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SEW00 AEROSPACE CO.,LTD

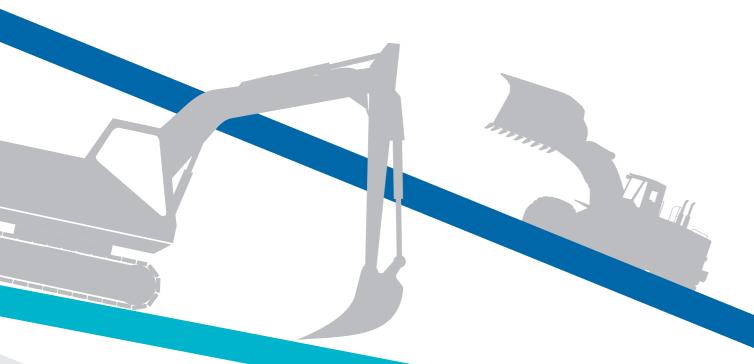
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SEW00

Aerospace Tubing & Welding Partner
Construction Equipment Hydraulic Pipe Partner





SEW00

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1985



2016

April, 1985 SEW00 established

October, 2005 Started Aircraft Tube Fabrication for Korea

Aerospace Industries. (KAI)

November, 2007 Outstanding Quality Awards from KAI

December, 2007 SEWOO AEROSPACE established

(separated from SEW00)

April, 2008 AS9100 Accreditation

April, 2009 ISO 14001 Accreditation

June, 2009 Venture Business Certification acquired

April, 2011 Performance of Excellence Award from KAI

June, 2011 Established R&D Center

December, 2012 Aluminum Fusion Welding & Inspection

Process Approval by DATQ

June, 2015 Performance of Excellence Award from KAI

April, 2016 AS9100 Re-accreditation

ISO 14001 Re-accreditation

December, 2016 NADCAP-Heat Treatment & Welding

to be certified



Aircraft Aerospace Parts Business

Hydraulic Line Tube Assembly

- Fuel Line Tube Assembly
- Environment Control System Line Tube Assembly
- · Conduit for Wire Harness Tube Assembly
- Crew Ladder Welding Assembly
- · Spoiler Beam Welding Assembly
- Air Duct Braiding Assembly







BUSINESS

AREA

Construction ipment Parts Business



- · Hydraulic Pipe Assembly
- · Structural Pipe Assembly (Handrail & Guardrail)

Aerospace Tubing & Welding Partner Construction Equipment Hydraulic Pipe Partner

Connector for Hydraulic Assembly

Small and Medium Tube Assembly

High Pressure Tube Assembly

Aerospace Tube Assembly

Global Hydraulic Pipe Partner **Strong Global Company**

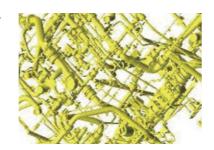
customers.

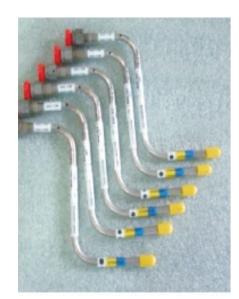
Since established, we've done a technial revolution through technical expanding the global sales network to INDIA, RUSSIA and CANADA based on current EU, JAPAN, UK and US market experience. All staffs in SEW00 are doing their best to become one of the top global companies recognized by global

Major Products

Aircraft / Aerospace Tubing Assembly

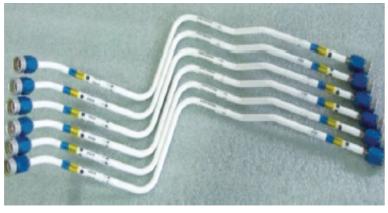
- Hydraulic Lines
- Fuel Lines
- Environment Control System Lines
- Conduit for Wire Harness

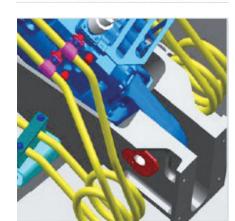












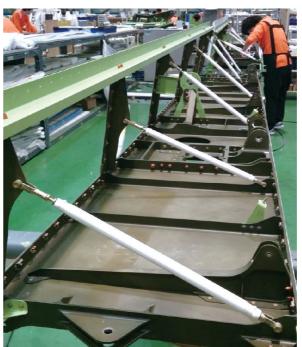


Aircraft / Aerospace Welding Assembly

• Tubing assembly for wing



• Spoiler Beam Assembly



• Crew Ladder Welding Assembly



• Tube Welding Assembly



Major Products

Aircraft / Aerospace Hot Air duct Assembly

- Hydraulic Lines
- Fuel Lines
- Environment Control System Lines
- Conduit for Wire Harness

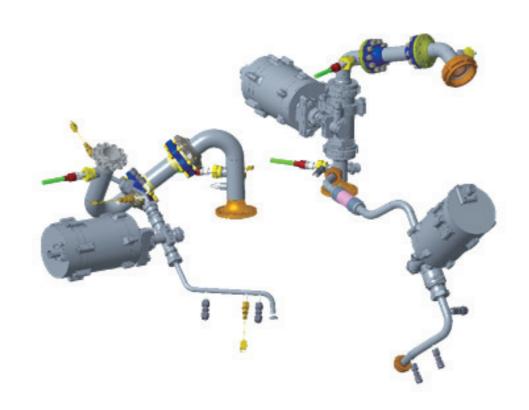


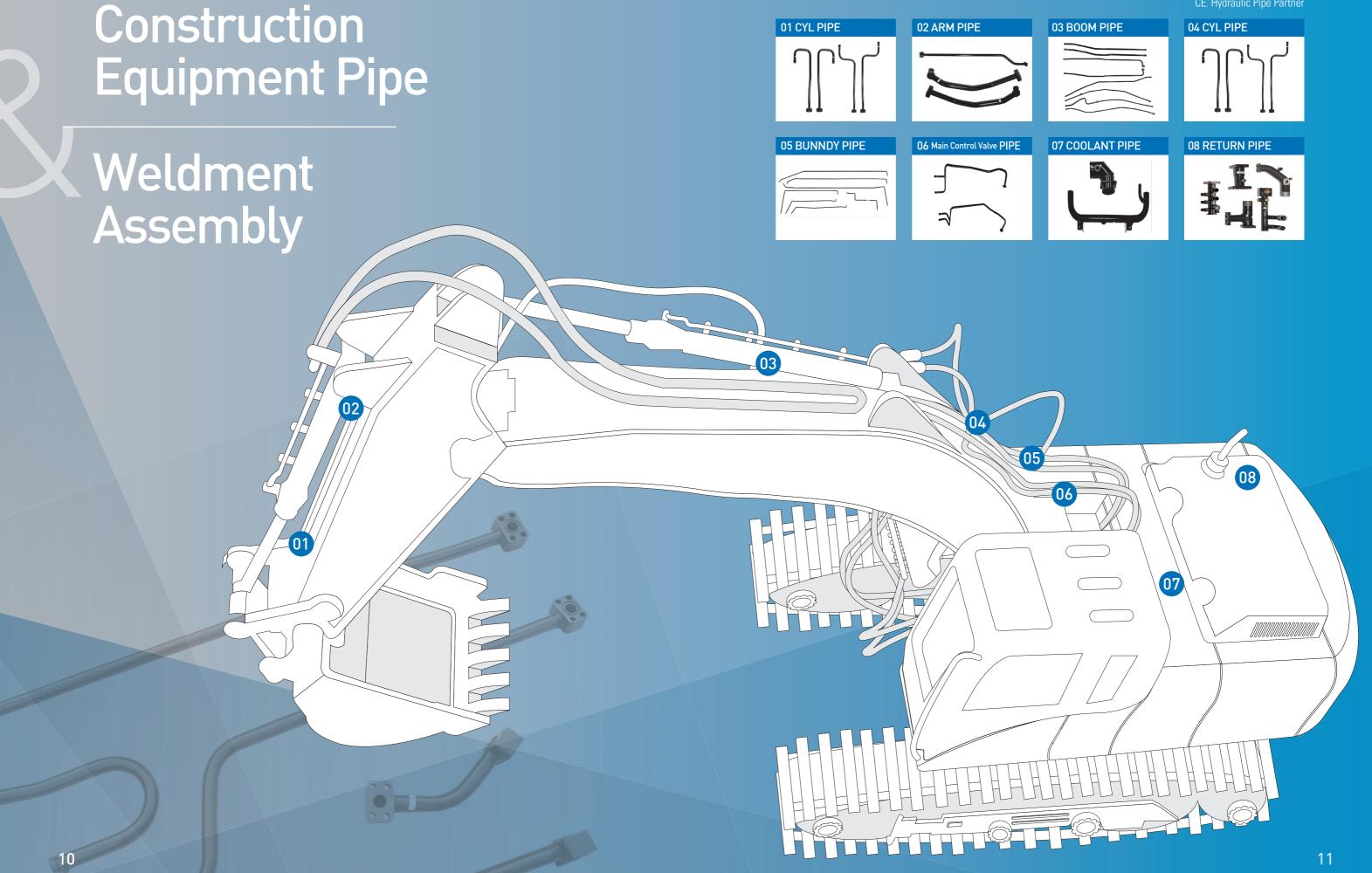


>> 75t Engine Assembly & Clustering Model



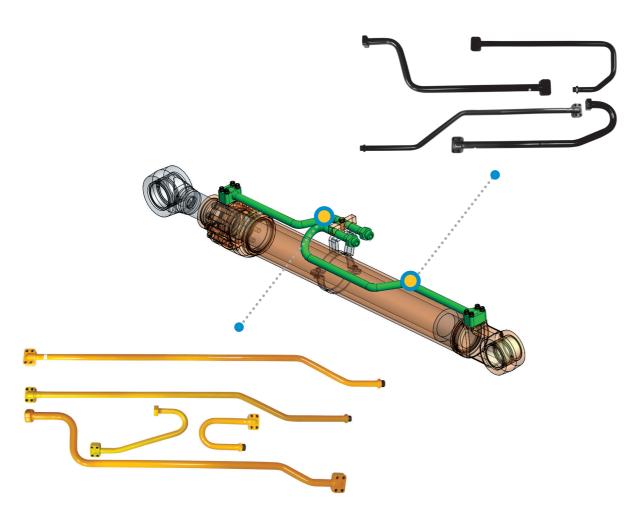
>> 7t Fuel & Lox High Pressure Pipe Assembly





Major Products

>> Hydraulic Cylinder Pipe & Weldment Assembly



>>> Structural Parts

• HANDRAIL / GUARDRAIL







Equipment

01

Tube Cutting Machines



Capacity		
Diameter Size	ze Circular Tube 6~90mm	
Cutting Length	30~7000mm	
Accuracy	±0.15mm	
Capability	Ø40 x 1.2t x 300L — 1000ea/h	
Materials	Steel, aluminum, titanium, Inconel	
Number of Unit	8 unit	

02

CNC Bending Machines



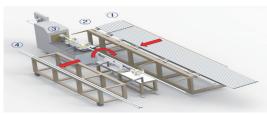


Capacity		
EATON	300HP	1 unit
	100HP	2 unit
	75HP	1 unit
	VB25	1 unit
YLM	80CNC	4 unit
	70CNC	1 unit
	38CNC	2 unit
	25CNC	1 unit
TAYI0	60CNC	1 unit
	40CNC	1 unit

03

Full Automatic Welding Machines





TIG	Automatic Vertical	26 unit
	Automatic Horizontal	4 unit
	Manual	7 line
CO2	Manual	7 line
Cert.	Stainless Steel	
	Aluminum	
	Titanium	
	Nickel Alloy	

06

Ultrasonic Cleaning Facility & Heat Treatment





Ultrasonic Alkali Cleaning

Heat Treatment(100~550°C)

Full Automatic Surface Treatment & Painting Facility







Electrostatic painting

80

Full Automatic Robot Production Line



Robot TIG Welding Assembly Line



Robot CO2 Welding Assembly Line

Equipment

09

Tube Swaging Machines



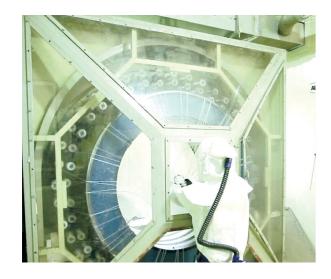
According to the assembly method of the aerospace tubing, We make the various shapes of the end points.

Capacity

oupdoity	
Diameter Size	Circular Tube 10~90mm
Swaging machine	5 unit
Forming machine	4 unit

10

Braiding Machines







Capacity

Diameter Size Circular Tube 38~90mm

11

Inspection & Test Equipment







Profile Projector



CMM



Microscope



Industrial Videoscope



Rockwell Hardness Tester



Vector Measuring Machine for Tube



Pressure testing equipment Pneumatic : Max 200psi



Pressure testing equipment Hydraulic : Max 10,000psi

Aircraft **Aerospace Parts**

All about tubing process from cutting to bending to welding and braiding.



Construction **Equipment Parts**

- Multiple items / small lot production system
- Short leadtime
- Tracking system with bar code











MATERIALS	SHIPPING
CUTTING	PACKING
CNC BENDING	CLEANING
MEDING	BRAIDING





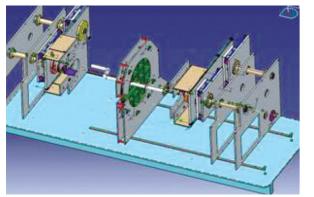




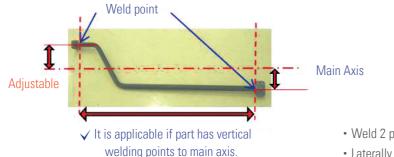


Manufacturing Strengths

2 Head Automatic Pulse TIG Welding Equipment







- Weld 2 points at the same time
- · Laterally Adjustable at the same time

Quality Assurance System

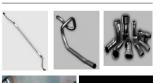
- Quality Assurance System Setup by ISO 9001/AS 9100 Quality System
- Satisfy Customer's Tubing Specification
- Satisfy Welding Specification

Requirements

- Tube Bend Data
- 2-D Drawing / Tube Mockup
- MBD / CATIA Model
- Tubing Specification
- Welding Specification
- Customer's Requirements









Certifications & Patent



CERTIFICATE OF REGISTRATION

SEWOO AEROSPACE Co., Ltd.

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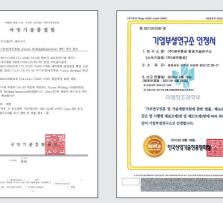
ISO14001



Patent granted

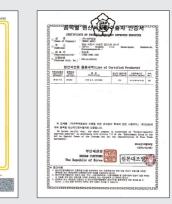


Welding Cert by KAI



Welding Cert by DTAQ in R&D center

Korea



Product specific approved exporter

To be certified Dec. 2016

- NADCAP Welding
- NADCAP Heat treatment

Five major innovation challenges Corporate Culture Quality Cost Process System

SEW00Vision

A leading Global Manufacturer of Tubing and Piping Assembly

Operating markets

The present

Japan, China, Europe

Mid - and long-term goals

India, Russia, Brazil, Indonesia, North America

Message from the President & CEO

Respect for mankind is Sewoo's management philosophy.

This philosophy has made true communication possible among the all employees Which in turn creates high-quality products that gain the trust of our customers.

Sewoo will continuously work to provide products that satisfy customers' expectation.



Sincerely, Hae-Sool Park