

# FENC & RMB



#### FENC staple fiber capacity

- Staple Fiber Div. Profile (Overall)
- FEIS (Far Eastern Industries (Shanghai))
- FEPV(Far Eastern Polytex(Vietnam))

#### 2. FEI

Agenda

#### FENC Hycare roadmap

- Softer touch & high level Low rewet
- Coarse denier has fine denier touch
- Sustainable:
  - Bio-mass
  - Bio-degradable
  - **Recycle PET**
  - Green-Ti (sb free)

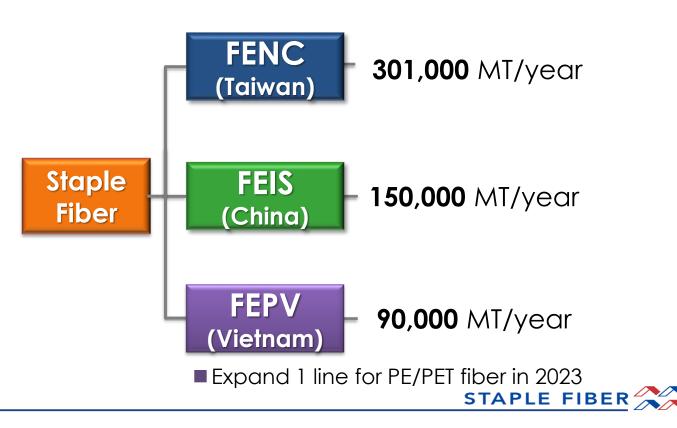
#### 3. FENC new product

- Antimony free PET series fiber (Available)
- New bonding fiber for heavy mattress application (2021.Q4 will available)
   STAPLE FIBER

#### Staple Fiber Div. Profile



- Established in 1970
- More than 1000 workers
- Sales revenue : US\$ 760 millions
- Sales volume: 541,000MT/year



### FEIS(Far Eastern Industries(Shanghai))-



- Established in 1996
- Location : Xinghuo Development Zone
- Area: 55.2 Hectares
- More than 1400 staffs & workers
- Main products : PET chips, staple fibers, filament and film.



**STAPLE** 

### FEPV(Far Eastern Polytex(Vietnam))



- Established in 2015
- Location : Bau Bang Industrial Zone (Binh Dương)
- Area : 226 Hectares
- More than 2000 staffs & workers
- Main products : PET chips, staple fibers, yarns and fabrics.





#### FENC Hycare roadmap

Customer benefit	New Product	Application
Softer touch & high level Low rewet	<ul> <li>Fine denier Available 0.7<sup>d</sup> ET Next step: 0.5<sup>d</sup> ET</li> <li>Coarse denier has good touch 3d → 2d 2d → 1.5d</li> </ul>	Top sheet Back sheet
Sustainable	<ul> <li>Bio-mass: Bio-PE  <ul> <li>Bio-degradable: FENC bio, PLA</li> </ul> </li> <li>Recycle PET</li> <li>Green-Ti (Sb free)</li> </ul>	Top sheet Back sheet ADL Wiper( testing)

STAPLE FIBER

# FENC® Hycare Advanced for baby diaper & sanitary napkins applications

#### Finer bi-component fiber: 0.7<sup>d</sup> PE/PET

- Superior hand feeling
- Smooth & Softness
- Easy carding
- Good skin affinity
- Hydrophilic or hydrophobic available



## FENC® Hycare Advanced for sanitary napkins applications

#### Coarse denier bi-component has good touch

- Good strike through
- Excellent hydrophilic performance
- Low rewet
- Good skin affinity
- Lighter menstrual blood color





Green staple fiber for hygiene application

#### Sustainable

#### • Bio series:

- ✓ Biodegradable: PLA & FENC- bio
- ✓ Biomass: Bio-PE , Bio-PET

#### • Recycle PET

- Heavy metal free
  - ✓ Green-Ti (sb free)



#### Application



Diapers & sanitary napkins



Food Packaging

Wipers and wet tissues

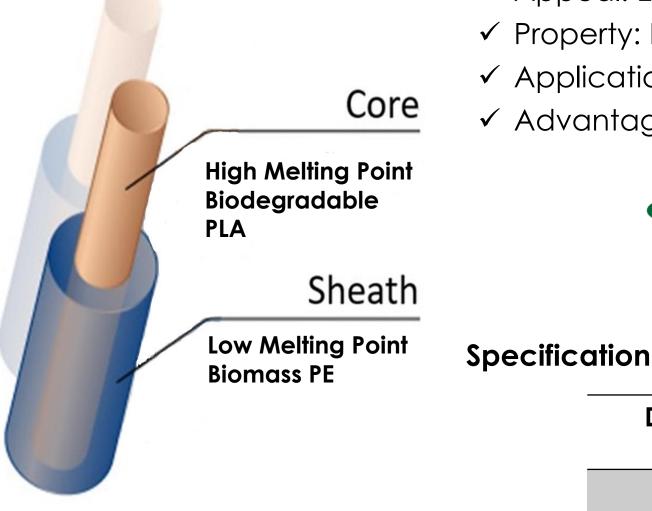
### Benefit of raw material

- PLA
  - ✓ Carbon emission <68% than PET</p>
  - ✓ Energy used < 42% than PET</p>
- Bio-PE
  - ✓ Carbon emission <70% than PET</p>
- Bio-PET
   ✓ Bio-EG
- Recycle PET
  - ✓ Carbon emission <50% than PET</p>
- Green-Ti (sb free)

✓ Sb content <10ppm than normal PET



#### **FENC Staple Fiber Biomass fiber**



✓ Appeal: Energy saving & reduce carbon emissions

Length

(mm)

38~64

- ✓ Property: Biomass
- ✓ Applications: Napkin, diaper, mask & wipes
- ✓ Advantage: Carbon emissions reduce 70%



Denier

(d)

1.5~5



**STAPLE FIB** 

#### FENC Staple Fiber Biodegradable



High Melting Point Biodegradable PLA

#### Sheath

Low Melting Point Biodegradable FENC-BIO

#### ✓ Appeal: Energy saving & reduce waste

- ✓ Property: 100% Biodegradable
- ✓ Applications: Napkin, diaper, mask & wipes
- ✓ Advantage: Biodegradable

(According to ISO 14855-1)



Temperature: 58°C±2 °C Humidity: 50-55%

- 45days · 70% CO<sub>2</sub> changed
- 180days · over 90% CO<sub>2</sub> changed

**STAPLE FIB** 

#### **Specification**

Denier	Length
(D)	(mm)
2-3	38~64

#### FENC Staple Fiber Biomass & Recycle base

- ✓ Appeal: Energy saving & reduce carbon emissions
- ✓ Property: 50% Biomass 
  <sup>、</sup> 50% Recycle
- ✓ Applications: Napkin, diaper, mask & wipes
- **Core** ✓ Advantage: Carbon emissions reduce 60%



**Specification** 





**STAPLE** 

Sheath

Low Melting Point Biomass PE

**Recycle Flake PET** 

Denier	Length
(d)	(mm)
1.5~5	38~64

# FENC<sup>®</sup> Green-Ti

Antimony Alternative Catalyzed PET Staple Fiber

- Antimony (Sb) catalyst is a kind of heavy metal.
- FENC develop a new process: Titanium catalyst for greener production.
- Good for human & environment.
- Suitable for Hygiene, Low melt & Conj. Fiber.



#### New bonding fiber for heavy mattress application

Schedule:

#### Advantage:

- Thermal keeping
- Recovery
- Supportive

- November can evaluate N.W. property.
- 2021.Q4 production line will available.



# **Thanks For Your Attention!**



