



# Confidential & Proprietary

## R-2 Mechanical Decorticator Project

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### STRATEGIC ALLIANCE PROPOSAL

**Canada is well positioned to provide 20 years of expertise, cultivars and processing technology required for the global industrial hemp sector.** Nationally, cannabis legalization is assisting the Canadian hemp industry. Investment opportunities are expanding. Changes in regulations are encouraging many farm operations to consider growing industrial hemp crops. The 2018 Farm Bill in the US will serve the same function and help expand the hemp sector across North America.

**Specialized farm machines to efficiently handle industrial hemp crops are required.** Modern harvesting and processing equipment for the industry is under-developed in today's market. Mechanical decortication systems and equipment, ranging from small stand-alone units to larger stationary and mobile systems, are needed in the industrial hemp sector.

### Our objective is to advance hemp sector technology with this Alliance project

This strategic alliance is a group of interested parties who have, or are about to have, an immediate need for industrial hemp decortication solutions. Specifically the alliance is initially focused on the "R-2" mechanical decorticator project as outlined below.

We are inviting a select group of hemp farm owners, processors, manufacturers and companies to participate in this alliance. Building hemp sector equipment provides the tools and systems that are lacking to process stalk efficiently into fibre and core material streams for adoption into existing manufacturing systems. Modern machine technology provides essential supply-chain solutions needed for the industry.

#### Current R-2 design status:

- Round 2 fibre output achieved. (see photo below)
- Full scale AutoCAD drawings completed. (see drawings below)
- Specifications and design have been contracted to farm machinery fabrication shop in Ontario.
- The first ten units are reserved for Alliance Members.
- Further engineering, parts and materials specifications are finalized to produce CAD, CNC files and specs for mass production beyond the first ten machines.

#### Alliance operations:

1. Purchase of machines at Alliance Pricing: members price \$225,000 USD. MSRP: \$330,000 USD.
2. Each member will provide a \$25,000 USD down-payment on a finished R-2 machine as per agreement.
3. Recommendations on other equipment needed: balers, dual-headed cutters, harvesting wagons, etc.
4. The second-phase: the "SD-50 Field Harvester" project will be available to all members.

Processing information, techniques, methods, equipment & systems used will be made available to all members and distributed as needed to all Alliance Members via our website. Any information regarding Alliance Members will not be made public until the first ten machines have been delivered. Alliance Members who wish to participate in subsequent R-2 sales activities, leveraging their discount, are welcome to do so.

*~Bruce Ryan*



## R-2 DECORTICATOR STRATEGIC ALLIANCE

### OVERVIEW & GENERAL SPECIFICATIONS

#### R-2 Decorticator System Design

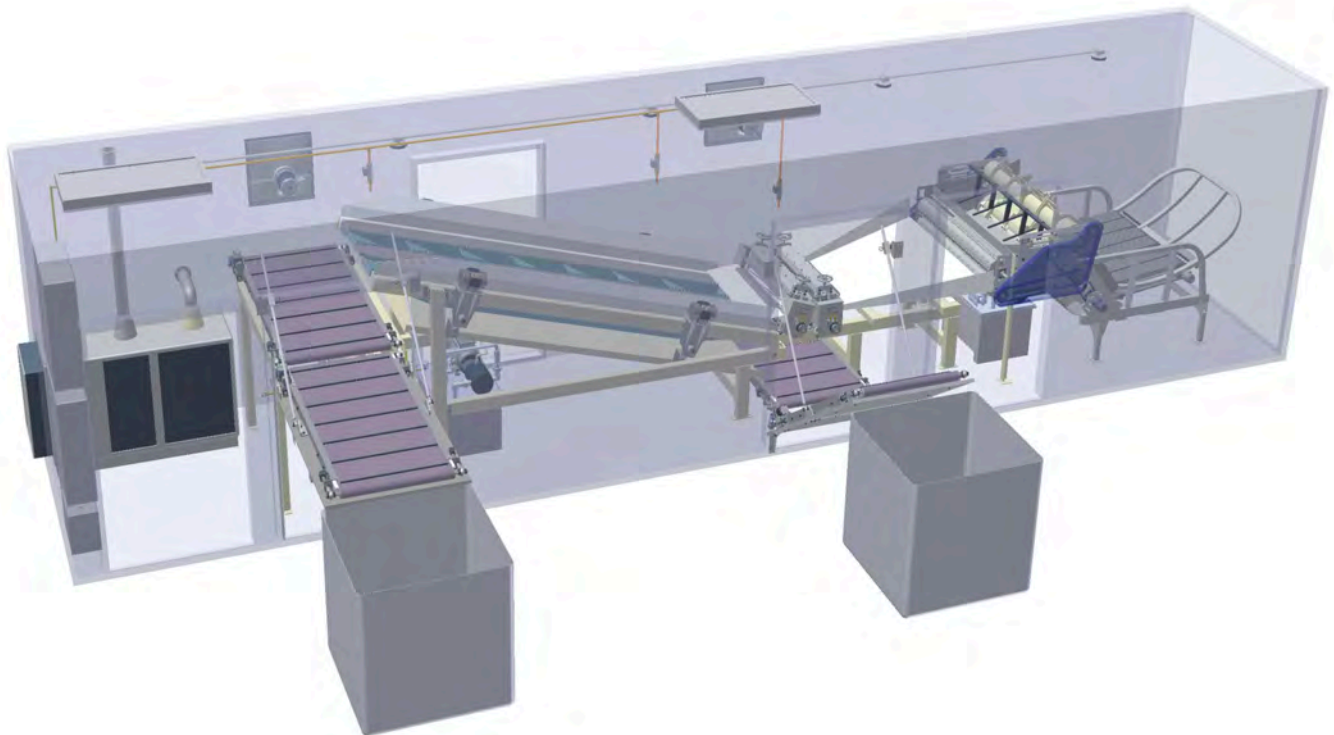
Core machine is an integrated design that can process green, dry or retted (not recommended) hemp stalk. Dual headed processing provides cleaner output with less core hurd left in the fibre mass. Automated feeding conveyors increase the output and final volumes.

R-2 Hemp Stalk Processing System is engineered into a stand-alone ISO 40' sea cargo hi-cube container. R-2 System is a self-contained, semi-portable unit designed to be used outdoors. Standard large square or round bales are fed to the bale ripper at the front of the unit. Conveyor carries stalk material at a controlled rate to the main decorticator heads. Main machine head assembly separates the fibre from the core via toothed roller structures and drops the core to a conveyor system below.

Fibre is removed at the far end of the system via straw walkers to a second conveyor ramp and collected with large bags at its' collection point. Core hurd material is carried out the side conveyor via a ramp and collected in a large square bag or container. Internal system is lit using skylights, plus an LED light array with ventilation systems for dust and waste removal. Integrated CO2 fire suppression system included. A diesel 50 kW generator or electrical transformer power system is integral for main operations.

Standard combing and sorting machines can be used to process the fibre after decortication. Ancillary equipment such as bale loaders and bale handling gear are off-the-shelf farm production machinery suitable for the hemp industry ie: John Deere combines and bale spears, Claas Flax Balers, etc. Assorted peat moss bagging and square balers can also be used in conjunction with the R-2 helical decortication unit.

#### R-2 HEMP STALK PROCESSING SYSTEM







### PROJECT REQUIREMENTS

1. Target output: 2 – 4 tons per hour with material handling for output.
2. Complete materials specifications and CNC files for volume manufacturing.
3. Unit is built into a 9'6" - 40' sea cargo container for delivery to farms via transport.
4. Diesel electric power systems. Electrical power options.
5. Emergency stops installed - safety shields installed.
6. Dust handling system installed.
7. Skylights and LED's installed.
8. Fire suppression system installed.
9. Field Green colour.
10. Machine "ready for prime-time" w/ minimum farm-level CSA approval for export to the US and Europe.
11. Machine brochure: (developed in-house)
12. Spec sheets plus photos - video of machine turning out fibre. (developed in-house)
13. Full technical & service manual. (developed in-house)
14. Parts & service arrangements in place. (i.e.: parts on-shore and overseas)





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## MEMBERSHIP OVERVIEW

### R-2 Decorticator Strategic Alliance Membership includes:

- First-in-line access to R-2 units when available for sale **2020**.
- The first ten production machines are reserved for Alliance Members. (one machine per member initially).
- During this final phase of development, input on machine design and improvements is requested.
- We will request Alliance Members to report on in-field testing, duty and maintenance cycles on installed units.

### Any changes, modifications or updates will be incorporated & circulated to all members.

- Current MSRP for the R-2 is estimated at **\$330,000 USD**. Farm Dealer price is estimated **\$225,000 USD**.
- Purchase Price of R-2 for Alliance Members will be at the Farm Dealer price as set at the time.
- Alliance Members will have Farm Dealer pricing, on all purchases from CannaSystems, forever.
- Shipping & transport costs are not included.
- CannaSystems can also assist Alliance Members with selling decorticator material products, where requested and appropriate. This may range from providing input and advice on various sales approaches the Alliance Member may be considering, to acting as broker -or- purchasing outright the fibre and core output.

### Alliance Membership Deposit: \$25,000 USD - allocated as follows:

\$ 1,000	Membership Fee
<u>\$ 24,000</u>	Non-refundable deposit toward purchase of R-2
\$ 25,000	USD

#### 2020 Operations

HEMP FARM	Y	N
SEED CROP	Y	N
CBD CROP	Y	N
FIBRE CROP	Y	N
ACRES GROWN	_____	

Full contract terms and conditions are contained in the R-2 Decorticator Strategic Alliance Membership Agreement.

You may obtain a copy by emailing: [alliance@cannasystems.ca](mailto:alliance@cannasystems.ca)

