

Same cuts and better clearing performance - focus on P-clearing

Field Study 100-M_2024
PRISMA compared to latest competitor model, Ne 26

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

The study took place in **China** at a Loepfe customer plant to compare **YarnMaster® PRISMA** to the **latest competitor model** on better clearing performance with focus on P clearing.

PRISMA is the right choice for profitable yarn clearing in the application of **100% cotton Ne 26** produced for the highest requirements.

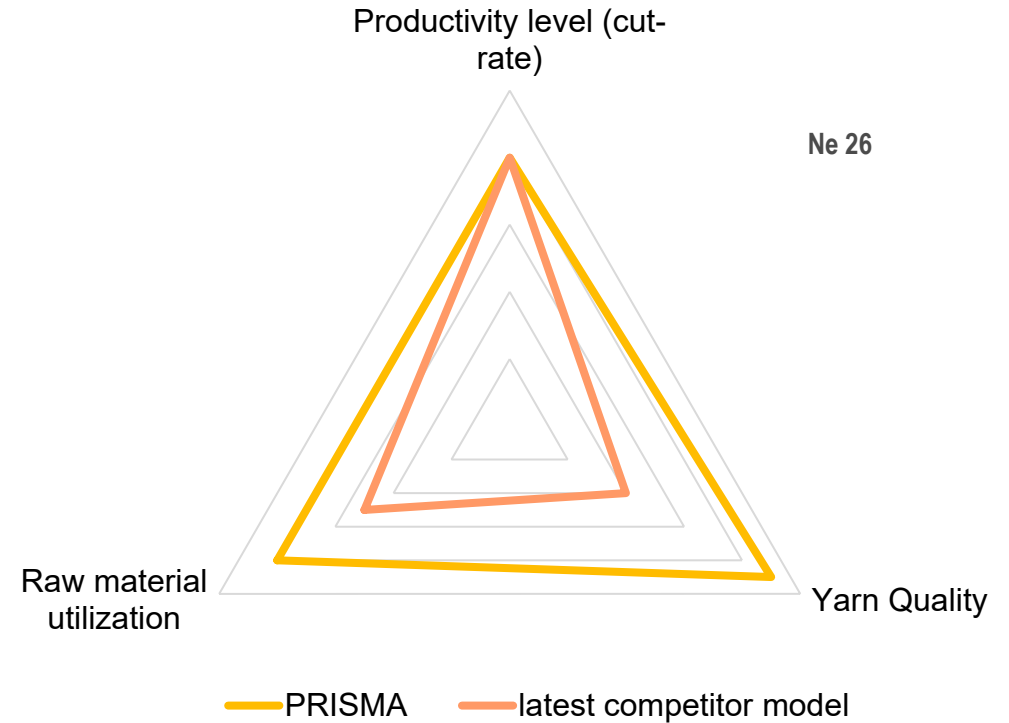


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1. Overall summary

- PRISMA achieves a precision rate of **92%** in P-clearing, outpacing the latest competitor model's rate of 20%
- PRISMA has four times higher genuine P cuts
- Most of the detected P events of PRISMA are the disturbing small ones



2. Study set-up

Sensors:

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

Location:

- Loepfe customer China

Raw Material:

- 100% middle staple cotton Ne 26 siro combed compact

Winder:

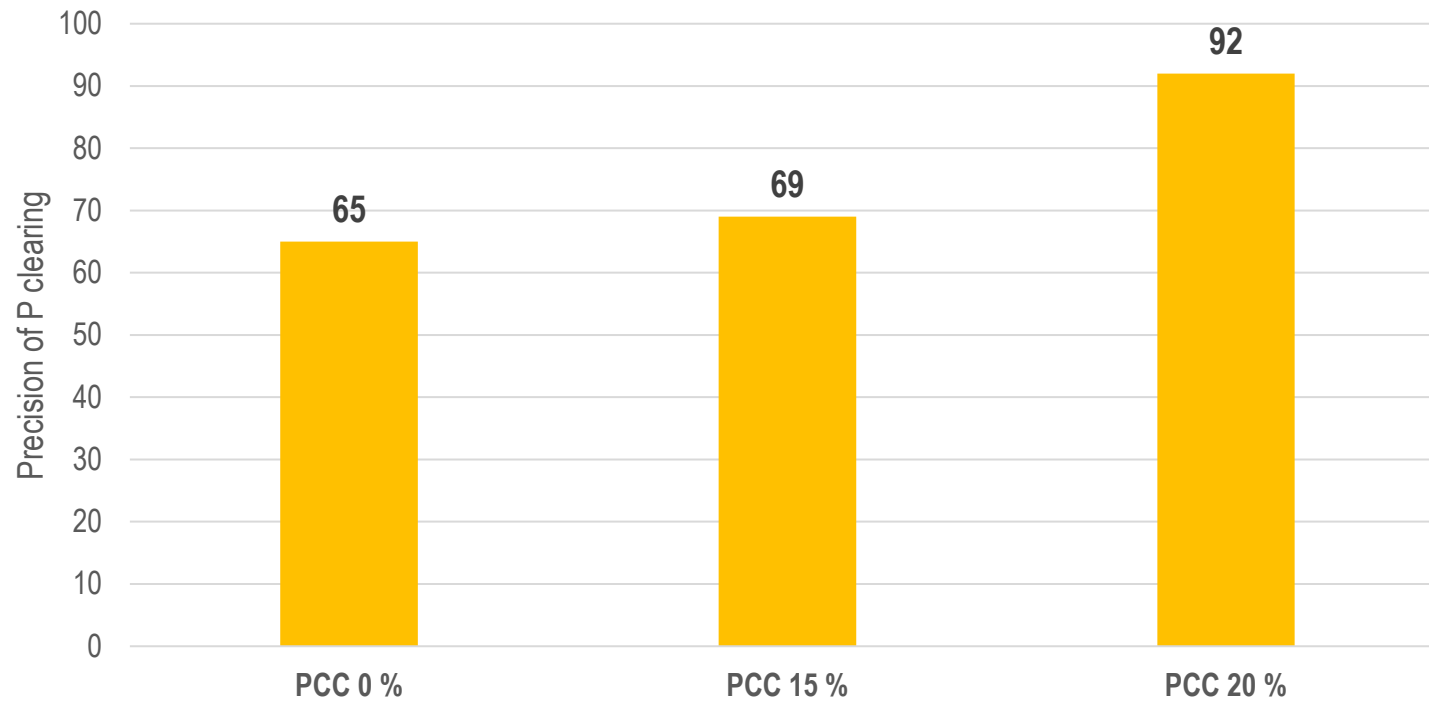
- Study was done on different Murata QPRO EX winding machine types fed with the same ring frame bobbins

Goal:

- Same cuts and better clearing performance - focus on P clearing

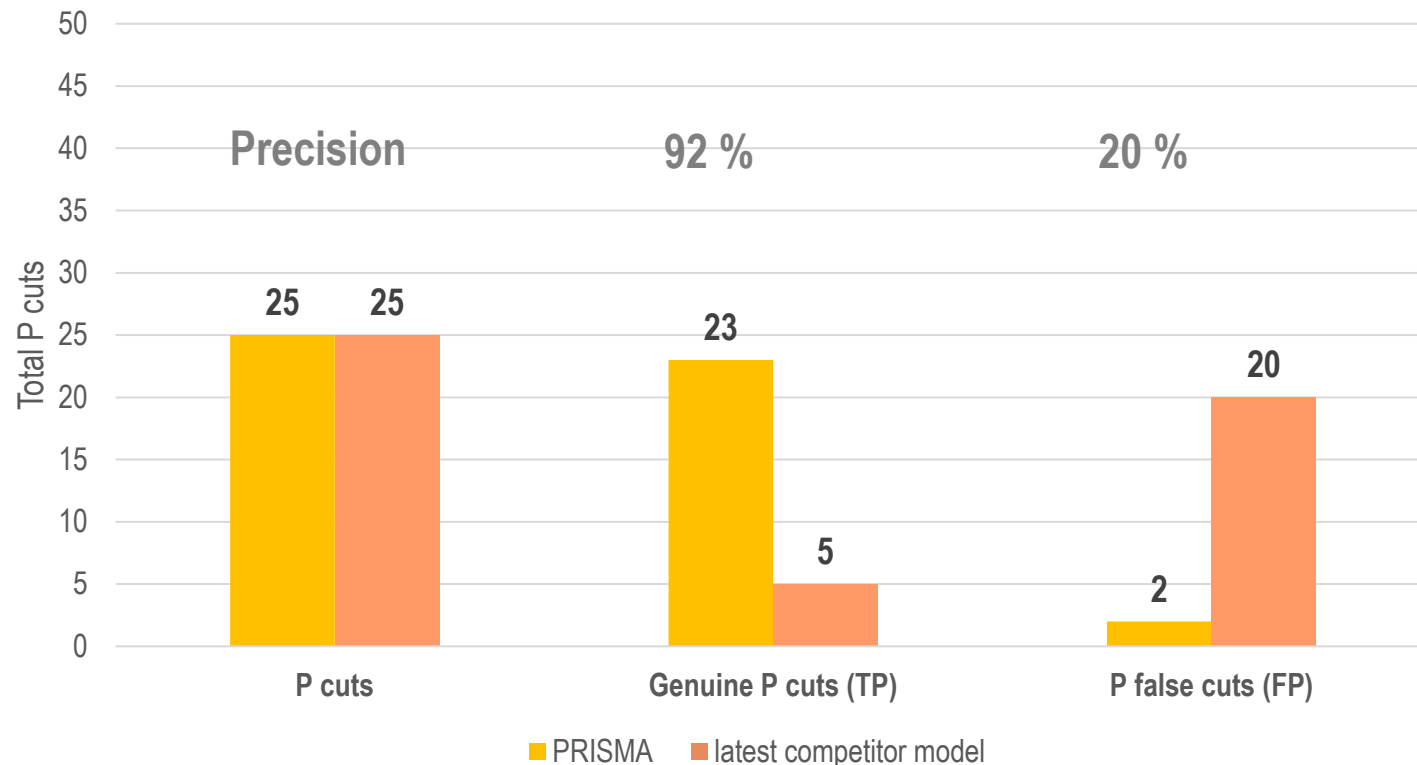
3. Results on yarn clearers

- PRISMA reaches a precision rate of 92 % with PCC 20 %, which was the optimized setting; without PCC only 64 % precision rate (PCC = climate compensation)



3. Results on yarn clearers

- PRISMA reaches a precision rate of 92 %; latest competitor model only 20 %
- Total P Cuts of latest competitor model and PRISMA are on the same level (2/100 km)
- Total winding length for comparison: 78 kg with PCC 20% (~2000 km)
- At rewinding of complete length latest competitor model had another 30 of P false cuts; PRISMA had no false cuts but there were no additional genuine cuts



$$\text{Precision} = \frac{TP \text{ (true positive)}}{FP \text{ (false positive)}} + TP \text{ (true positive)} * 100 \%$$

3. Results on yarn clearers

- PRISMA has four times higher genuine P cuts
- Total winding length in km: 2000 (total 78 kg yarn)
- Most of the detected P events of PRISMA are the disturbing small ones

