



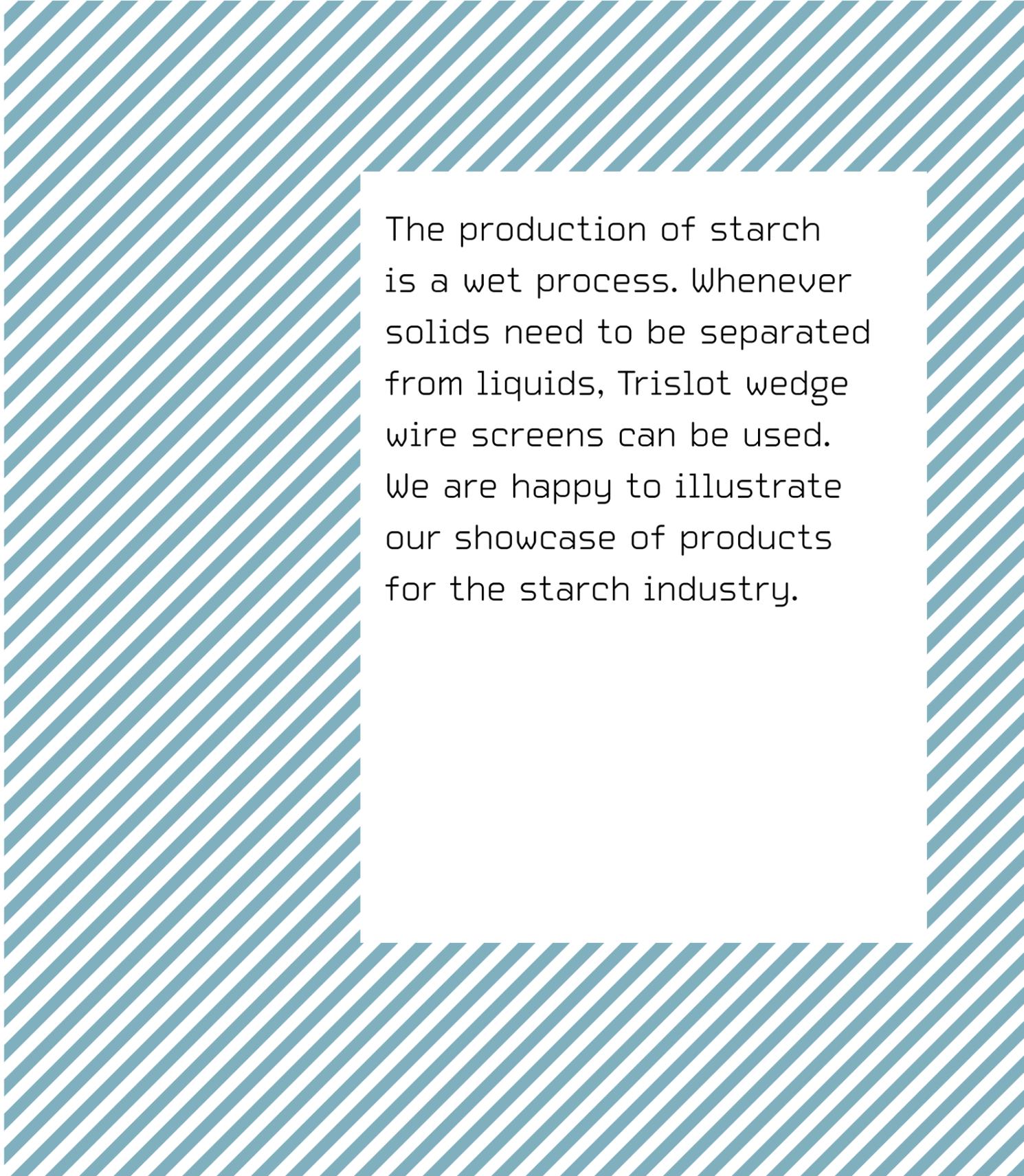
Screens for the

Starch Industry

Trislot® designs and manufactures stainless steel filter elements and separation screens based on V-shaped profile wires. These high precision filtration elements are made from profile wires that are resistance welded onto support wires in an automated production process.

Our leading edge production technology, innovative design from our engineering staff and close cooperation with our customers assures you have a cost-effective, tailor made solution for all your filtration needs.

Trislot screens and tubes are used in the production of starch originating from corn, wheat, rice, peas, potatoes, cassava, ...

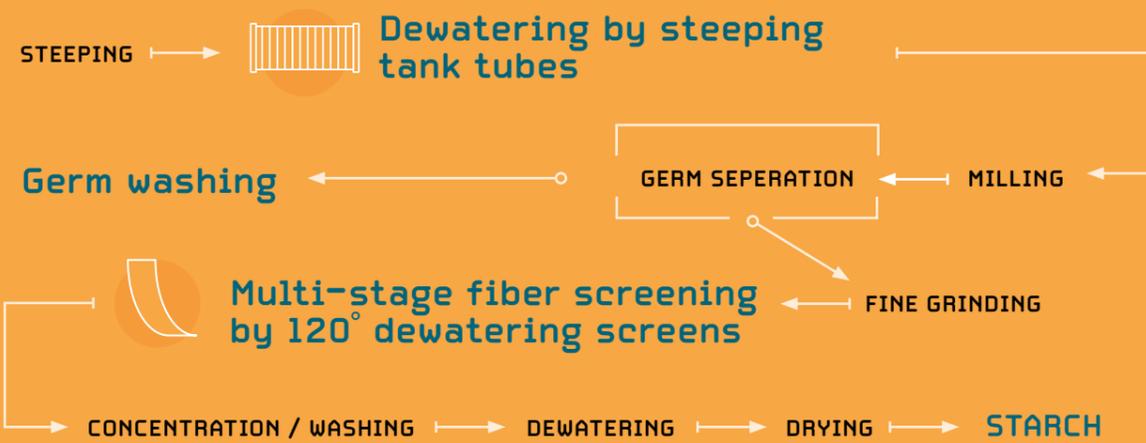


The production of starch is a wet process. Whenever solids need to be separated from liquids, Trislot wedge wire screens can be used. We are happy to illustrate our showcase of products for the starch industry.

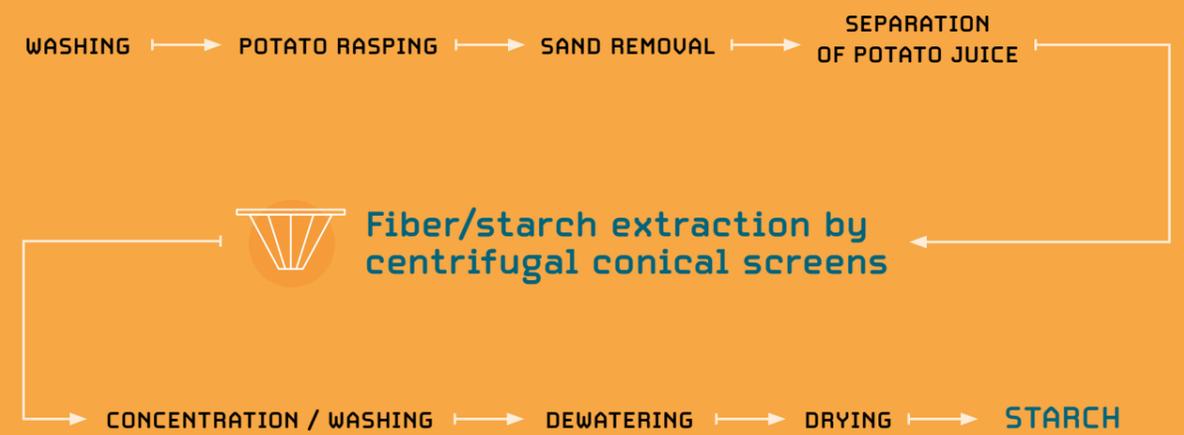
Process lines

Starch Industry

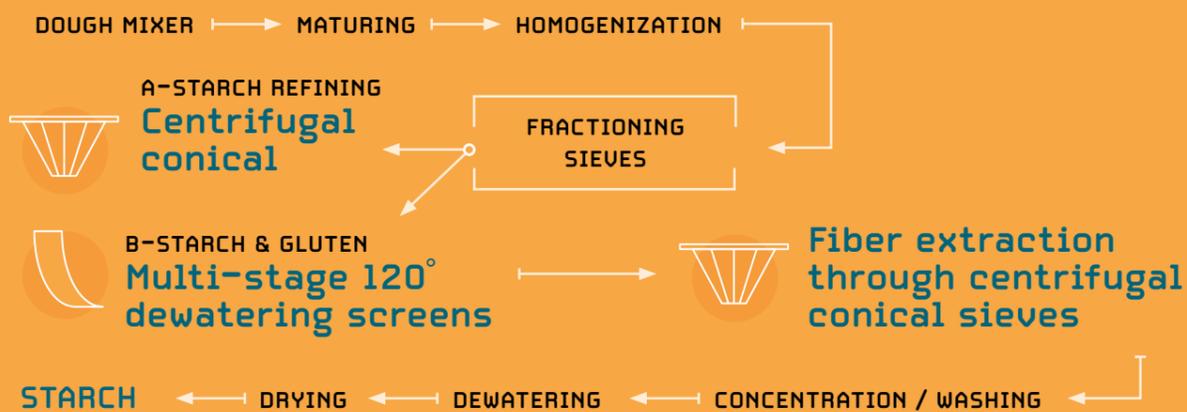
CORN STARCH PRODUCTION



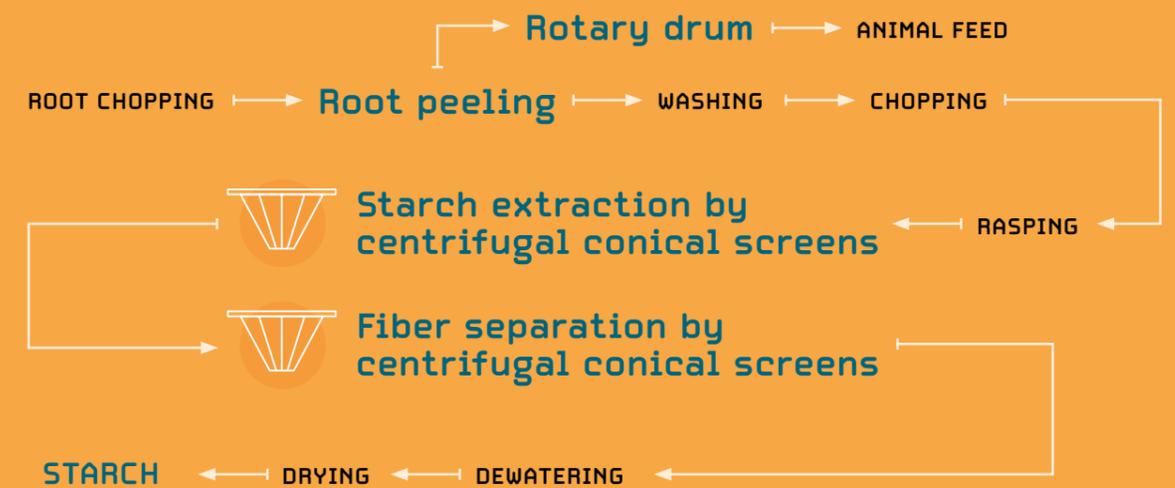
POTATO STARCH PRODUCTION



WHEAT STARCH PRODUCTION



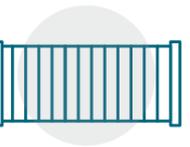
TAPIOCA STARCH PRODUCTION





Steeping tank tubes

Wedge wire slot tubes have the advantage of non clogging and high through put all in one. This is ideal for steeping tanks.



// FIELD OF APPLICATION

Corn, rice, peas and wheat

// CHARACTERISTICS

- ▶ Construction: radial slots, support wires on the inside, filtration from out to in
- ▶ Slots : 2-3 mm
- ▶ Diameter : 268-430 mm
- ▶ Heavy profiles and supports suitable to withstand the significant weight of wet corn.

For high capacity corn steep tanks, we can foresee reinforcements

// ADVANTAGES

- ▶ Strong construction
- ▶ High open area
- ▶ Easy to install

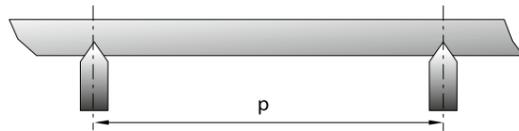
120° dewatering screens (DSM screens) and fiber separations

Trislot® is one of the few companies in the world that has in-house production of both looped and welded screens.

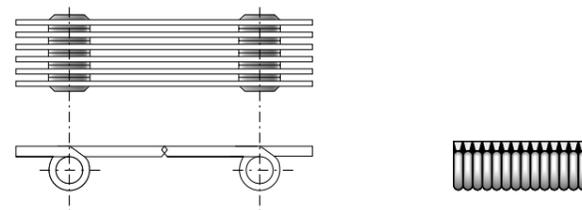
The Trislot® **looped screen** is a mechanical construction whereby the surface profiles are provided with a loop and are connected to each other through round cross wires.

The Trislot® **welded screen** consists of triangular-shaped surface profiles resistance welded onto support profiles at a very accurate distance to each other.

THE TRISLOT® WELDED SCREEN



THE TRISLOT® LOOPED SCREEN



// FIELD OF APPLICATION

Cassava, corn and wheat

// CHARACTERISTICS

- ▶ Looped or welded construction
- ▶ Profile wire:
 - 5S (width: 0.5 mm)
 - 10S (width = 0.75 mm)
 - 10A (width = 0.95 mm) only for looped screen
- ▶ Slot: 0.05 and 0.075 mm, other slots are possible

- ▶ Standard dimensions: 585 // x 1592 mm or 710 // x 1592 mm (others are possible)
- ▶ Reversible: When the leading edge of the wire wears, it becomes less sharp and the dewatering capacity decreases. By reversing the screen a 'new' leading edge is provided.

- ▶ Open area in percentage:

	50μ	75μ	100μ	150μ
5S	9.10%	13.00%	16.66%	23.00%
10S	6.25%	9.10%	11.80%	16.70%
10A	5.00%	7.30%	9.50%	13.60%



// ADVANTAGES

- ▶ Off the shelf products
- ▶ Reversibility = double life time
- ▶ Slot precision. The slot precision is one of the most important characteristics of the Trislot® screen as it determines the dimensions of the fibers passing through. Trislot guarantees a superb slot precision for both welded and looped screens.

The slot widths of the welded screen are controlled during manufacturing by a state-of-the-art electro-optic system. In this way we can control the average slot and standard deviation. It provides us the opportunity to adjust during the production process.

Conical baskets for centrifugal sieve

Electroformed nickel sheets are often used in conical baskets for extractors, however they can break easily. Trislot offers a perfect alternative to these sheets.

// FIELD OF APPLICATION

Cassava, potatoes and peas.
Centrifugal screens are also used to crystallize high fructose content corn syrup.

// CHARACTERISTICS

- ▶ Profile: 5S
- ▶ Pitch between support wires: 8 mm
- ▶ Slot is depending on base product:
 - 125 µm for fiber retention when starting from potatoes
 - 50-60 µm for refining purposes (potatoes)
 - 50-90 µm for starch from cassava
- ▶ Material : AISI 316L

// ADVANTAGES

- ▶ Higher filter efficiency
- ▶ Mechanical stability
- ▶ Longer life time
- ▶ Better cleanability. Our in-house designed support basket offers higher open area which benefits the overall performance and cleanability.

Lower
total cost
of ownership



Finishers

These screens offer an alternative to pressure screens for fiber washing, fiber dewatering and germ washing applications. They are also known as ICM or paddle screens.

Throughout the years, Trislot has acquired a reputable experience in designing and engineering purpose built screens for this specific application.



Other wedge wire products related to starch production



Drum screen to separate loose peels, sand and foreign contaminants. This product is used in the preparation and washing stage.



Screen nozzles for ion exchange units used in production of glucose and fructose syrup, also used in the decolourisation process.



Screw press for bagasse fly-ash. The material that remains after bagasse is burned in boilers, is considered to be a waste product. The screw press will remove moisture from the fly ash to a good 10 to 20 percent. The water obtained by screw separation can be treated and re-used in the process. This is typically a cylindrical construction with axial slots and strong support rods.



Gravity screens for waste water treatment.

Germ washing screens.



Filter elements for process water.

Trislot® screens are high quality products allowing starch producers to optimise the performance of their process at the critical separation points.

International representatives



▼ NORTH AMERICA

Florian Van Assche
T. +1 832 873 6615
fva@trisolot.be

▼ CENTRAL AMERICA, SOUTH AMERICA, UK, SCANDINAVIA, PORTUGAL, GERMANY (OTHER ZIP CODES) & THE NETHERLANDS

Glenn Vercrucy
T. +32 56 62 72 25
gvc@trisolot.be

▼ TURKEY, SPAIN, SWITZERLAND, AUSTRIA, GERMANY (ZIP CODES STARTING WITH 6, 1, 8, 7, 9, 0), EASTERN EUROPE, BELGIUM & LUXEMBOURG

Christophe Caenepeel
T. +32 56 62 72 41
ccn@trisolot.be

▼ FRANCE

Filtr'action
Xavier de Fenoyl
T. +33 675 755 020
info@filtraction.fr

▼ ITALY

Sergio Butti
T. +39 348 586 4515
sergiobutti@alice.it

▼ MIDDLE EAST, AFRICA, RUSSIA & GREECE

Mike Verduyn
T. +32 56 62 72 16
mvn@trisolot.be

▼ INDIA

Transcend Cleantech pvt. Ltd.
Mahesh Shastri
T. +91 880 601 3000
msi@trisolot.in

▼ SOUTH EAST ASIA (THAILAND, VIETNAM, CAMBODJA, MALAYSIA, INDONESIA & THE PHILIPPINES)

Hong Lim
T. +65 8265 3999
hong@trisolot.be

▼ CHINA

Samuel Chen
T. +86 139 011 62929
sch@trisolot.be

▼ AUSTRALIA, JAPAN, SOUTH KOREA, TAIWAN & NEW ZEALAND

Corey Brightwell
T. +61 477 269 410
crb@trisolot.be

Trislot

Roterijstraat 134, B-8790 Waregem
T. + 32 56 62 72 22 - E. info@trislott.be

www.trislott.be

 **Trislot**®