









Company	SAMHONG MACHINERY 
Introduction	<p>Since establishment in 1995, Samhong Machinery Co.,LTD and EMC Co., LTD specialized in the fields of industrial machinery and large-sized machine processing and manufacture. Through know-how and technology accumulated through long-period of experience, Samhong Machinery Co.,LTD and EMC Co., LTD are manufacturing and supplying various products in the fine processing field such as the marine engine and pump, nuclear power, ITER project and other industrial machineries.</p> <p>The brand value of Samhong Machinery and EMC are upgraded through the ISO9001 Quality Management Certification, ISO14001 Environmental Management Certification, KEPIC-MN with the best quality and competitiveness in delivery time.</p>
Company	Samhong machinery
C.E.O / President	Kim, Hong Gu
Establish	1995
Address	<p>1st Factory-308,Beopsu-ro, Beopsu-myeon, Haman-gun, Gyeongnam, South Korea</p> <p>2nd Factory-52, Sandan2-gil, Jinbuk-myeon, Hapcho-gu, Masan, Chongwon-city,Gyeongnam, South Korea</p>
Type of Business	Manufacturer
Capital(USD)	USD6.7 million
Land(m³)	23380m ²
Employee	68
Factory(m³)	14393m ²
Product	Precision processing and manufacturing of high-difficulty special materials (reducers, nuclear fusion ITER products, nuclear products, high-pressure multi-stage pumps, IT vacuum chambers, stationary &marine engines, machine tools, etc.)
Customer	      
Turnover [USD]	2018- US 11.5 million, 2019-US 15.2 million, 2020-US 19.0 million
Occupation (%)	SFA- 25% ,Selcos-23%, Finesolution-20%, DHI-8%, Gould Pump 5%, etc- 19%
Process	Material(Outsource)-Machining-Welding-3D Laser tracker inspection-Witness-Delivery
Certificate	ISO 9001:2000, KSA9001:2001 Quality Management Certification, ISO14001 :2004, KSA14001:2004 Environmental Management Certification, KEPIC-MN, Venture Company Certification, INNO-BIZ and the Clean Factory Certification.

Facility

SHOP		MACHINE NAME	MODEL	MAKER	SIZE	SYSTEM
SAMHONG (1st Factory)	A	PM	HF7M	SNK(日本)	X12000*Y4500*W4700	FANUC-15Mi
		Marking(Lay-out MC)		ATOTEC	9350*3000*2000	
		RT Room			11600*3000*7180	
		Overhead Crane	Bando(KOREA)	100ton	X100000*Y12500*W2700	
	B	Overhead Crane	Bando(KOREA)	50ton	X100000*Y12500*W2700	
				70ton	X100000*Y13000*W2700	
				10/5ton	X100000*Y13000*W2700	
	C	Overhead Crane	Bando(KOREA)	70ton	X100000*Y13000*W2700	
				50ton	X100000*Y13000*W2700	
				10/8ton	X100000*Y13000*W2700	
SAMHONG (2nd Factory)	A	Overhead Crane	Bando(KOREA)	50ton	X100000*Y13000*W2700	
		Ag Coating Facility	Bando(KOREA)	10ton	X100000*Y13000*W2700	
					X102300*Y5655*W3000	
		Others				
	B	Plano Miller	RB4N	HHI	X4850*Y2900*W1800	FANUC-15M
		Plano Miller	RB4N	HHI	X7500*Y2900*W1800	FANUC-15M
		Plano Miller	HF3M	HHI	X7000*Y2000*W1500	FANUC-15M
		Plano Miller	HPM30L	Hanmachine	X11000*Y3850*W3500	FANUC-18i
		Overhead Crane	Peongsun	30/10 ton		
			Bando(韓國)	7.5 ton		
		Overhead Crane	Bando(韓國)	7.5 ton		
SAMHONG (2nd Factory)	B	Plano Miller	HF5M-1	SNK(JAPAN)	X8500*Y3000*W3320	FANUC-18i
		Plano Miller	HF5M-2	SNK(JAPAN)	X8500*Y3000*W3320	FANUC-15Mi
		Overhead Crane	Bando(韓國)	20ton		
	Others					

Facility (Photo)

Samhong 1st Factory



HF5M (X8500*Y3000*W3320)



HF5M (X8500*Y3000*W3320)



HPM30L (X11000*Y3850*W3500)



HF3M (X7000*Y2000*W1500)



RB4N-4M (X4850*Y2900*W1800)

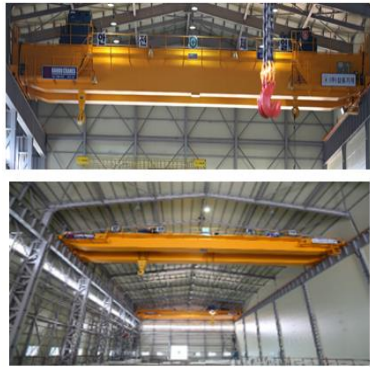


RB4N-7M (X7500*Y2900*W1800)

Samhong 2nd Factory



HF7M (X12000*Y4500*W4700)



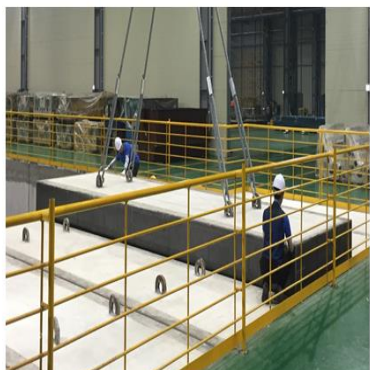
Overhead Crane(100+50ton 外)



Lay-out M/C



Moving Car



RT Room



Silver Coating Room

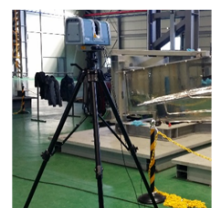
Inspection tool

Equipments	Measuring Range	Q'ty	Vendor	Calibration
3-Dimension Laser Tracker	Measuring unit: 0.001mm (1 μ m)	1 set	LEICA	1 time / year
3-Dimension Laser Scanner	Distance resolution : 0.001m	1 set	TaeSan	1 time / year
Cylinder Bore Gauge	Min. Bore Size : 10~18.5mm Max. Bore Size : 600~800mm	31 sets	MITUTOYO	1 time / year
Dial Gauge	0 ~ 10 mm / 0.01 mm	17 sets	MITUTOYO	1 time / year
Vernier Calipers	Min. : 0 ~ 300 mm / 0.05 mm Max. : 0 ~ 1000 mm / 0.05 mm	8 sets	MITUTOYO	1 time / year
Outside Micrometer	Min. : 0 ~ 25 mm / 0.01 mm Max. : 800 ~ 900 mm / 0.01 mm	25 sets	MITUTOYO	1 time / year
Height Gauge	0 ~ 600 mm / 0.01 mm	2 sets	MITUTOYO	1 time / year
Stick Micro Meter	50 ~ 1500 mm / 0.01 mm	3 sets	MITUTOYO	1 time / year
Test Indicabr	0 ~ 1.0 mm / 0.01 mm		MITUTOYO	1 time / year
Torque Lench	100 ~ 750 N.m		TOHNICHI	
Pressure Gauge	0 ~ 250 Mpa		DAITO	
Depth Micrometer	0 ~ 10 mm / 0.01 mm		MITUTOYO	
Dial Calliper Gauge	55 ~ 135 mm / 0.01mm		MITUTOYO	
Surface Roughness gauge	0 ~ 5.6 mm / 2 μ m		MITUTOYO	

Laser Tracker



Laser Scanner










Factory photo



Field of Business

- ITER fusion facility(Thermal Shield)- heat shield system (Stainless steel 316 welding manufacturing and 3D processing)
- Nuclear power plant product – welding manufacturing and processing of special materials inside the reactor (RVI)
- Marine & Stationary engine

	<ul style="list-style-type: none"> ■ High pressure Pump ■ Compressor Parts ■ IT Vacuum Chamber.(Stainless steel welding and precision processing) ■ Turbine Casing
Company	EMC Co.,Ltd. 
Introduction	<p>Since establishment in 1995, Samhong Machinery Co.,LTD and EMC Co., LTD specialized in the fields of industrial machinery and large-sized machine processing and manufacture. Through know-how and technology accumulated through long-period of experience, Samhong Machinery Co.,LTD and EMC Co., LTD are manufacturing and supplying various products in the fine processing field such as the marine engine and pump, nuclear power, ITER project and other industrial machineries.</p> <p>The brand value of Samhong Machinery and EMC are upgraded through the ISO9001 Quality Management Certification, ISO14001 Environmental Management Certification, KEPIC-MN with the best quality and competitiveness in delivery time.</p>
C.E.O / President	Kim, Hong Beom
Establish	2007
Address	<p>1st Factory-38, Shinsan-ro, Sanin-myeon, Haman-gun, Gyeongnam, South Korea</p> <p>2nd Factory-82-43, Juckjun-ro, Uichang-gu, Changwon-city, Gyeongnam, South Korea</p>
Type of Business	Manufacturer and Trading
Capital(USD)	USD1.5 million
Land(m³)	8289m ²
Employee	45
Factory(m³)	23380m ²
Product	Precision processing and manufacturing of high-difficulty special materials (reducers, nuclear fusion ITER products, nuclear products, high-pressure multi-stage pumps, IT vacuum chambers, stationary & marine engines, machine tools, etc.)
Customer	      
Turnover [USD]	2018- US 8.6 million, 2019-US 10.0 million, 2020-US 12.3 million
Occupation (%)	Selcos-29%, Finesolution-23%,HHL-15%, Samhong machinery-11%, DHI-5%, Marui-2.7%, Burchardt Compression-2.5%, etc- 11.7%
Process	Material(Outsource)-Machining-Welding-3D Laser tracker inspection-Witness-Delivery
Certificate	ISO 9001:2000, KSA9001:2001 Quality Management Certification, ISO14001 :2004, KSA14001:2004 Environmental Management Certification, Venture Company Certification, INNO-BIZ and the Clean Factory Certification.

Facility

SHOP		MACHINE NAME	MODEL	MAKER	SIZE		SYSTEM
EMC (1st Factory)	A	Plano Miller	KBN	Kotobuki(JAPAN)	X6000*Y2600*W1300	20 ton	FANUC-15M
		Plano Miller	HF8M	SNK(JAPAN)	X13500*Y4500*W5000	100 ton	FANUC-31i
		Plano Miller	MASTER	Ingersole(GE)	X12000*Y4000*W4500	140 ton	FANUC-18i
		Plano Miller	PME40	Hanmachine	X10500*Y4000*W4500	80 ton	FANUC-30i
		Overhead crane		Bando(KOREA)		100/50 ton	
				Bando(KOREA)		50/20 ton	
	B	Overhead crane		Bando(KOREA)		50 ton	
	C	Plano Miller	HF5M	SNK(JAPAN)	X8000*Y2900*W2950	30 ton	FANUC-18i
		Floor Boring	MAF-RS-150	Mitsubishi(JAPAN)	X10000*Y4000*Z2000	45 ton	FANUC-18i
		Overhead crane		Bando(KOREA)		50 ton	
EMC (2nd Factory)		Plano Miller	PCM4	Waldrich	X12000*Y4000*W3000	230 ton	Siemens
		Floor Boring	BF-φ132	Toshiba(JAPAN)	X6000*Y3500*Z2500	40 ton	FANUC-15M
		CNC Turning/Milling	VTC50/60	Hanmachine	外径φ6500*W4000(H)	80 ton	FANUC
		Overhead crane	Gantry			30 ton	
						100 ton	

EMC 1st Factory



HF8M (X13500*Y4500*W5000)



HF5M (X8000*Y2900*W2950)



CNC Boring (X10000*Y4000*W2000)



PME40 (X10500*Y4000*W4500)



KMC (X6000*Y2600*W1300)



Ingersoll (X12000*Y4000*W4500)

Facility (Photo)

EMC 2nd Factory



CNC Floor Boring (X6000 *Y 3200 *W1450)



CNC Plano Miller (X12000 * Y4000 *W3000)








Vertical Turning Center M/C (Φ6620*W3700(H))



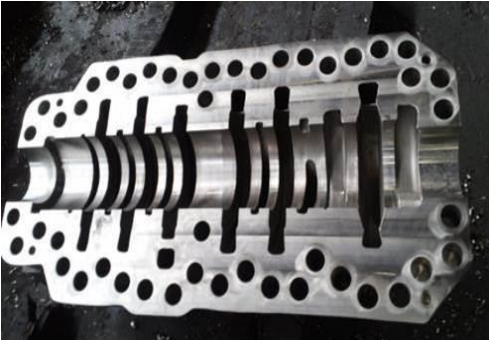




Inspection tool	Equipments	Measuring Range	Q'ty	Vendor	Calibration	Laser Tracker
	3-Dimension Laser Tracker	Measuring unit: 0.001mm (1 μ m)	1 set	LEICA	1 time / year	
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	Cylinder Bore Gauge	Min. Bore Size : 10~18.5mm Max. Bore Size : 600~800mm	31 sets	MITUTOYO	1 time / year	
	Dial Gauge	0 ~ 10 mm / 0.01 mm	17 sets	MITUTOYO	1 time / year	
	Vernier Calipers	Min. : 0 ~ 300 mm / 0.05 mm	8 sets	MITUTOYO	1 time / year	
		Max. : 0 ~ 1000 mm / 0.05 mm				
	Outside Micrometer	Min. : 0 ~ 25 mm / 0.01 mm	25 sets	MITUTOYO	1 time / year	
		Max. : 800 ~ 900 mm / 0.01 mm				
	Height Gauge	0 ~ 600 mm / 0.01 mm	2 sets	MITUTOYO	1 time / year	
	Stick Micro Meter	50 ~ 1500 mm / 0.01 mm	3 sets	MITUTOYO	1 time / year	
	Test Indicabr	0 ~ 1.0 mm / 0.01 mm		MITUTOYO	1 time / year	
	Torque Lench	100 ~ 750 N.m		TOHNICHI		
	Pressure Gauge	0 ~ 250 Mpa		DAITO		
	Depth Micrometer	0 ~ 10 mm / 0.01 mm		MITUTOYO		
Dial Calliper Gauge	55 ~ 135 mm / 0.01mm		MITUTOYO			
Surface Roughness gauge	0 ~ 5.6 mm / 2 μ m		MITUTOYO			
Factory photo						
	<div>Field of Business</div> <ul style="list-style-type: none">■ITER fusion facility(Thermal Shield)- heat shield system (Stainless steel 316 welding manufacturing and 3D processing)■Nuclear power plant product – welding manufacturing and processing of special materials inside the reactor (RVI)■Marine & Stationary engine■High pressure Pump■Compressor Parts■IT Vacuum Chamber.(Stainless steel welding and precision processing)■Turbine Casing					
	<div>Product</div> <p>Precision processing and manufacturing of high-difficulty special materials (reducers, nuclear fusion ITER products, nuclear products, high-pressure multi-stage pumps, IT vacuum chambers, stationary &marine engines, machine tools, etc.)</p>					

Product Description

<p>1.</p> 	<p>Reducer</p> <ul style="list-style-type: none"> -Material: SS440 -Main customers: Sumitomo, Kobe Steel, etc. -Reducers are used in the defense industry, power plants, and industrial machinery. <p>It is a product that requires precision welding and precision machining technology.</p>
<p>2.</p> 	<p>Crankcase (Engine block)</p> <ul style="list-style-type: none"> -Material: GG35 CU, GGG-40, FC350 -Main customers STX Engine, Hyundai Heavy Industries, : Wartzilla-Hyundai, Doosan Engine, etc. -Our company manufactures crankcase (engine block), the most important parts of stationary and marine power generation engines such as tanks and submarines. -It is a product that requires precision machining technology.
<p>3.</p> 	<p>Stainless vacuum chamber</p> <ul style="list-style-type: none"> -Material: Stainless steel 304 -Main customers: Samsung Electronics, LG Electronics, Applied, Materials, Canon Toki, BOE, etc. -Stainless chamber is a key component of vacuum deposition equipment used for displays of semiconductor, LCD and OLED. -Manufacturing technology that considers the deformation of the welding and processing process is important.
<p>4.</p> 	<p>Compressor components</p> <ul style="list-style-type: none"> -Material: EN-GJL-250 -Main Customer: Burckhardt Compression(Switzerland) -LNG carriers, oil and gas transportation, oil refining, chemicals, etc. Gas compressor used in industrial gas field -Supplied products: Base Plate, Frame, Bearing Cap& Fly Wheel. -This product requires ultra-precision processing and assembly technology
<p>5.</p> 	<p>Turbine Casing for Power plant</p> <ul style="list-style-type: none"> -Material: SCPH21, SCPH23, SCPH2, etc -Main Customer: SHIN-NIPPON (JAPAN) -The wide range of multi-stage steam turbines is applicable for power generation , oil and gas industry in the world. -Supplied products: Turbine Casing -We serve total solution like material procurement , machining, hydraulic pressure test and inspection in turbine key components such as turbine casing.

Product Description

<p>6.</p> 	<p>Thermal shield for ITER Nuclear Fusion Project</p> <ul style="list-style-type: none"> -Material : Stainless steel 316 -ITER thermal shield system minimizes heat loads till Appx.99.9 % transferred by thermal radiation from warm components to superconducting magnets. - The high technology of precision welding against severe heating deformation considering the thin panel (10t~20t), precision 3D processing, and precision assembly of special materials is required.
<p>7.</p> 	<p>Coil case for ITER Nuclear Fusion Project</p> <ul style="list-style-type: none"> -Material: 316 LNH (Austenitic stainless steel) -Main Customer: Toshiba -It prevents external leakage of plasma even at very high temperatures and confines & protects the inside of the vacuum container at the same time.
<p>8.</p> 	<p>High pressure multiplex Pump casing</p> <ul style="list-style-type: none"> -Material: A995 Gr1B (duplex) -Main customers: Goulds Pump, Flowserve, American Hydro, Elliot. -It is a multi-stage pump for high pressure used in power plants and turbines. -This is a new material that requires precision processing technology for difficult-to-cut materials.
<p>9.</p> 	<p>BED for machine tool</p> <ul style="list-style-type: none"> -Material: GC300 -Main customers: Doosan Machine Tools, Hyundai WIA -As a core component that becomes the basic base of machine tools, it is a product that requires precision processing technology.
<p>9.</p> 	<p>Top plate for Nuclear power plants</p> <ul style="list-style-type: none"> -Material: Stainless steel 316 -Main Customer: Doosan Heavy Industries & Construction -Related parts around nuclear fuel rods for nuclear power plants -This product is a special material and requires 3D processing of high difficulty, especially processing technology that considers thermal deformation.

Reference

Overseas

NO	Business Field	Customer	Country	Items	Scope	Remark
1	ITER	TOSHIBA	Japan	Coil case	Machining	2018 ~ 2019
2	Marine/Stationary Engine	CMP	China	Crankcase	Material and machining	2017
		KIMURA	Japan	Crankcase	Material and machining	2017
3	Reciprocating compressor for LNG	Burckhardt compression	Switzerland	Frame and Bedplate	Material and machining	2014~
4	Pump	Gould pumps	USA	High pressure Multiplex pump casing	Material and machining	
5	Machine Tool	Hyundai wia	Korea	Bed, column and Table	Material and machining	

Domestic

NO	Business Field	Customer	Country	Items	Scope	Remark
1	ITER	SFA	Korea	Thermal shield	Welding and machining	2014 ~ 2021
2	Nuclear Power	Doosan	Korea	Safety Injection Tank and Safety Injection Filling Tank	Material, welding and machining	2018 ~ 2019
				Mechanical component	Welding and machining	
3	LCD/OLED	Ulvac and Jusung	Korea	Sus vacuum chamber	Material, welding and machining	
4	Marine/Stationary Engine	Wartsila-Hyundai, Doosan engine & STX engine	Korea	Crankcase (4 stroke / medium speed engine)	Material, welding and machining	
5	Pump	Hyundai heavy industry	Korea	High pressure Multiplex pump casing	Material and machining	
6	Machine Tool	Hyundai wia	Korea	Bed, column and Table	Material and machining	