

# 德州锐弛橡塑制品有限公司

DEZHOU RICH RUBBER AND PLASTIC PRODUCTS CO., LTD



Innovation · Integrity · Beyond · Win-win

创新 — 诚信 — 合作 — 共赢

Ground Protection Mats

Outrigger Pads

Marine Fender Facing Pads

Mining Liner Sheets

UHMWPE/HDPE/PP/MC Nylon Sheets

Irregular Machinery Parts

Rubber Sheets

Rubber Dock Fenders

Create the

**DEZHOU RICH BRAND**

*in the plastic industry Build a manufacturing base of UHMWPE sheets*

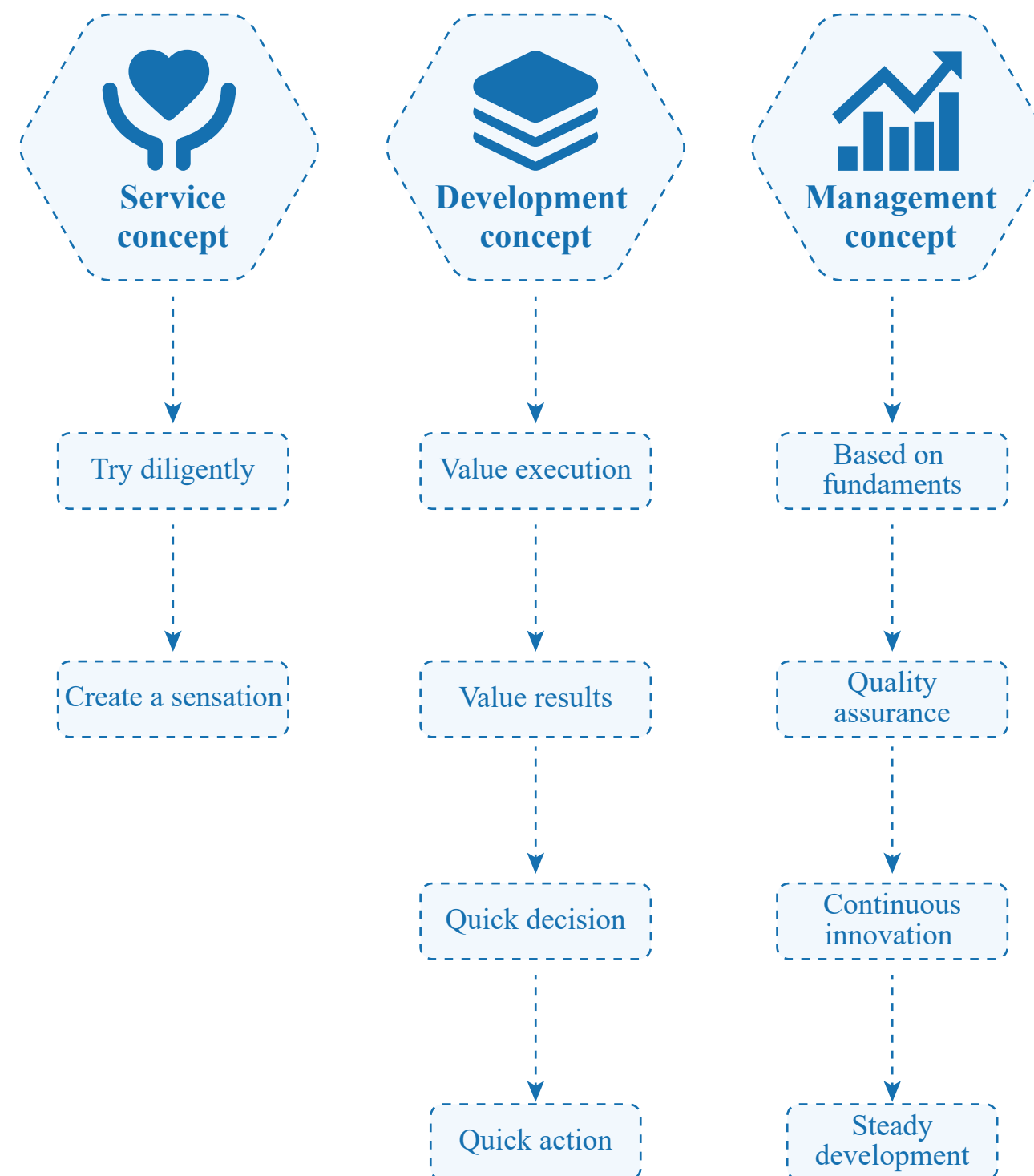
## Brief Introduction



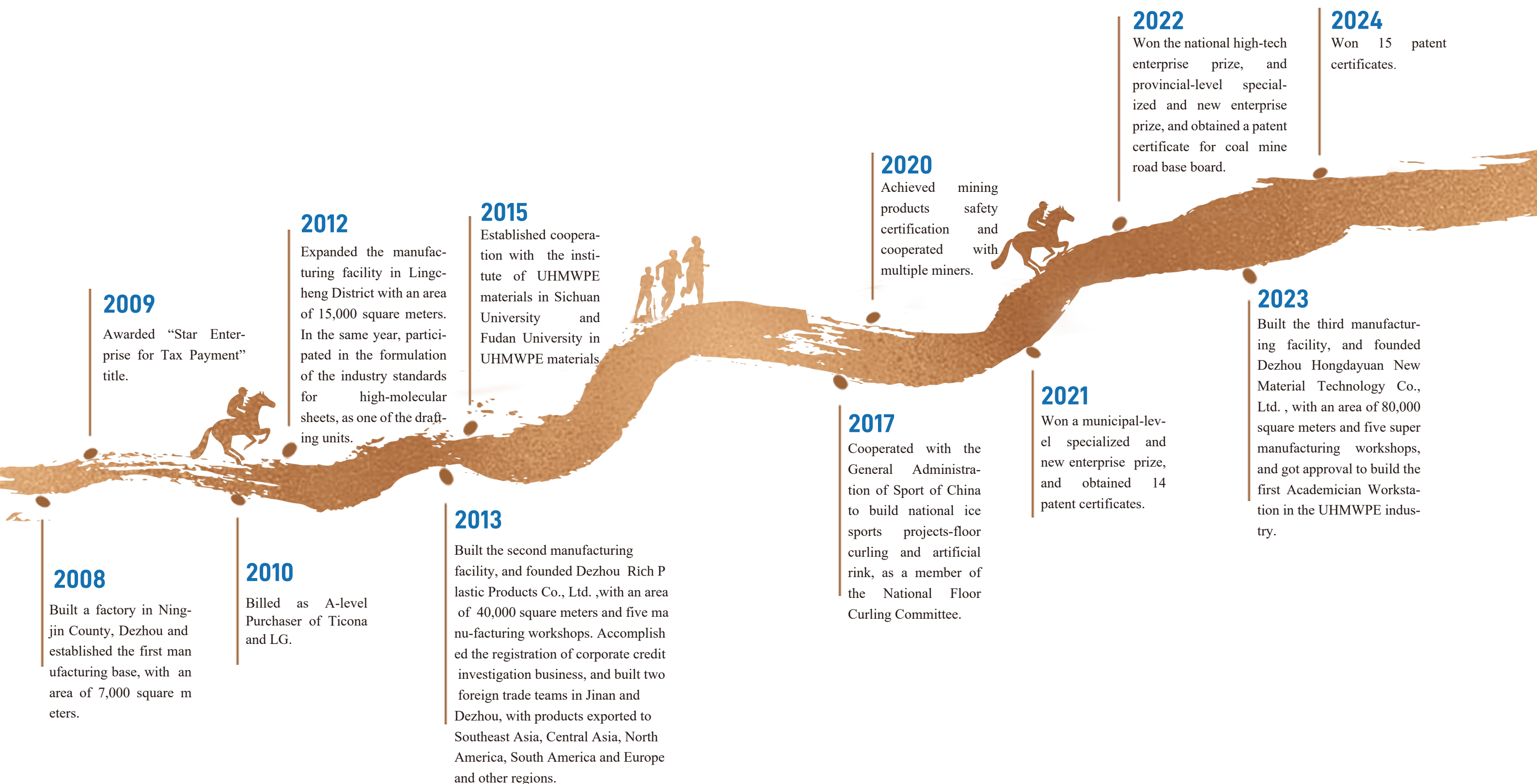
Dezhou Rich Rubber and Plastic Products Co., Ltd. has two production bases, UHMWPE series is located in Dezhou city of Shandong, the Ultra-High molecular weight polyethylene (UHMWPE) manufacturing center in China. And rubber fender series is located in Gaoyou City of Jiangsu Province. It is currently a large manufacturer of UH MWPE sheets in China, with three manufacturing facilities and a total area of about 120,000 square meters. We mainly produce ultra-high molecular weight polyethylene sheets, marine fender system, road mats, poly-ethylene lining sheets for coal bunkers, cement silo plates, polyethylene rollers, HDPE sheets, etc. Which are widely used in mining, terminals, electric power, Petro chemical, transport and other industries, In addition to production and sales, we have the ability to independently carry out design, research, development and constructions. Through international advance production procedures, advanced detection devices and strict examination on raw material supply, it can make sure that our customers are able to buy products with best quality, and with the best service.

We have established a long-term, good cooperative relationship with customers.

## Concept of the Company



## History of Development



## Cooperative Enterprises



# Company Overview

## Company environment

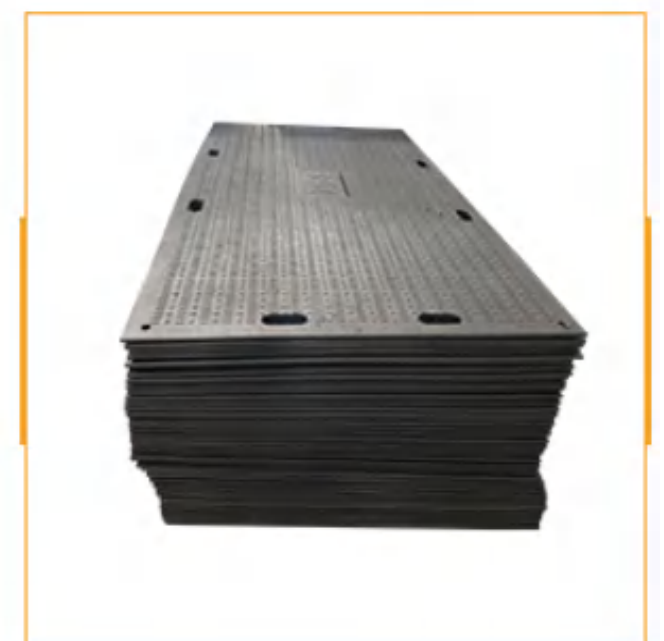
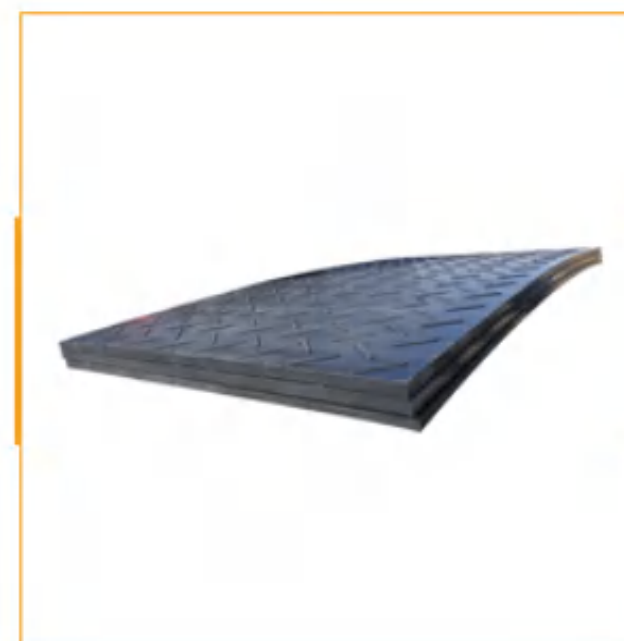




## TEMPORARY ROAD MATS

- Light weight, heavy duty road mats
- Unique skid resistance surface
- Tough durable working areas
- Easy installation and disassembly
- Environmental and recyclable

[View more](#)



## PE road mats



### Product introduction

The main materials for high molecular road substrates are high molecular polyethylene, including UHMWPE or HDPE, which is made through high-temperature and high-pressure molding process or extrusion process, allow adding flame retardant, anti-static additive according to requirements to meet specific environmental requirements, such as flame retardant and anti-static requirements of mine roadways. Compared to traditional steel-plate road base, high molecular road substrates are more lightweight, 1/7 of steel plates, with good corrosion resistance. They can use modular design, with unique connection holes for use in the large-area paving; they are recyclable, eco-friendly materials.



### Feature

- ✓ Easy to pave
- ✓ Unique lubricity
- ✓ Robust and enduring, can support large, heavy-duty devices and multiple devices
- ✓ Can prevent the wheel from sinking in the muddy and uneven road and avoid destroying ecology
- ✓ Can be connected by using appropriate connectors according to different terrains and devices
- ✓ Insulated, non-conductive
- ✓ Low costs



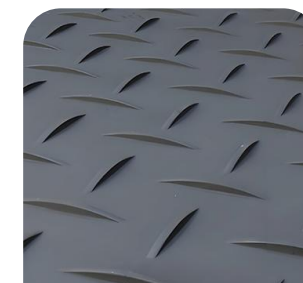
### Surface pattern



Polka dot pattern



Small willow leaf pattern



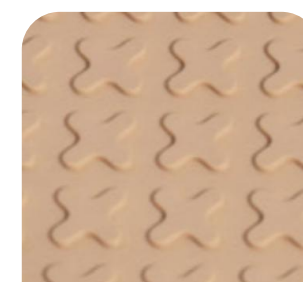
Large willow leaf pattern



Pattern of the character "川"



Hexagonal pattern



Cross pattern



Double-stripe pattern



Herringbone pattern

## Road Mats Sizes

| Name             | Pattern category          | Size (mm) | Size(inch) |
|------------------|---------------------------|-----------|------------|
| HDPE road mats   | Large Willow Leaf Pattern | 1220*2440 | 48*96      |
|                  | polka-dot                 | 1220*3000 | 48*118     |
|                  | Willow Leaf Pattern       | 1500*4000 | 59*157.5   |
|                  | Chuan character pattern   | 2000*3000 | 78.7*118   |
|                  | Hexagonal pattern         | 2000*4000 | 78.7*157.5 |
| UHMWPE road mats | Large willow leaf pattern | 1220*2440 | 48*96      |
|                  |                           | 1300*2800 | 51*110.2   |
|                  |                           | 2100*3100 | 82.6*122   |
|                  | Cross pattern             | 1480*4980 | 58.2*196   |
|                  |                           | 2050*4450 | 80.7*175.2 |
|                  | chevron double stripe     | 1220*2440 | 48*96      |
|                  |                           | 2200*4200 | 86.6*165.3 |

## Road Mats Thechnical data

|                               |                                                           |
|-------------------------------|-----------------------------------------------------------|
| Weight loading                | 150 tons                                                  |
| Material                      | HDPE and UHMWPE                                           |
| Material strength             | Compression loads in excess of 110kg/cm <sup>2</sup>      |
| Temperature resistance range  | Working temperature-80°C~80°C                             |
| Thickness                     | Hoices of thickness is available depends on requirements  |
| Colour                        | Customized                                                |
| Connection method             | Metal connectors for heavy equipmenis application         |
| Environmental characteristics | weather -resistant, wear-resistant , corrosion- resistant |
| User customization            | Customized requirement is available                       |

## Comparison of competing products



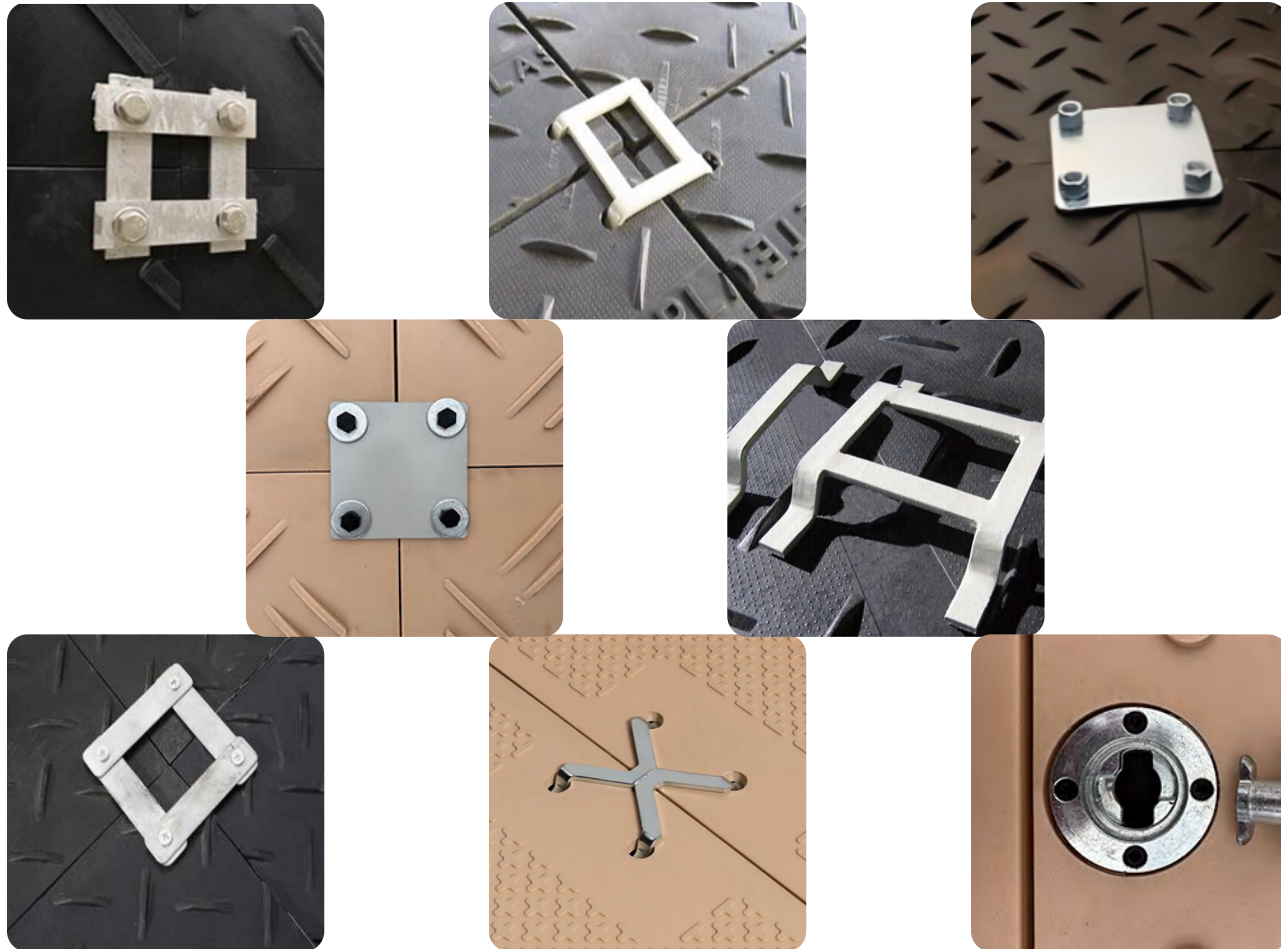
PE road mats real picture



Paving plate real picture

| Item                 | PE road mats                         | Paving plate                  |
|----------------------|--------------------------------------|-------------------------------|
| weight               | It's 1/7 of the steel plate          | Seven times PE road mats      |
| wear-resistant       | Wear base 7                          | Abrasion base1                |
| Corrosion resistance | Acid and alkali corrosion resistance | easy-corrosive                |
| Noise effect         | noiseless                            | Loud noise                    |
| Land pollution       | Will not                             | Rust easily Contaminated soil |
| Anti-slip design     | yes                                  | no                            |
| Tire damage          | no                                   | yes                           |
| Transportation cost  | 1000 m <sup>2</sup> , small          | 1000 m <sup>2</sup> , big     |
| Laying cost          | small                                | big                           |

## Connection method



## Main role of PE road mats connection

### 1 Connection

A specialized buckle is set on the edge of the high molecular road substrate, and quick connection can be achieved by matching the buckle of the road substrate with the slot of the adjacent road mats.

### 2 Fixing

In addition to the role of connection, the buckle is usually elastic to some extent and in the installation process, the buckle can be deformed by exerting force and embedded into the slot and then restored to its original shape, thus achieving firm connections.

## Application

### Project construction

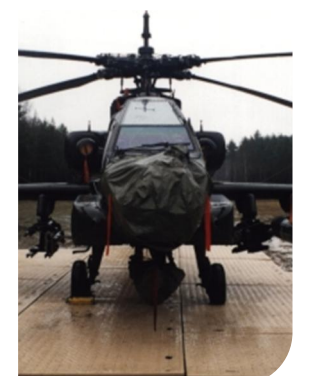


### Coal mine and petroleum



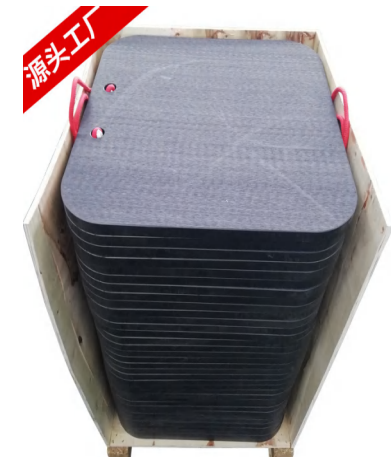
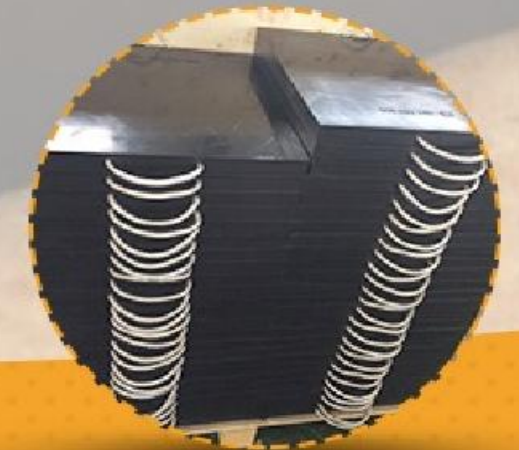
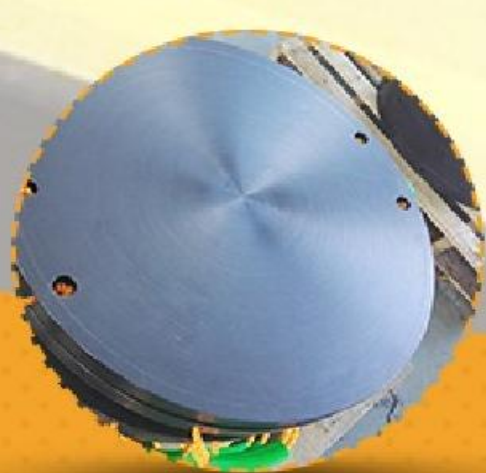
### Farmland

### Military



# CRANE OUTRIGGER PADS

TO PUT QUALITY BEFORE QUANTITY



## CRANE OUTRIGGER PADS

Safty textured, anti-slip surface

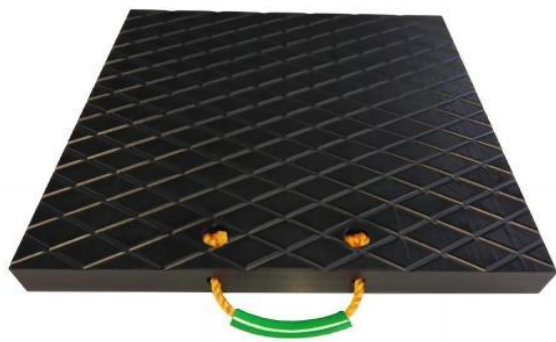
light weight to handle

Putstanding strength, rigidity and durability

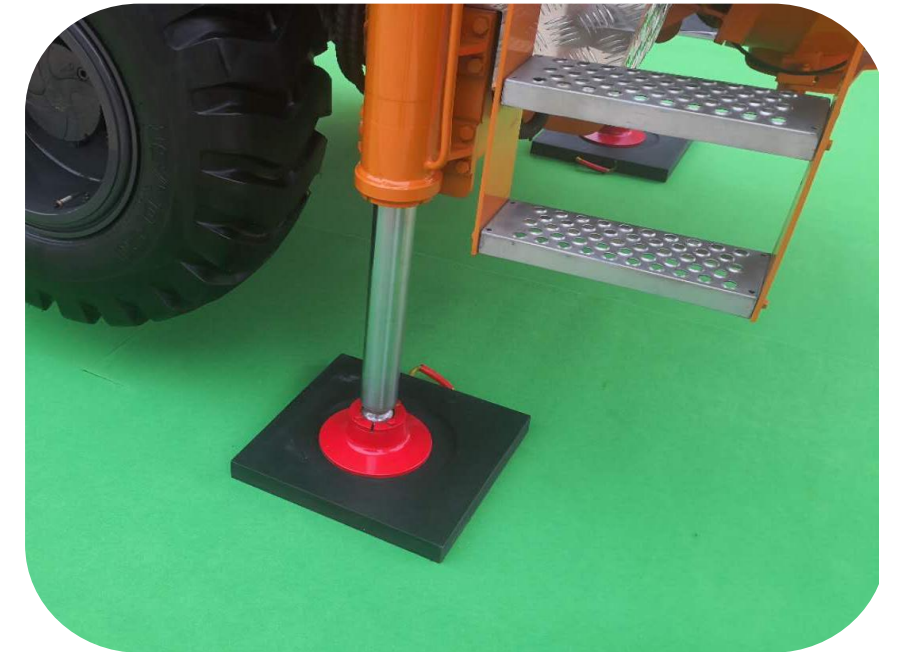
Guaranteed unbreakable

Non-conductive

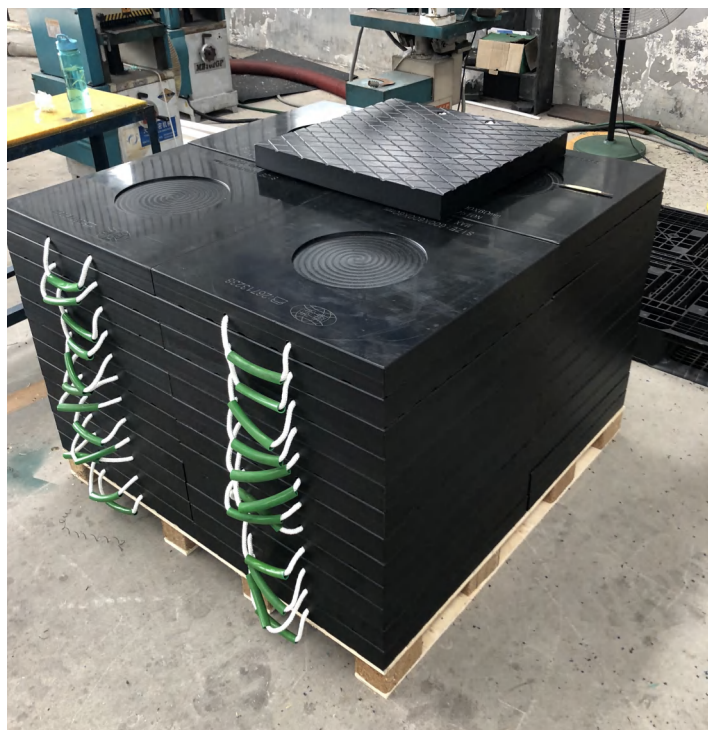
[View more](#)



## Crane jack ,Outrigger pads , PE PADS , Shim Pads 支臂垫板；

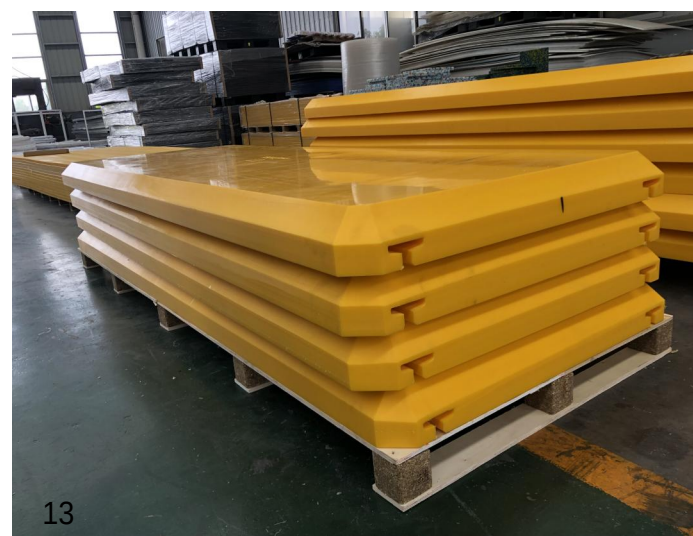
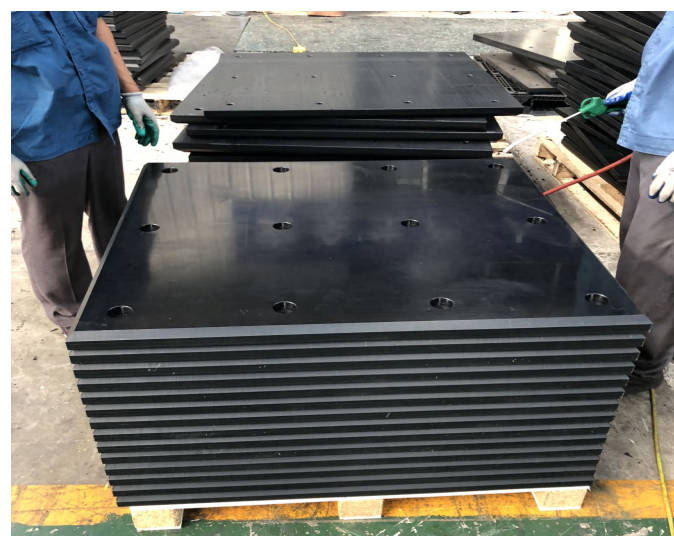
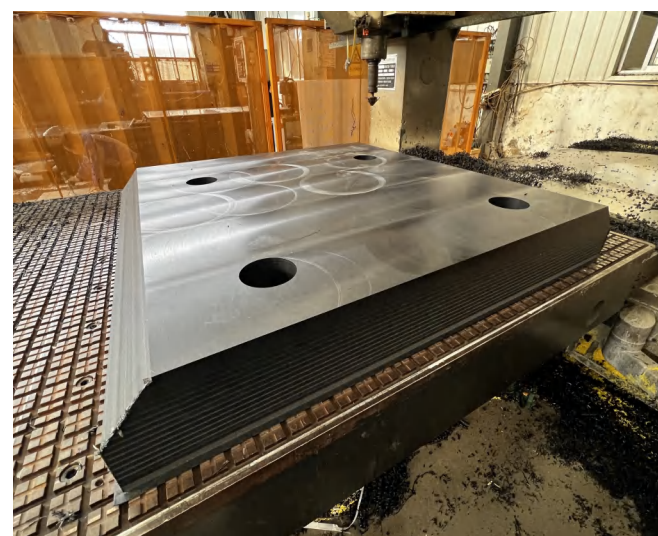
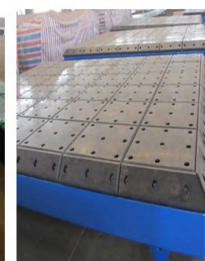
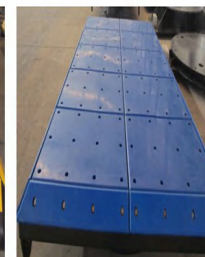
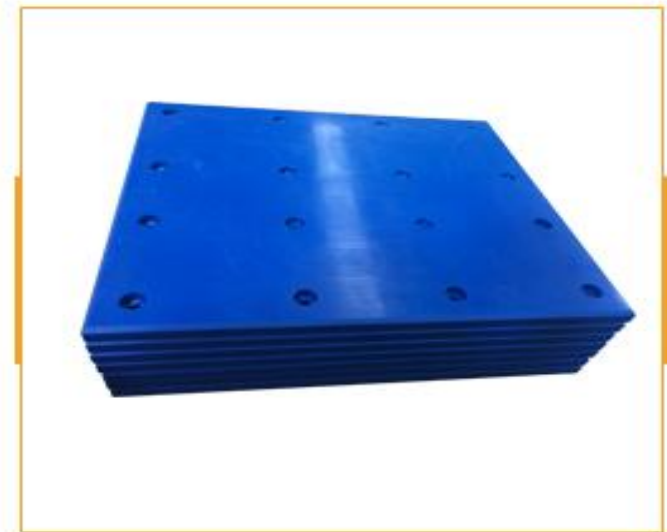


Crane, jack, and outrigger pads are used as a solid support for large cranes, jack pads, and outriggers. These outrigger pads, PE pads, crane boom wear pads and jack pads help create a stable base and protect the foundation.





## MARINE FENDER FACE PAD



# Marine Dock Fender System

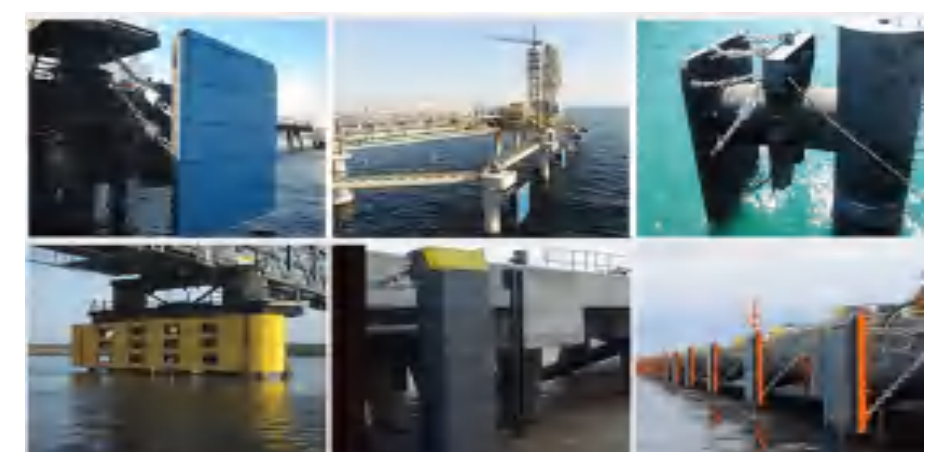
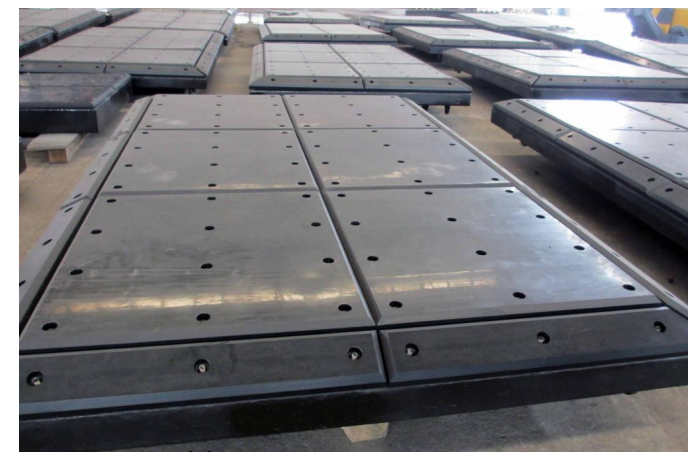
## UHMWPE Marine dock fender face pads / Dock Bumpers 码头防冲板，护舷贴面板；

UHMW PE is the strongest and toughest of all polyethylene grades for marine applications – even outlasting steel as a facing material, and many times better than timber facings.

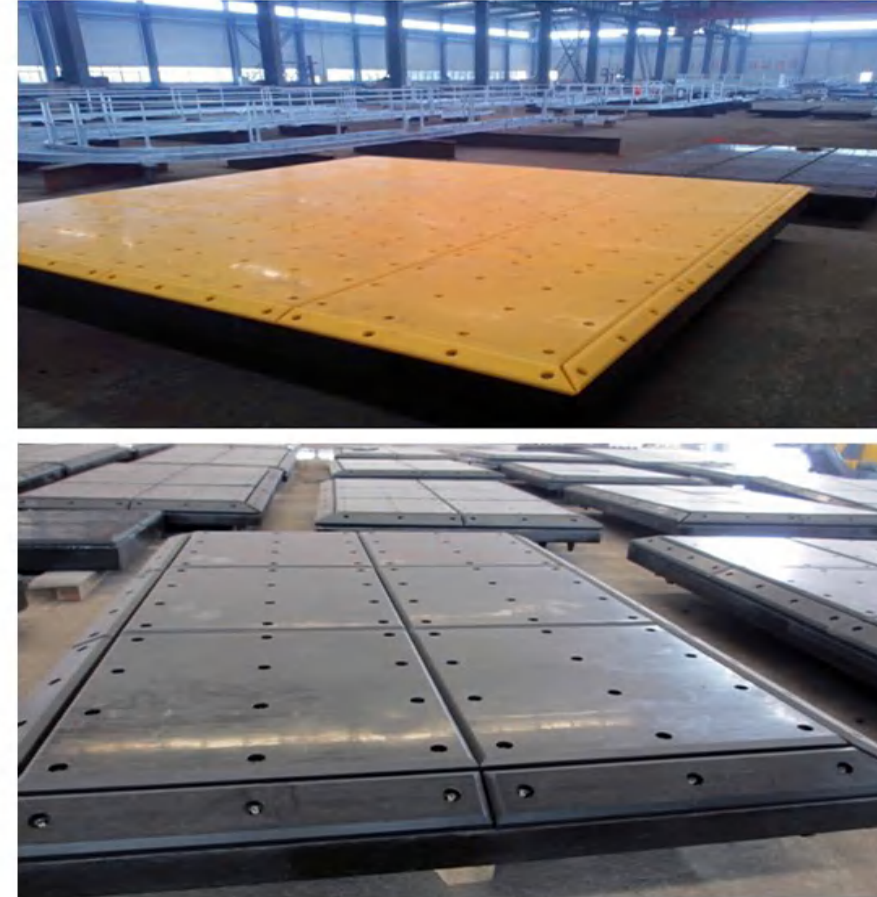
UHMW PE does not decay or rot, and is unaffected by marine borers. It is grain-free so will not splinter or crush, and can be cut, drilled and machined with ease. Most UHMW PE is supplied as Black – not just because this is the most economic choice, but also because black is manufactured using a double sintering process which work hardens the UHMW PE to further increase its abrasion resistance.

UHMW PE is available in many other colors yellow, white, blue, green, red, grey or orange which can be used to make the fender system highly visible in poor weather or to demarcate zones along a berth. UHMW PE also comes in many thicknesses per project requirements and also can be provided in a re-processed grade for a more economical solution.

UHMW PE can also be supplied in stand-alone applications not related to rubber fenders, for sliding surfaces that do not require any energy absorption.



## UHMW-PE & HDPE Marine Fender Face Pad



### ◀ CORE ADVANTAGES ▶



Low coefficient of friction,  
high wear resistance,  
self-lubricating,  
non-bonding materials.



Corrosion  
resistance, solvent  
resistant to most of  
the acid and alkali.



Heating molding  
process, better  
mechanical properties,  
greater strength and  
impact resistance.



ODM  
Drawings & Samples  
Customized  
Processing.



Japan and the United  
States have multiple  
customers long-term  
cooperation.



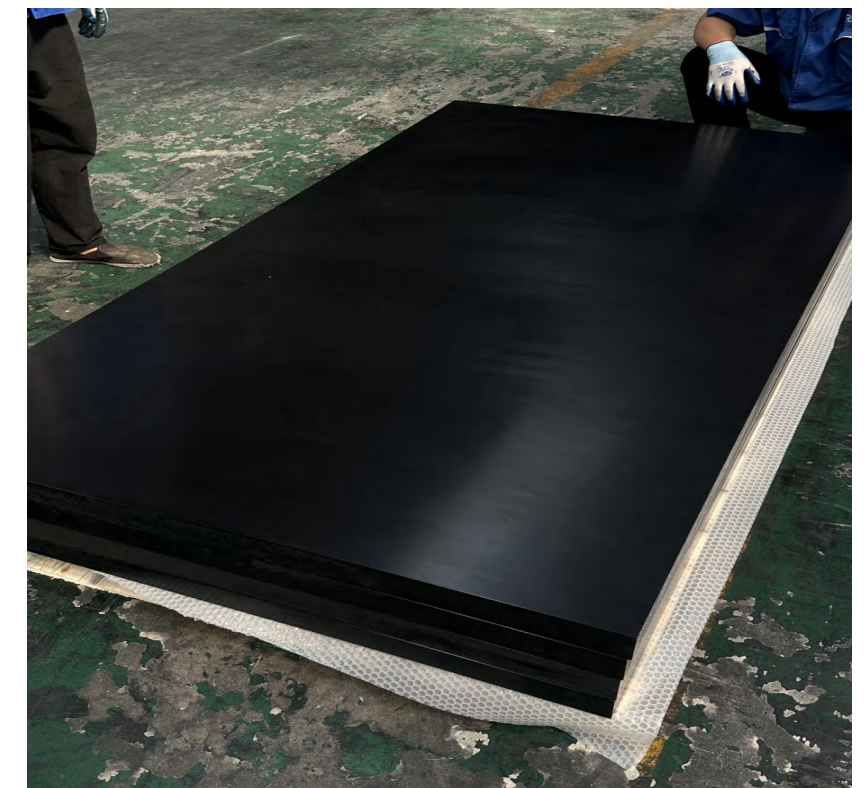
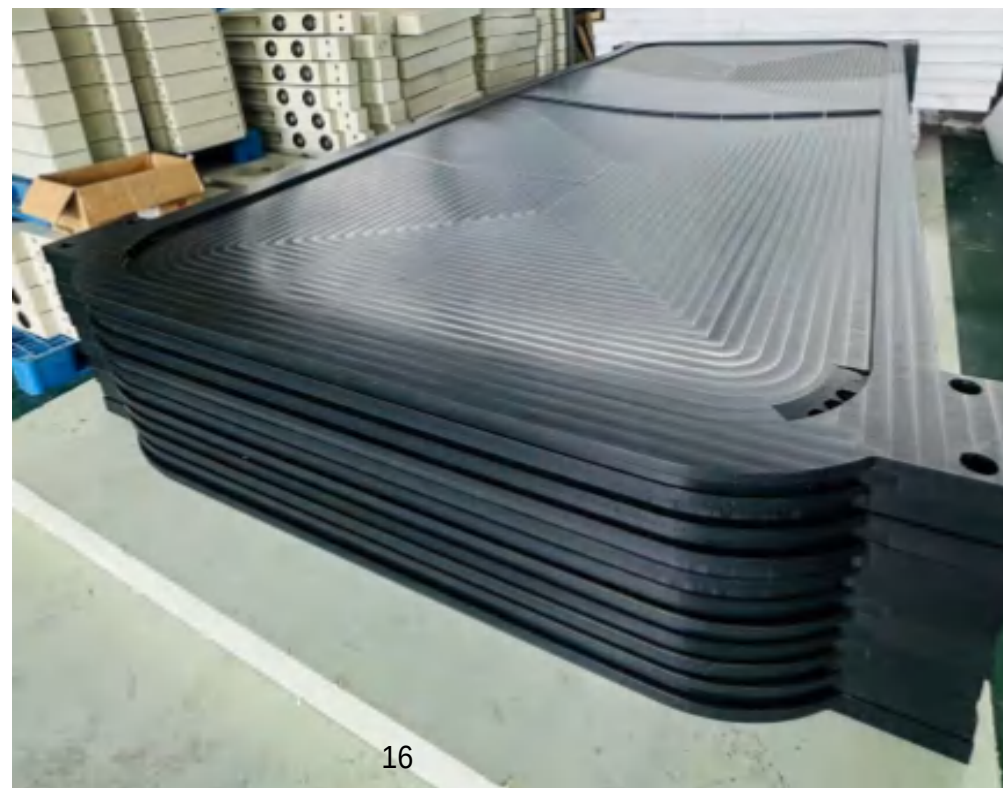
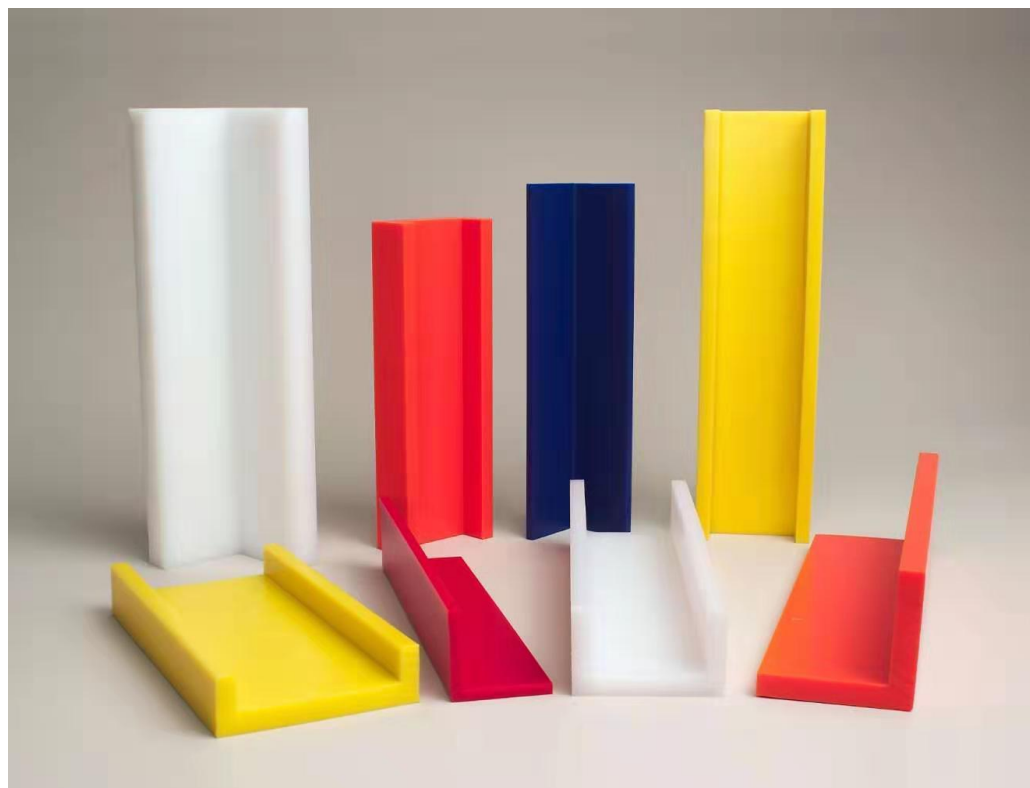
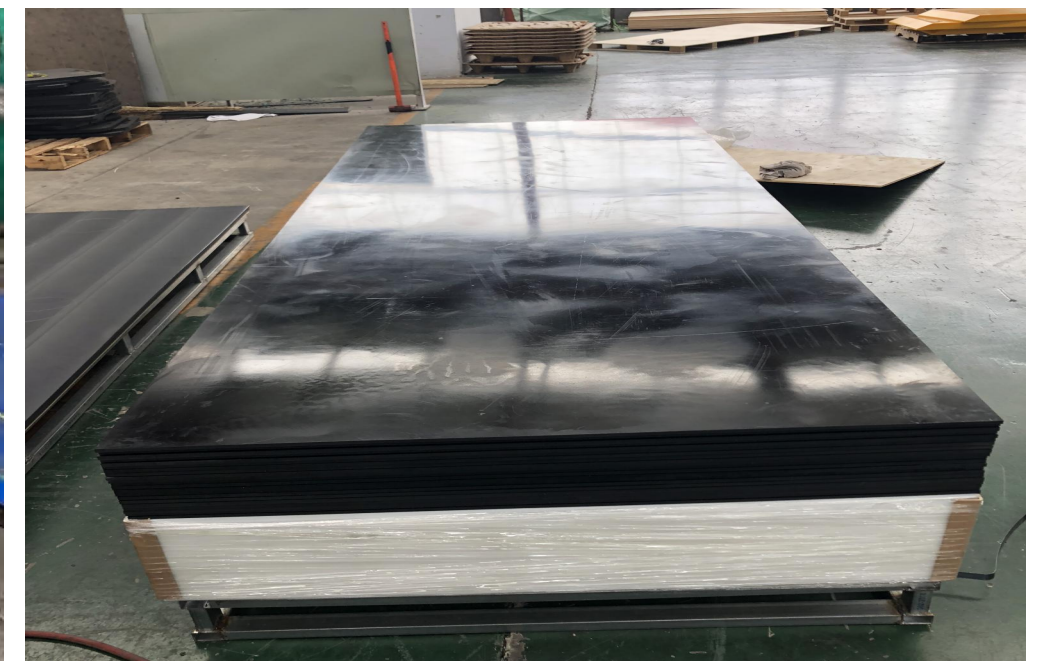
# UHMWPE Sheets 超高分子量聚乙烯板材

Ultra-high-molecular-weight polyethylene (UHMWPE, UHMW) is a subset of the thermo plastic polyethylene. Also known as high-modulus polyethylene (HDPE), it has extremely long chains. The longer chain serves to transfer load more effectively to the polymer backbone by strengthening inter molecular interactions. This results in a very tough material, with the highest impact strength of any thermo plastic presently made.



## Features 特点

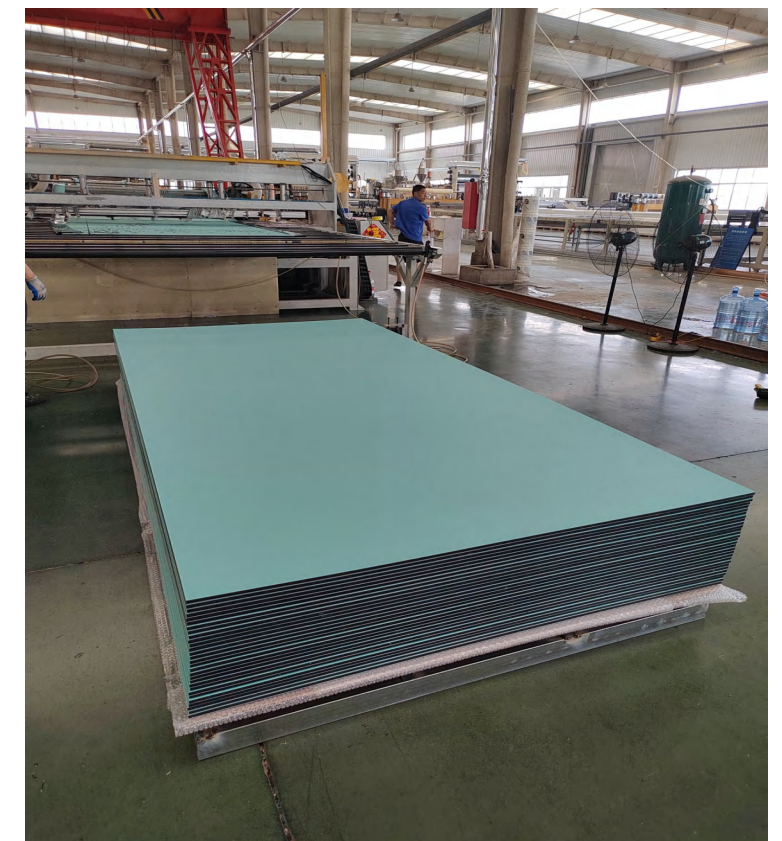
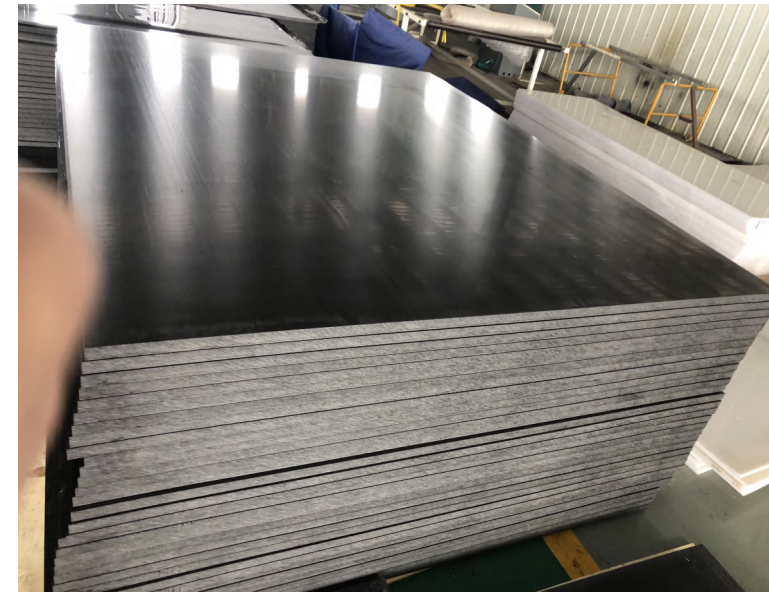
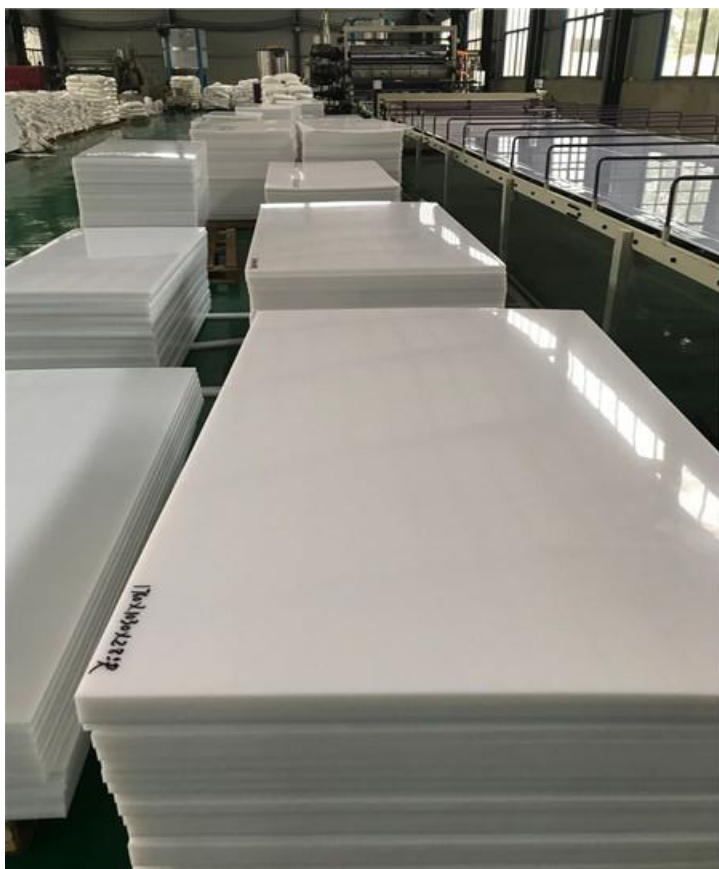
- Low coefficient of friction, high abrasion resistance.  
低摩擦系数，高耐磨性。
- Excellent chemical stability, corrosion resistance.  
优异的化学稳定性，耐腐蚀性。
- Odorless, tasteless, and nontoxic.  
无臭、无味、无毒。
- High impact resistance.  
高抗冲击性。
- Good self-lubrication.  
良好的自润滑性。
- Works well in wide temperature range (-150°C-85°C).  
工作温度范围广 (-150°C-85°C)。
- Low water absorption, no dimensional change in wet condition.  
低吸水率，湿态无量纲变化。



# HDPE sheets& rods 高密度聚乙烯板，棒材及加工件；

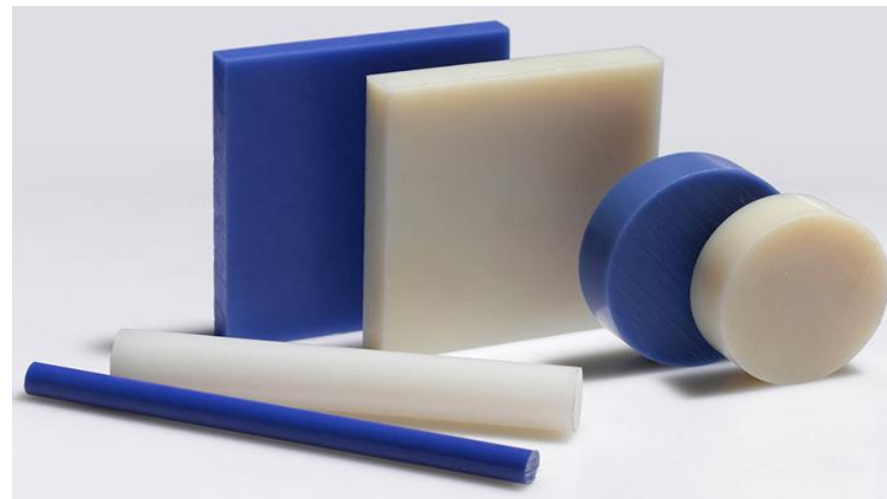


HDPE sheets  
Max width:2500mm  
Thickness: 1-40mm



\*The size and color can be customized according to customer needs.

# Nylon sheets& rods 尼龙板材，管材，棒材及加工件；



MC Nylon sheets and Irregular parts

Nylon rods:D20mm-D200mm

Size: Could be Customized Thickness: 1-200mm

# Application



**Gears**



**HopperLiners**



**Food Process**



**Material Convey**



**Building**



**Heavy Equipment**



**Mining**



**Marine**

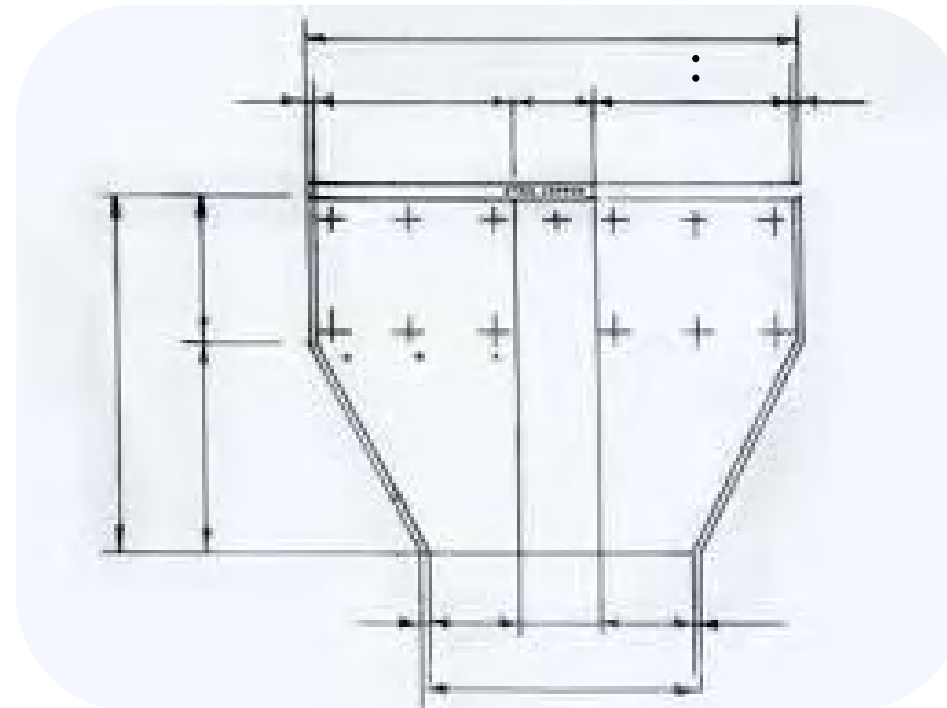
## Coal Bunker Liner Board Lining Bulk Storage Hoppers

煤仓衬板，车厢衬板，饲料储料斗等

UHMWPE sheets are used for lining bulk storage hoppers where low-friction, anti-stick and abrasion-resistant properties solve feed and wear problems.  
低摩擦、抗粘和耐磨性能解决饲料的储料斗和磨损问题。

Excellent toughness, Good sliding properties, Lightweight material.  
Very good abrasion resistance, Very good electrical insulation, Very low water absorption.

具有优良的韧性，良好的滑动性能，轻质材料。  
很好的耐磨性，良好的电绝缘，极低吸水率。

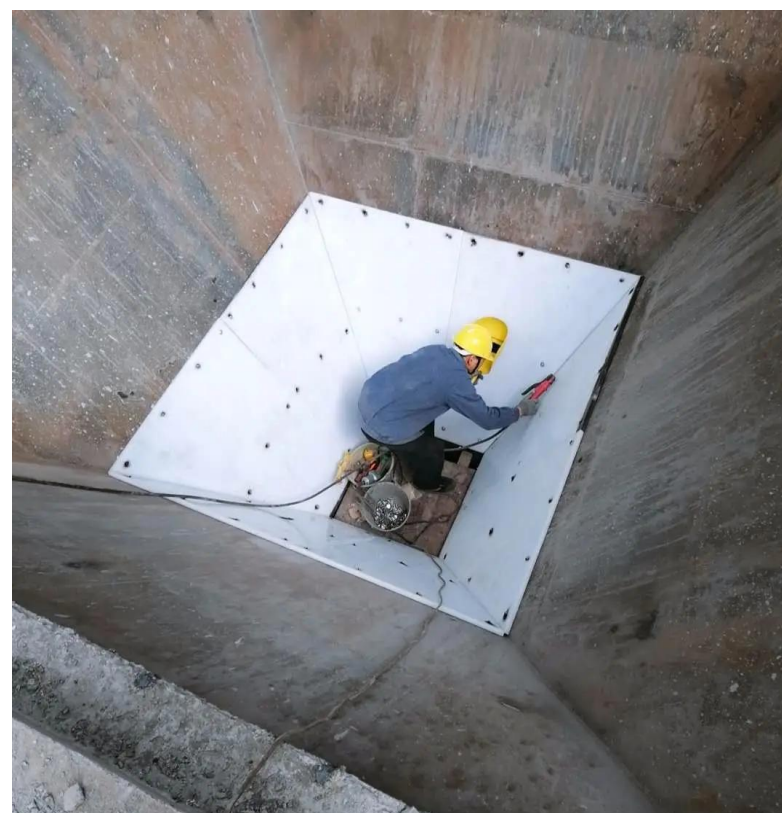


## Dump Truck Bed Liners Non-stick UHMW PE Plastic liners 车厢衬板

Our Off Road truck bed liners are ideal for construction, mining and industrial use. Off Road UHMW truck bed liners are built to handle the hardest jobs from gravel and limestone to coal and clay.

### Features:

Promotes reliable, steady bulk material flow.  
100% virgin UHMW liner - more consistent, reliable and durable liner.  
UV stabilized - protects liner from sunlight which will normally breakdown a liner.  
Custom widths and roll lengths available, No moisture absorption.



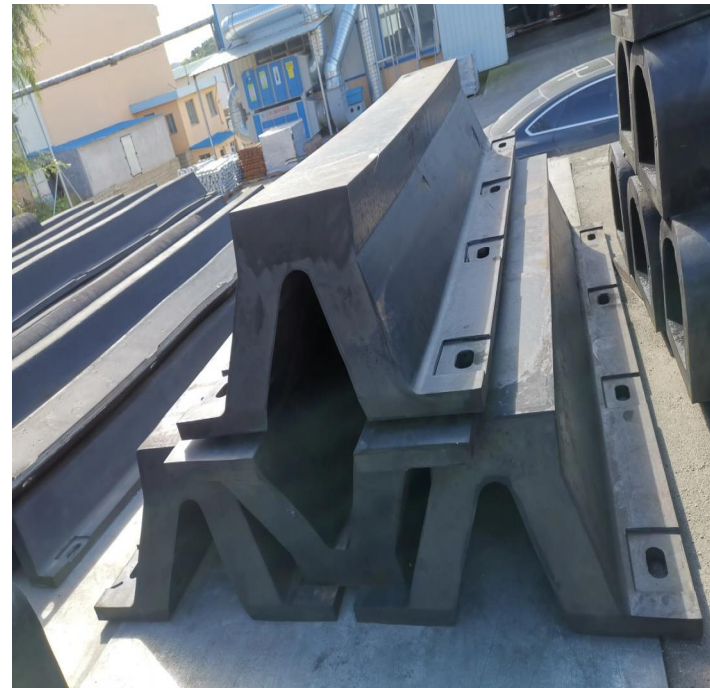
# Marine Dock Rubber Fender Series & Catalogs



## D type fenders



## SA / V type



# 超级鼓型橡胶护舷

## SUPER CELL FENDERS

### [SC Type]

#### 特点 / FEATURES

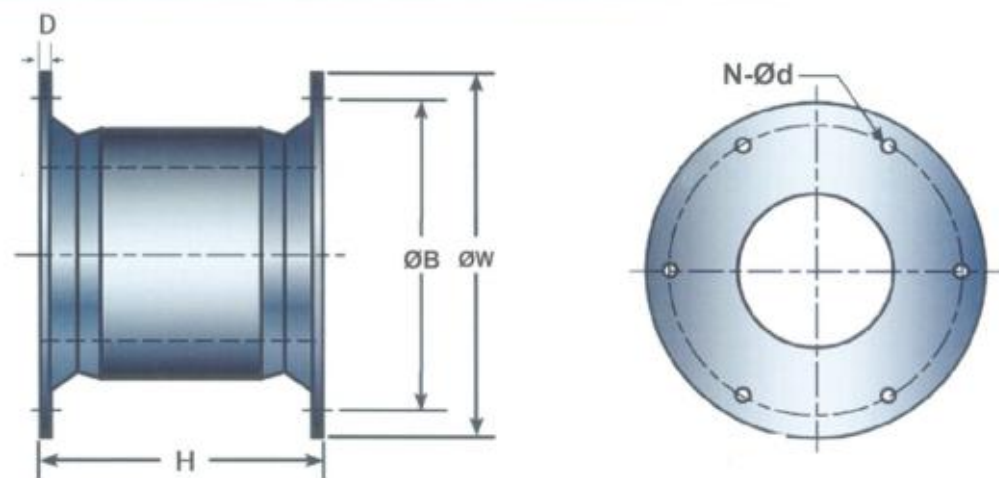
- ▶ 设计压缩变形大；
- ▶ 单位吸能量高；护舷前端设有防冲
- ▶ 钢架，从而降低船舶靠泊面压力，适用于大型港口、码头。



- ▶ More reasonable structure
- ▶ High E/R.H value
- ▶ Very suitable for the large wharf



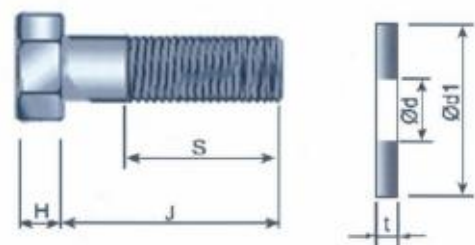
#### 尺寸 / SIZE



#### 规格 / SPECIFICATION

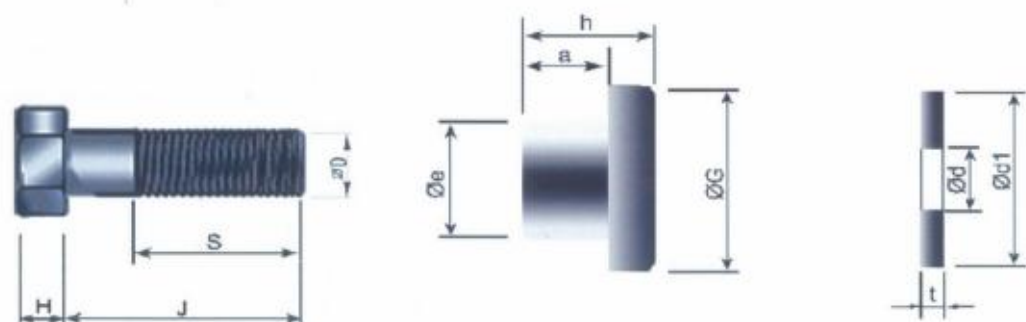
| 规格<br>SPECILIZATION | H<br>(mm) | ΦW<br>(mm) | ΦB<br>(mm) | D<br>(mm) | n×d<br>(mm) | Weight<br>(kg) |
|---------------------|-----------|------------|------------|-----------|-------------|----------------|
| SC400H              | 400       | 650        | 550        | 25        | 4×30        | 78             |
| SC500H              | 500       | 650        | 550        | 25        | 4×32        | 110            |
| SC630H              | 630       | 840        | 700        | 25        | 4×39        | 230            |
| SC800H              | 800       | 1050       | 900        | 30        | 6×40        | 410            |
| SC1000H             | 1000      | 1300       | 1100       | 35        | 6×47        | 790            |
| SC1150H             | 1150      | 1500       | 1300       | 37        | 6×50        | 1200           |
| SC1250H             | 1250      | 1650       | 1450       | 40        | 6×53        | 1500           |
| SC1450H             | 1450      | 1850       | 1650       | 42        | 6×61        | 2300           |
| SC1600H             | 1600      | 2000       | 1800       | 46        | 8×61        | 3000           |
| SC1700H             | 1700      | 2100       | 1900       | 50        | 8×66        | 3600           |
| SC2000H             | 2000      | 2200       | 2000       | 50        | 8×74        | 4200           |
| SC2250H             | 2250      | 2550       | 2300       | 57        | 10×74       | 7400           |
| SC2500H             | 2500      | 2950       | 2700       | 70        | 10×74       | 10500          |
| SC3000H             | 3000      | 3350       | 3150       | 75        | 12×90       | 18500          |

## 护舷与防冲板联接配件 / CONNECTION PARTS BETWEEN FENDER&FENDER PAD



| 规格<br>SPECIFICATION | 项目<br>ITEM | 螺栓 Bolt                             |     |     |    | 垫片 Washer               |     |
|---------------------|------------|-------------------------------------|-----|-----|----|-------------------------|-----|
|                     |            | D                                   | J   | S   | H  | d                       | d1  |
| ZC600H              |            | 24                                  | 50  | 40  | 15 | 26                      | 44  |
| ZC700H              |            | 30                                  | 55  | 45  | 19 | 33                      | 56  |
| ZC800H              |            | 36                                  | 65  | 50  | 23 | 39                      | 66  |
| ZC900H              |            | 36                                  | 75  | 60  | 23 | 39                      | 66  |
| ZC1000H-1100        |            | 42                                  | 80  | 65  | 26 | 45                      | 78  |
| ZC1150H             |            | 42                                  | 85  | 70  | 26 | 45                      | 78  |
| ZC1200H             |            | 42                                  | 92  | 75  | 26 | 45                      | 78  |
| ZC1300H-1600        |            | 48                                  | 100 | 80  | 30 | 52                      | 92  |
| ZC1800H             |            | 56                                  | 120 | 100 | 35 | 62                      | 100 |
| 材质<br>Material      |            | 1Cr13(2Cr13) 1Cr18Ni9Ti 0Cr7Ni12Mo2 |     |     |    | Q235热镀锌<br>Q235hot-galv |     |

## 防冲板与贴面板联接配件 / CONNECTION PARTS BETWEEN FENDER&FACE PAD



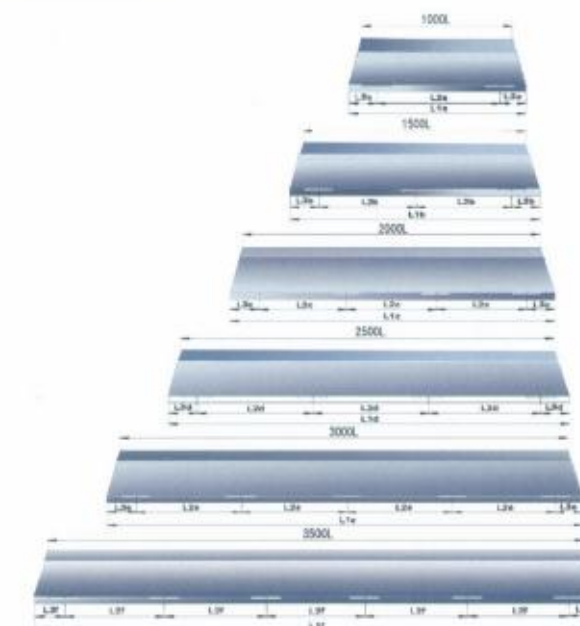
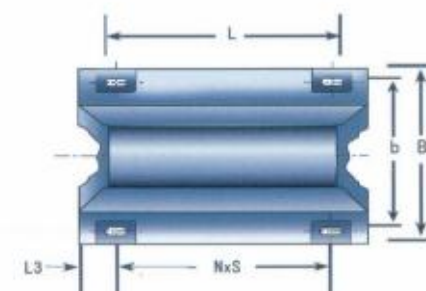
## 规格 / SPECIFICATION

| 规格<br>SPECIFICATION | 项目<br>ITEM | 螺栓 Bolt                                                     |    |    |    | 螺母 Nut                              |    |    |    | 垫片 Washer               |    |      |
|---------------------|------------|-------------------------------------------------------------|----|----|----|-------------------------------------|----|----|----|-------------------------|----|------|
|                     |            | D                                                           | J  | S  | H  | h                                   | a  | e  | D  | G                       | d1 | d    |
| M16                 |            | 16                                                          | 45 | 40 | 10 | 20                                  | 11 | 28 | 16 | 40                      | 32 | 17.5 |
| M20                 |            | 20                                                          | 45 | 40 | 12 | 20                                  | 11 | 32 | 20 | 36                      | 46 | 22   |
| 材质<br>Material      |            | Q235热镀锌 Q235hot-galv<br>1Cr13(2Cr13) 1Cr18Ni9Ti 0Cr7Ni12Mo2 |    |    |    | 1Cr13(2Cr13) 1Cr18Ni9Ti 0Cr7Ni12Mo2 |    |    |    | Q235热镀锌<br>Q235hot-galv |    |      |



## 超级拱型橡胶护舷 SUPER ARCH FENDERS [SA Type]

## 尺寸 SIZE



## 规格 / SPECIFICATION

| 型号 Model  | B<br>(mm) | b<br>(mm) | c<br>(mm) | d<br>(mm) | H<br>(mm) | h<br>(mm) |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| SA-A200H  | 400       | 320       | 145       | 128       | 200       | 30        |
| SA-A250H  | 500       | 410       | 175       | 160       | 250       | 33        |
| SA-A300H  | 600       | 490       | 225       | 196       | 300       | 33        |
| SA-A400H  | 800       | 670       | 300       | 260       | 400       | 40        |
| SA-A500H  | 1000      | 840       | 375       | 325       | 500       | 45        |
| SA-A600H  | 1200      | 1010      | 450       | 390       | 600       | 54        |
| SA-A800H  | 1600      | 1340      | 600       | 520       | 800       | 72        |
| SA-A1000H | 2000      | 1680      | 750       | 650       | 1000      | 90        |

## 特点 / FEATURES

- ▶ 反力、吸能量适中
- ▶ 重量较轻，安装维修方便；
- ▶ 底部宽度小，适合框架式码头。
- ▶ Suitable reaction force and energy absorption.
- ▶ Low weight easy for installation and maintenance.
- ▶ Applicable for frame dock due to the smaller bottom width.

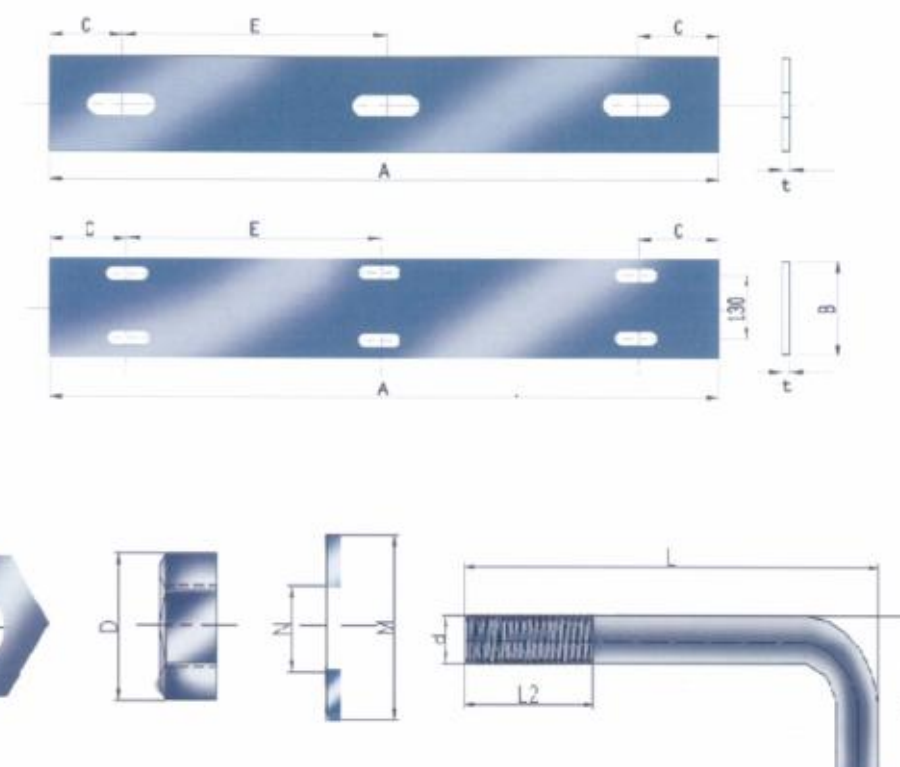
## 尺寸 / SIZE



## 规格 / SPECIFICATION

| 型号<br>Model | L<br>(mm) | A<br>(mm) | D<br>φ(mm) | d<br>φ(mm) | B<br>(mm) | H<br>(mm) | h<br>(mm) | P<br>(mm) | n<br>#Fastening Points | Weight<br>(kg) |
|-------------|-----------|-----------|------------|------------|-----------|-----------|-----------|-----------|------------------------|----------------|
| D200H       | 1000      | 200       | 55         | 28         | 200       | 200       | 30        | 300       | 3                      | 37             |
| D200H       | 1500      | 150       | 55         | 28         | 200       | 200       | 30        | 600       | 3                      | 56             |
| D200H       | 2000      | 250       | 55         | 28         | 200       | 200       | 30        | 500       | 4                      | 74             |
| D300H       | 900       | 150       | 65         | 32         | 300       | 300       | 40        | 600       | 2                      | 80             |
| D300H       | 1000      | 200       | 65         | 32         | 300       | 300       | 40        | 600       | 2                      | 67             |
| D300H       | 1500      | 150       | 65         | 32         | 300       | 300       | 40        | 600       | 3                      | 105            |
| D300H       | 2000      | 250       | 65         | 32         | 300       | 300       | 40        | 500       | 4                      | 134            |
| D300H       | 1000      | 200       | 65         | 32         | 360       | 300       | 40        | 600       | 2                      | 80             |
| D300H       | 1500      | 150       | 65         | 32         | 360       | 300       | 40        | 600       | 3                      | 120            |
| D400H       | 1500      | 150       | 65         | 32         | 400       | 400       | 55        | 400       | 4                      | 150            |
| D400H       | 2000      | 200       | 65         | 32         | 400       | 400       | 55        | 400       | 5                      | 200            |
| D500H       | 1000      | 150       | 55         | 28         | 500       | 500       | 90        | 350       | 3×2                    | 195            |
| D500H       | 1500      | 150       | 55         | 28         | 500       | 500       | 90        | 400       | 4×2                    | 298            |
| D500H       | 2000      | 200       | 55         | 28         | 500       | 500       | 90        | 400       | 5×2                    | 395            |

## 金属配件 / ACCESSORIES



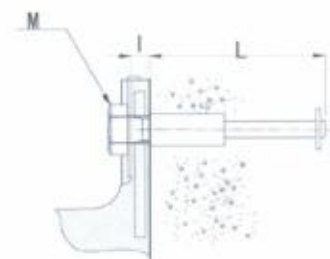
## 规格 / SPECIFICATION

| 型号<br>Model     | 压板<br>Impacted Plate |     |     |    |     |    | 螺母<br>Nut | 垫片<br>Washer |    |     | 螺栓<br>Bolt |     |    |   |
|-----------------|----------------------|-----|-----|----|-----|----|-----------|--------------|----|-----|------------|-----|----|---|
|                 | A                    | B   | C   | F  | E   | t  |           | D            | M  | N   | L          | L1  | L2 | d |
| D200H×200×1000L | 1000                 | 70  | 200 | 50 | 600 | 14 |           |              |    |     |            |     |    |   |
| D200H×200×1500L | 1500                 | 70  | 150 | 50 | 600 | 14 | 36        | 50           | 27 | 300 | 120        | 90  | 24 |   |
| D200H×200×2000L | 2000                 | 70  | 250 | 50 | 500 | 14 |           |              |    |     |            |     |    |   |
| D300H×300×1000L | 1000                 | 100 | 200 | 60 | 600 | 16 |           |              |    |     |            |     |    |   |
| D300H×300×1500L | 1500                 | 100 | 150 | 60 | 600 | 16 |           |              |    |     |            |     |    |   |
| D300H×300×2000L | 2000                 | 100 | 250 | 60 | 500 | 16 | 41        | 55           | 31 | 400 | 120        | 100 | 27 |   |
| D300H×360×1000L | 1000                 | 100 | 200 | 60 | 600 | 16 |           |              |    |     |            |     |    |   |
| D300H×360×1500L | 1500                 | 100 | 150 | 60 | 600 | 16 |           |              |    |     |            |     |    |   |
| D400H×400×1500L | 1500                 | 120 | 150 | 60 | 400 | 16 |           |              |    |     |            |     |    |   |
| D400H×400×2000L | 2000                 | 120 | 200 | 60 | 400 | 16 | 41        | 55           | 31 | 450 | 120        | 120 | 27 |   |
| D500H×500×1000L | 1000                 | 180 | 150 | 50 | 350 | 18 |           |              |    |     |            |     |    |   |
| D500H×500×1500L | 1500                 | 180 | 150 | 50 | 400 | 18 | 36        | 50           | 27 | 500 | 120        | 120 | 24 |   |
| D500H×500×2000L | 2000                 | 180 | 200 | 50 | 400 | 18 |           |              |    |     |            |     |    |   |

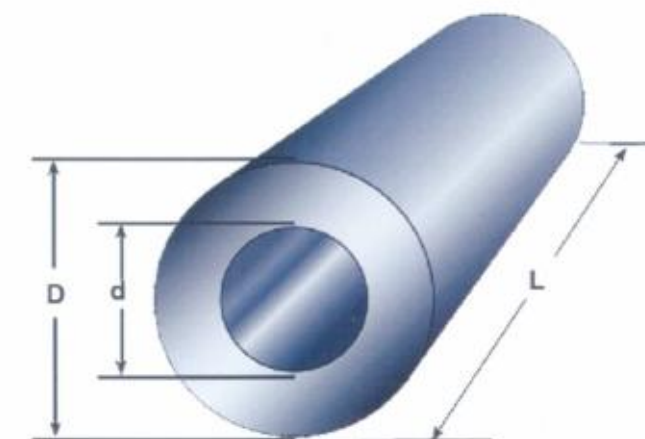
## 规格 / SPECIFICATION

| 型号<br>Model  | D<br>(mm) | E<br>(mm) | F<br>(mm) | H<br>(mm) | M<br>(mm) | I<br>(mm) | J<br>(mm) |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| GD280H×1000L | 540       | 430       | 40        | 280       | M30       | 40        | 300       |
| GD280H×1500L | 540       | 430       | 40        | 280       | M30       | 40        | 300       |
| GD280H×2000L | 540       | 430       | 40        | 280       | M30       | 40        | 300       |
| GD280H×2500L | 540       | 430       | 40        | 280       | M30       | 40        | 300       |
| GD280H×3000L | 540       | 430       | 40        | 280       | M30       | 40        | 300       |
| GD300H×1000L | 600       | 490       | 40        | 300       | M36       | 40        | 360       |
| GD300H×1500L | 600       | 490       | 40        | 300       | M36       | 40        | 360       |
| GD300H×2000L | 600       | 490       | 40        | 300       | M36       | 40        | 360       |
| GD300H×2500L | 600       | 490       | 40        | 300       | M36       | 40        | 360       |
| GD300H×3000L | 600       | 490       | 40        | 300       | M36       | 40        | 360       |

## 安装 / INSTALLATION

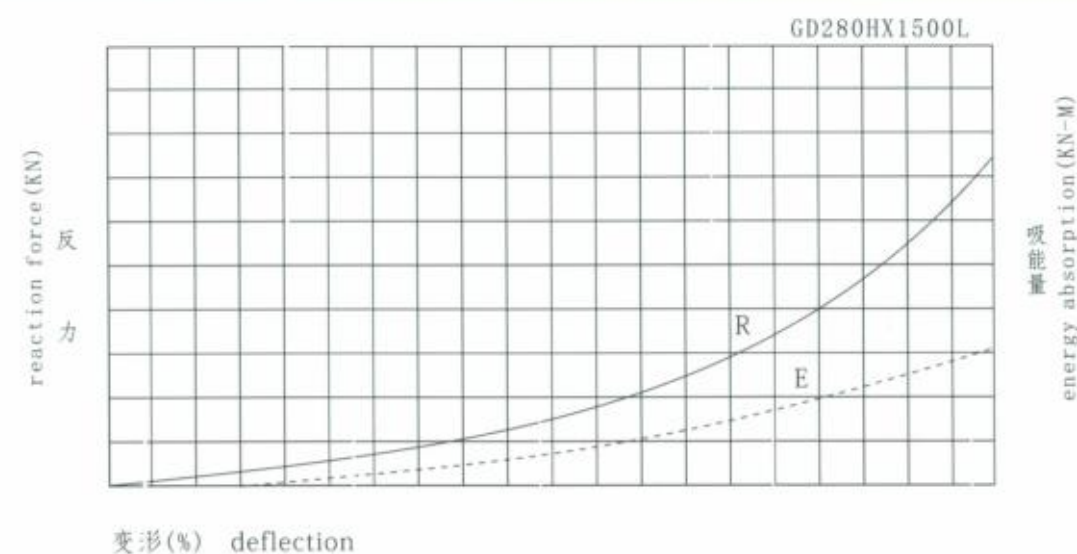


## 尺寸 / SIZE



## 性能表 / PERFORMANCE LIST

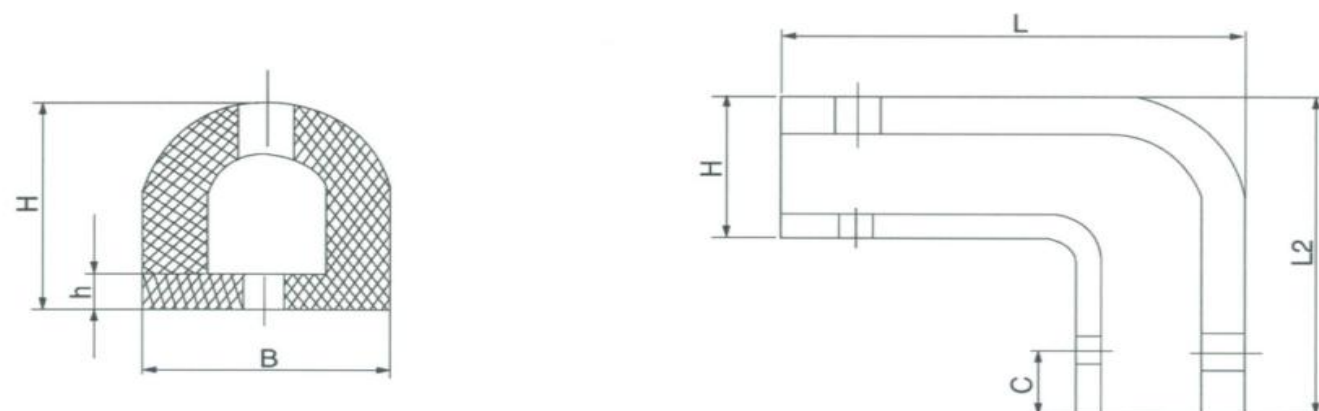
| 型号<br>Model  | 设计压缩变形 Rated Deflection 50% |                                |
|--------------|-----------------------------|--------------------------------|
|              | 反力<br>Reaction Force(KN)    | 吸能量<br>Energy Absorption(KN-M) |
| GD280H×1000L | 375                         | 14                             |
| GD280H×1500L | 565                         | 21                             |
| GD280H×2000L | 750                         | 28                             |
| GD280H×2500L | 940                         | 35                             |
| GD280H×3000L | 1130                        | 42                             |
| GD300H×1000L | 450                         | 18                             |
| GD300H×1500L | 675                         | 27                             |
| GD300H×2000L | 900                         | 36                             |
| GD300H×2500L | 1125                        | 45                             |
| GD300H×3000L | 1350                        | 54                             |



## 规格 / SPECIFICATION

| 规格<br>Specification | 长度L<br>(mm) | 外径D<br>φ (mm) | 内径d<br>φ (mm) | 参考重量<br>(kg/m) |
|---------------------|-------------|---------------|---------------|----------------|
| Y150                |             | 150           | 75            | 18             |
| Y200                |             | 200           | 100           | 28             |
| Y250                |             | 250           | 125           | 45             |
| Y300                |             | 300           | 150           | 64             |
| Y400                |             | 400           | 200           | 110            |
| Y500                |             | 500           | 250           | 175            |
| Y600                | 500-5500    | 600           | 300           | 250            |
| Y700                |             | 700           | 350           | 345            |
| Y800                |             | 800           | 400           | 450            |
| Y900                |             | 900           | 450           | 570            |
| Y1000               |             | 1000          | 500           | 710            |
| Y1100               |             | 1100          | 550           | 870            |
| Y1200               |             | 1200          | 600           | 1020           |
| Y1400               |             | 1400          | 700           | 1400           |
| Y1600               |             | 1600          | 800           | 1800           |

## D型 Type

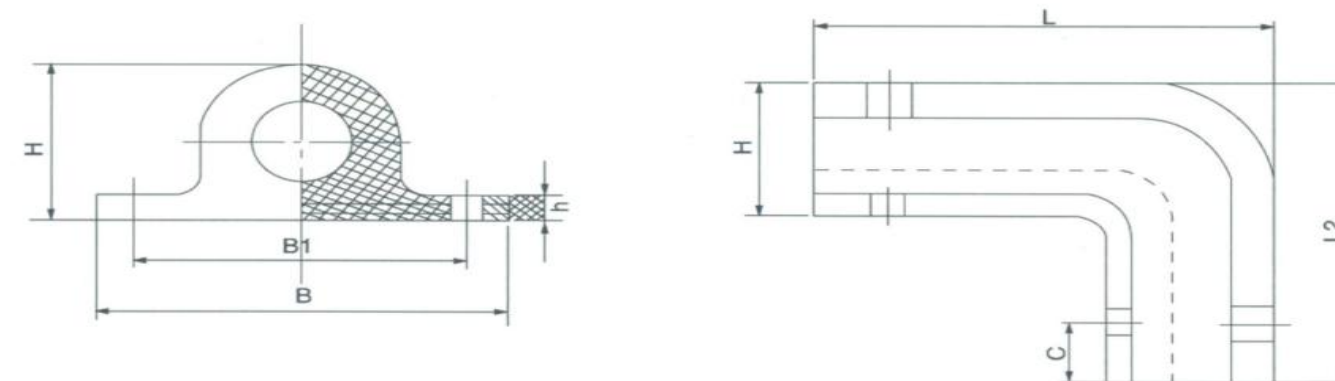


| 规格 Specification | H   | B   | h  | C   | 角度angle   | L1、L2     |
|------------------|-----|-----|----|-----|-----------|-----------|
| D300H            | 300 | 300 | 40 | 150 | 90° -150° | 可依据用户需求而定 |
| D400H            | 400 | 400 | 55 | 150 |           |           |
| D500H            | 500 | 500 | 60 | 150 |           |           |

## 规格 /SPECIFICATION

| 型号<br>Model | L<br>(mm) | A<br>(mm) | D<br>φ(mm) | d<br>φ(mm) | B<br>(mm) | H<br>(mm) | h<br>(mm) | P<br>(mm) | n<br>#Fastening Points | Weight<br>(kg) |
|-------------|-----------|-----------|------------|------------|-----------|-----------|-----------|-----------|------------------------|----------------|
| D200H       | 1000      | 200       | 55         | 28         | 200       | 200       | 30        | 300       | 3                      | 37             |
| D200H       | 1500      | 150       | 55         | 28         | 200       | 200       | 30        | 600       | 3                      | 56             |
| D200H       | 2000      | 250       | 55         | 28         | 200       | 200       | 30        | 500       | 4                      | 74             |
| D300H       | 900       | 150       | 65         | 32         | 300       | 300       | 40        | 600       | 2                      | 80             |
| D300H       | 1000      | 200       | 65         | 32         | 300       | 300       | 40        | 600       | 2                      | 67             |
| D300H       | 1500      | 150       | 65         | 32         | 300       | 300       | 40        | 600       | 3                      | 105            |
| D300H       | 2000      | 250       | 65         | 32         | 300       | 300       | 40        | 500       | 4                      | 134            |
| D300H       | 1000      | 200       | 65         | 32         | 360       | 300       | 40        | 600       | 2                      | 80             |
| D300H       | 1500      | 150       | 65         | 32         | 360       | 300       | 40        | 600       | 3                      | 120            |
| D400H       | 1500      | 150       | 65         | 32         | 400       | 400       | 55        | 400       | 4                      | 150            |
| D400H       | 2000      | 200       | 65         | 32         | 400       | 400       | 55        | 400       | 5                      | 200            |
| D500H       | 1000      | 150       | 55         | 28         | 500       | 500       | 90        | 350       | 3×2                    | 195            |
| D500H       | 1500      | 150       | 55         | 28         | 500       | 500       | 90        | 400       | 4×2                    | 298            |
| D500H       | 2000      | 200       | 55         | 28         | 500       | 500       | 90        | 400       | 5×2                    | 395            |

## GD型 Type

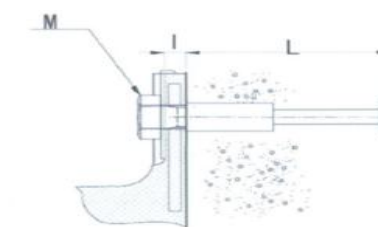


| 规格 Specification | N   | B   | B1  | h  | C   | 角度angle    | L1、L2     |
|------------------|-----|-----|-----|----|-----|------------|-----------|
| GD300H           | 200 | 540 | 430 | 40 | 150 | 100° -150° | 可依据用户需求而定 |
| GD400H           | 300 | 600 | 490 | 40 | 150 |            |           |

## 规格 /SPECIFICATION

| 型号<br>Model  | D<br>(mm) | E<br>(mm) | F<br>(mm) | H<br>(mm) | M<br>(mm) | I<br>(mm) | J<br>(mm) |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| GD280H×1000L | 540       | 430       | 40        | 280       | M30       | 40        | 300       |
| GD280H×1500L | 540       | 430       | 40        | 280       | M30       | 40        | 300       |
| GD280H×2000L | 540       | 430       | 40        | 280       | M30       | 40        | 300       |
| GD280H×2500L | 540       | 430       | 40        | 280       | M30       | 40        | 300       |
| GD280H×3000L | 540       | 430       | 40        | 280       | M30       | 40        | 300       |
| GD300H×1000L | 600       | 490       | 40        | 300       | M36       | 40        | 360       |
| GD300H×1500L | 600       | 490       | 40        | 300       | M36       | 40        | 360       |
| GD300H×2000L | 600       | 490       | 40        | 300       | M36       | 40        | 360       |
| GD300H×2500L | 600       | 490       | 40        | 300       | M36       | 40        | 360       |
| GD300H×3000L | 600       | 490       | 40        | 300       | M36       | 40        | 360       |

## 安装 /INSTALLATION



## 性能表 /PERFORMANCE LIST

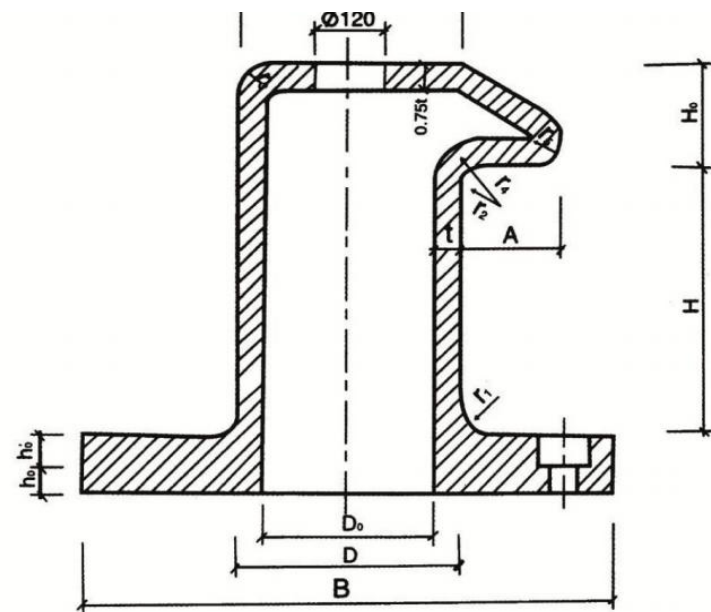
| 型号<br>Model  | 设计压缩变形 Rated Deflection 50% |                                |
|--------------|-----------------------------|--------------------------------|
|              | 反力<br>Reaction Force(KN)    | 吸能量<br>Energy Absorbtion(KN-M) |
| GD280H×1000L | 375                         | 14                             |
| GD280H×1500L | 565                         | 21                             |
| GD280H×2000L | 750                         | 28                             |
| GD280H×2500L | 940                         | 35                             |
| GD280H×3000L | 1130                        | 42                             |
| GD300H×1000L | 450                         | 18                             |
| GD300H×1500L | 675                         | 27                             |
| GD300H×2000L | 900                         | 36                             |
| GD300H×2500L | 1125                        | 45                             |
| GD300H×3000L | 1350                        | 54                             |

## Super Cone Type

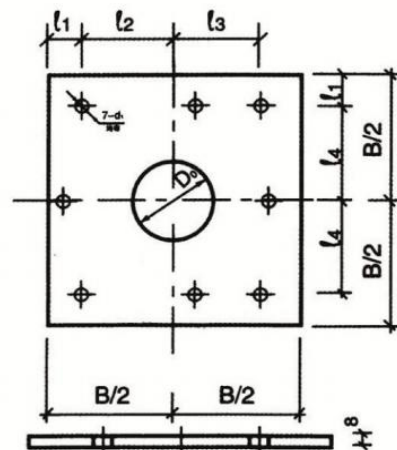


## Pneumatic Type

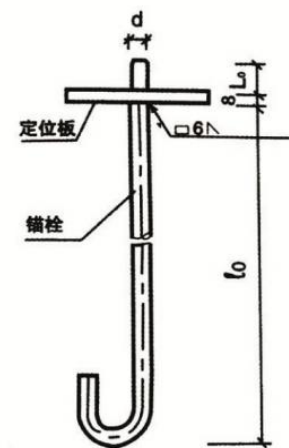




I-I 1:10



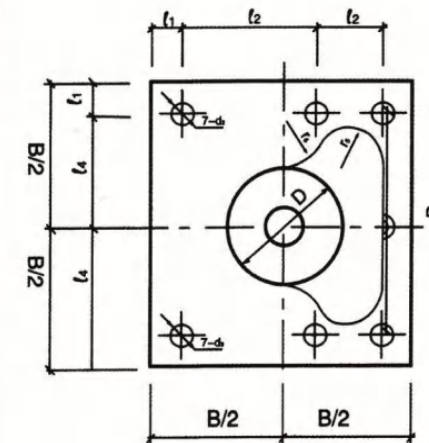
定位板 1:20



锚栓 1:10

各部位尺寸

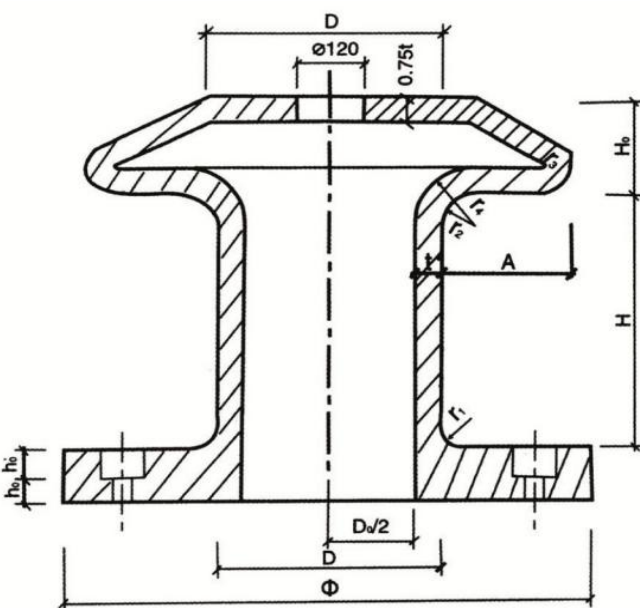
| 符号 | 吨级 | 250kN           | 350kN           | 450kN           | 550kN |
|----|----|-----------------|-----------------|-----------------|-------|
| D  |    | 320             | 380             | 400             | 450   |
| D0 |    | 250             | 290             | 290             | 330   |
| t  |    | 35              | 45              | 55              | 60    |
| H  |    | 350             | 450             | 450             | 500   |
| H0 |    | 144             | 171             | 180             | 203   |
| h0 |    | 40              | 45              | 50              | 55    |
| h0 |    | 45              | 50              | 50              | 55    |
| B  |    | 700             | 900             | 950             | 1000  |
| A  |    | 144             | 171             | 180             | 203   |
| r1 |    | 48              | 57              | 60              | 68    |
| r2 |    | 24              | 29              | 30              | 34    |
| r3 |    | 38              | 46              | 48              | 54    |
| r4 |    | 50              | 63              | 71              | 79    |
| r5 |    | 101             | 120             | 126             | 142   |
| r6 |    | 154             | 182             | 193             | 217   |
| d  |    | 30              | 30              | 36              | 42    |
| d1 |    | 31              | 31              | 37              | 43    |
| d2 |    | 36              | 36              | 42              | 48    |
| da |    | 75              | 75              | 92              | 109   |
| Lo |    | 80              | 90              | 95              | 105   |
| l0 |    | 900             | 900             | 1080            | 630   |
| L  |    | L+6.25d<br>1176 | L+6.25d<br>1186 | L+6.25d<br>1408 | 797   |
| l1 |    | 90              | 105             | 105             | 110   |
| l2 |    | 170             | 230             | 230             | 260   |
| l3 |    | 350             | 460             | 510             | 520   |
| l4 |    | 260             | 345             | 370             | 390   |
| δ  |    |                 |                 |                 | 34    |
| a  |    |                 |                 |                 | 168   |
| B0 |    | 522             | 620             | 552             | 734   |



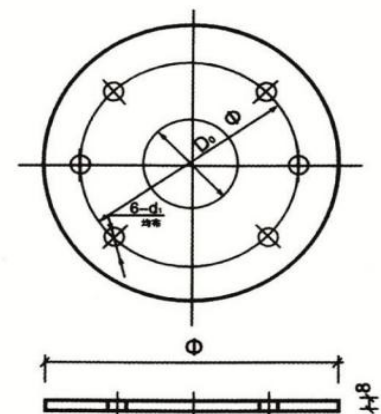
平面图 1:10

图纸说明

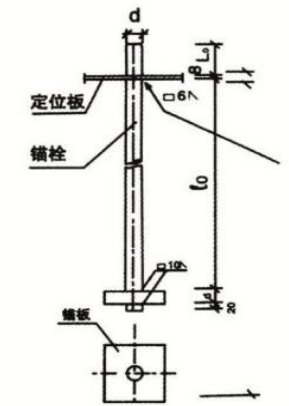
- 1、图中尺寸标高以mm计。
- 2、本图各部位尺寸按 I - I 550kN 方底盘半挡型铸铁系船栓绘制，比例如图。
- 3、系船柱顶部浇注250kN、350kN、450kN、550kN字样。
- 4、螺栓孔在铆帽拧紧后，需用沥青以防锈蚀。
- 5、系船柱安装完毕后，壳内浇注混凝土。
- 6、螺栓孔表面粗糙度一律  $\frac{20}{\sqrt{R}}$ ，其余  $\frac{10}{\sqrt{R}}$ 。
- 7、焊条采用T42。
- 8、图中未标明的外轮廓尺寸均应平滑过渡不应出现棱角。
- 9、系船柱壳体均涂红丹和防锈漆二度，柱头颜色可用红白漆间涂。
- 10、表中尺寸  $L=L_0 + \delta + 8 + 20$



I-I 1:10



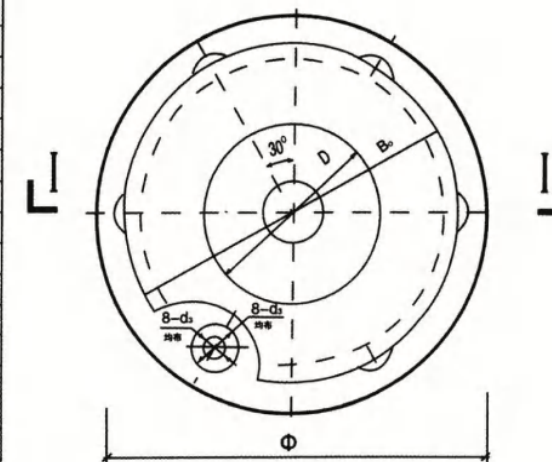
定位板 1:20



锚栓 1:10

各部位尺寸

| 符号 | 吨级 | 350kN | 450kN | 550kN |
|----|----|-------|-------|-------|
| D  |    | 380   | 400   | 450   |
| D0 |    | 290   | 290   | 330   |
| t  |    | 45    | 55    | 60    |
| H  |    | 450   | 450   | 500   |
| H0 |    | 171   | 180   | 203   |
| h0 |    | 45    | 50    | 55    |
| h0 |    | 50    | 50    | 55    |
| A  |    | 171   | 180   | 203   |
| r1 |    | 57    | 60    | 68    |
| r2 |    | 29    | 30    | 34    |
| r3 |    | 46    | 48    | 54    |
| r4 |    | 63    | 71    | 79    |
| d  |    | 42    | 42    | 48    |
| d1 |    | 43    | 43    | 49    |
| d2 |    | 48    | 48    | 54    |
| da |    | 109   | 109   | 126   |
| Lo |    | 90    | 95    | 105   |
| l0 |    | 630   | 630   | 720   |
| L  |    | 782   | 787   | 897   |
| Φ  |    | 900   | 950   | 1000  |
| Φ1 |    | 690   | 740   | 780   |
| δ  |    | 34    | 34    | 38    |
| a  |    | 168   | 168   | 192   |
| B0 |    | 722   | 786   | 856   |



平面图 1:10

图纸说明

- 1、图中尺寸标高以mm计。
- 2、本图各部位尺寸按 I - I 450kN 圆底盘羊角型铸铁系船栓绘制，比例如图。
- 3、系船柱顶部浇注250kN、350kN、450、550kN字样。
- 4、螺栓孔在铆帽拧紧后，需用沥青以防锈蚀。
- 5、系船柱安装完毕后，壳内浇注混凝土。
- 6、螺栓孔表面粗糙度一律  $\frac{20}{\sqrt{R}}$ ，其余  $\frac{10}{\sqrt{R}}$ 。
- 7、焊条采用T42。
- 8、图中未标明的外轮廓尺寸均应平滑过渡不应出现棱角。
- 9、系船柱壳体均涂红丹和防锈漆二度，柱头颜色可用红白漆间涂。
- 10、表中尺寸  $L=L_0 + \delta + 8 + 20$

材料表

| 序号 | 构件名称 | 材料   | 规格      |        |        |        | 数量     |        |        |        | 每个构件重 (kg) |        |        |        | 总重 (kg) |        |        |        |
|----|------|------|---------|--------|--------|--------|--------|--------|--------|--------|------------|--------|--------|--------|---------|--------|--------|--------|
|    |      |      | 250 kN  | 350 kN | 450 kN | 550 kN | 250 kN | 350 kN | 450 kN | 550 kN | 250 kN     | 350 kN | 450 kN | 550 kN | 250 kN  | 350 kN | 450 kN | 550 kN |
| 1  | 壳体   | 铸铁   | HT20-40 |        |        |        | 1      |        |        |        | 415        | 780    | 940    | 1160   | 415     | 780    | 940    | 1160   |
| 2  | 锚栓   | Q235 | M30     | M30    | M36    | M42    | 7      |        |        |        | 6.522      | 6.578  | 11.245 | 8.657  | 45.7    | 46.0   | 78.7   | 60.6   |
| 3  | 螺母   | Q235 | CB41-76 |        |        |        | 7      |        |        |        | 0.234      | 0.234  | 0.371  | 0.598  | 1.6     | 1.6    | 2.6    | 4.2    |
| 4  | 垫圈   | Q235 | CB95-76 |        |        |        | 7      |        |        |        | 0.051      | 0.051  | 0.081  | 0.175  | 0.357   | 0.357  | 0.7    | 1.23   |
| 5  | 定位板  | Q235 | 见图      |        |        |        | 1      |        |        |        | 28.500     | 47.100 | 52.860 | 57.430 | 28.5    | 47.10  | 52.90  | 57.40  |
| 6  | 锚板   | Q235 |         |        |        |        | 7      |        |        |        |            |        |        | 7.1    |         |        |        | 49.7   |

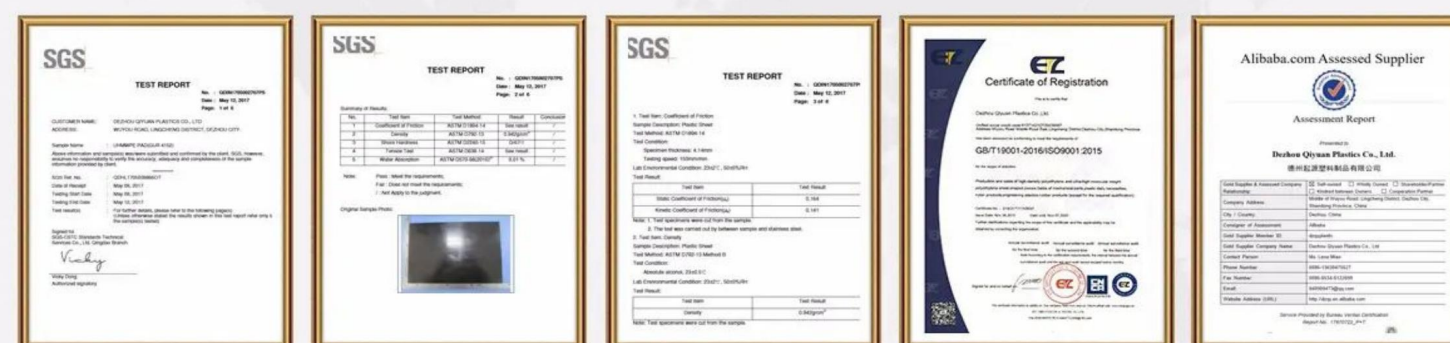
## RAW MATERIAL



## PRODUCTION PROCESS



## OUR CERTIFICATE





# *Quality is Our Culture!*

Your warmly coming and visiting are always welcomed by us.

———— Dezhou Rich Team

Tel: +86-15965214534 (WhatsApp/WeChat)

Addy: Dezhou City, Shandong, China.

Gaoyou City of Jiangsu, China.

Email: [info@dzrich.com](mailto:info@dzrich.com)

Web: [www.dzrich.com](http://www.dzrich.com)

[www.dzrichgroup.com](http://www.dzrichgroup.com)