

## ECO-JET PRO fabric dyeing machine

**ECO-JET PRO** doğal, sentetik ve karışım elyaftan imal edilen çok çeşitli kumaşların lüp ve açık ende yüksek kalitede boyanmasına olanak sağlayan bir kumaş boyama makinasıdır.

Kumaş boyama sektörünün günümüzde karşılaştığı en ciddi problemler yüksek enerji maliyetleri ve çevresel etkilerdir. Tekstil sektörünün bu problemleri göz önüne alınarak geliştirilen **ECO-JET PRO** boyama kalitesini artırırken enerji ve su sarfiyatlarını düşürmektedir.

**ECO-JET PRO** is a fabric dyeing machine that allows high quality dyeing a wide variety of fabrics made of natural, synthetic, and blended fibers in tubular and open width form.

Today, the most serious problems faced by the fabric dyeing industry are high energy costs and environmental impacts. **ECO-JET PRO** improved by considering these problems of the textile industry increases the quality of dyeing and reduces energy and water consumptions.



### Sağladığı Bazı Avantajlar

- Yüksek Seviyede Tekrarlanabilirlik
- Yüksek Kalite ve Geniş Çeşitlilikte Üretim
- Daha Düşük Enerji ve Su Harcamaları
- Minimize Edilmiş Çevresel Etki
- Kolay Kullanım Olanığı
- Tam Otomatik Proses Kontrolü

### Some of the Advantages

- High Level Repeatability
- High Quality and Wide Variety of Production
- Lower Energy and Water Consumptions
- Minimised Environmental Impact
- Easy to Operate
- Full Automatic Process Control

### Ayarlı Düze Sistemi

Her düze ayrı aktüatör kontrolü ayar mekanizmasına sahiptir. Düze pozisyonu bu aktüatör ile kademesiz olarak istenilen değerlere ayarlanabilir. Ayarlı düze sistemi sayesinde çok çeşitli kumaşlar tüp ve açık en formda problemsiz olarak mükemmel bir şekilde boyanır.

### Adjustable Nozzle System

Each nozzle equipped with adjustment system controlled by individual actuator. Nozzle position can be adjusted as stepless by this actuator. A wide variety of fabrics can be dyed in tubular and open width form as free from any penetration problem by means of adjustable nozzle system.



### İç Tambur

Her iç tambur ayrı birer inverter kontrolü motor ile tahrik edilir. Maksimum tambur hızı 450 m/dak. Rulman yatağı ve tambur şaft dizaynı sayesinde iç tambur mekanizması mükemmel bir mekanik dayanıma sahiptir. Bu sistem sayesinde salmastra ve rulmanlar sorunsuz olarak çok uzun süre çalışabilirler.

### Inner Reel

Each inner reel is driven by an individual frequency controlled motor. Reel speed up to 450 m/min. Excellent mechanical durability of inner reel mechanism by means of reel shaft and bearing house design. The mechanical seals and bearings run problem-free for a very long time by this mechanism.



### Uç Bulma ve Kumaş Tur Zaman Kontrolü

Kumaş boşaltma ve numune aşamalarında top başlarının bulunmasını sağlar. Gerçek kumaş hızının hesaplanmasında da kullanılır.

### Seam Detection and Cycle Time Control

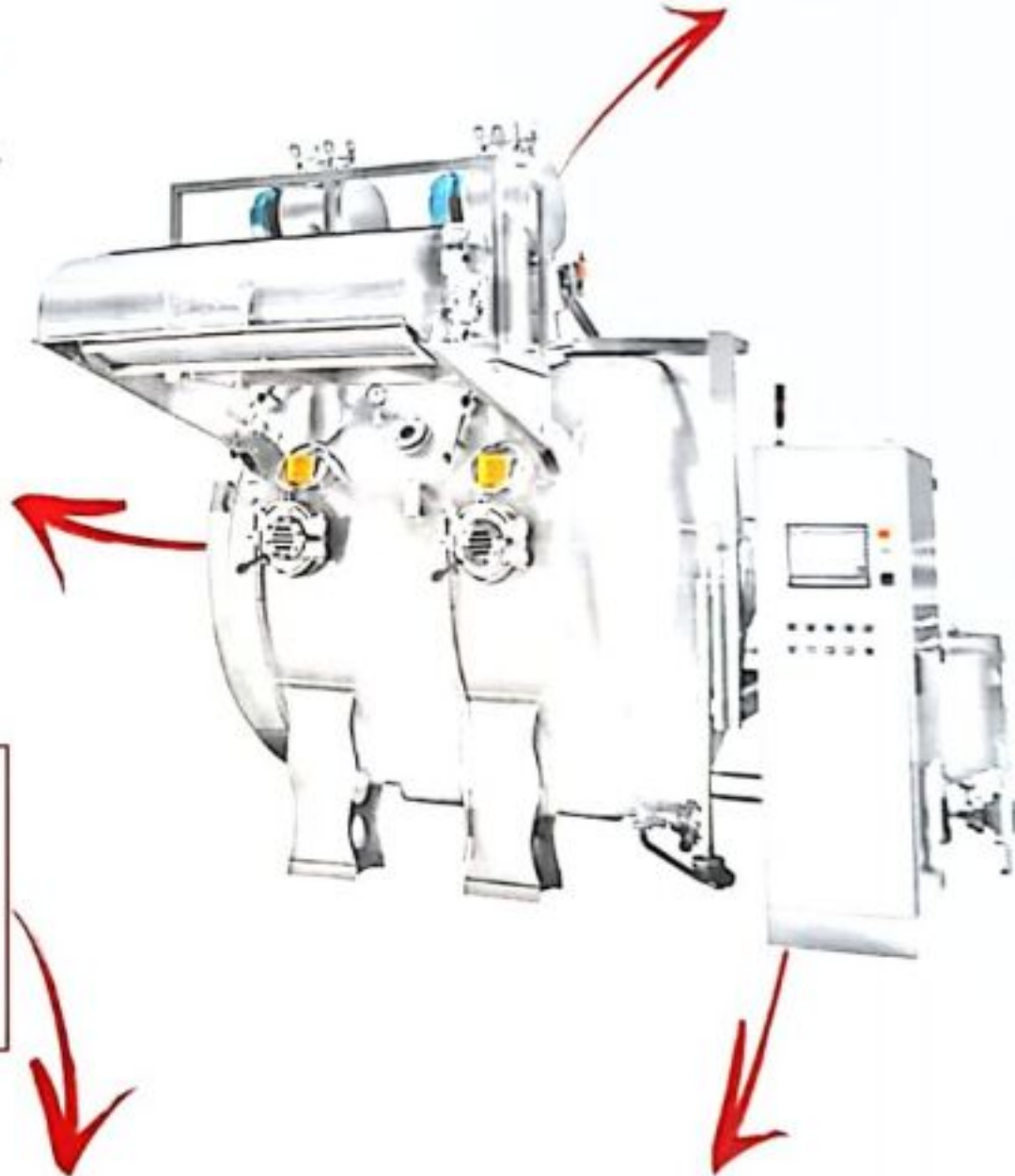
It ensures detection of seams in sampling and unloading stages of the process. It allows calculation of real fabric speed.

### Kapak Sistemi

Her göz otomatik kilit mekanizmalı yüklenme/boşaltma kapağına sahiptir.

### Lid System

The loading/unloading lids equipped with automatic safety locking system.



### Hazırlama Tankı (Opsiyonel)

1:4 flote kapasitesine sahiptir ve yatay pozisyonda yerleştirilmiştir. Sirkülasyon pompası, ısıtma sistemi ve seviye ölçüm sistemiyle donatılmıştır. Proseste sonraki adım için ihtiyaç duyulan su istenilen sıcaklıkta bu tankta hazırlanır.

### Stock Tank (Optional)

1:4 liquor volume capacity stock tank located in horizontal position. Equipped with circulation pump, heating system and level measuring system. The hot water required for the next step of the process is prepared in this tank at the desired temperature.

### Otomatik Proses Kontrol Sistemi

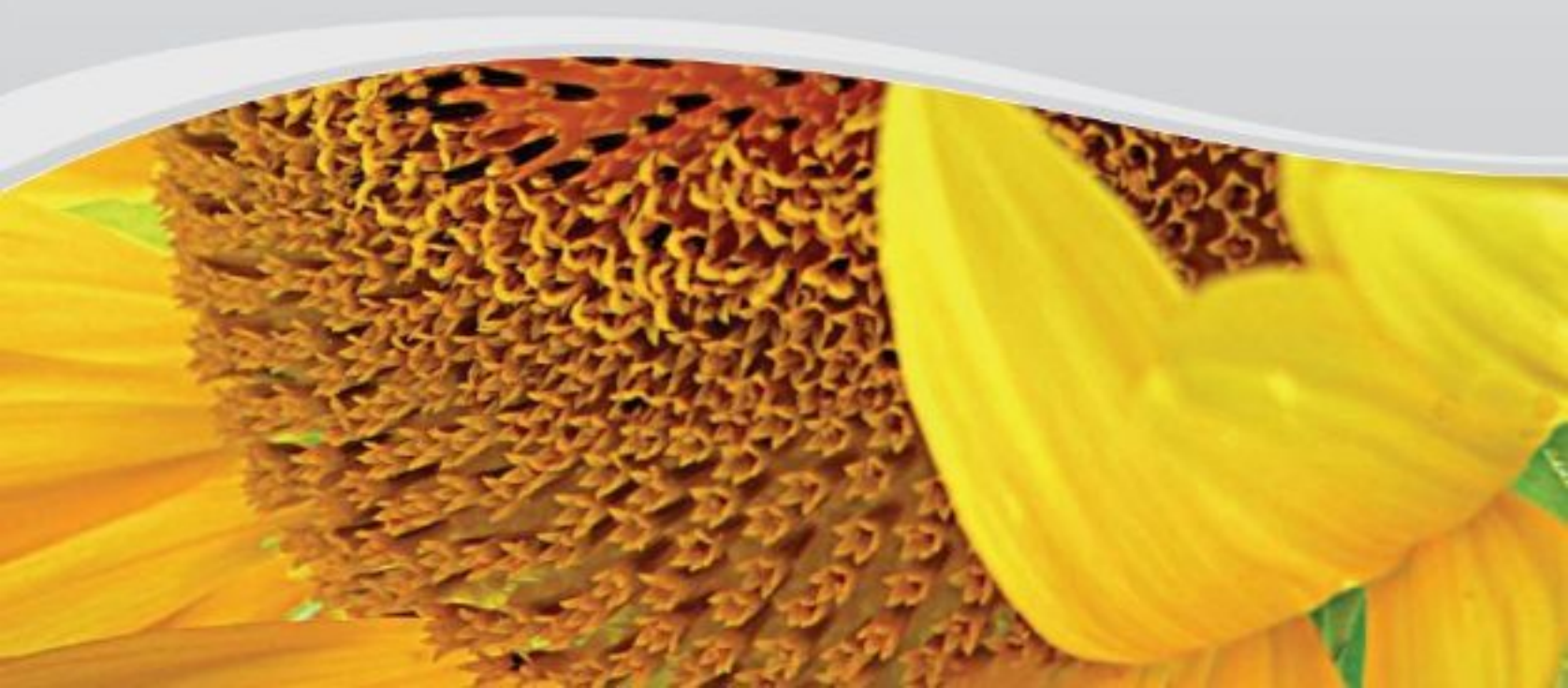
Tüm boyama prosesleri otomatik olarak kontrol edilir. Tüm makine parametreleri, dozajlama fonksiyonu, pompa hızı, iç tambur hızı, ısıtma/soğutma sistemi, düze pozisyonu, tur süresi, vs. operatör panelinden kolaylıkla yönetilebilir.

### Automatic Process Control System

Automatic control of all dyeing processes. All machine parameters, dosing function, pump speed, inner reel speed, heating/cooling system, nozzle position, fabric cycle time, etc. can be controlled easily via operator control panel.

xetma  
Vollenweider

FEEL THE  
**EVEN**  
TOUCH  
SHEARING WITH XETMA VOLLENWEIDER





## SCHÖNHEIT DIE MAN SEHEN KANN

*In vielen Anwendungsfällen kommt es auf eine gleichmäßige Oberfläche mit einer akkuraten Optik an. Der Flor des Gewebes soll eine einheitliche Höhe haben. Oftmals müssen die Fasern dazu vor dem Scheren gekämmt und ausgerichtet werden, um optimale Ergebnisse zu gewährleisten.*

### SCHERMASCHINEN VON XETMA VOLLENWEIDER

Die Marke Xetma Vollenweider steht weltweit seit mehr als 120 Jahren für höchste Qualität, Zuverlässigkeit und Langlebigkeit im Scheren. Dies gilt für alle Arten von Textilien, egal ob Nieder-, Mittel- oder Hochflor - selbst bei härtesten Anforderungen. Die variable Kombination der Technologien Scheren, Polieren und Tigern bietet individuelle Lösungen, die speziell auf den jeweiligen Anwendungsfall zugeschnitten sind.

#### SCHEREN XS

- Scheren aller Arten von Webwaren, Strick- und Wirkwaren sowie Nonwovens
- Xetma Vollenweider Schwertschnittschere<sup>®</sup> für höchste Leistung und Präzision auch bei schweren Waren mit sehr dichtem Flor
- die Genauigkeit der Xetma-Schersysteme ist mit 0,02 mm wesentlich genauer als bei vergleichbaren Maschinen
- beste Scherresultate und maximale Standzeit durch einzigartiges Design des Scherzeuges
- höchste Laufruhe aufgrund spezieller Lagerung des Scherzylinders und Aufnahme des Untermessers
- Scherstrassen mit bis zu 6 Schnittstellen für Links- und Rechtsschur erlauben hohe Schergeschwindigkeiten

#### POLIEREN XP UND XPP

- einfache Poliereinheit oder patentierte Doppelpolierereinheit für die Polveredlung und Polaufbereitung vor dem Scheren
- unterschiedliche Effekte - je nach Drehrichtung des Polierzylinders:  
gegen Warenaufrichtung: Glätten des Flors  
mit Warenaufrichtung: Aufrichten des Flors
- Glanzeffekte auf Kunstfasern
- spezielle Florhebe-Funktionalität für die Ausrüstung von Frottierwaren; dies garantiert weniger Scherabfall und somit eine höhere Rentabilität der Produktion

#### TIGERN XT

- Tischracheinheit zum optimalen Vorbereiten von Hochflorartikeln wie Decken, Kunstpelzen etc.
- Erzeugen eines Flors durch Anheben und Aufräufen von Polwaren
- Orientieren und Durchkämmen eines vorhandenen Flors vor dem Scheren

#### FLOAT-SCHEREN XF

- Aufschneiden von Stickerei-Sprengfäden aller Art

#### Aufschneidwalzen:

- Xetma Vollenweider-Aufschneidwalze mit speziellen Fänger-Messer-Kombinationen
- unterschiedliche Fängergrößen für verschiedene Stickerei-Designs verfügbar
- Einzelwalze in der Maschine oder separat vorgeschaltetes TriFloat Modul mit drei Aufschneidwalzen unterschiedlicher Fängergröße für flexibles Arbeiten

#### Aufschneidkamm:

- feststehender Aufschneidkamm mit speziellen Fänger-Messer-Kombinationen
- geeignet für Stickerei-Sprengfäden und für Schussfrottierungen auf Webwaren

#### KOMBINATIONEN

- modulare Systeme zur flexiblen Kombination der einzelnen Technologien in einer Maschine
- anwendungsbezogene Ausführung kompletter Tiger-, Polier- und Scherlinien



## BEAUTY THAT YOU CAN SEE

Many applications require an even surface with an appearance of accuracy. The pile of the fabric should have a uniform height. The fibres often have to be combed and raised to produce optimal results.

### SHEARING MACHINES BY XETMA VOLLENWEIDER

For more than 120 years the brand Xetma Vollenweider has been a symbol of highest quality, reliability and longevity in shearing world-wide. This applies to all kinds of textiles - no matter whether low, medium or high pile - even under the greatest strains.

The variable combination of the shearing, polishing and tigering technologies offers individual tailor-made solutions for each case of application.

#### SHEARING XS

- shearing of all kinds of woven, knitted and warp-knitted as well as non-wovens
- Xetma Vollenweider Heavy Duty Shearing Units® for top performance and precision even with heavy materials with very dense pile
- the accuracy of Xetma shearing systems at 0.02 mm is significantly higher than with comparable machines
- best shearing results and maximum serviceable life due to unique design of the shearing units
- greatest noise suppression due to special bearings of shearing cylinder and holding of ledger blade guarantees maximum running smoothness
- shearing lines with up to 6 shearing heads for two sides shearing permit high shearing speeds

#### POLISHING XP AND XPP

- single polishing unit or patented double polishing unit for pile finishing and pile treatment prior to shearing
- different effects - depending on rotation direction of polishing cylinder  
counter-pile: smoothing of pile  
in pile direction: lifting of pile
- gloss effect on synthetic fibres
- special pile lifting functionality for working terrycloth fabric; this guarantees less shearing waste and thus higher profitability of production

#### TIGERING XT

- table raising unit for optimal preparation of high pile articles such as blankets, synthetic furs etc.
- creation of pile by lifting and raising of pile fabric
- orientation and combing through of existing pile before shearing

#### FLOAT SHEARING XF

- cutting of all kinds of pattern separating threads sticking up from embroidery

#### Cutting rollers:

- Xetma Vollenweider cutting rollers with special detector-knife combinations
- different detector sizes for different embroidery designs available
- single roller in the machine or separately added TriFloat module with three cutting rollers of different detector size for flexible work

#### Cutting comb:

- fixed cutting comb with special thread-catchers in combination with hardened steel knives
- suitable for loose threads of embroidery and for welt float on woven fabric

#### COMBINATIONS

- modular systems for the flexible combination of the individual technologies in one machine
- executions of complete tigering, polishing and shearing lines as per application





## TECHNIK DER MAN VERTRAUT

### FEINFÜHLIGE WARENFÜHRUNG

Das innovative Flexitronic®-System überzeugt durch eine sensible Warenspannungsteuerung für elastische und bi-elastische Stoffe. Je nach Anwendung wird entweder über eine pneumatische Tänzerwalze oder mittels geregelt arbeitender Flexidrive® Zugwalzenantriebe die gewünschte Warenspannung konstant gehalten. Vielfältige optionale Einrichtungen ermöglichen eine optimale Gestaltung des Warenlaufs, selbst bei empfindlichen Textilien. Das komfortable Wareneinzugsystem gewährleistet jederzeit einen reibungslosen Warenfluss.

### INTELLIGENTE ANTRIEBE

Die frequenzgeregelten Direktantriebe mit Asynchron-Getriebemotoren zeichnen sich durch ihre hohe Zuverlässigkeit aus. Der geringe Energieverbrauch und die wartungsarme Ausführung der Antriebe gewährleisten insgesamt niedrige Betriebskosten.

### NUTZERFREUNDLICHE BEDIENUNG

Der menügeführte Farb-Touch-Screen vereint alle Funktionen in einer verständlichen Ansicht. Die Bediensoftware ist einfach und übersichtlich gestaltet, so dass sie jeder Bediener in kürzester Zeit erlernen kann. Dadurch sind die Xetma Vollenweider Maschinensysteme wesentlich einfacher zu handhaben als vergleichbare Maschinen. Alle technologischen Parameter werden am Touch-Screen eingestellt und können in der Steuerung als Rezepte gespeichert werden. So lassen sich alle Veredlungsergebnisse jederzeit sicher reproduzieren.

### REIBUNGSLOSE ABLÄUFE

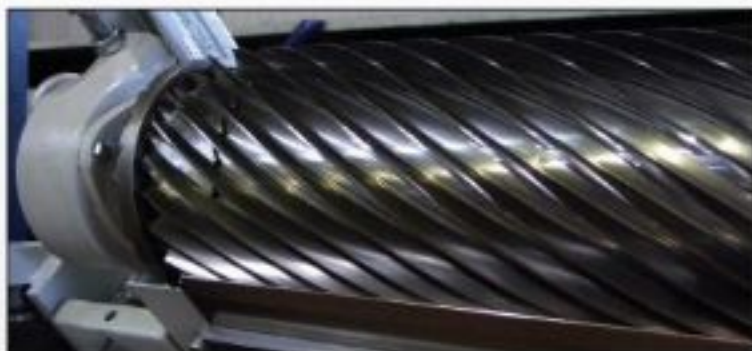
Das integrierte Diagnosesystem meldet Störungen und gibt selbstständig nützliche Hinweise zu den Ursachen der Fehler. Auftretende Störungen können über leicht verständliche Hilfetexte schnell selbst behoben werden. Für Ferndiagnose bzw. -wartung steht ein optionaler Remote-Zugriff vom Xetma-Vollenweider Servicecenter zur Verfügung. Differenzierte User-Level gewährleisten eine hohe Prozesssicherheit.

### ZEITSPARENDE PROZESSE

Die Anlage kann zur besseren Abstimmung der Prozesse in ein zentrales Erfassungssystem für Betriebsdaten eingebunden werden. Das einzigartige Schnellwechselsystem ermöglicht einen schnellen und mühelosen Austausch des Scherzeuges. Komfortable Wartungs- und Serviceprogramme unterstützen den Anwender bei der Durchführung von Instandhaltungsarbeiten. So ist Ihre Maschine stets produktionsbereit.

### UMWELTFREUNDLICHE TECHNOLOGIE

Die Veredlungstechnologien von Xetma Vollenweider sind durchweg Trockenveredlungstechnologien. Somit sparen Sie nicht nur Kosten, sondern schonen auch wertvolle Ressourcen.



## TECHNOLOGY THAT YOU CAN TRUST

### SENSITIVE GUIDANCE OF FABRIC

The innovative Flexitronic® system convinces by a sensitive control of fabric tension for elastic and bi-elastic materials. Depending on application, the desired *tension of the material is kept constant* either by a pneumatic dancing roller or by regulated working Flexidrive® draw roller drives. Diverse optional devices allow an *optimal setting of the fabric run* even in the case of sensitive materials. The convenient feeding system of the fabric affords *smooth flow of the fabric* at any time.

### INTELLIGENT DRIVES

The frequency-controlled direct drives with asynchronous gear motors excel by their *high reliability*. The *low energy consumption* and the low maintenance execution of the drives result in general *low operating costs*.

### USER-FRIENDLY OPERATION

The menu-guided colour touch screen combines all functions in one *understandable view*. The operating software is presented *plainly and clearly* so that any user can *learn it in the shortest possible time*. Thus the Xetma Vollenweider machine systems are *much easier to operate* than comparable machines. All technological parameters are set on the touch-screen and can be saved in the control as presets. This way all finishing results can be *reproduced safely* at any time.

### TROUBLE-FREE FUNCTIONING

The integrated diagnose system reports faults and *independently* gives useful advice about the causes of the faults. You can remedy occurring malfunctions yourself quickly through *easily understandable* help texts. For long-distance diagnose or maintenance, optional *remote access* by the Xetma Vollenweider Service Centre is available. A *high degree of process assurance* is achieved by differentiated user levels.

### TIME SAVING PROCESSES

For *better synchronization of the processes*, the installation can be linked to the operation data collection system. The unique fast-change system makes for *quick and easy exchange* of the shearing equipment. Convenient maintenance and service programs assist the user in the carrying out of maintenance work. Thus your machine is *always ready for production*.

### ECO-FRIENDLY TECHNOLOGY

All finishing technologies by Xetma Vollenweider are *dry finishing* technologies. This not only helps *save costs* but at the same time *valuable resources*.





## OPTIMA XSI

### SCHEREN

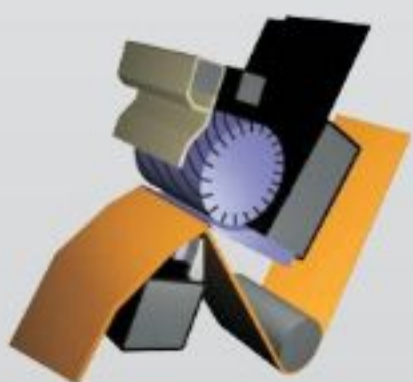
- Scheren aller Arten von Strick- und Wirkware sowie von Mittel- und Hochflor-Webwaren
- automatischer Warenrücklauf bei Maschinenstop zur Vermeidung von Scheransätzen
- Anscherautomatik zur Feinjustierung und Kontrolle des Scherbildes
- optimale Ausführung des Schertischprofils je nach Warenart
- hochpräzise Zustellung des Schertisches mittels neuartigem Zustellmechanismus
- Automatikprogramme zur Konstanthaltung der gewünschten Florhöhe
- automatische Scherzeugschmierung für maximale Standzeit
- Nahtautomatik für automatische Abschwengung des Scherzeugs bei Nahtpassage, Polier- und Tigereinheit sowie Bürsteinrichtung

Warengeschwindigkeit	3 - 50 m/min
Scherzylinderdrehzahl	600 - 1.200 U/min
Nennbreite	1.800 - 3.600 mm
Arbeitsbreite	1.600 - 3.400 mm

### SHEARING

- shearing of all kinds of knitted and warp-knitted as well as of medium and high pile woven materials
- automatic back-traveling when machine stops, in order to avoid shearing starting marks
- automatic shearing starting process for fine adjustment and control of shearing result
- optimal design of shearing table profile depending on kind of fabric
- high-precision setting of the shearing table using a new kind of setting mechanism
- automatic programmes for keeping the desired pile height constant
- automatic lubrication of shearing equipment for maximum serviceable life
- automatic swivelling away of shearing, polishing and tigering units as well as brushing unit during seam passage

Fabric Speed	3 - 50 m/min
Shearing Cylinder rpm	600 - 1,200 rpm
Normal Width	1,800 - 3,600 mm
Working width	1,600 - 3,400 mm







## OPTIMA XS2

### SCHEREN

- Scheren aller Arten von Strick- und Wirkware sowie von Mittel- und Hochflor-Webwaren
- kompakte Ausführung mit 2 Schereinheiten in einer Maschine
- Optima XS2 ist in zwei Varianten verfügbar:
  - zweimal Vorderseite scheren
  - einmal Vorderseite und einmal Rückseite scheren
- doppelte Ausbringungsmenge bei gleichem Platzbedarf

### POLAUFBEREITUNG

- Vielfalt an Zubehöreinheiten zur optimalen Anpassung an die jeweilige Anwendung, z.B.:
  - Bürsteinheit zur Aufbereitung des Pils vor dem Scheren
  - Klopfwalze zum Entfernen von Verunreinigungen auf der Warenrückseite
  - Zustreichbürste zum Ausrichten des Flors nach dem Scherprozess

Warengeschwindigkeit	3 - 50 m/min
Scherzylinderdrehzahl	600 - 1.200 U/min
Nennbreite	1.800 - 3.600 mm
Arbeitsbreite	1.400 - 3.400 mm

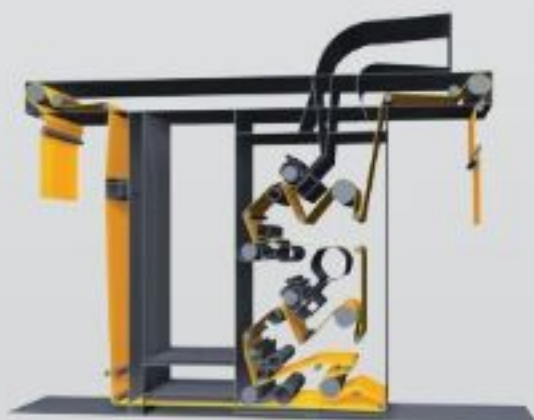
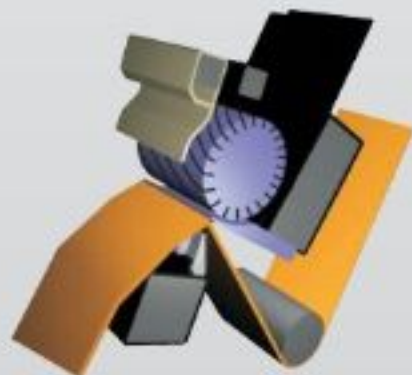
### SHEARING

- shearing of all kinds of knitted and warp-knitted as well as of medium and high pile woven materials
- compact execution with 2 shearing units in one machine
- Optima XS2 is available in two versions:
  - shearing front side twice
  - shearing front side once and reverse side once
- double output with same space requirement

### PILE PREPARATION

- variety of accessories to ideally match the required application, e.g.:
  - brushing unit for preparing the pile prior to shearing
  - beating roller for the removal of impurities on the reverse side of the fabric
  - brushing roller for straightening of pile after the shearing process

Fabric Speed	3 - 50 m/min
Shearing Cylinder rpm	600 - 1,200 rpm
Nominal Width	1,800 - 3,600 mm
Working Width	1,400 - 3,400 mm





## OPTIMA XPS

### POLIEREN UND SCHEREN

- variable Drehrichtung des Polierzylinders für wahlweises Glätten oder Heben des Fells
- höhere Effektivität des Polierzylinders durch neuartiges Heizkonzept
- gleichmäßige Wärmeverteilung durch feststehende Infrarot-Heizelemente
- Aufheizautomatik zum zeitlich kontrollierten Vorheizen des Polierzylinders
- sicheres Herunterfahren der Anlage durch Abkühlautomatik
- regelbarer Anpressdruck und Anpresshöhe des Polierzylinders zum Poliertisch mit automatischer Konstanthaltung
- optionale Schlagleisten an den 4 spiralförmigen Nuten - je nach Anwendung glatt oder mit Hieb
- zusätzlich alle Vorteile des Scherens wie bei Optima XS

Warengeschwindigkeit	3 - 50 m/min
Scherzylinderdrehzahl	600 - 1.200 U/min
Polierzylinderdrehzahl	600 - 1.200 U/min
Polierzylindertemperatur	max. 200°C
Nennbreite	1.800 - 3.600 mm
Arbeitsbreite	1.600 - 3.400 mm

### POLISHING AND SHEARING

- variable rotation direction of polishing cylinder for optionally smoothing or raising of pile
- higher effectiveness of polishing cylinder through new heating concept
- equal distribution of heat through fixed infrared heating elements
- automatic to trigger heating process for time-controlled preheating of polishing cylinder
- safe turning off of installation through cooling down automatic
- adjustable pressure and depth of pressure of polishing cylinders to the polishing table with automatic to keep constant
- optional cleats at the 4 spiral grooves - depending on application plain or with file cut
- additionally all advantages of shearing as with Optima XS

Fabric Speed	3 - 50 m/min
Shearing Cylinder rpm	600 - 1,200 rpm
Polishing Cylinder rpm	600 - 1,200 rpm
Polishing Cylinder Temperature	max. 200°C
Nominal Width	1,800 - 3,600 mm
Working Width	1,600 - 3,400 mm





## OPTIMA XPPS

### POLIEREN & POLIEREN UND SCHEREN

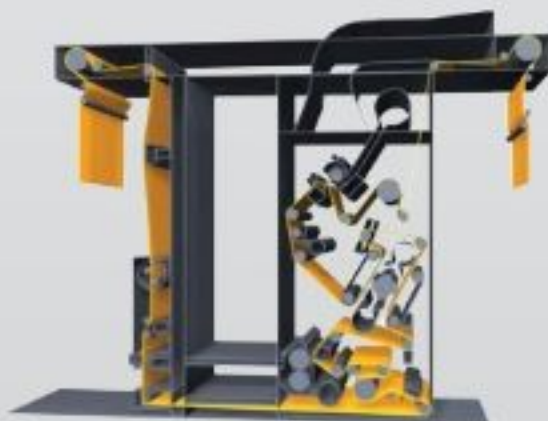
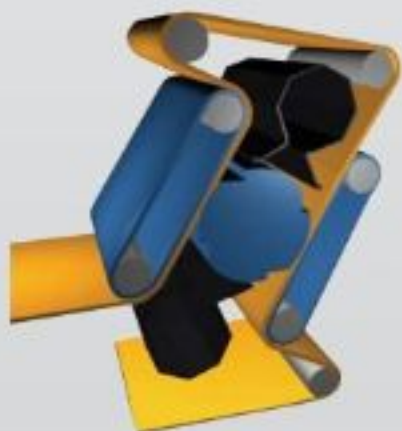
- gleiche Vorteile wie Optima XPS, jedoch mit patentierter Doppel-Polierereinheit
- 2 Polierstellen an einem Polierzylinder
- mehr Glanzeffekte auf der Ware und optimale Polaufbereitung vor den Scheren
- höhere Effizienz durch doppelte Nutzung der Wärmewirkung des Polierzylinders
- zusätzlich alle Vorteile des Scherens wie bei Optima XS

Waregeschwindigkeit	3 - 50 m/min
Scherzylinderdrehzahl	600 - 1.200 U/min
Polierzylinderdrehzahl	600 - 1.200 U/min
Polierzylindertemperatur	max. 200°C
Nennbreite	1.800 - 3.600 mm
Arbeitsbreite	1.400 - 3.400 mm

### POLISHING & POLISHING AND SHEARING

- same advantages as Optima XPS, but with patented double polishing unit
- 2 polishing spaces on one polishing cylinder
- more gloss effect on the material and optimal pile preparation prior to shearing
- higher efficiency through double use of heat effect of polishing cylinders
- additionally all advantages of shearing as with Optima XS

Fabric Speed	3 - 50 m/min
Shearing Cylinder rpm	600 - 1,200 rpm
Polishing Cylinder rpm	600 - 1,200 rpm
Polishing Cylinder Temperature	max. 200°C
Nominal Width	1,800 - 3,600 mm
Working Width	1,400 - 3,400 mm





## OPTIMA XTS

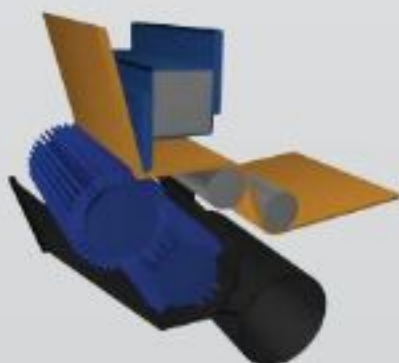
### TIGERN UND SCHEREN

- exakte Anstellung des Rauhtisches zur Regulierung der Rauhtiefe
- variable Drehzahl und Drehrichtung der Rauhwalze
- umschaltbarer Tigertisch mit einem Rund- und einem Spitzprofil für flexible Bearbeitung unterschiedlicher Waren
- vollautomatisches Abschwenken des Rauhtisches bei Nahtpassage und Maschinenstop
- leistungsfähige Absaugung direkt am Tigermodul
- zusätzlich alle Vorteile des Scherens wie bei Optima XS

Warengeschwindigkeit	3 - 50 m/min
Scherzylinderdrehzahl	600 - 1.200 U/min
Tigerdrehzahl	400 - 800 U/min
Nennbreite	1.800 - 3.600 mm
Arbeitsbreite	1.600 - 3.400 mm

### POLAUFBEREITUNG

- Vielfalt an Zubehöreinrichtungen zur optimalen Anpassung an die jeweilige Anwendung, z.B.:  
Infrarot-Heizeinrichtung zum thermischen Vorbehandeln von Poltextilien aus natürlichen und synthetischen Fasern  
Dämpfeinrichtung zum Befeuchten und thermischen Vorbehandeln der Ware mittels Dampf



### TIGERING AND SHEARING

- exact positioning of raising table to regulate the raising depth
- variable rotation speed and direction of raising roller
- tigering table exchangeable for round or pointed profile for flexible working of different materials
- fully automatic swivelling away of raising table with seam passages and machine stop
- efficient dedusting directly at tigering module
- additionally all shearing advantages as with Optima XS

Fabric Speed	3 - 50 m/min
Shearing Cylinder rpm	600 - 1,200 rpm
Tigering rpm	400 - 800 rpm
Nominal Width	1,800 - 3,600 mm
Working Width	1,600 - 3,400 mm

### PILE PREPARATION

- variety of accessory installations for optimal adaptation to the individual application, e.g.:  
infrared heating devices for thermal pre-treatment of pile textiles of natural or synthetic fibres  
steaming device for moistening and thermal pre-treatment of material with steam





## OPTIMA XS+F & OPTIMA XFS

### AUFSCHNEIDEN UND SCHEREN

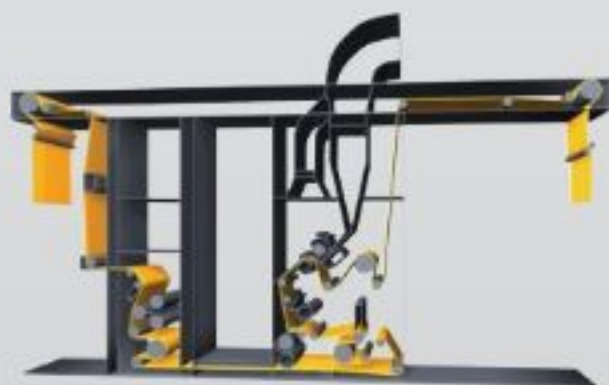
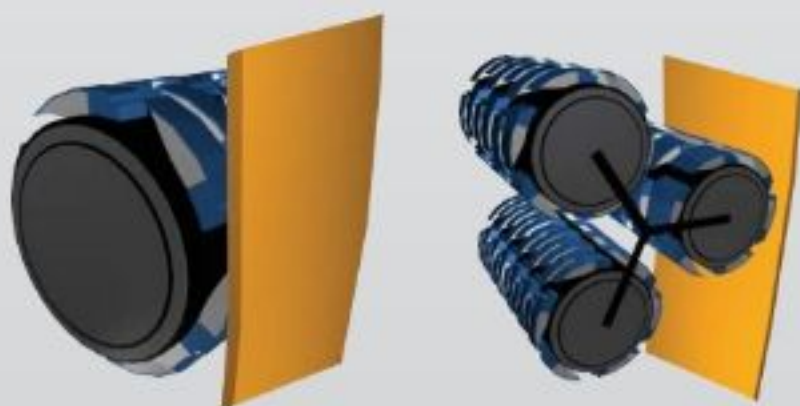
- Xetma Vollenweider-Aufschneidwalze mit optimaler Fänger- und Messergröße, je nach Stickdesign
- flexibler Aufbau der Aufschneidwalze für einfache Umrüstung der Fängergröße
- Fängerelemente in hochwertiger Stahlausführung
- Spezial-Schertisch zur Verhinderung von Schussverschiebungen
- erweiterte Flexibilität über separates TriFloat®-Modul mit 3 Aufschneidwalzen unterschiedlichen Designs
- feststehender Aufschneidkamm für Stickerei-Sprengfäden und Schussflozierungen
- zusätzlich alle Vorteile des Scherens wie bei Optima XS

Warengeschwindigkeit	3 - 50 m/min
Scherzylinderdrehzahl	600 - 1200 U/min
Aufschneidwalzendrehzahl	bis NB 2.600 mm: 100-400 U/min ab NB 3.000 mm: 100-300 U/min
Nennbreite	1.800 - 3.600 mm
Arbeitsbreite	1.400 - 3.400 mm

### CUTTING AND SHEARING

- Xetma Vollenweider cutting roller with optimal thread-catcher and knife size, depending on embroidered design
- flexible construction of cutting roller for simple re-setting of catcher size
- catcher elements in high quality steel execution
- special shearing table to prevent welt distortion
- increased flexibility via separate TriFloat® module with 3 cutting rollers of different design
- fixed cutting comb for pattern separating threads of embroidery and welt floats
- additionally all shearing advantages as with Optima XS

Fabric Speed	3 - 50 m/min
Shearing Cylinder rpm	600 - 1,200 rpm
Cutting Roller rpm	up to NW 2,600 mm: 100-400 rpm from NW 3,000 mm: 100-300 rpm
Nominal Width	1,800 - 3,600 mm
Working Width	1,400 - 3,400 mm





## PEERLESS XS

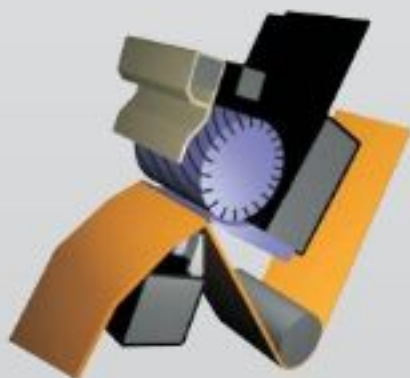
### SCHEREN

- Scheren von Webwaren aus Wolle und Wollmischungen
- Xetma Vollenweider Schwertschnittscherzeug® für nachhaltig beste Scherergebnisse
- automatischer Warenrücklauf bei Maschinenstop zur Vermeidung von Scheransätzen
- Anscherautomatik zur Feinjustierung und Kontrolle des Scherbildes
- hochpräzise Zustellung des Schertisches mittels neuartigem Zustellmechanismus
- Automatikprogramme zur Konstanthaltung der gewünschten Florhöhe
- Schutz der Webkanten durch Kantenabsenkung mittels Piano-Schertisch
- automatische Scherzeugschmierung für maximale Standzeit

Warengeschwindigkeit	5 - 50 m/min
Scherzylinderdrehzahl	600 - 1.200 U/min
Nennbreite	1.800 - 3.600 mm
Arbeitsbreite	1.600 - 3.400 mm

### FLORAUFBEREITUNG

- Vielfalt an Zubehöreinheiten zur optimalen Anpassung an die jeweilige Anwendung, z.B.:
  - Bürsteinheit zur Aufbereitung des Flors vor dem Scheren
  - Klopfwalze zum Entfernen von Verunreinigungen auf der Warenrückseite
  - Dämpfeinrichtung zum Vorbehandeln der Wolle mittels Wärme und Feuchtigkeit
  - Zustreichbürste zum Ausrichten des Flors nach dem Scherprozess



### SHEARING

- shearing of woven fabrics of wool and wool mixtures
- Xetma Vollenweider Heavy Duty Shearing Units® for consistent best shearing results
- automatic travelling backwards of material when machine stops in order to avoid shearing starting marks
- automatic shearing starting process for the fine adjustment and control of shearing result
- high-precision setting of shearing table by means of new setting mechanism
- automatic programs to keep desired pile height constant
- protection of selvages by lowering of edges by means of piano shearing table
- automatic lubrication of shearing equipment for maximum serviceable life

Fabric Speed	5 - 50 m/min
Shearing Cylinder rpm	600 - 1200 rpm
Nominal Width	1,800 - 3,600 mm
Working Width	1,600 - 3,400 mm

### PILE PREPARATION

- variety of accessory devices for the optimal adaptation to the individual application, e.g.:
  - brushing unit for the preparation of pile prior to shearing
  - beating roller to remove impurities on the reverse side of fabric
  - steaming device to pre-treat wool by means of heat and humidity
  - brushing roller to align pile after shearing process





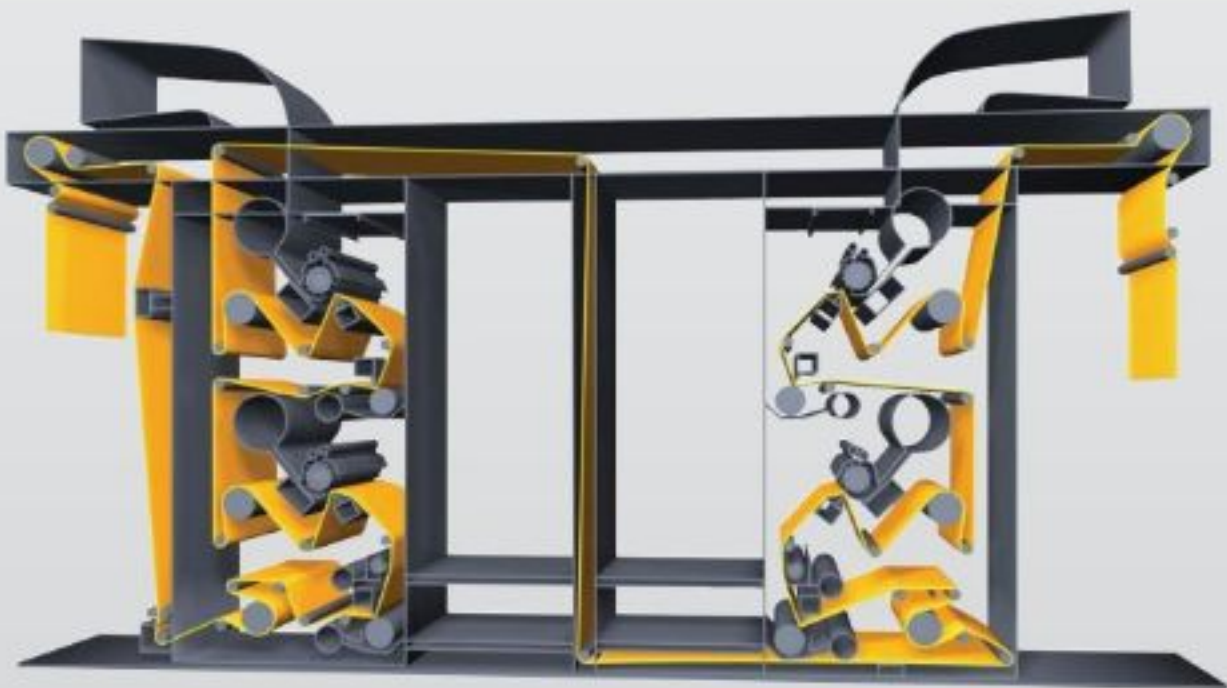
## PEERLESS XS IN ANLAGEN • PEERLESS XS IN LINES

### LINKS- UND RECHTSSCHUR

- beliebige Kombinationen aus Links- und Rechtsschur mit bis zu 4 Schnittstellen
- Anordnung in Scherstrassen zur Steigerung der Produktivität
- problemlose Kombination mit anderen Veredlungsmaschinen der Xetma-Gruppe

### SHEARING BOTH SIDES

- optional combination of front and reverse side shearing with up to 6 cutting points
- disposition in shearing lines to increase productivity
- easy combination with other finishing machines of the Xetma group





## ZUBEHÖR

### VOLLENWEIDER SCHWERSCHNITTSCHERZEUGE®

- hochwertige Qualitätsschneidzeuge aus eigener Produktion mit Spiral- und Untermessern namhafter deutscher Hersteller

### SCHERZEUGSCHLEIFMASCHINEN EMB UND EMB-Z

- Schleifmaschinen EMB zum Einschleifen des Scherzylinders in das Untermesser (EMB)
- Schleifmaschine EMB-Z zum Schleifen der Spiralmesser auf dem Scherzylinder sowie zum Einschleifen des Scherzylinders in das Untermesser

### UNTERMESSENER-LÄPP-APPARAT ULB

- pneumatisch angetriebenes Spezialschleifgerät zum Nachschleifen (Läppen) des Untermessers in der Maschine

### DOCKENWICKELVORRICHTUNGEN

- verschiedene Zentrums- und Umfangswickler mit optionalen Erweiterungen zur Anpassung an artikelpezifische Erfordernisse

### NAHTAUTOMATIK

- zum automatischen Erkennen von Nähten und Abschnen des Schertisches sowie des Tiger- und Poliertisches bei Nahtdurchgang, um eine Beschädigung der Ware zu vermeiden. In Abstimmung mit den Gegebenheiten des Kunden wird das geeignete Nahterkennungssystem ausgewählt.

### METALLMELDER

- erkennen alle Arten von metallischen Fremdkörpern in der Ware und stoppen die Maschine automatisch, um eine Beschädigung des Scherzeuges zu vermeiden.

### KANTENAUSROLLVORRICHTUNG

- zum Ausrollen der Kanten bei Strick- und Wirkwaren unmittelbar vor dem Scherzeug

### ZUBEHÖR FÜR OPTIMA XFS OPTIMA / XS+F

- Blaseinrichtung zum Ausrichten der geöffneten Sprengfäden vor dem Scheren
- Spezial-Bürsteinheit zu sanften Anheben der Sprengfäden vor dem Scheren
- Warenführungseinrichtungen zum Ausgleich von Spannungsunterschieden in der Ware bei gestickten Kanten und Bordüren





## EXTRAS

### VOLLENWEIDER HEAVY DUTY SHEARING UNITS®

- high quality cutting devices of our own production with spiral and ledger blade from reputable German manufacturers

### SHEARING UNIT GRINDING MACHINES EMB AND EMB-Z

- grinding machines EMB to grind shearing cylinder into the ledger blade (EMB)
- grinding machine EMB-Z to grind spiral knives on the shearing cylinder as well as for grinding the shearing cylinders into the ledger blade

### RE-GRINDING APPARATUS ULB FOR THE LEDGER BLADE

- pneumatic-driven special grinding device for re-grinding of the ledger blade in the machine

### BATCH WINDING DEVICES

- several centre and surface driven winders with optional extension for adaptation to article specific requirements

### AUTOMATIC SEAM DEVICES

- for the automatic recognition of seams and swivelling away of the shearing table as well as the tigering and polishing table at passage of seams, in order to avoid damage to the fabric. The adequate seam recognition system is chosen in accordance with the circumstances of the customer.

### METAL DETECTORS

- recognize all kinds of metallic foreign objects in the material and stop the machine automatically in order to avoid damage to the shearing equipment

### SELVAGE UNROLLING SYSTEM

- to spread out curled edges of knitted and warp-knitted fabrics immediately prior to shearing

### ACCESSORIES FOR OPTIMA XFS OPTIMA / XS+F

- blowing provision to align pattern separating threads prior to shearing
- special brushing unit to gently lift pattern separating threads prior to shearing
- devices to guide fabric to compensate for differences in tension in the fabric with embroidered edges and borders





## OUR TECHNOLOGIES

SCHMIGELN & BÜRSTEN

SCHEREN

RAUHEN, SCHMIGELN & BÜRSTEN

RAUHEN

GEWEBEPUTZEN

SENGEN

TEPPICHSCHEREN

FEEL THE TOUCH

FEEL THE SOFT TOUCH

FEEL THE EVEN TOUCH

FEEL THE SMART TOUCH

FEEL THE PLUSH TOUCH

FEEL THE CLEAN TOUCH

FEEL THE SMOOTH TOUCH

FEEL THE LEVEL TOUCH

EMERIZING AND BRUSH-SUEDING

SHEARING

RAISING, EMERIZING & BRUSH-SUEDING

RAISING

POLISHING

SINGEING

CARPET SHEARING



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**ELMEGO-X**®

**TEK MAKİNE;  
ÜSTÜN KALİTE,  
YÜKSEK ÜRETİM,  
MÜKEMMEL  
VERİMLİLİK**  
SINGLE MACHINE;  
TOP QUALITY, HIGH  
PRODUCTIVITY,  
PERFECT EFFICIENCY

**KONTİNÜ TUMBLER KURUTMA**  
CONTINUOUS TUMBLER DRYER

MORE THAN  
**1000**  
MACHINES  
ALL AROUND THE WORLD.

Flok / Flock



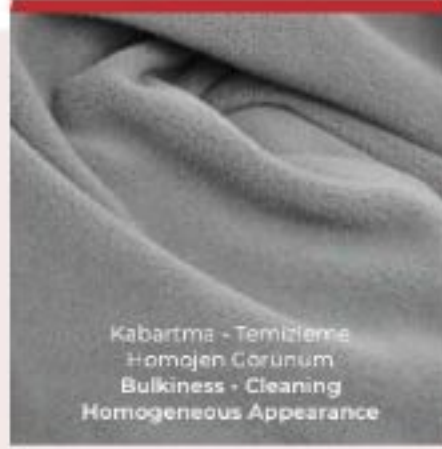
Temizleme - Homojen Görünüm  
Cleaning - Homogeneous Appearance

Niki Kadife / Niki Velvet



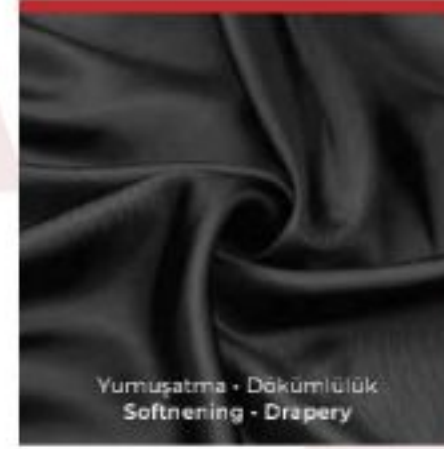
Hav Kaldırma - Hacimlendirme  
Gerilim Giderme - Homojen Görünüm  
Pile Pop up - Volume - Stress Relief  
Homogeneous Appearance

Polar / Polar



Kabartma - Temizleme  
Homojen Görünüm  
Bulkiness - Cleaning  
Homogeneous Appearance

Saten / Satin



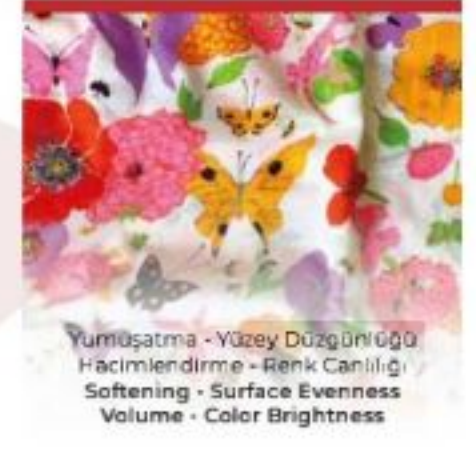
Yumuşatma - Dökümlülük  
Softening - Drapery

Şardonlu / Raising



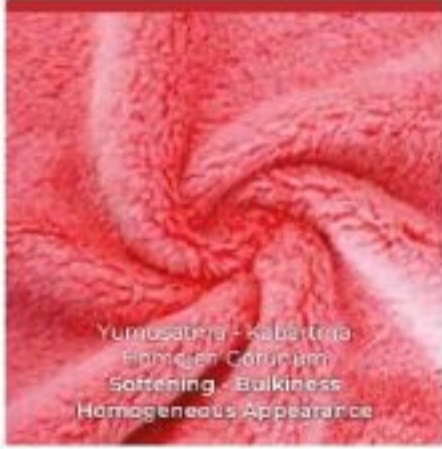
Toz ve Elyaf Temizleme - Hacimlendirme  
Dust and Fiber Cleaning - Volume

Pigment Baskı / Pigment Prints



Yumuşatma - Yüzey Düzgünlüğü  
Hacimlendirme - Renk Canlılığı  
Softening - Surface Evenness  
Volume - Color Brightness

Welsoft / Welsoft



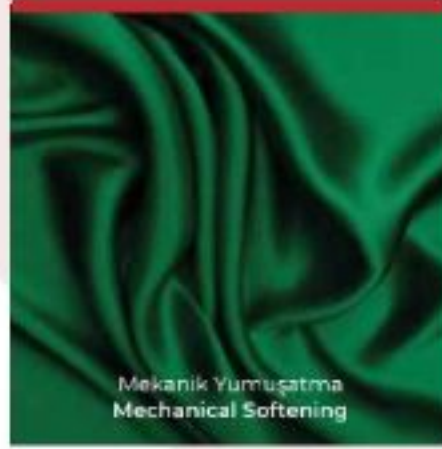
Yumuşatma - Kabartma  
Homojen Görünüm  
Softening - Bulkiness  
Homogeneous Appearance

Polyester / Polyester



Yumuşatma - İpeksi Dokunus  
Kırışma Dayanıklılığı  
Softening - Silky Touch  
Wrinkle Resistance

İpek / Silk



Mekanik Yumuşatma  
Mechanical Softening

Örgü / Knit



Hacimlendirme - Kenar Kıvrım Düzeltme  
Volume - Edge Curl Opening

Baskı Öncesi / Before Printing



Tüm baskı prosesleri öncesi temizlik ve hidrophilite.  
Cleaning and hydrophilicity before all printing process.

Bir makineden çok fazlası...  
More than a machine...

**ELMEGO-X**<sup>®</sup>

Açık en formdaki Dokuma, örgü ve non-woven kumaşların kontinü olarak işlemlerine uygundur. Modüler yapısıyla, arzu edilen kapasiteye göre kabin sayısı konfigüre edilebilir. Kumaş tiplerine göre, ön terbiye ya da son terbiye işlemleri için farklı makinelere ya da proseslere adapte edilebilir. Üretkenlik, ürün kalitesi ve enerji verimliliği açısından bakıldığında dünya tekstil piyasasında mevcut makineler içerisinde açık ara en kullanışlı makinedir.

It is suitable for the continuous processes of woven, knit and non-woven fabrics in open width form. Thanks to its modular structure, number of cabins can be configured according to desired capacity. In accordance with the fabric types, machine can be adapted to different machines or processes for pre-treatment or finishing. It is by far the most useful machine in the current machines in world textile market by productivity, product quality and energy efficiency point of view.



Tüm baskı prosesleri öncesinde kumaşın mekanik temizliği ve hidrophilitesinin artırılması amacıyla kullanılabilir. Bu sayede baskı hatalarının önüne geçilerek baskı proses kalitesi artırılmış olur. Baskı sonrasında ise, tüm baskı tiplerinde canlı renkler elde edilmesi amacıyla kullanılmaktadır.

Machine can be used for mechanical cleaning and better hydrophilicity before all printing processes. Thanks to this, printing process quality can be improved by avoiding printing errors. After printing process also, machine can be used for providing brighter colors in all printing types.

Kumaş tiplerinize göre en uygun proses çözümünüzü beraber oluşturabiliriz. We can create the most suitable process solutions together according to your fabric types.

[technologist@elteksmak.com.tr](mailto:technologist@elteksmak.com.tr)

## ÇALIŞMA PRENSİBİ

Makine içerisine sürekli formda sevkedilen kumaş, hava kanalı içerisinde sıcak hava vasıtasıyla kanal çıkışlarına yerleştirilmiş çarpma ızgaralarına çarptırılır. Buradan da ağırlık kontrolü prensibi-ne göre çalışan J-box haznelerinde biriktirilir. Kumaş ağırlığı operatör panelinden girilen set değerine ulaştığında hava akışı otomatik olarak diğer yöne çevrilir ve kumaş diğer J-Box'a transfer edilir. Sıcaklık ve mekanik vuruşun etkisiyle kurutma işlemi gerçekleştirilmiş olur. Özel tasarlanmış hava kanalı yapısıyla ve hassas ayar özellikleriyle kumaşa en homojen şekilde uygulanan hava, her bir kumaş lotu için aynı efekti (tuşe) garanti eder. Elmego-X Kontinü-Tumbler Kurutma Makinesi, arzu edilen kapasite ve çalışacak kumaş tiplerine göre bir ya da birden fazla eş kabinden oluşacak şekilde modüler yapıda dizayn edilmiştir. Proses gereksinimlerine göre kabinler birbiri ile eş parametrelerde ya da birbirinden bağımsız olacak şekilde farklı parametrelerde çalıştırılabilir. Bu sayede proses ihtiyaçları en doğru şekilde karşılanır ve mükemmel üretim kalitesi yakalanmış olur. Entegre yüksek performanslı filtreleme sistemi sayesinde bakım ve temizlik maliyetleri minimize edilir. Tüm bu avantajları ile Elmego-X Kontinü tumbler Kurutma Makinesi, kumaşın metre ya da kilogram bazında en optimum şartlarda prosese tabi tutulmasını sağlar.

## WORKING PRINCIPLE

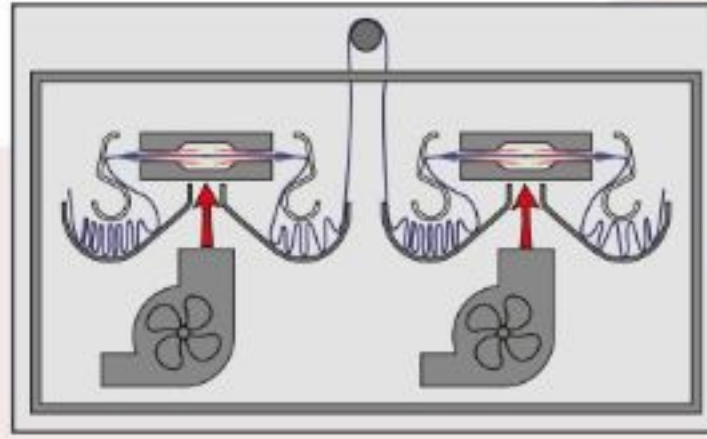
Fabric, which is transferred into the machine in continuous form is blown to the blow walls placed at the exits of the nozzle via hot air. Then, accumulated into the J-Boxes which works according to weight control principle. As soon as the weight of the fabric reaches to the set level inserted via operator panel, air flow is diverted towards other direction and fabric is accumulated to other J-Box. By the impact of temperature and mechanical hit, drying process is performed. Air, which is homogeneously applied to fabric by help of specially designed air nozzle structure and by sensitive adjustment features guarantees the same effect (touch feel) for every lot of fabric. In accordance with desired capacity and fabric types, Elmego-X Continuous Tumbler Dryer Machine has been designed in modular structure which can be composed of single or multiple cabins. According to process requirements, cabins can work with identical parameters or with different parameters individually. Thanks to this availability, process requirements can be provided in most accurate way and excellent product quality can be achieved. Maintenance and cleaning costs is minimized by help of integrated high performance filter system. With all those advantages, Elmego-X Continuous Tumbler Dryer Machine provides the most optimum conditions for the processed fabric in base of meter or kilogram.

## OPERATÖR PANELİ

15" dokunmatik ekran ve özel tasarım kullanıcı dostu arayüz yardımıyla makine kontrolleri, parametre ayarlamaları, anlık bilgi takibi, çalışma istatistikleri, reçeteler, vb. makine üzerinden veya ağa bağlı bir PC üzerinden kontrol edilip gözlemlenebilmektedir. Öncesine ve sonrasına yerleştirilen diğer ekipman ve makineler ile kolaylıkla entegre edilip, senkron çalışması sağlanabilmektedir. İnternet hattı üzerinden uzaktan erişim ile program güncellemele-ri, arıza tespit ve arıza giderilmesi sağlanabilmektedir.

## OPERATOR PANEL

By help of 15" touch screen and a specially designed user-friendly interface, machine controls, parameter settings, monitoring instant information, working statistics, recipes, etc. can be controlled and observed on the machine or via computer connected to the internal network. It can be easily integrated with other equipment and machines placed before and after and a synchronous operation can be achieved. Program updates, fault detection and troubleshooting can be provided via remote access by an internet connection.



## ÇOKLU KUMAŞ GEÇİŞİ

Bir veya daha fazla sayıda dar ende kumaşlar Elmego-X Kontinü Tumbler Kurutma Makinesinde aynı anda problemsiz bir şekilde işlem görürler.

## MULTIPLE FABRIC PASSES

One or more than one narrow-width fabrics can be processed at the same time on the Elmego-X Continuous Tumbler Dryer Machine without any problem.



## BUHARLAMA SİSTEMİ

Makine giriş kısmına yerleştirilen giriş buharlama ünitesi ve kabin/ler içerisine yerleştirilen kabin içi buharlama sistemi vasıtasıyla kumaşa direkt olarak, yoğunlaşmadan, homojen şekilde buhar uygulanabilir. Özellikle kuru proseslerde, kimyasal kullanımı olmadan mekanik yumuşatma, kumaş yüzey kalitesinin artırılması, hacimlendirme ve kabartma, baskı öncesi temizlik, statik elektrik giderme, şardon tozu temizleme, traşlama veya kaplama gibi sonraki prosese kumaş hazırlamaya yönelik özel işlemler için mükemmel sonuçlar sağlanır.

## STEAMER

By entry steaming unit placed at the machine entry and cabin internal steaming system placed inside the chamber/s, homogeneous steam application can be done directly to fabric without any condensation. Especially for dry processes, superior results can be achieved for mechanical softening without chemical usage, improving the surface quality of fabric, volume and bulkiness, cleaning before printing, static electric elimination, cleaning of raising dust, special processes for preparing the fabric for post processes like shearing or coating.

## RELAX & CRASH

J-boxlarda biriktirilecek kumaş miktarı operatör paneli vasıtasıyla ayarlanabilir. Makine girilen set değerine göre J-boxler içerisindeki kumaş miktarını stabil tutar. Çalışılan kumaş yüksek/düşük çarbeli ve/veya gergin/gerginimsiz şekilde prosese tabi tutulabilir. Bu sayede hem ağır gramajlı kumaşlarda hem de hafif gramajlı hassas kumaşlarda mükemmel efekt kalitesi sağlanabilir.

## RELAX & CRASH

Accumulated fabric amount in the J-boxes can be adjusted via operator panel. Machine keeps the fabric amount stable inside the chambers according to the set value inserted. Fabric can be processed in high/low strike and/or stretched/relax forms. Thanks to this excellent effect quality can be provided for both heavy gsm and light gsm sensitive fabrics.

## FILTRELEME SİSTEMİ

Kumaş taşıma kanalından çıkan hava içerisinde kumaş üzerinden gelen nem, toz ve elyaf parçacıkları da bulundurulur. Makine içerisinde turbo sistemle sirküle edilen hava içerisindeki parçacıklar makine içerisinde boydan boya uzanan hareketli termoplastik elek vasıtasıyla tutulur. Elek ileri geri hareket ederek üzerindeki parçacıkları kabin dışına taşır. Eleğin kabin çıkışına yerleştirilmiş olan döner fırça - emiş düzeneği ve çarpma duvarları arkasına yerleştirilmiş olan toz emiş kanalları vasıtasıyla toplanan parçacıklar toz dolaplarına yönlendirilerek üzerindeki toz ve elyaf parçacıkları paslanmaz malzemeden üretilmiş filtre üzerinde tutulur. Tutulan elyaflar, döner fırçalar vasıtasıyla filtre üzerinden toz kanalına ve buradan da kanal içinde çalışan helezon vasıtasıyla toz torbalarına yönlendirilir. İşlenen kumaşın bıraktığı toz ve atık elyaf yoğunluğuna göre filtre sistemi çalışma zamanı, istenilen aralıkta ayarlanabilir. Mükemmel şekilde çalışan filtreleme sistemi tıkanmayı önleyerek, makine performans kaybını ve gereksiz makine duruşlarını ortadan kaldırır. Bu sayede makine temizleme maliyeti minimize edilmiş olur.

## FILTER SYSTEM

Air blown from the nozzle also includes humidity, dust and fiber wastes which come from fabric body. Particles inside the circulated air in the chamber by turbo system are held by help of moving thermoplastic filter belt laid inside the chamber from entry to end. Filter belt which moves forward and rear carries the particles on its body to outside the chambers. Particles collected by rotational brush and suction mechanism placed at the cabin exit point of the filter belt and by dust suction channels placed just behind the blow wall are diverted to dust boxes, dust and fiber wastes inside are held by filter which is produced by stainless material. Hold fibers are transferred to dust channel via rotational brushes and from dust channel to dust bags by help of extruder placed inside the channel. In accordance with the intensity of dust and fiber waste of the processed fabric, working time of the filter system can be adjusted in desired time period. Excellently working filter system eliminates performance loss and unnecessary machine stops by avoiding clogging. Thanks to this, cost of the machine cleaning can be minimized.

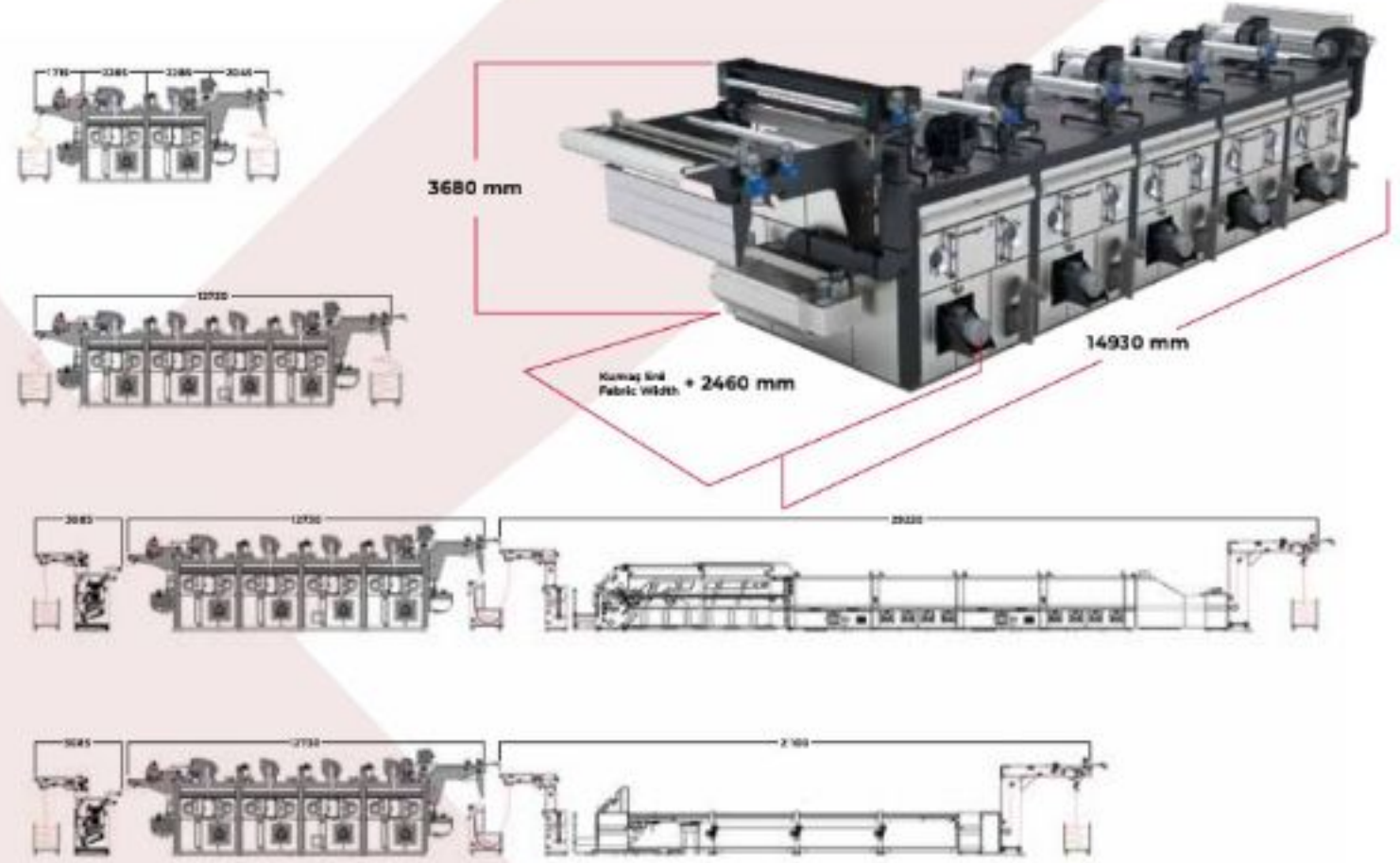


## ELMEGO-X TEKNİK ÖZELLİKLER ELMEGO-X TECHNICAL SPECIFICATIONS

<b>ÇALIŞMA ENİ</b> 1600 - 3600 mm	<b>WORKING WIDTH</b> 1600 - 3600 mm
<b>ÜRETİM HIZI</b> 3 - 60 m / dk	<b>PRODUCTION SPEED</b> 3 - 60 m / min
<b>KUMAŞ GİRİŞİ</b> Arabadan veya Doktan	<b>FABRIC ENTRANCE</b> from Trolley or Batcher
<b>KUMAŞ ÇIKIŞI</b> Arabaya veya Doka	<b>FABRIC EXIT</b> to Trolley or Batcher
<b>AZAMİ HAVA SICAKLIĞI</b> 155°C	<b>MAXIMUM AIR TEMPERATURE</b> 155°C
<b>BUHARLAŞTIRMA KAPASİTESİ</b> 360 kg / saat / kabin	<b>EVAPORATION CAPACITY</b> 360 kg / h / chamber
<b>KURULU ELEKTRİK GÜCÜ</b> 147 kW (2 kabin için). İzve her kabin için +67 kW	<b>INSTALLED ELECTRIC POWER</b> 147 kW (for 2 chambers). Per additional chamber +67 kW
<b>KURULU TERMAL GÜÇ</b> 350 kW / saat / kabin	<b>INSTALLED THERMAL POWER</b> 350 kW / h / chamber
<b>ORTALAMA GAZ TÜKETİMİ</b> ~10 - 12 Nm <sup>3</sup> / saat / kabin	<b>AVERAGE GAS CONSUMPTION</b> ~10 - 12 Nm <sup>3</sup> / h / chamber
<b>ORTALAMA BUHAR TÜKETİMİ</b> ~250 kg / saat / kabin	<b>AVERAGE STEAM CONSUMPTION</b> ~250 kg / h / chamber
<b>AZAMİ BASINÇLI HAVA TÜKETİMİ</b> ~200 Ni / dk.	<b>MAXIMUM COMPRESSED AIR CONSUMPTION</b> ~200 Ni / min



# ELMEGO-X®



**KONTİNÜ TUMBLER KURUTMA**  
**CONTINUOUS TUMBLER DRYER**



**ELMEGO-X**®




**ELTEKSMAK**®  
DRYING TECHNOLOGIES

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**Genel Merkez / Headquarters**  
Koyunaliler Mah. Cafer Sacık Abaloğlu  
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Denizli, Türkiye



**Fabrika / Factory**  
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