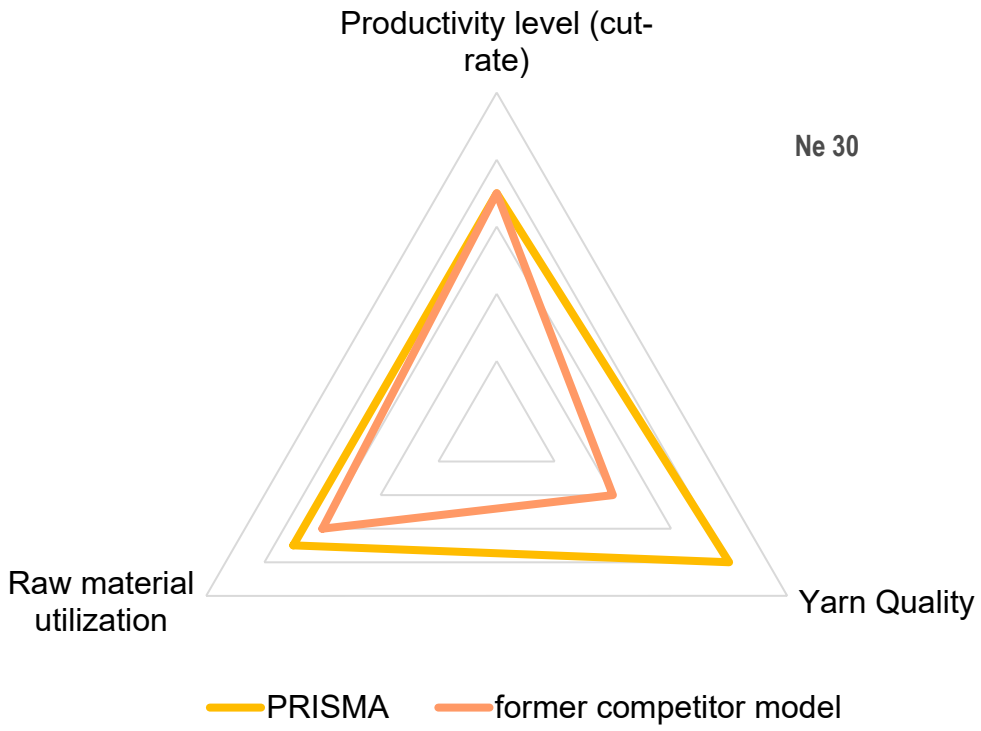
PRISMA is the right choice for profitable yarn clearing in the application of **100% cotton Ne 30** produced for the highest requirements.

Content

Same cuts and better final fabric quality - focus on P-clearing

1. Overall summary

- PRISMA achieves a precision rate of **65%** in P-clearing, outpacing the former competitor model's rate of 29%
- PRISMA has more than **double** the number of **justified P-cuts** ensuring a better final fabric quality



2. Study set-up

Sensors:

- PRISMA DMFP* compared to former competitor model focus on P clearing

Location:

- Loepfe customer India

Raw Material:

- 100% cotton from India Ne 30 combed compact (Shankar6)

Winder:

- Study was done on different winding machine types fed with same ring frame bobbins

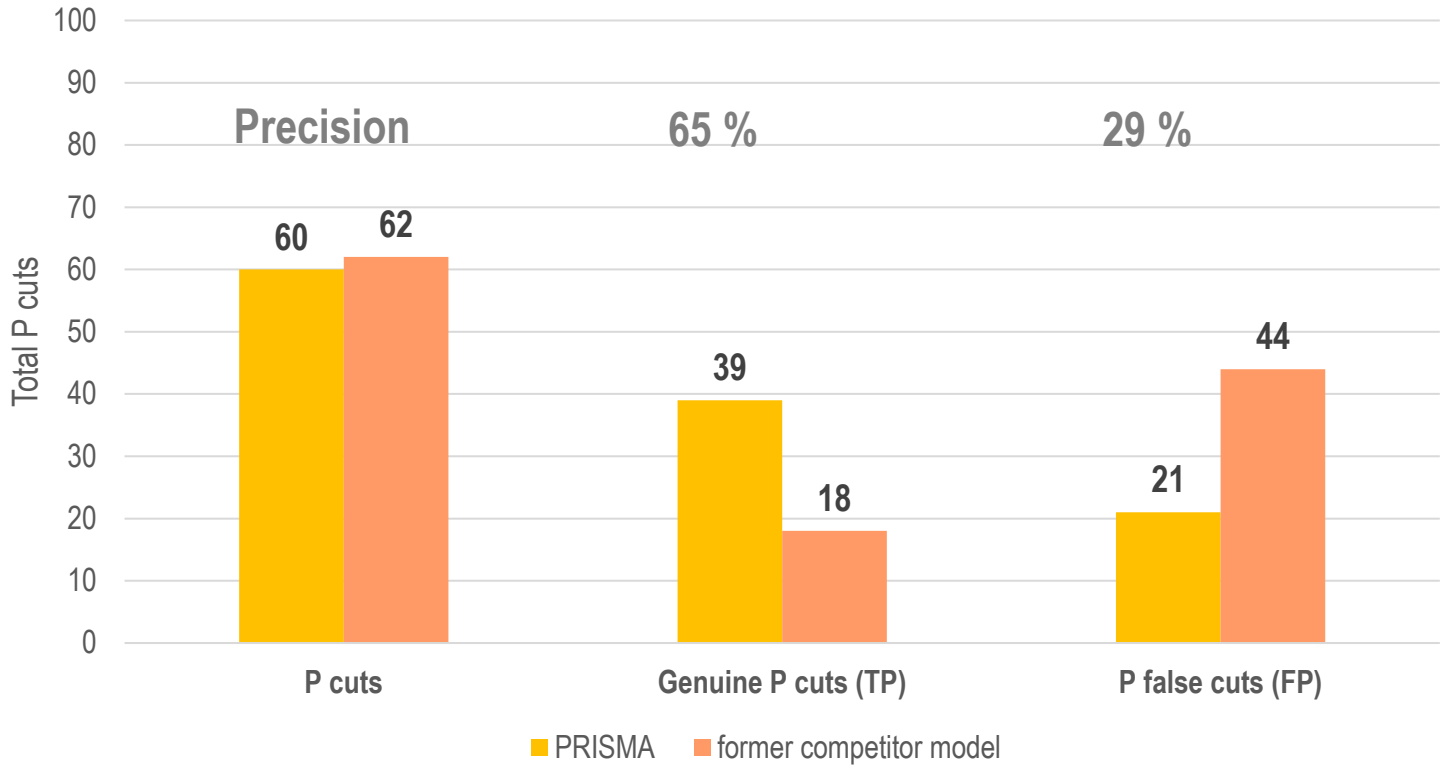
Goal:

- Same cuts and better final fabric quality - focus on P clearing

* (D) optical Infrared, (M) mass, (F) optical RGB, (P) Triboelectric

3. Results on yarn clearers

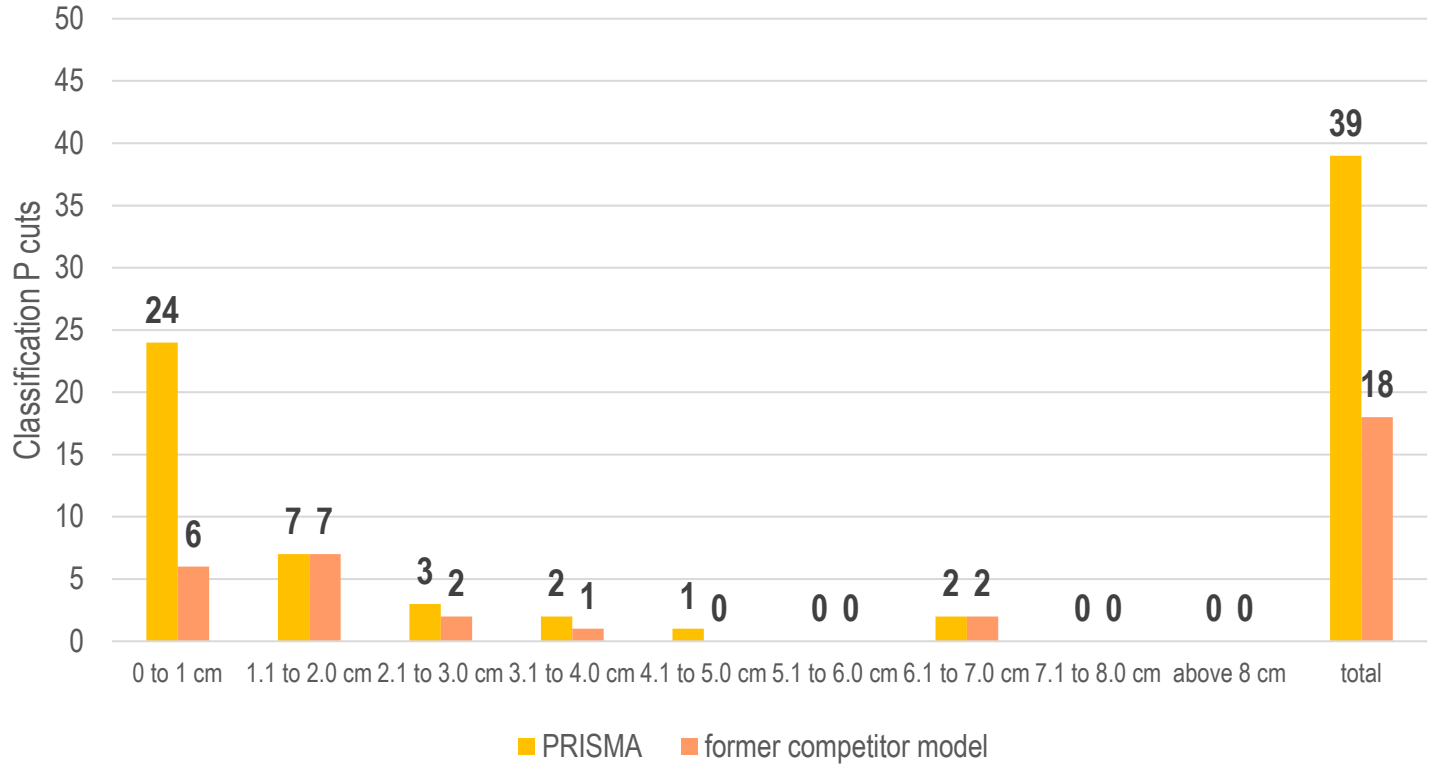
- PRISMA achieves a precision rate of 65% in P-clearing, outpacing the former competitor model's rate of 29%
- Total winding length in km: 582 (total 20 kg of knitted fabric) with climate compensation of 35%



*Precision = TP (true positive) / FP (false positive) + TP (true positive) * 100 %*

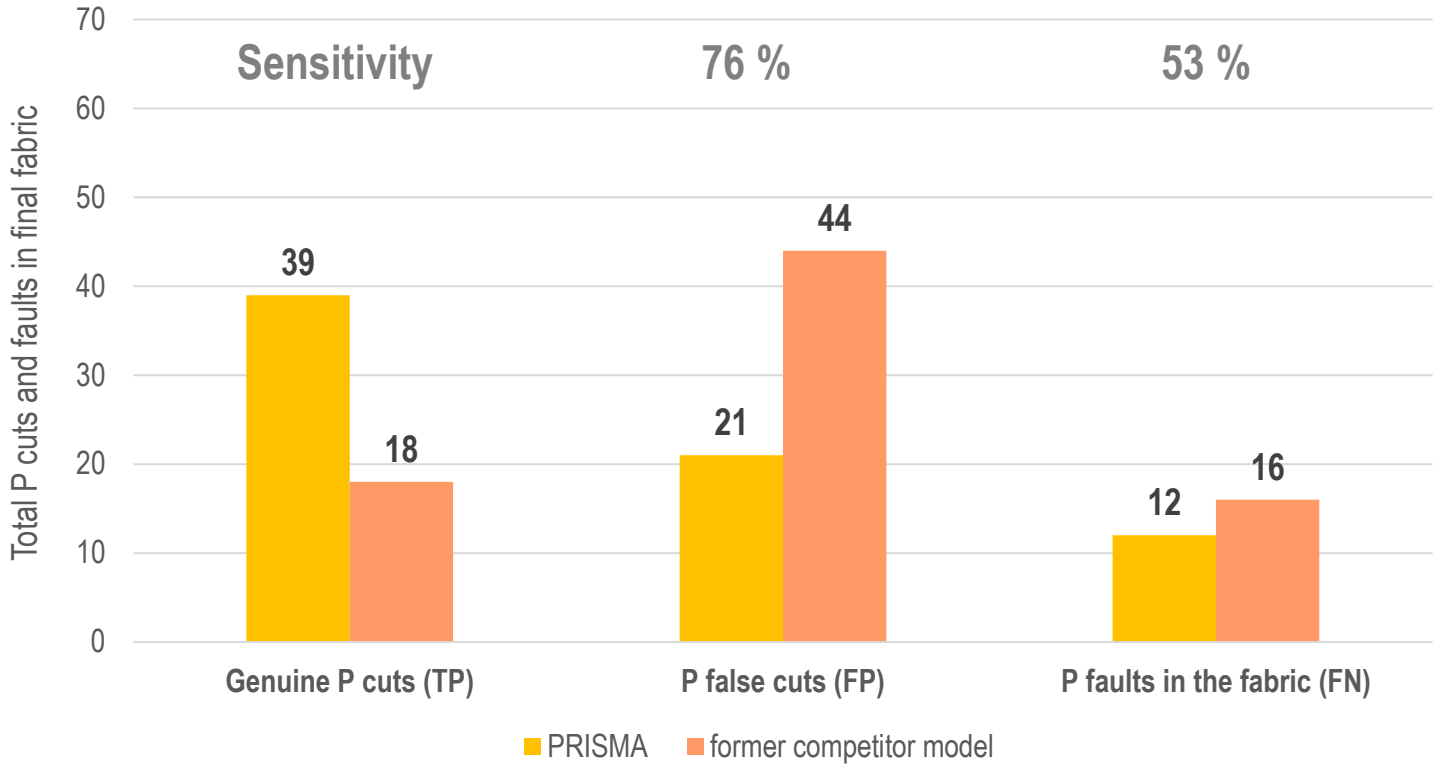
3. Results on yarn clearers

- PRISMA has more than double genuine P cuts
- Most of the detected P events of PRISMA are the disturbing small ones
- Total winding length in km: 582 (total 20 kg of knitted fabric)



4. Results on final fabric

- PRISMA reaches more than a 100 % higher total detection of P events
- P faults per kg dyed fabric: Prisma 0.6 and former competitor model 0.8



*Sensitivity = TP (true positive) / TP (true positive) + FN (false negative) * 100 %*