



Elastomer Technology for more than 50 years

Industrial Ranges











#### MITEX - A Success Story

Founding MITEX in 1954 Hans Knott provided the beginning of our successful development. First flexo printing rolls were manufactured followed by industrial roller coverings from rubber, polyurethane, silicone and further

special materials. World-wide the patented MITEX rubber covering equipment is known and used by almost 100 licensees for the manufacturing of roller coverings with MITEX technology. Nowadays MITEX Gummifabrik manufactures roller coverings for all industrial applications. New materials are developed in our own laboratories. More than 600 compounds are available and are manufactured by our mixing department for our own roller production as well as for our compound customers. Our future



directed R&D applications, simulations and continuous information exchange with our partners within the Global Roller Technologies Group provide the basis for the modern technology supplied by MITEX.



ROTADYNE MITEX USA

GOMPLAST MITEX Spain METGUM MITEX Poland RUPLAK MITEX Lebanon

H & M ROLLERS South Africa TENGZHOU MITEX China POLYWEST POLSKA Poland



Production and research facilities of our global partners and licensees

Some of our 90 partners and licensees world-wide:

Rotation Dynamics USA Katsura Japan Gomplast Spain Hannecard Belgium Vulco Chile AFI Saudi Arabia Conteudo Brazil Rolino Morocco Lathia Rubber LRMC India Rapid Rollers Australia

#### MITEX - Your Partner for a first class Roller Covering

MITEX offers roller coverings of high quality in rubber, polyurethane, silicone and other special materials, i.e. ceramic, mill rolls and brush rolls for all applications. The materials are available in various versions and a hard-ness range from 15° Shore A - 90° Shore D.

## Important Features of MITEX Rolls:

- · long service life and cost efficiency
- · high chemical resistance
- · extreme high operating temperatures
- dynamic endurance

characteristics

- excellent wear and cut resistance
- minimal hardening and glazing
  excellent coating and transfer
- adjustable electrical properties



Modern analysis



Raw material analysis and swell tests of our compounds in customer application chemicals

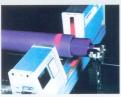
MITEX operates advanced laboratory facilities. Our investment in intensive research and development, the simulation of particular applications, the close communication with our customers and a perfect service result in an excellent final product.



Innovation and education

Modern grinding machines perform precision grinding and provide special surfaces for any type of roller applications.

Qualified technicians and our domestic and foreign team support you in selecting the appropriate material.



Contactless measurement



MITEX roller testing unit for high pressure applications



Simulation of impression roller applications

Our modern production scheduling ensures the prompt delivery of your rollers.



Heat distribution measurement in high performance rollers, shown with special R&D equipment

## Quality Management:

Our production is certified according to ISO 9001:2000

#### MITEX Laboratory - Compound Development

Compound development and fine tuning to market ready mixtures are done in our specially equipped laboratory. State of the art lab equipment is available.

The scale up of the new lab mixtures is done in our mixing department. Here we produce the latest compounds for our own roller production, for our licensees and other roll manufacturers.





Rubber and raw materials prior to compounding

Cleaning Roller . Sticky Roller for sensitive materials, such as plastic films, metal foils and paper

#### Guide Roller

high release, anti-linting, no build-up of glue orink

## Brush Roller

Paster roll covering for the splicing process in gravure and web offset presses

### Transport Roller for steel and automotive application

Special Polyurethane Coverings

- DYNAPUR heat resistant up to 140° C
- · RUGOPUR permanently rough surface (patented) with high coefficient of friction
- · STATOPUR antistatic or conductive PUR
- ROTOPUR reasonably priced rotational casting polyurethane



Ribbon flow casting machine - Production of high performance elastomer coverings



High performance calender equipped with modern measuring equipment



MITEX high performance coverings also serve in Airbus super transporters

Our R&D and service departments solve technical problems and provide solutions for our customers. Special roller coverings and roller surfaces were developed and are used, i.e. in the production of holographic, matt finished and coated plastic films as well as in many other industrial applications.

## Special Silicone Coverings

Our silicone coverings perform in temperatures of 200 - 300° C (390 - 570F).

Hardness range from 20 - 90 Shore A is available.

- SIKONORM standard silicone
- SIKODUR high textile strength
- · SIKOLEASE for extrusion lines and hot melt
  - applications
- SIKOMATT for the production of sticky
  - films and matt finishes
- SIKOPRESS for high pressure applications
- SIKOTHERM heat conductive
- SIKODUKT electrically conductive
- SIKOSTAT excellent dielectric properties



Hologram foils laminated and embossed with MITEX covering HOLODUR



Laser engraved 70 Shore D roller surface



Fluoro polymer - antiadhesive roller surface produced with modern nanotechnology



MITEX special brush roll coverings for applications in grinding and transport rollers in the steel and automotive industry and in the printing process

# MITEX - Your Partner for modern Gravure Printing

Publication, Packaging and Decorative printing, based on 24/7 production at top speed, demands extraordinary properties of impression roller coverings. Here Mitex materials have set new standards.

The materials are long lasting and provide excellent runability at top speed. Low fatigue, less hardening and glazing combined with high chemical resistance and constant electrical properties are the features of our coverings.



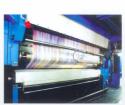
Cerutti printing unit - gravure printing width 3600 mm equipped with MITEX impression roller coverings



Schiavi - Pulsar packaging gravure press



KBA TR10 printing machine - equipped with MITEX impre



MITEX impression roller covering in 3650 mm KBA gravure printing unit at 15 m/s



Bobst Lemanic 82 - Packa





Schiavi - Packaging gravure press IDEA 1880 mm printing width



ing gravure press

Our impression roller coverings provide a fast pay back and an excellent print quality.

ESA, rubber and polyurethane coverings are available in various hardnesses and suitable for all electrical charging systems. These materials have shown excellent compatibility with all solvents, inks and substrates.

We maintain close contact to the original equipment and ESA-System manufacturers. Based on continuous research and development we offer state of the art technology.



MITEX covering for the NIPCO deflection compensation system

MITEX is one of the few authorised supplier for the NIPCO System and has provided numerous impression rollers world-wide for printing machines with more than 5 m width as well as for high temperature calendering applications.

Our coverings for paster rolls, jockey and drive wheels, sandwich roller coverings and polyurethane cutting bars for the folders have increased the performance of many printing machines world-wide

#### MITEX - Roller Covering for the Steel and Metal Industry



ThyssenKrupp Nirosta S-Rolls - Annealing and Pickling Line (APL)



Voest coilcoating equipment with MITEX roller covering ULTRAMAX



#### Properties of MITEX materials:

- · long service life
- · high chemical resistance
- excellent squeezing efficiency
- highest abrasion resistance
- enhanced cut and wear resistance





Salzgitter Flachstahl AG - MITEX rubber and PUR roller coverings



Mill roll covering MITETEC for squeezing applications in the steel and automotive industry



MITEX non-slip roller covering ULTRADUR in deflector roll positions in the new APL



ThyssenKrupp Nirosta - APL complete equipped with MITEX coverings

The most important steel, stainless steel and metal processing companies in Germany, Belgium, France, Great Britain, Italy, Poland, Spain, Scandinavia, Australia, South Korea, China, Taiwan, Japan, South Africa, Brazil, Mexico and USA use MITEX rolls or roller coverings manufactured by MITEX licensees with confidence in our technology.



ThyssenKrupp Nirosta APL - MITEX PUR roller coverings



Salzgitter Flachstahl AG - Bridle/S-Rolls MITEX covering ULTRADUR



BFI/Sundwig - Shapemeter rolls covered with MITEX excellent covering HIGH DYNAMIC

## MITEX - Roller Coverings for numerous Applications in the Plastic Industry

In extrusion, hot melt and lamination lines MITEX roller coverings are used for the manufacturing of plastic film and foils and for the converting process of paper and cardboard.

High tech foils, composite materials, embossed dashboard coverings for automotives, hygienic medical care materials, adhesive tapes, reflective foils for license plates, coverings and other special tapes are manufactured with MITEX roller coverings.

Our superfinished, temperature resistant embossing rolls have set new standards in the holographic industry. At maximum production speed the high performance materials withstand extreme temperatures, ozone, UV light, high voltage and aggressive chemicals.



3M - Reflective license plate





Küsters calender - Heat and pressure resistant MITEX KALANTEC covering 75 Shore D

#### Benecke-Kaliko decors are produced with MITEX roller coverings



#### MITEX - Roller Coverings optimised for Applications in the Paper Industry

We manufacture roller coverings in rubber, polyurethane and silicone for multiple purposes in the paper manufacturing, coating and converting industry. Further applications are press, guide and transport rollers as well as tambours.

Based on the individual requirements our coverings can be manufactured with anti-adhesive, antistatic or conductive properties.

The fastest and widest printing machines in the world are printing newspapers, magazines and catalogues on your paper with MITEX roller coverings.



MITEX paper roller coverings

### MITEX - Technical Solutions for the Textile Industry

Our rubber and polyurethane roller coverings are widely used in the textile industry. Versability and high speed, which are mainly required in the wet sections of textile machines, are provided by MITEX textile roller coverings.

MITEX roller coverings are manufactured world-wide. GOMPLAST MITEX is the most successful manufacturer of textile rollers in Southern Europe. For more than 10 years our joint venture in the United States successfully produces textile roller coverings in the local market. H&M Rollers South Africa, METGUM MITEX Poland, Ruplak Rollers Int. Lebanon as well as our partners in Australia, China, Chile, Brazil, India, Indonesia and Morocco manufacture lexitle roller coverings with MITEX Hechnology.



Küsters - Wet treatment with MITEX textile roller coverings



Babcock - Wet treatment with MITEX textile roller coverings

# MITEX - Service, Maintenance and Delivery

Our modern production scheduling ensures the prompt delivery of your rollers.

Qualified MITEX technicians support your selection of the appropriate material globally.

Bearing replacements, journal repair and the manufacturing of new roller cores of any type are performed by our service.



Quality assurance and final inspection



Special equipment for the removal of bearings



Heat induction equipment for the bearing assembly



Preparation of bearing assembly



Assembling of bearings and lubrication



Heavy duty grinding machine for precision roll grinding

Modern grinding machines perform precision grinding and the preparation of special surfaces for all kinds of rolls.

Our service involves MITEX vehicles and contracted transport companies in order to meet your requirements.



Schenk dynamic balancing machine for roller coverings



Heavy duty transports loaded with MITEX PUR and ULTRADUR coverings



MITEX Express transport service



## **MITEX Product Range**

- rubber and PU rollers
- silicone rollers
- fluoro polymer coverings · fleece for surface protection
- surface protection bars
- · steel and stainless steel cores
- FEP/PFA coverings
- · ceramic rollers for furnaces
- hard surface coatings
- magnetic rollers
- conveyor rollers
- chrome rollers
- brush rollers
- heating and cooling rollers

## **Elastomer Technology** for more than 50 years

#### Contact us

Our individual service and a cost analysis will convince you of the advantages of our elastomer technology and roller coverings.

#### **Elastomer Technology**









Gummifabrik

#### MITEX Gummifabrik - Hans Knott GmbH