



The **T r i g o**  
Simply, take it further...



Ville Hela-Aro  
Jarno Lindberg  
Rochale Yates



# OUTLINE

1. Stroller research
2. User profile
3. Concept
4. Functions & Characteristics
5. Ideation
6. Final design
7. Mechanisms
8. Dimensions
9. Materials/Textiles



# STROLLERS

## *What makes a good stroller?*

- Child can sit up, or lie down
- Room for small storage
- Light-weight but durable

## *What should always be included?*

- 5 point harness system
- Brake locks
- Swivel wheels
- Weather guard
- Removable/washable upholstery



# USER PROFILE

- Adults age 20-45 years old
- Year-round cyclist
- Families with children aged 1-6 years old
- Uses bike on daily basis for local travel
- May or may not own a vehicle



# CONCEPT

## "Simpli city"

Our aim was to create an everyday product that would simply and seamlessly transition into the lives of cyclists with young children. Whereby, it could eliminate the need for the user to purchase a stroller in addition to a child transportation system for their bike. The intent for the final design was that it would be able to be utilized as a fully functioning bicycle buggy, comfortable stroller, and when no child is present, a small flat bed trailer for minor shopping tasks. The simple, yet dynamic, all-in-one system would also remove the need for additional kits to be purchased later on, should the user wish to transform their buggy into a stroller, or vice versa. An essential feature of the product is the mechanism which allows the buggy to be easily removed from the bike and then becomes the handle of the stroller, and yet is simple and intuitive to operate.



# FUNCTIONS & CHARACTERISTICS

## Functions:

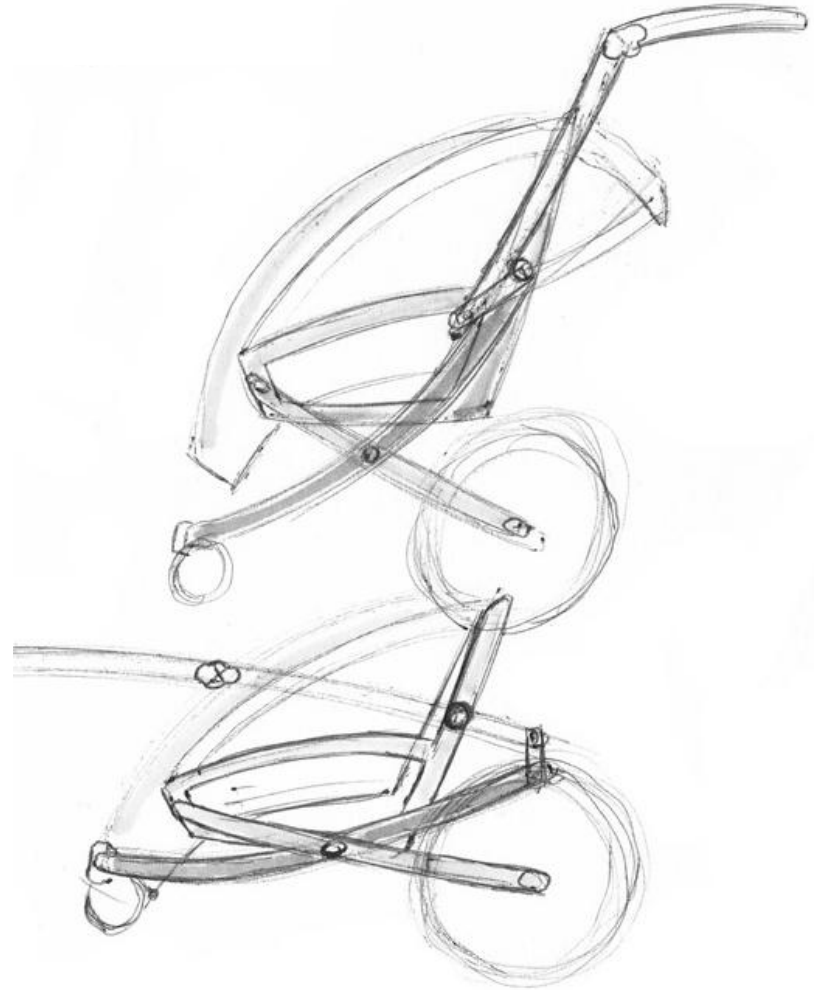
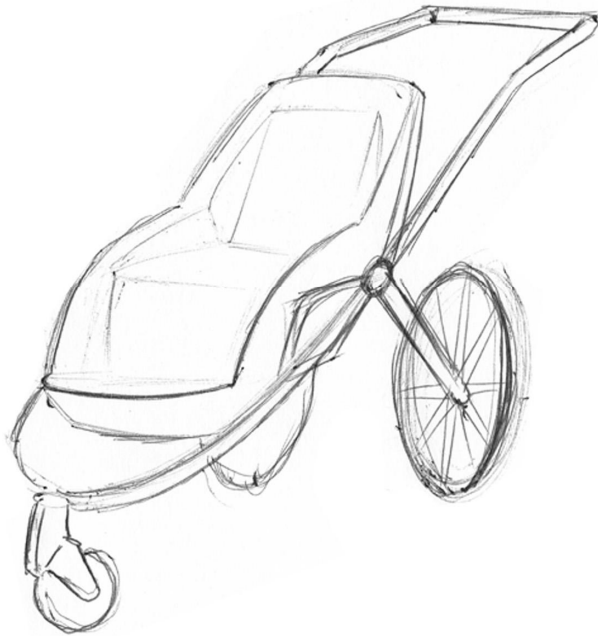
1. Local travel
2. Child transport
3. Minor shopping tasks

## Characteristics:

- Reliable/Durable
- Foldable – easily stored
- One frame structure that converts for different functions
- Convenient – user decides which setting is right for them
- Light-weight
- "Ease of use" & "Intuitive use"  
(=simple to operate)



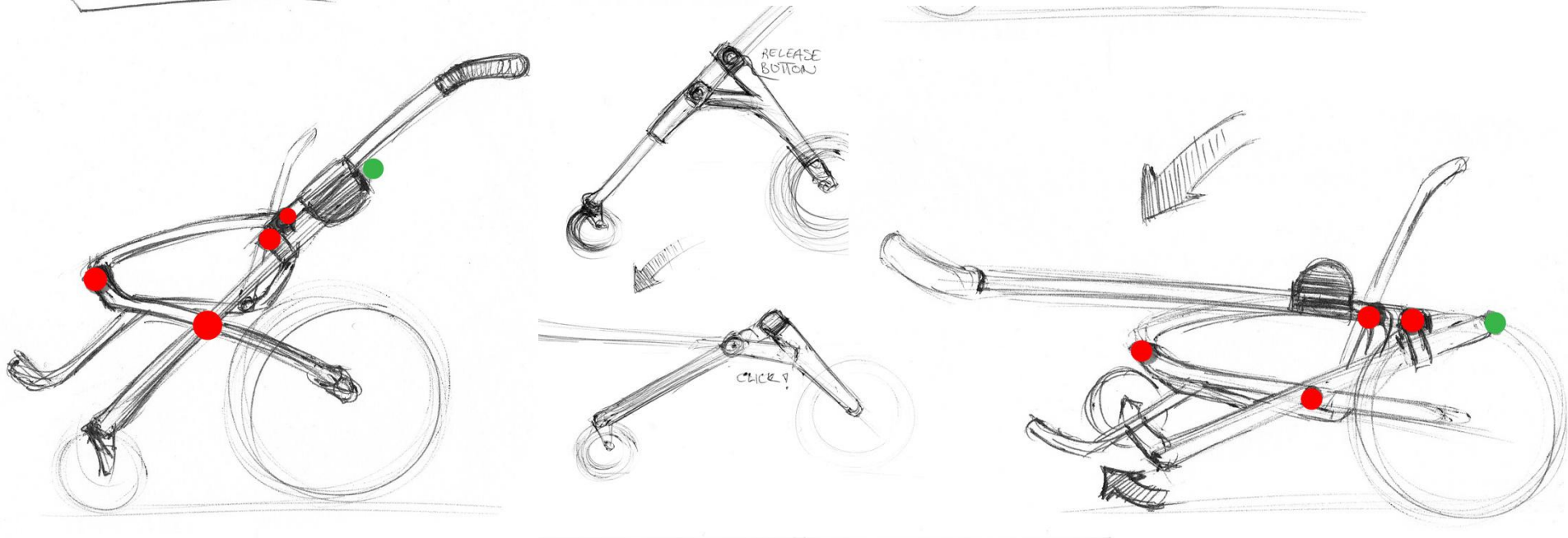
# SKETCHES/IDEATION



# SKETCHES/IDEATION

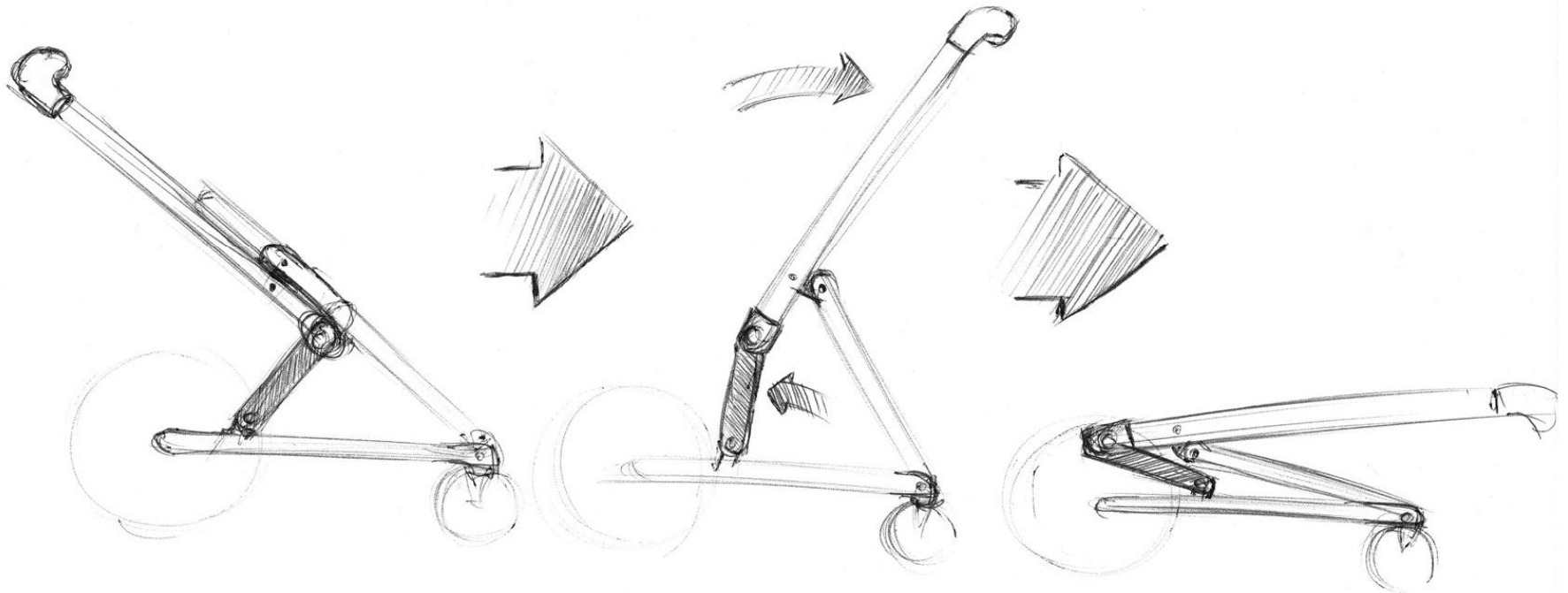
● TURIPISTE

● VAPAUTUS PAINIKKE





# SKETCHES/IDEATION



# SKETCHES/IDEATION



# FINAL DESIGN



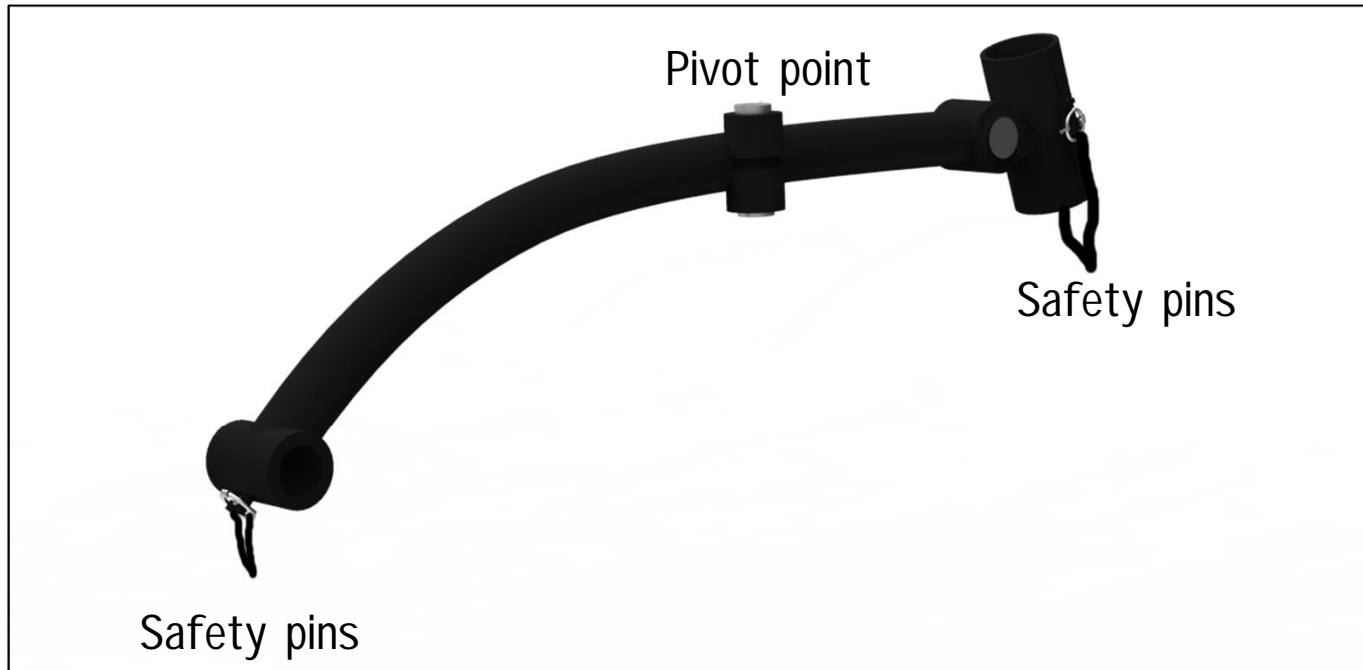
The **T r i g o**



# MECHANISMS

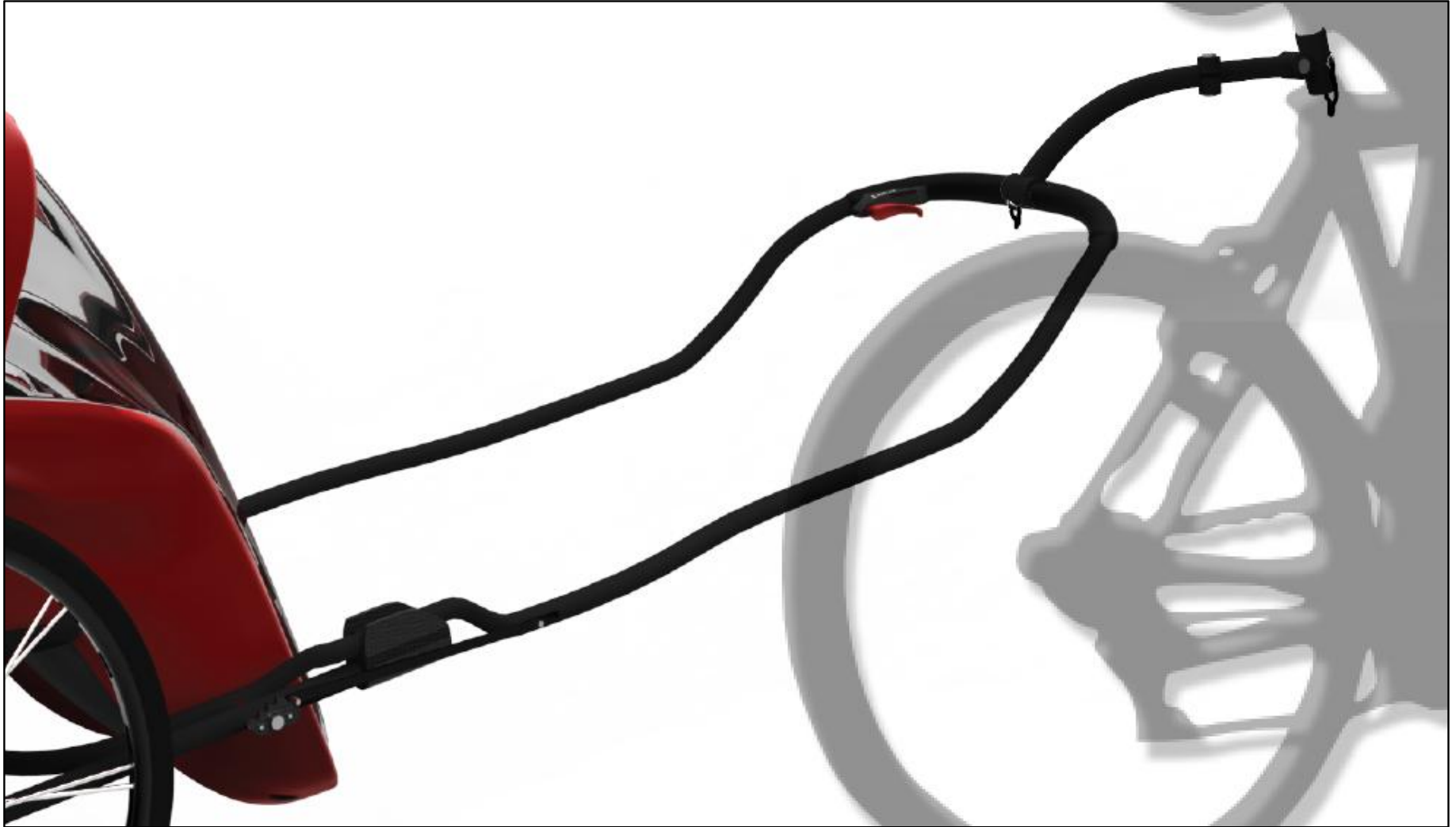


# MECHANISMS



Attachment arm is installed to the saddle pipe of the bike and remains in place, creating a “snap-and-go” system for the handle of the stroller. Safety add extra support in case of an accident.

# MECHANISMS



# DIMENSIONS



# DIMENSIONS





# TEXTILES

Fabric for seat: (recommendation from textile student)

- Waterproof/woven fabric
- Washable – Nylon (nylon produced by synthetic polymers [artificial production])
- Polycotton liner

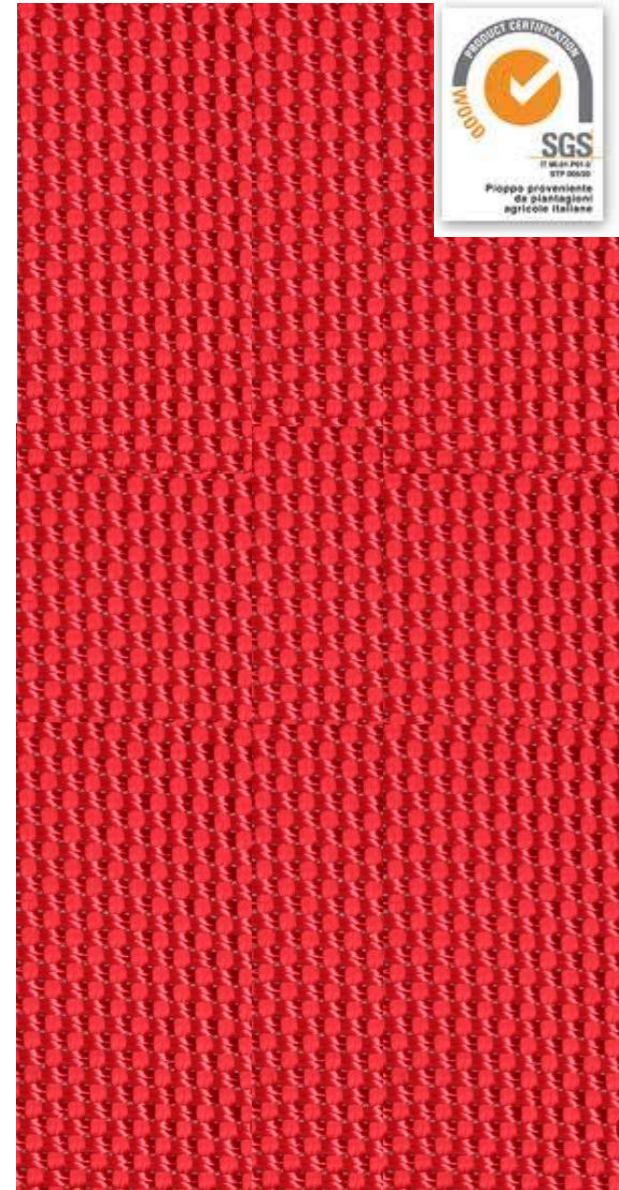
**Double Yarn Waterproof Nylon  
Oxford Fabric PA\PU\PVC:**

Certification: **SGS**

Usage: Home Textile, Bag, Umbrella, Curtain, etc.

Material: 100% Nylon

Features: Tear-Resistant, Shrink-Resistant



# MATERIALS

## Padding for seat:

- Wadding/stuffing – polyester wadding (good for people with allergies)
- Can be washed
- 100% polyester

## Velcro:

- Nylon /polyester
  - Snaps/buckles to be considered in some areas, as velcro is easier to pull apart.

## Waterproof cover:

- Nylon taffeta
- Acrylic coating
- Scotch guard finish on top



# MATERIALS

## Aluminum pipe structure

- Light and durable

## ABS hard plastic tube connectors

- Light and durable



# The **T r i g o**



Simply, take it further...





In cooperation with

