



# 2023



## COMPANY PROFILE

NINGBO HENTEK CAT ENVIRONMENTAL PROTECTION  
TECHNOLOGY CO.,LTD

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# Company Profile







## COMPANY PROFILE

Ningbo HENTEK CAT Environmental Protection Technology Co., Ltd. is a high-tech enterprise specializing in manufacturing and offering technology solutions for motor vehicle emission control. We have two production plants in Jiangsu and Shandong Province with registered capital of 20 million yuan. Our main products are automobile three-way catalyst, catalytic converter, DPF, Doc, and providing exhaust solutions for gasoline vehicles, diesel vehicles, CNG/LPG vehicles.







## Our Honors



# Products & Business Fields



## Business

- OEM supporting
- Aftermarket and Foreign trade
- Upgrading and transformation of parallel imported vehicles



## Product

- Slurry
- Catalysts: TWC/GPF/DPF/SCR/DOC...
- Directly fitted assemblies and Universal converter.



## Application Fields

- Gasoline vehicle/ Diesel vehicle
- Natural gas vehicle
- Non-road Motor Machinery
- Shipbuilding Industry
- Civil machinery



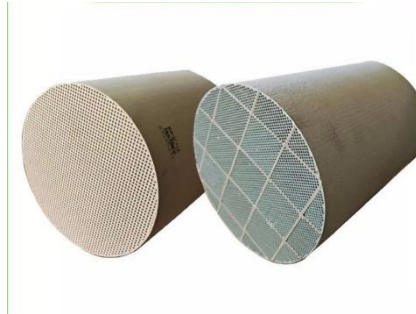
# Products Categories



Three Way Catalyst for Light Duty  
Gasoline Automobiles



Light & Heavy Duty Diesel Vehicles catalysts: DOC/DPF/SCR



High performance catalyst converter



Universal Catalytic Converter



Directly Fit Catalyst Assemblies



Catalyst manifold





# Three Way Catalyst for Light Duty Gasoline Automobiles

ceramic catalyst 400/600 cpsi







## Three Way Catalyst for Light Duty Gasoline Automobiles

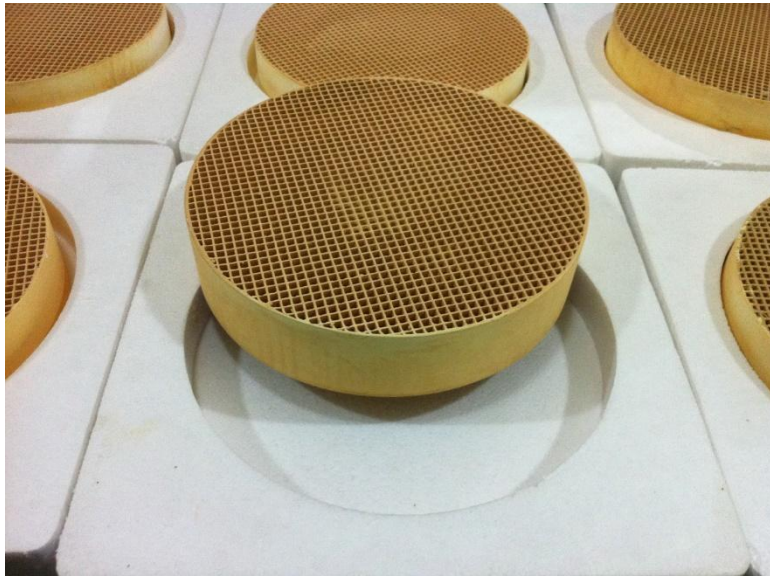


metallic catalyst 50/100/200/300/400cpsi



Light & Heavy Duty

Diesel Vehicles catalyst: DOC/DPF/S



# High performance catalytic converter & Universal catalytic converter





## Directly Fit Catalyst Assemblies



Audi A6L 2.0T



A6 & Passat 1.8T



Honda Avancier



Honda Accord 2.4



Benz C200



Roewe RX5 1.5T



## Manifold Catalyst

Cruize Excelle 1.6/1.8



Hyundai Sonata

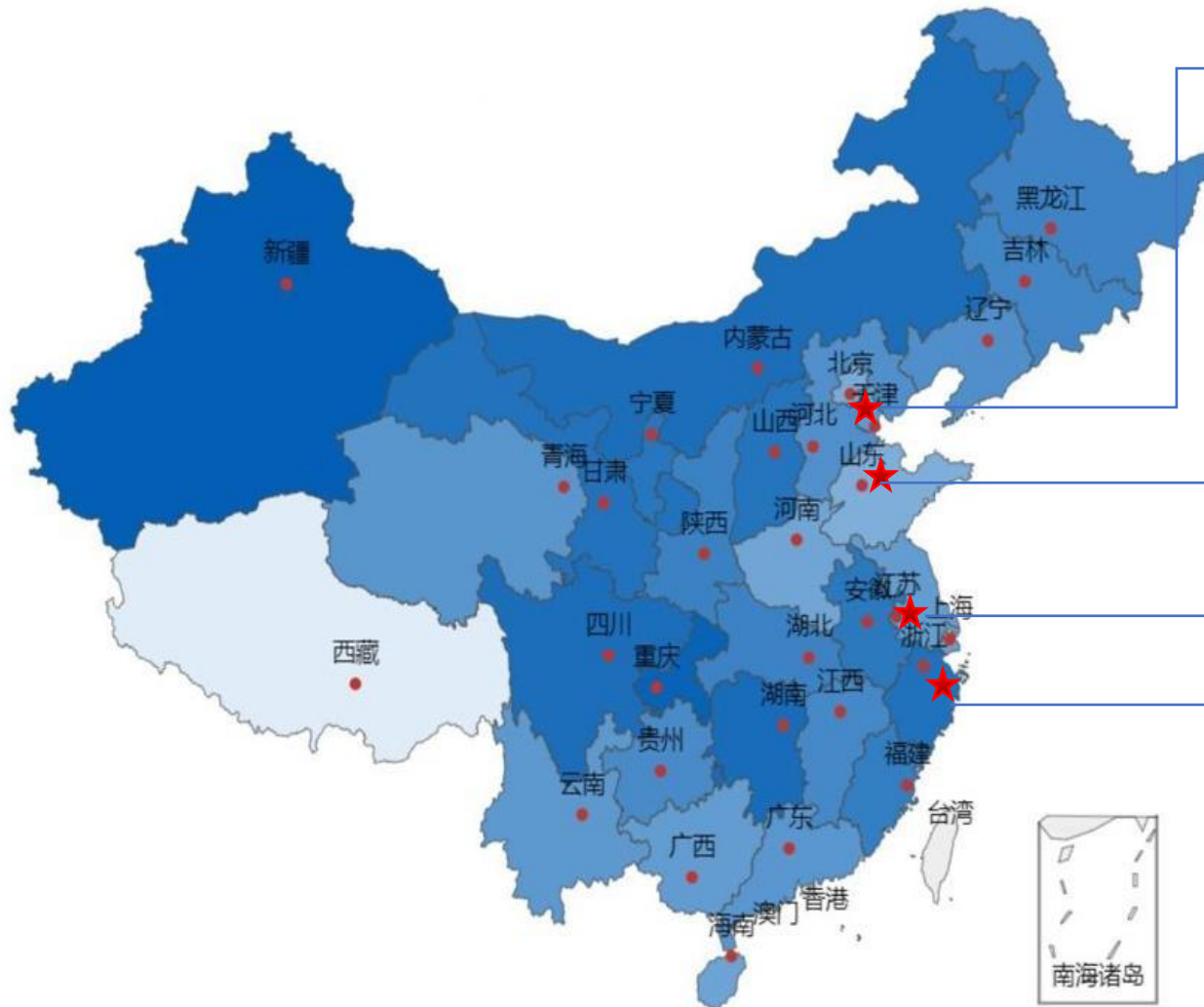


Powder produced by HENTEK CAT





# Work Plants Locations



## Tianjin

Modification work for Exhaust  
of Imported automobiles

## Shandong

Slurry Production

## Nanjing

Catalyst Production

## Ningbo

R&D, Export Business

# Production Equipments



Currently 2 Units of Automatied Batching System, 2 Units of Automatied Coating System and 4 Channel Stove

TWO



02

# Technical Advantages



- 1、Patent#: 202121881567.6 A kind of automobile exhaust device
  - 2、Patent#:CN202110980356.6 An environment protection gasoline engine individual pull collector (Invention)
  - 3、Patent#: CN201810872194.2 Preparation method of high heat stable oxygen storage material (Invention)
  - 4、CN202122256591.7: A monitoring and processing device for auto emission
  - 5、CN202122474814.7:A protective structure for automobile exhaust system
  - 6、CN202122475134.7: A vehicle emission detection device
  - 7、202111321620.1: Emission device for environment protection
  - 8、202122256525.X:A supportive structure for particle collector at gasoline vehicles.
- .....Another 7 patents are during processing



Industry Standard: (draft)

HJ

中华人民共和国环境保护行业标准

HJ/T □□-□□□□

燃油车用催化剂浆料

正在编制中

20□□-□□-□□发布

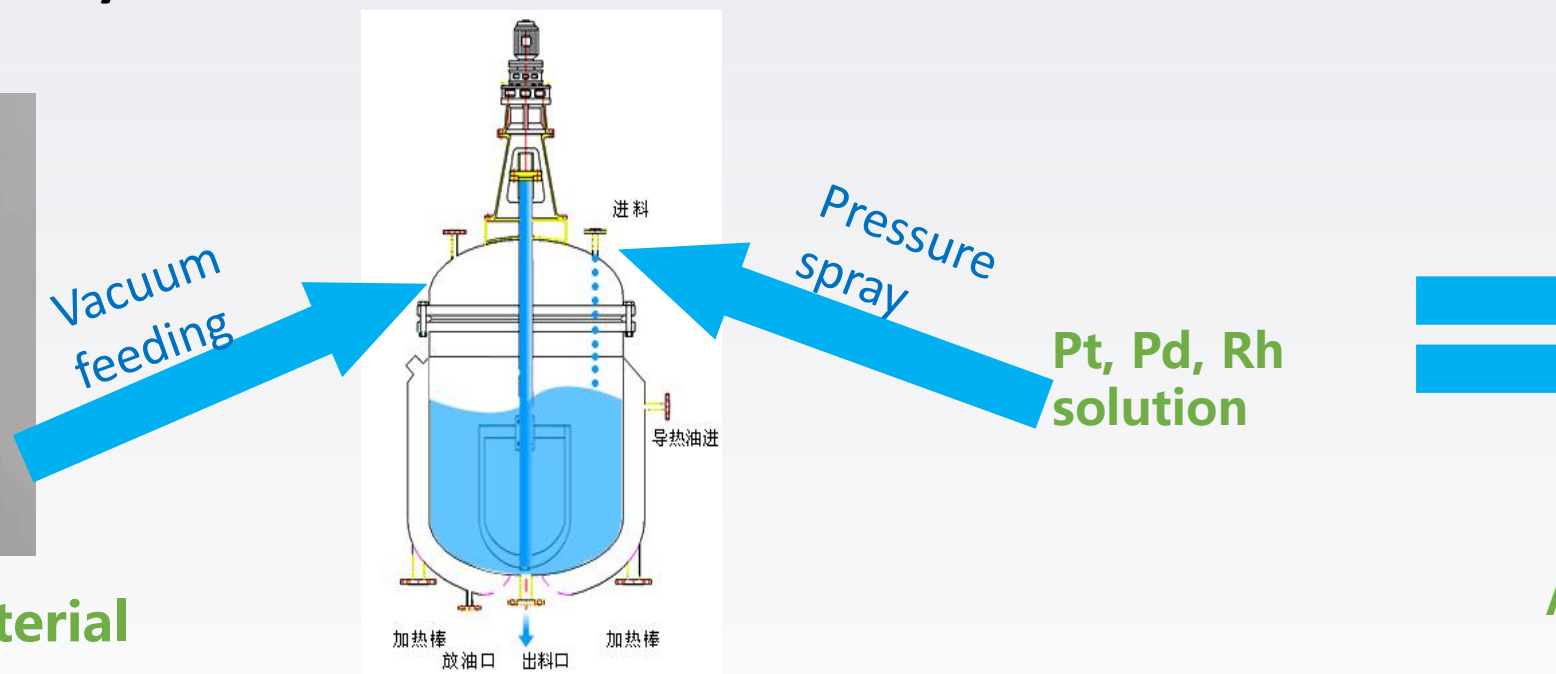
20□□-□□-□□实施

国家环境保护总局 发布

Unique method of PGM absorbed on alumina and oxygen storage material, especially for aftermarket



Powder Material



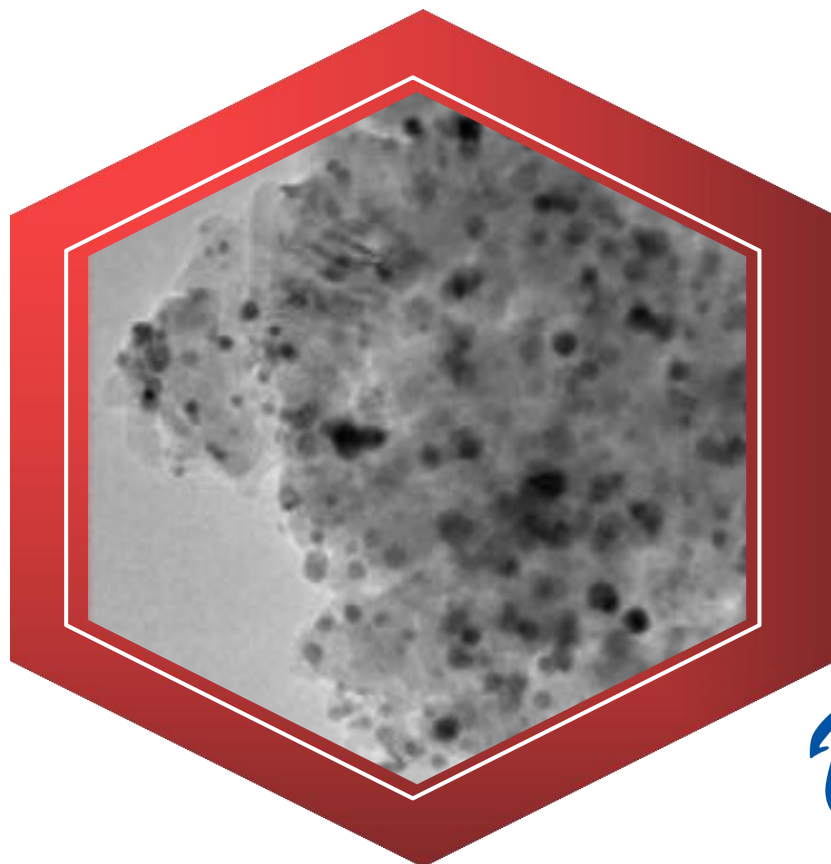
Dipping Equipment  
(Stirring and heating)



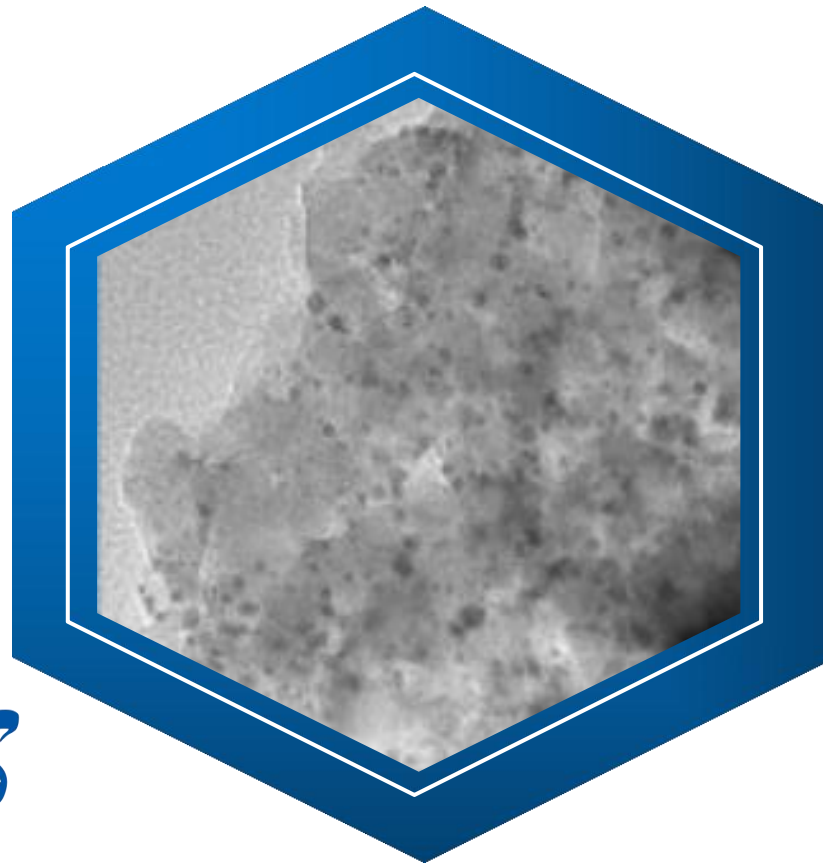
Active Component Material



## Advanced Technology



*VS*



Electron microscopic photos of precious metals in catalyst

Dispersion and uniformity of PGM in catalyst:  
Right > Left

The state of precious metal at catalyst:

Ion free state

Part free state

Part absorbed state

The state of precious metals (Cat Technology which has been applied less than 20% in OEM market, and 0 in after market)

Layered Tech

Zoning Tech

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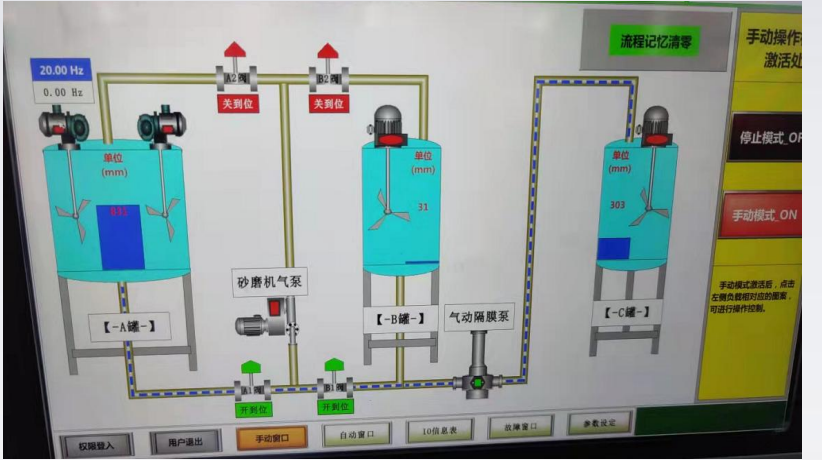
Advanced Equipment



Equipment

Old V.S New

Control	Old	New
PH value	uncontrollable	Controllable
Solid Content	uncontrollable	Controllable
Granularity	uncontrollable	Controllable
Viscosity	uncontrollable	Controllable
Temperature	uncontrollable	Controllable
.....		



Can use one Key start  
Precisely Control



# High Performance Material



Item	HENTEK CAT	Other companies
Precious Metal	Heraeus, Johnson Matthey	Domestic Supplier
Aluminum Oxide	佰德信	Domestic Supplier
Rare Earth	索尔维, 博晶	Domestic Supplier

THREE



03

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# Product Performance



## Products Performance Comparison Cat V. S other company

Project		Products by other company	Products by Cat	How much Cat superior
Upload Qty		😞	😊	20-25%
Shedding Rate		😞	😊	10%
Specific Surface Area	Fresh	😞	😊	25%
	Aging	😞	😊	15%
Oxygen Storage	Fresh	😞	😊	20%
	Aging	😞	😊	40%
Conversion Rate		😞	😊	6%
Light off Temperature		😞	😊	The Light off temperature is 60-80 lower than other products

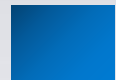
FOUR



04

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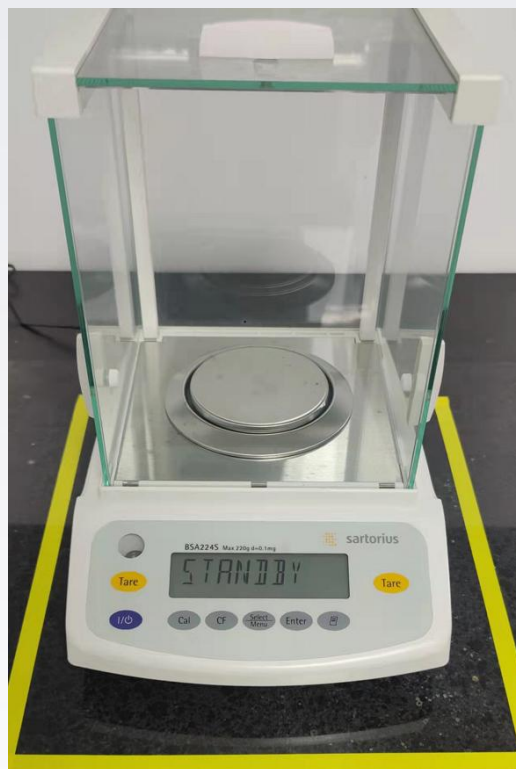
# Quality Assurance



## Analysis and Testing equipment



**BET检测仪**  
(原材料比表面积  
检测)



**高精度电子称**  
(称贵金属)  
High-accuracy electronic balance



**Malvern激光粒度检测仪**  
(原材料及浆料粒度检测)  
Malvern laser particle Detector



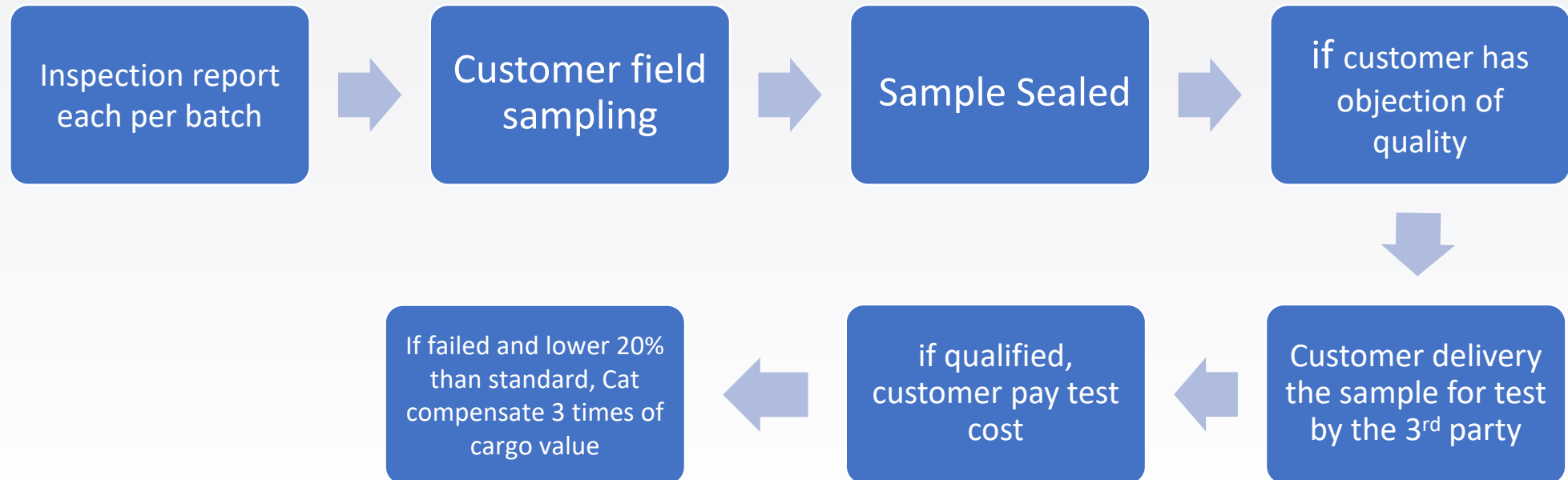
## Quality measures



### Before Sale



### During Sale



## Quality Measurements



After  
sale

Quality problems  
from market  
feedback



Batch production has  
problem:  
compensate 3 times  
of cargo value



Occasional problems:  
compensate 2 times  
of the value

# HENTEK CAT' s catalyst market performance



Item	1 Jan	2 Feb	3 Mar	4 Apr	5 May	6 Jun	7 Jul	8 Aug	9 Sep	10 Oct
Qty of Delivery	10963	6694	21832	21566	42085	48918	49460	23997	26982	16457
Quality target(returns%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Actuality(return%)	0	0	0	0.05%	0	0.02%	0	0.08%	0.03%	0

Data is sourcing from catalyt sales records since Jan-Oct2021

Unit is by liter



FIVE

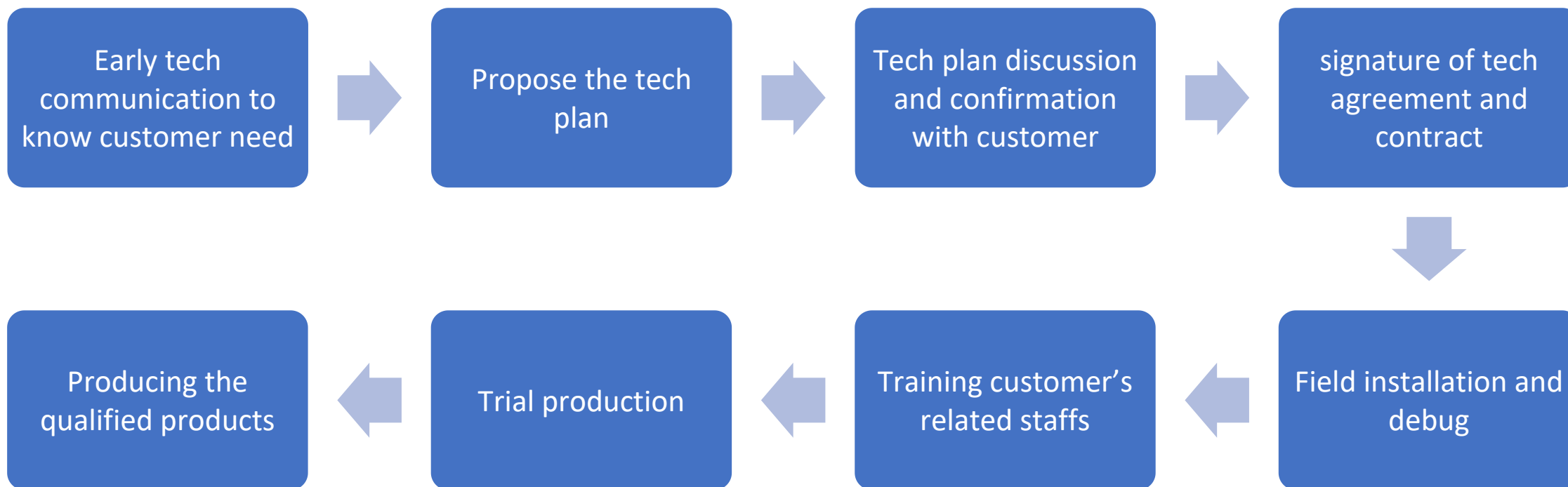


05

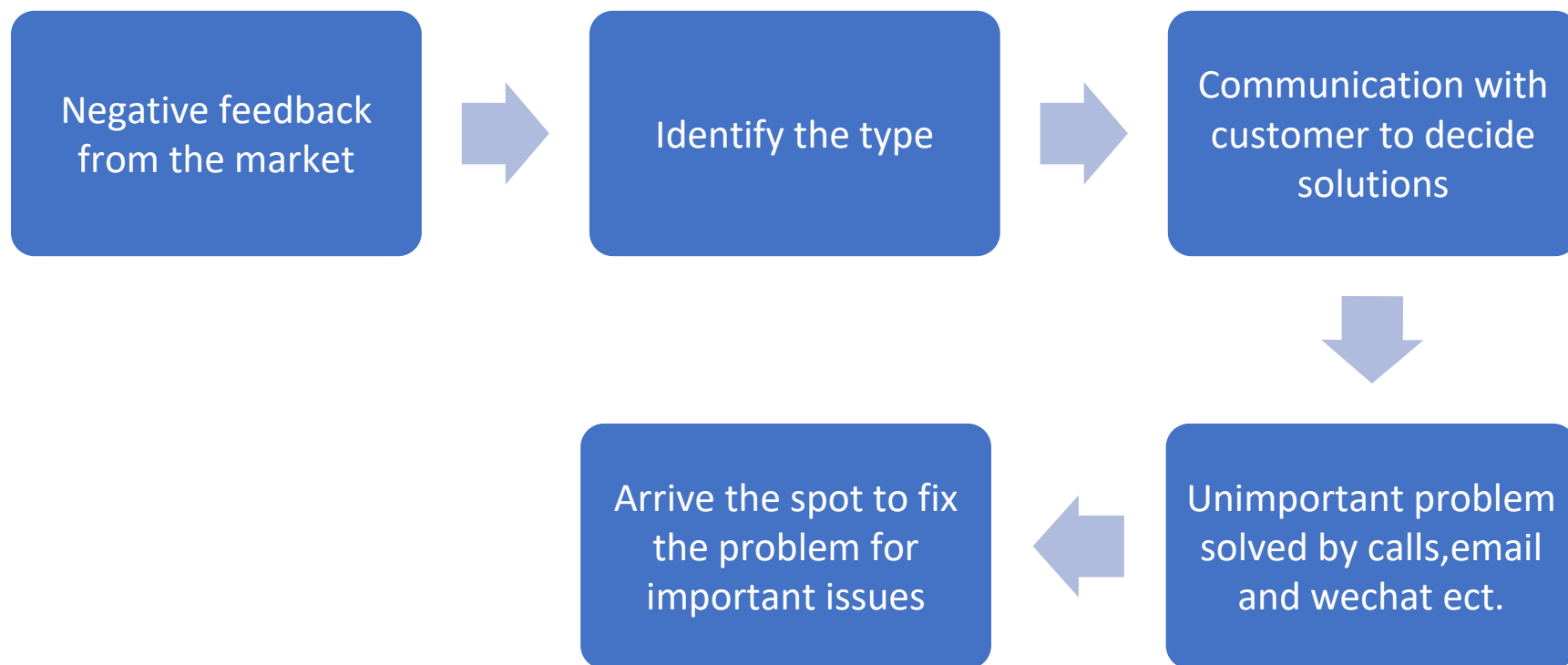
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**Technical Service**

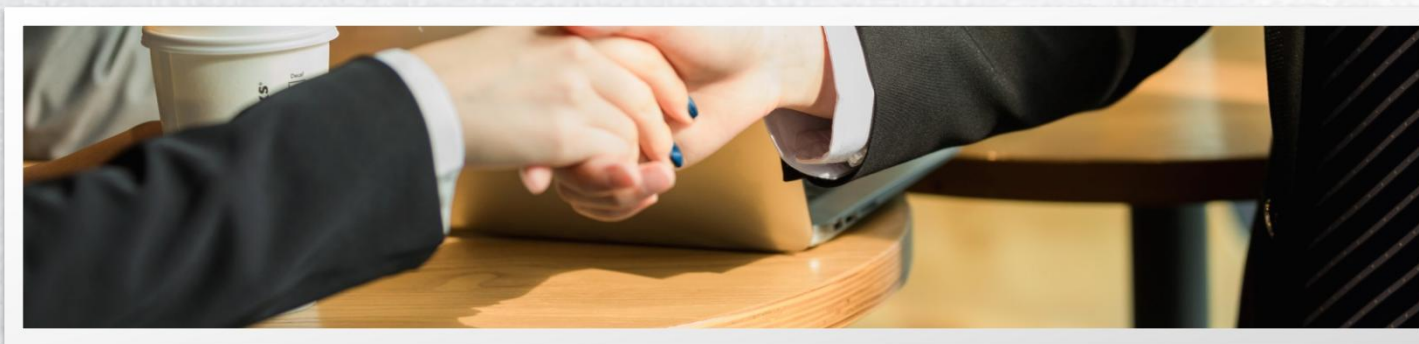
## Technology Service( Pre sale)



## Tech Service( after sale)







**Win-Win Cooperation**

**Thank you!**