

# COMPANY PROFILE



TOHO YOGYO CO.,LTD.







**Quality Policy**



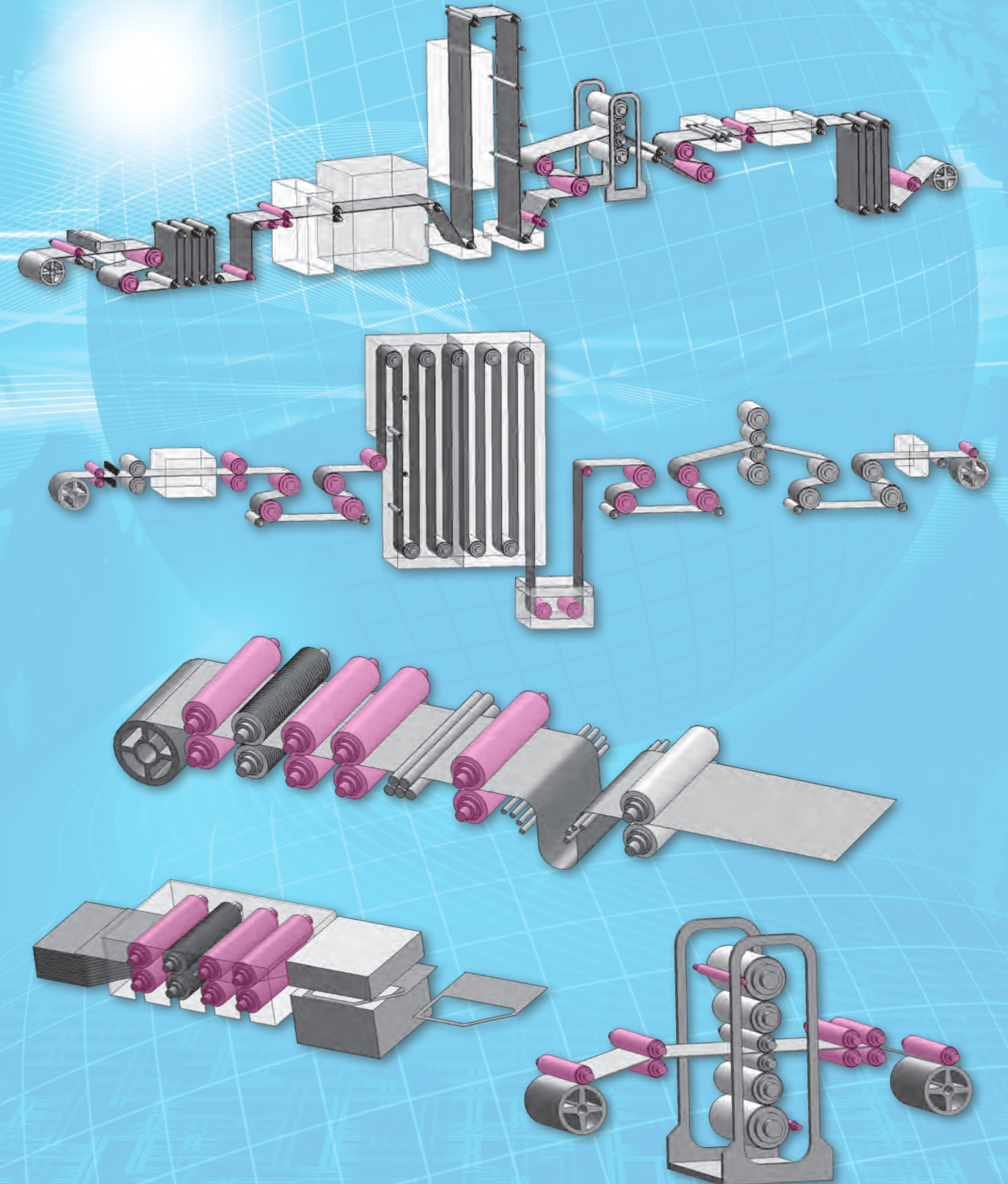
## **Quick Response & Perfectly**

**We provide quick response  
and perfect satisfaction,  
supported by Innovation, Creation,  
Research and Effort, to customers.**



**TOHO YOGYO CO.,LTD.**

**TOHO YOGYO  
and its nonwoven  
rolls aim at realizing  
Low Carbon Society.**





## TOHO 66D NON-TEX ROLL

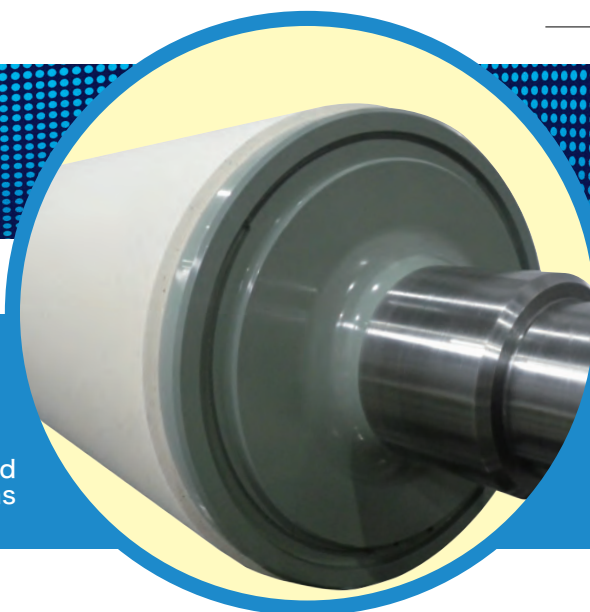
66D NON-TEX ROLL is a nonwoven fabric stacked in layers and compressed on a shaft. Different materials and compositions enable to design rolls to meet various applications.

### FEATURES

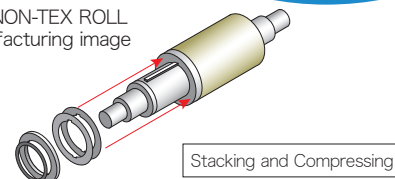
- ☞ **High Coefficient of Friction**  
No slippage on the surface of rotating rolls.
- ☞ **High Squeezing Performance**  
Squeezing and damming water, oil and others.
- ☞ **High Edge Resistance**  
High elasticity and high abrasion resistance
- ☞ **Damages and scratches on the roll are not marked on the products.**  
Protecting and preventing from marking on the products
- ☞ **Variety of applications**  
Selectable variety of nonwoven materials, compositions and hardness enable to apply for water, oil and chemical solutions.

### APPLICATIONS

- General**  
No slippage. Squeezing rolls, Oiling rolls, Control rolls, and others
- Steel and Non-Ferrous Metal Industries**  
Wringer rolls for oil, water and chemical solutions.  
Oiling rolls  
Control rolls (Tension, Pinch, Feed, Table, Guide and others)
- Automotive Industries (Car body production lines)**  
Wringer rolls, Oil cut rolls, Wiper rolls and Pinch rolls
- Film, Sheet and Textile Industries**  
Wringer rolls, Wiper rolls and Control rolls (Tension, Pinch, Feed, Table, Guide and others)



66D NON-TEX ROLL manufacturing image

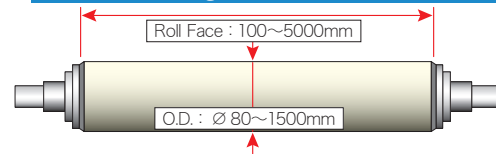


### Main Materials and Characteristics

Material	Applications	Characteristics
OW-90H	Wringer roll	Oil proof, high abrasion resistance
PC-67	Wringer roll, oiling roll	Oil proof, High squeezing performance from starting to use
PC-97	Wringer roll	High abrasion resistance, oil/water/weak-Alkali solution
OR-210	Oiling roll	High oil retention
CR-83	Control roll	High pressure and abrasion resistance
CR-87	Control roll	Acid/solvent resistance
OHP-74	Wringer roll	Acid/Alkali resistance
OHN-74	Wringer roll	Alkali resistance

Contact us for more information. We can select an appropriate non-woven material for your application.

### Available Range of Roll Size



## VACUUM ROLL • VACUUM EQUIPMENT

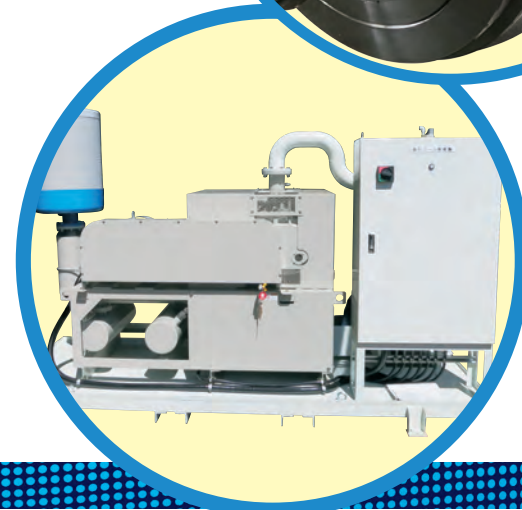
Vacuum roll is a nonwoven roll reinforced sucking and washing oil, water and other solutions by combination with a vacuum equipment.

### FEATURES

- ☞ **Speed-Up Production Line**  
Capillary phenomenon effected by nonwoven fabric and reinforced suction by a vacuum equipment enable to decrease quantity of excess oil and speed up the production line.
- ☞ **Improving Cleaning Power**  
By drastically decreasing excess oil, quantity of washing oil can be increased to improve cleaning power furthermore.
- ☞ **Adjustable Quantity of Excess Oil on the plate**  
Controlling the vacuum equipment by the inverter enable to adjust vacuuming power, and control quantity of excess oil on the plate.

### APPLICATIONS

- Steel and Non-Ferrous Metal Industries**
- Wringer rolls for ECL (Electrolytic Cleaning Line) and CAL (Continuous Annealing Line).
  - Oil cut rolls for leveler and re-coiler.
- Automotive Industries (Car body production line)**
- Wringer rolls in washing machine on the press line



## BIWAKO-ROLL

BIWAKO-ROLL is a nonwoven roll made by compressed and spirally wrapped with high functional nonwoven fabrics.

### FEATURES

#### ☞ Heat Resistance • Wear Resistance

Material	Application	Temperature range	Abration property* (cm <sup>3</sup> /1000)
PBO	Heat and wear resistance	Up to 400°C	0.14
Para-aramid	Heat and wear resistance	Up to 250°C	0.12
Meta-aramid	Heat and wear resistance	Up to 250°C	0.67

\*Abration property measurements were recorded using Acron wear tests.

#### ☞ High Heat Resistance

Replaceable with asbestos rolls

#### ☞ High Wear Resistance

Improving wear resistance for guide rolls

#### ☞ High Coefficient of Friction

No slippage for CPC rolls and other rolls

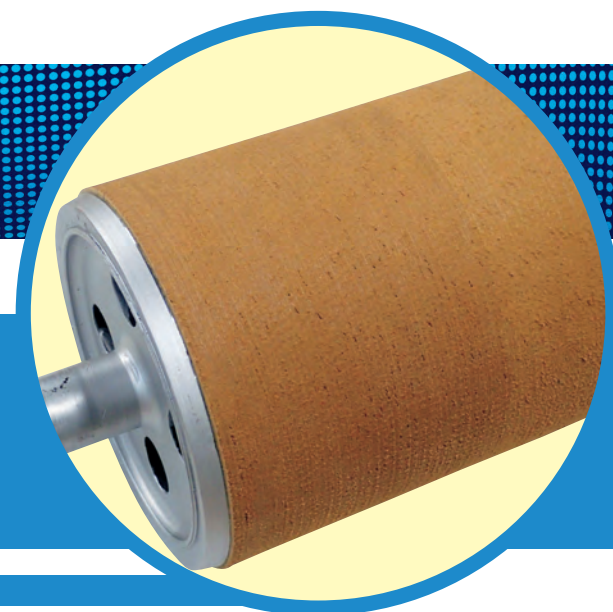
### APPLICATIONS

#### Heat Resistance Applications

Furnace rolls for APL (Annealing Pickling Line). Replaceable with asbestos rolls  
Support rolls for the top rolls at entrance side of BAL (Bright Annealing Line)  
Support rolls holding steel plates to avoid flipping in pre-heating equipment  
Catenary support rolls at entrance side of CAL (Continuous Annealing Line)  
Support rolls in cooling area in CAL (Continuous Annealing Line)

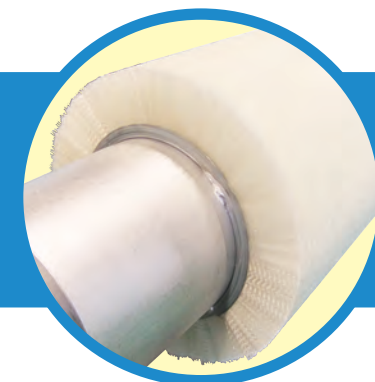
#### Wear Resistance Applications

Tail catching rolls in hot strip finishing mill  
CPC rolls. Replaceable with steel rolls  
Guide rolls and support rolls in heat treat furnace



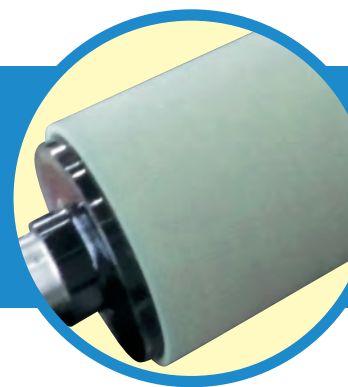
## BRUSH ROLL

Brush rolls are made by mounting channel strip brushes on the shafts, and used for cleaning and descaling the steel plates.



## RUBBER (POLYURETHANE) ROLL

Rubber (Polyurethane) rolls are made by covering rubber (polyurethane) on the shafts, used for controlling and feeding steel plates.



## OPTICAL FLUID MEMBRANE THICKNESS MEASUREMENT TOOL

Optical fluid membrane thickness measurement tool is an equipment enable to easily measure the thickness of oil membrane on the steel plates and others.

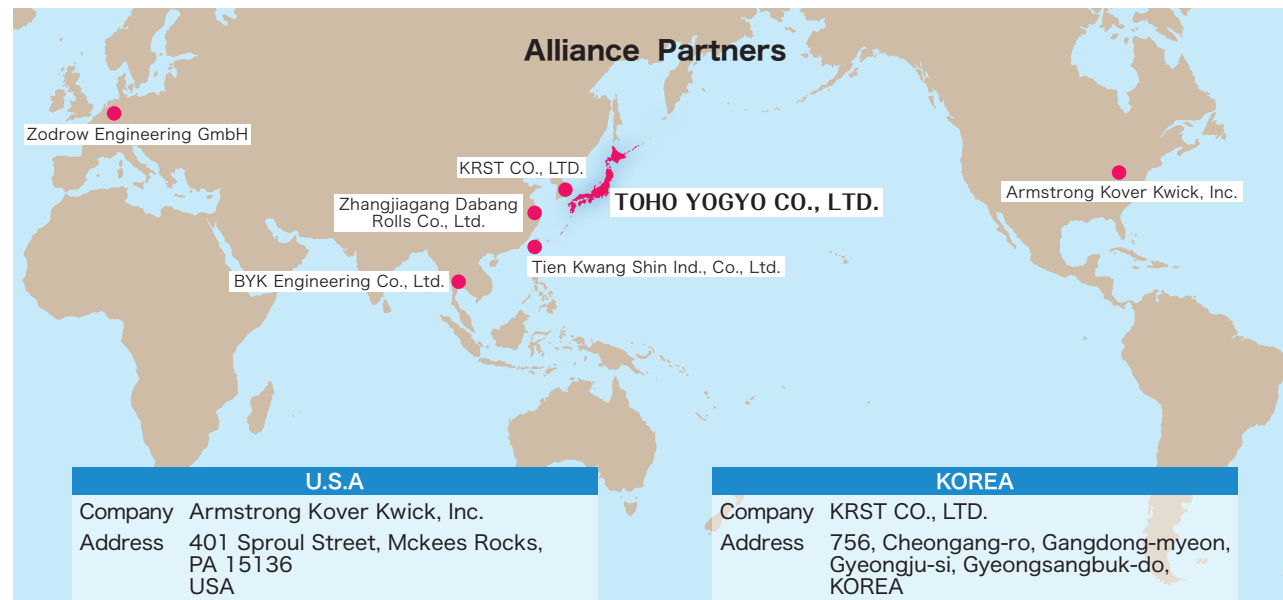




### ADOPTION OF OUR ROLL PRODUCTS

Our roll products are world-widely used in automotive, steel and non-ferrous metal industries. We have alliance partners responsible and skillful for manufacturing, repairing, technical-support and marketing.

Automotive Industries		Steel and Non-Ferrous Metal Industries	
Japan	TOYOTA, NISSAN, HONDA, MITSUBISHI, MAZDA, SUBARU, SUZUKI, DAIHATSU, ISUZU and HINO	Japan	NIPPON STEEL, JFE STEEL, KOBELCO, UACJ, DOWA METAL, HITACHI METALS NEOMATERIAL, CHUGAI RO and others
Overseas	VOLKSWAGEN, RENAULT, FORD, GENERAL MOTORS, DAIMLER, BMW, PSA, MARUTI SUZUKI, KUOZUI, HYUNDAI, CHANGAN and others	Overseas	ALUNORF, CHINA STEEL, POSCO, USIMINAS and others
Countries			
Asia	China, Taiwan, Korea, Thailand, Indonesia, Malaysia, Philippines, Vietnam, India, Pakistan, Iran and Turkey		
Europe	Germany, United Kingdom, France, Czech, Italy, Spain, Hungary, Poland and Russia		
North America	U.S.A. and Canada		
Mid-South America	Mexico, Brazil and Argentine		
Africa	South Africa		
Oceania	Australia		



**U.S.A**  
Company Armstrong Kover Kwick, Inc.  
Address 401 Sproul Street, McKees Rocks, PA 15136 USA  
TEL +1-412-771-2200  
FAX +1-412-771-5777  
E-mail sales@akkinc.com  
URL https://akkinc.com/

**KOREA**  
Company KRST CO., LTD.  
Address 756, Cheongang-ro, Gangdong-myeon, Gyeongju-si, Gyeongsangbuk-do, KOREA  
TEL +82-54-762-8252  
FAX +82-54-762-8225  
E-mail roll@krst.co.kr  
URL http://www.krst.co.kr

**GERMANY**  
Company Zodrow Engineering GmbH  
Address Dierath 31, D-42799, Leichlingen, GERMANY  
TEL +49-2175-5005  
FAX +49-2175-5091  
E-mail zodrow@zodrow-engineering.de  
URL http://www.zodrow-engineering.de

**THAILAND**  
Company BYK Engineering Co., Ltd.  
Address 149 Moo 11 Soi Sor Thaiseri 2, Suksawat Rd., Naiklong Bangplakod, Prasamutchedi, Samutprakarn 10290 THAILAND  
TEL +66-2-425-0412  
FAX +66-2-425-8241  
E-mail byk@bykengineering.com

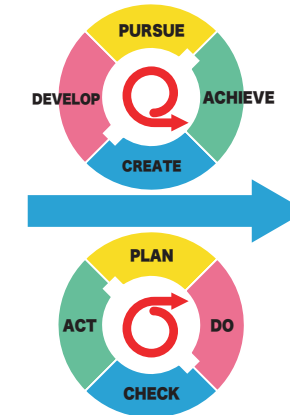
**TAIWAN**  
Company Tien Kwang Shin Ind., Co., Ltd.  
Address No.25, Sec 2, Zhongshang Road, Hune Dist., Kaohsiung 82942 TAIWAN ROC  
TEL +886-7-699-3333  
FAX +886-7-699-1203  
E-mail tksco@ms43.hinet.net  
URL http://www.absolutetks.com.tw

**CHINA**  
Company Zhangjiagang Dabang Rolls Co., Ltd.  
Address Gaoqiao Road, Houchengqiao-cun, Jingang Town, Zhangjiagang City, Jiangsu Province, CHINA  
TEL +86-512-5693-6800  
FAX +86-512-5693-6803

### TOHO YOGYO CO., LTD.

Address 533-2, TOENDO, AISHO-CHO, ECHI-GUN, SHIGA, 529-1325, JAPAN  
TEL 0749-42-2801  
FAX 0749-42-2803  
URL http://www.toho-yogyo.co.jp  
President Tetsuo Higashino  
Established 1924  
Capital JPY120mil.  
Employee 28 (As of 2019)  
Products Nonwoven roll (TOHO 66D NON-TEX ROLL)  
High functional roll (BIWAKO-ROLL)  
Vacuum roll · Vacuum Equipment  
Brush roll · Rubber roll

### Quality Management System and Customer Support By Double PDCA



In 1966, TOHO YOGYO succeeded in developing and commercializing the first nonwoven roll, in the other name as non-textile roll, in the world. 66D NON-TEX ROLL means Non-Textile Roll Developed in 1966. 66D NON-TEX ROLL is well-known, as a reliable nonwoven roll with high quality and superior performance, and world-widely adopted in automotive, steel & non-ferrous metal and other industries.