



ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



**NAK**

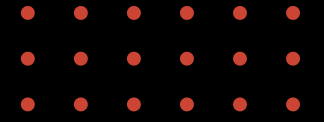
**TOTAL SEALING SOLUTIONS**

# CAPABILITY STATEMENT

NAK IS EVERYWHERE

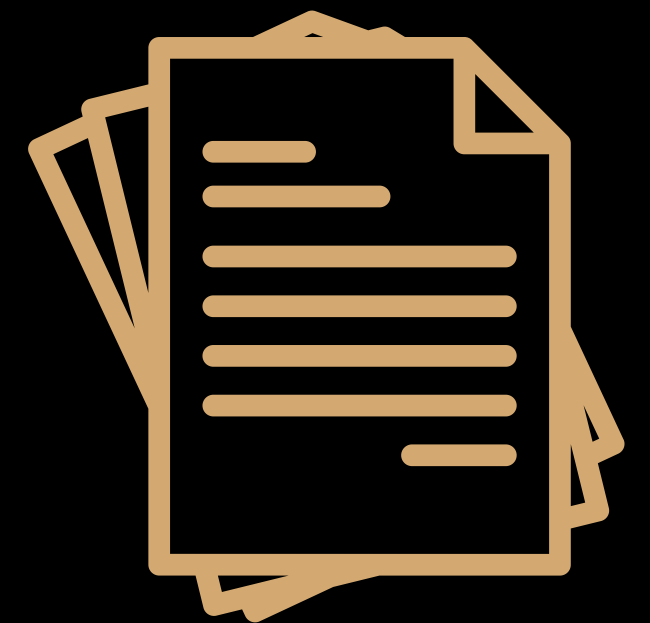
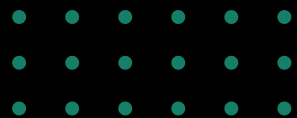


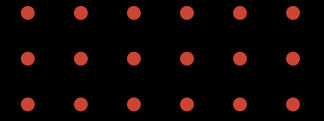
[WWW.NAKSEALINGTECHNOLOGIES.COM](http://WWW.NAKSEALINGTECHNOLOGIES.COM)



# TABLE OF CONTENTS

<b>4</b>	PART ONE - Company Profile
<b>16</b>	<u>PART TWO - Research &amp; Development</u>
<b>40</b>	<u>PART THREE - Quality Management Systems</u>
<b>46</b>	<u>PART FOUR - Product Lines</u>
<b>65</b>	<u>Contact Us</u>





# COMPANY PROFILE

**5** About Company.

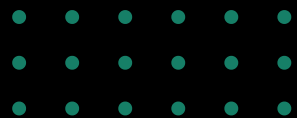
**7** Our Team

**8** Vision & Mission

**10** Our Services

**12** Advantages

**13** Key Customers





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



# ABOUT COMPANY

## Introduction to NAK Total Sealing Solutions, Australia

Established in 2014, we are the Australian arm of NAK Sealing Technologies, headquartered in Taiwan. Our main office is situated in Willawong, QLD.

We cater to various Original Equipment Manufacturers (OEMs) both locally and globally, and provide services to hundreds of small businesses across Australia. Our combined experience with NAK Taiwan spans over four decades.

NAK has built an extensive collection of Oil Seals, with over 100,000 items that are widely used in various applications. Our tooling equipment and facilities located in NAK Taiwan enable us to provide quotes for a wide range of products.





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



# ABOUT COMPANY

With about 45 years of experience in manufacturing and technology through continual improvements on quality, NAK has secured its position on the global OE market and also became one of the top leading manufacturers of sealing products with collaboration and distribution networks spread throughout the world.

NAK's seals are being used in a wide range of industrial sectors including Automotive, Industrial, Hydraulic & Pneumatic, Construction and Mining Equipment.



# WORLD CLASS MANUFACTURING

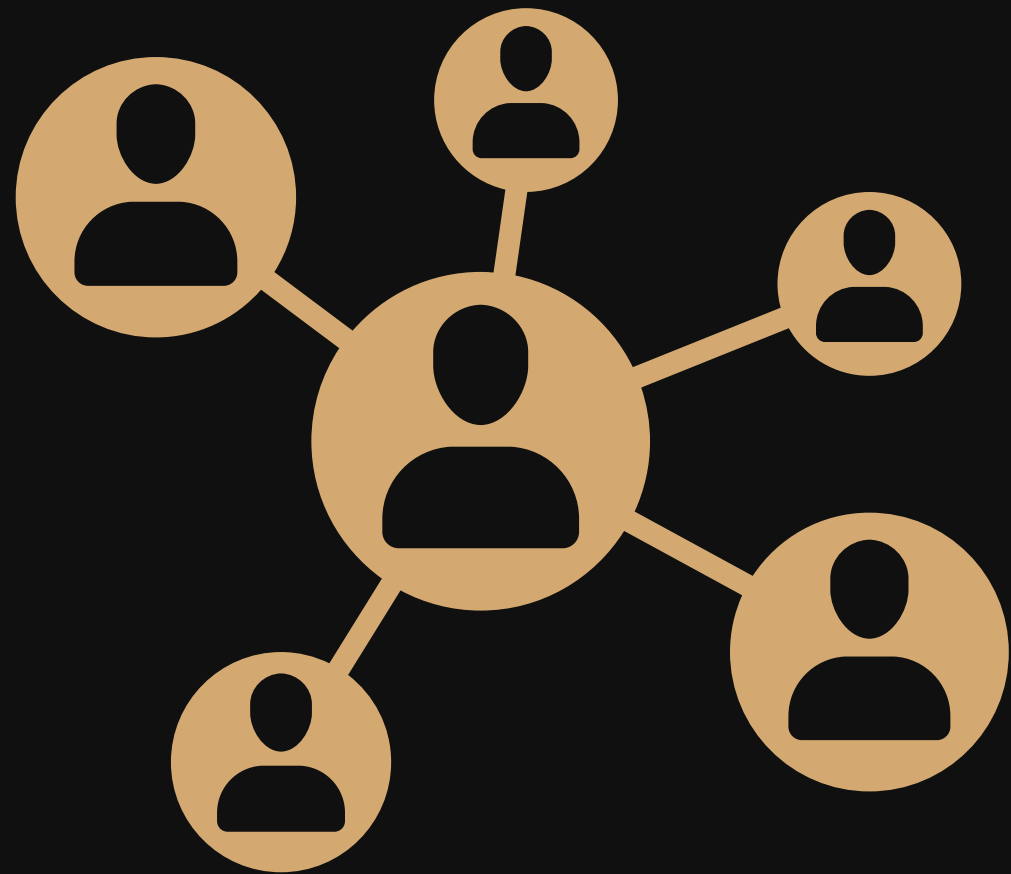
NAK Sealing Technologies Corporation  
Since 1976.



ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



# OUR TEAM



- GRAHAM: OWNER AND DIRECTOR
- BORIS: GENERAL MANAGER
- TONY: WAREHOUSE MANAGER
- RENEE: OFFICE MANAGER
- PAUL: SALES MANAGER
- SHAUN: WAREHOUSE & OFFICE



[WWW.NAKSEALINGTECHNOLOGIES.COM](http://WWW.NAKSEALINGTECHNOLOGIES.COM)



ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



# OUR VISION

## VISION:

- Our Head Office in Taiwan, NAK Sealing Technologies has a great and robust history dating back to the 1970's, when the Chairman Mr. Joseph Shek established the company in 1976 to drive an organization with its fundamental principles based on innovation, research, perseverance and social commitment. Today, NAK Sealing Technologies is the largest manufacturer of sealing products across Taiwan and the first ever corporate organization in this sector to ever go public on the Taiwanese Stock Exchange (Symbol: 9942), as in the year 2002.
- Here in Australia we align ourselves with the same vision, philosophy and core values as our Head Office.



- VISION**
  - World Class Brand
  - World Class Manufacturing
  
- PHILOSOPHY**
  - Love,                       Responsibility
  - Trust,                       Tolerance
  
- CORE VALUES**
  - Value for Customers     Responsibility
  - Innovation                 Leadership
  - People                       Long-Term Orientation

**WORLD CLASS  
MANUFACTURING**

NAK Sealing Technologies Corporation  
Since 1976.



ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# OUR MISSION

## MISSION:

- NAK's mission is to build a superior corporate culture. Our R&D, Marketing and Manufacturing utilise methodology which includes Balanced Scorecard, Strategy Management, Organisational Design, and Process Re-engineering. Our aim is to market and manufacture to a World Class Manufacturing level with a World Class Brand.



**2023**  
**NET**  
**ZERO**  
**AWARD**

NAK is honored to be selected as a Winner by the Taiwan Fluid Power Association for the NET ZERO AWARDS. Net Zero Award celebrates the leadership, innovation, and commitment to excellence of businesses in the carbon reduction.







ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



# OUR SERVICES



## QUALITY SYSTEM

All NAK products meet the standard ISO9001/TS16949 requirements. We at NAK constantly install brand New & fully automated equipment along with critically advanced lab instruments in order to perform precise quality tests, provide crucial statistical data that contributes to be the base of our enhanced quality improvements and to further incorporate the technical knowledge to reach our goal of improving our proficiency and quality.



## HIGH PERFORMANCE SEALING SOLUTIONS

Trust NAK for superior sealing solutions that meet and exceed your expectations. NAK's seals are being used in a wide range of industrial sectors including Automotive, Industrial, Hydraulic & Pneumatic, Construction and Mining Equipment.

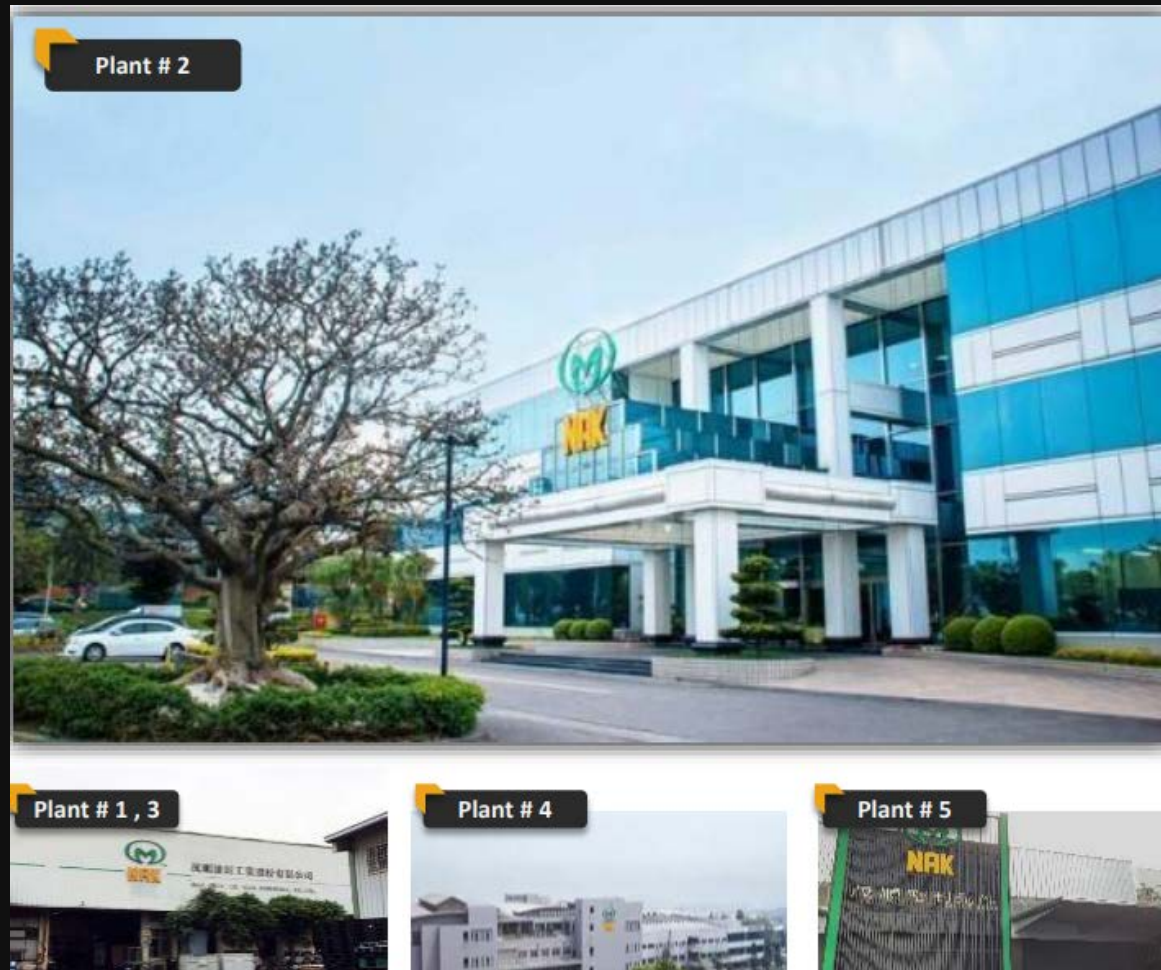
[WWW.NAKSEALINGTECHNOLOGIES.COM](http://WWW.NAKSEALINGTECHNOLOGIES.COM)



ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



# OUR SERVICES



## CAPACITY

NAK has about 500 production machines, which deliver a monthly output of nearly 12 million pcs that clearly indicates the potential of NAK Sealing Technologies as Taiwan's largest manufacturer of sealing products.

## RUBBER PLANT

About rubber products, NAK has established an expertise in developing our own recipe, and has an advanced rubber mixing chain factory to produce high quality rubber material along with a rigorous control of plastic material mixed chain process to ensure quality and stability of the plastic material.

## PRODUCT SAMPLE

The sampling process for a product initiates when the NAK's R & D team reviews the requirements with customers to develop a new product, the mold department applies a variety of CNC machine tools for manufacturing mold to provide fast sample delivery.



[WWW.NAKSEALINGTECHNOLOGIES.COM](http://WWW.NAKSEALINGTECHNOLOGIES.COM)



# ADVANTAGES

## EXPERT & RELIABLE SUPPLIER

- NAK is an ISO-9001/14001, TS-16949 and OHSAS-18001 registered manufacturer of sealing solutions.
- NAK offers sealing solutions which are developed with a series of advanced lab instruments and latest technologies to meet or exceed the ASTM, DIN, BS and the SAE international standards.
- NAK also implements 6  $\sigma$  (Six Sigma) management to advance sophisticated products and higher quality for years.

## STATE-OF-THE-ART TECHNOLOGIES

- NAK has a complete line of equipment and ingredient research lab.
- We implement rubber testing method including processibility of Unvulcanized rubber, hardness of plastic and rubber, material tensile strength and adhesive strength, heat ageing / oil immersion / fuel immersion / low temperature properties / compression set, rebound properties / microscopy of compound dispersion and FT-IR analysis.

## EFFICIENCY MANUFACTURING PROCESS

- NAK has implemented full automation and computerization in manufacturing process by deploying machineries such as automatic spring loading machines, automatic packaging machines, automatic storage system etc.
- NAK keeps improving efficiency and capability to satisfy and even exceed requirements from different OE customers.





ISO-9001/14001  
 ISO/TS-16949  
 OHSAS-18001

# KEY CUSTOMERS



## AUTOMOTIVE

NAK Automotive Seals are applied to four dynamic systems: Driving System, Steering System, Suspension System, and Engine System.

They are designed in various types to suit different applications. We not only provide standard size, but also design for customising.

**AUTOMOTIVE**

**AISIN**

**SHOWA**

**TENNECO**

**KYB**

**OILES**










ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# KEY CUSTOMERS



## INDUSTRIAL

NAK's Industrial Seals are widely used in different applications, i.e. Gear Reducers, Gearboxes, Motors, Power Tools, Pumps, Robotic Arms, Washing Machines, Wind Turbines etc.

## INDUSTRIAL





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# KEY CUSTOMERS



## AGRICULTURE, CONSTRUCTION & MINING

NAK Agricultural “AP” Seal is designed for use in heavy contaminated applications such as Agricultural Machinery, Construction and Mining Equipment, Track Driven Vehicles, etc.

AGRICULTURE  
CONSTRUCTION MINING

 **AGCO**  
Your Agriculture Company

 **JOHN DEERE**

**CATERPILLAR**<sup>®</sup>

 **NEW HOLLAND**  
AGRICULTURE

**LIEBHERR**

**KOMATSU**

**Kubota**





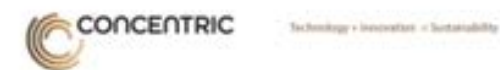
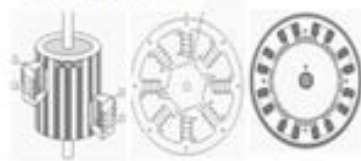
ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# KEY CUSTOMERS



## OEM Customers

機密等級: 機密 / Confidential Classification: C





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

## PART TWO



# RESEARCH & DEVELOPMENT

18

Research & Development

27

Technical Support

28

Quality & Manufacturing

NAK has been committed to improving the existing processes and provide faster, more efficient production techniques, in order to meet the expectations of customers for high-quality and high value sealing element.







ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

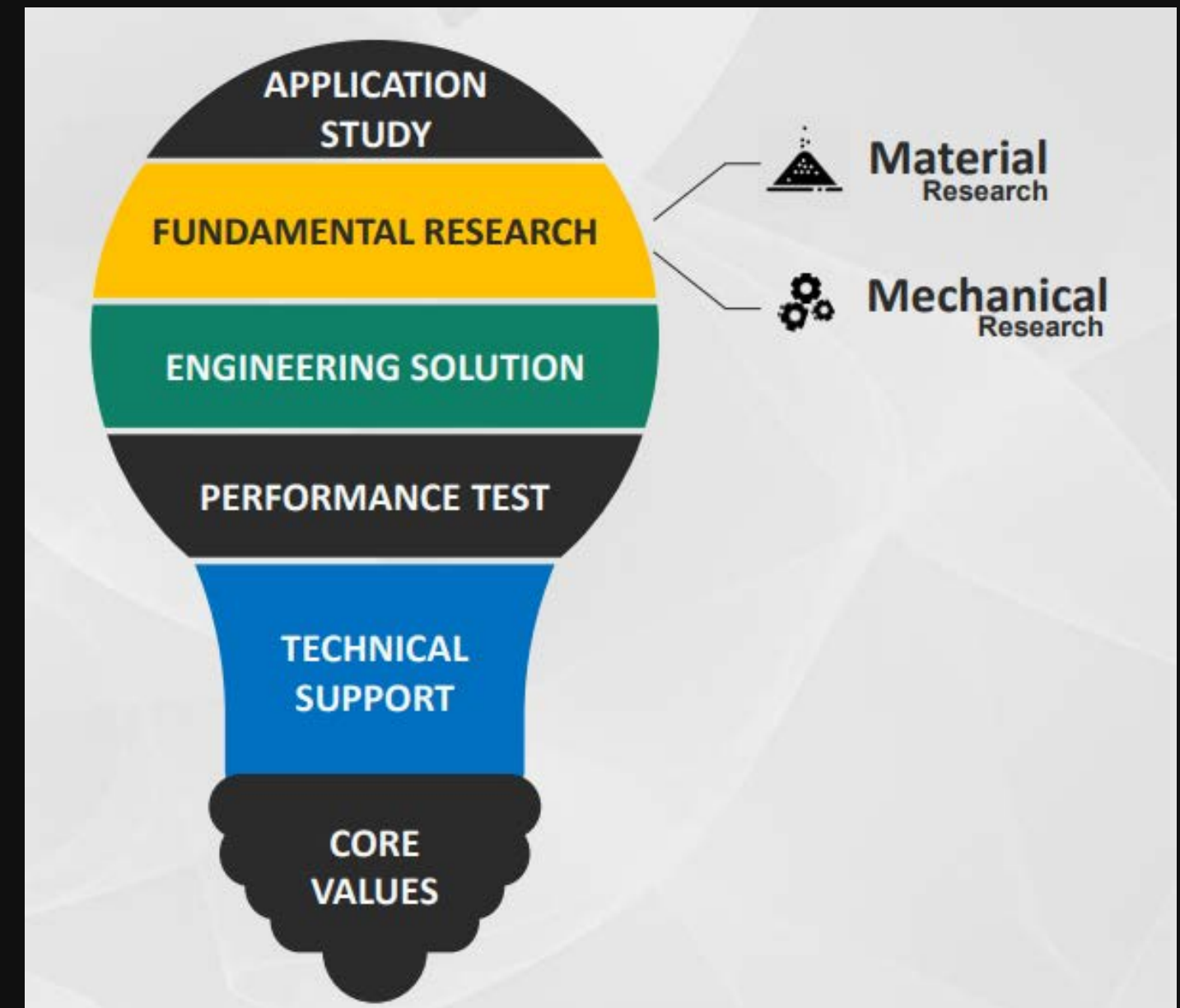


# RESEARCH & DEVELOPMENT

## CORE VALUE | R&D ACTIVITIES

NAK has a strong and dedicated team of R&D, we not only design, develop and do material research on our own, but we also take the initiatives on following up with our customers, providing competent technical support.

Our R&D has direct link with our customer so to be able to obtain first-hand information of the specifications, requirements and demands of our customer thus improving the successive rates of new product development and customer satisfaction to a higher level.





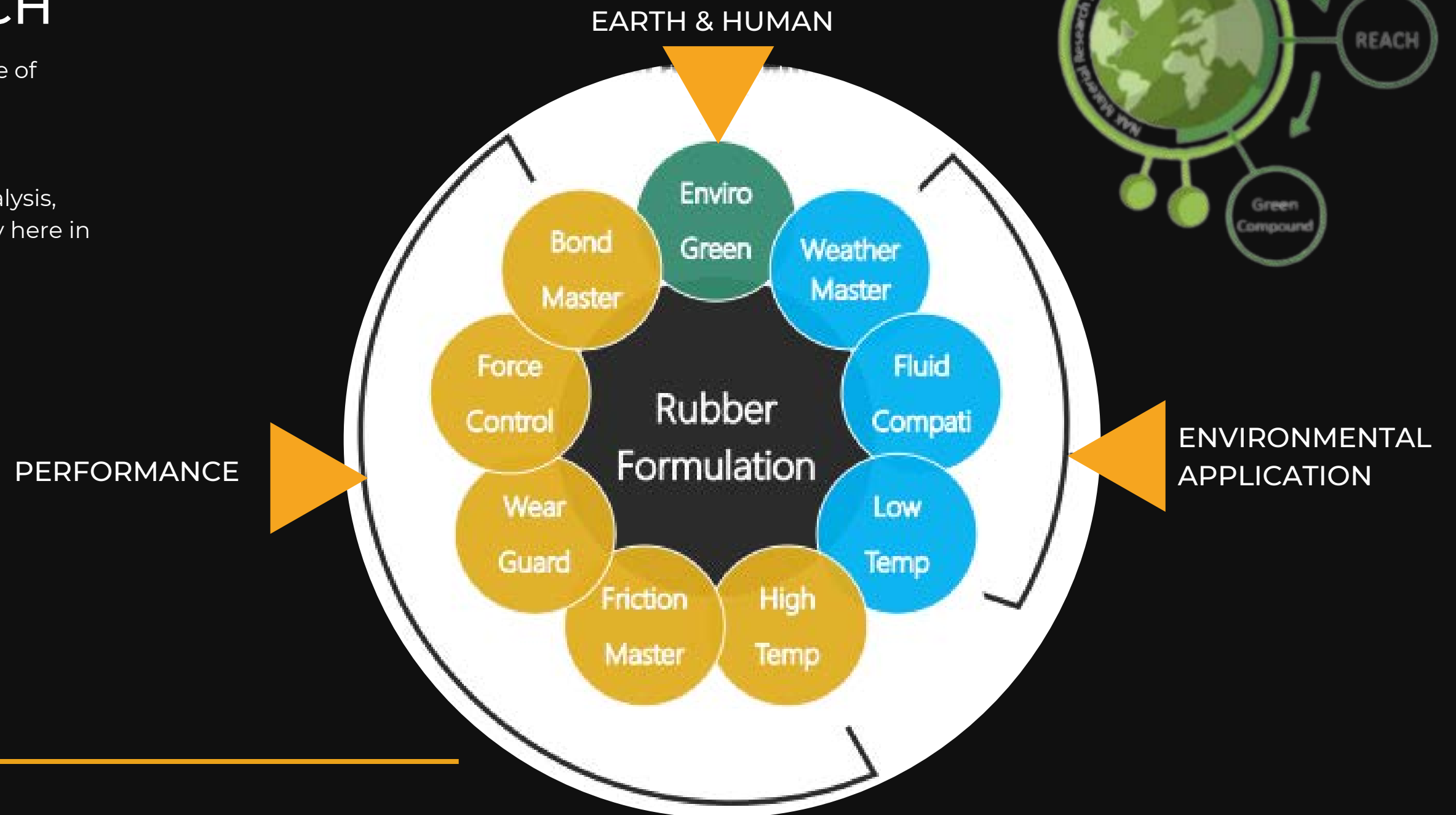
ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# RESEARCH & DEVELOPMENT

## FUNDAMENTAL RESEARCH

As for the fundamental research, NAK has a complete line of equipment and ingredient research lab.

Starting from the research and development of rubber compounding, characteristic testing, rubber material analysis, down to the quality inspection are all done systematically here in NAK.





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



# RESEARCH & DEVELOPMENT

## MATERIAL RESEARCH LAB

Receiving ISO/IEC 17025: 2017 accreditation for our Material Research Lab further demonstrates our commitment to meeting the highest level of quality assurance for our customers



The laboratory has independent research and development capabilities, including formula research and development, rubber mixing, physical property testing, rubber material analysis (including quality inspections), all of which can be done in the factory. NAK Material Research Lab has received ISO/IEC 17025: 2017 accreditation from Taiwan Accreditation Foundation.

ISO/IEC 17025: 2017 CERTIFICATION



## ACCREDITED LABORATORY



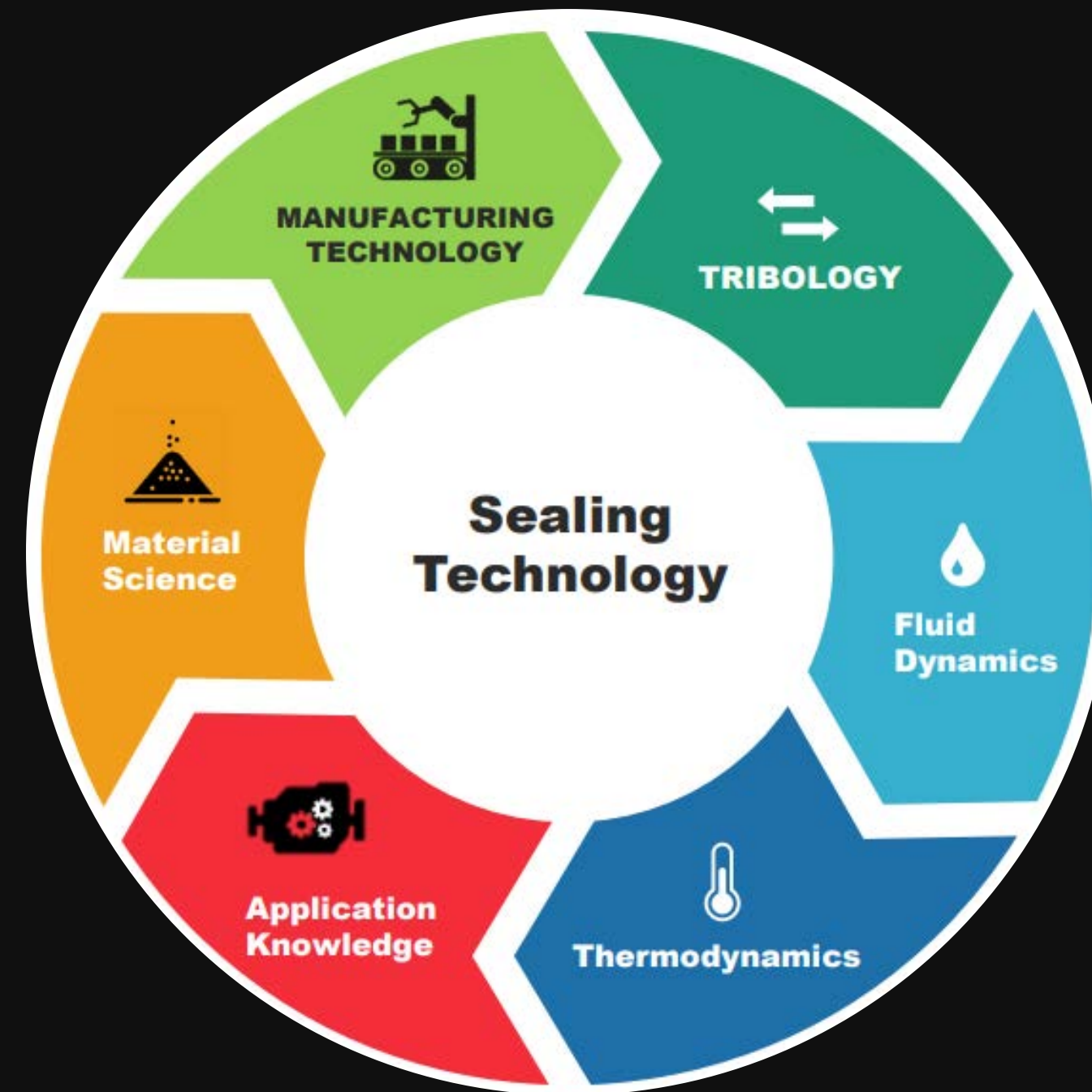


ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# RESEARCH & DEVELOPMENT

## FUNDAMENTAL RESEARCH | MECHANICAL RESEARCH

Sealing Technology incorporates interdisciplinary knowledge. NAK implement the fundamental research on various science to fulfill the sealing requirement.





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# RESEARCH & DEVELOPMENT

## FUNDAMENTAL RESEARCH

As for the material research, NAK has a complete line of equipment and ingredient research lab. Starting from the research and development of rubber compounding, characteristic testing, rubber material analysis, down to the quality inspection are all done systematically here in NAK.



Left to Right: Rheometer, Thermogravimetric Analysis (TGA), Differential Scanning Calorimeter (DSC), Fourier Transform InfraRed (FT-IR), Tribometer, Ozone Tester, Scanning Electron Microscope and Brittleness Temp. Tester





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

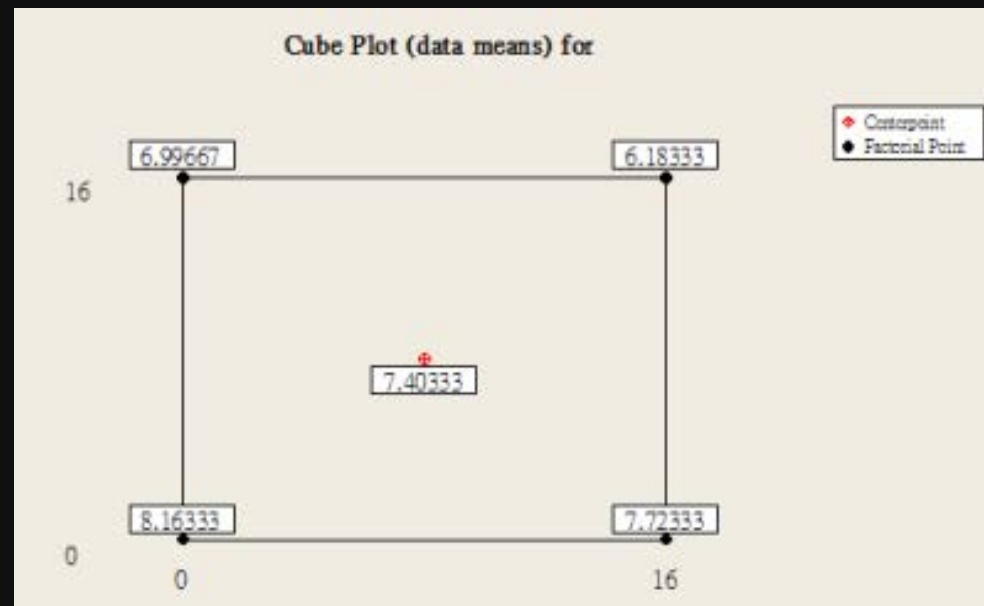
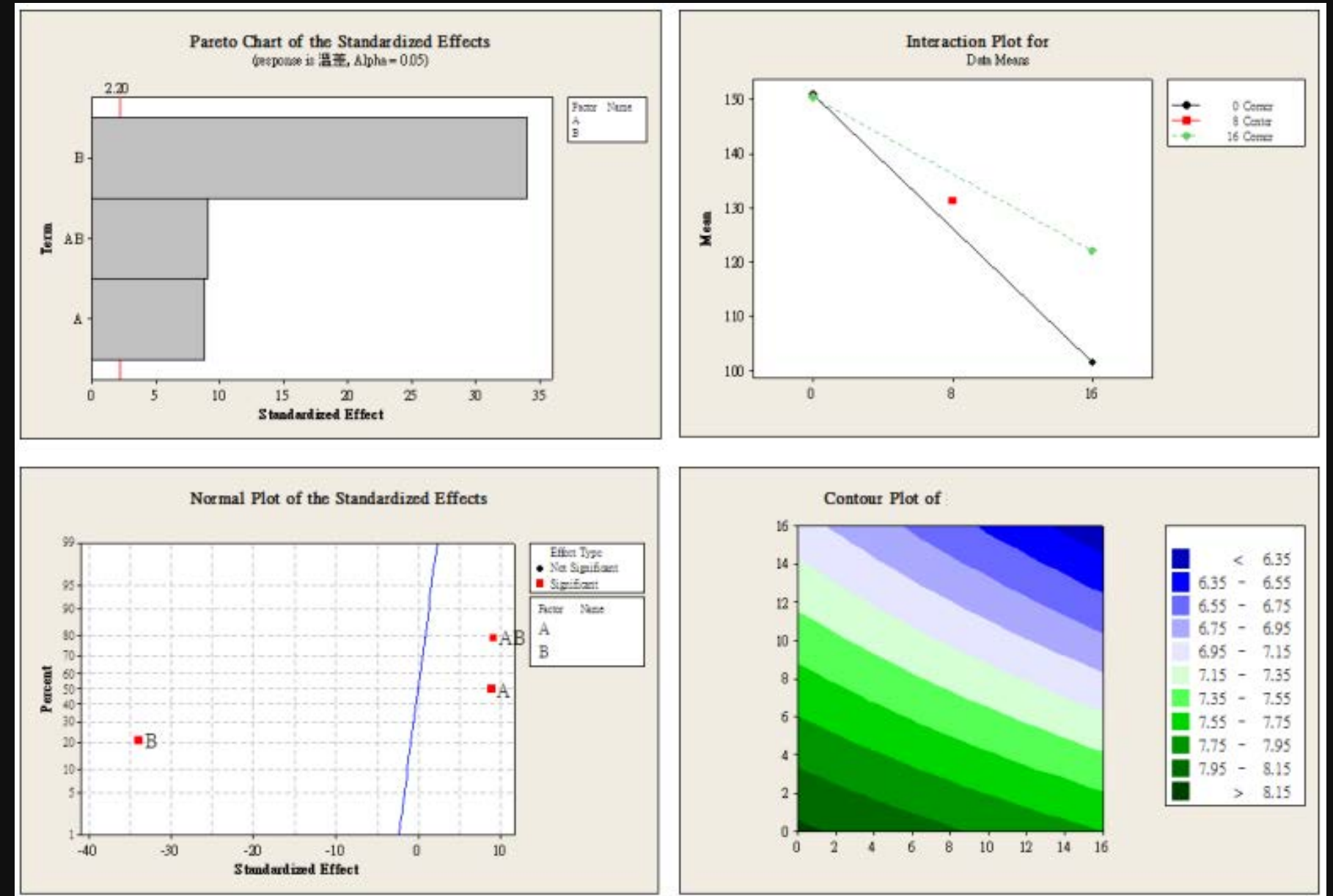


# RESEARCH & DEVELOPMENT

## ENGINEERING SOLUTION | DESIGN FOR SIX SIGMA (DFSS)

DFSS is based on the use of statistical tools like linear regression and is an improvement system used to develop new processes or products at Six Sigma quality levels.

DFSS is a different approach to new product or process development in that there are multiple methodologies that can be utilized. It also can be employed if a current process requires more than just incremental improvement.











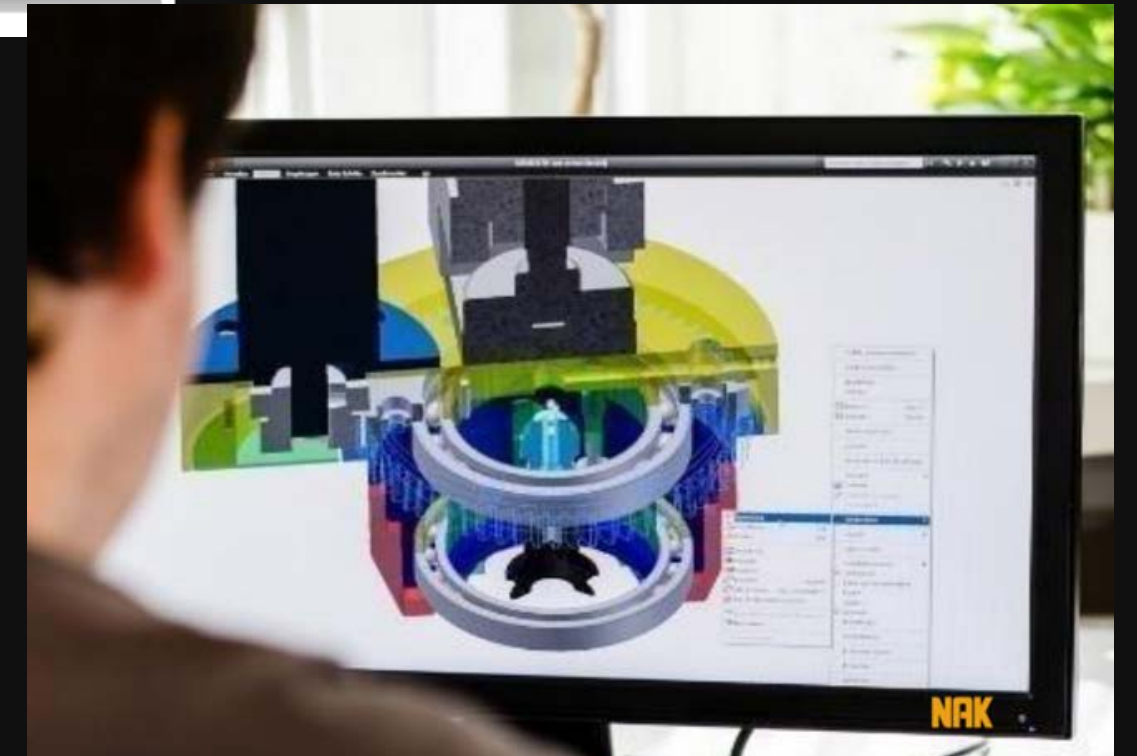
ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# RESEARCH & DEVELOPMENT

## ENGINEERING SOLUTION | SEALING ENGINEERING

Decrease in overhead costs and coming up with the finest design by full implementation of the FEA software (Finite Element Analysis), building up theoretical analysis for various manufacturing process; combine the designed product, tooling and CNC code with the original self developed software design known as the SCAD (Seal Computer Aided Design) software design to decrease the failure rates during trial runs.

Application	Model	CAD Model
Industrial (Hydraulic Pump Seal)		
Automotive (Transmission Seal)		
Automotive (Shock Absorber Seal)		





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



# RESEARCH & DEVELOPMENT

## DYNAMIC TEST | PERFORMANCE TEST

### TESTING EQUIPMENT

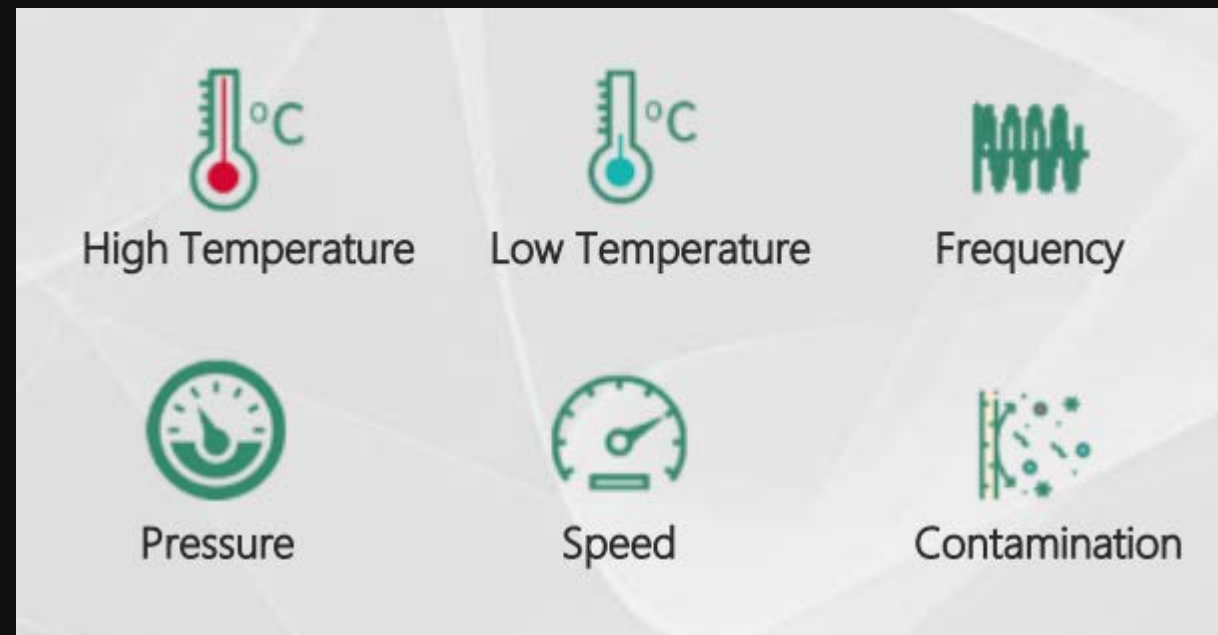
Our laboratories and testing facilities, staffed by knowledgeable and experienced personnel, help you to reduce risks, shorten time to market and demonstrate the quality and safety of components or products.

### TEST LABORATORY

NAK has a dynamic test lab with advanced equipment to test seals in various environmental conditions.

### CUSTOMISED TESTING

We can simulate the seal's working conditions based on the requirements of customers



### DYNAMIC TEST LAB







ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



# RESEARCH & DEVELOPMENT

## TESTING EQUIPMENT | PERFORMANCE TEST

We also take investment of advanced testing equipment as one of our high priorities, therefore, we have built our own in-house dynamic test center and material research laboratory; Regarding to industry-academy cooperation, NAK is working with schools and research centers to bring our developing capabilities to even higher level.





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



# TECHNICAL SUPPORT

## CUSTOM PRODUCT DEVELOPMENT

You'll have a dedicated project management and engineering team with you at every single development step. We can guide you with our StreamSyn Service from initial concept to prototype to production. Your project team at NAK will work closely with you to understand your goals and adapt to even the most challenging requirements.

## RESEARCH STAFF

70 researchers and engineers are available to NAK clients



**StreamSyn** NAK  
Support customers in creating value added products.



**Selection**  
**Assistance in Selecting the Most Suitable Seal**  
Not subject to standard items, NAK focuses on improving efficiency of customer's equipment.



**Design**  
**Higher machine efficiency & Better sealing performance**  
NAK's new technology provides a perfect balance allowing our seals to perform excellent sealing function while offering better machine efficiency.



**Test**  
**Professional Test Services**  
We provide professional matching tests between rubber and oils, functional tests and durability tests. Whether it is for a new product under development or an existing project upgrade..



**Installation**  
**Installation Instructions Prevent Oil Leakage**  
NAK provides installation instructions and designs customized assembly which make installation a lot easier and faster.



**Optimization**  
**Analysis & Optimization**  
NAK offers professional seal failure analysis. In doing so, NAK is able to find the root cause(s) of seal failure, which helps customers improve and optimize their products.



ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# QUALITY & MANUFACTURING

## TAIWAN

Taiwan Largest Seal Manufacturer

500

Vulcanization Machines

13M

Seal Output Per Month





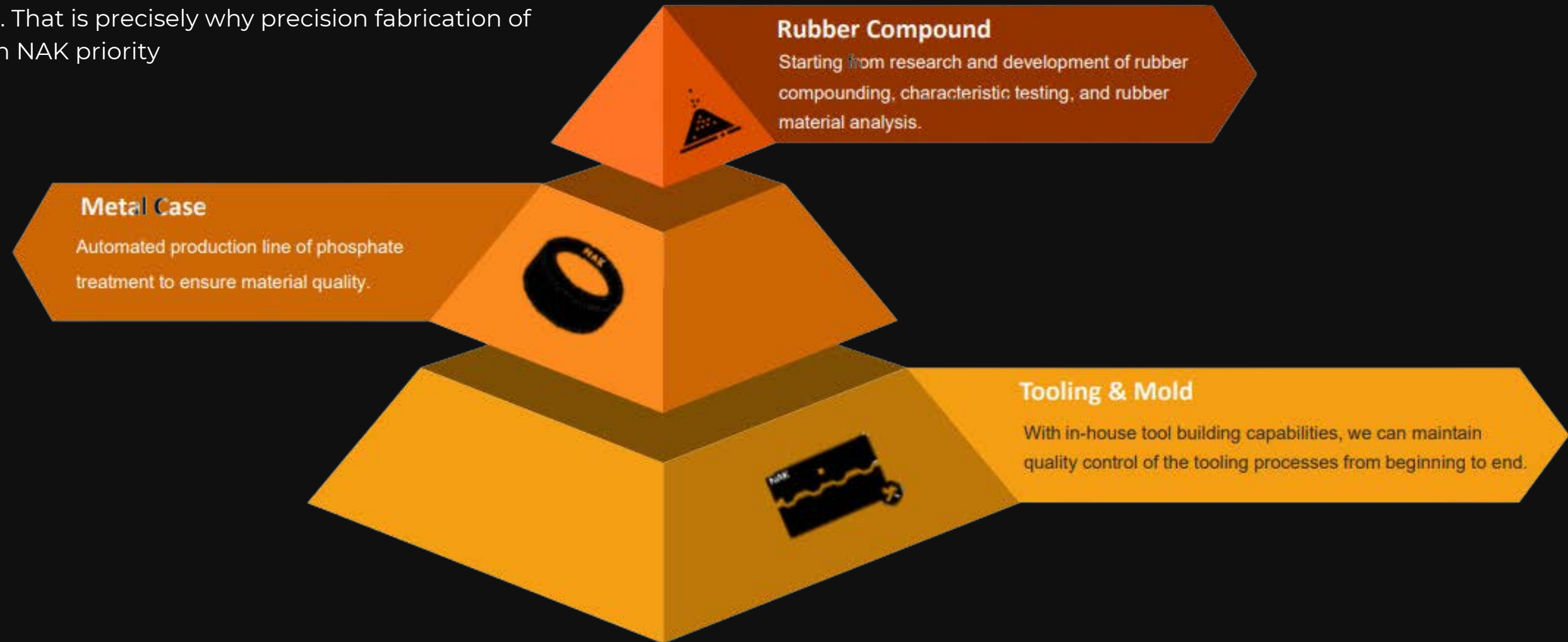
ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



# QUALITY & MANUFACTURING

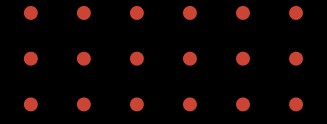
## CORE COMPETITIVENESS

The quality of a seal depends on the quality of the tooling and raw material. Garbage in, garbage out, as the saying rightfully goes. That is precisely why precision fabrication of new molds along with great material is an NAK priority



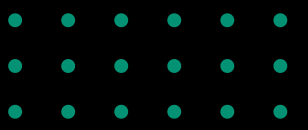
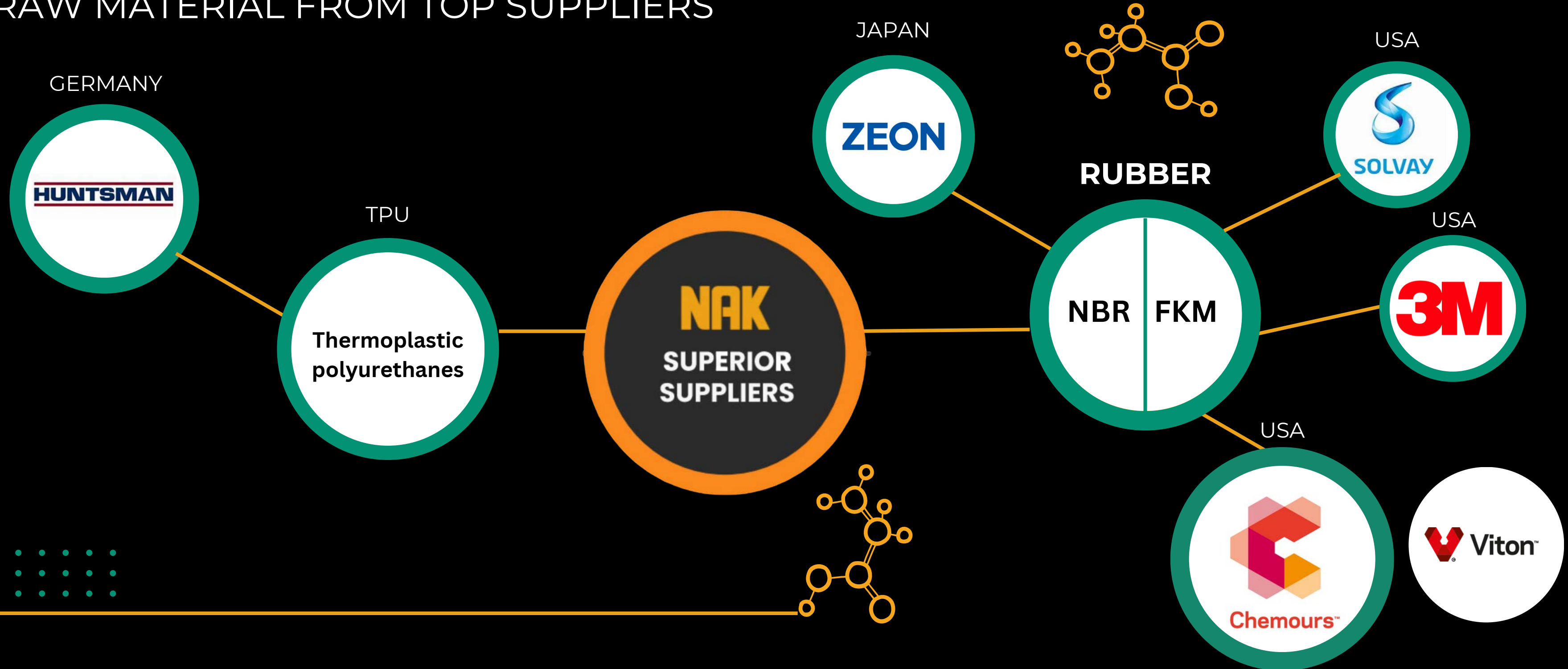


ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



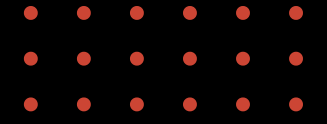
# QUALITY & MANUFACTURING

## RAW MATERIAL FROM TOP SUPPLIERS





ISO-9001/14001  
 ISO/TS-16949  
 OHSAS-18001



# QUALITY & MANUFACTURING

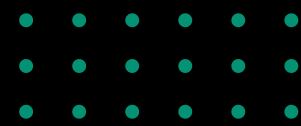
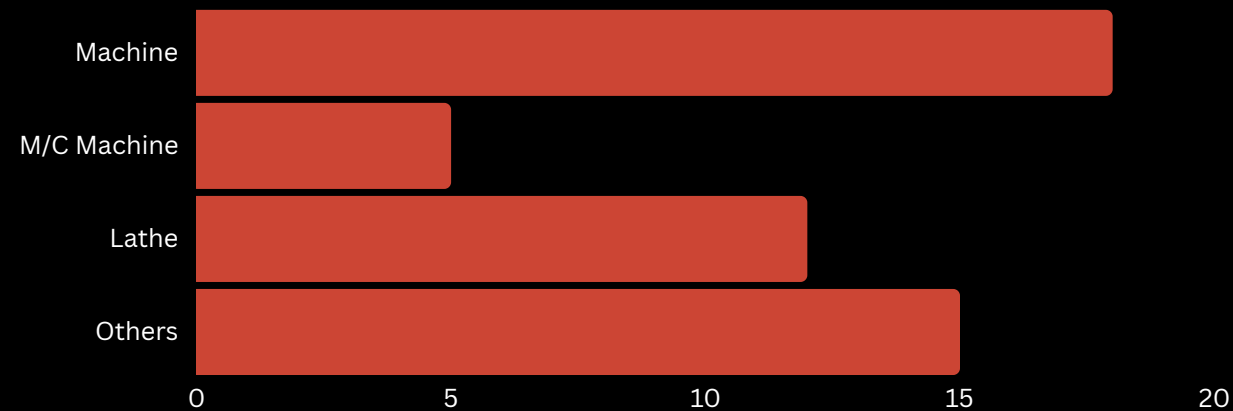
## TOOLING & MOLD | IN-HOUSE TOOLING CAPABILITY

NAK's in-house tooling capabilities streamline our production processes for reduced lead times and faster project completion. Our in-house tooling also ensures that every piece of equipment used in the creation of a part is subjected to our rigorous quality standards, translating into a higher-quality end product.

MEET OUR IN-HOUSE TOOL DESIGN & BUILD TEAM

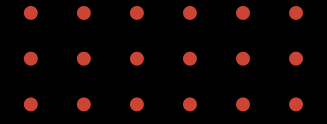


## EQUIPMENT





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



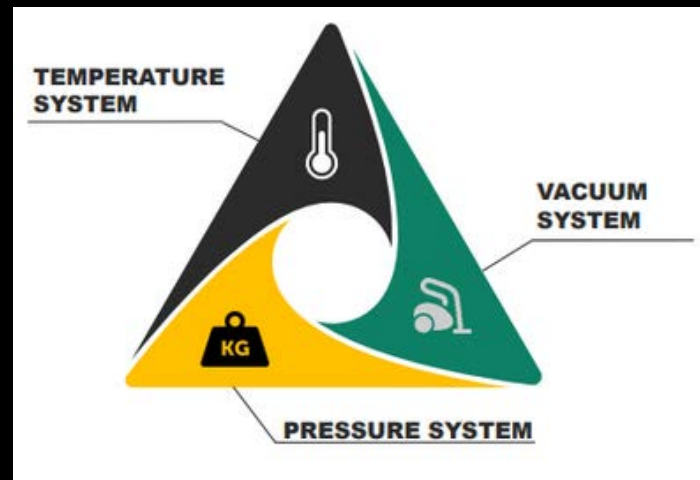
# QUALITY & MANUFACTURING

## SUPERVISORY CONTROL AND DATA ACQUISITION | SCADA SYSTEM

SCADA systems are used by industrial organizations and companies in the public and private sectors to control and maintain efficiency, distribute data for smarter decisions, and communicate system issues to help mitigate downtime.

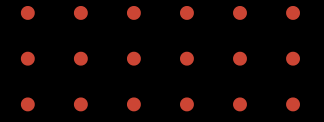
### REAL-TIME MACHINE HEALTH MONITORING

Preventing potential defect seals which couldn't be identified by inspection equipment & human eyes from going through the production lines and reach end customers





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



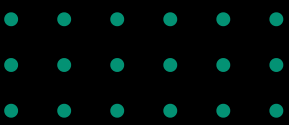
# QUALITY & MANUFACTURING

## LEAN PRODUCTION

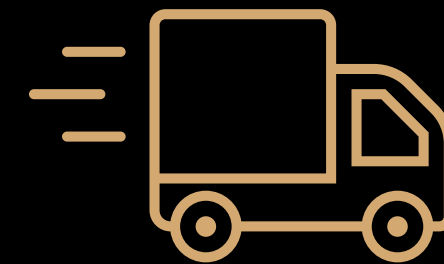
### A PROCESS IMPROVEMENT METHODOLOGY

Lean manufacturing is a methodology that focuses on minimizing waste within manufacturing systems while simultaneously maximizing productivity.

The benefits of lean include reduced lead times, reduced operating costs and improved product quality, to name just a few.



## BENEFITS



Reduced Lead Times

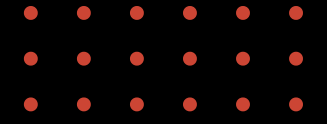


Reduced Operating Costs





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



# QUALITY & MANUFACTURING

## TQM & SIX SIGMA

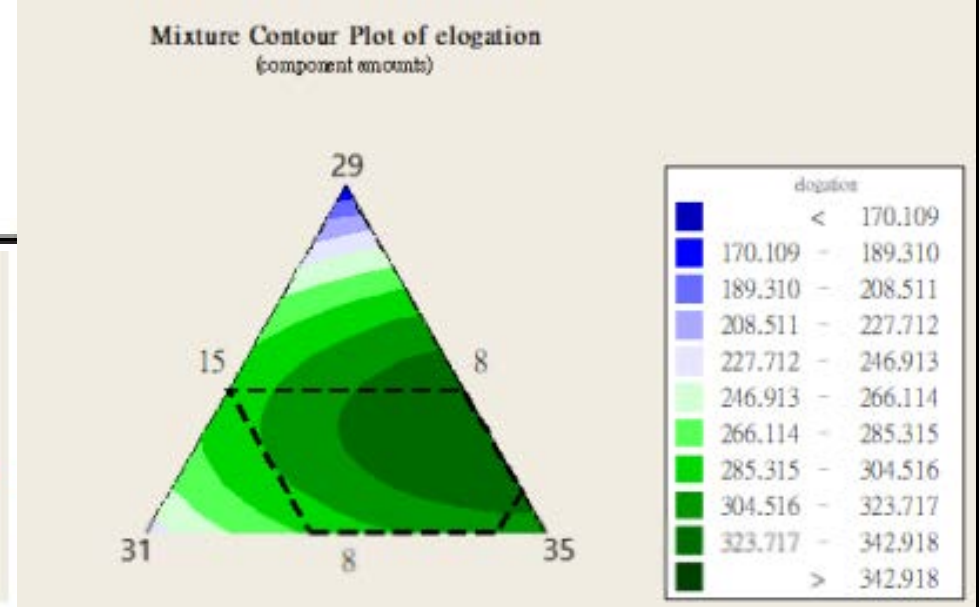
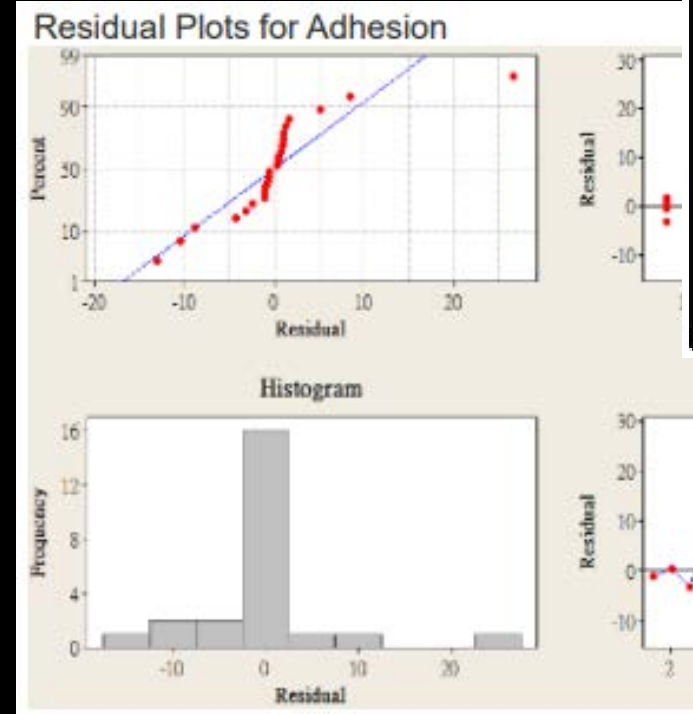
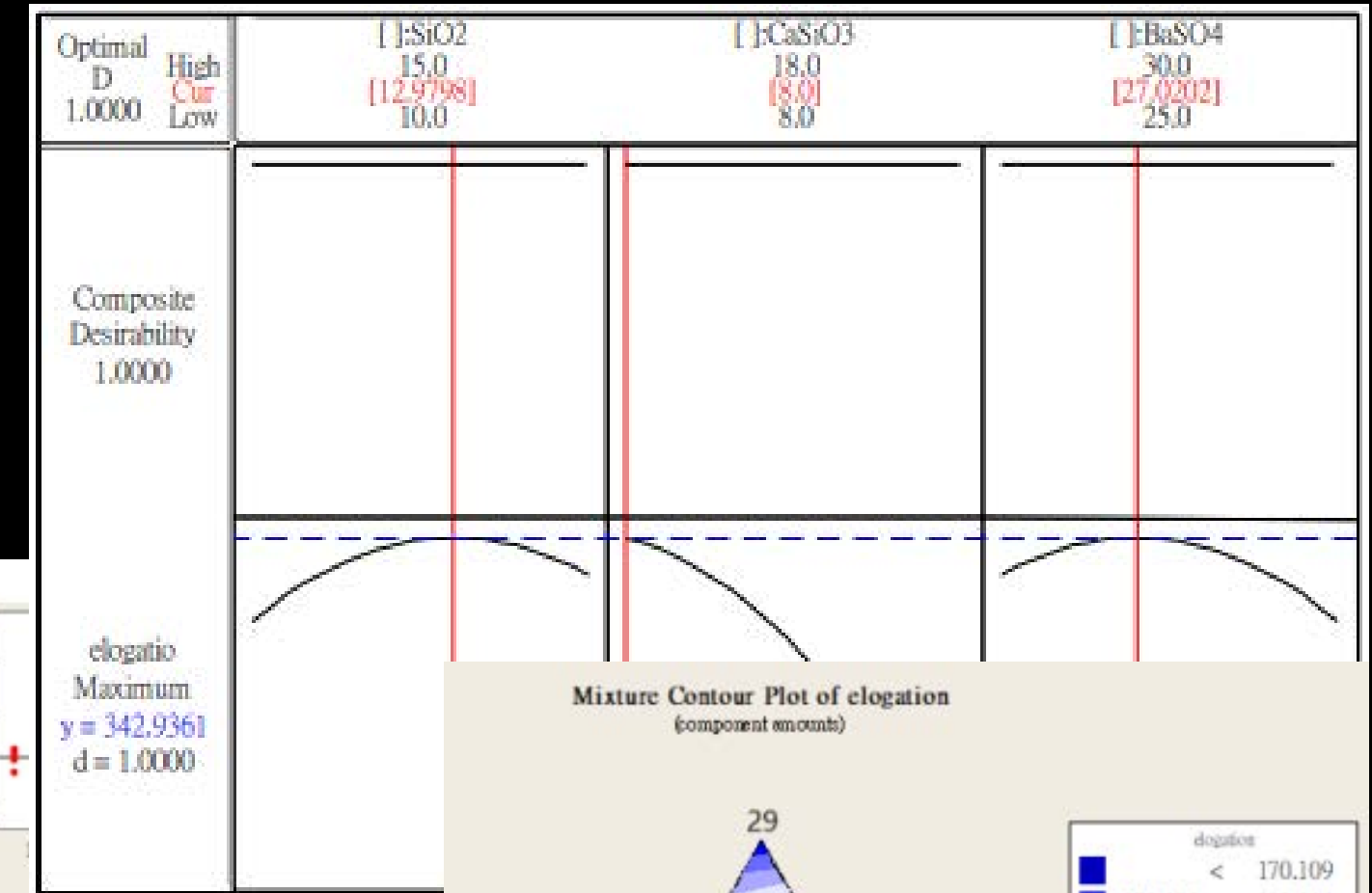
### TQM

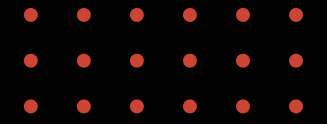
Continuous improvement for pursuing zero defect parts

# 6σ

### SIX SIGMA | A QUALITY IMPROVEMENT METHODOLOGY

Six Sigma is a method that provides organizations tools to improve the capability of their processes. This increase in performance and decrease in process variation helps lead to defect reduction and improvement in profits, employee morale, and quality of products or services.



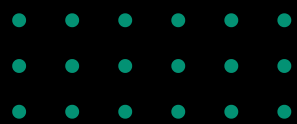
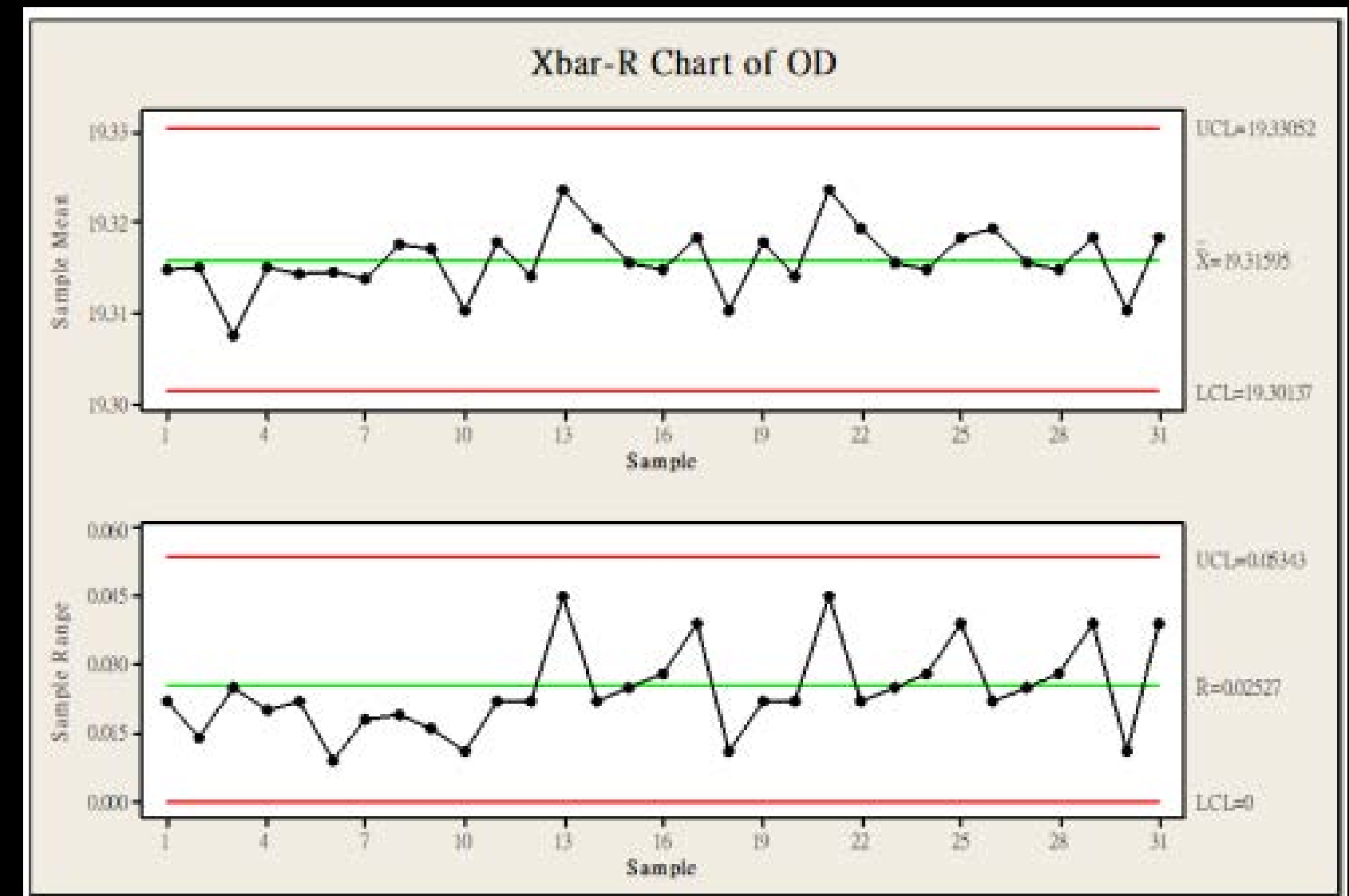
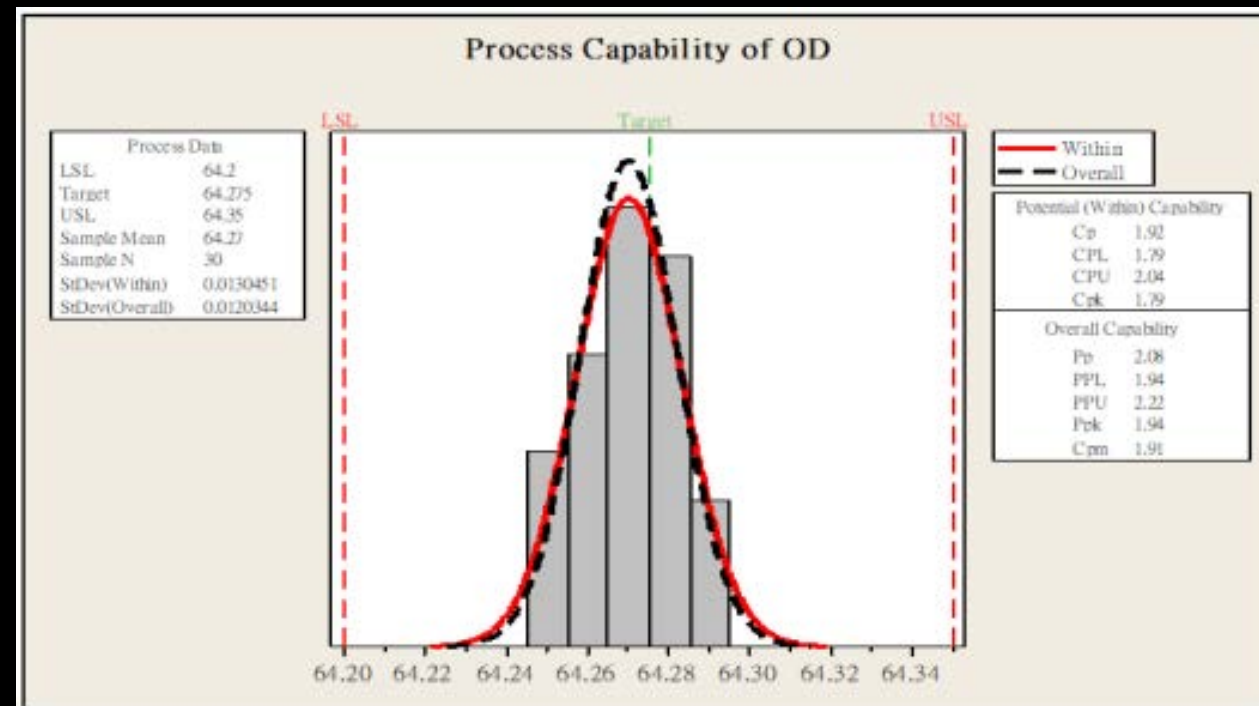


# QUALITY & MANUFACTURING

## STATISTICAL PROCESS CONTROL (SPC)

### A PROCESS CONTROL METHODOLOGY

Statistical process control (SPC) is defined as the use of statistical techniques to control a process or production method. SPC tools and procedures can help you monitor process behavior, discover issues in internal systems, and find solutions for production issues. Statistical process control is often used interchangeably with statistical quality control (SQC).





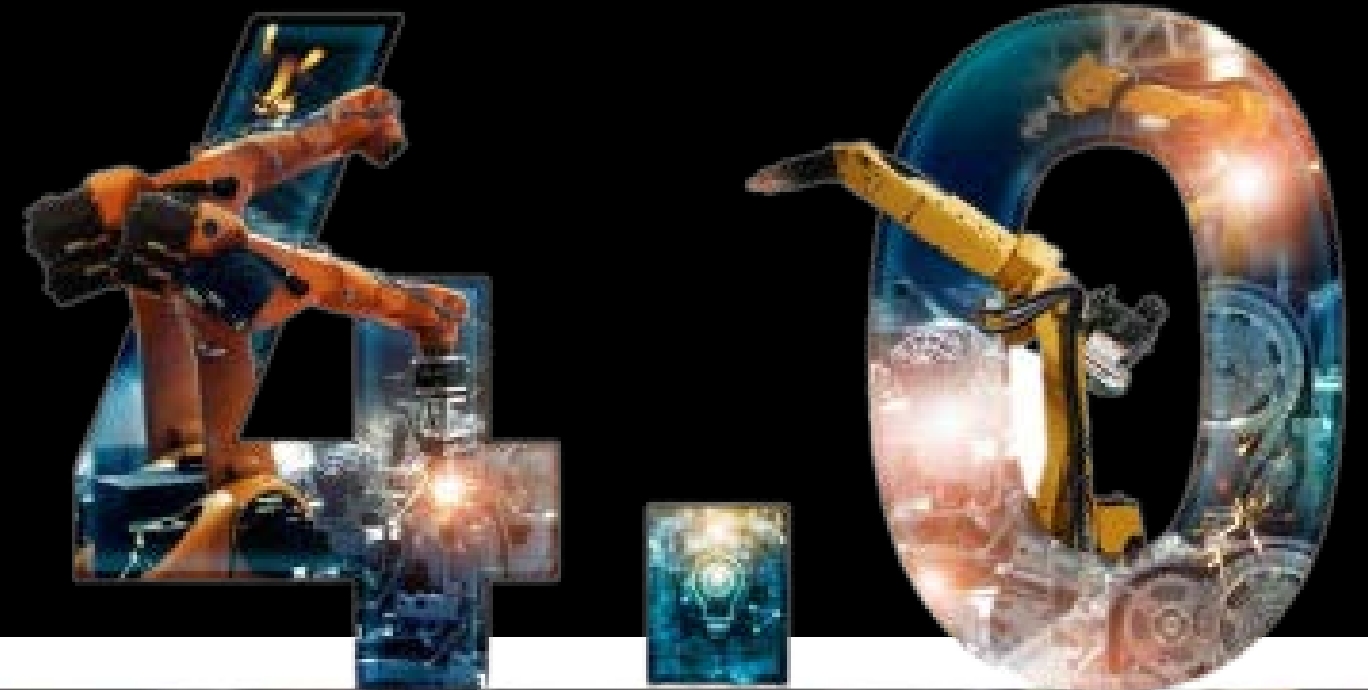
ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# QUALITY & MANUFACTURING

## QUALITY INSPECTION

### NAK INVESTED IN AUTOMATION AND INDUSTRY 4.0

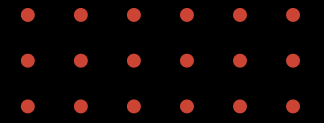
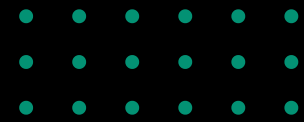
Automation introduces benefits for both NAK and its customers. Customers see improved overall services and products due to better consistency in the quality, lead time, and costs. Therefore improved user satisfaction increases the lifetime value of customers and brand loyalty.



**FACTORY AUTOMATION**



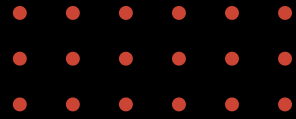
**NAK PLANT 6**





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# QUALITY & MANUFACTURING



## QUALITY INSPECTION



The Leading Supplier In Visual Inspection Equipment

# 100%

## FINAL INSPECTION

- Critical Dimensions Inspection
- Special Characteristics Inspection

## ADVANTAGES

- Avoid Human Mistakes
- 100% Quality Satisfaction



## PART THREE



# QUALITY MANAGEMENT SYSTEMS

**40** Automotive

**41** Environmental

**42** REACH/ SVHC compliance

**43** RoHS Compliance

NAK is an ISO 9001/14001, 45001, 50001 IATF 16949, registered manufacturer of Oil Seals and Technical Sealing Products used for a wide range of applications.





ISO-9001/14001  
 ISO/TS-16949  
 OHSAS-18001



# QUALITY MANAGEMENT SYSTEMS

## AUTOMOTIVE



ISO 9001 Certified since 2015  
 Certificate Number: 15618/EE/0001/SM/En

IATF 16949 Certified since 2016  
 Certificate Number: 15618/E/0001/SM/En





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# QUALITY MANAGEMENT SYSTEMS

## ENVIRONMENTAL MANAGEMENT SYSTEMS

Occupational Health and Safety  
ISO 45001:2018  
Certificate Number: 15618/F/0001/UK/En



Environment Management Systems  
ISO 14001:2015  
Certificate Number: 15618/A/0001/UK/En



Energy Management Systems  
ISO 50001:2018  
Certificate Number: TW18/10494





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# QUALITY MANAGEMENT SYSTEMS

## REACH / SVHC COMPLIANCE

INCLUDING 205 SUBSTANCES

- Registration, Evaluation, Authorization & Restriction of Chemicals
- 211 SVHCs - Substances of Very High Concern

REACH applies to all chemical substances; not only those used in industrial processes but also in our day-to-day lives, for example in cleaning products, paints as well as in articles such as clothes, furniture and electrical appliances. Therefore, the regulation has an impact on most companies across the EU

Substances added to the Candidate List for a

#	Substance name	EC number	CAS number	Reason for
1	1-vinylimidazole	214-012-0	1072-63-5	Toxic for reproduction (Article 57 (c))
2	2-methylimidazole	211-765-7	693-98-1	Toxic for reproduction (Article 57 (c))
3	Dibutylbis(pentane-2,4-dionato-D,O')tin	245-152-0	22673-19-4	Toxic for reproduction (Article 57 (c))
4	Butyl 4-hydroxybenzoate (Butylparaben)	202-318-7	94-26-8	Endocrine disrupting properties - human health (Article 57(f) - human health)







ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# QUALITY MANAGEMENT SYSTEMS

## ROHS COMPLIANCE

DIIRECTIVE 2011/65/EU

- Restriction of Hazardous Substances Directive 2011/65/EU
- And amending Directive (EU) 2015/863

Directive 2011/65/EU was published in 2011 by the EU, which is known as RoHS-Recast or RoHS 2. RoHS 2 includes a CE marking directive, with RoHS compliance now being required for CE marking of products. RoHS 2 also added Categories 8 and 9, and has additional compliance recordkeeping requirements.



## PART FOUR

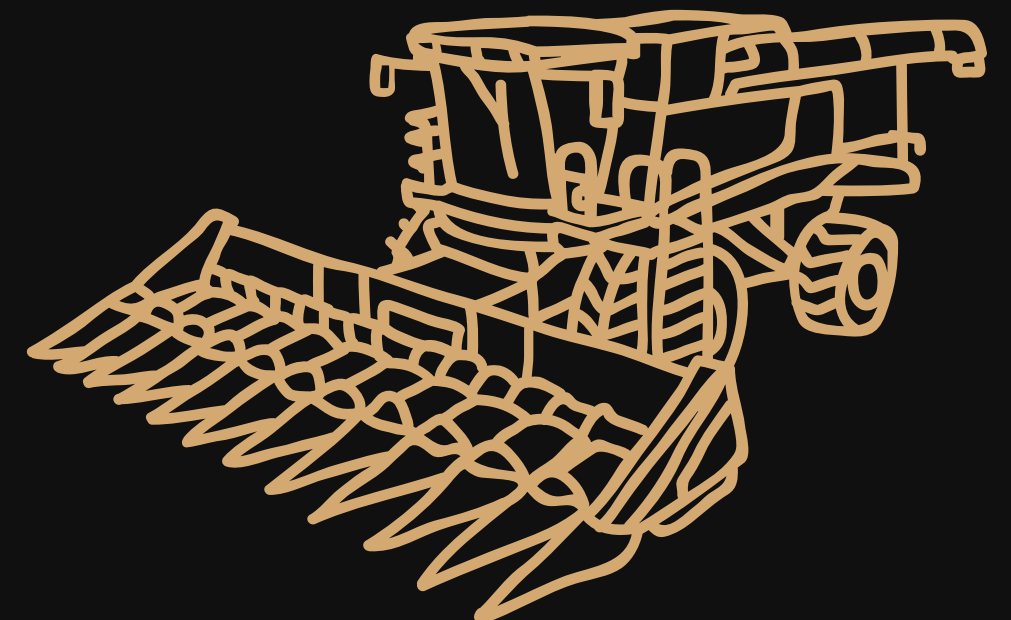


# PRODUCT LINES

**45** Automotive

**54** Industrial

**59** Agriculture Construction and Mining



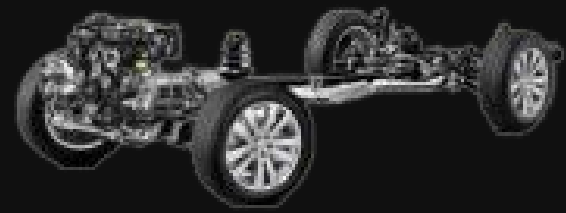


ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



# AUTOMOTIVE

## POWERTRAIN



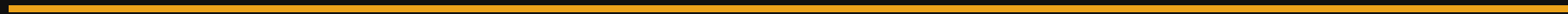
## DRIVELINE



## SUSPENSION



## STEERING





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



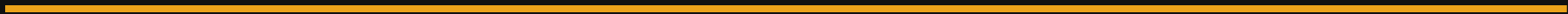
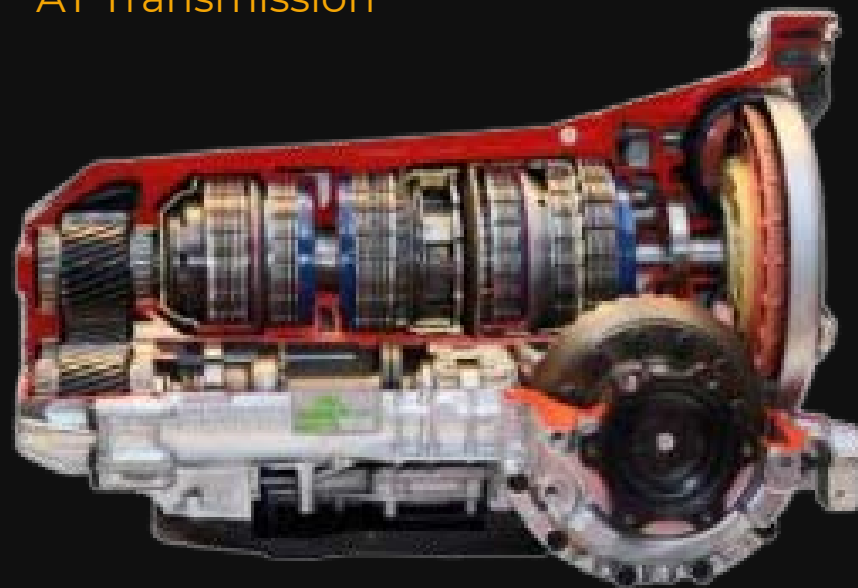
# AUTOMOTIVE

## TRANSMISSION

Transmission Seal



AT Transmission



INPUT SEAL			
SCR	SGR	TGR	TCR10
OUTPUT SEAL			
TC9	TC29	TG29S8	TGW14-PL1
SELECTOR SEAL		BONDED PISTON SEAL	
TZ4	TBG41	AT164	AT17



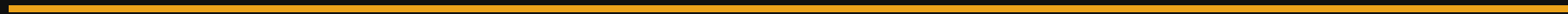
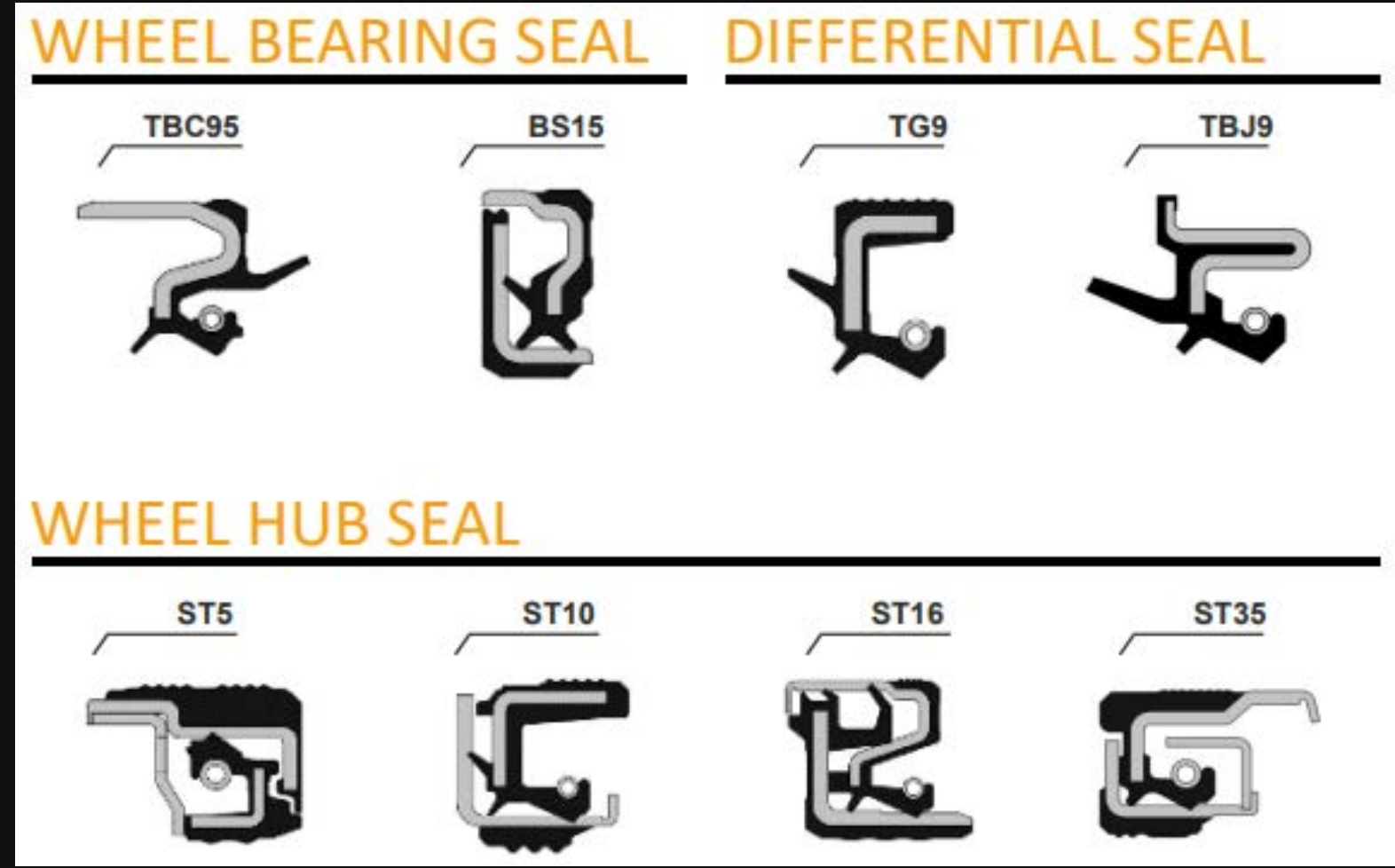
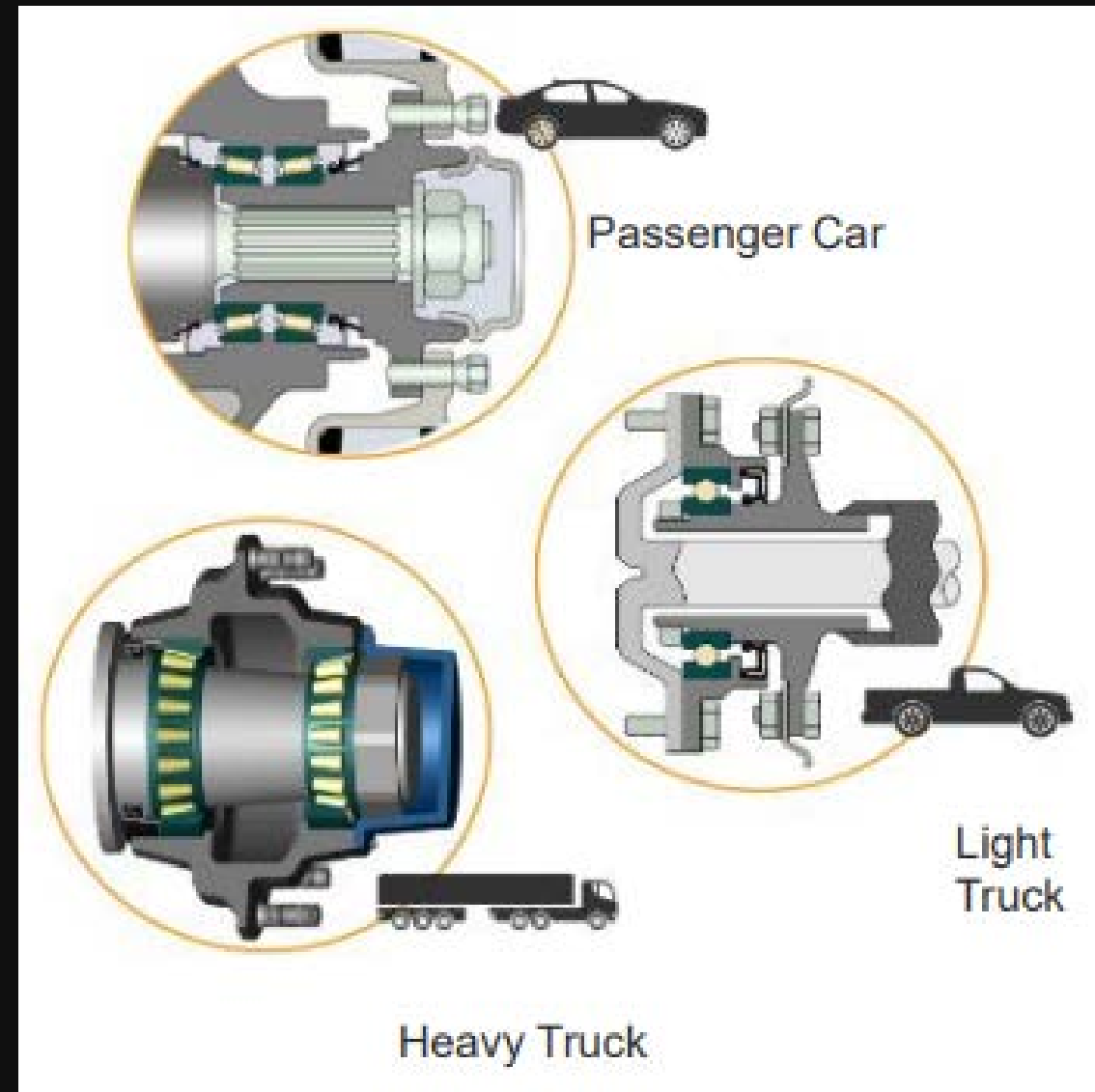
ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



# AUTOMOTIVE

## AXLE

Axle Seal





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



# AUTOMOTIVE

## SHOCK ABSORBER

Shock Absorber Seal



Shock Absorber



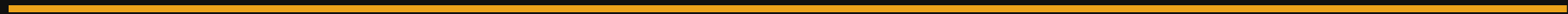
Shock Absorber Seal

TC4S      DC4S      DC4S11      AS

Low Temp. Resistance

-45°C  
NBR rubber capability

-40°C  
FKM oil seal capability





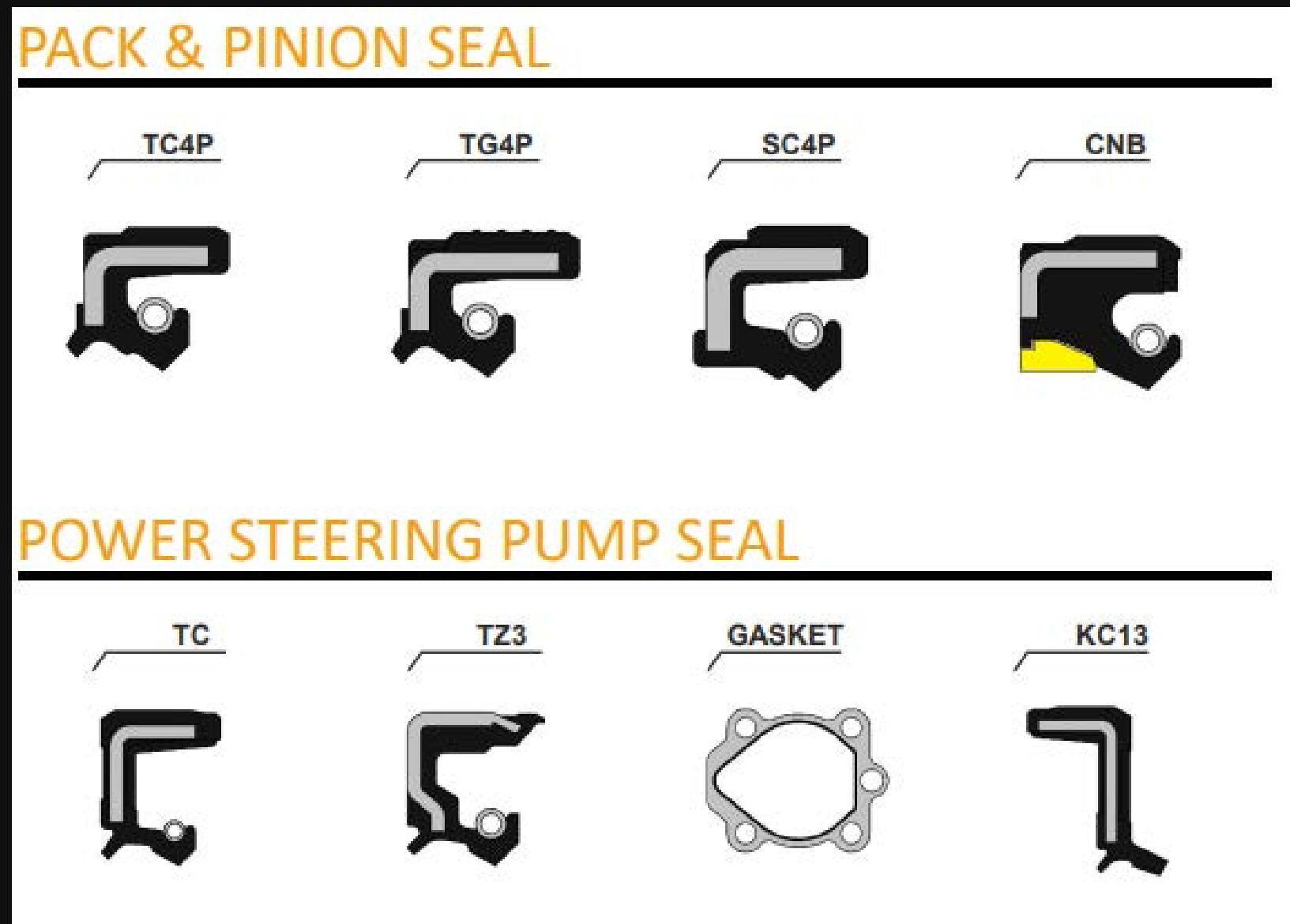
ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



# AUTOMOTIVE

## POWER STEERING

Power Steering Seal





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



# AUTOMOTIVE

## FUEL PUMP

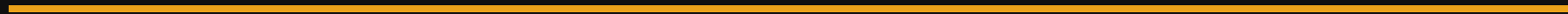
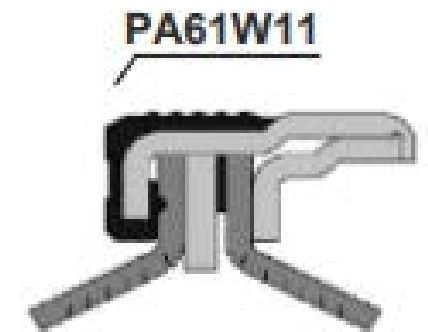
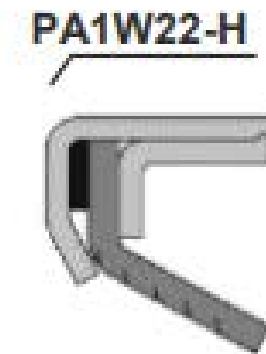
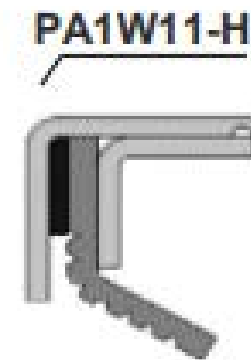
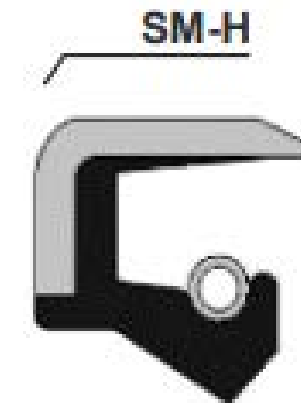
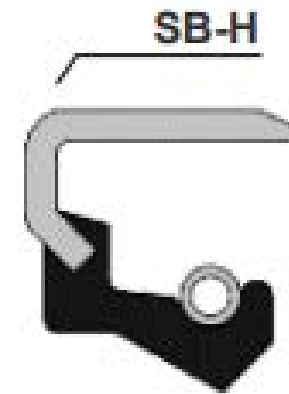
Fuel Pump Seal



Fuel Pump



## FUEL PUMP SEAL





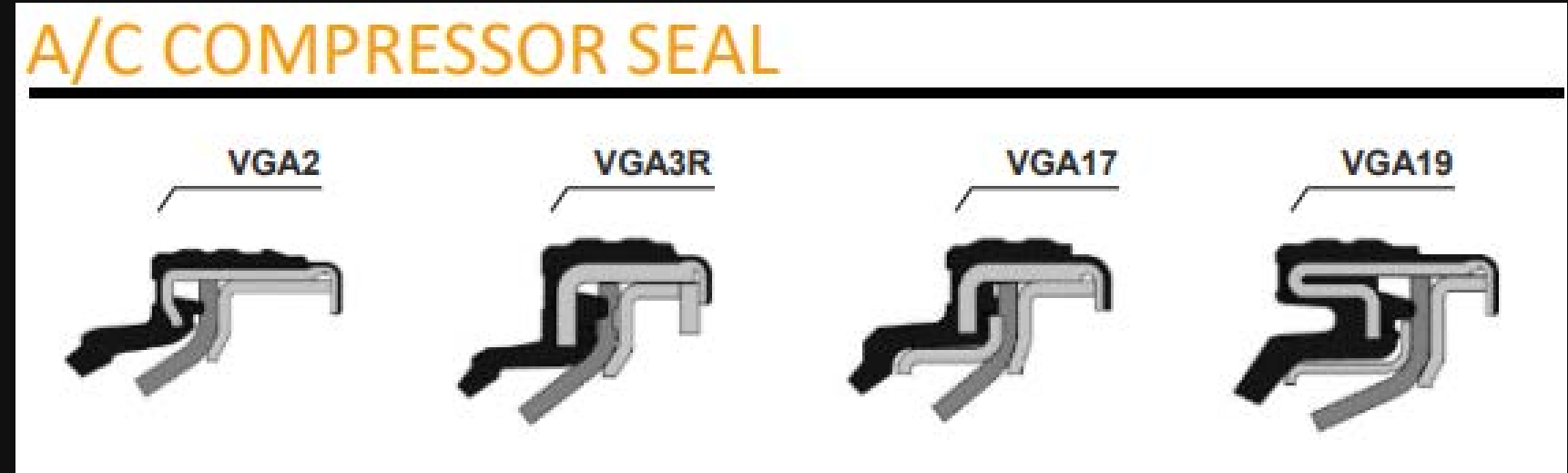
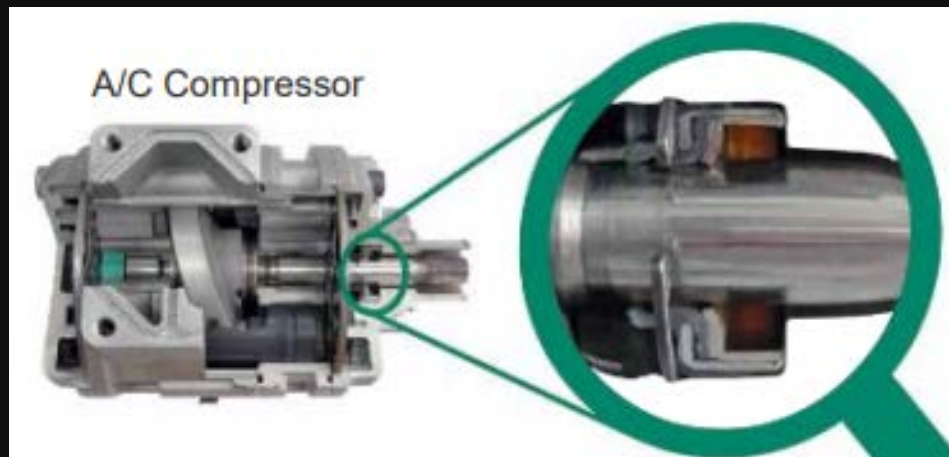


ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



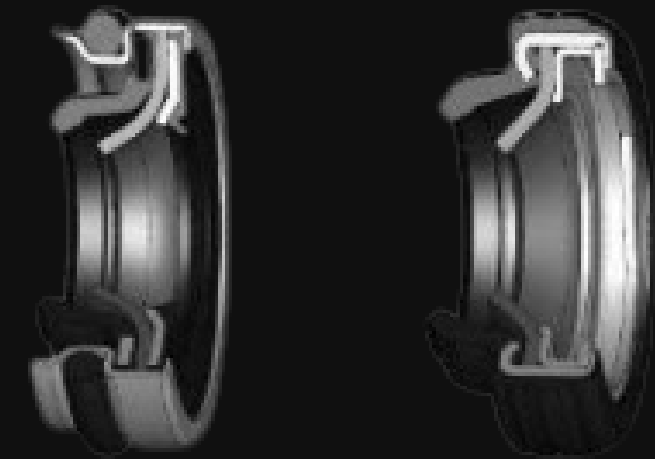
# AUTOMOTIVE

## A/C COMPRESSOR



### MATERIAL

- Automotive A/C compressor sales mainly use HNBR and PTFE
- NAK provides customised requirements and demands according to variety application.







ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# AUTOMOTIVE



## ELECTRIC VEHICLE

### EV Transmission Seal



### EV Motor Seal



### OPTIMISED DESIGN

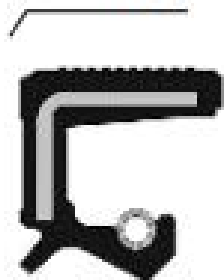
Seal designed to optimise spring loaded lip profile for low torque

Reduced torque



### EV TRANSMISSION INPUT SEAL

TG



TC50

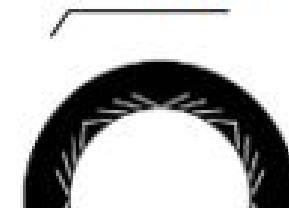


PTFE COATING

LKG1

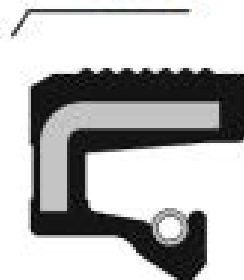


W14

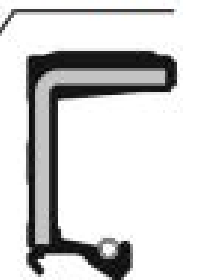


W14 helix ensures that the lubricant will be pumped from the air side back to the lubricant side

SG50

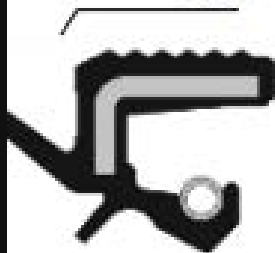


TX1C



### EV TRANSMISSION OUTPUT SEAL

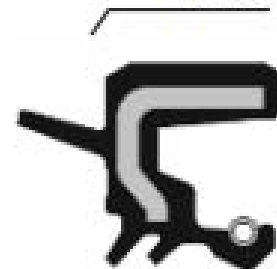
TG9



TBG2



TC29



TAJY





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

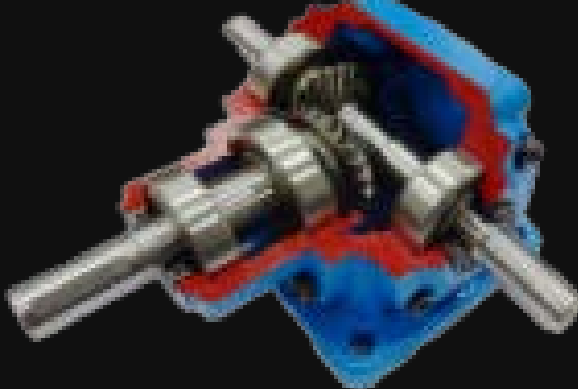


# INDUSTRIAL

PUMPS



REDUCERS



MOTOR



ROBOTIC  
ARMS



POWER  
TOOLS





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



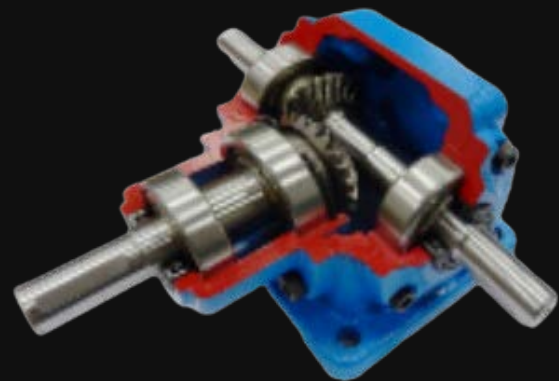
# INDUSTRIAL

## GEARBOX / REDUCER

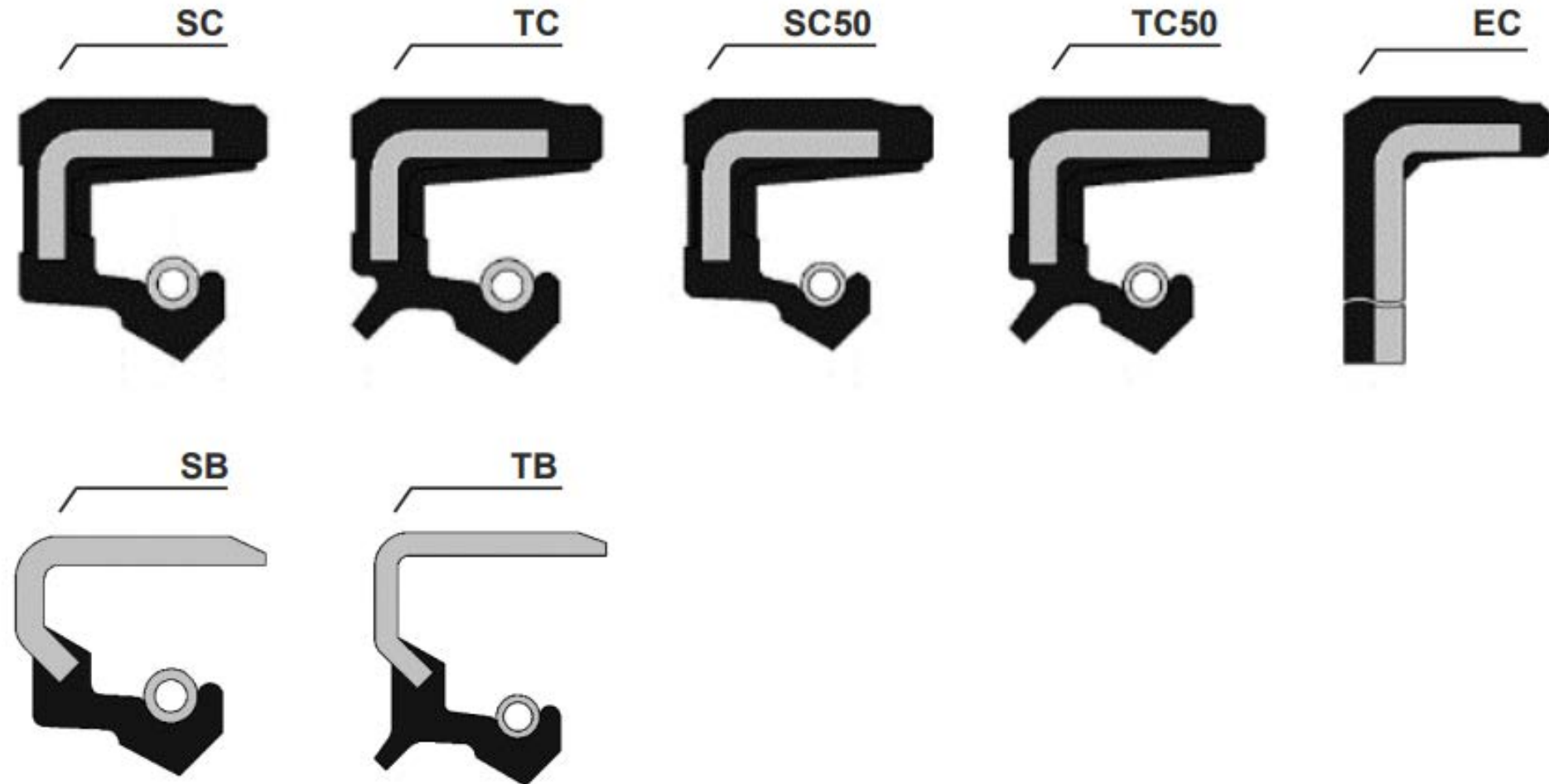
Gearbox Seal



Bevel Gearbox



### GEARBOX SEALS





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



# INDUSTRIAL

## HYDRAULIC PUMP

Pump Seal



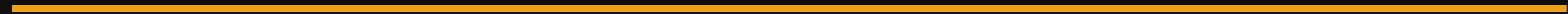
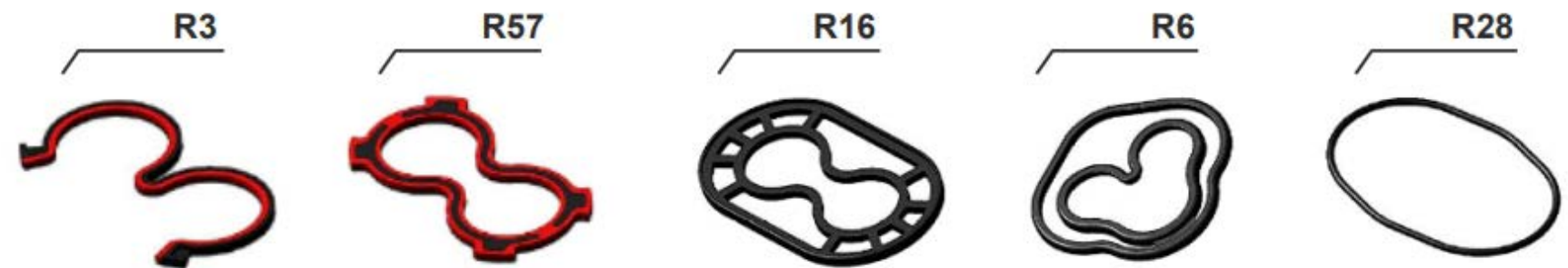
Hydraulic Piston Pump



## HYDRAULIC PUMP SEALS



## GASKET





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



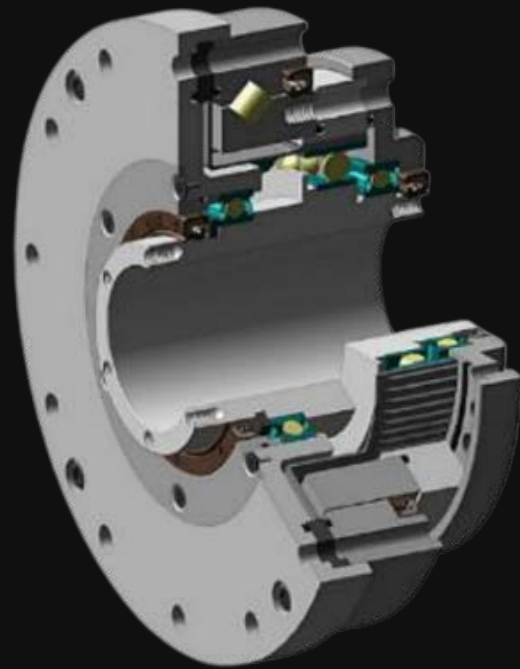
# INDUSTRIAL

## ROBOT SPEED REDUCER

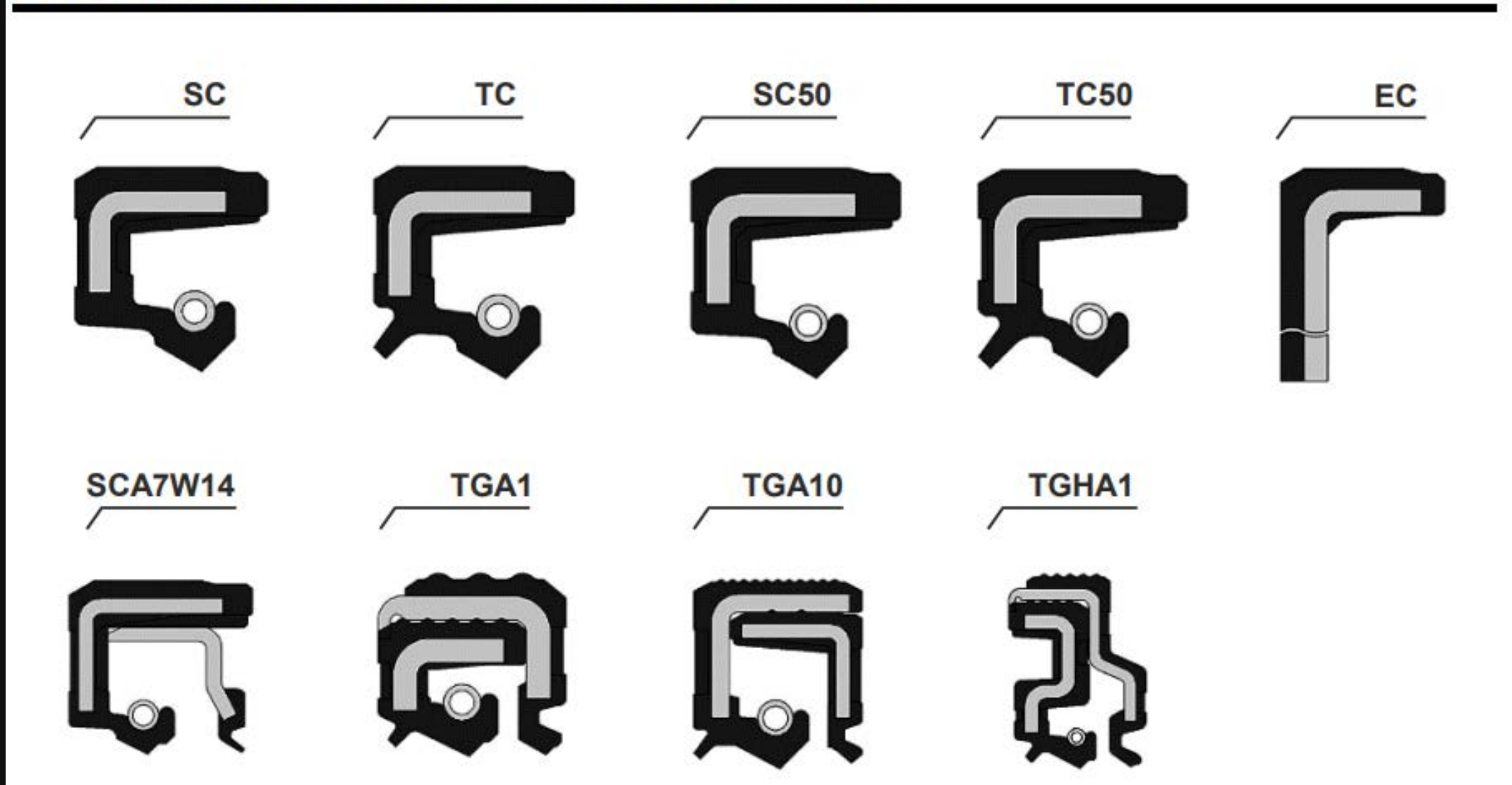
Reducer Seal



Speed Reducer



## ROBOT SPEED REDUCER SEALS





ISO-9001/14001  
 ISO/TS-16949  
 OHSAS-18001



# INDUSTRIAL

## WASHING MACHINE

Washer Seal



Front-Loading Washer



### TOP-LOADING WASHER SEAL

TCWA2



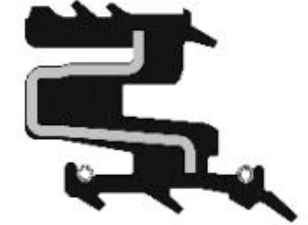
TCWA5



DCWA



DCWA1



### FRONT-LOADING WASHER SEAL

TCWA1



TCWA7



SGWA1



TAJYW14



TGWA



TGWA1



TGWA2



TAJYW14







ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# AGRICULTURE CONSTRUCTION AND MINING



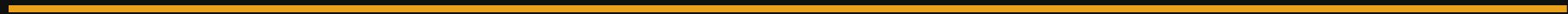
AGRICULTURE



CONSTRUCTION



MINING





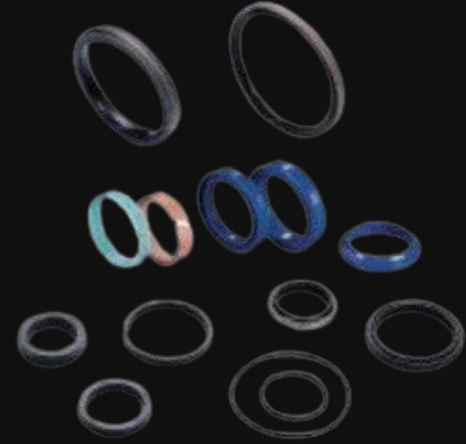
ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# AGRICULTURE CONSTRUCTION AND MINING

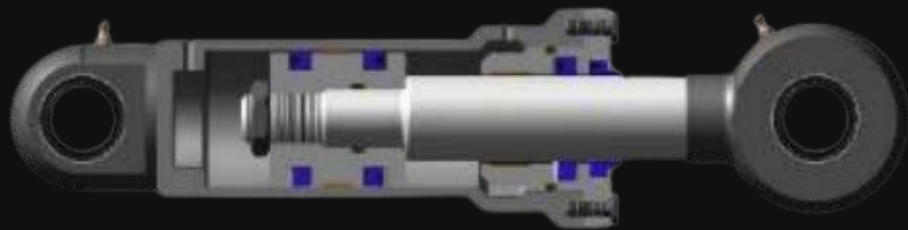


## CONSTRUCTION

Hydraulic Seal



Hydraulic Cylinder



PISTON SEAL			
UOP	COP	HOD	HPO
ROD SEAL			
UOP	COP	UIR	CIR
WIPER SEAL			
WP1	WP2	WP4	WP7





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# AGRICULTURE CONSTRUCTION AND MINING

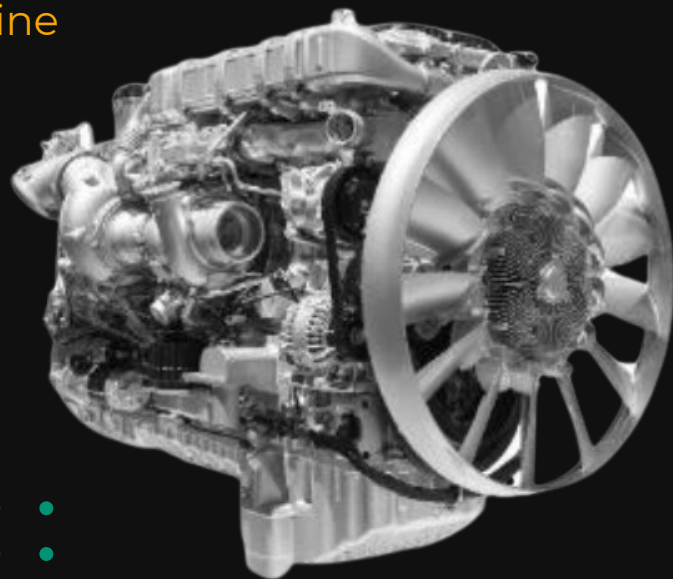


## AGRICULTURE CONSTRUCTION

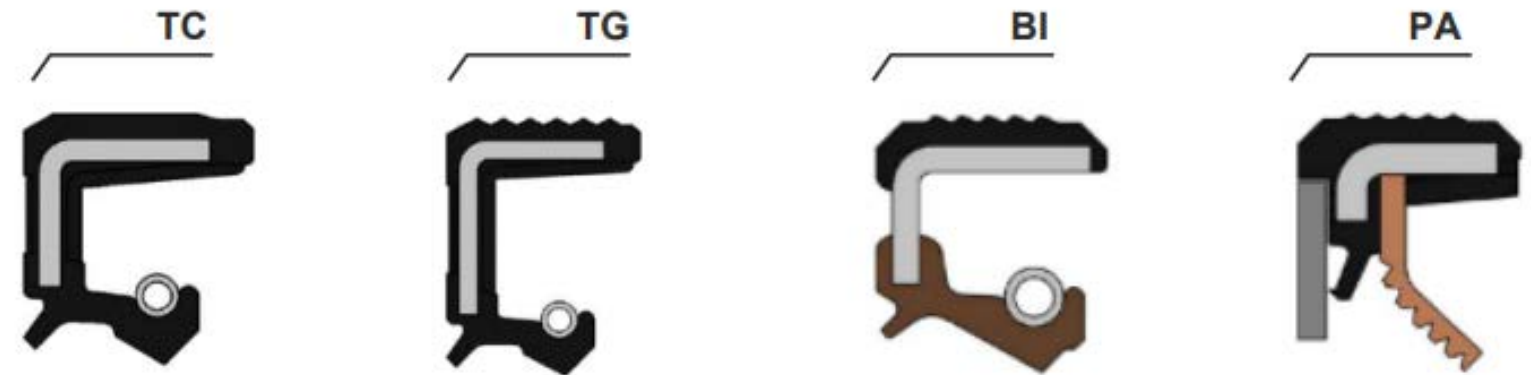
Engine Seal



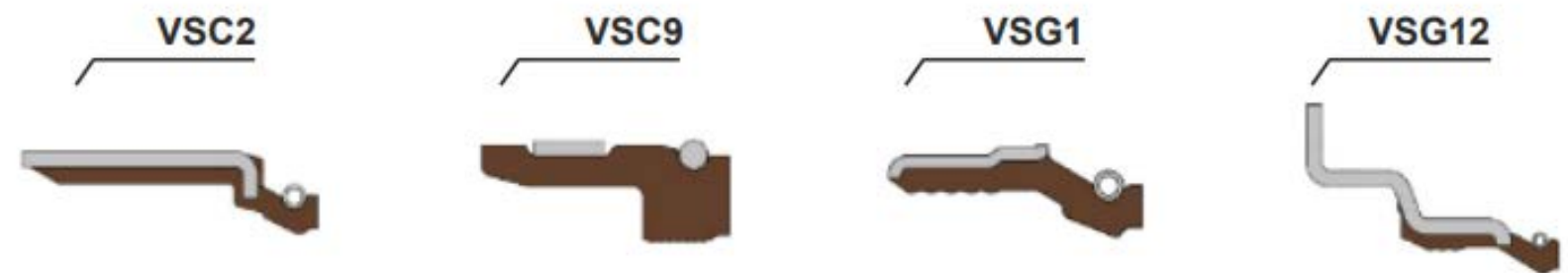
Diesel Engine



### ENGINE SEAL



### VALVE STEM SEAL





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# AGRICULTURE CONSTRUCTION AND MINING

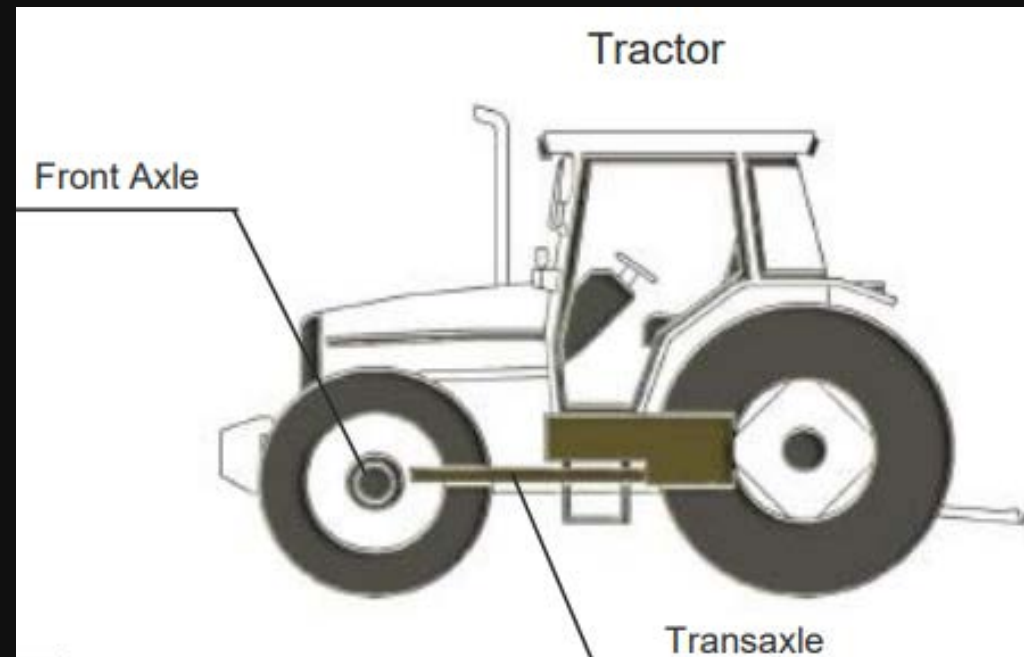


## AGRICULTURE

Front Axle Seal



Transaxle Seal



### FRONT AXLE SEAL


### TRANSAXLE SEAL

--	--	--	--



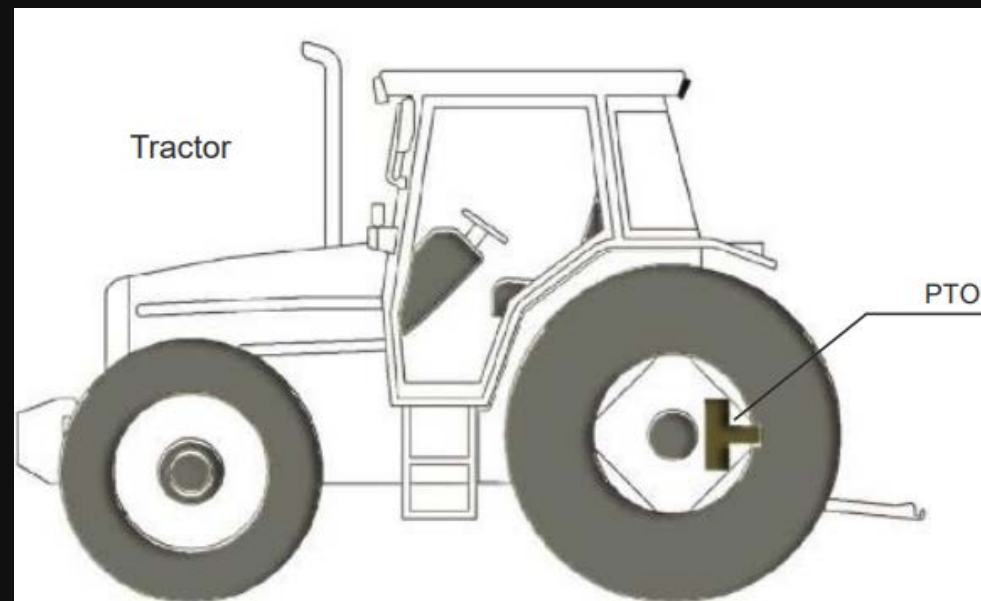
ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# AGRICULTURE CONSTRUCTION AND MINING



## PTO

PTO Seal



### PTO SEAL

 TB2	 TC2	 TG2	 TCJ2
 AJ1	 AO13	 AO46	 AP13





ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001

# AGRICULTURE CONSTRUCTION AND MINING



## FORKLIFT TRANSMISSION

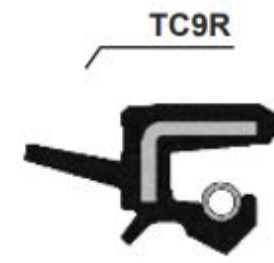
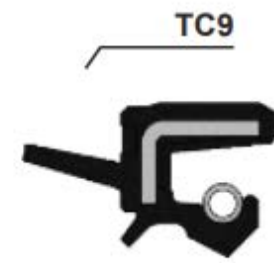
Transmission Seal for Forklift



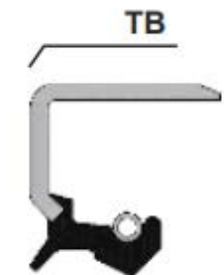
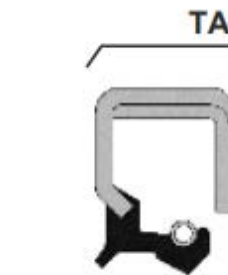
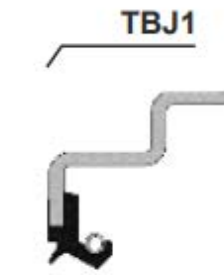
### INPUT SHAFT SEAL



### OUTPUT SHAFT SEAL



### SELECTOR SEAL



### OIL PUMP SEAL

### CLUTCH SEAL



ISO-9001/14001  
ISO/TS-16949  
OHSAS-18001



# CONTACT US



07 3266 7266



[SALES@NAKSEALINGTECHNOLOGIES.COM](mailto:SALES@NAKSEALINGTECHNOLOGIES.COM)



[WWW.NAKSEALINGTECHNOLOGIES.COM](http://WWW.NAKSEALINGTECHNOLOGIES.COM)



UNIT 1/17 BUTTONWOOD PLACE,  
WILLAWONG QLD 4110 AUSTRALIA

