MODENTIC

# Trademarks we've entered into:

MODENTIC

# Modentic Group Company Profile

With a history of new product development and innovation that dates back to the the company's inception in 1982, Modentic Group provides the products in a broad range of materials, sizes and pressure classes. Focused on the various industrial sector including Power Generation, Petroleum Refining, Oil & Gas, food&pharmacy and Commercial Construction, Modentic's highly engineered product solutions are widely specified and used throughout the world.

## MODENTIC IND. CORP.

Manufacture Fire safe ball valves from CLASS 150 to CLASS 2500 and sell all kinds of industry valve

Location: Taichung, Taiwan
Main Products: Industrial Valves

*www.modentic.com.tw*

## MODENTIC VALVE CORP. *NANJING*

Manufacture Actuated valves and import all kinds of industry valves from abroad to sell in Chinese market

Founded in 1997
Location: Nanjing, China
Main Products: Industrial Valves

*www.modentic.com.cn*

## Megaline VALVES

**MEGALINE VALVES CORPORATION**
Valve solutions provider

Founded in 2009
Location: Taichung, Taiwan
Main Products: Automation Valves
High temperature and cryogenics valves
Temperature range : -196°c ~ 550°c

*www.megalinevalves.com*

## KEVIN STEEL CORPORATION *TAIWAN*

Manufacture special alloy valves

Founded in 1999
Location: Taichung, Taiwan
Main Products: Super Alloy Valves

*www.kevinsteel.com.tw*

## AsiaValves

**ASIA VALVES CORPORATION**
Manufacture ball valves and import valves & fittings for building and industry to sell in Vietnamese market

Founded in 2007
Location: HCMC, Vietnam
Main Products: Automation Valves

*www.asiavalves.com.vn*

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# History & the milestones we've achieved

1982 Modentic founded

1997 Modentic Nanjing founded

1999 Kevin Steel founded

2007 Asia Valve Corporation founded

2009 Megaline Corporation founded

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# History & the milestones we've achieved

**1982~1985**

**Seed stage：**
fabrication of screwed fittings

**1985~1992**

**Startup stage：**
fabrication of screwed end valves

**1992~2000**

**Expanding stage：**
extended facilities to fabricate flanged endvalves

**2000 ~ 2008**

**Stable stage：**
extended facilities to fabricate Gate / Globe / Check
Automation

**2009 to now**

**Current stage：**
Develop clean valves / Super Alloy Valves.
Stock Super Alloy Valves, Build B to B website
R&D Vacuum Valve

MODENTIC

# Industries served

**We provide a broad range of valve solutions to meet various industrial applications.**

## Business by industries served

*General constructions*

10%

*Oil & Gas*

30%

*Marine Shipbuilding*

10%

*Water Resources*

10%

10%

30%

*Chemical Petrochemical*

*Food Bio-technology*

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# Flow Control Product range:



## <1> API 607 FIRE SAFE APPROVED BALL VALVES

MD-51FS-150/300

API 607 4th

MD-52FS-150/300

API 607 4th

V-255FS • V-255M

API 607 4th

MD-82-150/300

API 607 6th / ISO 10497-5 / BS 6755 Part II

MD-82 PN 16/40

API 607 6th / ISO 10497-5 / BS 6755 Part II

MODENTIC

# Flow Control Product range:



## <1> API 607 FIRE SAFE APPROVED BALL VALVES

V-755FS

API 607 6th / ISO 10497-5 / BS 6755 Part II

V-155FS

API 607 6th / ISO 10497-5 / BS 6755 Part II

HPV-43FS

API 607 5th / ISO 10497-5 / BS 6755 Part II

HPV-40FS

API 607 5th / ISO 10497-5 / BS 6755 Part II

HPV-41FS

API 607 5th / ISO 10497-5 / BS 6755 Part II

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# Flow Control Product range:

## <2> SANITARY & HIGH PURITY BALL VALVES

V-255EB / TC

V-Z05EB / TC

V-Z05MEB / TC

V-Z58EB / TC

K-Z04EB / TC

K-338TC

K-434TC

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# Flow Control Product range:



## <3> SUPER ALLOY VALVES

### CASTING BALL VALVES

V-006

V-255

MD-82

MD-54

### BAR MATERIAL BALL VALVES

VS-06

HPV-40/41

HPV-43

MODENTIC

# Flow Control Product range:



## <3> SUPER ALLOY VALVES

**API 600 / API 603 Design** Gate • Globe • Check Valves

Gate Valve
GTF

Globe Valve
GBF

Check Valve
SF

### OTHERS

Check Valve
MV-1220
Wafer Type

Check Valve
MV-1221
Lug Type

Needle Valve
NV-0060
NV-0061

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# Flow Control Product range:



## <3> SUPER ALLOY VALVES

### SUPER ALLOY VALVES MATERIAL LIST

Other metal materials other than the above listed can be offered upon request

**Material Conversation Chart**

| Material code | Nominal | Casting | | | Bar or forged | | |
|---|---|---|---|---|---|---|---|
| | Designation | ASTM | DIN | UNS | ASTM | DIN | UNS |
| **Austenitic Stainless Steel** | | | | | | | |
| SS304 | 18Cr-8Ni | A351 CF8 | 1.4308 | J92600 | A276 304 | 1.4301 | S30400 |
| SS304L | 18Cr-8Ni-LC | A351 CF3 | 1.4306 | J92500 | A276 304L | 1.4306 | S30403 |
| SS316 | 18Cr-9Ni-2Mo | A351 CF8M | 1.4408 | J92900 | A276 316 | 1.4401 | S31600 |
| SS316L | 18Cr-9Ni-2Mo-C<0.03% | A351 CF3M | 1.4404 | J92800 | A276 316L | 1.4404 | S31603 |
| SS317 | 18Cr-12Ni-3.5Mo | A351 CG8M | | J93000 | A276 317 | 1.4449 | S31700 |
| SS317L | 18Cr-12Ni-3.5Mo-C<0.03% | A351 CG3M | | J92999 | A276 317L | 1.4438 | S31703 |
| SS347 | 18Cr-10Mi-Nb | A351 CF8C | 1.4552 | J92710 | A276 347 | 1.4550 | S34700 |
| 904L | 19Cr-23Ni-4.0Mo | | | | AISI 904L | 1.4539 | N08904 |
| Alloy 20 | 29Ni-20.5Cr-3.5Cu-2.5Mo | A351 CN7M | 1.4536 | J95150 | B473 | 2.466 | N08020 |
| **Super Austenitic Stainless Steel** | | | | | | | |
| 254Mo | 20Cr-18Ni-6.5Mo-N-Cu | A351 CK3MCuN | 1.4547 | J93254 | A276 | | S31254 |

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# Flow Control Product range:



## <3> SUPER ALLOY VALVES

| Material code | Nominal | Casting | | | Bar or forged | | |
|---|---|---|---|---|---|---|---|
| | Designation | ASTM | DIN | UNS | ASTM | DIN | UNS |
| **Nickel based Alloy** | | | | | | | |
| Nickel CZ100 | 97Ni | A494 CZ-100 | 2.4066 | N02100 | | | |
| Monel 400 | 67Ni-30Cu | A494 M-35-1 | 2.4365 | N24135 | B164 | 2.4360 | N04400 |
| Hastelloy B | 67Ni-28Mo-5Fe | A494 N-12MV | 2.4882 | N30012 | B335 | 2.4819 | N10001 |
| Hastelloy B2 | 67Ni-30Mo-1Fe | A494 N-7M | 2.4617 | . | B335 | 2.4856 | N10665 |
| Hastelloy C | 58Ni-16Cr-16Mo-6Fe-4W | A494 CW12MW | 2.4686 | N30002 | B574 | 2.4819 | N10002 |
| Hastelloy C276 | 64Ni-18Cr-18Mo | A494 CW6M | 2.4819 | N30107 | B574 | 1.7752 | N10276 |
| Hastelloy C22 | 58Ni-21Cr-14Mo-4Fe-3W | A494 CX2MW | 9.4602 | N26022 | B574 | 2.4602 | N06022 |
| Inconel 600 | 78Ni-15Cr-5Fe | A494 CY-40 | 2.4816 | N06040 | B166 | 2.4817 | N06600 |
| Inconel 625 | 65Ni-22Cr-9Mo-3.5Nb | A494 CW6MC | 2.4856 | N26625 | B446 | 2.4856 | N06625 |
| **Duplex Stainless Steel** | | | | | | | |
| 1A | 25Cr-5Ni-Mo-Cu | A890 CD4Mu | 1.4507 | J93370 | A790 31260 | | S31260 |
| 1B | 25Cr-5Ni-Mo-Cu-N | A890/995CD4MCuN | 1.4507 | J93372 | A790 31260 | | |
| 2A | 24Cr-10Ni-Mo-N | A995 CE8MN | | J93345 | | | |
| 2205/4A | 22Cr-5Ni-Mo-N | A890/995 CD3MN | 1.4462 | J92205 | A790 31803 | 1.4462 | S31803 |

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# Flow Control Product range:



## <3> SUPER ALLOY VALVES

| Material code | Nominal | Casting | | | Bar or forged | | |
|---|---|---|---|---|---|---|---|
| | Designation | ASTM | DIN | UNS | ASTM | DIN | UNS |
| **Super Duplex Stainless Steel** | | | | | | | |
| 2507/ 5A | 25Cr-7Ni-4Mo-N | A890/995 CE3MN | | J93404 | A479 32750 | 1.4410 | S32750 |
| Z100/ 6A | 25Cr-7Ni-3Mo-Cu-N-W | A890/995 CD3MWCuN | 1.4468 | J93380 | A479 32760 | 1.4460 | S32760 |
| Ferralium 255/1C | 25Cr-6Ni-Mo-Cu-N | A890 CD3MCuN | | J93373 | A479 39277 | | S39277 |
| 329 | 25Cr-7Ni-3Mo-N | | 1.4507 | | A479 32760 | 1.4460 | S32900 |
| **Titanium** | | | | | | | |
| Grade 2 | | B367 C2 | | | B348 C2 | | |
| Grade 5 | 6Al-4V | B367 C5 | | | B348 C5 | | |

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# Flow Control Product range:

## <4> ISO 5211 DIRECT MOUNTED VALVES

V-355

K-435

V-158

MD-28

KF-315

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# Flow Control Product range:

## <5> HIGH PRESSURE BALL VALVES

HPV-30

HPV-40 • HPV-41

HPV-84

HPV-43

# Modentic family Tree

## (A) Head Office

1.Taichung Taiwan


## (B) Manufacturing plants

1. Taichung plant - Taiwan
2. Nanjing plant - China
3. Ho Chi Min city plant - Vietnam

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# (A) Head Office

## Modentic Industrial Corp.

## Taichung Taiwan

a. Operations & Business plans
b. Worldwide Marketing
c. Procurement programs
d. Training Center

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# (B) Manufacturing plants

## Kevin Steel Corporation

Space area : 6000M$^2$

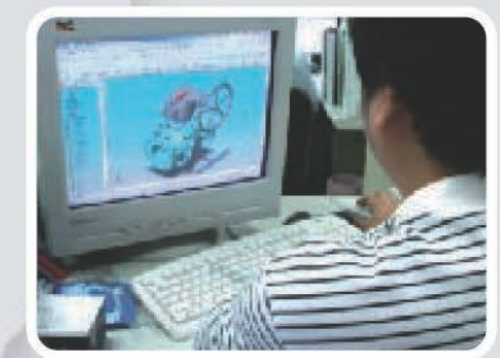
Jobs :

(1) Research & Design Center as a support of the headquarter

(2) Maunfacture

(3) Automation Valves

(4) Quality Control Center



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# (B) Manufacturing plants

## Modentic Valve Corp. Nanjing

Space area : 6800 $M^2$

Jobs : Supply House
Automation Valves
Manuture Ball Valves
Butterfly Valves
Importer / Agent

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# (B) Manufacturing plants

## Asia Valve Corporation

Space area: 10,000 $M^2$

Jobs: Automation Valves
Control Valves & HVAC
Importer and Agent

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# 檢測儀器 Testing Instrument


## 三次元測量儀
## Coordinate Measuring Machine

### 功能
利用顯微鏡擷取影像進入電腦，或利用測頭在工件上觸測，依系統的各項功能進行量測． 由於所有的量測工件皆由點構成，因此三次元量測儀以最基本的取點原則量測工件，進而使量測過程及結果精確化。

### Function
This is a device to measure physical geometrical figures of an object. It could be operated both manually or computer controlled using touch-probe measurements. As all measurements are collected and recorded using coordinates, hence all figures acquired are highly precised.

MODENTIC

# 檢測儀器 Testing Instrument

## 水壓測試機10,000 psi
**Water Pressure Testing Equipment 10,000 psi**

### 功能
利用水壓做閥件的洩漏測試，將牙口閥門安裝在測試機的管線上，仿實際管線的壓力做殼體和閥座的測試。

產品測試範圍:
牙口閥門 1/4”（DN8）~ 4”（DN100）

壓力最高可測至 10,000 psi

### Function
To perform leakage testing for valves with water pressure. The flange ends will be fitted on the testing machine, to carry out shell and seat testing by imitating actual pipeline pressure.

Size and Pressure Range:
1/4” (DN8) ~ 4” (DN100)

Maximum Testing Pressure: 10,000 psi

MODENTIC

# 檢測儀器 Testing Instrument

## 水壓測試機160 kg
## Water Pressure Testing Equipment 160kg

### 功能

利用水壓做閥件的洩漏測試，將法蘭式閥門兩端的法蘭夾住外拉，再利用水壓往閥體灌滿增壓，仿實際管線的壓力做殼體和閥體的測試。

產品測試範圍:

法蘭式閥門 Class 150 / Class 300 / PN16/25/40
1/2”(DN15) ~ 12”(DN300)

壓力最高可測至 160kg

### Function

To perform leakage testing for valves with water pressure. The flange ends will be fitted on the testing machine, to carry out shell and seat testing by imitating actual pipeline pressure.

Size and Pressure Range:

Flange Valves, Class 150 / Class 300 & PN16 / 25 / 40, 1/2” (DN15) ~ 12” (DN300)

Maximum Testing Pressure: 160 kg

MODENTIC

# 檢測儀器 Testing Instrument

## 空壓測試機10 kg
**Air Pressure Testing Equipment 10kg**

### 功能
利用空氣壓力做閥件的洩漏測試。用密封圈加壓方式將閥門固定在機台上，再利用空氣往閥體灌滿增壓,再浸泡到水裡，看有無氣泡冒出。

產品測試範圍: 閥門
Class 150 / Class 300 / PN16/25/40 / 1/2”(DN15) ~ 6”(DN150)
壓力最高可測至 10kg

### Function
Using air pressure to perform valves leakage testing. Fix the valve on the platform by applying pressure from gasket to the valve, then insert air into the valve. The valve will be place below water level and observe if any bubble emerge.

Size and Pressure Range:
Flange Valves, Class 150 / Class 300 & PN16 / 25 / 40, 1/2” (DN15) ~ 6” (DN150)

Maximum Testing Pressure: 10 kg

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# 檢測儀器 Testing Instrument

## 材料分光儀
**Mobile Spectrometer For Metal Analysis**

## 功能
通過激發槍的電弧或火花放電蒸發樣品材料，這時激勵釋放的原子和粒子以放出射線，由光導纖維將輻射光傳到光學系統。在此處理射線，數據存儲在儀器中，測量得到的值與這些數據進行比較，接著將結果顯示螢幕上。

## Function
The sample probe evaporates sample material by means of arc discharge or spark discharge. In this process, the released atoms and ions are stimulated to emit radiation. A fiber-optics directs this radiation to the optical system. Here the radiation is evaluated.
Data are already stored in the unit's memory. The measured values are compared with these data. The results are then displayed on the screen.

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# 檢測儀器 Testing Instrument

## 氦氣測漏儀
**Helium Leak Detector**

### 功能
利用偵測到氦氣的原則來探測工件是否洩漏的儀器。氦氣測漏儀比其他測試方式更具有高敏感度及精密度。

### Function
This equipment is a leak detector which operates on the principle of a mass spectrometry and uses helium for the probe gas. The helium leak test method provides the highest sensitivity and highest accuracy as compared with any other leak test methods.

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# 檢測儀器 Testing Instrument

## 超音波清洗機
## Ultrasonic Cleaner

### 功能

超音波洗淨是以每秒4萬5千次的振動傳導，在清洗液內反覆產生空洞位置的現象，形生孔蝕效應(cavitations)；當空洞相互撞擊時，即有極大之壓力產生，透過吸引或剝脫的作用，消除附著在清洗物上的汙垢，且不傷材質，達到徹底洗淨的絕佳效果。

### Function

Ultrasonic cleaning is operated by energy released from vibration (45,000 times per second) to create cavitations near the dirty surface. The bubbles produced by cavitations will perform the cleaning process without any damage occurs.

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# 檢測儀器 Testing Instrument

## 粗糙度測試儀
## Surface Roughness Tester

### Function

Surface roughness tester tests the surface roughness by using a probe. The probe was actuated and move along with the surface of the specimen in a constant speed. The probe senses the roughness of the surface that causes the displacement of the probe. The displacement causes the change of the magnitude of the induction through the induction coil and therefore outputs a simulated signal proportional to the surface roughness from the output end of the rectifier. This signal is amplified and then is processed by DSP for calculations; the final results is shown on the LCD monitor.

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# 檢測儀器 Testing Instrument


## 肥粒鐵以及厚度測試儀
## Feritscope and Isoscope(Ashtead MP30)

### Function

The feritscope incorporates both eddy current and magnetic induction units with full measurement storage, downloading and printing capabilities. The feritscope measures ferrite parts using magnetic induction method. A magnetic field generated by a coil enters into interaction with the magnetic components of the specimen. The changes in the magnetic field induce a voltage proportional to the ferrite content in a second coil. This voltage is then evaluated. All magnetic components of the otherwise non-magnetic structure are recognized, that is, in addition to delta ferrite and other ferritic components transformation martensite is also recognized.

MODENTIC

# Quality System

## All major approvals:

## ISO 9001 Certificate

LRQA
Business Assurance

**CERTIFICATE OF APPROVAL**

This is to certify that the Quality Management System of:

**Modentic Industrial Corporation**
**14F-1, No.57, Taya Road, Taichung City 40458, Taiwan**

has been approved by Lloyd's Register Quality Assurance to the following Quality Management System Standards:

**ISO 9001:2008**

The Quality Management System is applicable to:

**Design and Manufacture of Valves and Stockist of valves, pipe fittings and Hardware parts.**

This certificate is valid only in association with the certificate schedule bearing the same number on which the locations applicable to this approval are listed.

Approval
Certificate No: TWN6013557

Original Approval: 18 October 2011
Current Certificate: 18 October 2011
Certificate Expiry: 17 October 2014

Issued by: Lloyd's Register Inspection Limited Taiwan Branch for and on behalf of Lloyd's Register Quality Assurance Limited

UKAS
001

This document is subject to the provision on the reverse
71 Fenchurch Street, London EC3M 4BS United Kingdom. Registration number 1879370

MODENTIC

# Quality System

## All major approvals:

# PED 97/23/EC (CE0038)

# Module H

Lloyd's Register

**EC CERTIFICATE OF CONFORMITY**

**In accordance with the requirements of the Pressure Equipment Directive 97/23/EC and the Pressure Equipment Regulations 1999, UK Statutory Instrument 1999 No. 2001 and SI 2002 No. 1267**

This is to certify that the Quality Management System of:

**Modentic Industrial Corporation/ Kevin Steel Corporation**
**Office: 14F-1/3, No.57, Ta Ya Road, Taichung City, Taiwan.**
**Manufacture site: No.9, Wugong 6th. Road, Wufeng District, Taichung City, Taiwan.**

has been assessed against the requirements of Annex III, Module H of the Pressure Equipment Directive 97/23/EC, and Schedule 4, Module H of the Pressure Equipment Regulations 1999 and conforms to the requirements for the products shown below:

**Design and Manufacturing of Industrial Valves**

Approval is subject to the continued maintenance of the quality system in accordance with the requirements of the above Directive and Regulations.

Authorisation is hereby given to use the LRV Notified Body Identification Number in accordance with the requirements of the specified Directive and Regulations in relation to the products as identified above.

| | |
|---|---|
| Certificate No: | 0038/PED/SHA/6013557/A |
| Original Approval: | November 24, 2011 |
| Current Certificate: | November 24, 2011 |
| Certificate Expiry: | November 23, 2014 |

LRV Notified Body Number 0038

Fucheng Lin on behalf of Lloyd's Register Verification

Lloyd's Register Verification Limited, 71 Fenchurch Street London EC3M 4BS UK

MODENTIC

# Quality System

## All major approvals:

## CRN

**CRN LISTING**

**MODENTIC**

| PROVINCE | CRN | EXPIRES(mo/yr) |
|---|---|---|
| Alberta | OC0795.952 | Feb-2011 |
| British Columbia | OC0795.951 | Feb-2011 |
| Manitoba | OC0795.954 | Feb-2011 |
| New Brunswick | OC0795.97 | Feb-2011 |
| Newfoundland | OC0795.90 | Feb-2011 |
| Nova Scotia | OC0795.98 | Feb-2011 |
| Ontario | OC0795.95 | Feb-2011 |
| P.E.I. | OC0795.9 | Feb-2011 |
| Quebec | OC0795.96 | Feb-2011 |
| Saskatchewan | OC0795.953 | Feb-2011 |
| N.W.T. | OC0795.9T | Feb-2011 |
| Yukon | OC0795.9Y | Feb-2011 |
| Nunavut | OC0795.9N | Feb-2011 |

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# Quality System

## All major approvals:

### ATEX Certificate


Stellungnahme zur Anwendbarkeit
der RL 94/9/EG (ATEX)

Für Geräte und Komponenten
zur Verwendung in explosionsgefährdeten Bereichen
Statement for application of directive 94/9/EC
For Equipment and Components
Intended for Use in Potentially Explosive Atmospheres

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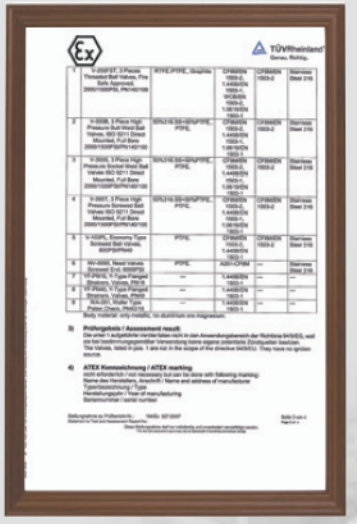
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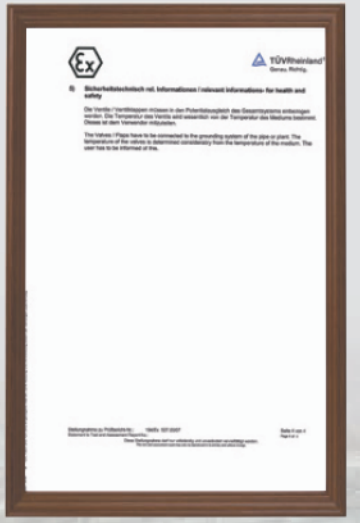
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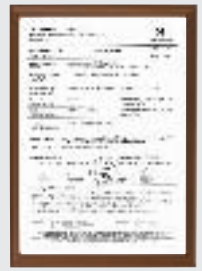
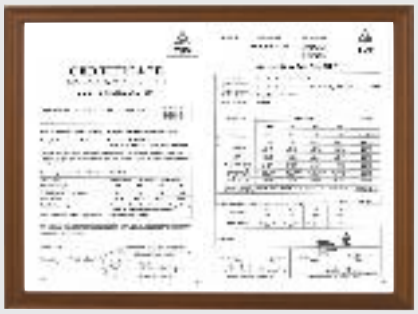
# Quality System

## All major approvals:

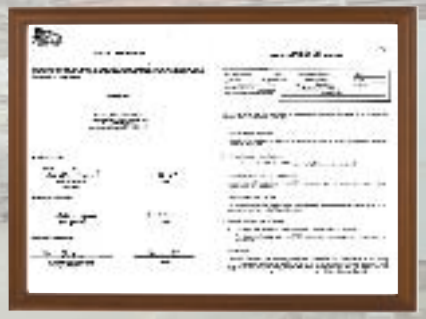
### API 607 CERTIFICATE







MODENTIC

# World Wide Customers

MODENTIC

# Our Culture and Philosophy

1 Quality

2 Service

3 Delivery

4 Price

5 誠信、積極、團結、負責