TEXTILHUS

DIPLOMA

THEME B

SOLANGE PICCARD

MANIFESTO TEXTILHUS

PART I

PRODUCTION PROCESS

TEXTILHUS

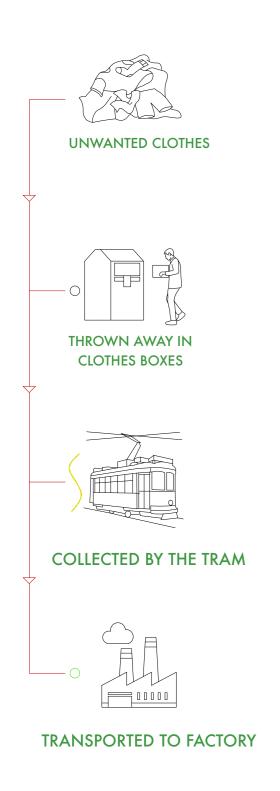
PART II

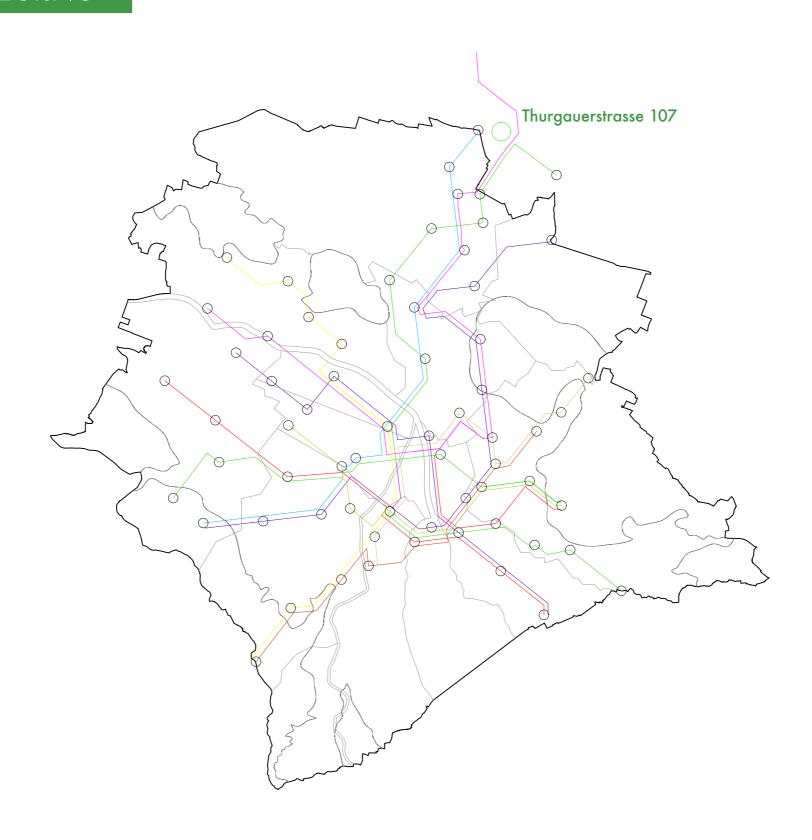
MACHINES

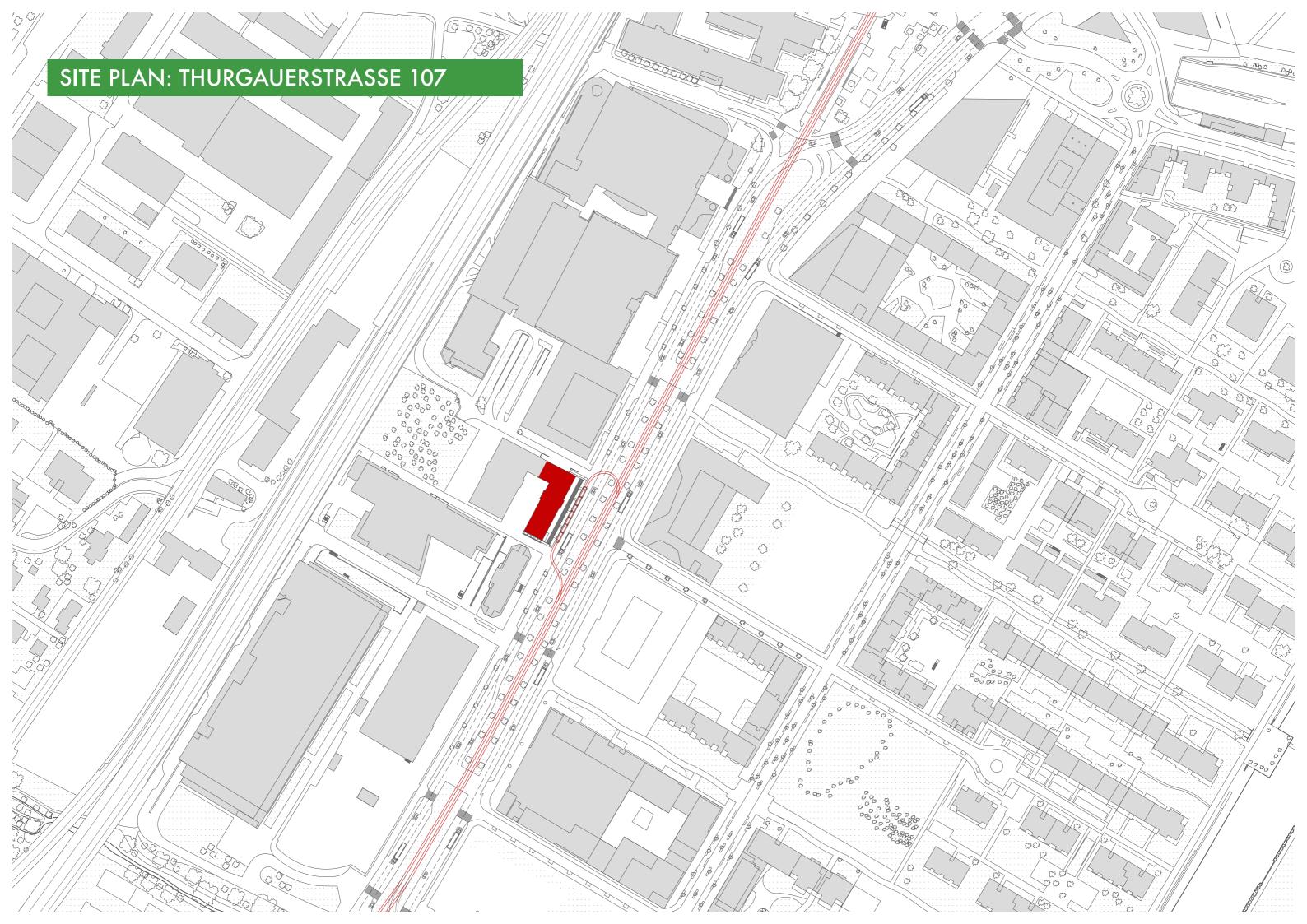
TEXTILHUS

PART III

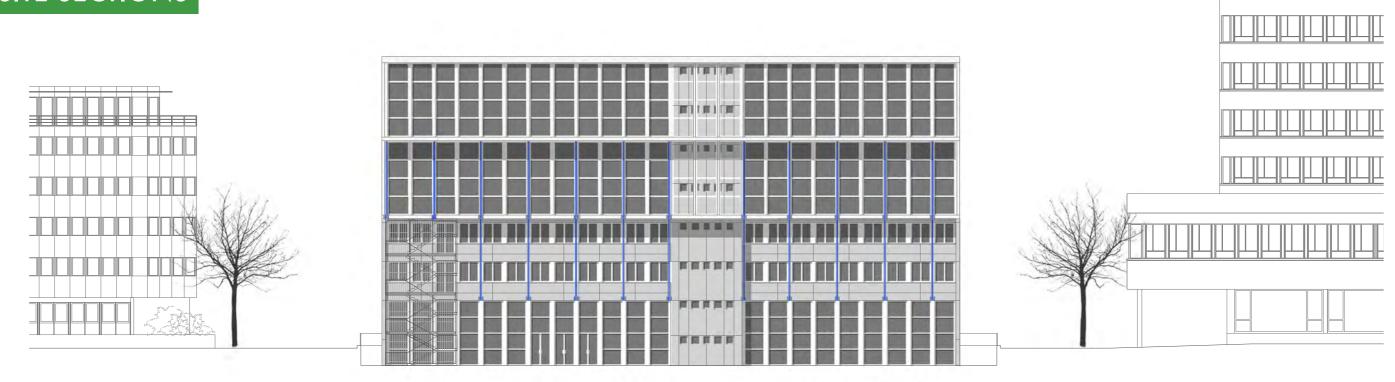
ZURI TRAM MAP: COLLECTING







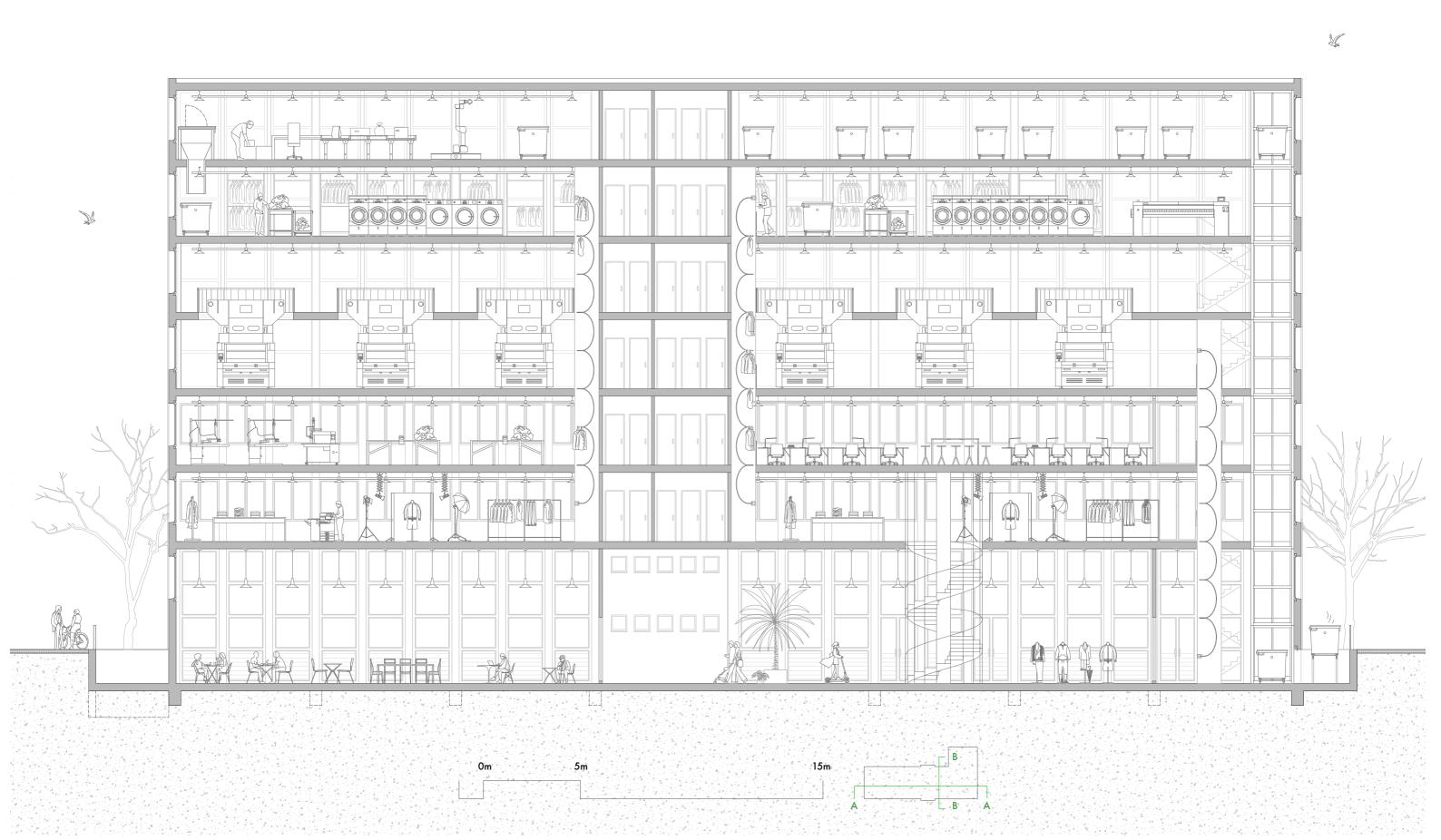
SITE SECTIONS

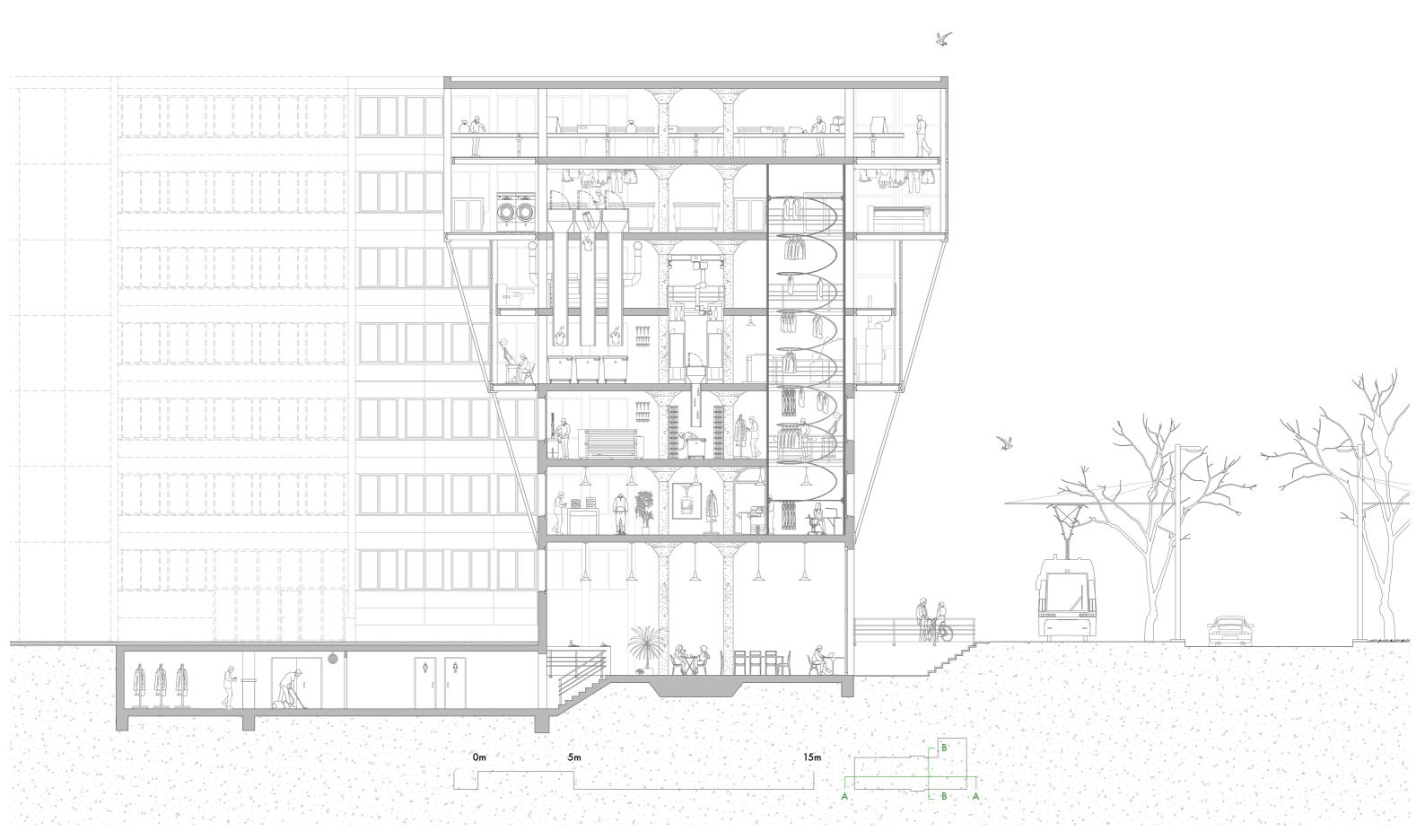






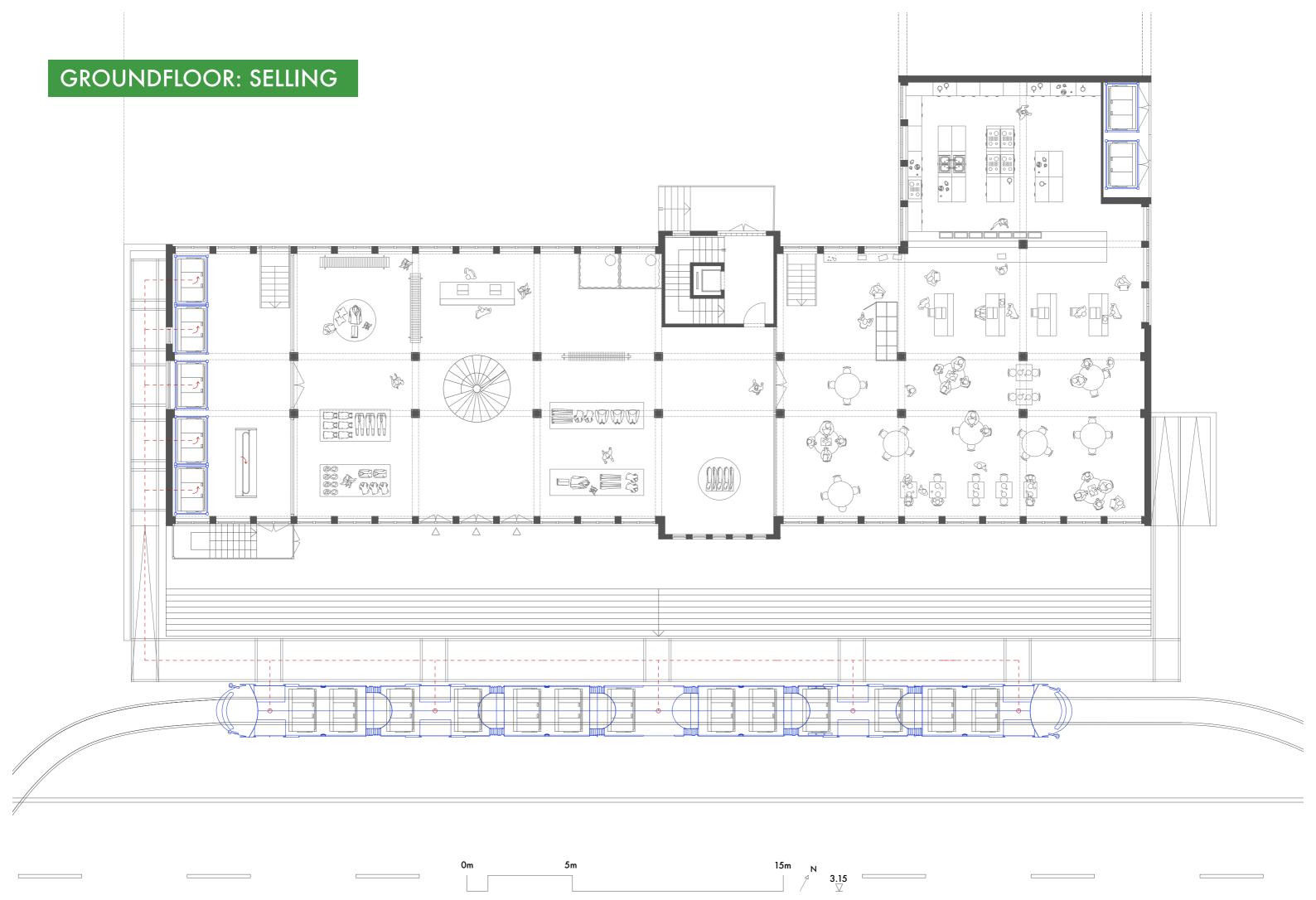


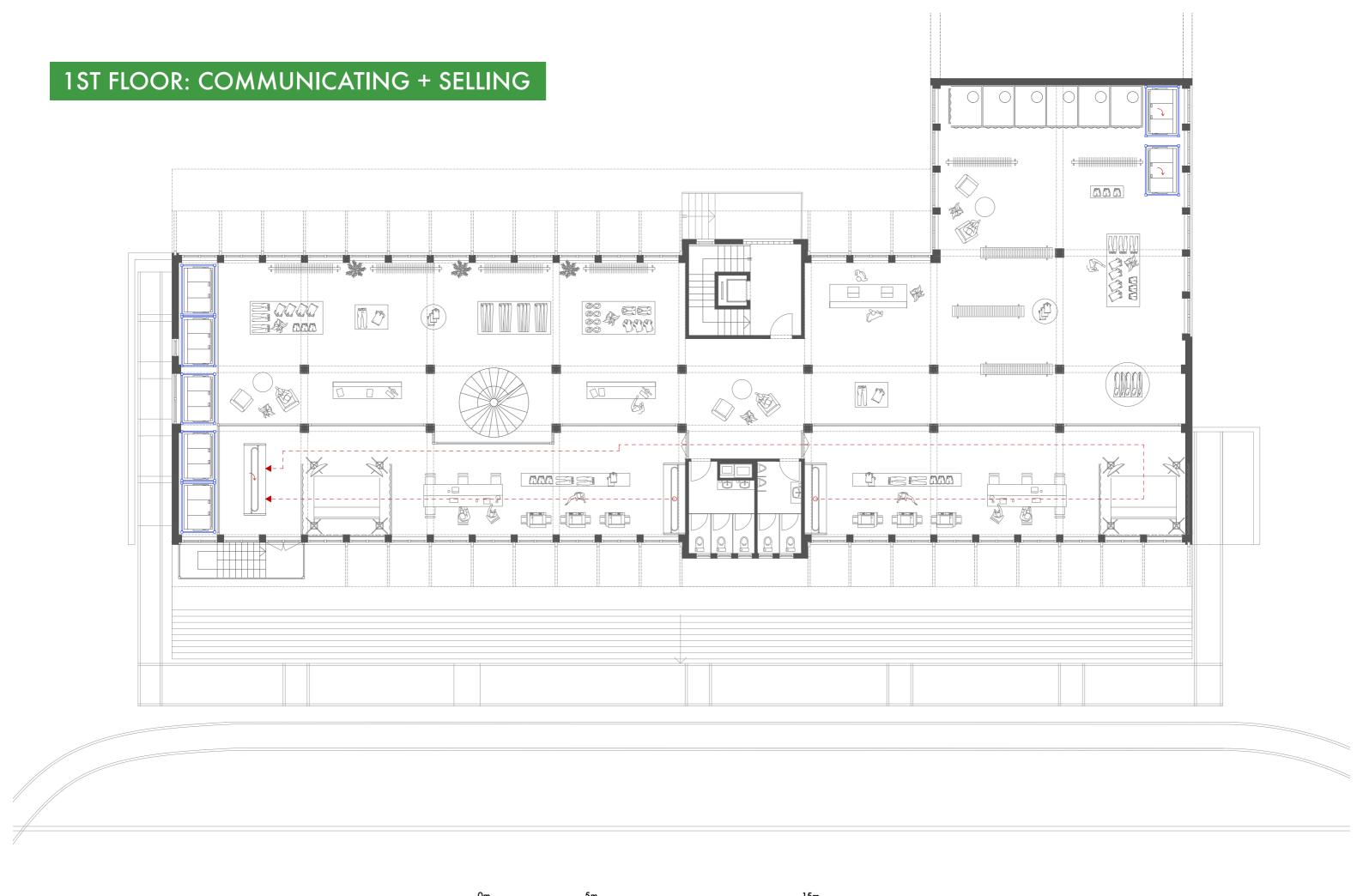


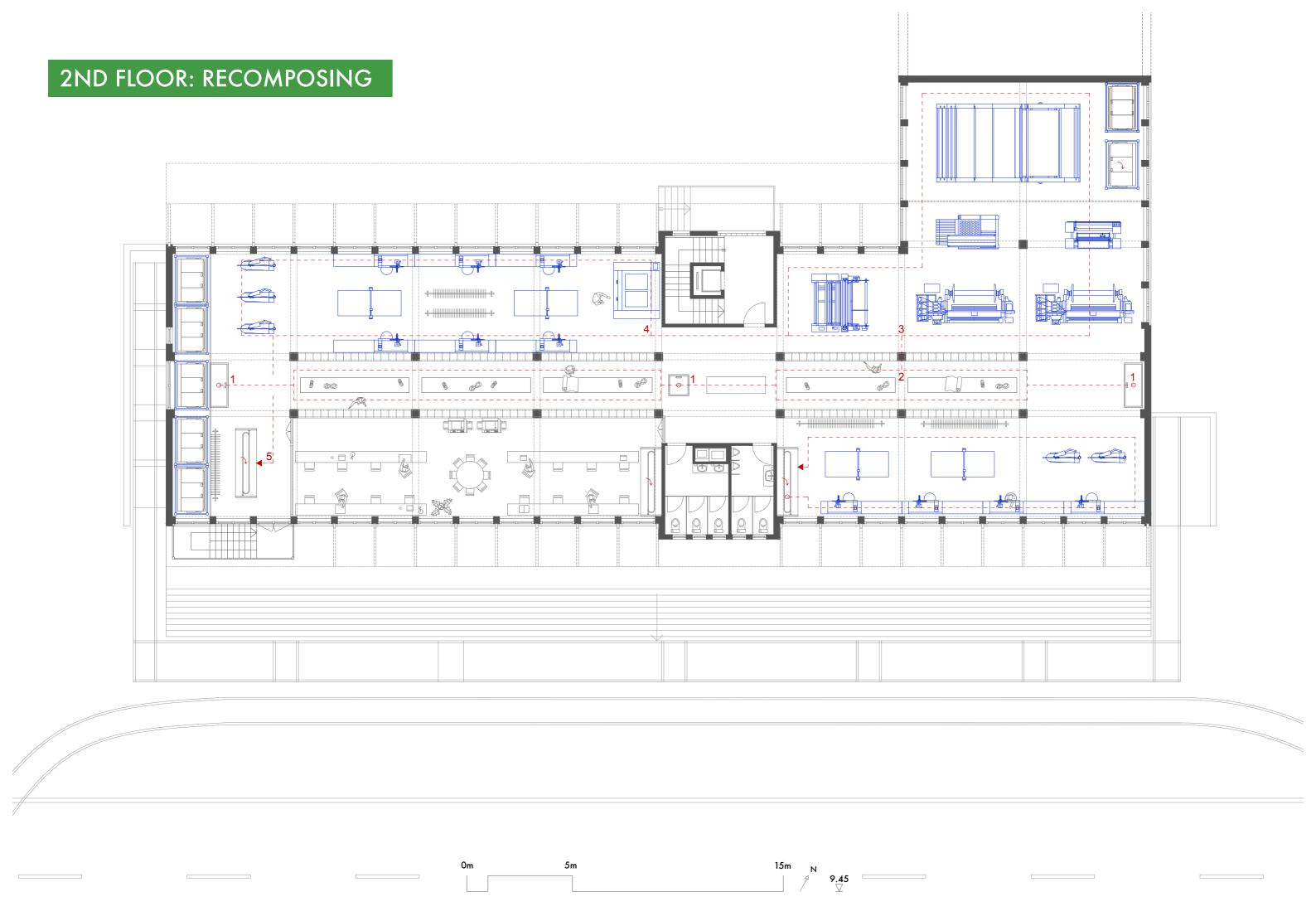


UNDERGROUND FLOOR: DELIVERING

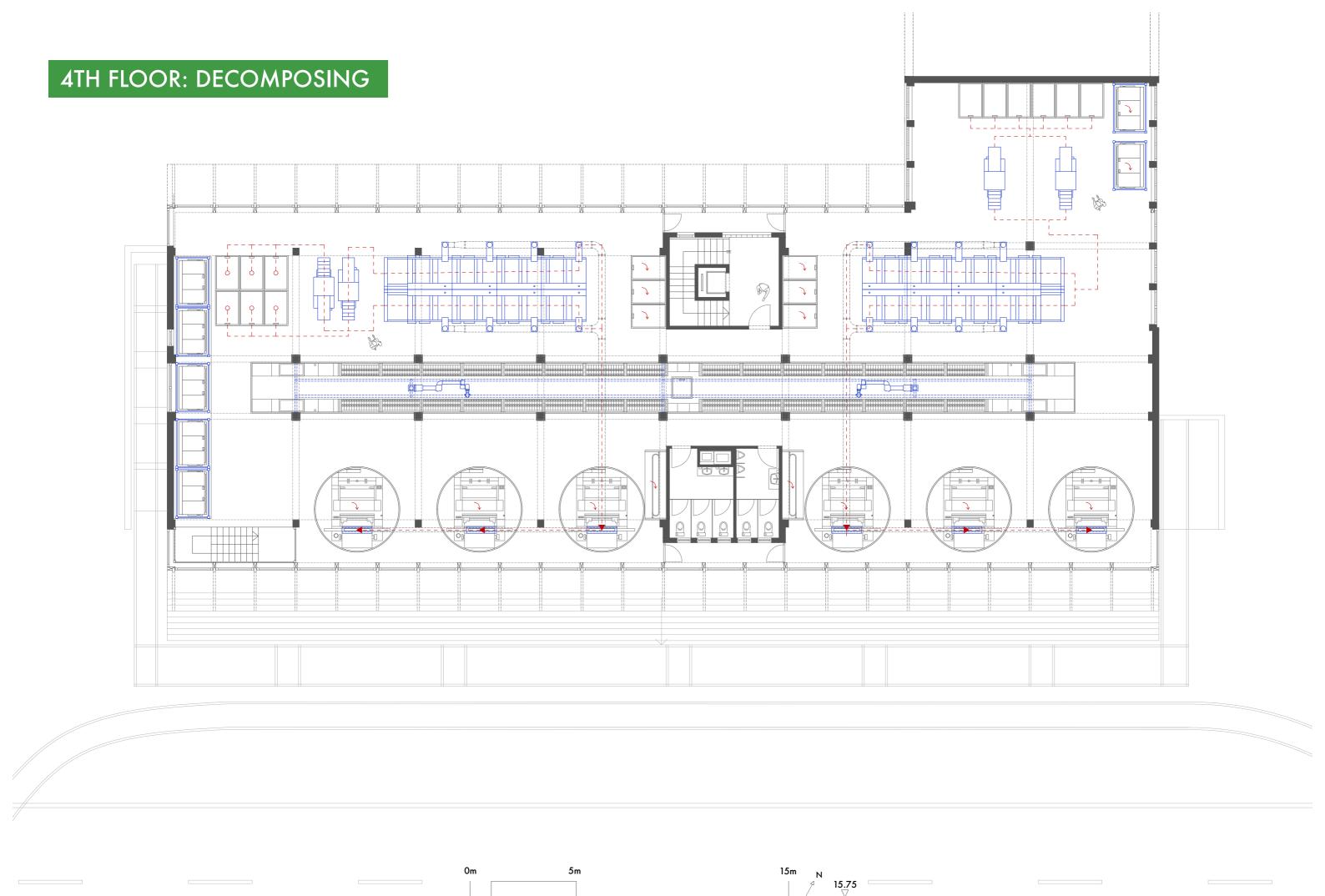


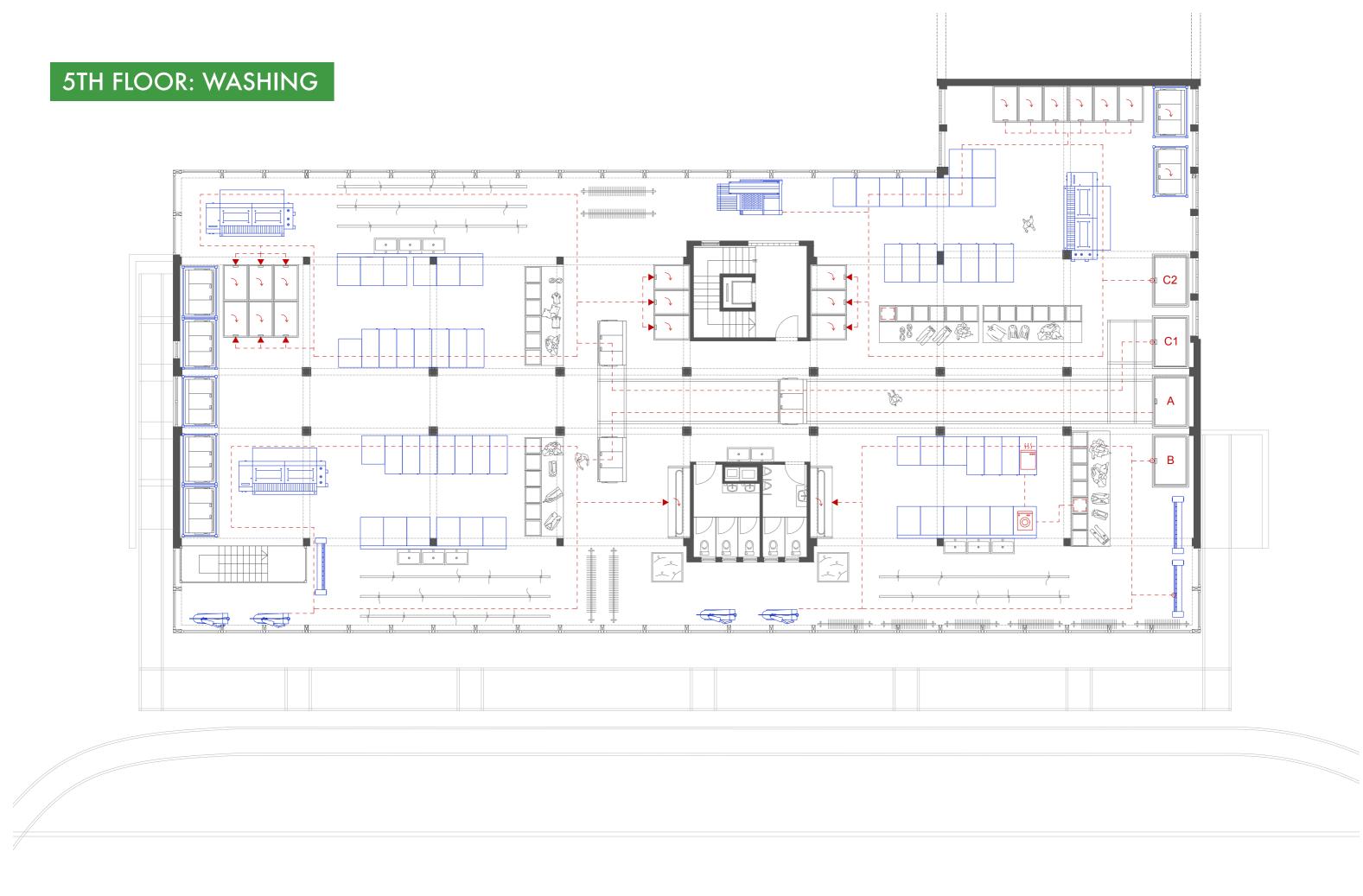














ANNEXES

TEXTILHUS



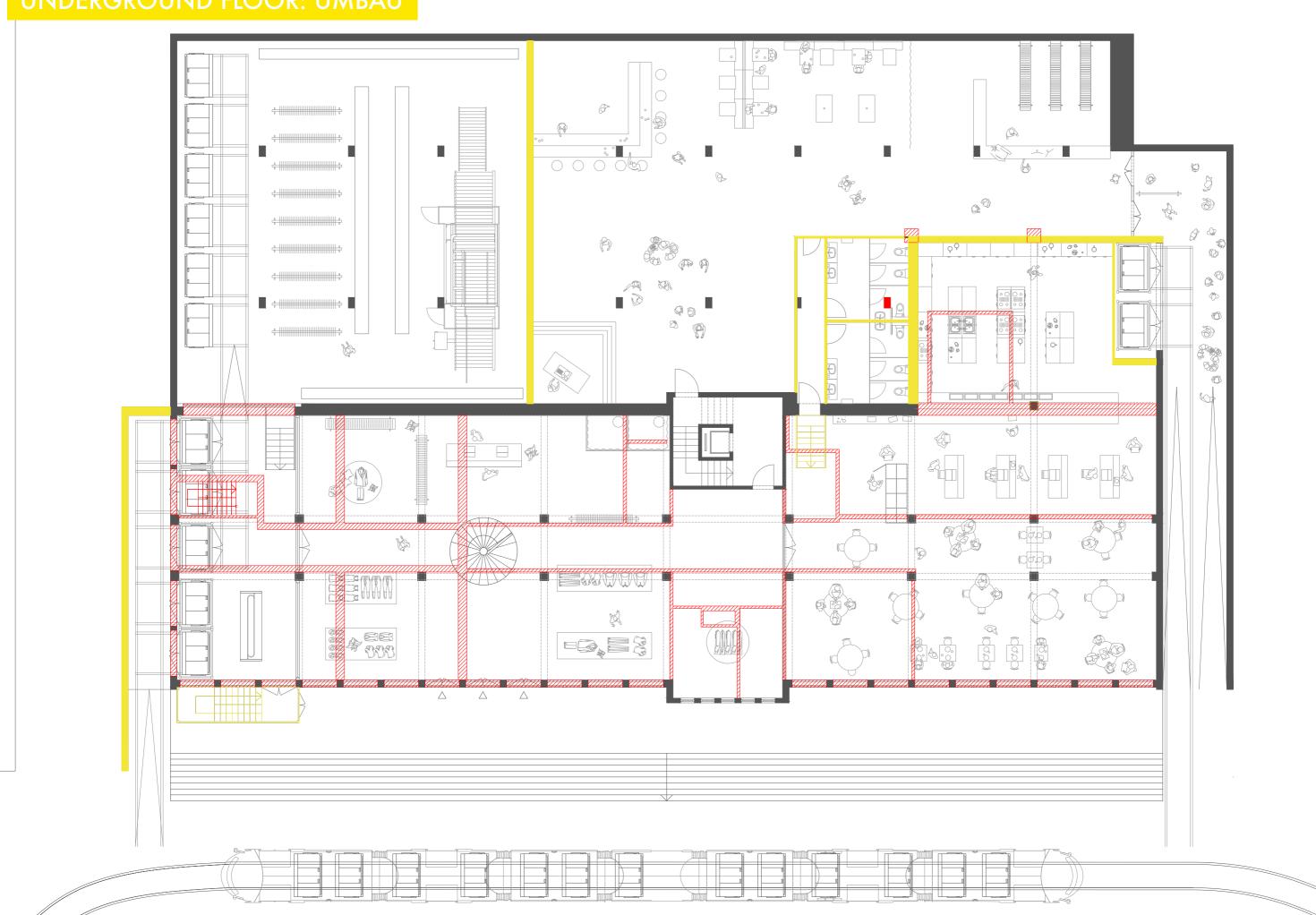


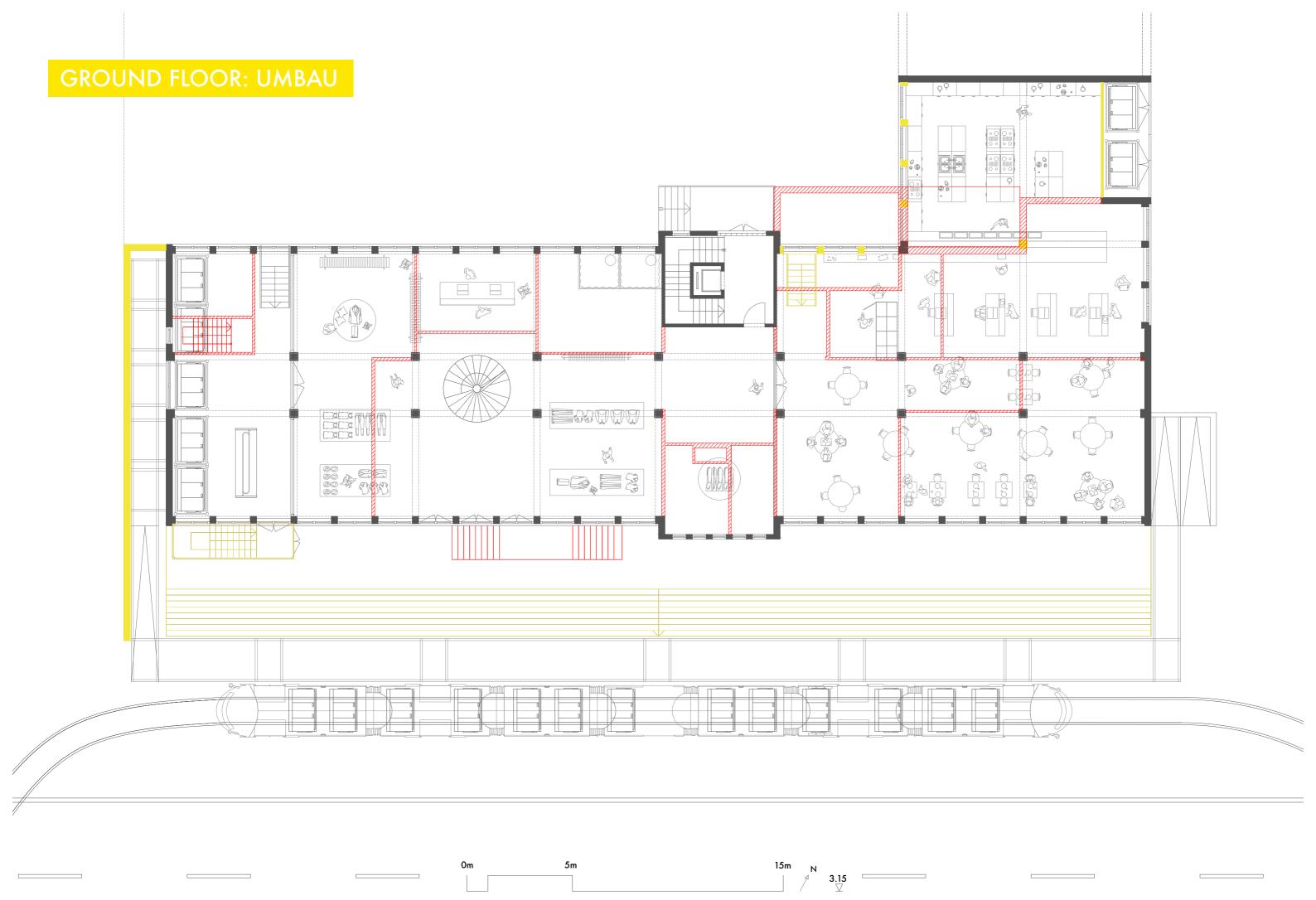


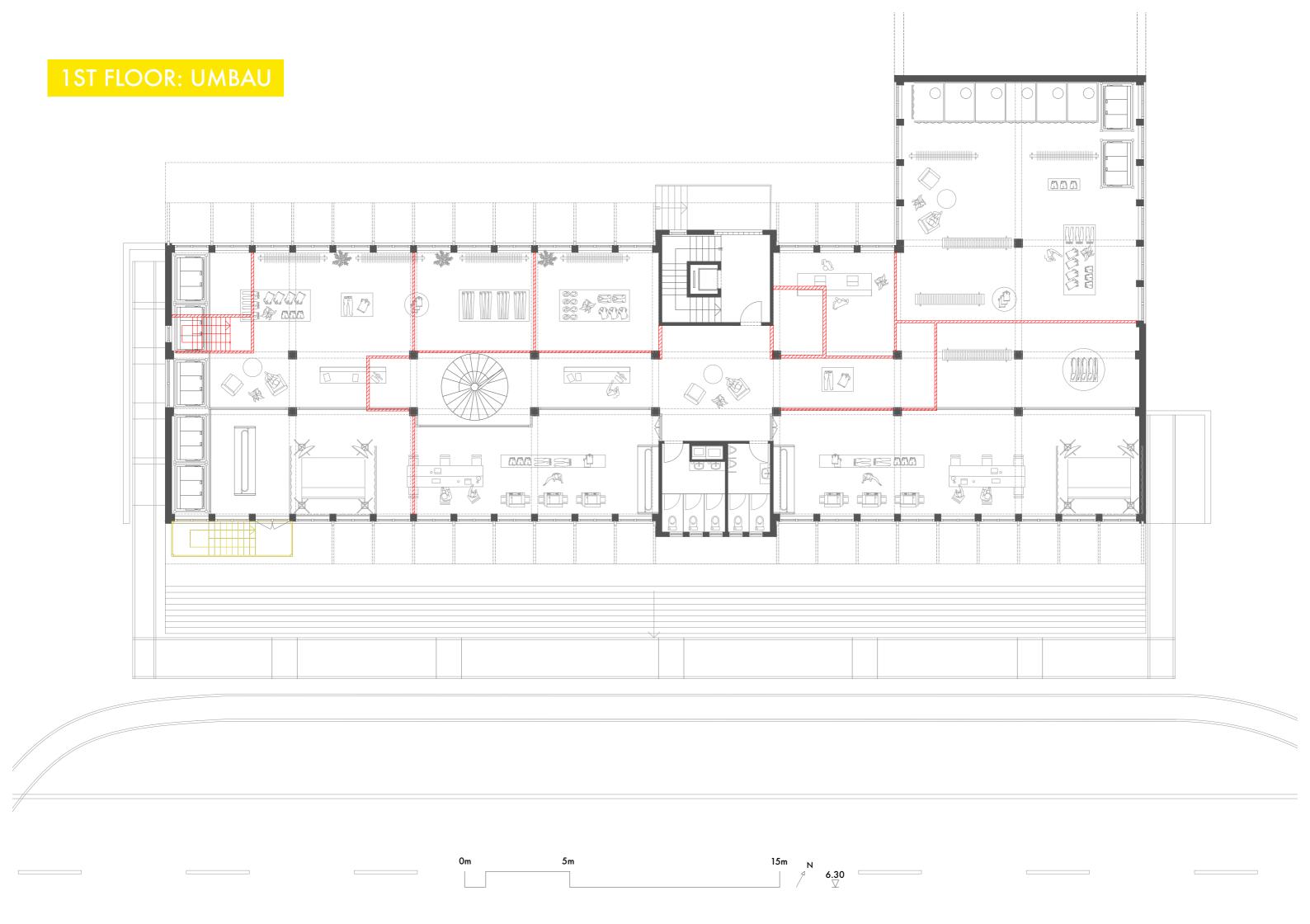
UMBAU

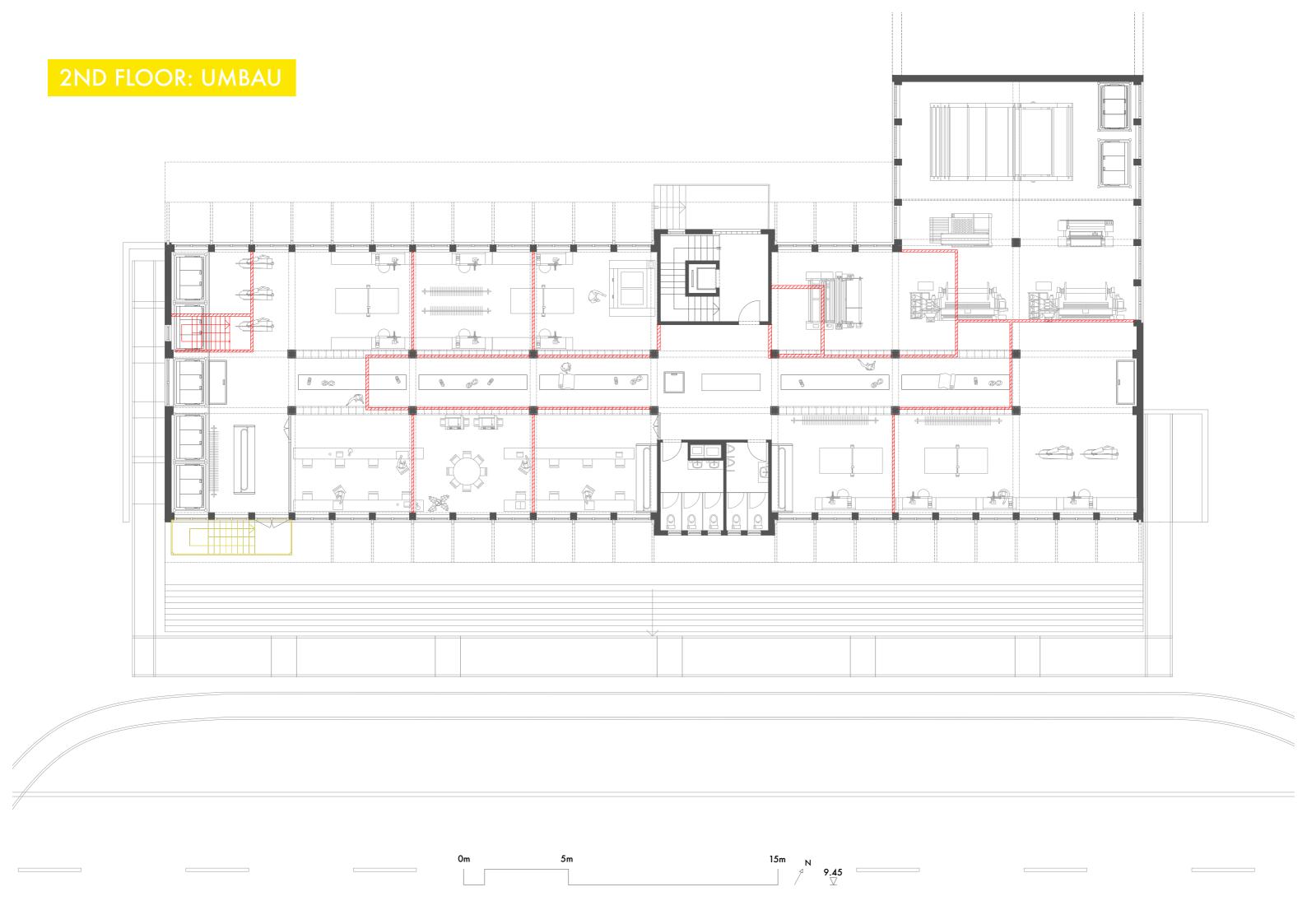
TEXTILHUS

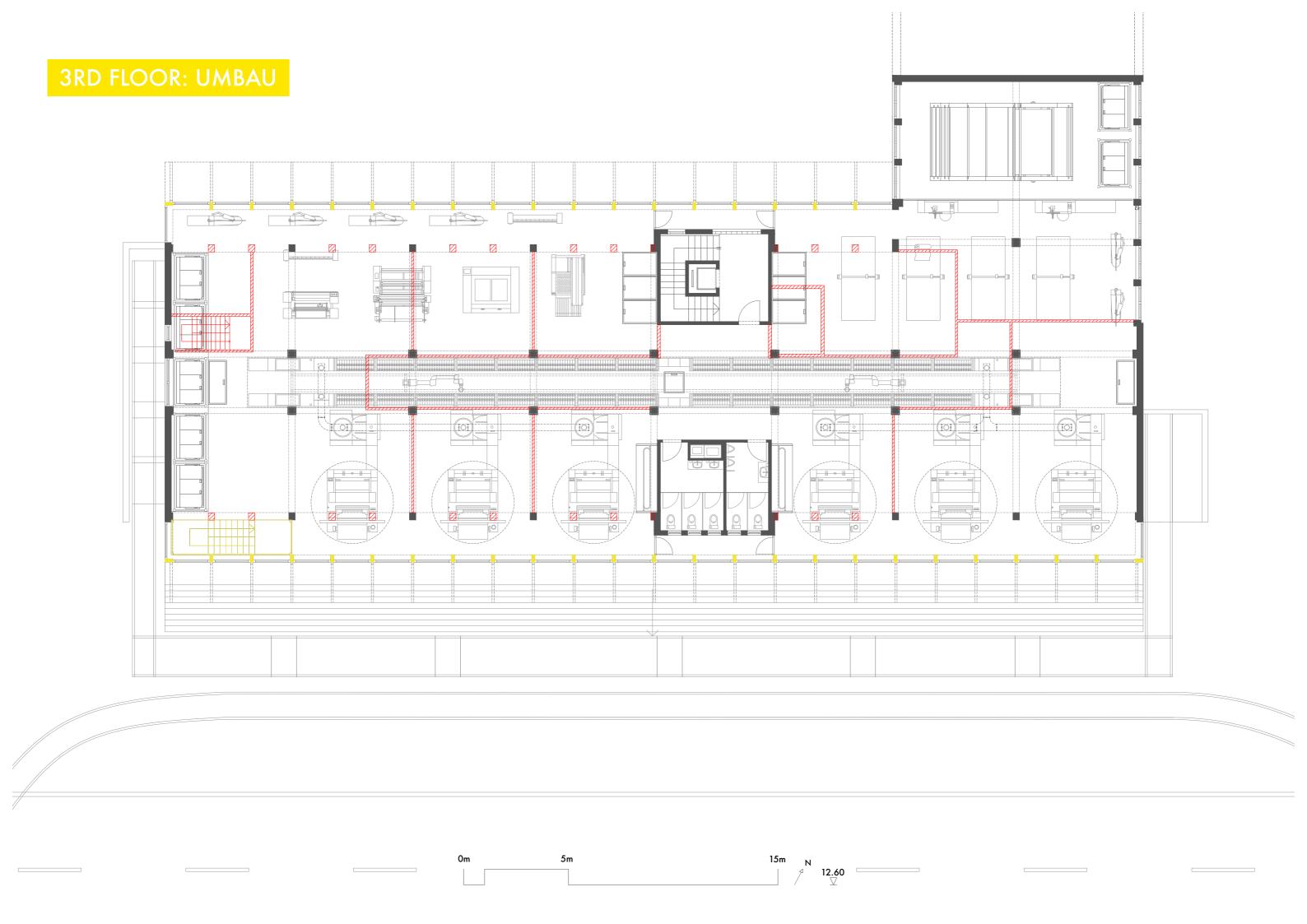
UNDERGROUND FLOOR: UMBAU

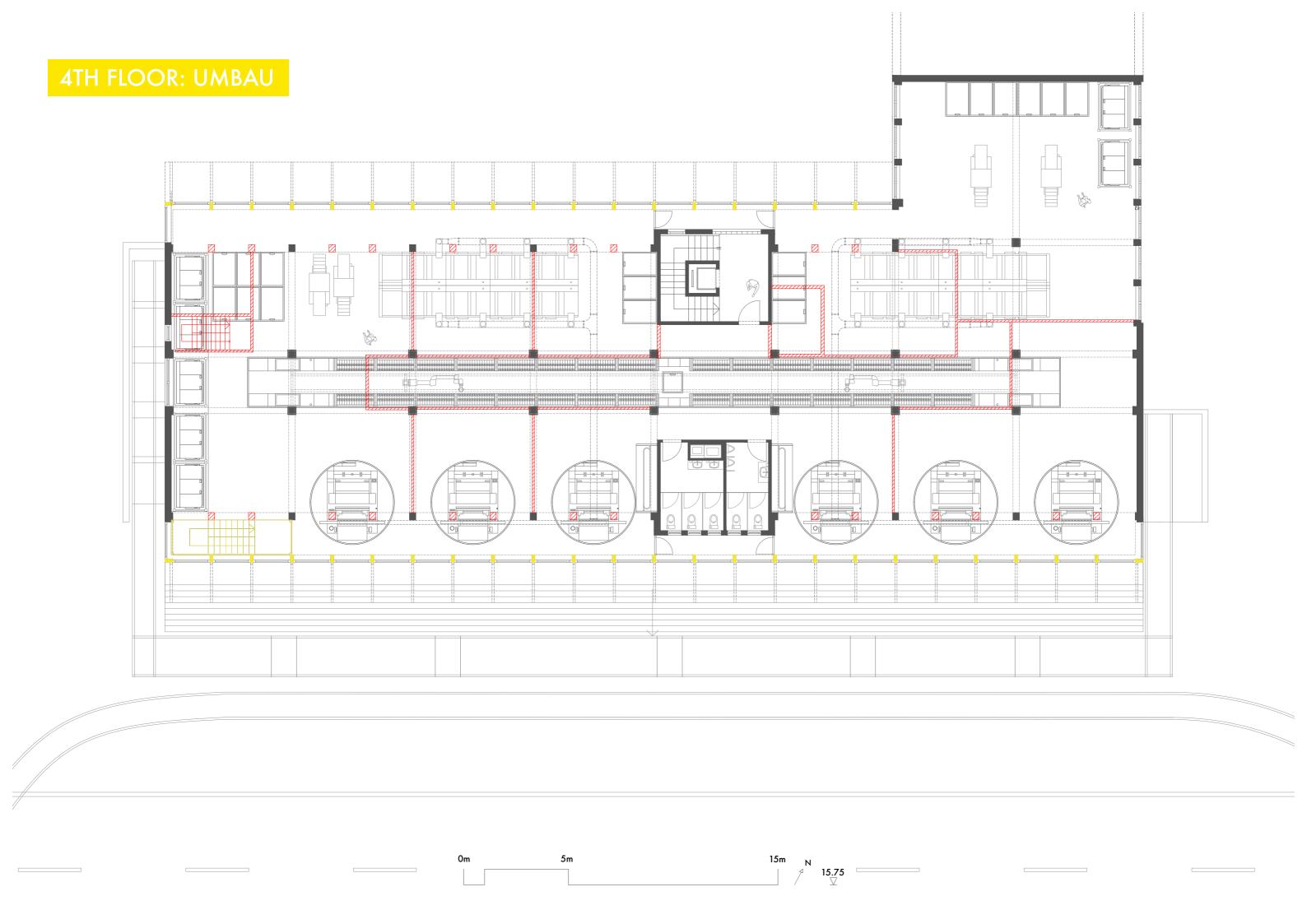


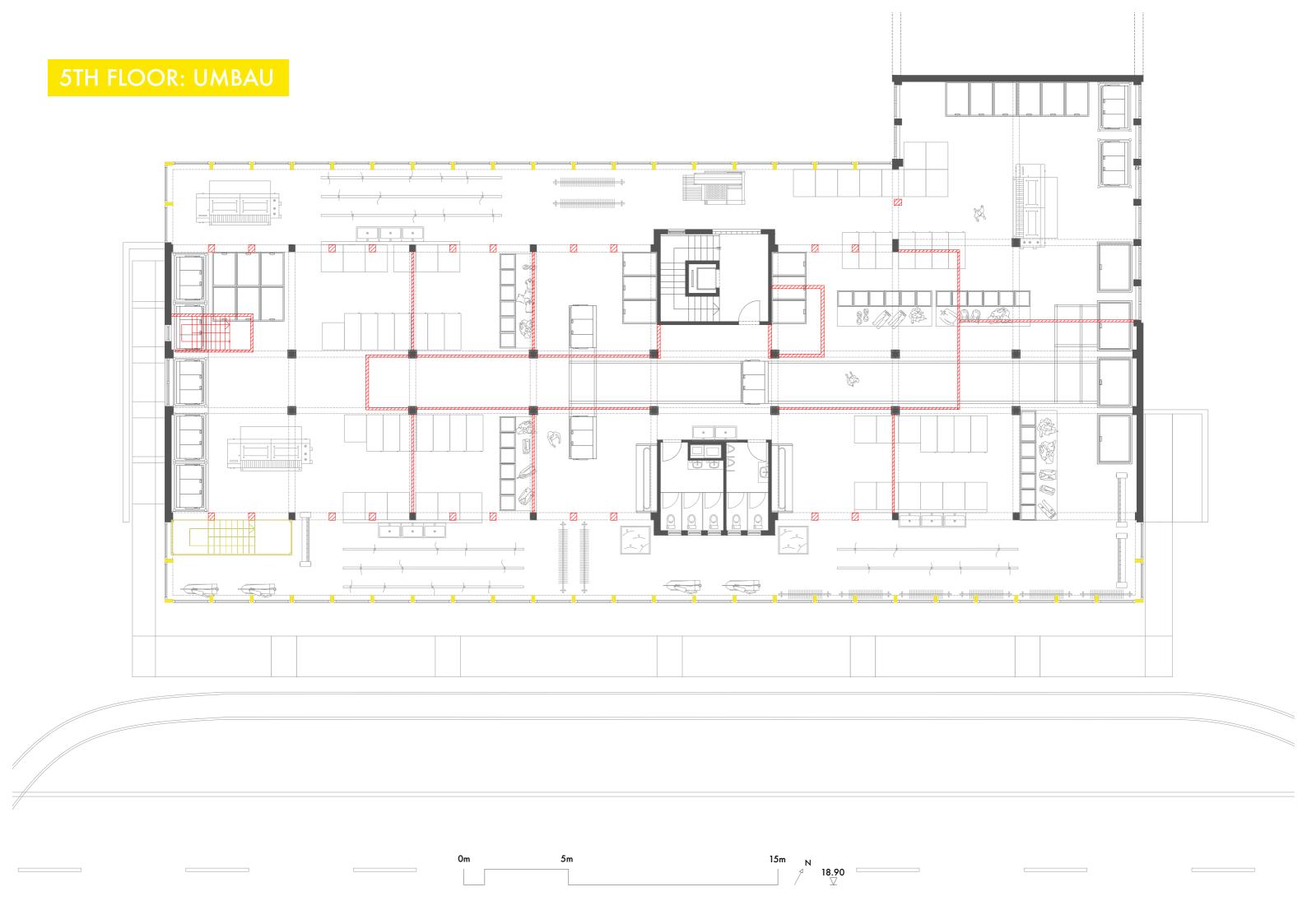


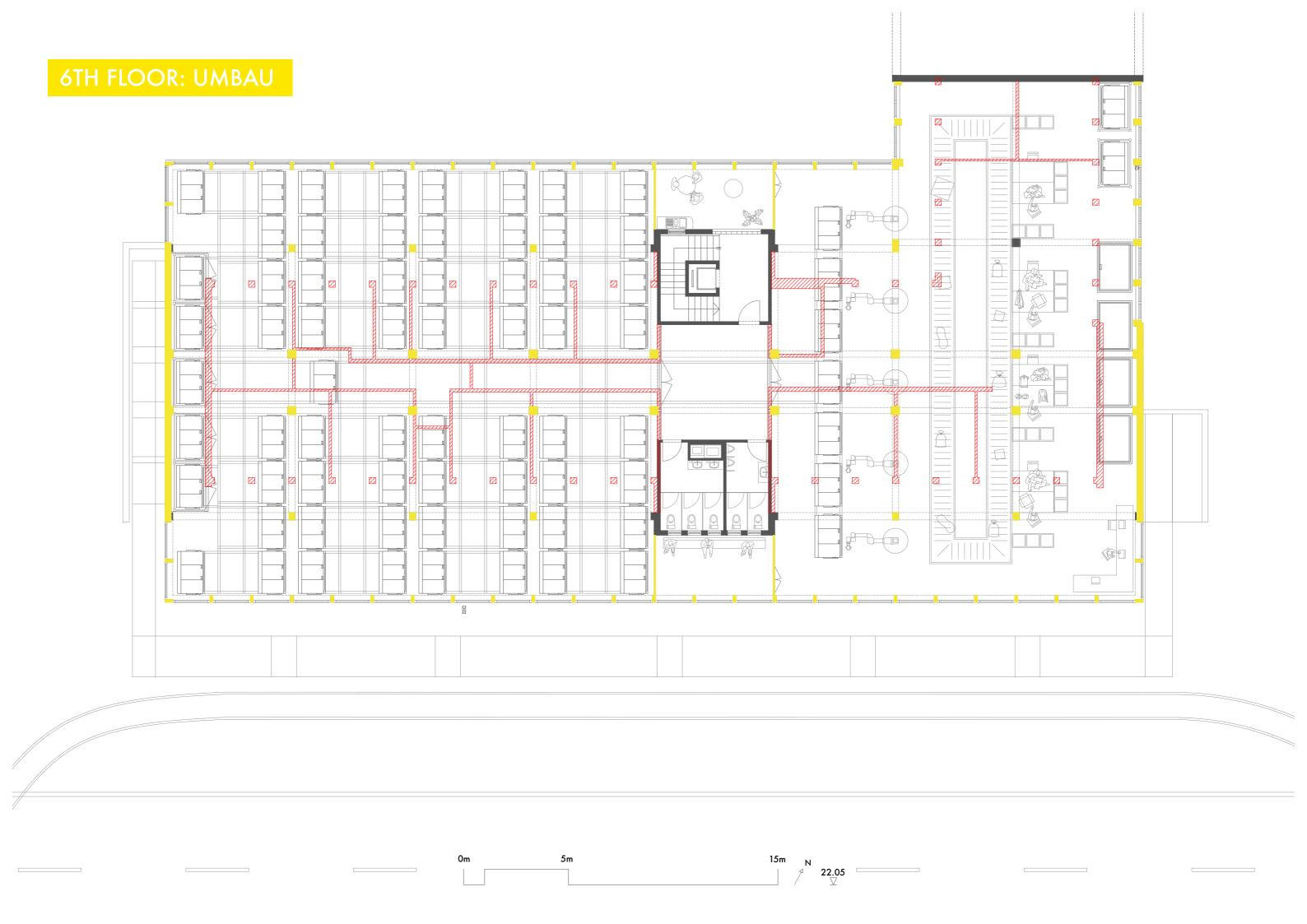












PRODUCTION PROCESS

TEXTILHUS

PHASE 1: COLLECTING

TEXTILE WASTE PER YEAR

1 ZÜRCHER WASTES 10 KG OF CLOTHES PER YEAR. 450'000 ZÜRCHER WASTE 4'500 T OF CLOTHES PER YEAR.

WHERE

2'700 T (60%) ARE COLLECTED IN CLOTHES BINS PER YER. 1800 T (40%) ARE GIVEN AWAY OR THROWN AWAY.

ABOUT CLOTHES BINS

THERE ARE 82 TEXTILSAMMELCONTAINER ARRANGED IN ZÜRICH. 82 CONTAINER CONTAIN 2'700 T PER YEAR. 82 CONTAINER CONTAIN 50 T. PER WEEK.

CAPACITY

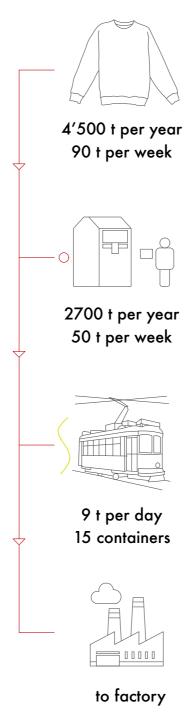
- 1 CONTAINER COLLECTS 33 T PER YEAR.
- 1 CONTAINER COLLECTS 330 M³ PER YEAR.
- 1 CONTAINER COLLECTS 0,6 T PER WEEK.
- 1 CONTAINER COLLECTS 0,6 M³ PER WEEK.

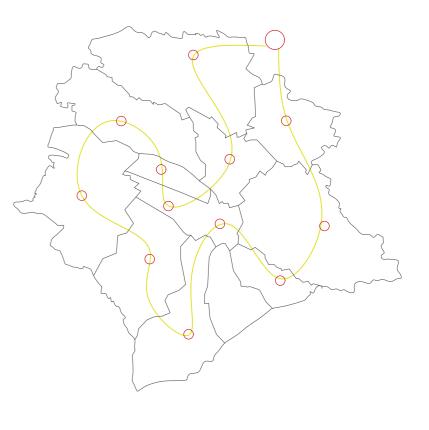
EMPTYING

82 CONTAINERS ARE EMPTIED ONCE A WEEK.
50 T. OF CLOTHES ARE EMPTIED EVERY WEEK.
15 CONTAINERS ARE EMPTIED ONCE A DAY
9 T. OF CLOTHES ARE EMPTIED ONCE A DAY
90 M³ ARE EMPTIED ONCE A DAY
(MO - FR : 15 CONTAINERS EACH DAY / SA : 7 CONTAINERS)

TRANSPORTING

THE TRAM COLLECTS THE CLOTHES AND BRING THEM TO THE TEXTILE FACTORY THE TRAM MODEL IS THE 'FLEXITY ZÜRICH' ITS DIMENSIONS ARE 42,86 M (L) X 2,4M (W) X 3,6 (H) ITS TOTAL VOLUME IS OF 370 M3. ITS INTERIOR VOLUME IS OF 350 M3. THE DAILY VOLUME OF COLLECTED CLOTHES IS OF 9T. THE DAILY VOLUME OF COLLECTED CLOTHES IS OF 90M3.





PHASE 1: COLLECTING - TRAM TIME TABLE

MÄNTIG

KREIS 2-3 15 CONTAINERS 9 T.

ZICHTIG

KREIS 9 15 CONTAINERS 9 T.

MITTWUCH

KREIS 7-8-9-12 13 CONTAINERS 7,8 T.

DUNSCHTIG

KREIS 11 15 CONTAINERS 9 T.

FRITIG

KREIS 10-11 12 CONTAINERS 7,2 T.

SAMSCHTIG

KREIS 1-4-5-6 12 CONTAINERS 7,2 T.



PHASE 2: SORTING

9 TONNES OF CLOTHES ARE BROUGHT TO THE FACTORY EVERYDAY.
THE CLOTHES ARE FIRST STOCKED IN THE UNDERGROUND FLOOR AND
BROUGHT TO THE SORTING AREA.

STOCKING

THE CLOTHES ARE FIRST STOCKED ON THE 6TH FLOOR.

SORTING

THE CLOTHES (9T) ARE BROUGHT TO THE SORTING AREA.

1,8 T. (20%) ARE SHOES. THE GOOD ONES ARE GIVEN AWAY TO THE HEILS ARMEE.

0,9 T. (10%) ARE NOT TEXTILE WASTE AND ARE THROWN AWAY OR RECYCLED. 6,3 T. (70%) ARE SORTED IN 4 CATEGORIES: A-B-C-D

A. VALUABLE CLOTHES

1260 KG (20%) ARE WASHED AND SOLD AS THEY ARE IN THE OUTLET.

B. VALUABLE CLOTHES TO BE REPAIRED OR CUSTOMIZED

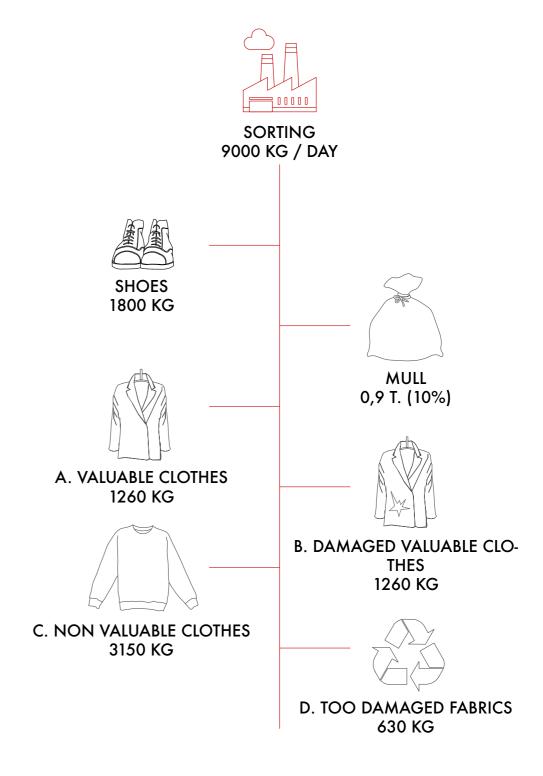
1260 KG (20%) ARE WASHED, REPAIRED OR CUSTOMIZED AND SOLD.

C. VALUABLE CLOTHES TO BE DECOMPOSED AND UPCYCLED INTO A NEW ITEM

3150 KG (50%) ARE DECOMPOSED TO CREATE A NEW ITEM AND SOLD.

D. NON VALUABLE FABRICS

630 KG (10%) ARE GIVEN AWAY TO BUILDING INSULATION FIRMS.













1260 KG/DAY

VALUABLE CLOTHES
WASHED & SOLD AS THEY ARE
SOLD IN SITU OR IN POP UP
PRICE RANGE: LOW

EXEMPLES:
COATS
JACKETS
SKI JACKETS
SUITS
HANDBAGS
SWEATERS (WOOL/
CASHEMIRE)

















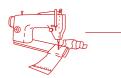
1260 KG/DAY

VALUABLE CLOTHES
TO BE REPAIRED OR
CUSTOMIZED
PRICE RANGE: LOW COST

EXEMPLES:
RIPPEN COATS
DAMAGED JACKETS
TORN SUITS
A PILLING BLAZER
BROKEN HANDBAG



















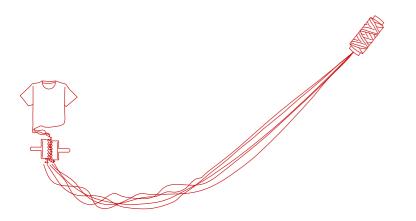
3150 KG/DAY

NON VALUABLE FABRICS DECOMPOSED TO FORM A NEW ITEM

PRICE RANGE: MIDDLE COST

EXEMPLES:
JEANS
BASICS
UNDERWEARS
SWIMMING SUITS
SPORTWEAR
BED SHEETS
TOWELS











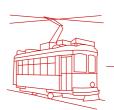


CATEGORY D

630 KG/DAY

TOO DAMAGED FABRICS
TO BE GIVEN AWAY TO
BUILDING INSULATION
COMPANIES
PRICE RANGE: FREE







PHASE 3: WASHING

PROCESS:

5.1 NEW ITEMS ARE DESIGNED IN THE CONCEPTION AREA

5.2 USE OF BANDS (C1) OR YARNS (C2) TO MAKE A NEW FABRIC

5.2.1. WEAVING YARNS TO MAKE A NEW FABRIC

5.2.2. STRATFYING THE NEW FABRIC

5.2.3. WINDING THE NEW FABRIC, or

5.2.4. FOLDING THE NEW FABRIC

5.3. CUTTING FABRIC

5.3.1 CUTTING TEXTILE TABLE

5.3.2 LASER TEXTILE CUTTING MACHINE

5.3.3 FABRIC SLITTING MACHINE

5.4 SEWING ITEM

5.4.1 SEWING MACHINE

5.5 IRONING ITEM

5.5.1 IRONING MACHINE

5.6 SENDING TO COMMUNICATING AREA

MACHINES:

5.2.1. WEAVING MACHINE 3150 KG/ DAY 700 SETS/ MONTHS MIN 2 MACHINES

5.2.2. STRATIFICATION MACHINE UP TO 3150 KG/ DAY 30M/MIN CAPACITY NEED OF ONE MACHINE

5.2.3. FABRIC WINDING MACHINE UP TO 3150 KG/ DAY 0-30M/MIN

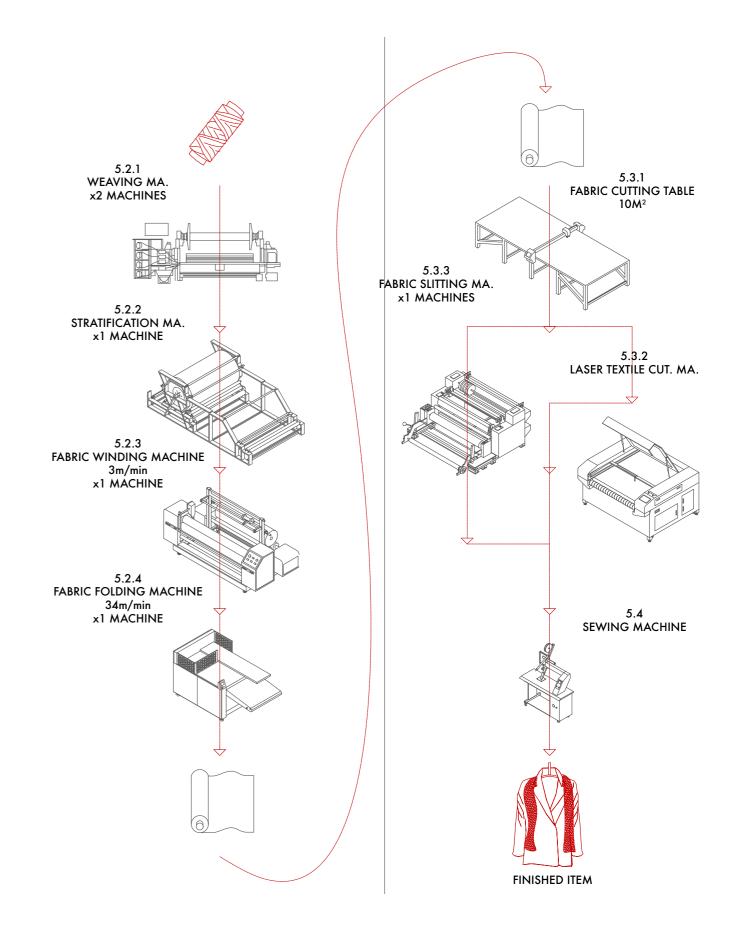
5.2.4 FABRIC FOLDING MACHINE UP TO 3150 KG/ DAY 34M/MIN 5.3.1 FABRIC CUTTING TABLE UP TO 3150 KG/DAY 10M²

5.3.2 LASER TEXTILE CUTTING MA-CHINE UP TO 3150 KG/DAY 30 M/MIN CAPACITY CAPACITY

5.3.3 FABRIC SLITTING MACHINE UP TO 3150 KG/DAY 90 M/MIN CAPACITY NEED OF ONE MACHINE

5.4.1 SEWING MACHINE UP TO 3150 KG/DAY

5.5.1 MANUAL IRONING MACHINE UP TO 3150 KG/DAY ONE PERSON : 6KG/H



PHASE 4: DECOMPOSING

CATEGORY C1 (40%): 1260 KG

SORTED ACCORDING TO ITEMS: > JEANS, SCARFS, BED SHEETS, CHECKED PLAID, TOWELS, FUT ITEMS, LEATHER ITEMS, CASHEMIRE ITEMS

PROCESS:

4.C1.1. CUTTING OFF THE SEAMS AND ZIPPERS
4.C1.2. CUTTING ITEMS INTO FABRICS BANDS
4.C1.3. IRONING THE BANDS
4.C1.4. FOLDING THE BANDS
4.C1.5. LIFTING BANDS TO THE RECOMPOSITION

MACHINES

4.C1.1. CUTTING TABLE 1260 KG/DAY 12,6 M³/DAY TABLE SURFACE: 10M²

4.C1.2. CUTTING TABLE 1260 KG/DAY 12,6 M³/DAY TABLE SURFACE: 10M²

4.C1.3. INDUSTRIAL IRONING MA-CHINE 630 KG/DAY 75 KG/H CAPACITY 1 DAY OF 8 HOURS : 600 KG

4.C1.4. FOLDING MACHINE 630 KG/ DAY 34M/MIN CAPACITY

CATEGORY C2 (60%): 1890 KG

SORTED ACCORDING TO MATE-RIALS: >NATURAL FIBERS: COTTON, 6SCOSE, LINNEN, SILK, WOOL >SYNTHETIC FIBERS: POLYESTER, ACRYLIC, ELASTHANE >MIXED MATERIALS

PROCESS:

4.C2.1. SHREDDING THE ITEMS INTO TINY PIECES
4.C2.2. RECYCLING THE TINY PIECES INTO FIBERS
4.C2.3. CARDING THE FIBERS
4.C2.4. TURNING THE CARDED FIBERS INTO YARNS
4.C2.5. LIFT YARNS TO THE RECOMPOSITION AREA

MACHINES

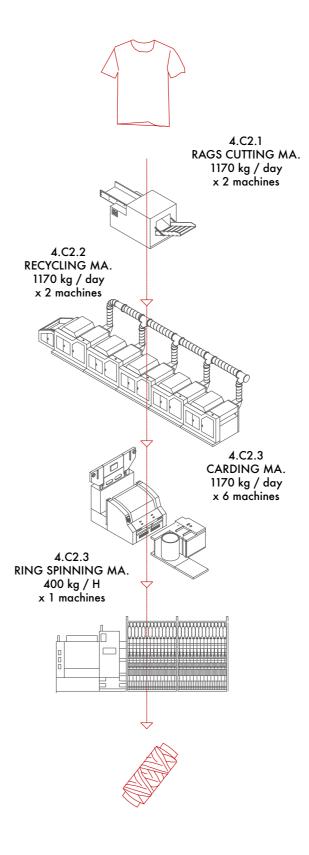
4.C2.1 RAGS CUTTING MACHINE 1890 KG/DAY 1000 KG/H CAPACITY NEED OF 2 MACHINES: NATURAL OR SYNTHETIC FIBERS

4.C2.2. RECYCLING MACHINE 1890 KG/DAY 850 KG/H CAPACITY NEED OF 2 MACHINES: NATURAL OR SYNTHETIC FIBERS

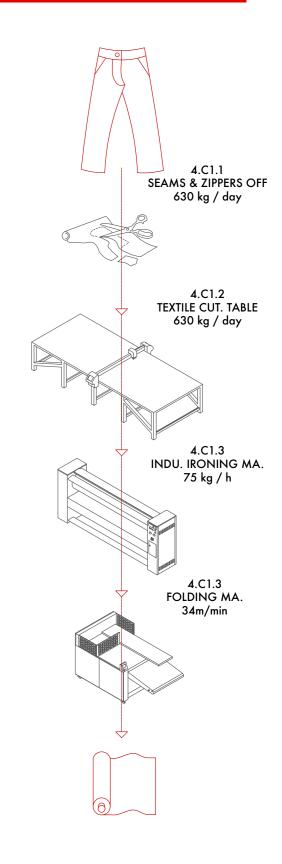
4.C2.3. CARDING MACHINE 1890 KG/DAY 225 KG/H CAPACITY NEED OF 6 MACHINES: 3 NATURAL OR 3 SYNTHETIC FIBERS

4.C2.4. RING SPINNING MACHINE 3150 KG/ DAY 400 KG/H CAPACITY NEED OF 1 MACHINE

CATEGORY C1 (40%): 1260 KG



CATEGORY C2 (60%): 1890 KG



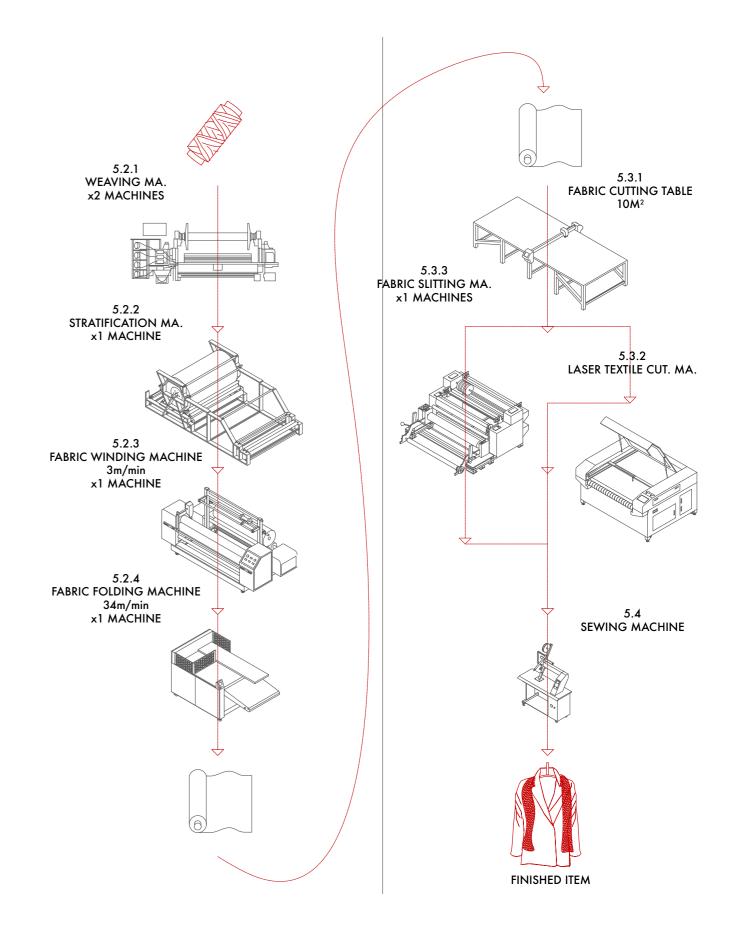
PHASE 5: RECOMPOSING

PROCESS:

- 5.1 NEW ITEMS ARE DESIGNED IN THE CONCEPTION AREA
- 5.2 USE OF BANDS (C1) OR YARNS (C2) TO MAKE A NEW FABRIC
 - 5.2.1. WEAVING YARNS TO MAKE A NEW FABRIC
 - 5.2.2. STRATFYING THE NEW FABRIC
 - 5.2.3. WINDING THE NEW FABRIC, or
 - 5.2.4. FOLDING THE NEW FABRIC
- 5.3. CUTTING FABRIC
 - **5.3.1 CUTTING TEXTILE TABLE**
 - 5.3.2 LASER TEXTILE CUTTING MACHINE
 - **5.3.3 FABRIC SLITTING MACHINE**
- **5.4 SEWING ITEM**
 - 5.4.1 SEWING MACHINE
- 5.5 IRONING ITEM
 - 5.5.1 IRONING MACHINE
- 5.6 SENDING TO COMMUNICATING AREA

- 5.2.1. WEAVING MACHINE 3150 KG/ DAY 700 SETS/ MONTHS MIN 2 MACHINES
- 5.2.2. STRATIFICATION MACHINE UP TO 3150 KG/ DAY 30M/MIN CAPACITY NEED OF ONE MACHINE
- 5.2.3. FABRIC WINDING MACHINE UP TO 3150 KG/ DAY 0-30M/MIN
- 5.2.4 FABRIC FOLDING MACHINE UP TO 3150 KG/ DAY 34M/MIN

- 5.3.1 FABRIC CUTTING TABLE UP TO 3150 KG/DAY 10M²
- 5.3.2 LASER TEXTILE CUTTING MA-CHINE UP TO 3150 KG/DAY 30 M/MIN CAPACITY CAPACITY
- 5.3.3 FABRIC SLITTING MACHINE UP TO 3150 KG/DAY 90 M/MIN CAPACITY NEED OF ONE MACHINE
- 5.4.1 SEWING MACHINE UP TO 3150 KG/DAY
- 5.5.1 MANUAL IRONING MACHINE UP TO 3150 KG/DAY ONE PERSON : 6KG/H



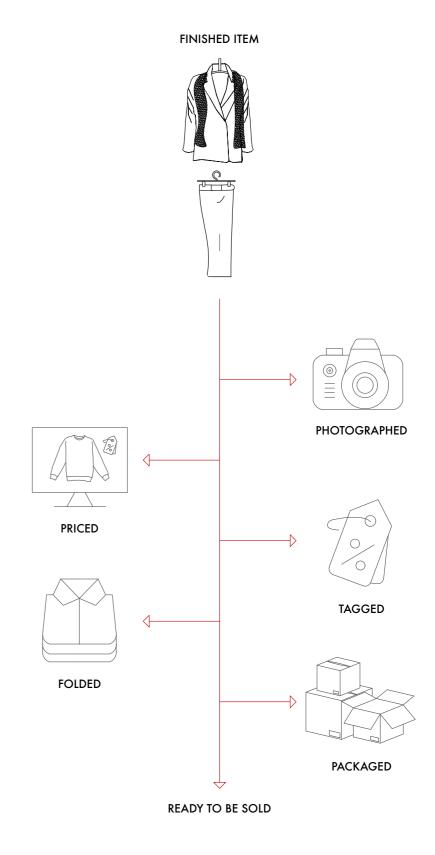
PHASE 6: COMMUNICATING

PROCESS:

- 6.1. FINISHED ITEM IS PHOTOPHED AND UPLOADED ON THE SERVER
- 6.2. THE ITEM IS STUDIED BY THE COMMUNICATING TEAM. A PRICE IS ESTABLISHED. IS A DESIGNER COMING SOON TO DESIGN FOR A WEEK?
- 6.3. THE ITEM IS TAGGED AND READY TO BE SOLD.
- 6.4. THE ITEM IS FOLDED AND IRONED IF NEEDED.
- 6.5. THE ITEM IS PACKAGED IF NEEDED.







PHASE 7: SELLING

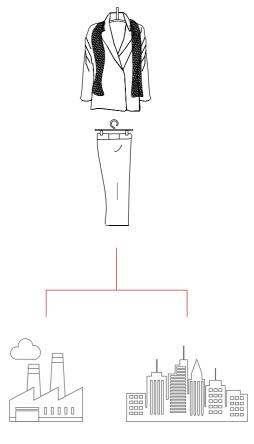
PROCESS:

- 7.1. THE ITEM IS READY TO BE SOLD.
- 7.2. IT IS BEING STOCKED IN THE UNDERGROUND FLOOR
- 7.3. IT IS SOLD IN THURGAUERSTRASSE IN SITU.
- 7.4.1 OR IT IS SOLD IN A POP UP STORE IN ZÜRICH.
- 7.4.2 IF SOLD IN A POP UP STORE, IT IS TRANSPORTED BY THE TRAM.





READY TO BE SOLD





SOLD IN POP UP STORES



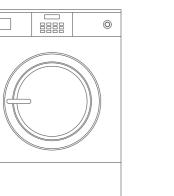
MACHINES

TEXTILHUS

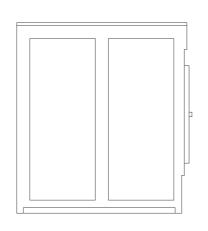
WASHING MACHINE



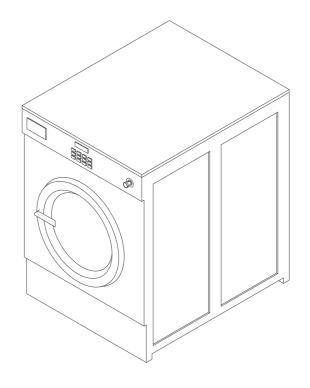








□ 1.3 □ □



DESCRIPTION WASHING MACHINE

MODEL UC100

REFERENCE 3.2.1

DIMENSIONS 1054x1298x1453 cm

WEIGHT 581 kg

CAPACITY/h 45 kg/h

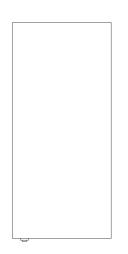
CAPACITY/day 360 kg/day

POWER 3.75 kW

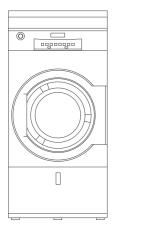
5670 kg/day

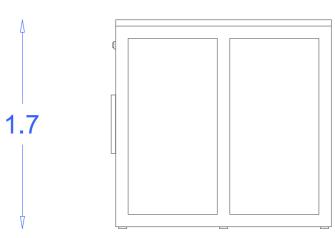
min 20 MACHINES

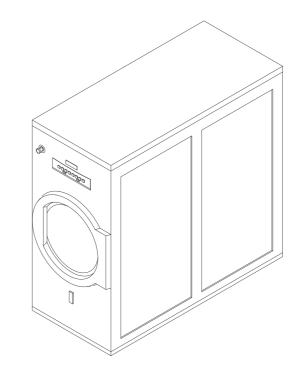
INDUSTRIAL TUMBLER DRYER











DESCRIPTION DRYING MACHINE

MODEL UHP345

REFERENCE 3.2.1

DIMENSIONS 1680x795x1735 cm

WEIGHT 375 kg

CAPACITY/h 17 kg/h

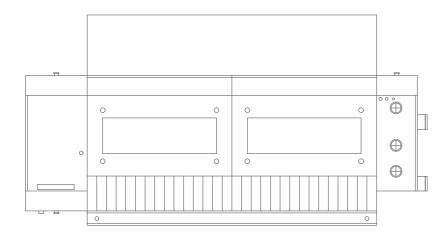
CAPACITY/day 136 kg/day

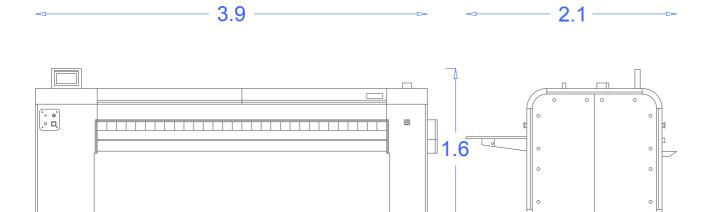
POWER 2.9 kW

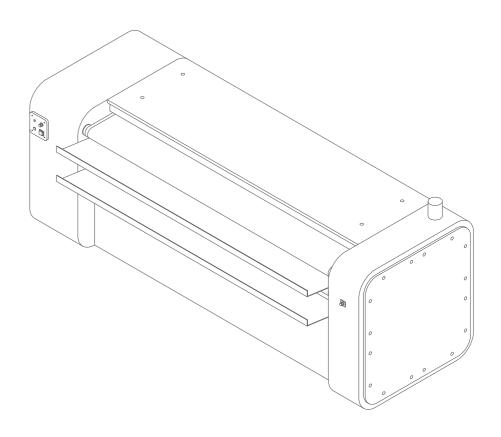
1260 kg/day

min 16 MACHINES

INDUSTRIAL DRYING MACHINE FOR CLOTHES







DESCRIPTION INDUSTRIAL DRYER FOR CLOTHS

MODEL ACL800

REFERENCE 3.2.3

DIMENSIONS 2910x2035x1415 cm

WEIGHT 200 kg

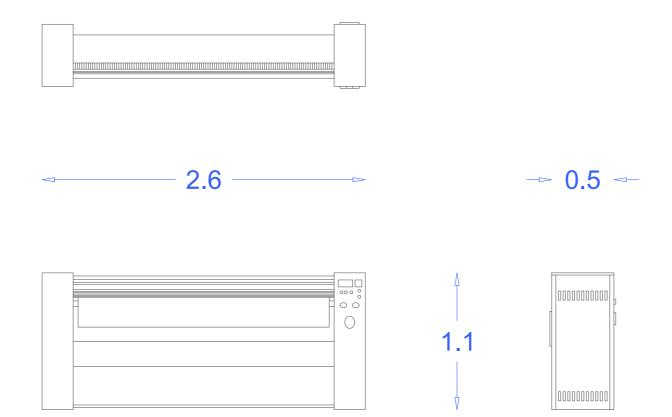
CAPACITY/h 152 kg/h

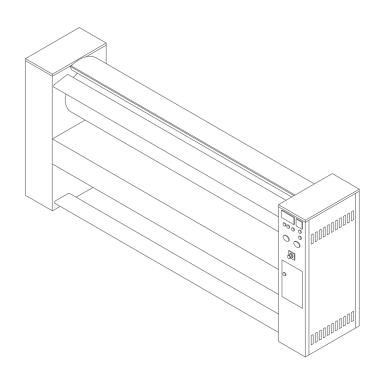
CAPACITY/day 1216 kg/day

SPEED 3-12m/min

3150 kg/day

INDUSTRIAL IRONING MACHINE





DESCRIPTION DRYING MACHINE

MODEL I30-200AV

REFERENCE 3.3.1

DIMENSIONS 1100x2600x500 cm

WEIGHT 350 kg

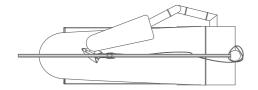
CAPACITY/h 52-79 kg/h

CAPACITY/day 600 kg/day

SPEED 2-4m/min

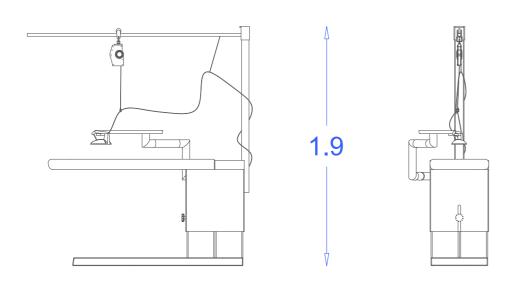
630 kg/day

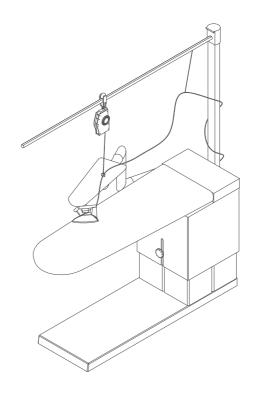
MANUAL IRONING MACHINE











DESCRIPTION

DRYING MACHINE

MODEL UC100

REFERENCE 3.3.2 / 6.1.5

DIMENSIONS 610x1400x930 cm

SURFACE 0.48 m²

WEIGHT 82 kg

CAPACITY/h 2.6 kg/h

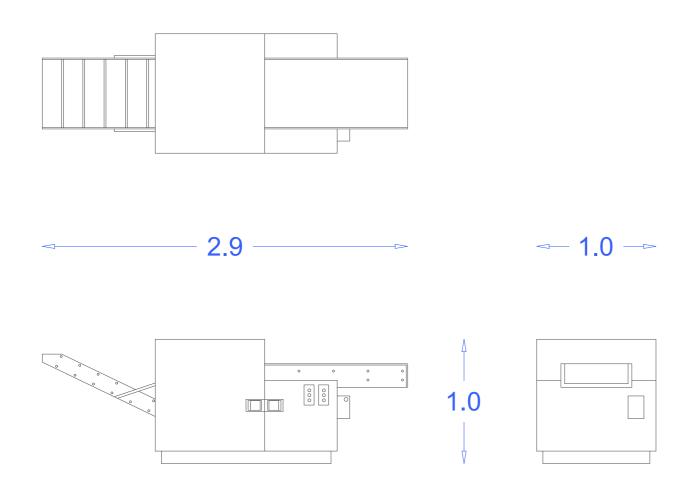
CAPACITY/day 48 kg/day

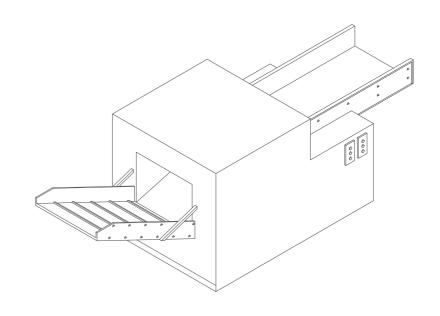
POWER 2.6 kW

630 kg/day

min 13 MACHINES

RAGS CUTTING MACHINE





DESCRIPTION **RAGS CUTTING MACHINE**

MODEL C35

REFERENCE 4.C1.1

DIMENSIONS 3050x960x1000 cm

WEIGHT 850 kg

CAPACITY/h

1000-1500 kg/h

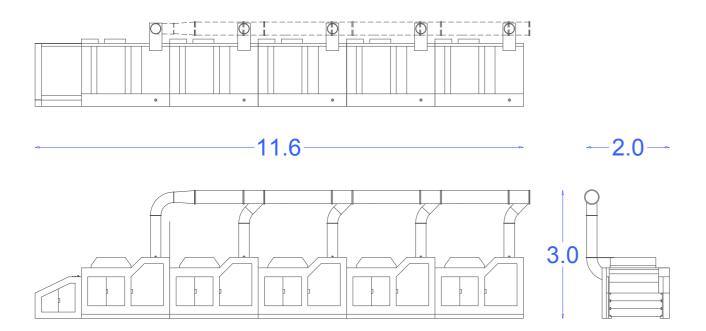
CAPACITY/day

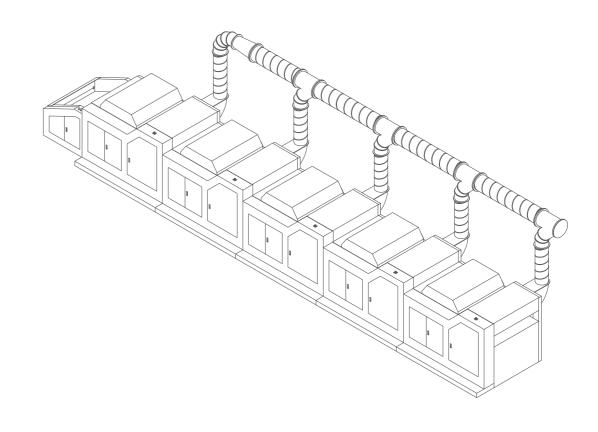
48 kg/day

SPEED 230 r/m

1890 kg/day

RECYCLING FABRIC MACHINE





DESCRIPTION RECYCLING MACHINE

MODEL K700-N

REFERENCE 4.C1.2

DIMENSIONS 11600x2000x3000 cm

WEIGHT 7500 kg

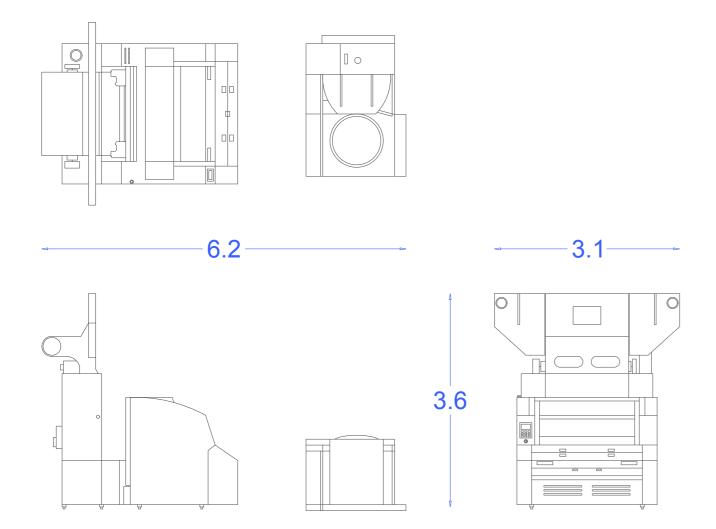
CAPACITY/h 850 kg/h

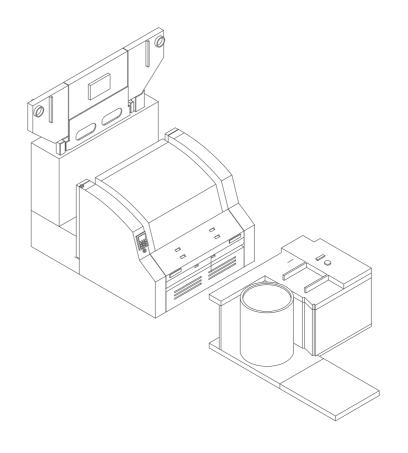
CAPACITY/day 48 kg/day

POWER 133kW

1890 kg/day

CARDING MACHINE





DESCRIPTION CARDING MACHINE

MODEL CardC75

REFERENCE 4.C1.3

DIMENSIONS 3325x2380x2930 cm

CAPACITY/h 50 kg/h

CAPACITY/day 400 kg/day

SPEED 330m/min

POWER 23.5-29 kW

1890 kg/day

RING SPINNING MACHINE

DESCRIPTION RING SPINNING MACHINE

MODEL ISO9001

REFERENCE 4.C1.4

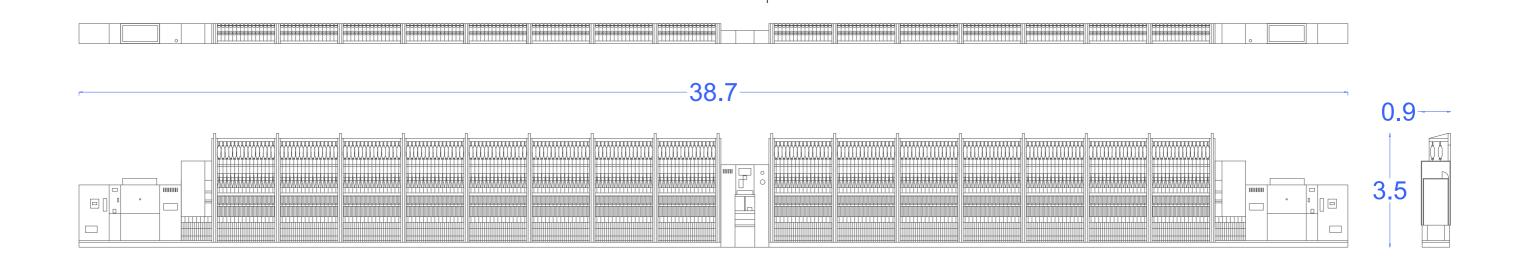
DIMENSIONS (7700+N*1700)x120x120 cm

WEIGHT 345 kg

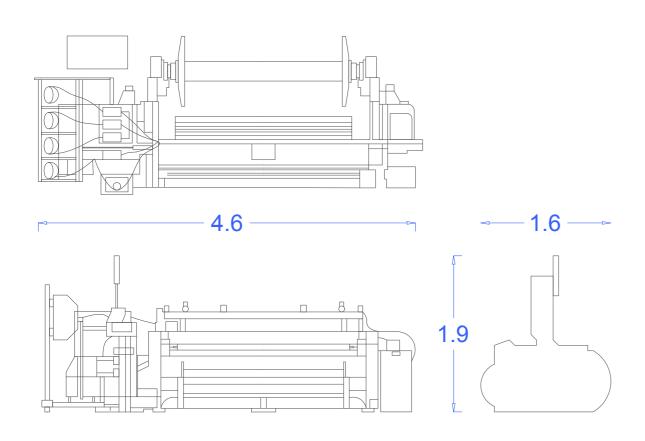
SPINDLE SPEED 4500-8000 RPM

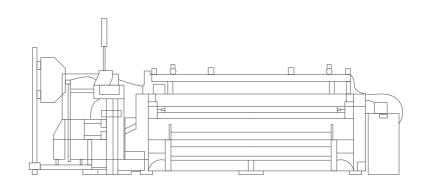
SPEED 5-12m/min

1890 kg/day



WEAVING MACHINE





DESCRIPTION WEAVING MACHINE

MODEL R9500²

REFERENCE 5.C1.1

DIMENSIONS 4600x1600x1900 mm

CAPACITY 700 sets/month

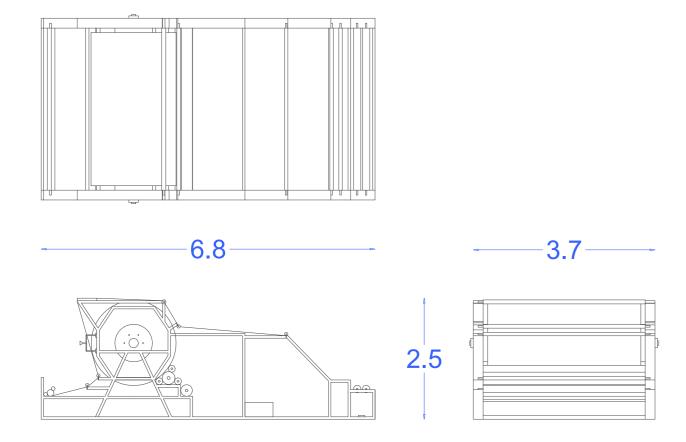
COLORS 2-6

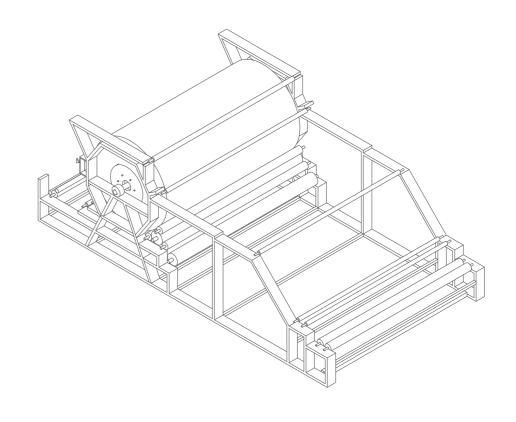
SPEED 800-1200 RPM

REED WIDTH 140-360 cm

1890 kg/day

STRATIFICATION MACHINE





DESCRIPTION STRATIFICATION MACHINE

MODEL H-WG-1800

REFERENCE 5.C1.2

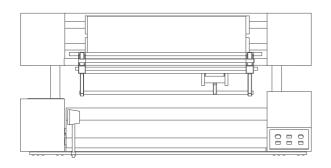
DIMENSIONS 6800x2400x2400 mm

WEIGHT 3800 kg

SPEED 0-30 m/min

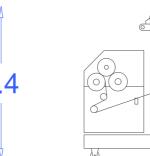
1890 kg/day

FABRIC WINDING MACHINE

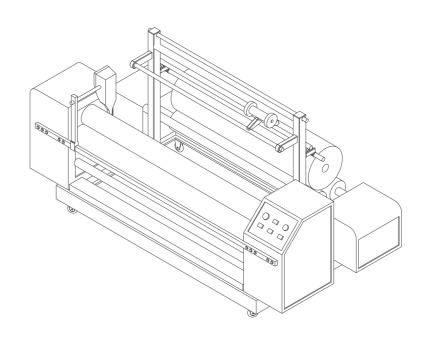








□ 1.3 □□



DESCRIPTION FABRIC WINDING MACHINE

MODEL YL-210F-JS-ED

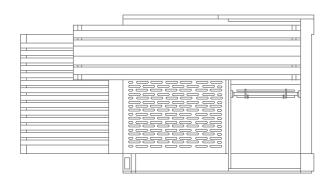
REFERENCE 5.C1.3

DIMENSIONS 2630x670x1250 mm

POWER 0.65 kW

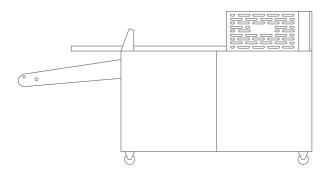
SPEED 0-30 m/min

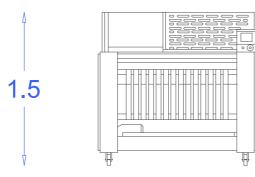
FABRIC FOLDING MACHINE

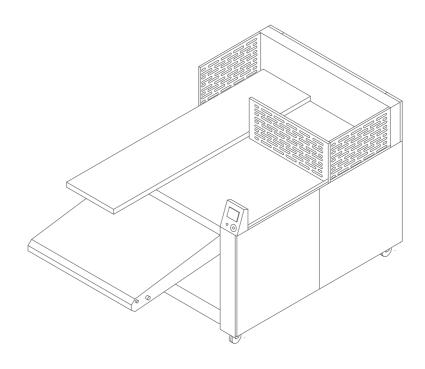












DESCRIPTION FOLDING MACHINE FOR TEXTILES

MODEL ATFVC3

REFERENCE 5.C1.4

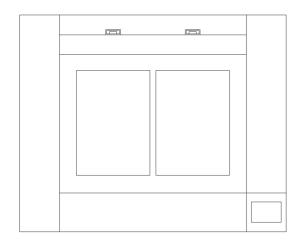
DIMENSIONS 1600x3000x1700 mm

WEIGHT 850 kg

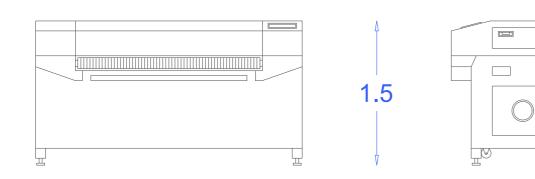
POWER 2.5 kW

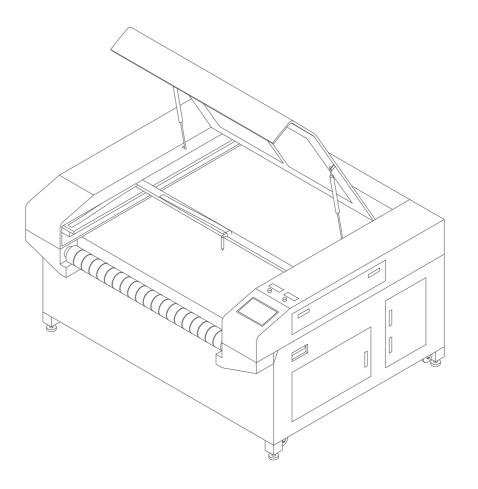
SPEED 34 m/min

LASER TEXTILE CUTTING MACHINE









DESCRIPTION LASER CUTTING MACHINE

MODEL CDH-1810

REFERENCE 4.C2.1/6.1.1

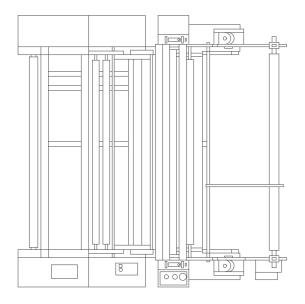
DIMENSIONS 2680x2180x1450 mm

WEIGHT 730 kg

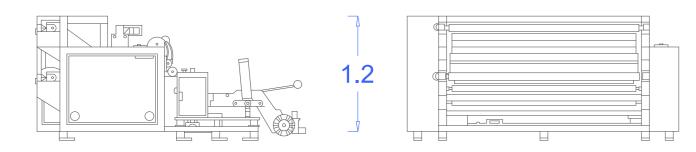
CUTTING AREA 1500x900

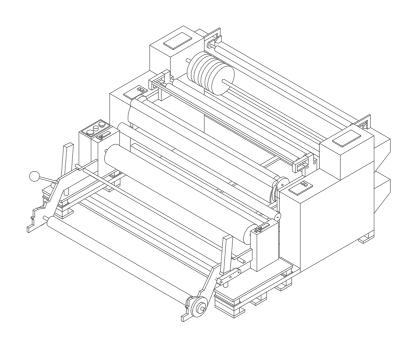
SPEED 0-30 m/min

FABRIC SLITTING MACHINE









DESCRIPTION FABRIC SLITTING MACHINE

MODEL ONL-XE 1800

REFERENCE 4.C2.2/6.1.2

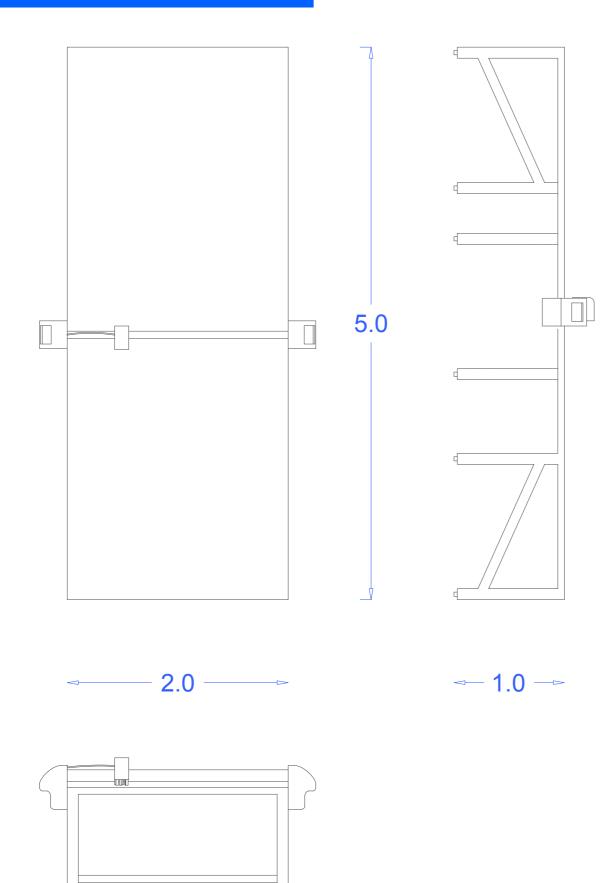
DIMENSIONS 2900X2700X1600 mm

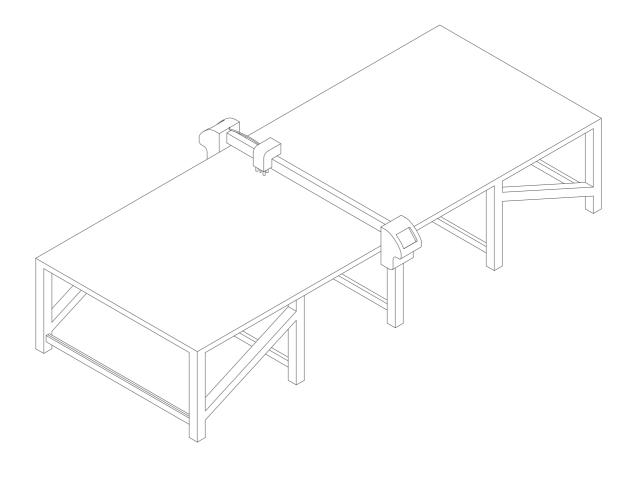
WEIGHT 1500 kg

POWER 5 kW

SPEED 50-90 m/min

FABRIC CUTTING TABLE





DESCRIPTION CUTTING TABLE FOR FABRIC

MODEL \$125

REFERENCE 4.C2.3/6.1.3

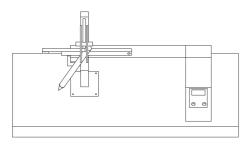
DIMENSIONS 5000x2000x1000 mm

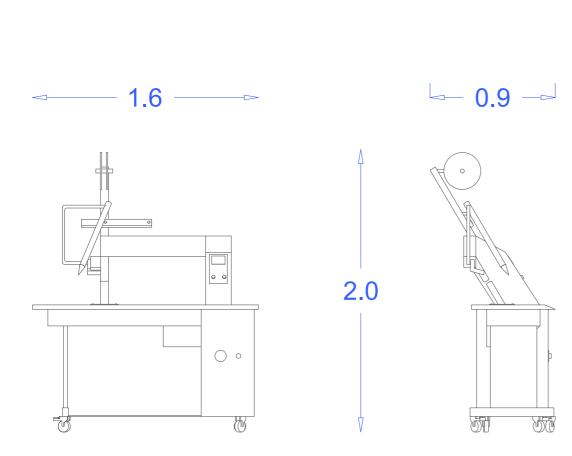
WEIGHT 300 kg

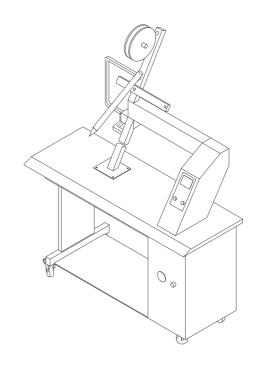
SURFACE 10 m²

CAPACITY 1524 mm/s

SEWING MACHINE







DESCRIPTION INDUSTRIAL SEWING MACHINE

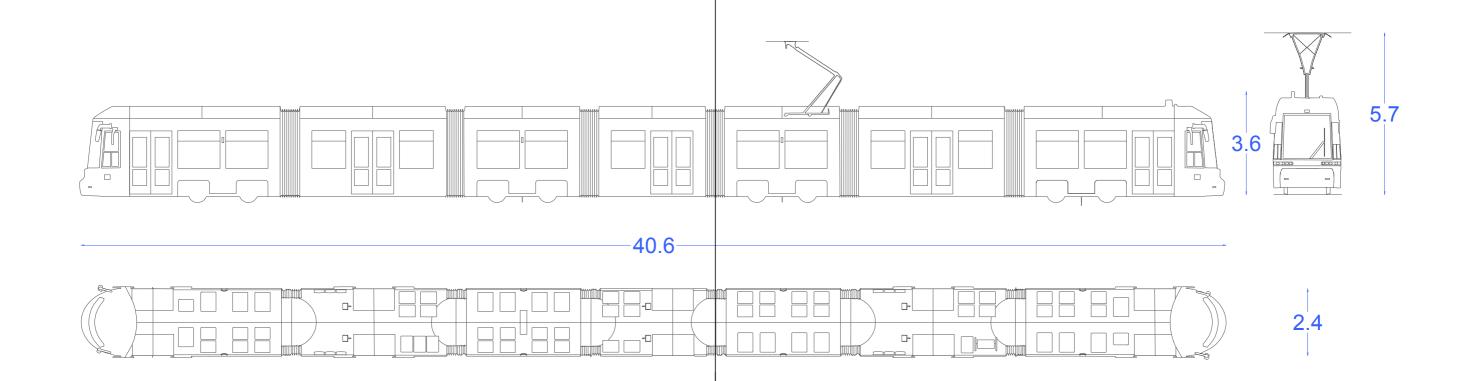
MODEL YC-F7

REFERENCE 6.1.4

DIMENSIONS 1750x590x1590 mm

POWER 1.8 kW

ZURI FLEXITY CITY TRAM



MODEL FLEXITY CITY

REFERENCE 1.1

DIMENSIONS 40600x2400x3600 mm

VOLUME 350 m³

CAPACITY 9 t. of clothes per day