

胜利精密 Victory Precision



Innovation - Transparency - Communication - Initiative

創新-透明-溝通-主動

www.vicsz.com

65+社以上の子会社を傘下に持つ

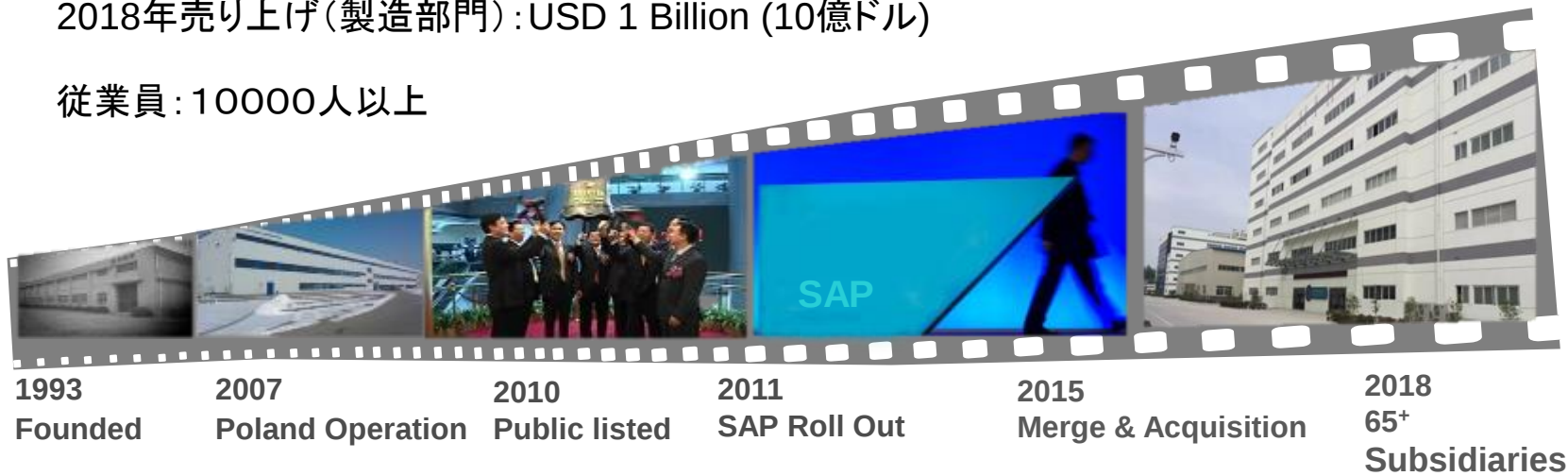
登録資本金: USD 0.5 Billion (5億ドル) 純資産: USD 1.3 Billion (13億ドル)

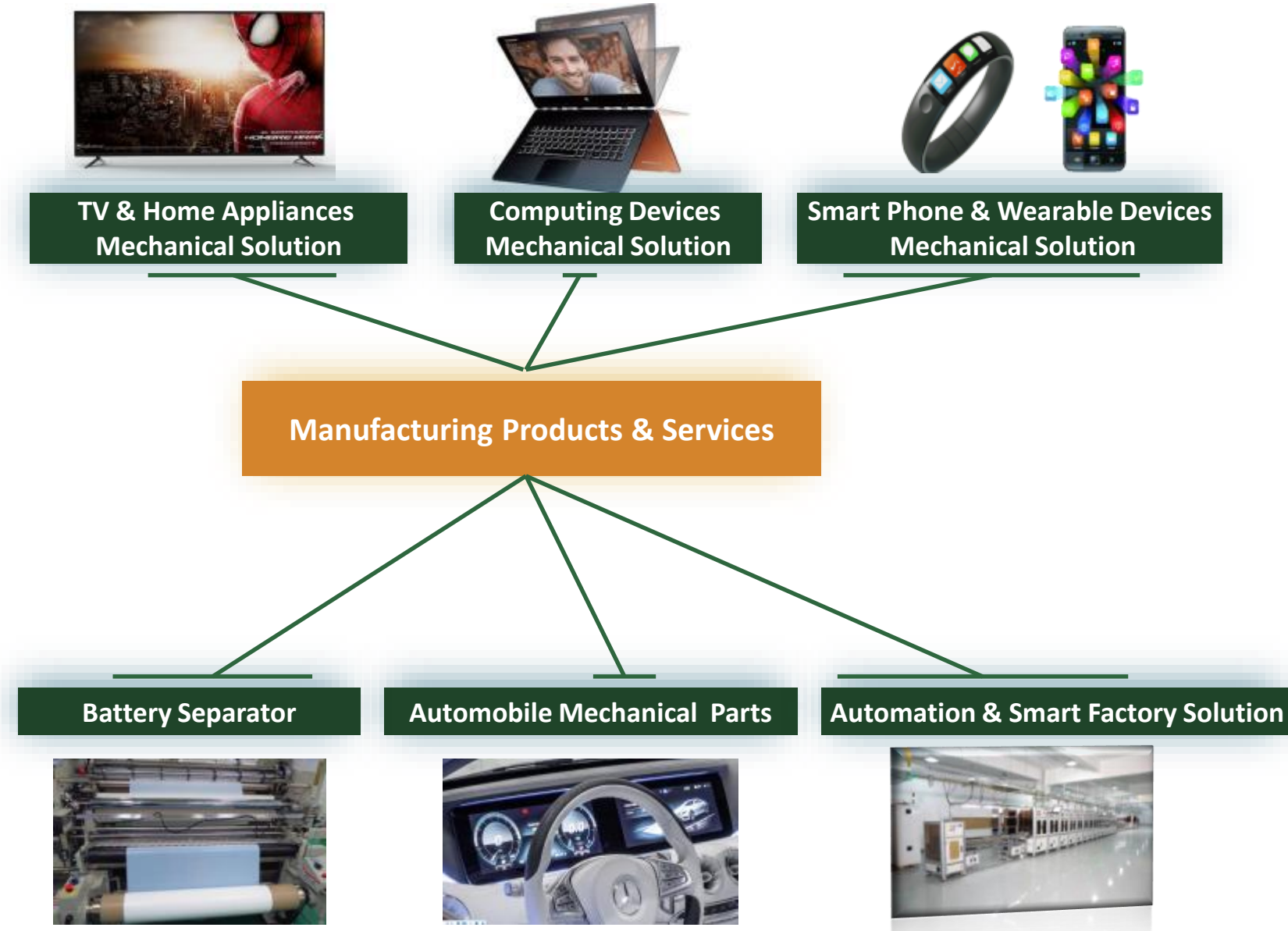
深圳証券取引所上場

時価総額 : USD 1.3 Billion (13億ドル)

2018年売り上げ(製造部門): USD 1 Billion (10億ドル)

従業員: 10000人以上

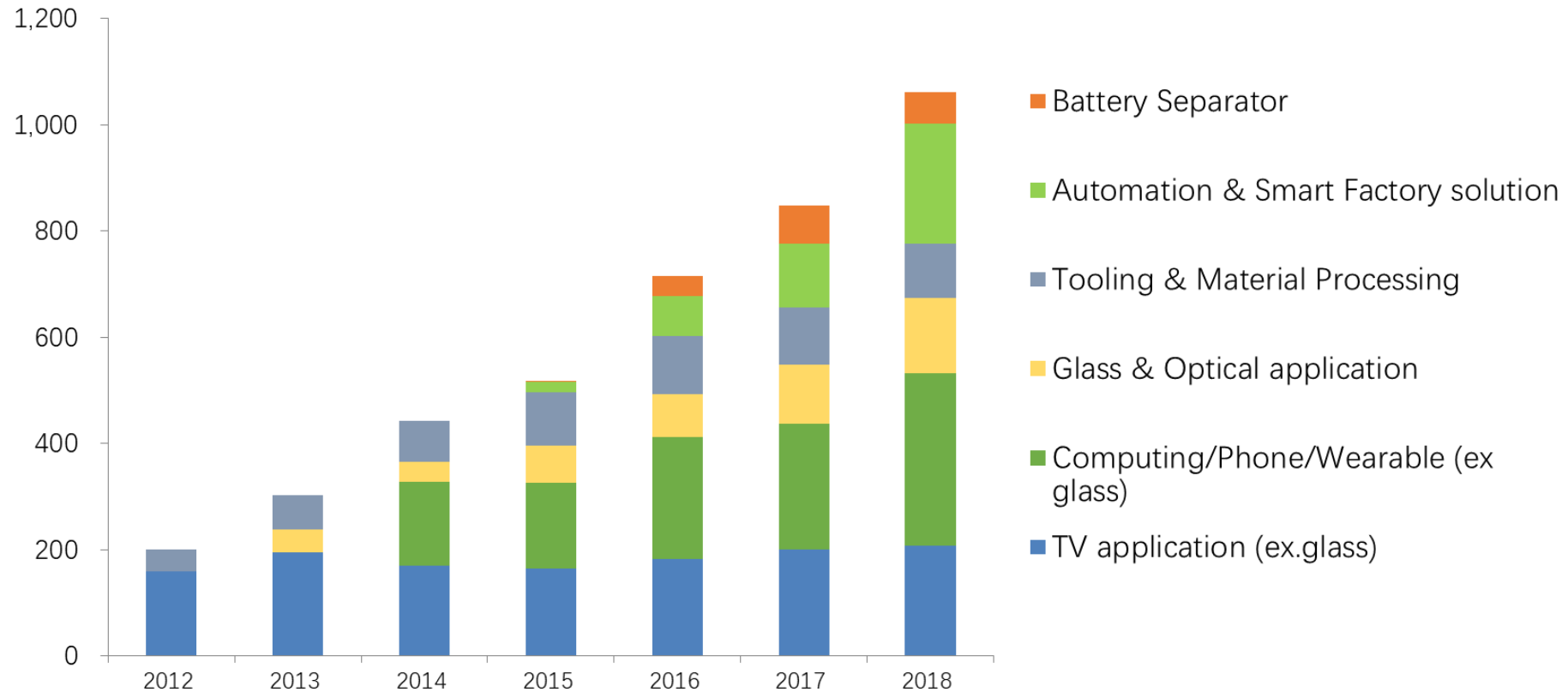




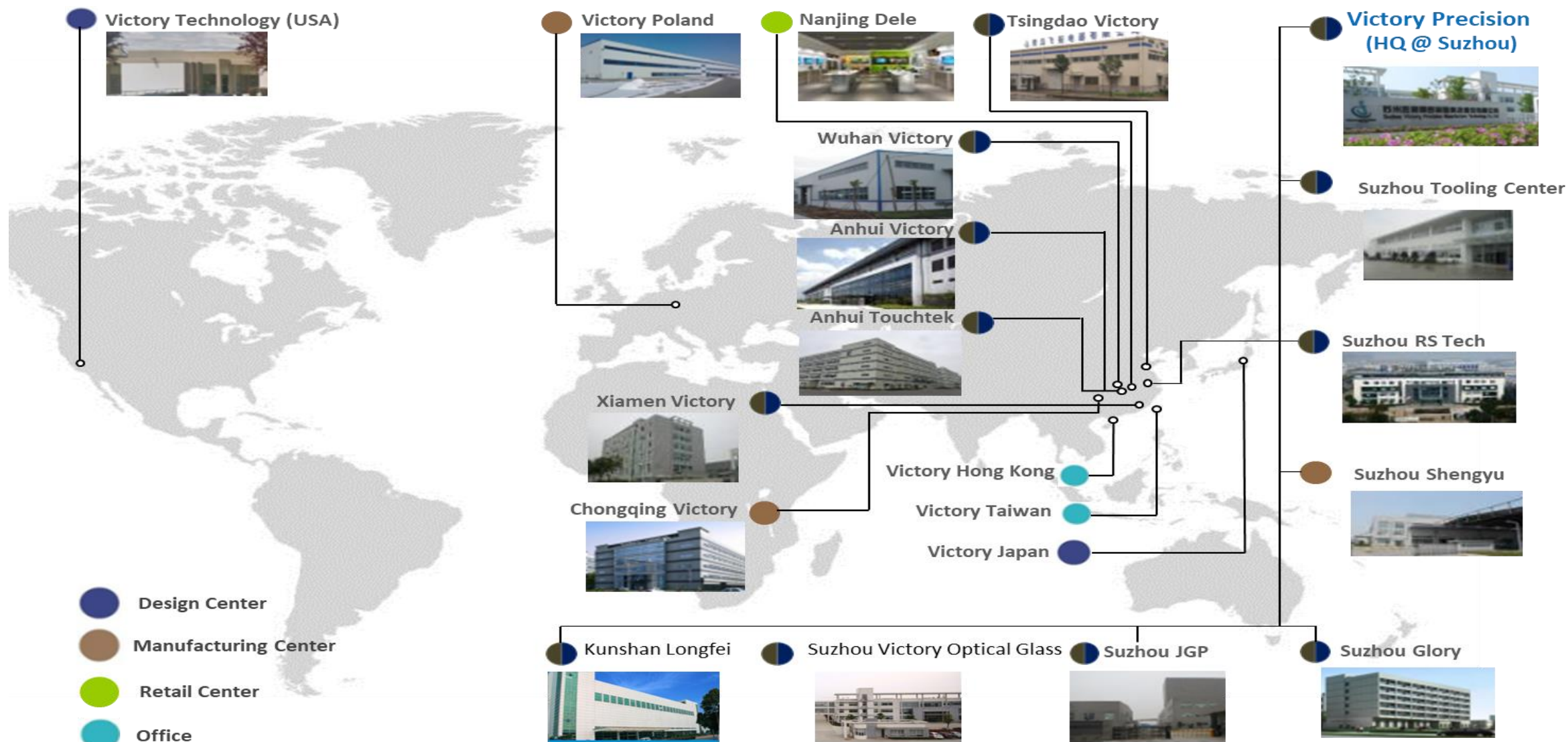
Revenue Breakdown

Revenue (Manufacturing Product and Services)

Million USD



Global Presence



Our Customers

PHILIPS

SONY



CORNING

BOE

Panasonic

oppo



Haier

SHARP

vivo

MEIZU

Hisense



coolpad 酷派



ZTE中兴



TPV

TOSHIBA



ASUS

SAMSUNG



Lenovo



fitbit



CATL



SONOS

Magnesium Thixomolding – Victory factories



Suzhou Victory Precision (thixomolding factory)

thixomolding plant established 2014
 15 sets of JSW thixomolding machine, max 650T
 Auto robot polish
 In-house painting



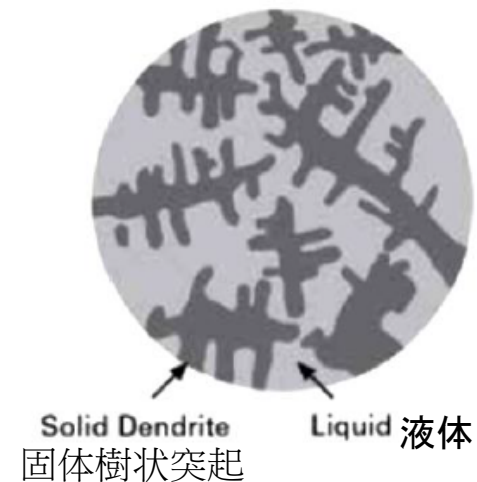
Anhui Victory Precision (thixomolding factory)

thixomolding plant established 2016
 15 sets of JSW thixomolding machine, max 850T
 Auto robot polish
 In-house chemical conversion
 In-house painting

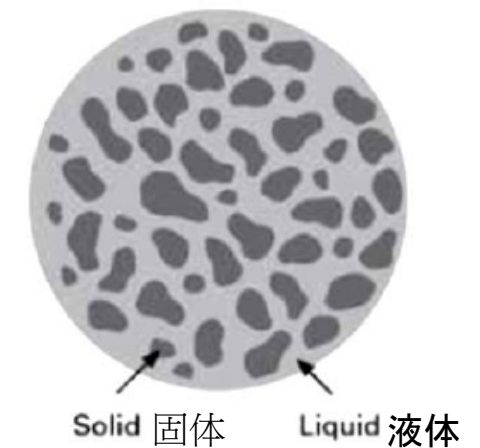
Magnesium Thixomolding -Advantages

マグネシウム チクソモールディングー利点

- ✓ superior strength to weight ratios
重量比で優れた強度
- ✓ better straightness and flatness,
高い平坦度
- ✓ better heat dissipation
高い放熱性
- ✓ low porosity
低気孔率
- ✓ tighter tolerances- reduce or eliminate secondary
machining operations
高精密(小さい公差)→二次加工の削減



Conventional dendrite
formation in semi-solid alloy
半固体合金における
通常の樹枝状晶形成



Thixotropic structure
of semi-solid alloy
resulting from stirring

攪はんから生じる半凝固合金
のチキソトロピック構造

Mg部品の成形手法 プロコン

Mg チクソモールド VS ダイキャスト

	材料費	二次加工	金型 寿命	Cycle time	肉厚 (最小厚保)	寸法精度 (反り含む)	巣	外観	環境
チクソ	△ (\$1 up/kg) ペレット化	○ (バリ20%少) (最終形状に近)	○	○	○ (0.3~0.6mm) 超高圧成形	○ (Shrinkage) 0.003 「低温」の製法	○ 凝固収縮小	○	○ Non SF₆
ダイキャスト	○	△	△	△	△ (more 1mm)	△ (Shrinkage) 0.005	△	△	× (SF ₆)

SF₆ : 温暖化への影響 (二酸化炭素の22,800倍)
環境規制対象

Mg部品の成形手法 プロコン

チクソモールドのメリット

薄肉成形が可能で外観および精度が必要とされる部品に適している
部品の最終形状に近い状態までの成形が可能であり、二次加工、サイクル時間に対しても有利

車載ディスプレイに使用されるMg部品



Instrument Panel
Chassis



Display TP/BC Chassis
Bracket Chassis



Bracket & Heat sink



Mg Frame

寸法精度（反り部組む）が要求される部品が多く、チクソモールドが成形手法として適している

Magnesium Thixomolding –Victory Processes



Thixomolding



Trimming



CNC



Stamping

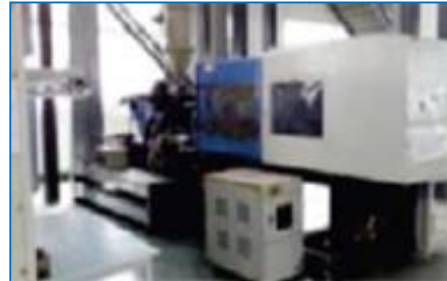


Auto polishing

Mg Product Common Process Flow



Painting



Plastic
Insert molding



Chemical
Conversion



Manual
polishing

Magnesium Thixomolding – Victory factories

Thixomolding Machine	Machine Type	Anhui Factory	Suzhou Factory
	850T	1	
	650T	11	9
	450T	1	1
	280T	2	1
	220T		1
	Total	15	12

制造能力—镁合金压铸 Die-Casting (Al-Mg)

- 27sets Thixomolding machine From 220 MT to 850MT (JSW)
 27台JSW镁合金成型机 From 220 MT to 850MT ， 半熔融固态成型技术



JSW Machine

	Machine Type	Anhui Factory	Suzhou Factory
Thixomolding Machine	850T	1	
	650T	11	9
	450T	1	1
	280T	2	1
	220T		1
	Total	15	12

制造能力—镁合金压铸 CNC (Al-Mg)

- 500+ CNC machines (FANUC/BROTHER/ RS -Tech)
- 500+ CNC machines (FANUC/BROTHER/RS-Tech) 加工中心



CNC Machines

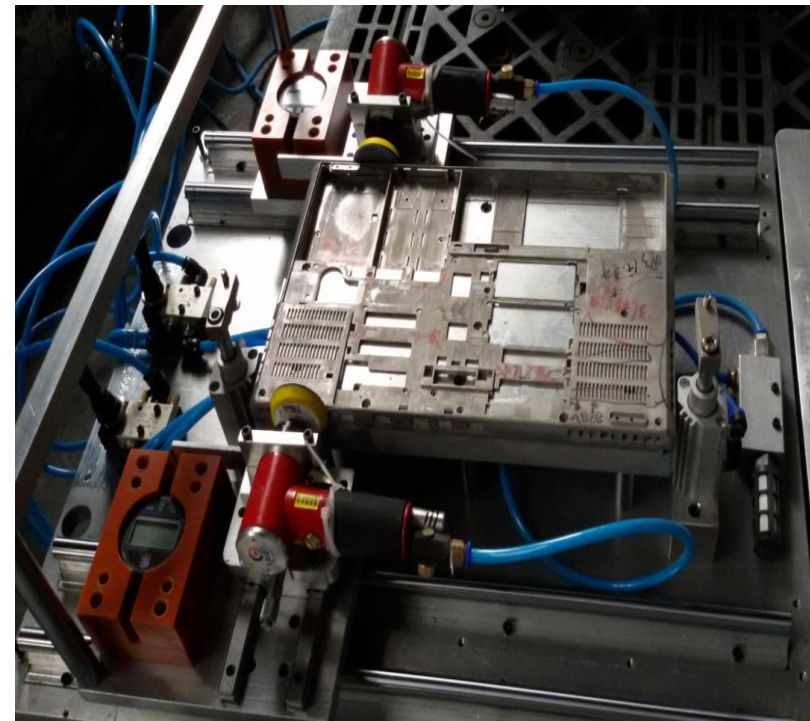
	ブランド	Suzhou Factory	Anhui Factory
CNC	FANUC	48	-
	BROTHER	90	36
	RS TECK	215	196
	TTL	353	232

制造能力—镁合金压铸 Polishing (Al-Mg)

- (10+8)x manual polish lines
(10+8)条手工打磨线体
- (35+8)sets Robot polish line
(35+8)台机器人自动打磨线体

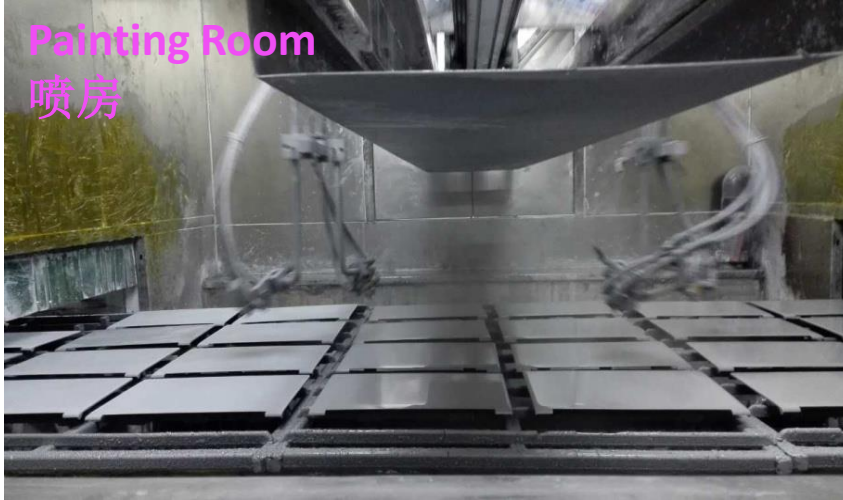


- 6 sets Semi-automatic Robot
polish line self-development
6 台半自动抛光机



	Method	Suzhou Factory	Anhui Factory
Polish	Manual polish	10	8
	Robot polish line	35	8

Painting Room
喷漆房



Assembling Line
组装线

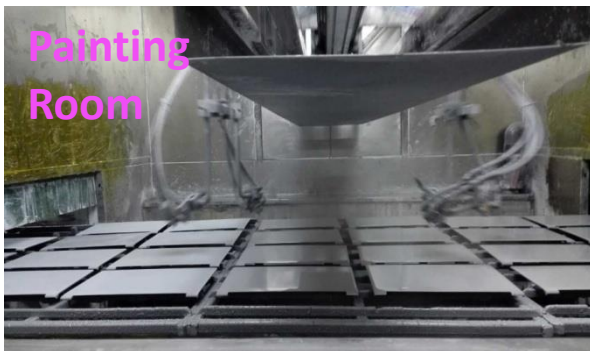


Baking Line
烘烤线



Clean Room
洁净室





高温镁铝合金烤漆 High Temperature Painting



High Gloss

低温塑胶件烤漆 Low Temperature Painting For Plastic parts



制造能力—阳极氧化 Anodizing

	Suzhou Factory	Anhui Factory
Anodizing	9	11



BMW 3series / 5series



Project 1: Bracket

Size : 287*113*18.5

Part Weight: 160g

Machine: 450T/650T

Surface: Chemical Conversion



Project 2: Bracket

Size : 286*106*19

Part Weight: 150g

Machine: 650T

Surface: Chemical Conversion



Project 3: Bracket

Size : 380*121*48.6

Part Weight: 350g

Machine: 650T

Surface: Chemical Conversion



Project 4: Chassis Main

Size : 190*70*59

Part Weight: 118g

Machine: 280T

Surface: Chemical Conversion



Tesla Model 3



Project 1: Housing
Size : 356*282*182
Part Weight: 746g
Machine: 850T
Surface: Painting



Project 2: Housing
Size : /
Part Weight: /
Machine: 850T
Surface: Painting

BMW X3series X5series Z series



Project 1: Bracket
Size : 400*112 *80
Part weight: 213g
Machine: 650T
Surface: Chemical Conversion



Project 2: Bracket
Size : 435*151*82
Part weight: 287g
Machine: 650T
Surface: Chemical Conversion



Project 3: Back Support
Size : 436*137*32
Part weight: 200g
Machine: 650T
Surface: Chemical Conversion

Lenovo Yoga4 Liszt

Part1: lcd cover

Size : 321.97*217.21*0.8

Part weight: 118g

Machine: 650T

Process: Thixomolding+ CNC

Surface: chemical conversion + painting



Part 2: C cover

Size : 323.9*217.22*0.8

Part weight: 88g

Machine: 650T

Process Thixomolding + CNC + insert molding

Surface: chemical conversion + painting + leather attaching



Part 3: D cover

Size : 321.99 Z*217.24*0.7

Part weight: 90g

Machine: 650T

Process: Thixomolding + CNC+ insert-molding

Surface: chemical conversion and painting



Lenovo Yoga4 Maksim

Part 2: C cover

Size :305.39*209.1 *0.7

Part weight:83.2 g

Machine: 650T

Process: Thixomolding + CNC + insert-molding

Surface: chemical conversion + painting + leather attaching



Part3: D cover

Size : 303.37x206.75*0.6

Before Painting: **t0.5mm**

Part weight: 79g

Machine: 650T

Process: Thixomolding + CNC+ insert-molding

Surface: chemical conversion and painting



Lenovo YB2

Part1: A Cover

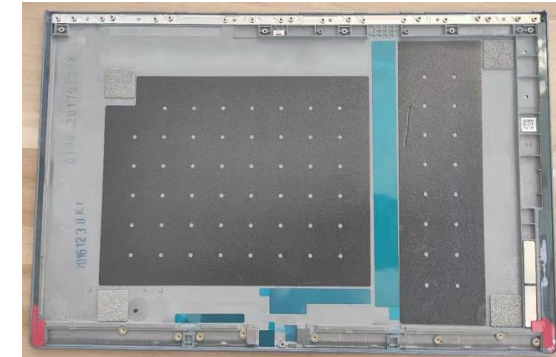
Size : 260.4*179.44 *0.7

Part weight: 73g

Machine: 650T

Process: Thixomolding + CNC+ insert-molding

Surface: chemical conversion and painting



Part 2: D Cover

Size : 260.40x179.44*0.75

Part weight: 75g

Machine: 650T

Process: Thixomolding + CNC+ insert-molding

Surface: chemical conversion and painting



Samsung Epic 13

Part 1: case upper

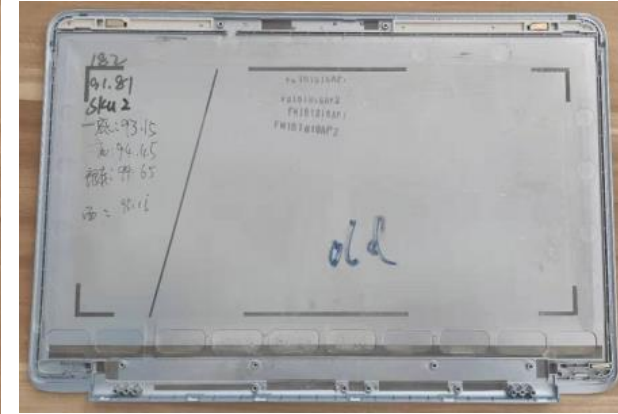
Size : 307.75*204.48 *0.7

Part weight: 98.6g

Machine: 650T

Process: Thixomolding + CNC

Surface: MAO and painting



Part 2: case front

Size : 309.42*208.02*0.8

Part weight: 85g

Machine: 650T

Process: Thixomolding + CNC

Surface: MAO and painting



Samsung Epic 15

Part 1: case upper

Size : 346.60*225.91 *0.8

Part weight: 148g

Machine: 650T

Process: Thixomolding + CNC

Surface: MAO and painting



Part 2: case front

Size : 347.90*229.40*0.8

Part weight: 120g

Machine: 650T

Process: Thixomolding + CNC

Surface: MAO and painting

