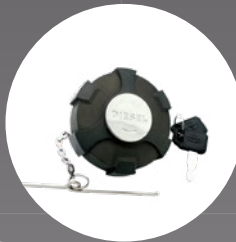




**Sub Ass'y Maker** for Heavy Machinery



# KUNYOUNG TECH

## Global No.1 Locking Solution & Sub Ass'y Maker for Heavy Machinery

KUNYOUNG TECH is a leading global heavy machinery & automotive supplier of locking systems, fuel delivery systems, and exterior solutions.

Founded in 1992 with manufacturing presence in Changwon, Korea.  
ISO-9001, 14001, TS-16949 Certified.





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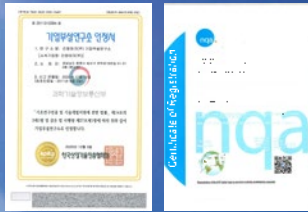


# HISTORY





# Sub Ass'y Maker for Heavy Machinery





# EXCAVATOR



- A** HANDLE-UB
- B** INNER LATCH-GA SET
- C** HANDLE-QB
- D** MIDDLE PLATE SUB ASS'Y
- E** CAP ASS'Y
- F** NONSLIP, FRONT STEP-C, COVER







- A** DOOR LOCK
- B** CATCH ASS'Y
- C** MIRROR STAY
- D** CAP NECK SET
- E** BATTERY BOX
- F** BATTERY COVER
- G** STEP
- H** HANDLE LATCH SET
- I** WIND SHIELD HANDLE





# WHEEL LOADER



- A** FAN GUARD
- B** FRONT LATCH-DB
- C** STAY-B
- D** REAR FENDER
- E** GRILL
- F** GUARD
- G** HANDLE





# FORKLIFT



- A** CAP 50A
- B** HANDLE-P
- C** INNER LATCH-F
- D** HID01-0
- E** MONITER FIX- B





# TRACTOR



**A** PULL LATCH-BD, FUEL CAP 50AB

**B** HANDLE-ZA, SIDE DOOR LOCK-FA





# AUTOMOBILE



**A** CAP 50 SERIES, CAP 80 SERIES, CAP 50 UREA, NECK 50DD, NECK 80FC





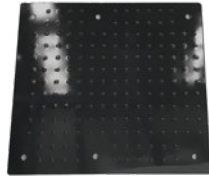
# COVER

Nonslip Plate / Front Step / Grill / Tank Cover



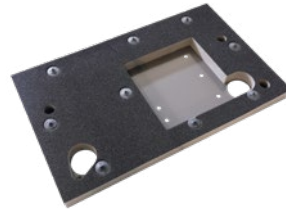
## NONSLIP PLATE

- **P/N** : NONO-R000-0
- **Size** : Customized
- **Material** : Steel / ZnDC2
- Bushing Type & Painting



## NONSLIP PLATE

- **P/N** : NP18-01
- **Size** : 550×650
- **Material** : SPCC



## FRAME COVER ASS'Y

- **P/N** : Frame Cover Ass'y
- **Size** : 910×445×50
- Electro Coating, Painting



## TANK COVER

- **P/N** : Tank Cover
- **Size** : 659×531×53
- **Material** : Steel
- Painting

# SUB ASS'Y



## GRILL

- **P/N** : Grill
- **Size** : 1,300×1,015×300
- Painting



## GURAD

- **P/N** : Guard
- **Size** : 1,580×1,469×1,196
- Painting



## STEP

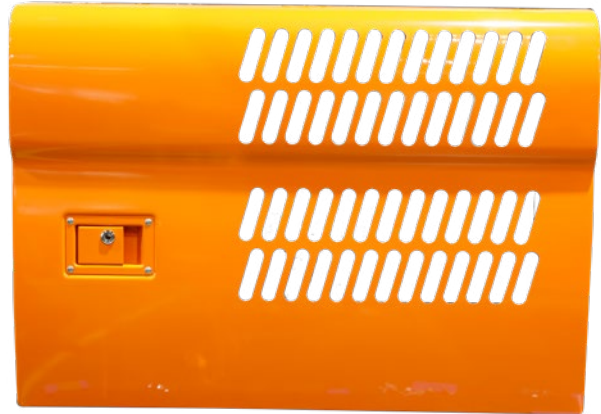
- **P/N** : Step
- **Size** : 1,630×664×395
- Painting





**BATTERY BOX**

- **P/N** : Battery Box
- **Size** : 900×304×667
- **Material** : Sttel
- Painting



**SIDE TANK COVER**

- **P/N** : Side Tank Cover
- **Size** : 1,191×848×230
- Painting

## SEAT FRAME



**MIDDLE PLATE SUB ASS'Y**

- **P/N** : MPSAC01-0
- **Size** : 780×572×358
- **Material** : Steel, ABS
- Electro Coating, Painting



**TILT SUPPORT - RH - LH**

- **P/N** : TISAR01-0
- **Size** : 469×261×138
- **Material** : Steel
- Electro Coating



**STAND ASS'Y**

- **P/N** : SDASM01-0
- **Size** : 600×500×300
- **Material** : Steel
- Electro Coating, Plating



# ENGINE HOOD FRAME



## HOOD FRAME

- P/N : Hood Frame
- Size : 1,565×1,172×425
- Painting



## HOOD FRAME

- P/N : Hood Frame
- Size : 1,272×554×394
- Painting



## HOOD FRAME

- P/N : Hood Frame
- Size : 1,040×997×128
- Painting



## SUPPORT ASS'Y

- P/N : Support Ass'y
- Size : 848×469×566
- Painting

# T/BOX FRAME / DOOR



## T/BOX FRAME

- P/N : T/Box Frame
- Size : 357×663×347
- Painting



## T/BOX DOOR

- P/N : T/Box Door
- Size : 449×807×301
- Painting



# DOOR LOCK

Cabin Door Handle / Window Catch / Side Cabin Door



**SIDE DOOR LOCK - BBA**

- **P/N** : LOBBA01-0
- **Size** : 31×110×170
- **Material** : Steel
- Painting



**SIDE DOOR LOCK - G**

- **P/N** : LOG01-0
- **Size** : 28×110×127
- **Material** : Steel
- Painting



**PULL LATCH - BFB**

- **P/N** : PULBFB01-0
- **Size** : 183×118×82
- **Material** : Steel, ALDC
- Painting



**LOCK - GD**

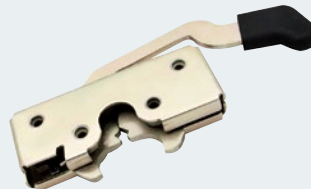
- **P/N** : DLGD01-1
- **Size** : 127×110×127
- **Material** : Steel, ZINC
- Painting

# LATCH / CATCH



**CATCH - A**

- **P/N** : SK-CT51-A04
- **Size** : 45×94×234
- **Material** : ZnDC2, Steel
- Painting



**CATCH LOCK - AA**

- **P/N** : CLB01-0
- **Size** : 20×57×117
- **Material** : Steel
- Plating



**CATCH LOCK - BE**

- **P/N** : CLBE01-0
- **Size** : 20×35×170
- **Material** : Steel
- Plating

# HANDLE



**HANDLE - P2**

- P/N : HPAL03-0
- Size : 79×102×225
- Material : PA6
- Painting



**HANDLE - PB**

- P/N : HPB01-0
- Size : 65×110×234
- Material : PA6
- Painting



**HANDLE - PDA**

- P/N : HPDA01-0
- Size : 88×220×57
- Material : PA6
- Painting



**HANDLE-QEB(L/R)**

- P/N : HANDLE-QEB(L/R)
- Size : 220×85×42
- Cr. Coating



**HANDLE SET**

- P/N : HAY01-0, ILGDJ01-1
- Size : 67×134, 45×92
- Material : Steel, PA6
- Cr. Coating

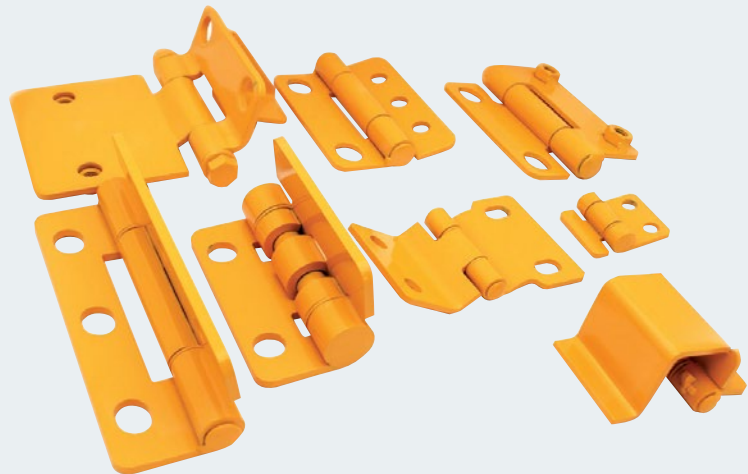


**HANDLE LATCH SET**

- P/N : HANDLE LATCH SET
- MATERIAL : STEEL
- Cr. Coating, Painting

# HINGE

Hinge-D / Hinge-L / Hinge-Q





# DAMPER / STOPPER

Damper-A / Damper-C / Damper-G



**DAMPER - A**

- P/N : DPA01-0
- Size : Ø25×41
- Material : CR



**DAMPER - AB**

- P/N : DPAB01-0
- Size : Ø26×50
- Material : NBR



**DAMPER - AD**

- P/N : DPAD01-0
- Size : Ø25×61
- Material : CR

# FUEL CAP / ADBLUE CAP

Fuel Cap 50AB / Adblue Cap Set / Neck / Strainer



**CAP 50A**

- P/N : CP32-A50
- Size : Ø66×57
- Material : PA6



**FUEL CAP 50AB**

- P/N : 50AB01-0
- Size : Ø68×65
- Material : AL12, POM



**CAP 50B**

- P/N : CP32-B50-0
- Size : Ø66×54
- Material : PA6



**CAP NECK SET**

- P/N : CAP NECK SET
- Size : 60×60
- Painting

# STAY



**MIRROR STAY - CD**

- P/N : MSC01-3
- Size : 206×207×488
- Material : ALDC, Steel
- Plating, Electro Coating



**MIRROR STAY - C**

- P/N : MSD01-0
- Size : 240×260×60
- Material : ALDC
- Heat Treatment, Electro Coating, Plating



**MIRROR STAY**

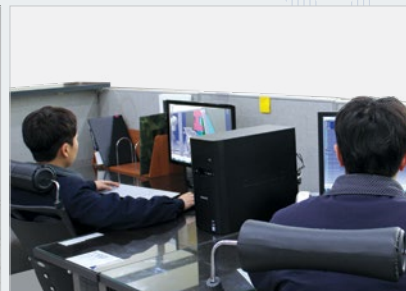
- P/N : MSEB01-0
- Size : 190×80×290
- Material : Steel, ZNDC
- Plating, Electro Coating



**MONITER FIX- B**

- P/N : MFB01-0
- Size : 50×135
- Coating, Plating

# RESEARCH & DEVELOPMENT



01

02

03

01

02

Kunyoung Tech has its own design capability of all products.

Kunyoung Tech has developed its own durability test tool with carrying out a number of tests for Door Lock, Door Handle, Fuel Cap, Adblue Cap, etc.

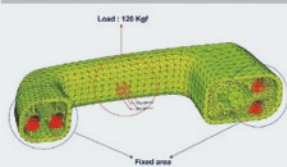
03

All employees in R&D Center had completed 3D Modeling training and now they are actively involved with both drawing and developing prototypes.

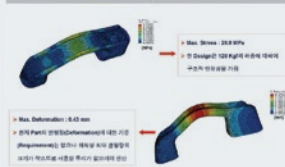
Kunyoung Tech has capability to co-operate based on customer's needs.

## 1. Structural analysis

Structural Analysis - Boundary Condition

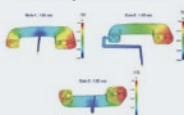


Structural analysis - Static

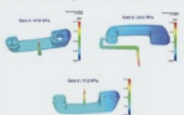


## 2. Flow analysis

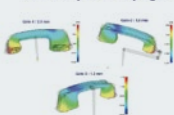
Flow analysis - Fill Pattern



Flow analysis - Pressure



Flow analysis - Warpage



Result summary

Gate Location	Structural Analysis		Flow Analysis		
	Stress	Deformation	Fill Time	Pressure	Deformation
Gate-1			1.04 sec	41.8 MPa	2.0 mm
Gate-2	28.0 MPa	0.43 mm	1.05 sec	63.5 MPa	1.8 mm
Gate-3			1.03 sec	31.2 MPa	1.3 mm

- Step1 Design concept
- Step2 Design
- Step3 Modeling
- Step4 Test
- Step5 Commercialization



STEP 1



STEP 2



STEP 3



STEP 4





## MEASUREMENT & TEST EQUIPMENT

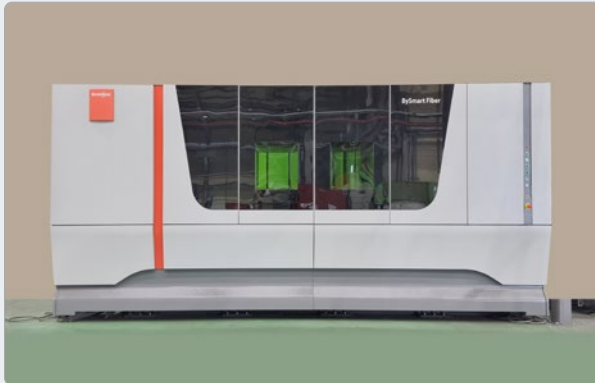


DURABILITY TESTER



3D MEASURING MACHINE

## MAJOR PRODUCTION LINE



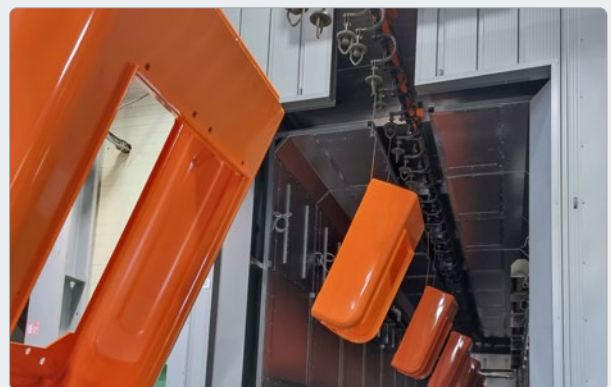
LASER CUTTING



BENDING



ROBOT WELDING



PAINTING



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