

DIY Hemp Decorticator to provide textile needs : a collaborative and a win-win approach

By Pierre Amadiou



**15th International Conference of the
European Industrial Hemp Association (EIHA)**

12th – 13th June 2018, Maternushaus (Cologne, Germany)

 **European Industrial Hemp Association**



Collaborative approach

A pool of partners, thanks to Lin et Chanvre Bio :

– Safilin

- A NM8 wet spun hemp yarn

– Virgo Coop, Passetrame,

- A pair of jeans by Tuffery

- France and Poland

- Other collaborations : L&C Bio, Emanuel Lang

- So a really win-win approach !!!

Wet spun NM8 Yarn

- **Our best benchmark so far**
- **Backed on an original process,** (fibres refined with a customized drum)
- **No interesting process without a valuable business model**



Business model for thriving local hemp value chains

- **Need to create good added values**
 - Shivs for building
 - (Organic) seeds for food and fibre for local insulation
 - Fibres for textile
- **Savings on logistics, on means and costs**
- **Relied on local, regional and global ecosystems and network**
 - Each products its level, e.g. collecting textile fibres
 - To share tools and good practices

A dedicated industrial process

- Specifications :
 - **EASY and CHEAP**
- The only way :
 - **AS SIMPLE AS POSSIBLE**
- A breakthrough is needed :
 - **THE WHEEL !!!**
 - **To roll and to unroll**
 - **To break to clean and roll again**
 - **Then unrolling for textile refining or for insulating**



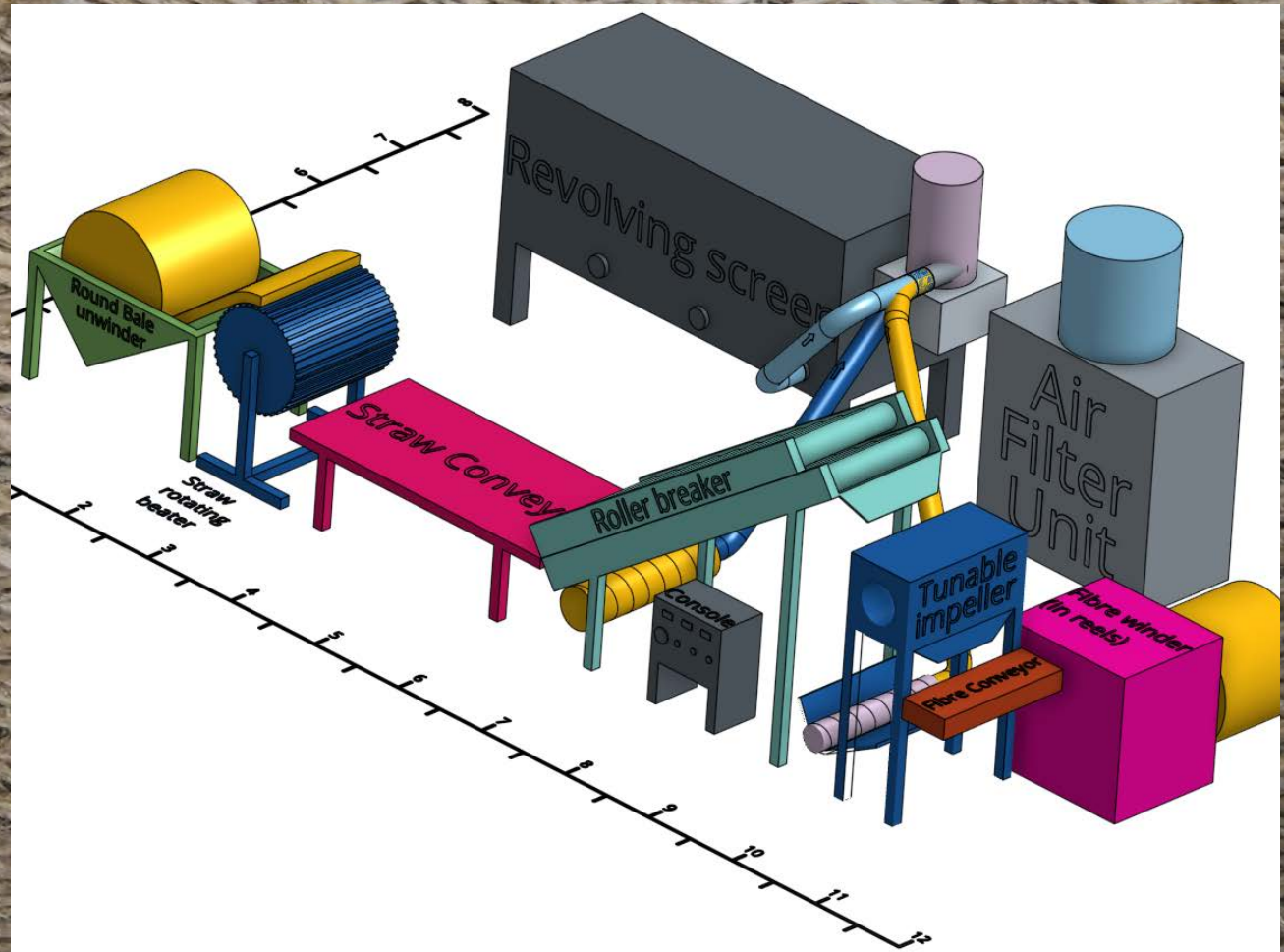
Integrated decortivating process

- Growing & harvest
- Retting & RB
- A regular flow
- Roller breaker
- Cleaning stage
- Rolling the fibres
- Sorting and milling the shivs
- Air cleaning

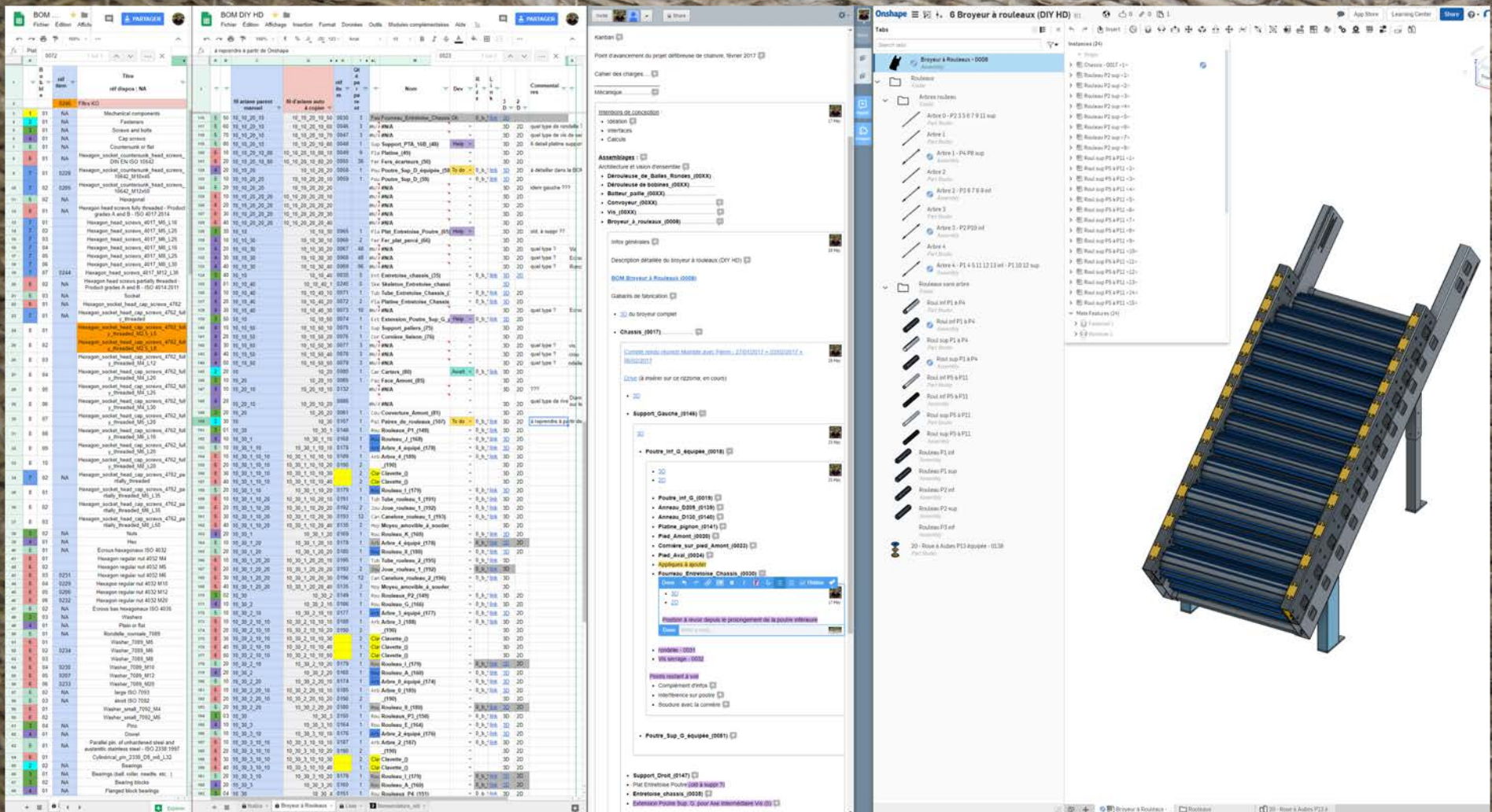


Hemp Decorticator/ DIYHD

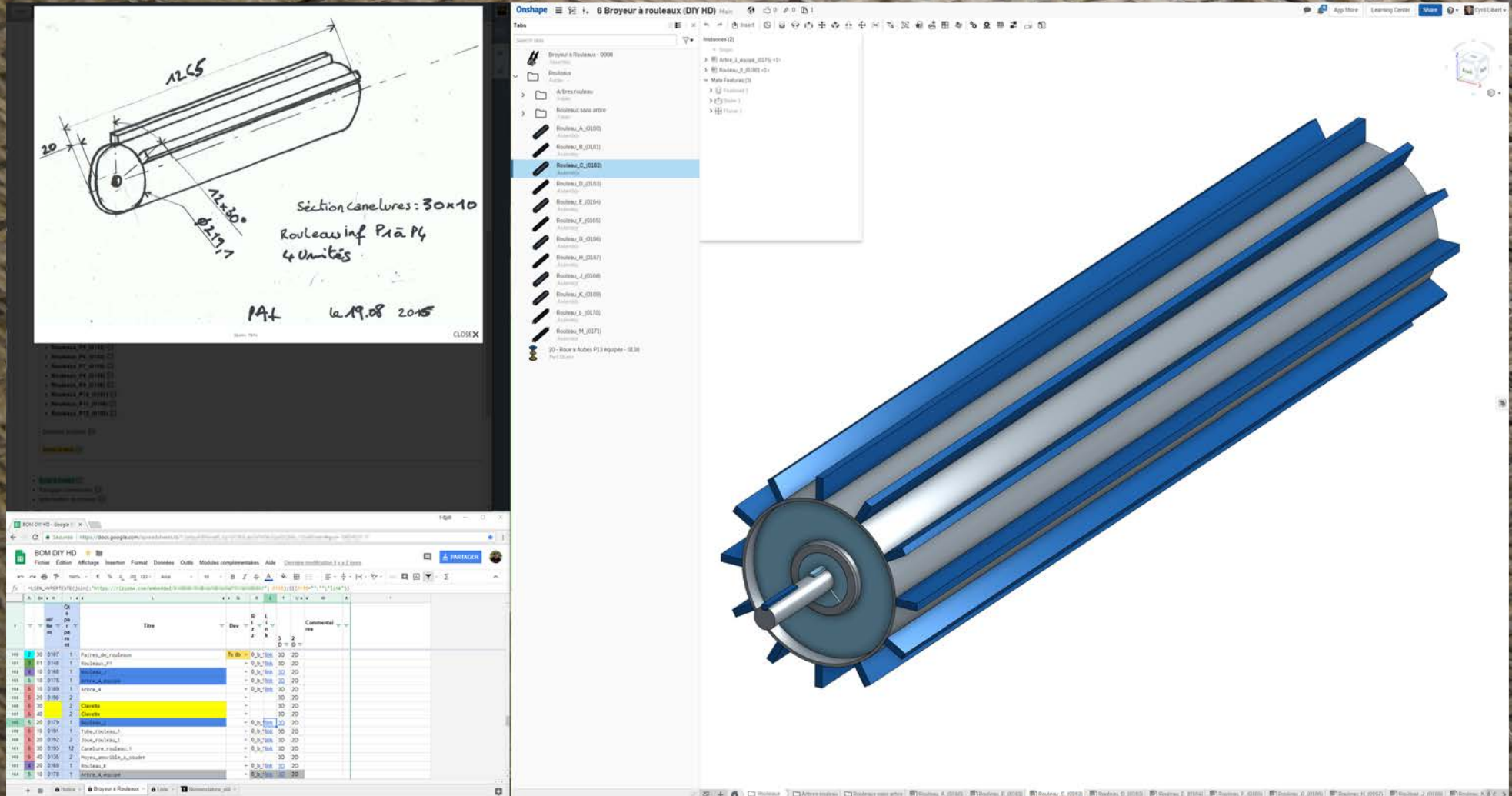
- 500 kg/h
- 150 ha/y/s
- 2 operators
- 60 kw
- Shivs 4 build
- All fibres
- 350 K€
- 2nd textile step
- Open source available



CAD with Open Source Ecology France



CAD with OSE France



Foreward programme

- 1 Final trials with laboratory scaled breaker.
Proto TO. 3 months
- 2 Building and **Launching the DIYHD model 00**,
10/12 month. **Looking for partnership**
- 3 A first series of 10 units of decorticating line. 3
units/year
- 4 Development of a 2nd generation dedicated
textile refining process
- 5 Diffusion of **DIYHD by open source (seeking
funds)** - new textile refining lines on sells

Conclusion : win-win collaborations

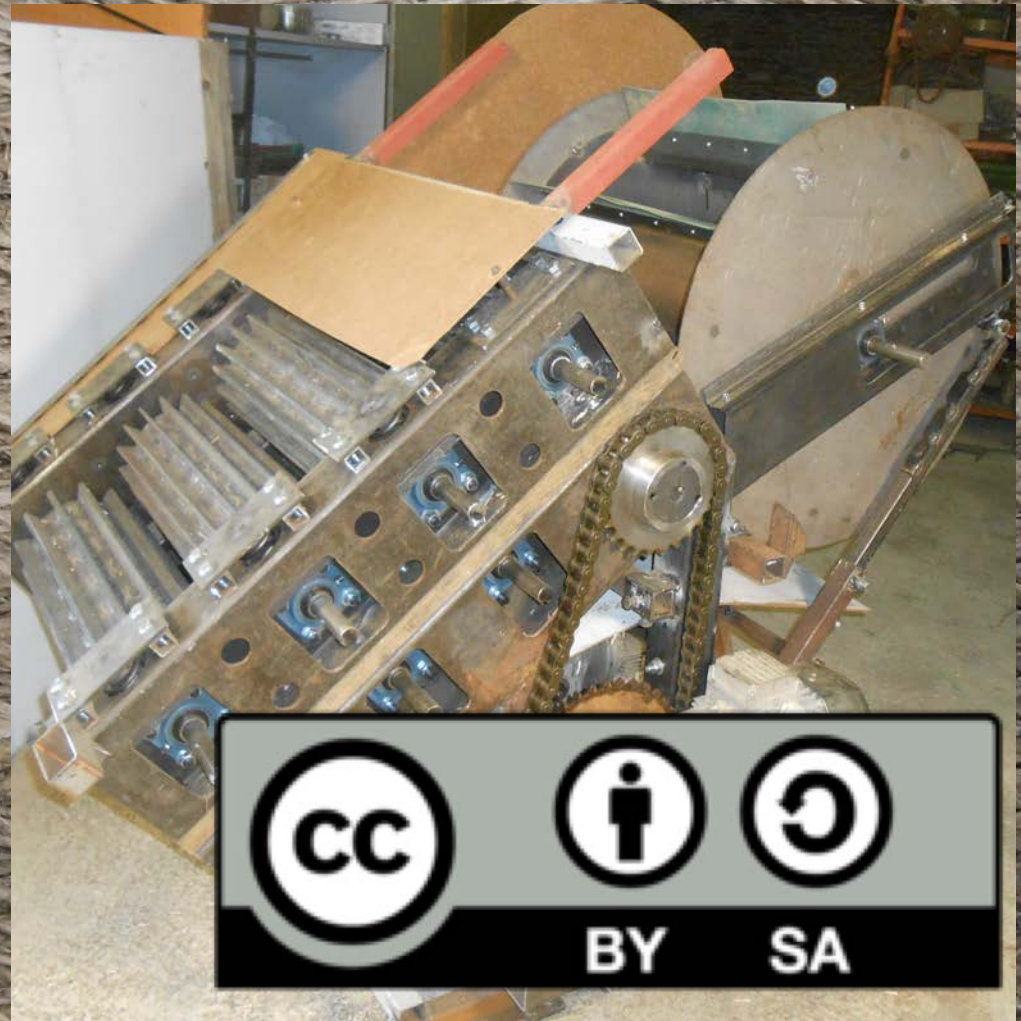
Done : NM8

From now :

1 Final trials

2 1st DIYHD

3 Open source
diffusion for a
**BOOMING
DEVELOPMENT**



MANY THANKS

Pierre AMADIEU

The booster you need for your hemp projects

Training and support

Hemp yarn and textile fibres

Decorticating and refining your fibres

Prototyping your fibres

Welcoming partners and funds

DIY Hemp Decorticator

<http://diyhd.org/>

Tel : +33 603 961 628

Email : pierre.amadiou21@gmail.com

Betille 46120 LACAPELLE-MARIVAL (France)