



THE WORLD'S BEST PIPE LINE TOTAL SOLUTION PROVIDER

LEADING EXPERT IN **PIPE LINE**
TOTAL SOLUTION





Koins aims
for professional leading
company in the world
in pipeline
maintenance,
inspection and
rehabilitation.

Welcome to visit KOINS CO., LTD. We are carrying out leading position with fruitful growing based on our advanced technology & experience in this pipeline field which is core for national key industry including petrochemical plants. We are recognized for our professionalism on pipeline maintenance, especially pigging technology since the foundation of our company. We get prior & competitive position with INTEGRATED SYSTEM in a range of engineering, design, manufacture, pig production, outsourcing technology and site service. Based on this robust ability and experience in pipeline maintenance field, we are extending our service territory on pipeline inspection as well as maintenance.

Now we pursue to achieve highest level through technical ability & global network and get the competitiveness in global market. We are going to meet you with package process service in all industrial field with pipeline inspection, maintenance and rehabilitation.

Our executives and staff guarantee to fulfill the need with first class technology & service to domestic, national, further world wide client with our sense of responsibility and principle that we are at a pivotal role of industry.

Sincerely yours.

|| OVERVIEW & HISTORY

Name of the company | KOINS CO., LTD.

Date of establishment | 25th July 2005

Tel | 82_61-684-6862

Website | www.koins21.co.kr

Address | #109-32, Sandanjungang-ro, Yeosu-si, Jeollanam-do 555-280, Republic of Korea

License | ISO9001(quality) / ISO14001(environment) certificate/ INNO-BIZ / Trade business

President | Myung Hwan-Choi

Fax | 82-61-684-6865

E-mail | koins@koins21.co.kr

II HISTORY

- 2014 |
 - 08. ASME Certification with "U", "U2" and "PP" Designator
 - 04. Sign on Agency with PETROMAC in UAE
 - 03. Sign on EXCLUSIVE AGENT with Projectile tube cleaning Co. (USA)
 - 03. Sign on Agency with KENOR ASIA in Iran
 - 02. License for Mechanical utility construction
 - 01. Partnership with Jiwon Tech. for CHEMICAL CLEANING (KOREA)

- 2013 |
 - 05. Registered family company with Suncheon University (KOREA)
 - 05. Designated to promising S&M company (Technical prospect of Jeollanam-Do in KOREA)

- 2012 |
 - 12. Designated to star company of Yeosu-Si(Ministry of Knowledge Economy)
 - 10. Sign on Partnership with INPIPE inc. UK
 - 09. Award S&M company technical innovation prize from head of Ministry of Knowledge Economy
 - 07. Designated to good company for work in local (Ministry of Knowledge Economy)

- 2011 |
 - 07. Selected as a green management company
 - 05. Establish Koins India Coporation (Selected POSCO Maintenance Company)
 - 03. Partnership with NamKwang Tech. for Pressure vessel febrication (KOREA)

- 2009 |
 - 07. Selected as technical Innovation S&M Company (S&M Business administration)
 - 05. Sign for local agent of S.O.S. INC. Australia Tube cleaning system

- 2008 |
 - 10. Opening The Shop for Self - producing Pig
 - 05. Acquire certificate of ISO9001(Quality) and 14001(Environment)

- 2007 |
 - 12. Sign on exclusive agent with Rosen Inc. Malaysia
 - 07. Sign on partner relationship with SeonWoo TS. Co. (KOREA)

- 2006 |
 - 07. Acquire regular membership of national trade associate of Korea

- 2005 |
 - 12. Establishing Koins India branch (PLANT MAINTENANCE)
 - 12. Partnership PIGSUNLIMITED in USA
 - 10. Partnership with POLY UNION PIG LINING Co. in Japan
 - 07. Establishing Koins co.,. ltd.

II BUSINESS

MANUFACTURE & SUPPLY

·Production & Sales of Pigs

·Sales of Pigging material

PIGGING SERVICE

·Pig cleaning for New built pipeline

·Furnace Heater Tube Decoking

·Descaling for existed pipeline

·Proof test

PIGGING SYSTEM

·Design, Fabrication and Installation of Pigging Trap, Signaller, Diverter

INSPECTION SERVICE

·Intelligent Pig

·Laser Profiler

·Mapping Service

·CCTV Visual

LINING SERVICE

·Pig Lining Service

·Spray Lining Service

HOT TAPPING / PLUGGING

·Hot Tapping / Plugging

HIGH PRESSURE WATER JET CLEANING

·High Pressure Water Jet Cleaning

MANUFACTURE & SUPPLY



|| KOINS PIG?

We can technically manufacture the customized poly urethane pigs by ourselves. We ensure the best result of cleaning as considering speculation of pipeline, service fluid, condition of operation and status of inside of pipeline, etc. we also made a technical agreement with famous overseas company, and we can provide our customer the best suitable pigs.

|| KOINS PIG SIZE

·SIZE : 1"~42"STANDARD SIZE

·SPECIAL ORDER : Over than 44"

|| CLEANING PIG FOR FOAM TYPE

 <p>KIS-SWA1 CYLINDRICAL BARESWAB</p>	 <p>KIS-SWA3 LOW DENSITY NON COATING</p>	 <p>KIS-NCW1 MEDIUM DENSITY NON COATING</p>	 <p>KIS-NCB1 HIGH DENSITY NON COATING</p>
 <p>KIS-RCC1,2 EACH DENSITY CRISS CROSS</p>	 <p>KIS-RCWB1,2 EACH DENSITY HALF BRUSH</p>	 <p>KIS-SPB1,2 TOTAL WIRE BRUSH</p>	 <p>KIS-SMPS1,2,3 METAL PIN PIG</p>

|| STEEL MANDREL PIG

 <p>KIS-BGC2 BATCHING CUP PIG (2"~48")</p>	 <p>KIS-BGC4 BATCHING CUP PIG (2"~48")</p>	 <p>KIS-CSB BRUSH CLEANING CUP PIG (2"~48")</p>	 <p>KIS-SRB BRUSH CLEANING CUP PIG (2"~48")</p>	 <p>KIS-CSBJ BRUSH CLEANING CUP PIG (6"~14")</p>
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<p>KIS-VP2BA BATCHING CONICAL CUP PIG (2''~48'')</p>	<p>KIS-VP4BA BATCHING CONICAL CUP PIG (2''~48'')</p>	<p>KIS-PSDB CLEANING PIG (6''~14'')</p>	<p>KIS-PSCC2 CLEANING PIG (10''~24'')</p>
<p>KIS-MD MULTI DISC PIG (2''~48'')</p>	<p>KIS-MDB MULTI DISC BRUSH PIG (2''~48'')</p>	<p>KIS-BGD2 DISPLACEMENT PIG (2''~48'')</p>	<p>KIS-BGD4 DISPLACEMENT PIG (2''~48'')</p>

|| SPECIAL PIG

<p>KIS-SWP(SUD) PROCESS PIG</p>	<p>KIS-FLX SOLIDCASTUTILITYPIG (DISC TYPE)</p>	<p>KIS-SPHERE SOLID CAST PIG (SPHERE TYPE)</p>	<p>KIS-MGM SOLIDCASTUTILITYPIG (CUP TYPE)</p>
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|| SPARE COMPONENTS

<p>DISC SCRAPPERCUP</p>	<p>DISC SCRAPERDISC (GUIDE,SEALING,SPACER)</p>	<p>DISC SCRAPERDISC (BLOTTEDDUALDIAMETER)</p>	<p>PLATE GAUGINGPLATE (ALUMINUM,STEEL)</p>	<p>BLADE FORWAX,PARFFIN, SLUDGE,ORGANIC GROWTHANDMUD</p>
<p>BLADEASSEMBLY FORWAX,PARFFIN,SLUDGE, ORMILLSCALE,RUST, ORGANICGROWTHANDMUD</p>	<p>BRUSH SANDANDDEBRIS</p>	<p>BRUSHASSEMBLY FORMILLSCALE,RUST, SANDANDDEBRIS</p>	<p>PIGTRACKER ELECTROMAGNETIC SYSTEM</p>	

PIGGING

SERVICE

|| CLEANING

To service liquid as the best quality by removing remained debris, rust, sand, mud and welding spatter inside of pipeline which is arising during construction or long term outdoor storage.



BEFORE CLEANING



AFTER CLEANING

|| DESCALING

To keep stable producing progress, quality, save the operating expense.
To keep stable flow rate and pressure by removing scale raised during operation



BEFOR DESCALING



AFTER DESCALING



COLLECTED SCALE

|| EVACUATION

To evacuate inside of pipeline with pig for pipeline relocation and liquid substitution.



INSTALL TANK FOR COLLECTING LIQUID



PIG FOR COLLECTING PRODUCT(BEFORE PIGGING)



PIG FOR COLLECTING PRODUCT(AFTER PIGGING)

|| FURNACE HEAT TUBE DECOCKING

To get stable flow rate, To extend life span of tube by preventing bulging, To prevent heat loss and raising pressure by removing coking deposit, carbon of inside wall of tube



BEFORE DECOCKING



AFTER DECOCKING



COLLECTED COKE

|| TRACKINGSYSTEM

To check the pig passage, To locate the stock pig

1. ELECTRONIC PIG DETECTOR

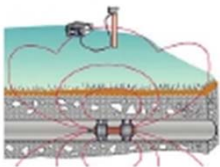


ELECTRONIC PIG DETECTOR
(EPDII)



ITX TRANSMITTER

2. HOW TO USE



EPD detects the pulse signal from the transmitter inside of pig.

3. ULTRASONIC GEOPHONE



You can hear ultrasonic sound by contacting sensor on the ground or around the pipeline.

|| PIGGINGSYSTEM

In case that pipe line needs cleaning regularly or replacing product frequently, install pigging system permanently to raise work efficiency.

- **APPLICABLE FIELD**

Refinery, Chemical factory, Tank storage, Pipeline of gas, oil and water, Food factory and Pharmaceutical factory



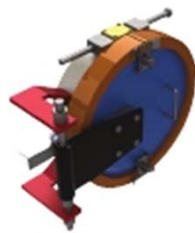
WAYS OF DESIGN FOR PIG CLEANING SYSTEM

Customized designing to fit usage and condition of site



PIG LAUNCHER / RECEIVER

Equipment for launching and receiving pig



QUICK OPEN / CLOSE DOOR

To open and close launcher and receiver door quickly



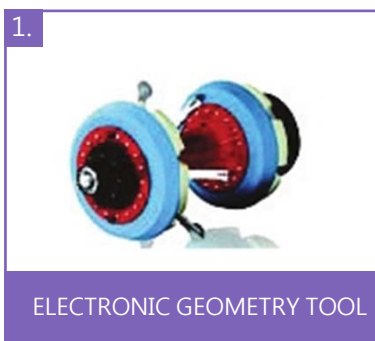
PIG SINGALLER

To detect pig passage attaching on launcher and receiver



INSPECTION SERVICE

II KIND OF TOOL FOR INTELLIGENT PIGGING



1. ELECTRONIC GEOMETRY TOOL

2. MAGNETIC FLUX LEAKAGE METAL LOSS ILI TOOL



3. ULTRASONIC CRACK DETECTION TOOL

4. COMBINED MFL/ ULTRASONIC DETECTION TOOL



5. COMBINED MFL/SIC DETECTION TOOL

6. ULTRASONIC CORROSION DETECTION TOOL



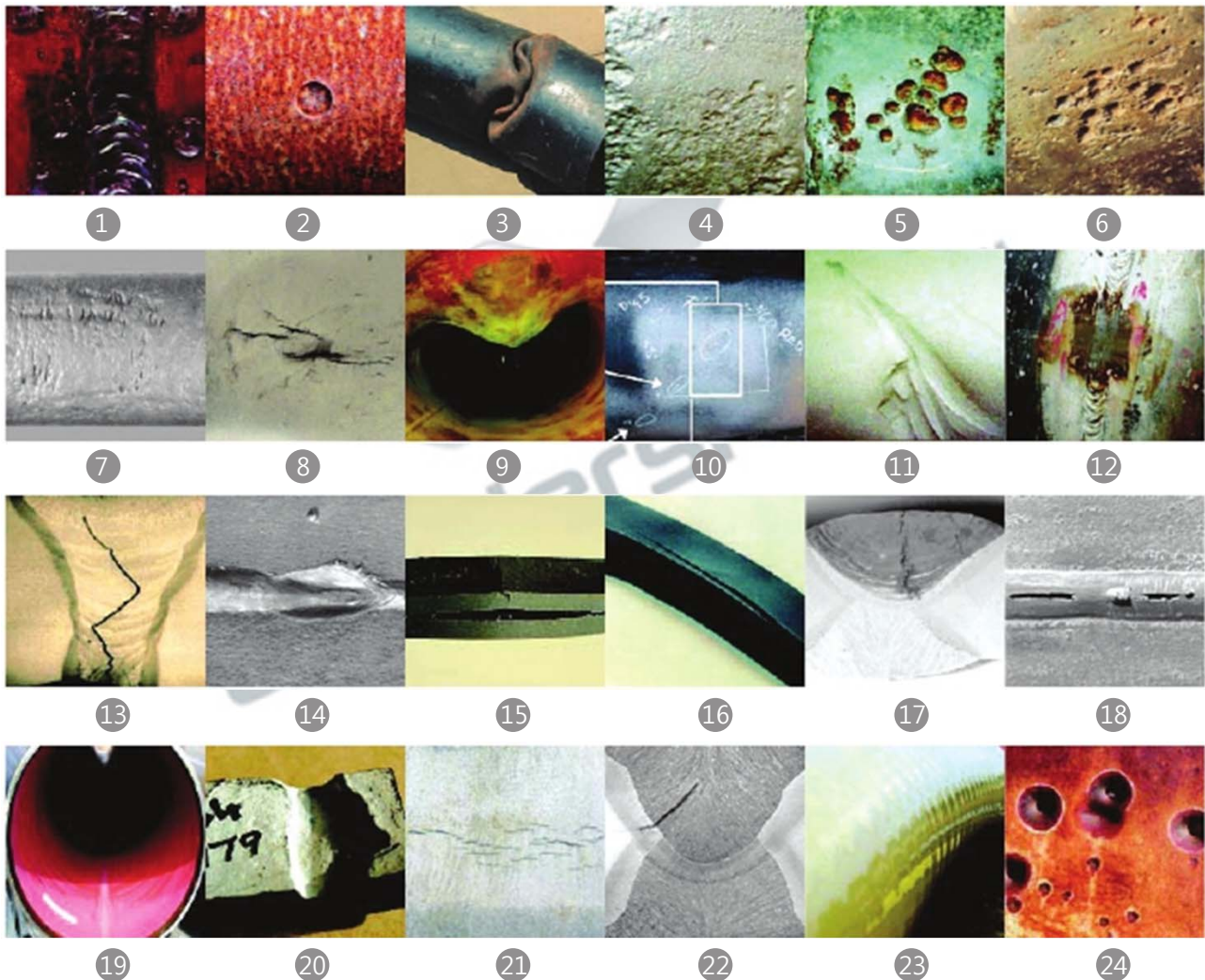
7. SPIRAL MAGNETIC FLUX LEAKAGE TOOL(SMFL)

8. GAS PIPELINE MAGNETIC FLUX LEAKAGE TOOL(GMFL)

II APPLICATION

- Acquire the DATA of new built in the pipe line and integrity inspection
- Managing pipe line's integrity for corrosion

II Detect for corrosion and deformation



1. ARC STRIKE 2. ARTIFICIAL DEFECT 3. BUCKLE 4. GENERAL CORROSION 5. CORROSION CLUSTER 6. GENERAL PITTING 7. CIRCUMFERENTIAL CRACK 8. AXIAL CRACK 9. DENT 10. DENT WITH METAL LOSS 11. GOUGING 12. GRINDING 13. GIRTH WELD CRACK 14. GIRTH WELD ANOMALY 15. HYDROGEN INDUCED CRACKING(HIC) 16. LAMINATION 17. LONGITUDINAL WELD CRACK 18. LONGITUDINAL WELD ANOMALY 19. OVALITY 20. PIPE MILL ANOMALY 21. STRESS CORROSION CRACKING(SCC) 22. SPIRAL WELD ANOMALY 23. WRINKLE 24. ZERO WALL

LINING SERVICE

|| OUTLINE OF PIG LINING

Minimum lining temperature : Over 1°C

Film thickness : Based on one time lining, 800µm for straight pipeline, 400µm for Bend, maximum thickness 3mm.

Distance : Possible over than 1km(Standard 10")

Ability : Possible for lining regardless of quantity and sort of horizontal / vertical pipeline.

Durability :20years based on the film thickness of 800µm

Maximum bore size : 30inch



BEFORE CLEANING

AFTER CLEANING

AFTER LINING

|| OUTLINE OF SPRAY LINING

Equipment of Lining : KCTR-IR(KOINSConvergenceTechnologyforPipeLining-IntelligenceRehabRobot

Minimum lining temperature : See specification of each brand / Film thickness : 0.5mm~12.5mm

Distance : According to bore size and thickness of lining / Ability : 45° of horizontal / 22° of vertical

Durability : Over than 20 years / Maximum bore size : 174inch

|| APPLICATIONS



|| IN-SITUSPRAYLINING



|| CERTIFICATE & SUPPLY



|| DOMESTIC CUSTOMER



|| ABROAD CUSTOMER





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