

RAW MATERIAL SORTING DEPARTMENT

❖ ORIGIN OF RAW MATERIAL

■ ORIGIN COUNTRY

- West European Bulls: South and North Germany
- Calfskin: France
- Double Butt Split Suede: Domestic/European/Canadian
- Lambskin: Canada
- Goatskin: India

■ ADVANTAGES IN SOURCING EUROPEAN HIDES VS. SOUTH AND NORTH AMERICAN

- Far less bug infestations due to moderate climate leading to less grub holes (flesh) and parasite bites (healed, circular grain defects).
- Size of hides dramatically larger.
- Hides not branded.
- Selection of hides is much better due to grazing/environment/+husbandry practices difference, ex. no barbed wire fences.

■ ADVANTAGES IN BULLS OVER COWS

- Life span 18 months vs. 5-10 years leads to less defects.
- Grain is more uniform and fine in structure due to not procreating and lactating as is the case with cows.
- Level of veins less severe.

❖ SPECIFICATIONS

■ HIDES PURCHASED PRIMARILY IN NATURAL, PEARL WHITE CRUST FORM - ALSO IN WET BLUE AND COLORED CRUST

- Uniformity of crust color, thickness, and grain structure are critical.

■ SUBSTANCE/THICKNESS (MEASURED IN MILLIMETERS BY THICKNESS GAUGE)

- Upholstery standard 0.9 - 1.1 mm for optimum strength and usability.

■ SELECTION - AGREED UPON TOLERANCES FOR SURFACE DEFECTS SUCH AS SCARS, PITS, OPENS, NECK WRINKLES, HOLES, GRAIN VARIATION, AND VEINS

- Visual inspections and documentation to report to Suppliers on performance to command consistency.

■ AREA REQUIREMENTS

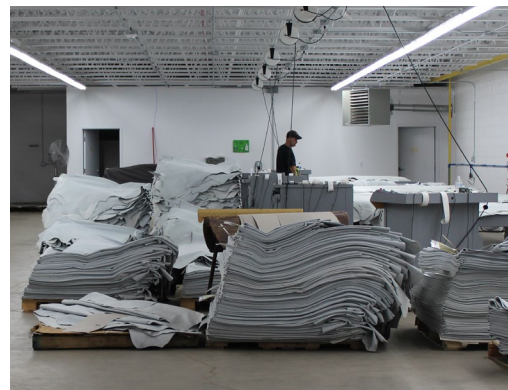
- Average and minimum sizes required for each raw material.
- Area measured for accuracy.
- Proper trim of hides ensures yield.



RAW MATERIAL SORTING DEPARTMENT (CONT'D)

◆ ALLOCATION

- **TOWNSEND SELECTION CRITERIA ESTABLISHED FOR EACH PRODUCT**
 - Appropriate grades selected by product and customer specifications.
 - Products and their processes lend themselves to properly blending defects to make all grades received yield excellent utilization.
 - Classic, Taj (Classic with Pearlized finish), and Nubuck are 3 of Townsend's most popular products and demand the best hides; to fulfill the demand for these products, it is necessary to have a diverse product range utilizing processes such as buffing, stuccoing, embossing, and finishing to make use of C's and D's.



◆ QUALITY CONTROL

- Strict quality control specifications required for fat + chrome content, stitch tear strength, light fastness, heat aging, and pH levels, as well as area, thickness, and selection criteria mentioned above.
- All hides received in a shipment from a supplier are stamped in order to identify and control the batch (sequential delivery by specific supplier) and are not mixed with other batches or suppliers.
- Process tickets devised for all products and variations of products to standardize outcomes. Ticket follows load throughout production process and is signed off by all machine operators and department Production Managers at various critical stages within the process.



COLORING DEPARTMENT

◆ ANILINE-DYEING AND SPECIAL TANNAGES

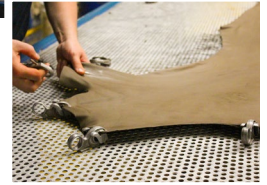
- **COLORING IS THE ACTUAL DYEING OF THE HIDES IN PREPARATION FOR THE FINISHED PRODUCT**
 - Formulas are developed and maintained for each order.
 - Products by Townsend that are aniline in nature include Nubuck and Suede.
 - Strict Quality controls on all dyes for compatibility with process and all other chemicals used.
- **RE-TANNING AND FLAMEPROOFING CAN BE DONE DURING COLOR PROCESS**
 - Veg re-tans and fat liquors are used to enhance the feel, grain, and embossing capability.



CRUST DRY STAGE PROCESSING

VARIOUS DEPARTMENTS/AREAS

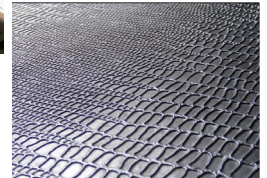
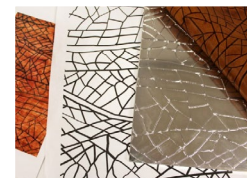
- **REPETITIVE PROCESSING FOR MULTIPLE REASONS: PREPARING FOR NEXT PROCESS, MOISTURE, AND TEMPER CONTROL**
 - Toggling - Stretching and drying of hides
 - Stucco - Hand application to fill small defects
 - Staking - Softening and relaxing of fibers
 - Buffing - For Nubucks to create nap and to lightly correct hides with greater defects
 - Polishing - Smooths and heats the wax on Mesa and Manchester
 - Milling - For softening, control moisture level, and creating grain



EMBOSSING DEPARTMENT

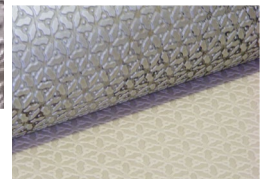
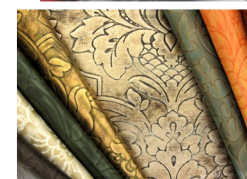
FLAT BED PRESS

- **THIS PROCESS “STAMPS” THE LEATHER USING A MAGNESIUM PLATE WITH A DESIGN OR GRAIN TEXTURE UNDER VERY HIGH PRESSURE AND HEAT**
 - Townsend has the largest collection of embossing plate patterns for leather in the U.S. with over 900 embossing plates to choose from.
 - We can work from design sketches or photographs to develop virtual renderings and customized tooling of embossing plates.
 - We have internal graphic design capabilities that allow us to create custom embossing designs in unprecedented turn around times.
 - Most of the Townsend Leather product line can be Embossed and is a highly customized and therefore we treat every project as unique.



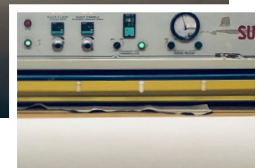
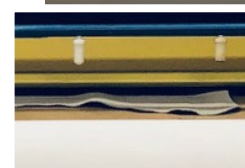
GAUFRAGE CALENDAR ROLLER

- **THIS METHOD OF EMBOSSING IS WHERE THE DESIGN IMPRESSION IS TRANSFERRED TO THE LEATHER BY AN ENGRAVED ROLLER UNDER HIGH HEAT AND LOW PRESSURE FOR A SOFT, NATURAL HAND WITHOUT PATTERN MATCH LINES.**
 - Townsend owns over 140 calendar rolls, this includes everything from small grains to decorative and abstract designs.
 - This unique process creates upholstery leather of exceptional softness and beauty and is offered in Center Cut hides averaging 40-45 SF or Cowhide Sides averaging 25 SF, which maximizes cutting yield and greatly minimizes the need for excess seams during upholstery.



ROLLER PRESS

- **ROLLER EMBOSSING ALLOWS FOR WHOLE HIDES TO BE EMBOSSSED WITHOUT MATCH LINES WITH GRAIN TEXTURES USING HIGH HEAT AND LOW PRESSURE FOR A SOFT, NATURAL HAND.**
 - This added benefit not only upgrades hides but also is a more efficient method of embossing and giving natural looking grain to leather.
 - Townsend hopes to expand our whole hide grain offerings this year by purchasing 2 more rolls.



FINISH DEPARTMENT

◆ WATER-BASED FINISHES

- **FINISHING IS APPLYING COLOR-MATCHED WATER-BASED FINISHES TO THE GRAIN TO ACHIEVE THE BEST COLOR MATCH MOST CONSISTENTLY THROUGHOUT AN ORDER; ADDITIONALLY, TOPCOATS ARE APPLIED FOR PERFORMANCE, FEEL AND/OR SHEEN**

- All pigments are tested to meet compatibility with all production processes and to meet or exceed industry standards in regard to performance.

- **FINISH PROTECTS THE LEATHER ITSELF AND GIVES IT THE PROPERTIES TO MEET NORMAL TO HIGH WEAR IN REGARD TO UPHOLSTERY APPLICATIONS**

- **COLORS MATCHED TO CUSTOMER SPECIFICATIONS**

- Lighting is very important to color judgment.

- **COMPUTER-ASSISTED COLOR-MATCHING AND CONTROL**

- Takes into consideration chroma, lightness and darkness values, hue and intensity.
- Townsend's x-rite Spectrophotometer accurately measures solid colors to ensure a color quality audit trail across multiple devices and locations throughout the production process to ensure consistent color and brand integrity.
 - Tested against the data color computers in the finish department and the results is within a thousandth of a point difference, if any difference at all.
 - A remote measurement trigger allows operators to initiate hands-free measurement and display a pass/fail result in the software program within seconds.
 - The Sample Department will be able to read incoming samples to compare to their masters, as well.
 - Townsend is now storing the information to build a database for fast access to existing data when performing future color checks.

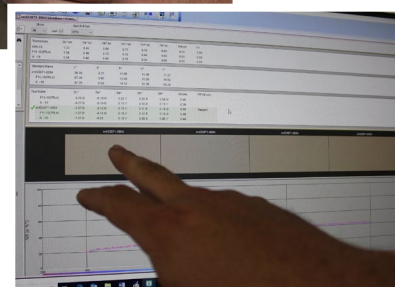
- **CAN MATCH ANYTHING FROM LEATHER TO FABRIC, PAINT CHIPS TO PIECES OF FRUIT OR OTHER TANGIBLE ITEM - YOU NAME IT!**

- **TECHNOLOGICAL ADVANCEMENTS**

- New spray line, computers, roller coater, and spectrophotometer.
- Efficient, environment-friendly machinery.

- **MANY EFFECTS**

- Sheen variations, Pearlized and Metallic effects, Antique effects, waxes and effect coats.



TIPPING DEPARTMENT

◆ UNIQUE FINISH APPLICATIONS

- **PIGMENT (COLOR) APPLIED BY HAND**
 - Often done on the high raised points of textures.
- **SPECIALTY TIPPINGS**
 - Double tipping, hand rubs, Handiworks (rub-off - example Galuchat embossed product).
- **EMPHASIS ON CHARACTERISTICS**
 - For Tipping, variation in color and overall effect.
 - For Hand rubs, the natural characteristics are highlighted.



FINISH DRY STAGE

◆ PROCESSES

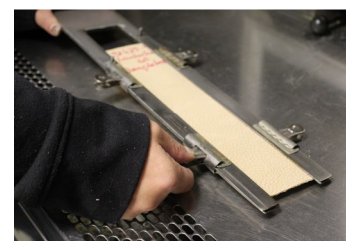
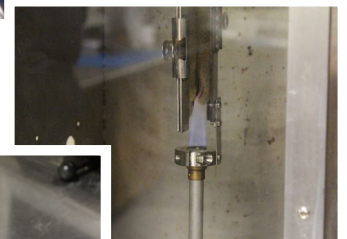
- **MILLING**
 - Control moisture content and final hand.
- **TOGGLING**
 - Drying and stretching.
- **STAKING**
 - Relaxing of leather fibers.



QUALITY CONTROL DEPARTMENT

◆ PROCEDURES

- **ASSURANCE ALL PRODUCTS AND DYE LOTS MEET STRICT INDUSTRY AND TOWNSEND STANDARDS**
 - Flame retardancy, finish and dye performance, accelerated aging of many others, and so on.
- **BATCH TESTING**
- **AS9100 CERTIFIED**



FINAL INSPECTION DEPARTMENT

◆ TRIMMING AND FINAL INSPECTION

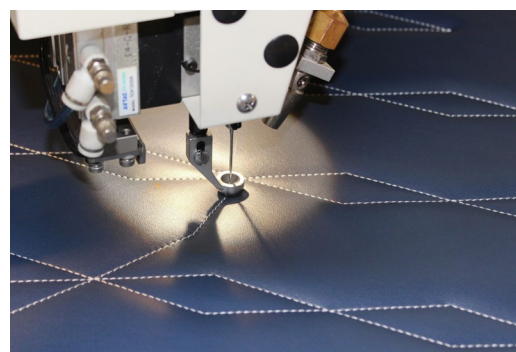
- **OVERALL GRADING AND INSPECTION OF FINAL PRODUCT BASED UPON TOWNSEND PRODUCT AND CUSTOMER CRITERIA**
 - Each and every hide is looked at closely and small imperfections are touched up, as needed.



QUILTING & PERFORATING DEPARTMENT

◆ THESE PROCESSES PROVIDE GREAT RESULTS FOR PRECISE AND VISUALLY DECORATIVE PATTERNS

- **STATE-OF-THE-ART MACHINERY ALLOWS US TO CREATE STANDARD AND ONE-OF-A-KIND PATTERN SEAT INSERTS AND PANELS**
 - Uses both thread and hole punches to create beautiful designs.
 - Quilted leathers can be produced on any one of Townsend's In-Stock, standard, or custom colored leathers with standard patterns to choose from.
 - The whole process is completed in Townsend's Upstate New York facility with quick turn times and attention to finest quality.
- **QUILTING & PERFORATING DETAILS**
 - Available panel sizes: 28"x28", 38"x28".
 - Maximum quilting area varies based on pattern chose.
 - Thread & leather colors can be selected from Townsend's library.
 - Quilting patterns can be designed with or without perf holes.
 - Digital renderings can be requested to see different leather and



MEASURING & SHIPPING DEPARTMENTS

◆ PRODUCTS ARE SHIPPED UNDER THE HIGHEST QUALITY STANDARDS AND WITH A TRUE PASSION FOR GREAT WORK AND THE BEST POSSIBLE LEATHER.

- **MEASURING AND PACKAGING**
 - All orders are packaged and delivered to the customer's requirements for receiving.
- **DELIVERY OPTIONS**
 - Split deliveries, special boxes, rolled or folded a special way, etc.



SAMPLE DEPARTMENT

◆ SAMPLE SUPPORT

- **TOWNSEND HAS A FULLY-DEDICATED BUILDING HOUSING OUR SAMPLES WITH A STAFF DEDICATED EACH DAY TO PRODUCING AND PROVIDING SAMPLING TOOLS OF NUMEROUS VARIETIES TO FIT OUR CUSTOMERS' SPECIFIC NEEDS**
 - We know each order begins with a sample and are equipped to support our customers with unparalleled sampling tools and memos upfront, whether for customer presentations, showroom drawers, or travel kits for the road.
 - With more than a thousand standard skus and an archive of more than 20,000 custom samples from our last two decades of production, sample support from Townsend is reliable, timely, and an added value resource.
- **SEARCH OUR DATABASE OF APPROXIMATELY 1000 (AND GROWING!) COLORS, TEXTURES, AND QUALITIES FROM OUR ONLINE CATALOG OF IN-STOCK AND STANDARD LEATHERS**
 - Go to www.townsendleather.com for more information, to make your sample selections or to keep up with what's new at Townsend Leather on our blog.



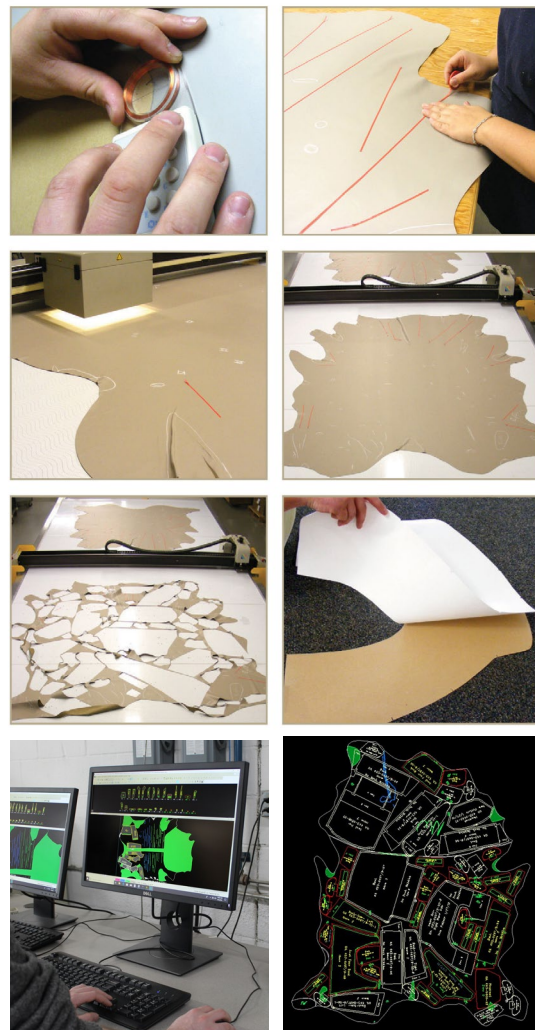
CUTTING & STOCK DEPARTMENTS

◆ CUTTING PROGRAM

- Allows us to produce orders to customers' exact size specifications, which reduces waste and increases effectiveness and efficiency.

◆ STOCK PROGRAM

- Adjacent to the Cutting Department is the home of our stock program (in-stock, quick-ship, and color base stock programs) which can be utilized as a resource for rush orders.



CONTACT US

◆ TOWNSEND LEATHER OFFICES

■ MARKETING, SALES, ACCOUNTING, SAMPLES AND SORTING

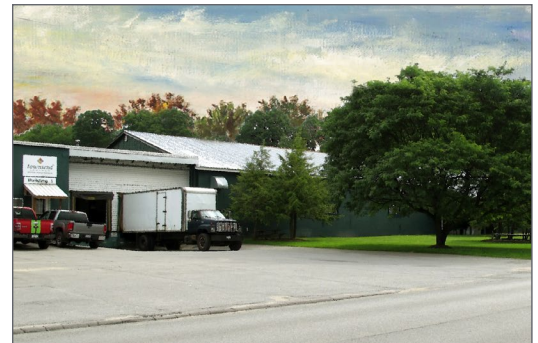
- PHONE: 518-762-2764
- TOLL FREE: 1.800.852.0144
- FAX: 518.762.5566
- EMAIL: INFO@TOWNSENDLEATHER.COM
- P.O. BOX 669
- 4 GROVE STREET
- JOHNSTOWN, NY 12095



◆ TOWNSEND LEATHER PRODUCTION & SHIPPING

■ PRODUCTION AND SHIPPING DEPARTMENTS

- P.O. BOX 669
- 45-49 TOWNSEND AVENUE
- JOHNSTOWN, NY 12095



◆ ONLINE

- WWW.TOWNSENDLEATHER.COM

◆ SOCIAL MEDIA

-    

