

DAESUNG Limited Co. Company Profile

www.topdsht.com

Chapter1. Company Overview

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Contents

Company Organization

Chapter1. Company Overview

General

Company Name: Daesung Hi-Tech Co., Ltd.

Established: January 1995

No. of Employee : 200 (as of Nov. 2012)

Capital : \$820,000

Sales Turnover(2011) : \$46.1M

Main Products :

Diversification ↓	Precision Machine Parts	Gear ,Spindle ,Housing ,Sleeve, Bush Piston , Collet , Shaft, Coupling, Cap, Spacer Manifold block, Bracket ,Sprocket ,Disk ,Bracket
	Assembly Unit Jig Fixture Large part	Processing Jig Fixture for Arm ,Block, Cylinder Tilting Index Table , Feed Unit , NC Table Tool Holder, Multi Spindle Unit Attachment
	Completed Machinery	Auto Lathe, Medical device, film machine Final polishing machine

Plant

1st Plant (Head Office / Main Plant)



Components Division

Building : 4,700 m²

Land : 2,700m²

Address : 922-5, Wolam-Dong, Dalseo-Gu, Daegu

2nd Plant



Machining Division

Building : 6,782m²

Land : 4,216m²

Address: 1010, Daecheon-Dong, Dalseo-Gu, Daegu

3rd Plant



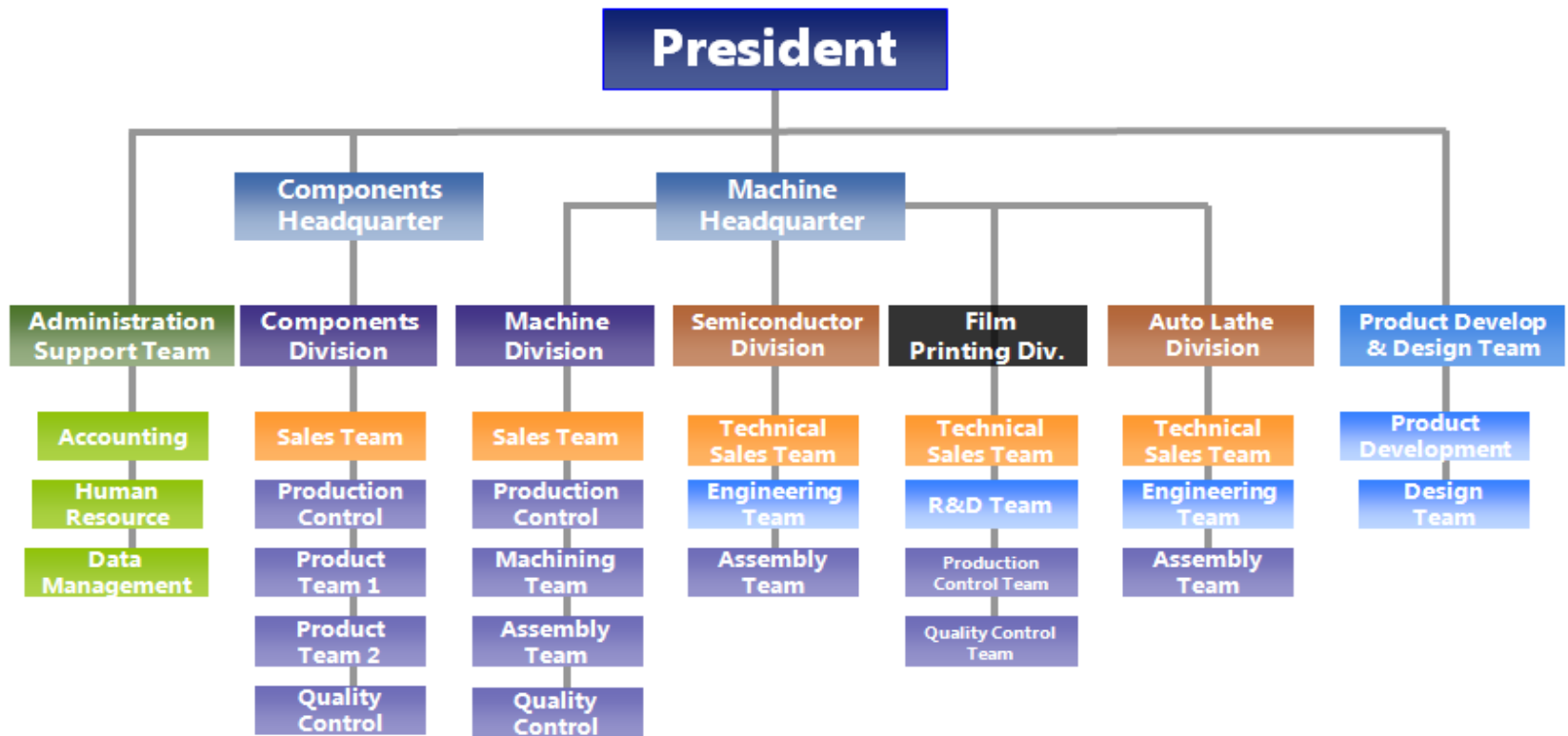
Assembly Division

Building : 4,954m²

Land : 5,358m²

Address: 893-6, Daecheon-Dong, Dalseo-Gu, Daegu

* Two Japanese Technical Advisors included



Mid 90s' ~ Mid 00's

1997

Started business with Mazak

1998

Developed spindle spacer (1 μ m tolerance)

2001

Certified ISO 9001

2004

Awarded for 5 million dollar export

2005

Awarded for 10 million dollar export

Mid 00s' ~ End 00's

2006

Completed 2'nd factory

2007

Certified ISO 14001

2008

Certified as **"The first class machine processing company"**

Awarded for 20 million dollar export

2009

Established Semiconductor machine division

Selected "Selected "Start Company in Daegu"

Received "Stone Pagoda Industrial Medal of Honor"

2010's ~ Present

2010

Established "Film Printing machine division"
Completed 3'rd factory

2011

Awarded for "Trade Man of the Year in Korea"

2011

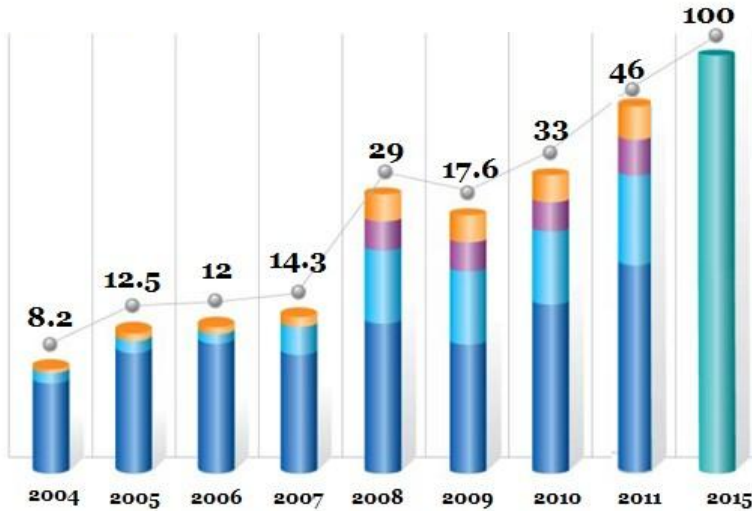
Selected as "Small but Strong Global Company"



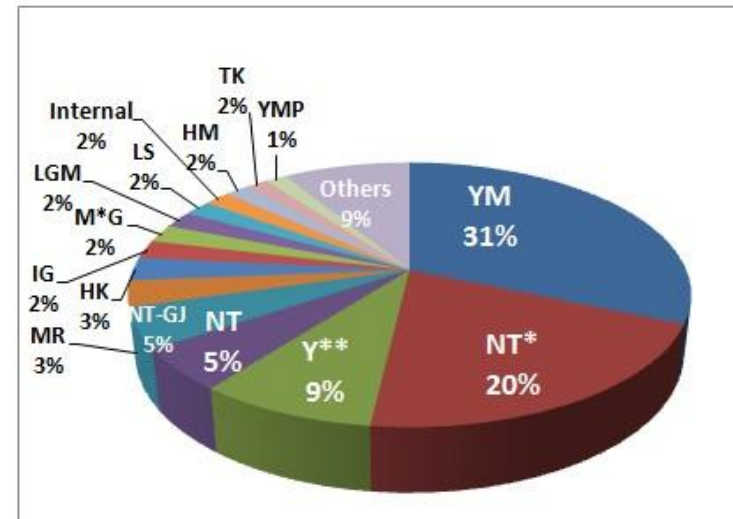
Sales Turnover

Chapter1. Company Overview

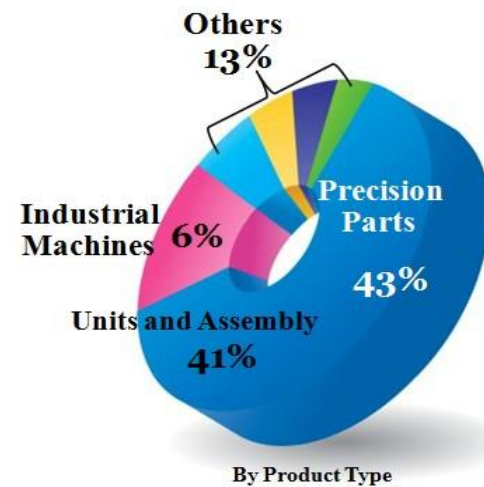
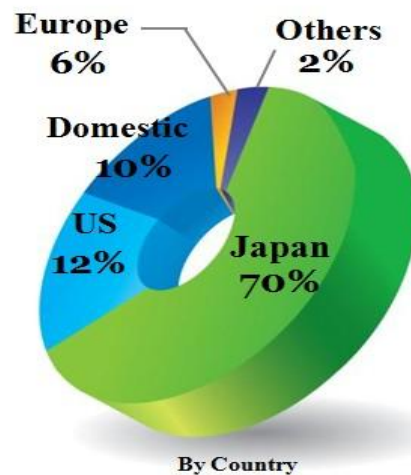
| Sales History (Unit: Million\$) |

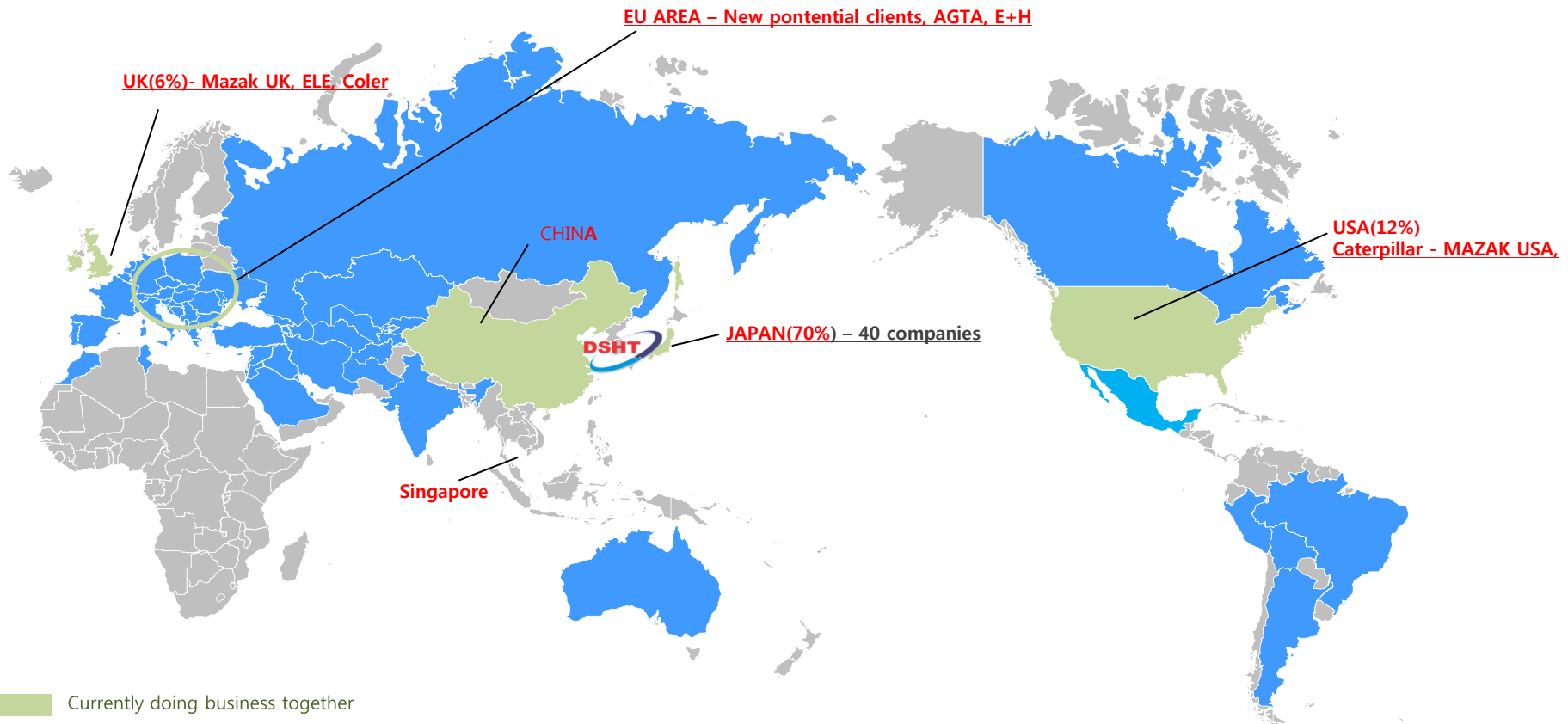


| Sales Breakdown by Customers |

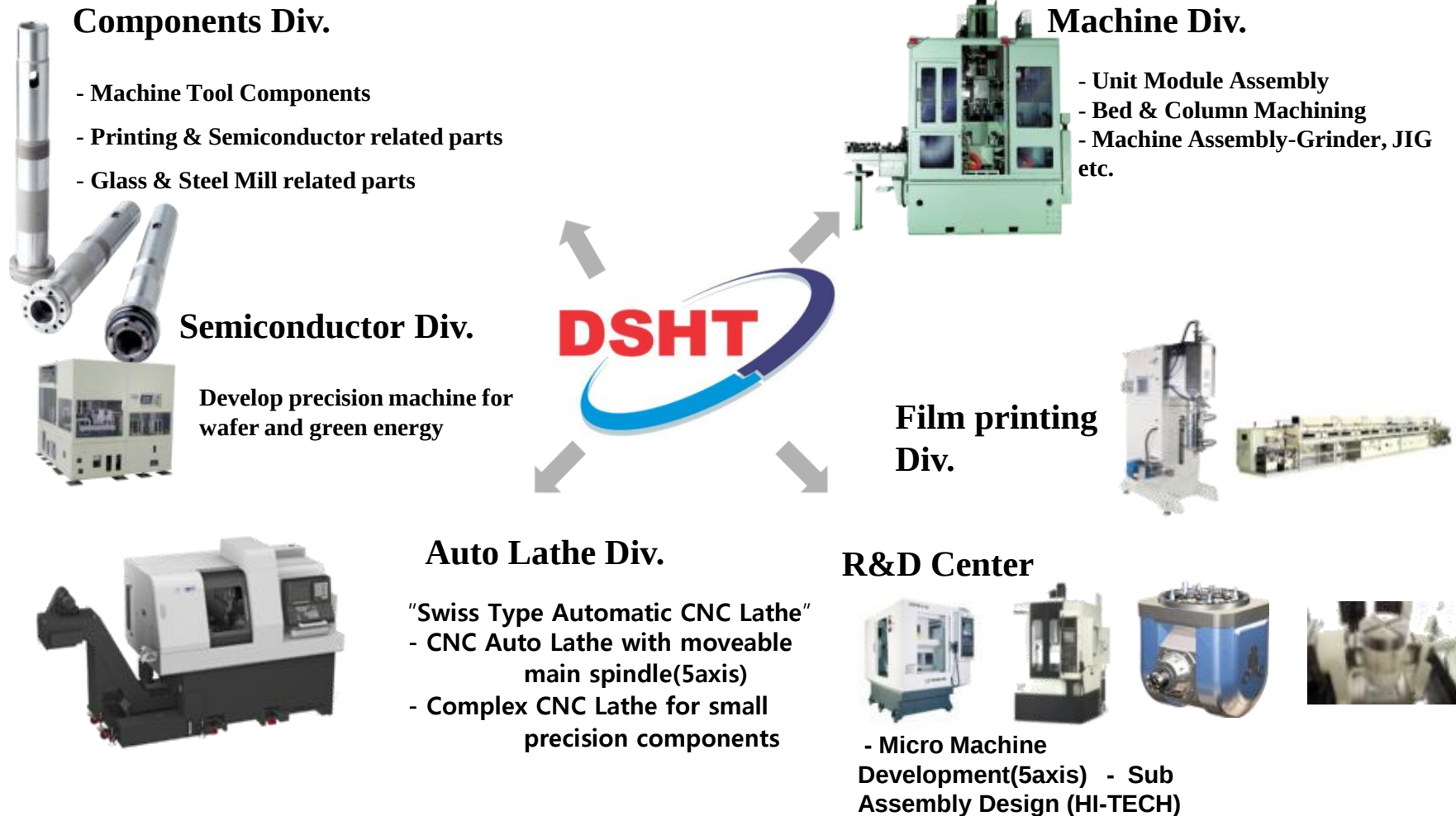


| Sales Breakdown |





- Currently doing business together
- Target Countries within the next 10 years





SLEEVE



HOUSING



SLEEVE



BUSH



PISTON



COLLECT



ROD



GEAR





< Semiconductor-related M/C parts >

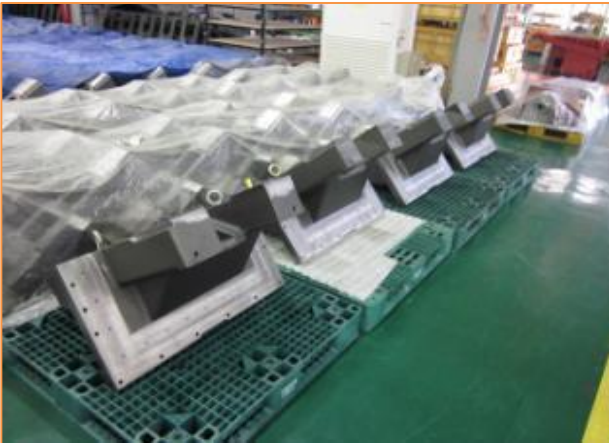


< Glass M/C parts >



< Index Coupling >





< Critical Parts in Hydraulic System >

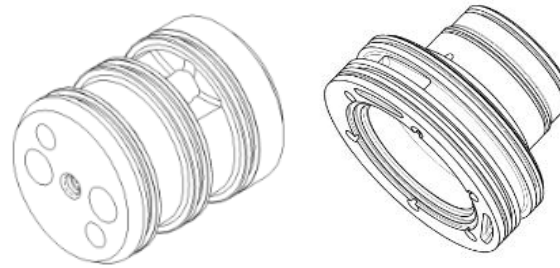


Cap assembly made by welding
(forging+steel casting+tube)

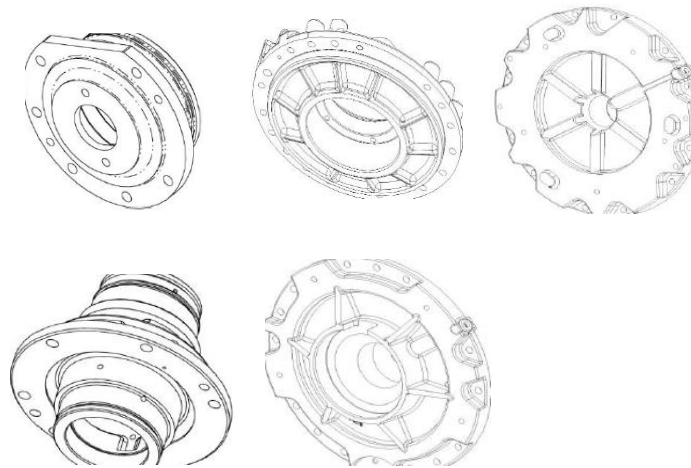


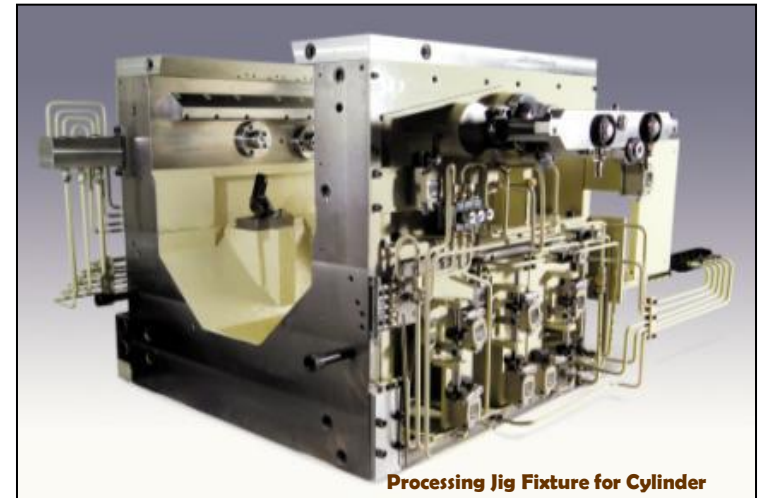
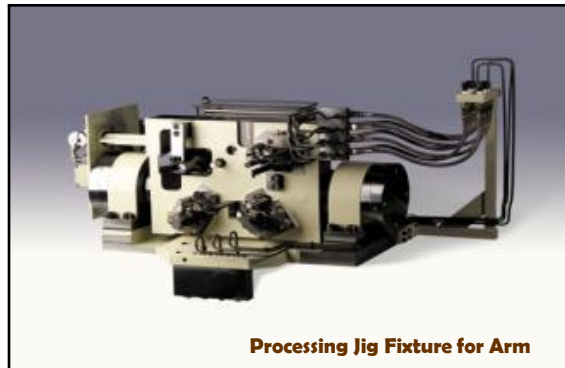
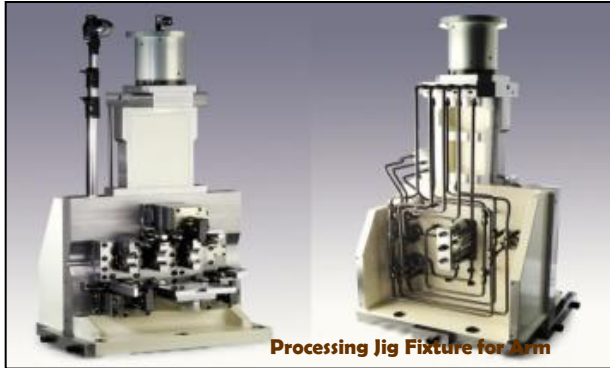
Manifold Block Body

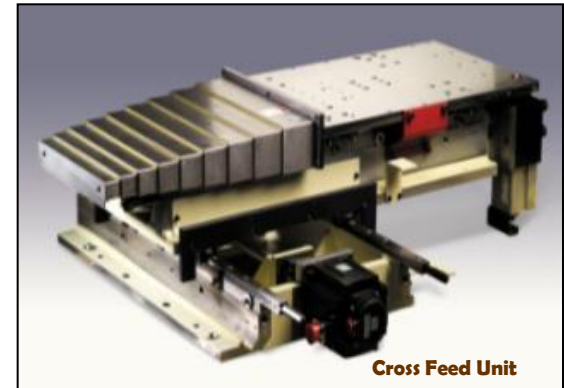
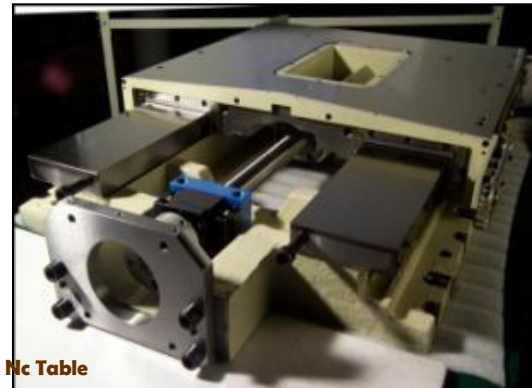
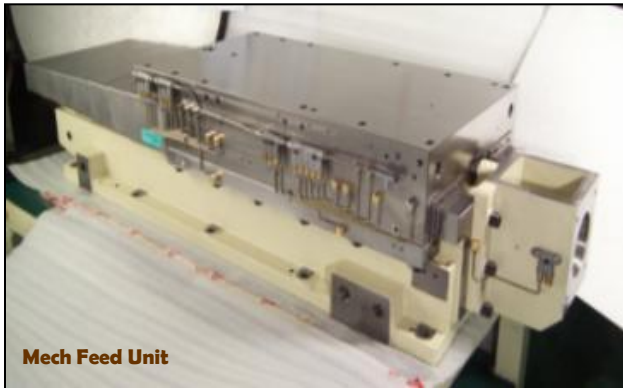
< Competitiveness 1 – carrier seal >

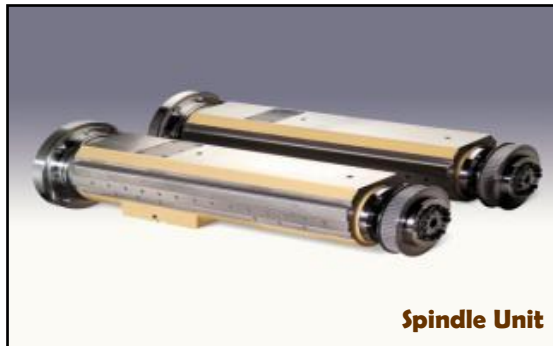


< Competitiveness 2– cage bearing >

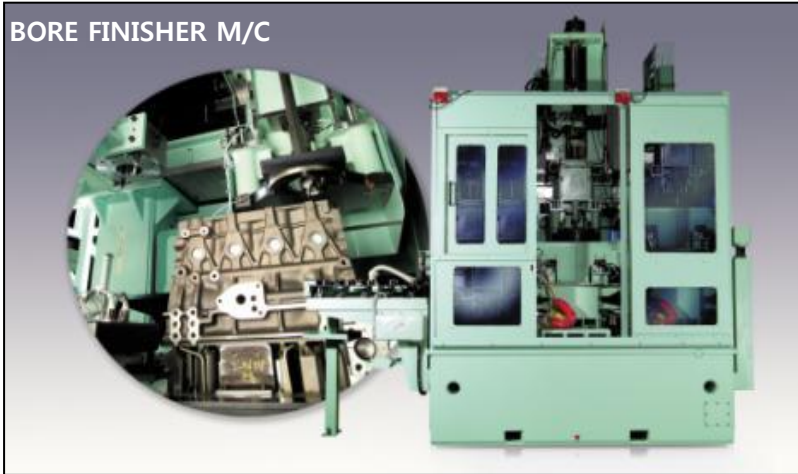








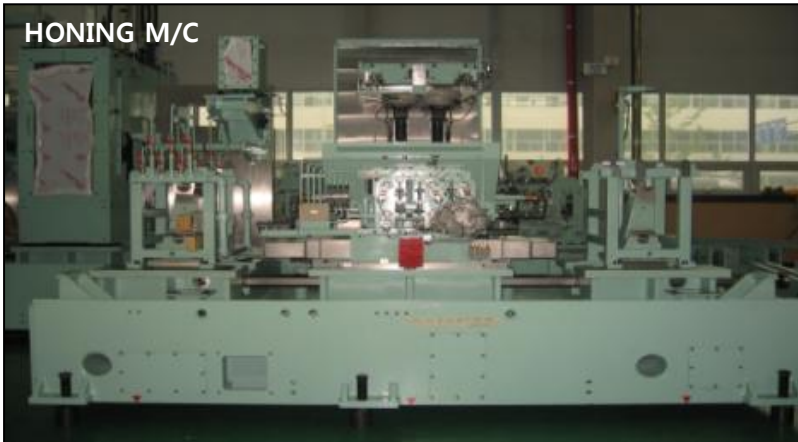
BORE FINISHER M/C



ROLLING M/C (Before Overhaul)



HONING M/C



ROLLING M/C (After Overhaul)







ZERO-IN MV-5X

< 5 axis Machine Center >



ZERO-IN TX-35B

< Tapping Center >



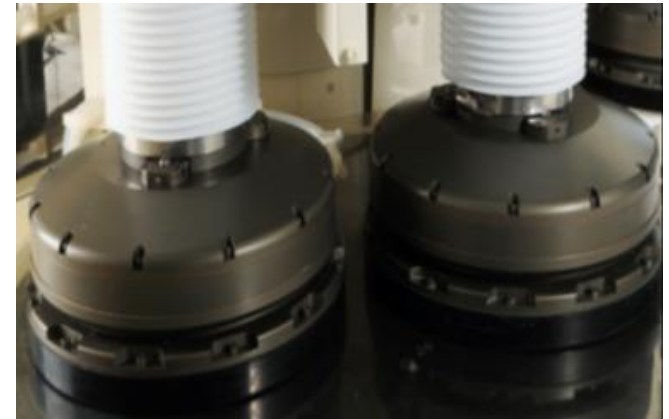
HAL-VC106(A)

< Turret Center >

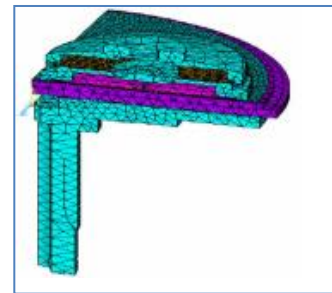


< Auto Lathe >

ITEM	DESCRIPTION	DS A-20	DS A-32
Machine	Main Max. rpm (Sub)	10,000(8,000)	
	Max. Turning Diameter mm	D20	D32
	Stroke mm	230	230
	Additional Position Brake	1° (Cs : 0.001°)	
	L * W * H	1,750 X 1,600 X 1,700	
	Weight Kg	3,900	4,000
Tooling	O.D Tools	6EA(□12mm)	5EA(□16mm)
	Front / Face Tools	5 : D10mm/M8	
	Cross Work Tools	4 : D10mm/M8	
	Back Tools	4 : D10mm/M8	
Motors	Main Spindle Kw	2.2 / 3.7	7.5 / 5.5
	Sub Spindle Kw	1.5 / 2.2	
	Cross Unit Kw	0.55 / 1.1	
	Servo Kw	0.75	
	Coolant pump capa w	900 / 250	
Others	Power Consumption (KVA)	15	
	Coolant tank capacity(ℓ)	200	
	N/C Controller	FANUC 18i-TB	



Head



Plate



Robot Hand

Model	CMP (C hemical M echanical P olishing Machine)
CMP Comp.	3 Platen & 8 Head
Capacity	8 machines per year (about \$13m)
Appli- cation	Silicon Bare Wafer, Device Wafer, GaAs Wafer Apply to grinding of Substrate



-Environment Controller -Air Shower Rm.

- Area : 237 m²
- Environment Controller :
9,000CMH
- CLASS : 10.000



Clean Room

Machine Tool Highlight -1

Chapter3. Equipment Overview



Model / Q'ty	MVR-30(Five Face Plano Machine) / 1 EA
Maker	MITSUBISHI (Japan)
Machine Spec.	system 4,200 X 3,000 X 700 X 800(X, Y, Z, W) TABLE : 2,000 X 4,000 2 PALLET CHANGER ATC : 100 P.C.S BT50 PULL STUD : P50T – 2(PS-6), T-SLOT : 28.5
Specialized Machining	Five-Face Plano machining Internal diameter tolerance $\pm 5 \sim 10 \mu\text{m}$, Concentricity and perpendicularity $\pm 10 \mu\text{m}$



Model / Q'ty	FH10800 (Horizontal M.C.T) / 1EA
Maker	YAMAZAKI MAZAK (Japan)
Machine Spec.	1,700 X 1,400 X 1,400 TABLE : 1,000 X 1,000 2 PALLET CHANGER ATC : 80 P.C.S BT50 INDEX TABLE 0.001° PULL STUD : PS-G41, M20
Specialized Machining	Equipped with dual table Tolerance range $\pm 5 \mu\text{m}$



Model / Q'ty	(Jig Boring Machine)M310YR / 2 EA
Maker	DIXI (SWISS)
Spec.	1,000 X 840 900 X 900 X 700 X 400 HORIZONTAL JIG BORING M/C
Specialized Machining	Pitch(distance between holes) $\pm 10\mu\text{m}$ When simultaneous machining, perpendicularity $\pm 10\mu\text{m}$ When subject turning, concentricity $\pm 10\mu\text{m}$



Model / Q'ty	(Jig Boring Machine)HYDROPTIC-6A / 2 EA
Maker	SIP
Spec	1,100 X 842 950 X 700 X 480 X 300 VERTICAL JIG BORING M/C
Specialized Machining	Pitch(distance between holes) $\pm 10\mu\text{m}$ When simultaneous machining, perpendicularity $\pm 10\mu\text{m}$

Machine Tool Highlight -3

Chapter3. Equipment Overview



Model / Q'ty	BTD 200QF / 1 EA
Maker	TOSHIBA MACHINE MACHINERY (Japan)
Machine Spec.	1,500 X 1,200 X 700 X 400 TABLE : 1,000 X 1,000 ATC : 30 MAS BT50 INDEX TABLE 0.0001° PULL STUD : MAS P50T-1(45°)
Specialized Machining	Internal diameter tolerance $\pm 5\mu\text{m}$, Concentricity and perpendicularity $\pm 10\mu\text{m}$



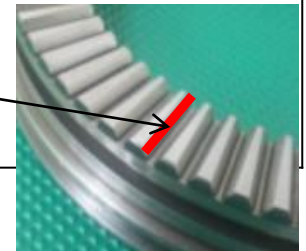
Model / Q'ty	VX750M (Vertical M.C.T) / 1 EA
Maker	WIA
Machine Spec.	1,550 X 750 X 720 (X, Y, Z) TABLE : 1,800 X 700 Main Output : 18.5/15KW 30/25KW ATC : 30本, BT50 Tool changing speed : T-T 3.5 sec, C-C 10 sec
Specialized Machining	Internal diameter tolerance $\pm 5\mu\text{m}$, Concentricity and perpendicularity $\pm 10\mu\text{m}$



Model / Q'ty	PRECIEION BORING MACHINE (YBM-10T)/ 1 EA
Maker	YASDA (Japan)
Machine Spec.	1,500 X 1,500 X 1,800
Specialized Machining	Internal diameter tolerance $\pm 5\mu\text{m}$, Concentricity and perpendicularity $\pm 10\mu\text{m}$ Function of macro Proper for mass production



Model / Q'ty	Grinding Machine (PSG125DXNC)/ 1 EA
Maker	OKAMOTO MACHINE (JAPAN)
Machine Spec.	1,200 X 500 X 595 COLUMN TYPE SURFACE GRINDER
Specialized Machining	Specialized in grinding of tooth for coupling Grinding side of tooth

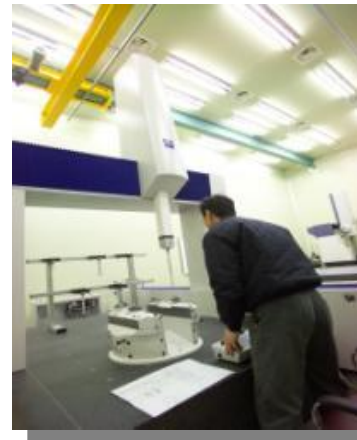




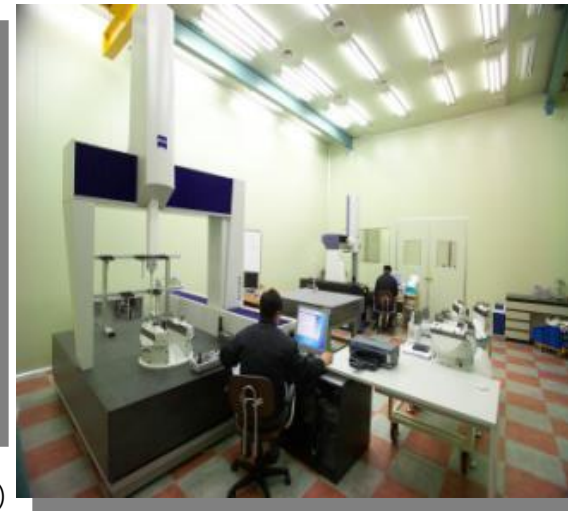
CARL ZEISS
1200×1800×1000 (0.0001)



MITSUTOYO
700×1000×600 (0.0001)



CARL ZEISS
1600×2400×1000 (0.0001)



Equipment	Machine Capacity	Q'TY	Manufacturer
5 Faced Plano Milling M/C	4200×3000×700×800	1	MHI MVR30
Horizontal JIG Boring M/C	1000×840 900×900×5500×400	2	DIXI M310YR
	900×900×700×400		
Horizontal Boring M/C	1000×1000 1500×1200×700×400	1	TOSHIBA BTD-200QF
Vertical JIG Boring M/C	1100×842	2	SIP HYDROPTIC-6A
	950×700×480×300		
Horizontal Machining Center	1700×1400×1400	1	MAZAK FH-10800
	800×650×650	2	DAEWOO HEAVY IND. LTD. HYUNDAI WIA
	670×560×575		
	630×525×500	3	MAKINO
	610×450×500		MAZAK
	400×300×300		KITAMURA
	950×825×760	1	DAEWOO HEAVY IND. LTD
	1250*1000*850	1	DAEWOO HEAVY IND. LTD
Vertical Machining Center	1120×560×560	1	NTC ZV5000
	1120×560×560	1	NTC ZV5400
	800×450×460	2	ENSHU
	1000×600×550	1	MITSUBISHI
Surface Grinder	700x500	1	WOOJIN WSG 7050A

Equipment	Machine Capacity	Q'TY	Manufacturer
Vertical Machining Center	510×410×650	3	DAEWOO HEAVY IND. LTD.
	640×410×500		SAMSUNG TECH WIN
	1550×750×720		WIA VX750M
Milling M/C	1200×600×500	2	KIHEUNG
	600×300×400		NAKSUN
CNC Lathe	Ø600×2000	2	KOREAN MACHINE TOOL P/TN 60
	Ø400×680		DAEWOO PUMA250
Internal & External Grinding M/C	Ø320×1050	2	TONGIL
	Ø320×1000	2	KIA
	Ø410×1500	1	WIA
	Ø550×1800	1	S&T TGU-40
	Ø350×1000	2	S&T TGU-35
	Ø350×1200	1	S&T TGU-35
Lathe M/C	Ø480×1500	2	TONGIL
	Ø400×1000		TONGIL
Complex CNC Lathe	Ø760×1524	1	MAZAK INTERGREX 400Ⅲ-1500U
Drilling M/C	NRD 1600	1	NAMBUK
Column Type Surface Grinder	1200×500×595	1	OKAMOTO MACHINE TOOL WORKS. LTD.

Gauge and Test Device	Gauging Range	Q'TY	Manufacturer
Coordinate Measuring Device (3D)	1600×2400×1000(0.0001)	1	CARL ZEISS
	1200×1800×1000(0.0001)	1	CARL ZEISS
	700×1000×600(0.0001)	1	MISUTOYO
Height Gauge (2D)	600mm(0.001)	5	MAHR-3 / TREMOS-1 / MISUTOYO-1
Height Master	300mm(0.0001)	8	MISUTOYO
Block Gauge	112 ITEM/103 ITEM 4SET 76 ITEM 1SET	2/4SET 1SET	
Height Gauge	600mm/300mm(0.01)	7/2	
Hardness Testing Machine	150Kgf	3	
Portable Surface Roughness Tester	0.01	1	
Black Granite Surface Plates	1500cm ² Blow	14EA	UNITECH
	2000cm ² Blow	4EA	MIKRO
	2000cm ² Blow	2EA	UNITECH
Cylinder Gauge	Ø6 ~ Ø400	106EA	MISUTOYO
Micrometer	0 ~ Ø600	151EA	
Inside Micrometer	5 ~ 100	16EA	
Vernier Caliper	0 ~ 2000	61EA	

Gauge and Test Device	Gauging Range	Q'TY	Manufacturer
PIN Gauge	Ø3 ~ Ø120	250EA	INSELF PRODUCTION
Screw Thread Gauge (Ring, Plug)	Ø3 ~ Ø120	151EA	OSG
Stone Master Angle	300mm / 500mm	2EA	UNITECH
Straight Edge	790×100×150	1EA	
Shape Measuring Machine	50*120	1	Mahr
Roundness Measuring Machine	870*705*2260	1	TAYLOR HOBSON
Others		9	

[Fact Sheet]

- 8,000 types** of components
- 49% of market share** in Japanese market
(among Korean exporting companies)
- 15 years** of business relationship with Mazak

[Benefits for **Your Company**]

•**Concentrate on your core business**

DSHT's harsh quality control system shown in the Fact Sheet enables **you** to concentrate its core business. Reliable and trustable quality of DSHT will make **you** business easier and more convenient.

•**DSHT is the best troubleshooter for you**

DSHT's accumulated knowhow in precision parts and flexible manufacturing system benefit you in many ways. Challenging parts to make, very small quantity of products and parts needed urgently can be solved by DSHT. Whenever you have a problem, please share with **DSHT, the best troubleshooter** for you business.



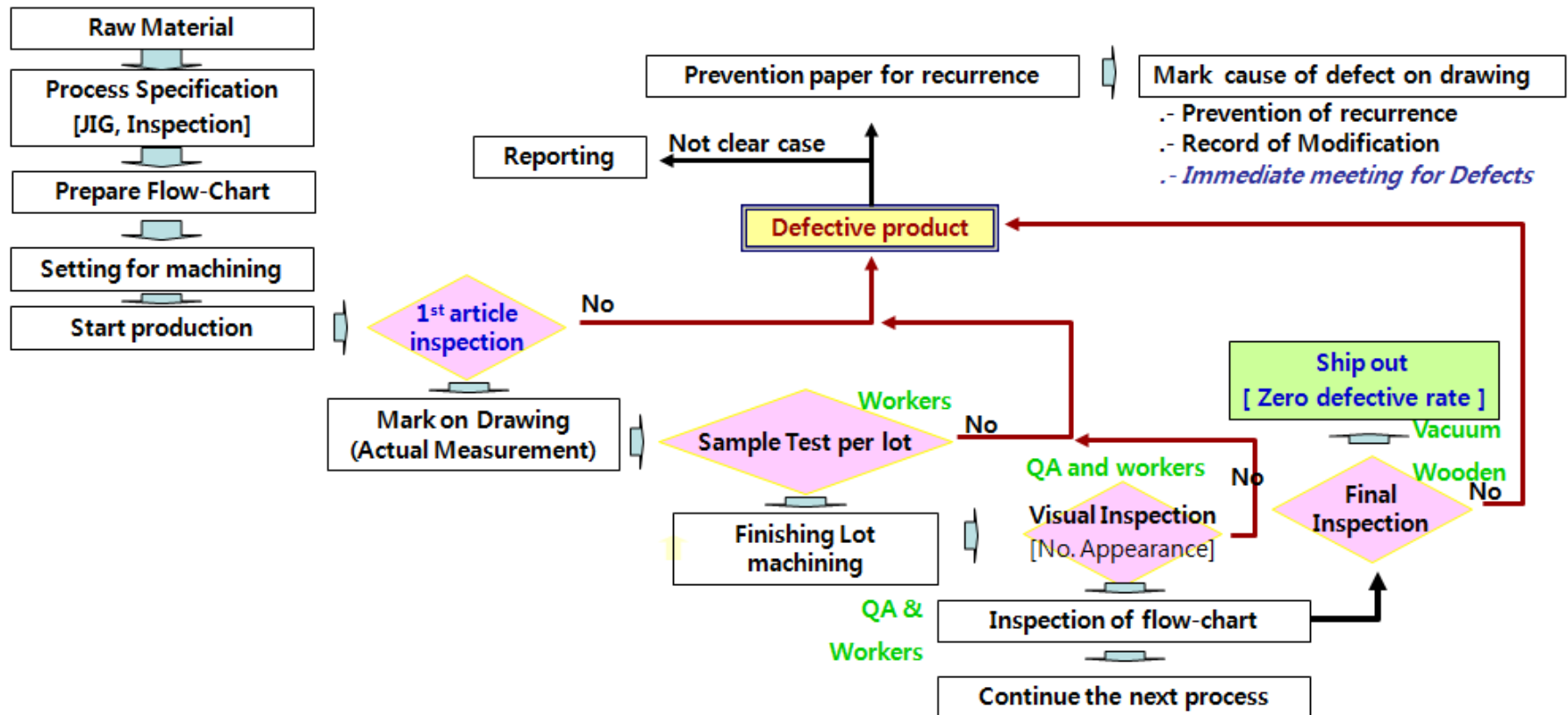
Small Quantity and tiny size



Large size of components



Assembled Unit

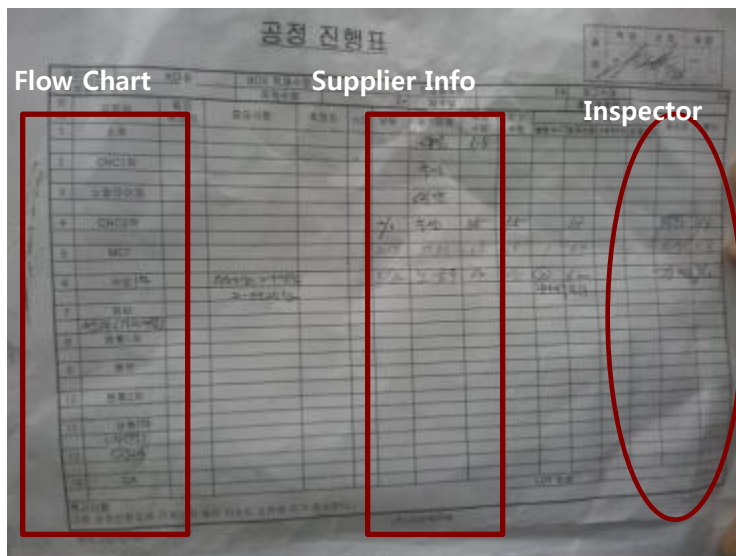


Unique Control System

Chapter4. Why should be DSHT

① Flow chart printed on the drawing

On the opposite side of every drawing, flow chart is printed.
Without inspector's middle inspection, the part can't go to the next step



② Quality Performance Bulletin Board

DSHT opens a meeting every month with 200 employees all together.
By sharing mistakes, DSHT prevents similar mistakes.
DSHT presents all the data on bulletin board



③ Analysis about Suppliers

DSHT analyzes suppliers' weekly performances. When problem is found, DSHT's engineer is dispatched at once to suppliers to teach them.

Example) 2012. January- No. of defect case





Model / Q'ty	Grinding Machines / 8 EA
Maker	Various (For details, please refer to the machine lists)
Machine Spec.	Various (For details, please refer to the machine lists)
Specialized Machining	Tolerance level up to 2 μ m Grinding for sensitive internal and external diameter Groove grinding

Information for Grinding Room

- ① One of the most skilled work station in DSHT
- ② Challenging (final) machining is done in here
- ③ DSHT is planning to be equipped with more than 10 grinding machines as the demand for precision part increases from all over the world
- ④ Never outsourced the grinding work because the final grinding work decides the quality level

Unique Features

[Special Box and vacuum packaging]
: prevent scratch and rust



[Grinding Work Station]
: internal/external grinding station meeting tight tolerance



Chapter4. Why should be DSHT?

[Skilled Labors with various certificates]
: The most powerful weapons of DSHT.
Turnover rate of 2011 is very low, 2%



Types of Certificates

- ① Measurement specialist
- ② Scraping specialist
- ③ Electricity control specialist
- ④ Lathe specialist
- ⑤ Milling specialist
- ⑥ Machine drawing specialist

Broad Network with Casting Suppliers

Chapter4. Why should be DSHT?

DSHT's Casting Supplier Profile

At a Glance

Company Site Size

- Building : 11,795㎡
- Land : 28,760㎡

Established Year : 2000

Employee No. : 147

Annual Sales : \$30.6M

Certifications :

- TS16949
- ISO9001
- SQ

Major Customers

- Hyundai Wia
- Hanhwa Tech M
- DMC
- Hyundai-Kia Motor co.
- Hyundai Heavy Ind. Co.

Bokook Cast Iron Ind. Co., Ltd.

Picture of Company

Major Product

Company Site Size

- Building : 3200㎡
- Land : 5200㎡

Established Year : 1979

Employee No. : 200

Annual Sales : \$4320M

Export : \$300M (indirect)

Certifications :

- TS16949 : Aug. 03
- OHSAS 2007:18001:Nov.11
- SQ : Jun. 01

Major Customers

Korea

- HYUNDAI WIA
- HYUNDAI METIA
- Doosan Infracore
- Hyundai-Kia Motor co.
- etc

US/Canada

- Indirect export through DSHT

Development Process and Capability

Process	L/Time
1. Initial Tooling	25 days
2. 1 st Shot & Inspection	10 days
3. Tool Repair	10 days
4. Production Tool Ready	15 days

Production line and Capacity (Monthly)

Product Category	P/Line
1. Small Cast (~30kg)	Man. Greensand Molding
2. Small Cast (~30kg)	Auto Greensand Molding
3. Med. Cast(30~50kg)	Auto Greensand Molding
4. Med. Cast(50~150kg)	Auto Greensand Molding
5. Large Cast(300~500kg)	Man. Furan Molding
Total	

Daehan Special Metal Co., LTD

At a Glance

Company Site Size

- Building : 3200㎡
- Land : 5200㎡

Established Year : 1979

Employee No. : 200

Annual Sales : \$4320M

Export : \$300M (indirect)

Certifications :

- TS16949 : Aug. 03
- OHSAS 2007:18001:Nov.11
- SQ : Jun. 01

Major Customers

Korea

- HYUNDAI WIA
- HYUNDAI METIA
- Doosan Infracore
- Hyundai-Kia Motor co.
- etc

US/Canada

- Indirect export through DSHT

Development Process and Capability

Process	L/Time
1. Initial Tooling	20 days
2. 1 st Shot & Inspection	7 days
3. Tool Repair	5 days
4. Production Tool Ready	10 days

Production line and Capacity (Monthly)

Product Category	P/Line	Capacity
1. Small Cast (~20kg)	Auto. Greensand Molding	1000 Ton
2. Small Cast (~20kg)	Auto. Greensand Molding	800 Ton
3. Large Cast(100~600kg)	Man. Furan Molding	1000 Ton
Total		2800 Ton

Melting Equipment

Process	Equipment Type	Quantity	Spec.	Manufacturer
Melting	Electrical Furnace	1	2.5 Ton, Dual Type	Hanmi
	Electrical Furnace (Holding Furnace)	1	3 Ton	Seochang

Sales Breakdown

Machine Tool Automot

Major Customers

Korea

- Doosan Infracore
- Hwachoan Machinery
- Hansung Gear
- Dongbu Metal
- etc

Japan

- Indirect export through DSHT

Major Cast Material

Cast Iron

DSHT's Casting Supplier Profile

At a Glance

Company Site Size

- Building : 9,586㎡
- Land : 20,826㎡

Established Year : 2005

Employee No. : 21

Annual Sales : \$13.5M

Export : \$1.4

Certifications :

- ISO9001:2009

Major Customers

Korea

- Doosan Infracore
- Hwachoan Machinery
- Hansung Gear
- Dongbu Metal
- etc

Japan

- Indirect export through DSHT

Major Cast Material

Cast Iron

Development Process and Capability

Process	L/Time	Capability
1. Initial Tooling	25 days	Simultaneous tool development capability for each production line
2. 1 st Shot & Inspection	5 days	
3. Tool Repair	5 days	
4. Production Tool Ready	5 days	

Production line and Capacity (Monthly)

Product Category	P/Line	Capacity	Allotment for DSHT
1. Small Cast (~15kg)	Greensand	100 Ton	30 Ton
2. Small Cast (~15kg)	Molding	100 Ton	20 Ton
3. Med. Cast(30~200kg)	FD-4 (Auto.)	600 Ton	300 Ton
4. Large Cast(200kg~)	Furan	600 Ton	50 Ton
Total		1,400 Ton	400 Ton

Melting Equipment

Process	Equipment Type	Quantity	Spec.	Manufacturer
Melting	Electrical Furnace	1	2.5 Ton, Dual Type	Hanmi
	Electrical Furnace (Holding Furnace)	1	3 Ton	Seochang

Sales Breakdown(%)

Industrial machine Machine Tool Automotive Heavy Machine Agr. Machine

Daegu, Korea, 3 factories are located in Seongseo industrial complex .

Factory location



Components Division

Building : 4,700 m²

Land : 2,700m²

Address : 922-5, Wolam-Dong, Dalseo-Gu, Daegu

© 1st Plant (Head Office / Main Plant)



Machining Division

Building : 6,782m²

Land : 4,216m²

Address: 1010, Daecheon-Dong, Dalseo-Gu, Daegu

© 2nd Plant



© 3rd Plant

Assembly Division

Building : 4,954m²

Land : 5,358m²

Address: 893-6, Daecheon-Dong, Dalseo-Gu, Daegu

Contact Person

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Thank You