

Catalog



| | |
|---|-----------|
| Slatted floor systems for sows | 4 |
| Repressor Balance | 6 |
| Balance | 7 |
| Balance Blue Deck | 8 |
| Super Coated farrowing pen slat | 9 |
| Blue Deck farrowing pen slat | 10 |
| Tri-Bar farrowing pen slat | 11 |
| Loose housing Sow | 12 |
| WellFarrowing | 13 |
| Lying areas for piglets | 14 |
| Tri-Bar and Tri-Cast sow inserts | 15 |
| Cool Sow System | 16 |
| Manure drain behind the sow | 17 |
| Tri-Bar for individual or group housing | 18 |
| Tri-Cast for individual or group housing | 19 |
| Slatted floor systems for piglet rearing | 20 |
| Blue Deck | 22 |
| Tri-Bar | 23 |
| Super Coated | 24 |
| Tri-Cast | 25 |
| Slatted floor systems for fatteners | 26 |
| Poly Deck | 28 |
| Tri-Bar | 29 |
| Tri-Cast | 30 |
| Second Floor | 31 |
| Quality | 32 |



Innovators by tradition

From pig farmer to producer of steel slatted floors. And from a producer of steel slatted floors to a multinational involved in industries in which steel solutions predominate. That is Nooyen Group in a nutshell. Growth is only achieved through continuous innovation. Something that is good today should be even better tomorrow. With this philosophy in mind, Nooyen Group is working hard every day.

While their father Grard Nooyen started producing steel grids for pigs in 1978, his six sons went on to expand the company into other activities. Grandson Gerben now leads the company's continuing international growth. This family business has always retained its original theme of keeping pigs. The Nooyen Group has a pig farm in Spain and it sells the meat under its own brand.

Tradition and innovation – These are the key words on which Nooyen Group is based and on which the family business continues to build. In addition to floor solutions for livestock, Nooyen Group is active in the market of steel gates and kennels, steel cladding and utilitarian and architectural applications of steel products. And Nooyen Group produces other items such as natural stone-like worktops for kitchens.

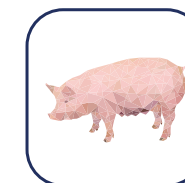
Nooyen Group works closely with its customers, striving to produce the best applicable solutions. Continuous innovation while maintaining traditional family values is paramount.

Nooyen Group
Innovators by tradition





SLATTED FLOOR SYSTEMS FOR SOWS



Top results require optimum sow housing in the various production stages. Nooyen is known for its high-quality floor systems for sows, focused on fast and hygienic work, maximum comfort and significantly better results.

REPRESSOR BALANCE

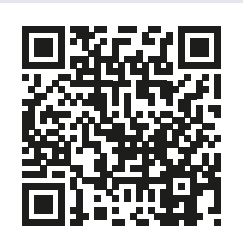
Save up to 40% energy by re-using air

For years, the Nooyen Balance system for slatted floors in farrowing pens has offered an innovative and reliable system that limits crushing piglets. As soon as the sow stands up, the sow floor rises to a safe height for the young piglets.

Sustainability has a high priority at Nooyen. The Repressor has been developed to reduce the energy needed to create the working pressure to operate the Balance. This system collects the used air and re-uses it. Compared with systems that use a compressor, systems with a repressor can realise energy savings of up to 40% when creating the necessary working pressure. Investments such as this can often be considered for subsidies.

Another advantage of this recirculation system is the consistently good quality of the compressed air, resulting in a longer operating life of the compressor and other pneumatic parts. The closed air circuit also ensures that the Balance system works silently.

Look at www.nooyen.com for the operation of the Repressor or scan QR-code below.



▶ Repressor.



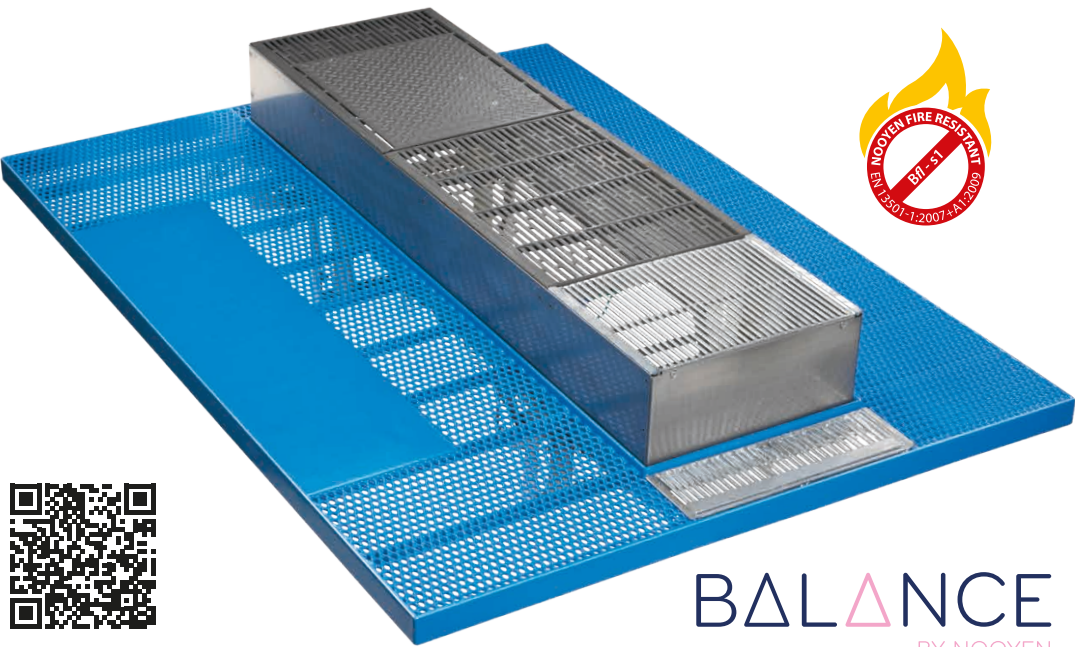
▶ Refrigeration dryer.



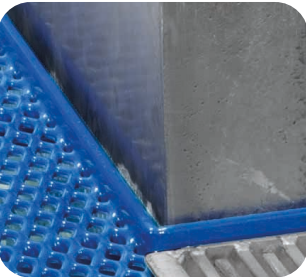
▶ Control unit for Repressor.

BALANCE

The Super Coated slatted floor system with moveable sow slat



Scan the QR code and watch de video.



▶ Balance Control System (BCS): standard movement control using pneumatic operation.



With the Balance, Nooyen offers a sophisticated system centring on the reduction of piglet mortality. We prevent sows from lying on their piglets. As soon as the sow stands up, she activates a switch that raises the sow area to a safe height for the piglets, to prevent them climbing onto it. When the sow lies down again, the sow area is lowered to the same level as the piglet slat which enables the piglets to drink safely.

80% LESS CRUSHED PIGLETS

The calculation example below shows how the Nooyen Balance can help you to wean more piglets per farrowing pen per year based on international common principles.

| 1 FARROWING PEN | |
|---------------------------------------|-----|
| Rounds per year | 12 |
| 12 x 14 piglets born alive | 168 |
| 12% total mortality | 20 |
| 45% is crushed piglets | 9 |
| 80% less crushed piglets with Balance | 7 |

CONCLUSION: 7 piglets extra / balance / year

PROVEN SYSTEM

Nooyen has already delivered more than 100,000 Balance floors worldwide. In a special video you can see how the Balance floor prevents the sow from crushing her own piglets.

NOOYEN BALANCE

- ▶ 80% less crushed piglets
- ▶ Fast payback time
- ▶ Straight and angled positioning possible
- ▶ Sow can be placed off centre
- ▶ Flexibility in dimensions
- ▶ Operation with flexible side switch
- ▶ Quick and easy to assemble
- ▶ Works 24/7, year-round
- ▶ Labor saving due to less intensive control of the maternity departments



Scan the QR code and watch the video.

BALANCE BLUE DECK

The plastic slatted floor system with moveable sow slat

With the Balance Blue Deck, Nooyen offers a sophisticated system centring on the reduction of piglet mortality. We prevent sows from lying on their piglets. As soon as the sow stands up, she activates a switch that raises the sow area to a safe height for the piglets, to prevent them climbing onto it. When the sow lies down again, the sow area is lowered to the same level as the piglet slat which enables the piglets to drink safely.

The piglet slats used in this model are the Blue Deck solid plastic slats. Thanks to the tear shaped bars and the rounded top, the Blue Deck slat for in the farrowing pen provides a comfortable surface for the pig to lie on, **perfect manure drainage** and is extremely **easy to clean**. The slat is different from other solid plastic slats: as the bars run parallel to the sow, they provide **maximum grip** to the piglets during suckling. The Balance Blue Deck is operated by using a flexible side-mounted switch.

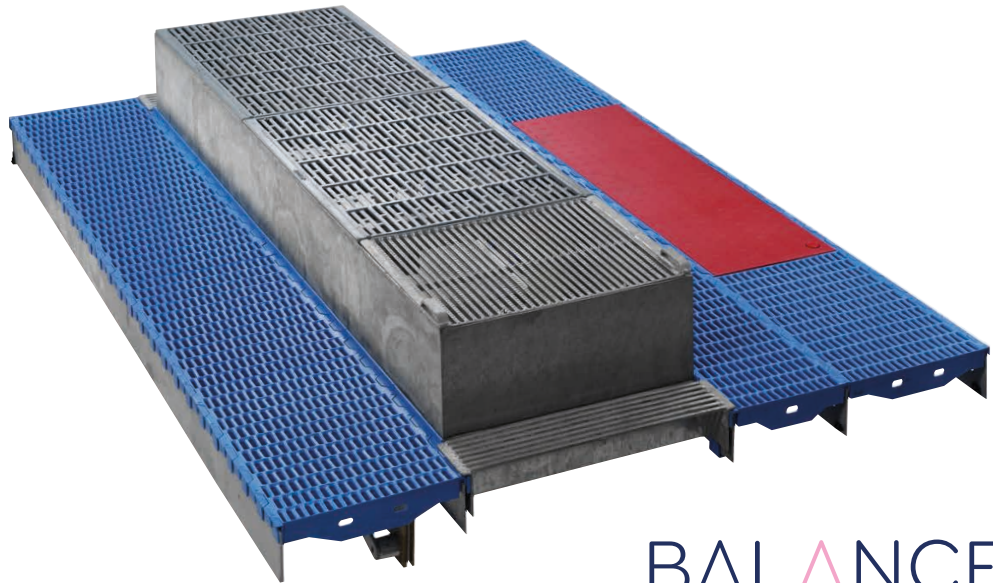
The Balance is **laboursaving** as the farrowing pens require less extensive monitoring. The Balance Blue Deck is **quick and easy to install**.

The sophisticated Balance system means that initial investment costs are higher than the costs for conventional flooring for farrowing pens. However, the Balance system will quickly earn back this extra expense. The earn-back time mainly depends on the reduction of piglet mortality.

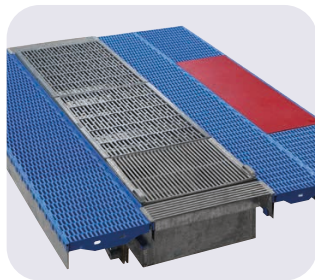
80% LESS CRUSHED PIGLETS
The calculation example below shows how the Nooyen Blue Deck can help you to wean more piglets per farrowing pen per year based on international common principles.

| 1 FARROWING PEN | |
|---------------------------------------|-----|
| Rounds per year | 12 |
| 12 x 14 piglets born alive | 168 |
| 12% total mortality | 20 |
| 45% is crushed piglets | 9 |
| 80% less crushed piglets with Balance | 7 |

CONCLUSION: 7 piglets extra / balance / year



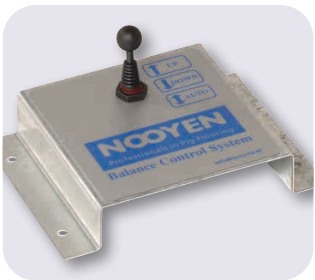
BALANCE
BY NOOYEN



▶ The Balance Blue Deck with the sow slat on the same level as the piglet floor.



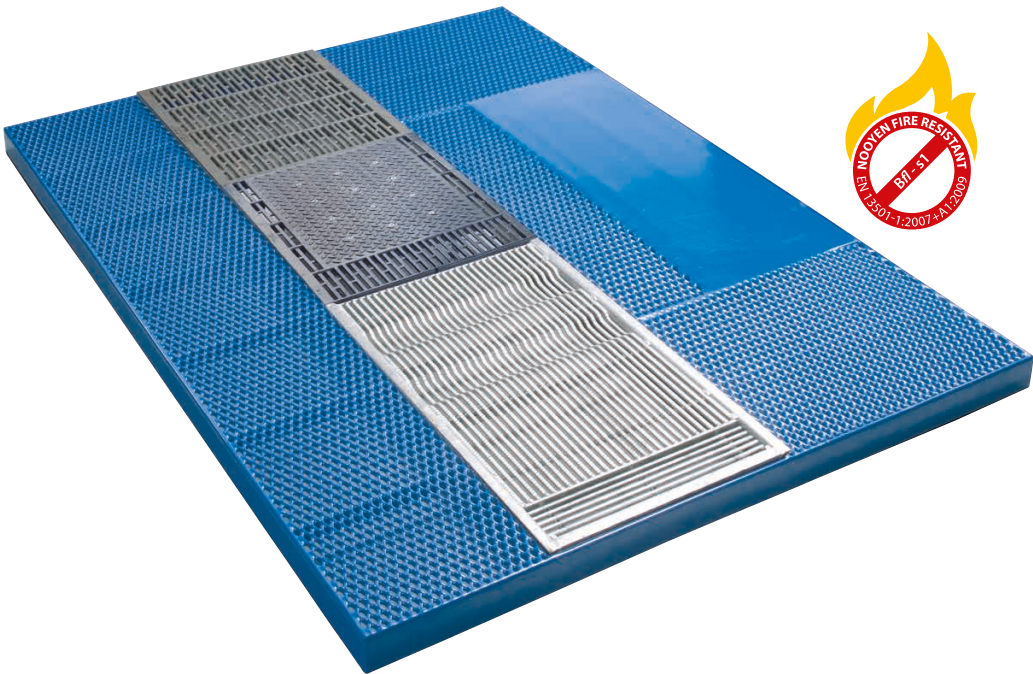
▶ Simple operation by using a flexible side-mounted switch guarantees reliable results.



▶ Balance Control System (BCS): standard movement control using pneumatic operation.

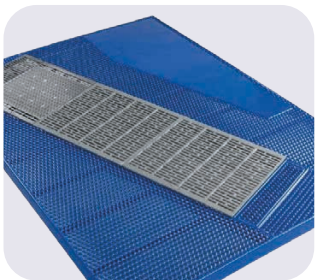
SUPER COATED FARROWING PEN SLAT

The animal-friendly, coated slat for optimal comfort

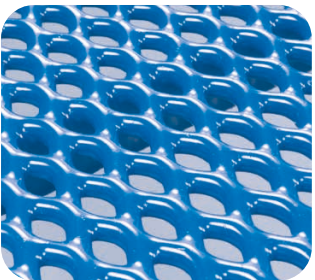


The Super Coated slatted floor is an **animal-friendly** floor system, made of expanded metal or woven wire equipped with a an **excellent coating**. This coating creates **optimal comfort** because it feels warm and soft. The Super Coated slat is available in various standard sizes. Other sizes are available on request. The Super Coated slat for the farrowing pen is available as a self-supporting Frame model in a straight or diagonal position or Wing model.

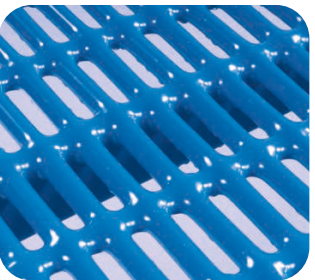
ADDITIONAL OPTION:
▶ The Super Coated slat can be equipped with lying areas on either side of the sow. All models are available with an integrated heating system. Various removable heating elements are also available.



▶ Super Coated Frame in a diagonal position.



▶ Expanded metal.



▶ Woven wire.



BLUE DECK FARROWING PEN SLAT

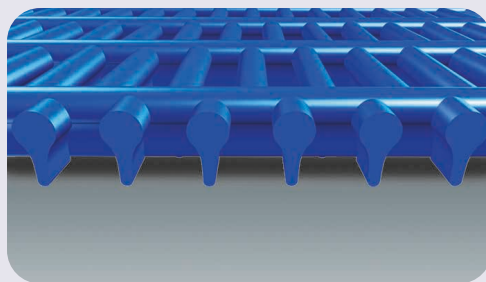
The unique solid plastic slat in Woven Wire model

The Blue Deck slat for the farrowing pen is a solid plastic slat, which, because of the tear shaped bars and the rounded top, provides **high lying comfort, perfect manure drainage** and an easy to clean surface. The slat is different from other solid plastic slats: as the bars run parallel to the sow, they provide **maximum grip** for the piglets during suckling.

The self-supporting Blue Deck slat is **easy to install**. Galvanised or glass fibre strips can be used for the support. The slat has a standard length of 600 mm and is available in the following width sizes: 200, 300 or 400 mm. The length of the individual components can be customised if required. In this way, all required sizes are possible. All models of the Blue Deck slat have sufficient bearing capacity for the sow.

ADDITIONAL OPTIONS:

- ▶ The Blue Deck slat can also fit on one or both sides of the sow with an integrated lying area. Various removable heated elements are also available..
- ▶ The steel galvanised support strips can be equipped with a wall plate, an angle iron or a round pin. This offers additional installation options.



- ▶ The tear shaped bars and the rounded top provide high lying comfort, perfect drain of the manure and easy to clean surface.



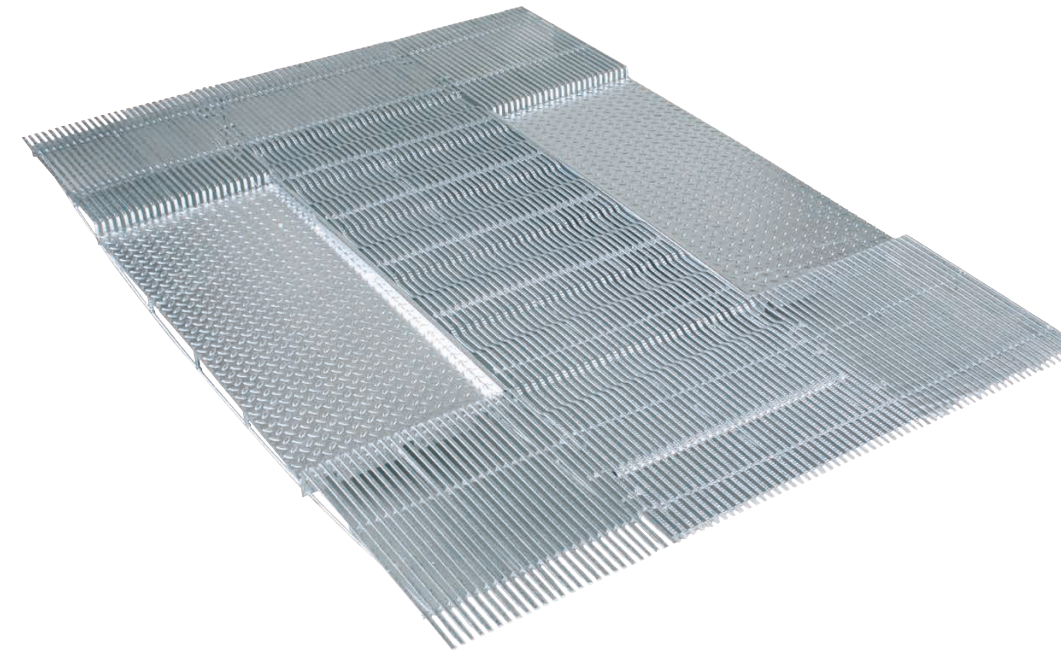
- ▶ The solid area of the Blue Deck has a tear shaped profile, giving the piglets optimal grip.



- ▶ The Blue Deck slat is equipped with bars running parallel to the sow providing extra grip for the piglets

TRI-BAR FARROWING PEN SLAT

The V-shaped slat for perfect hygiene



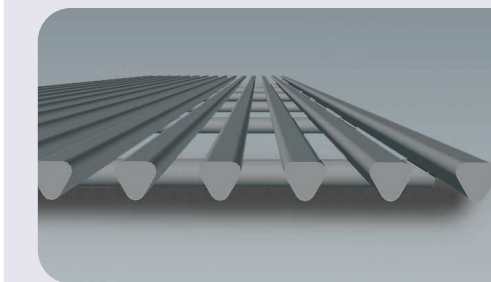
- ▶ The Eco-Line is a Tri-Bar slatted floor for in the farrowing pen with heated lying areas on both sides of the sow.

The **V-shaped bars** of the Nooyen steel Tri-Bar slatted floors ensure a **perfect manure drainage** and, consequently, **excellent hygiene**. This gives the flooring system an ammonia reducing effect. Because of their flat tops, Tri-Bar slats have an **optimal standing surface** and offer **outstanding lying comfort**.

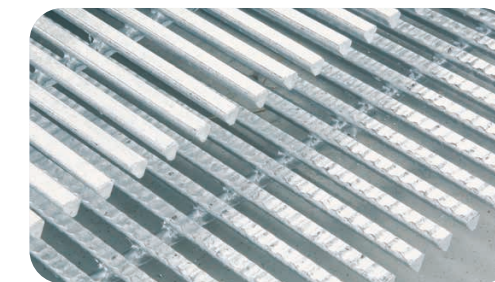
In addition to various standard sizes, the Tri-Bar is available in any customised size. The steel Tri-Bar slats for the piglet area in the farrowing pen is available with 10 mm width bar. In combination with 8 or 10 mm slots.

ADDITIONAL OPTIONS:

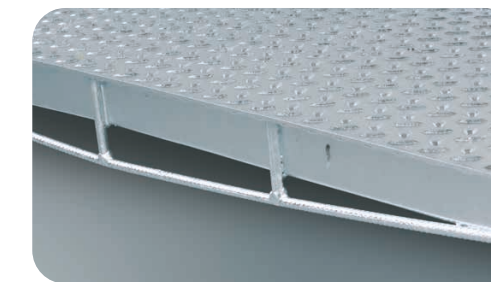
- ▶ Tri-Bar slats can be installed at any required height using strips welded against or under the Tri-Bar or angle iron.
- ▶ The Tri-Bar farrowing pen slatted floor can also be fitted on both sides of the sow with a steel lying area with an integrated floor heating system. The Eco-Line has a steel solid area on both sides. The MVR on one side.
- ▶ Tri-Bar slats can also be combined as a half-slatted floor with a concrete area.



- ▶ Optimal manure drainage and hygiene thanks to the V-shaped bars with rounded edges.



- ▶ Tri-Bar is available in a flat model or a model with extra profile: Softgrip



- ▶ The lying areas in the Eco-Line have a tear shaped profile., providing optimal grip for the piglets.

LOOSE HOUSING SOW

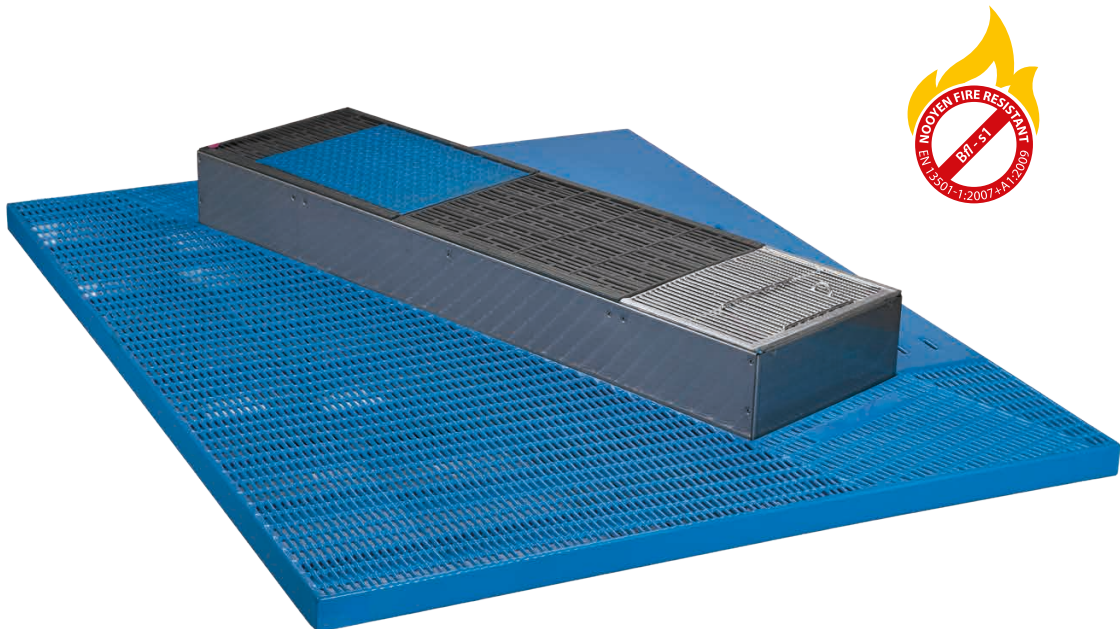
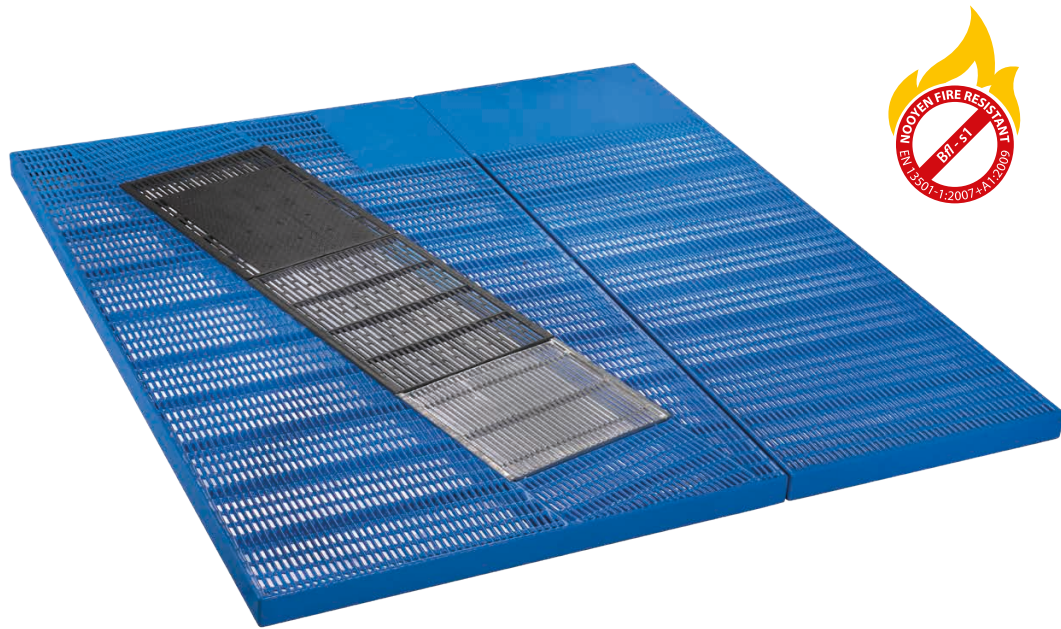
Farrowing crate for more hygiene and animal welfaren

Animal welfare is a key focus area in European legislation and regulations. In traditional pig farming this translates into a focus on free roaming for the sow in the farrowing pen. Nooyen Pig Flooring has a lot of experience with a farrowing pen in which the sow crate is loose and has a lot of freedom of movement andat the same time the risk of piglet mortality is reduced to a minimum.

HYGIENE
The high-quality Super Coated frame is the answer to the need for maximum hygiene and optimum animal welfare.

ANIMAL WELFARE
After one week the farrowing crate is opened and this creates a spacious (> 6 m²) farrowing pen.

EFFICIENCY
Smart investment anticipating on future developments with the possibility of easy conversion from 3 into 2 farrowing pens.



WELLFARROWING
BY NOOYEN



WELLFARROWING

Loose housing without reducing your technical results!

The WellFarrowing farrowing pen from Nooyen is the only free farrowing pen with no reduction in results. WellFarrowing offers the advantages of freedom of movement with maximum results thanks to the built-in Balance floor and delivers improved animal welfare for both the sow and the piglets.

FEWER CRUSHINGS
The new WellFarrowing farrowing pen provides better animal welfare and a higher return on investment. With the built-in Balance floor, the survival rate of newborn piglets is maximised and crushing of piglets is minimized. Once the sow lies down, the height difference is gone and allows the piglets to drink at their mother safely and undisturbed.

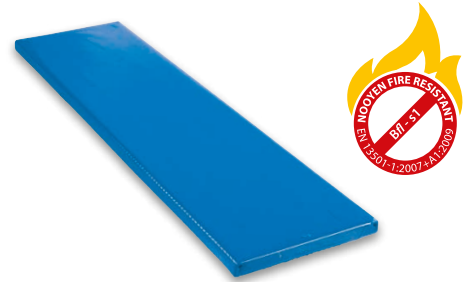
INCREASED HYGIENE AND QUALITY OF LIFE
With WellFarrowing, hygiene and quality of life go hand in hand. Sows can walk around freely on a steel grid with soft coating, which offers sufficient grip. This grid optimises the removal of manure and hygiene is guaranteed. On the soft, coated floor, the piglets will not damage their knees and nipples. Piglets remain healthy and there is a reduced risk for infections. WellFarrowing ensures maximum results.

| NOOYEN WELLFARROWING | |
|----------------------|---|
| Material | Super Coated steel |
| Fire safety | Nooyen Fire Resistant: Fire classification EN 13501-1:2007+ A1: 2009 (Bfl - s1) |
| Hygiene | The high-quality Super Coated frame, in combination with an optimal removal of manure, contributes to maximum hygiene |
| Animal welfare | <ul style="list-style-type: none">▶ After a week, the farrowing crate will be opened and this creates a spacious area for the sow▶ The soft coating contributes to animal welfare and a reduction in antibiotics▶ The survival rate of newborn piglets is maximised by the Balance system |
| Return | <ul style="list-style-type: none">▶ The only free farrowing pen with no reduction in results▶ Smart investment: easy to convert from 3 to 2 farrowing pens |

LYING AREAS FOR PIGLETS

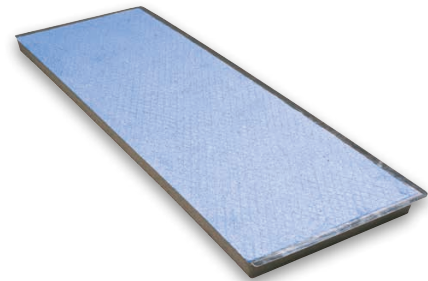
With integrated heating system

Nooyen offers a comprehensive range of lying areas for piglets in the farrowing pen. These lying areas can be equipped with an integrated heating system and are characterised by their optimal grip and comfort levels



SUPER COATED PANEL

- ▶ Integrated in the Super Coated slatted floor: no joints;
- ▶ Also available as removable model;
- ▶ Water heated;
- ▶ Comfortable: coating feels warm;
- ▶ Hygienic: easy to clean;
- ▶ Optional insulation.



POLYMER CONCRETE SOLID AREA

- ▶ Standard insulated;
- ▶ Good grip;
- ▶ Long life span;
- ▶ Low entry temperature;
- ▶ High pipe density gives good distribution across the panel.



WATER BATH HEATED PLATE

- ▶ Manufactured from solid plastic;
- ▶ Profile gives good grip;
- ▶ Hygienic: easy to clean;
- ▶ Standard insulated.



POLYMER CONCRETE SOLID AREA WITH STAINLESS STEEL TOP PANEL

- ▶ Standard insulated;
- ▶ Hygienic: easy to clean;
- ▶ Long life span;
- ▶ Low entry temperature;
- ▶ High pipe density gives good distribution across the panel.



RUBBER FLOOR

- ▶ Water-heated rubber heating plate with nubs;
- ▶ Optimum grip.



ALUMINIUM SOLID AREA

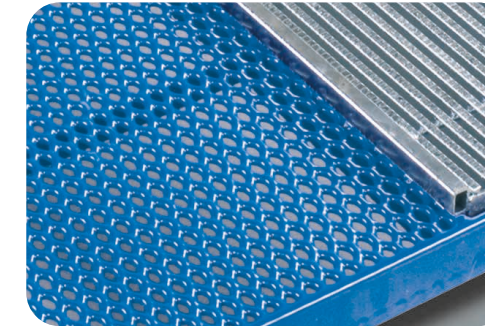
- ▶ Standard insulated;
- ▶ Good grip thanks to tear shaped profile;
- ▶ Low entry temperature;
- ▶ Aluminium pipe under the panel ensures maximum heat transfer;
- ▶ Excellent distribution of heat across the panel.

TRI-BAR AND TRI-CAST SOW INSERTS

Tri-Bar inserts for perfect hygiene - Tri-Cast inserts for reliability and durability



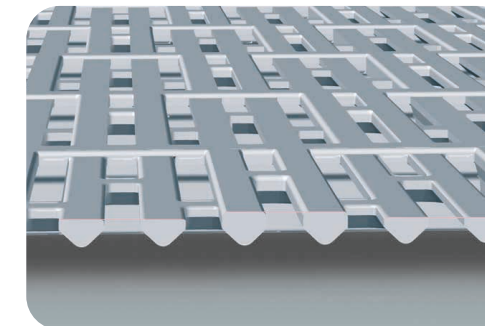
- ▶ U-Noslip provides optimal grip for the sow.



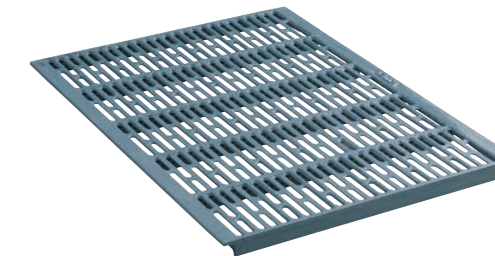
- ▶ Raised sow slat



- ▶ Level sow slat.



- ▶ Tri-Cast: anti slip standing surface thanks to high-low profile.



- ▶ Tri-Cast sow insert without shoulder plate.

In the farrowing pen, the sow can be positioned in a straight or in a diagonal position. The slatted floor under the sow can be provided at the same level as the piglet slats or in an lifted position. With lifted sow slats, a passage for the piglets is possible in the front and the back.

The inserts under the sow can be made of Tri-Bar or Tri-Cast. A combination of different inserts is also possible.

Tri-Bar sow inserts

The **V-shaped bars** of the Nooyen steel Tri-Bar slatted floors ensure a **perfect drain of manure** and, consequently, **excellent hygiene**. Because of their flat tops, Tri-Bar slats have an **optimal standing surface** and offer **outstanding lying comfort**.

The Tri-Bar sow slats are available with 10 or 12 mm width bar in combination with 10 mm slot. An alternative option is a steel round profile with 10 mm width bar or slot.

TRI-BAR ADDITIONAL OPTIONS:

- ▶ Equipped with shoulder plate for extra sow comfort.
- ▶ Equipped with a Hotpipe behind the sow, for a warm reception of newly-born piglets.
- ▶ Equipped with a manure opening or manure hatch that tilts upwards or downwards.

Tri-Cast sow inserts

The Tri-Cast slatted floor is a reliable cast-iron floor system made of high-quality Australian cast-iron. The Tri-Cast slats are **strong, ductile** and, especially, **durable**, and have a **good drain of manure** thanks to the **V-shaped bar**. The Tri-Cast insert under the sow is available in various standard sizes

TRI-CAST ADDITIONAL OPTION:

- ▶ Equipped with shoulder plate and/or cooling for extra sow comfort..

COOL SOW SYSTEM

Floor cooling for lactating sows

Creating a warm zone for piglets and a cool zone for the sow is essential for the performance in the farrowing pen. Precisely for this application, Nooyen has developed a sow slat with floor cooling: the Cool Sow System.

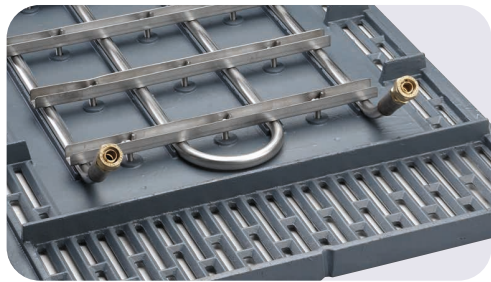
The Wageningen University (WUR) has performed two years of research into the effects of floor cooling under lactating sows. The research shows that sows housed in a farrowing pen with floor cooling have a higher feed intake. The sow losses less weight, leaves the farrowing pen in a better condition which results in a full extra piglet in the next litter. More feed intake for the sow means also more milk for the piglets and results a higher weaning weight. The financial advantage of the system has been calculated to be **60 euro per farrowing pen/year**.

Floor cooling works most effectively when used with cast iron slats with a shoulder plate. The optimal temperature of the water used for cooling is 21 degrees Celsius.

| BENEFITS COOL SOW SYSTEM | |
|--|------------------|
| Higher feed intake by sow during lactation | + 0,3 kg/sow/day |
| Less treated piglets | - 2,3% |
| Less mortality after weaning | - 2,4% |
| Increased weight piglets after weaning | + 0,4 kg |
| More piglets in following litter | + 1,0 |

Source: Wageningen University & Research Centre, The Netherlands

- ▶ Higher thermal comfort for the sow
- ▶ Increasing animal well-being
- ▶ No summer dip
- ▶ High ROI



▶ Tri-Cast sow insert with the Cool Sow System.

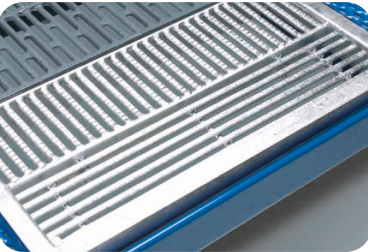


▶ Cool water flows through a stainless steel tube underneath the slat.

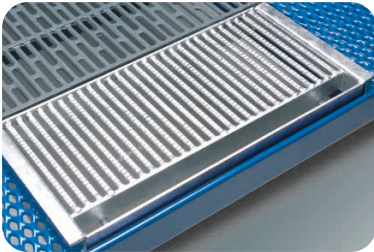
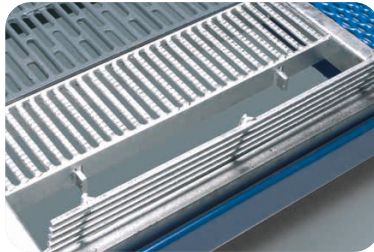
MANURE DRAIN BEHIND THE SOW

For perfect hygiene in the farrowing pen

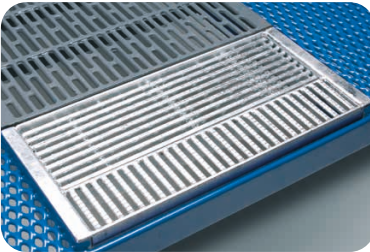
Nooyen offers many possibilities for manure drainage behind the sow in the farrowing crate. The use of a removable, tilting manure hatch or the choice of a manure opening ensure perfect hygiene in the farrowing crate.



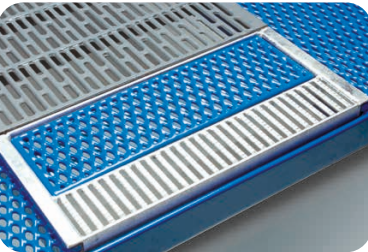
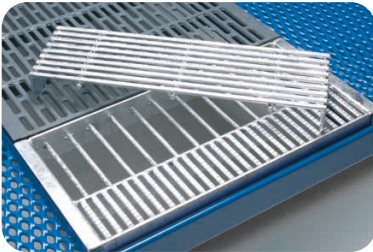
▶ Tri-Bar tilting manure hatch.



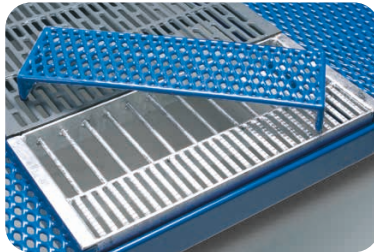
▶ Manure opening 40 mm.



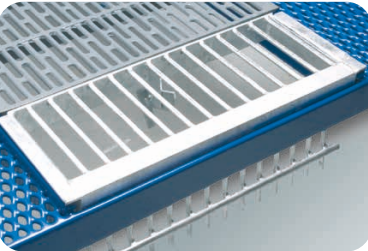
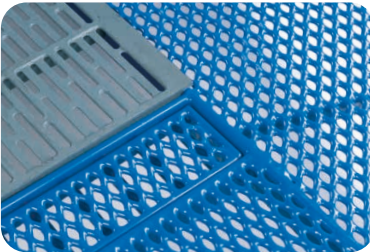
▶ Tri-Bar manure slat with removable Tri-Bar insert.



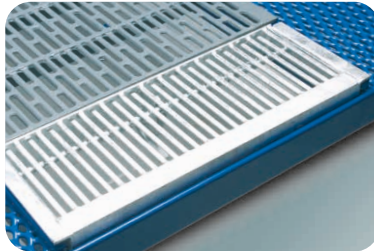
▶ Tri-Bar manure slat with removable Super Coated insert, made of expanded metal.



▶ Super Coated manure slat with removable Super Coated insert, made of expanded metal. Alternative option: Tri-Bar insert.



▶ Tri-Bar Turnable manure hatch downwards.



▶ Galvanised manure opening with insert.



▶ Coated manure opening with insert.

TRI-BAR SOW SLAT

For individual sows or group housing

The **V-shaped bars** of the Nooyen steel Tri-Bar slatted floors ensure a **perfect manure drainage** and, consequently, **excellent hygiene**. This gives the flooring system an ammonia reducing effect. Because of their flat tops, Tri-Bar slats have an optimal standing surface and offer outstanding lying comfort.

Tri-Bar is available as a self-supporting construction and is easy to install in a standard position or in a combined position (parallel to the passage) with a steel support. In the standard position, self-supporting spans are possible up to 3,000 mm. The optimal seating is 25 mm.

For pens housing gestation sows, an option is a self-supporting Tri-Bar floor system installed over the width above the manure channel. Angle irons are used to install the slats on the edges of the pit. By using the centre-to-centre dimension of the pens, these angle irons fall precisely under the side fences, creating no obstacle for the sows.

The Tri-Bar floor system for individually housed sows is fitted as standard with a 120mm. tilting manure hatch positioned at the back. Another option is a complete Tri-Bar slatted floor.

The steel Tri-Bar slatted floor for gestation sows is available with 15 mm width bar in combination with 12 or 15 mm slots.

ADDITIONAL OPTION:

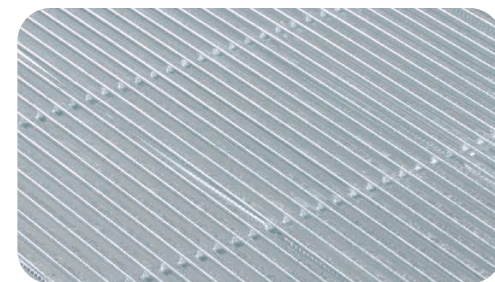
- ▶ Tri-Bar slats can be installed at any required height by using strips welded against or under the Tri-Bar.
- ▶ Same for angle irons.



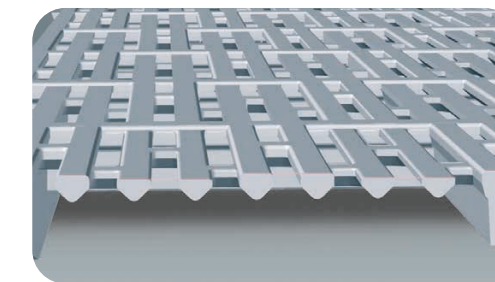
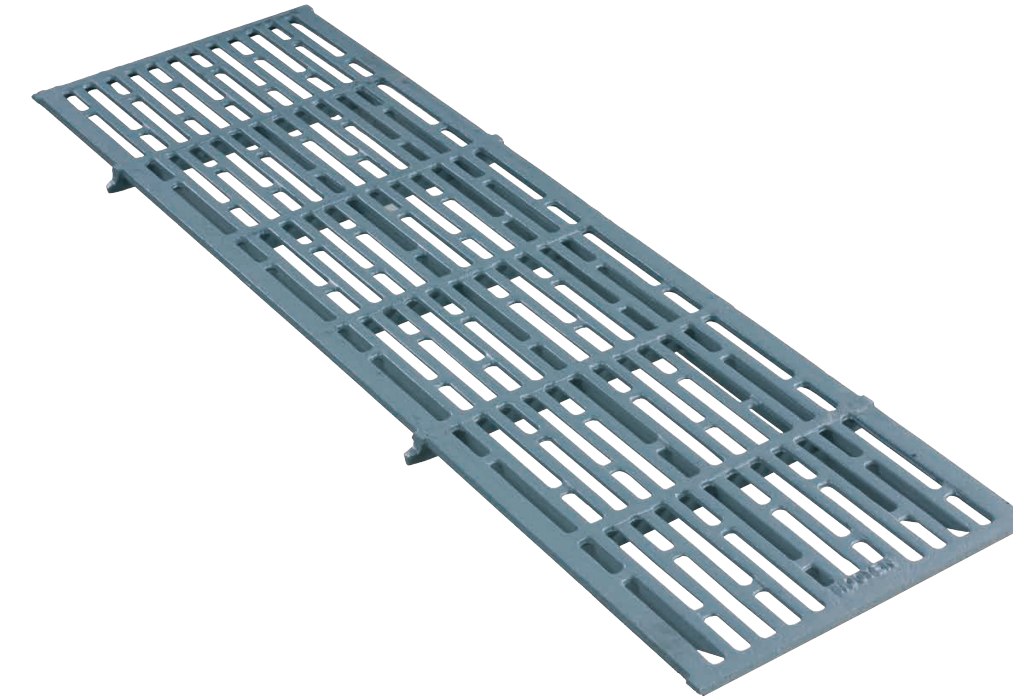
- ▶ Slatted floor for gestation sows with open, tilting manure hatch.



- ▶ The Tri-Bar slats for gestation sows come standard with extra profile: Softgrip.



- ▶ Tri-Bar equipped with a strip welded against the Tri-Bar.



- ▶ Anti-slip standing surface thanks to alternate high-low profile and optimal manure drainage thanks to the V-shaped bars.

TRI-CAST SOW SLAT

For individual or group housing

The Tri-Cast slat is a reliable cast-iron floor system for gestation sows. The slats are available in various standard lengths up to 2,000 mm and are self supporting. The Tri-Cast slats are made of high-quality Australian cast-iron and are **strong, ductile** and, especially **durable**.

The V-shaped bars in the Tri-Cast slat give excellent **manure drainage** and therefore reduce ammonia. Moreover, the surface is **easy to clean**. These factors ensure **excellent hygiene**.

An alternating **high-low profile** creates a **perfect anti slip standing surface** for the sows. Tri-Cast slats offer **optimal lying comfort**.

The Tri-Cast slats for sows have 15 mm standard bar and slot widths. The slats are available in various standard lengths.

The slatted floor is **easy to install** in a standard position or a combined position (parallel to the passage) with a steel support. The optimal standard seating is 25 mm. For deviating pit dimensions, slatted floors can be customised lengthwise and widthwise.

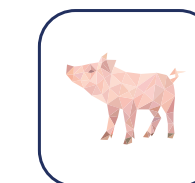
Like Tri-Bar slatted floors, Tri-Cast slatted floor systems can be combined perfectly with solid concrete areas.



- ▶ Side lips ensure a good connection of the slatted floors.



SLATTED FLOOR SYSTEMS FOR PIGLET REARING



Piglets are extra sensitive immediately after weaning. Good and easy to clean housing allows you to ease the transition, and this helps prevent a weaning dip. For piglet rearing, Nooyen offers super-coated plastic, Tri-Bar or Tri-Cast gratings, or a combination, and with the option of partly concrete.

BLUE DECK PIGLET SLAT

The comfortable solid plastic slat

The Blue Deck slats are solid plastic slats, developed for piglets of up to 50 kilos. The **V-shape and rounded top of the bars** ensure a **perfect manure drainage** and an **easy to clean surface**. This means **optimal hygiene**. The extra elevations on the slatted floor provide **comfort** and **good grip** for the piglets. This results in a good development of the piglets' legs. The Blue Deck slats can be combined perfectly with the Tri-Bar slats to control the piglets' dunging behaviour even better.

The Blue Deck slats are **easy to install**. Steel galvanised or glass fibre strips can be used for the support. As the galvanised base strips can be equipped with a bridge construction, large self-supporting spans are possible. Another option is a height-adjustable plastic support leg.

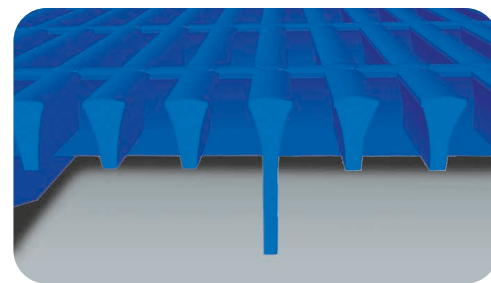
The standard size of the slatted floor is 600 x 600 mm or 600 x 800 mm. If necessary, the floors can be customised lengthwise and widthwise.

ADDITIONAL OPTIONS:

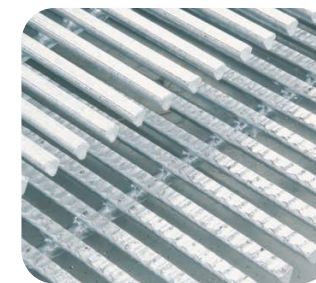
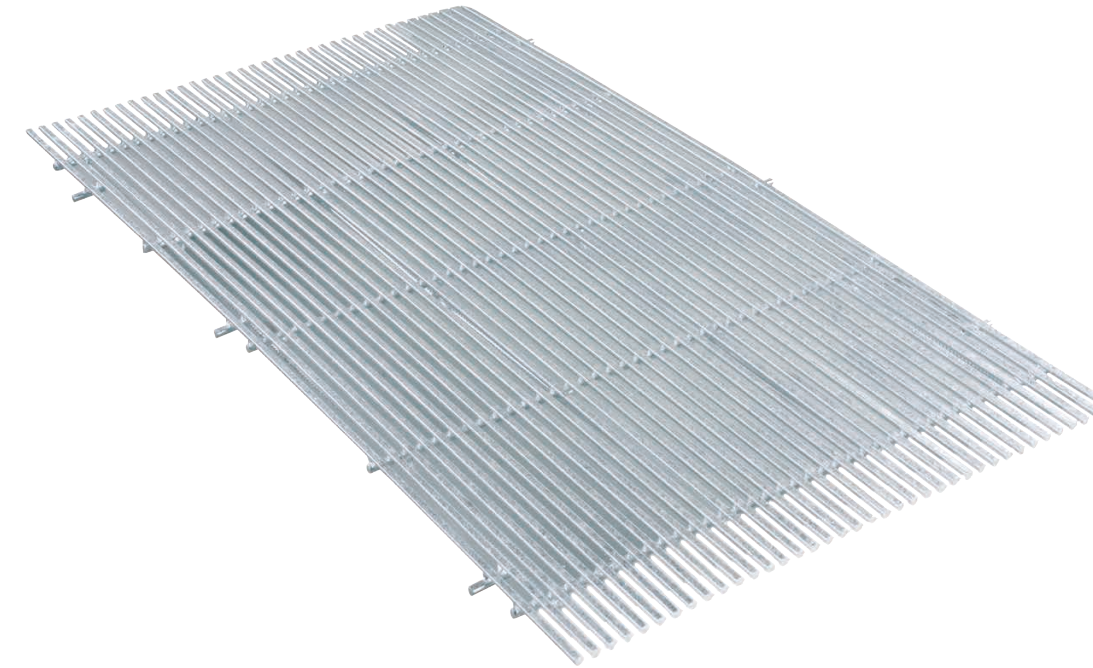
- ▶ The Blue Deck slatted floor is also available as a model with a 100% solid area.
- ▶ The galvanised support strips can be equipped, for instance, with a wall plate, an angle iron or a round pin. This offers additional installation options.



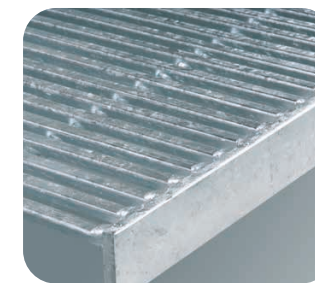
▶ Extra elevations on the slats ensure good grip.



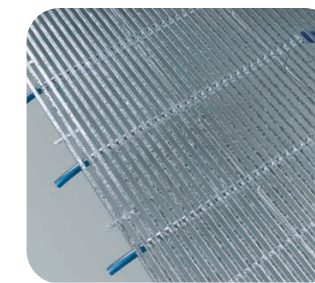
▶ Optimal drain of manure and cleaning thanks to V-shape and rounded top of the bars.



▶ Tri-Bar is available in a flat model or a model with extra profile: Softgrip.



▶ Tri-Bar equipped with a strip welded against the Tri-Bar.



▶ Hotpipe slatted floor.

TRI-BAR PIGLET SLAT

The V-shaped slat for perfect hygiene

The **V-shaped bars** of the Nooyen steel Tri-Bar slatted floors ensure a **perfect manure drainage** and, consequently, **excellent hygiene**. This gives the flooring system an ammonia reducing effect. Because of their flat tops, Tri-Bar slats have an **optimal standing surface** and offer **outstanding lying comfort**.

Tri-Bar is available as a self-supporting or non self-supporting construction and is easy to install in a standard position or in a combined position (parallel to the passage) with steel support. Tri-Bar is available in various standard lengths – increasing per 100 mm. Different lengths are available on request. The Tri-Bar slatted floors can be equipped, for instance, with a heating system: the Hotpipe slatted floor or de heated convex panel slats.

The steel Tri-Bar slats are available with 10 mm width bar in combination with 8, 10 or 12 mm slots. Another option is 12 mm width bar in combination with 10 of 12 mm slots.

An alternative option for Tri-Bar is a steel round profile with 10 mm width bar in combination with a 10 mm slot.

ADDITIONAL OPTIONS:

- ▶ Tri-Bar slats can be installed at any required height using strips welded against or under the Tri-Bar or angle irons.
- ▶ Tri-Bar slatted floors can be equipped with a manure opening..
- ▶ Tri-Bar slats can be combined perfectly with Blue Deck or Super Coated slats.

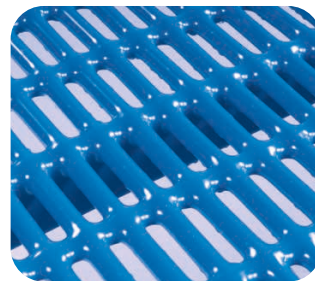
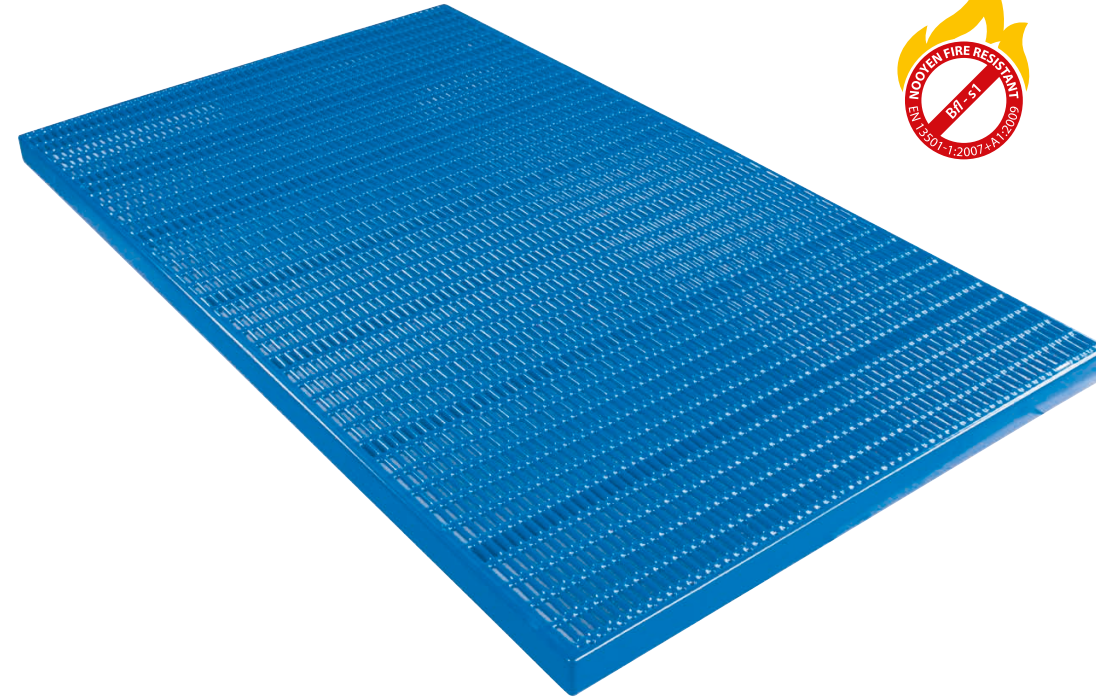
SUPER COATED PIGLET SLATS

The animal-friendly, coated slat for optimal comfort

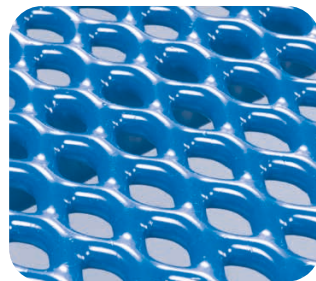
The Super Coated slatted floor for weaning is an animal-friendly floor system for piglets. The slats are made of expanded metal or woven wire, equipped with a **qualitatively excellent coating**. This coating ensures **optimal comfort** for the piglets because it feels warm and soft. The Super Coated slats are available as a self-supporting construction. Dimensions can be produced according customer requirements. The Super Coated slats can be combined perfectly with the Tri-Bar slats to control the piglets' dunging behaviour even better.

ADDITIONAL OPTIONS:

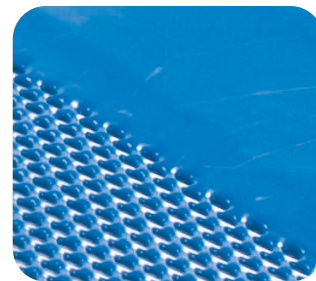
- ▶ Super Coated slats for weaners can be fitted with a solid area and, if necessary, with an integrated heating system.
- ▶ Super Coated slats for weaners are also available as separate coated panels that can be installed on a steel frame.



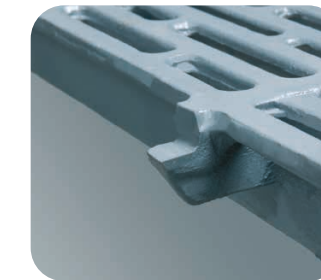
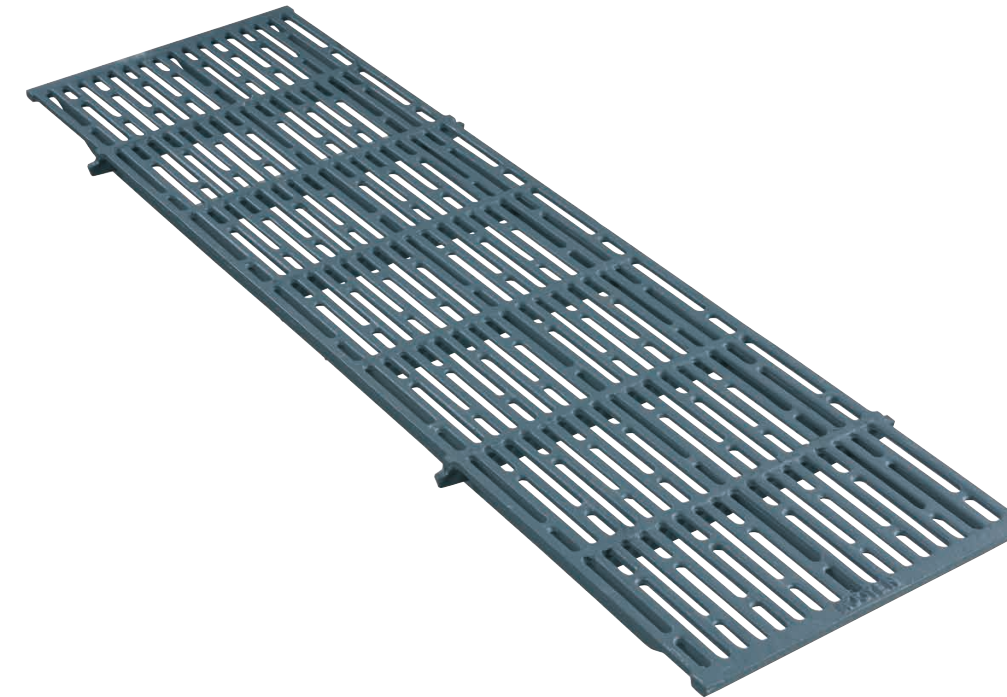
▶ Super Coated woven wire.



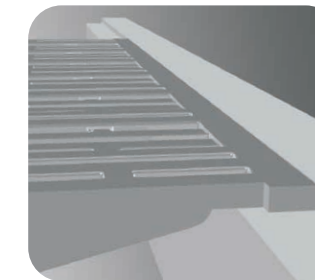
▶ Super Coated expanded metal.



▶ Super Coated weaner slat with solid area, equipped with an integrated heating system.



▶ Side lips ensure a good connection of the slatted floors.



▶ Optimal standard seating: 25 mm

TRI-CAST PIGLET SLAT

A reliable and durable cast-iron slatted floor

Tri-Cast slats are a reliable cast-iron floor system for weaning. The Tri-Cast slats are made of high-quality Australian cast-iron and are **strong, ductile** and, especially, **durable**.

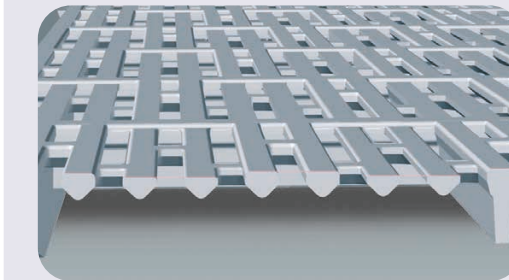
The V-shaped bars in the Tri-Cast slat give excellent **manure drainage** and therefore reduction of ammonia. Moreover, the surface is **easy to clean**. These factors ensure **excellent hygiene**.

An alternating **high-low profile** creates a **perfect anti slip standing surface** for the sows. Tri-Cast slats offer **optimal lying comfort**.

Tri-Cast slats for weaners have standard 12.5 mm width bar and 10 mm width slot. The slats are available in various standard lengths up to 2,000 mm. self supporting. The slatted floor is **easy to install** in a standard position or a combined position (parallel to the passage) with a steel support. For deviating pit dimensions, slatted floors can be customised lengthwise and widthwise.

ADDITIONAL OPTION:

- ▶ Tri-Cast slatted floors in combi-position can be equipped with a manure opening.

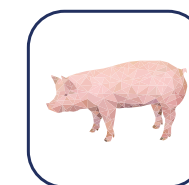


▶ Anti-slip standing surface thanks to alternate high-low profile and optimal manure drainage thanks to the V-shaped bars.





SLATTED FLOOR SYSTEMS FOR FATTENERS



Tri-Bar or Tri-Cast gratings ensure nice clean fatteners and reduce pathogen pressure. Poly Deck composite gratings offer extra hygiene due to the dense structure of the gratings. And the Second Floor significantly increases the living space for the fatteners.

POLY DECK QUALITY COMPOSITE

Provides your animals the perfect support

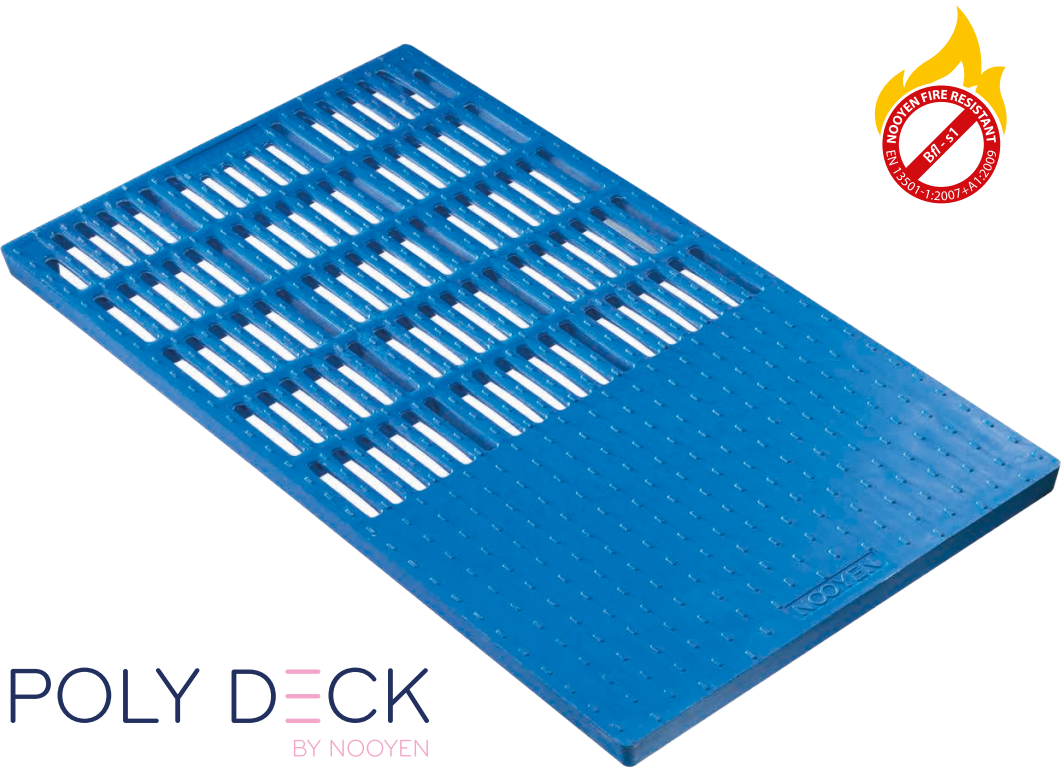
The Nooyen Poly Deck is a polymer composite grid floor, suitable for piglets and fatteners.

The Poly Deck grid floor is particularly hygienic thanks to the closely spaced structure of the material and the open layout. The floors are also available with a closed area.

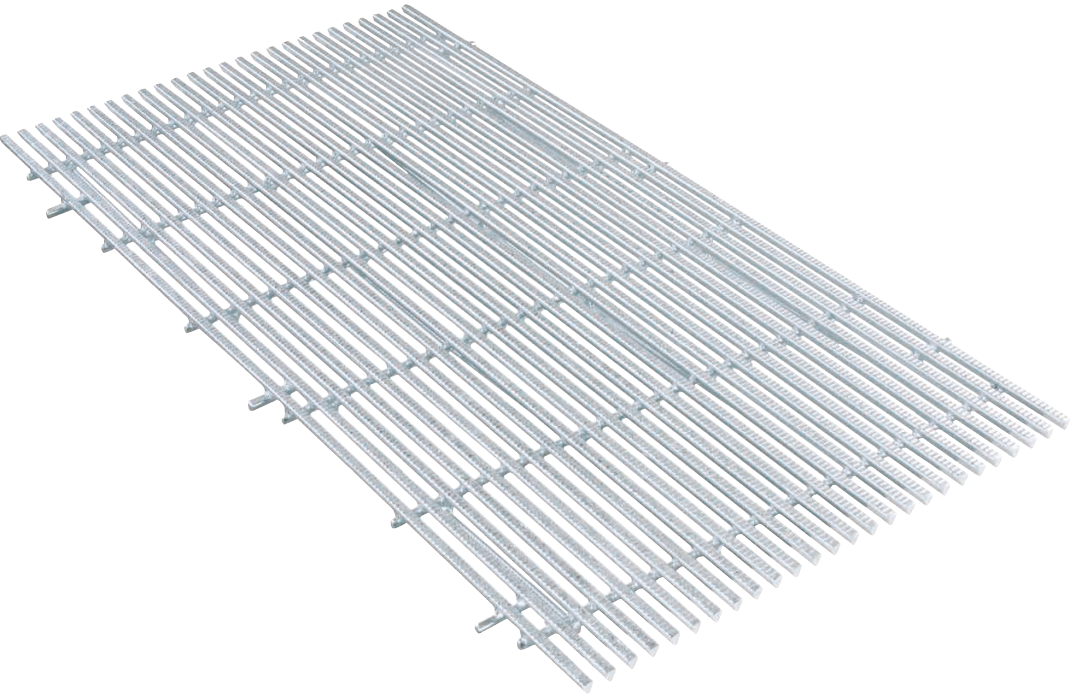
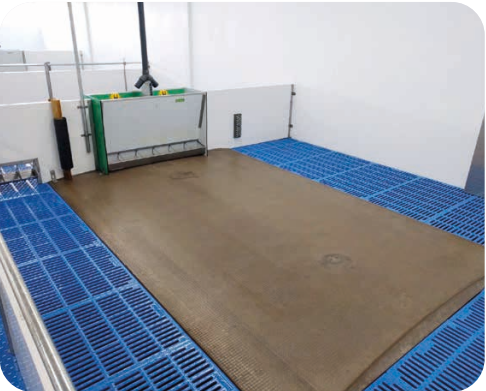
PERFECT SUPPORT, GRIP AND HYGIENE
Piglets and fatteners have perfect support and grip thanks to the unique shape of the grid. Removal of manure is outstanding due to the open layout.

These grid floors with closely-spaced structure are completely water resistant and are therefore easy to clean. The polymer composite is self-supporting up to 2000 mm, thanks to the steel reinforcement, does not rust and has better resistance to acid than concrete.

| NOOYEN POLY DECK | |
|-----------------------------|--|
| Material | Reinforced polymer composite |
| Reinforcement | Featuring steel reinforcement |
| Profile | Triangle shape with slightly curved top side (grid never remains wet) and anti-slip |
| Fire safety | Nooyen Fire Resistant |
| Characteristics/ advantages | <ul style="list-style-type: none">▶ Available for piglets and fatteners▶ Does not rust, fire resistant▶ Better resistance to acid than concrete▶ Does not absorb water▶ Self-supporting up to 2000 mm▶ Closely spaced structure for maximum hygiene▶ Outstanding removal of manure thanks to open layout▶ Available in various sizes▶ With smooth sides and good grip for your animals▶ Also available with a closed area |



POLY DECK
BY NOOYEN



TRI-BAR FATTENER SLAT

The V-shaped slat for perfect hygiene

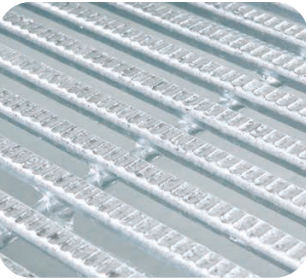
The **V-shaped bars** of the Nooyen steel Tri-Bar slatted floors ensure a **perfect drain of manure** and, consequently, **excellent hygiene**. This gives the flooring system an ammonia reducing effect. Because of their flat tops, Tri-Bar slats have an **optimal standing surface** and offer **outstanding lying comfort**.

Tri-Bar is available as a self-supporting construction and is **easy to install** in a standard position or in a combined position (parallel to the passage) with a steel support. In the standard position, self-supporting spans are possible up to 3,000 mm. Tri-Bar is available in various standard lengths. Different lengths are available on request. Tri-Bar slat systems can be combined perfectly with a solid concrete area.

The steel Tri-Bar slats for fatteners are available with 12 or 15 mm width bar in combination with 12 or 15 mm width slots. The optimal standard seating is 25 mm.

ADDITIONAL OPTIONS:

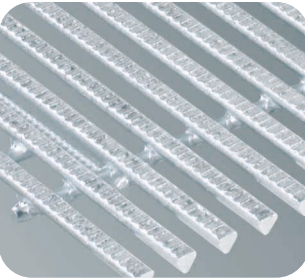
- ▶ Tri-Bar slats can be installed at any required height using strips welded against or under the Tri-Bar or angle irons.
- ▶ Tri-Bar slats for fatteners are available with a manure opening.



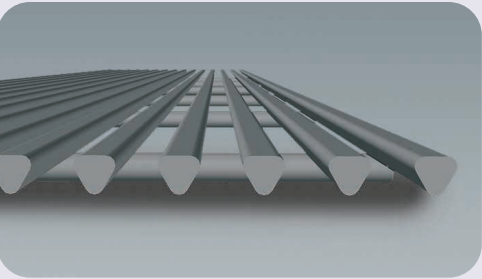
▶ Tri-Bar slats for fatteners come standard with an extra profile: Softgrip.



▶ An alternative option for Tri-Bar is a steel round profile with 12 mm width bar and slot.



▶ Side pins ensure a good connection of the slatted floors..



▶ Optimal manure drainage and hygiene thanks to the V-shaped bars with rounded edges

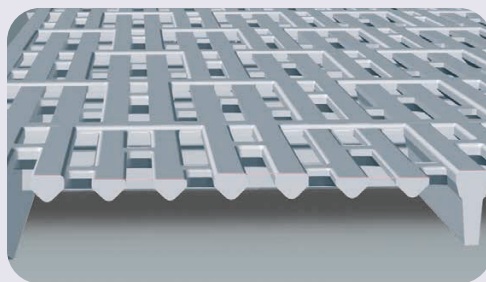
TRI-CAST FATTENER SLAT

A reliable and durable cast-iron slatted floor

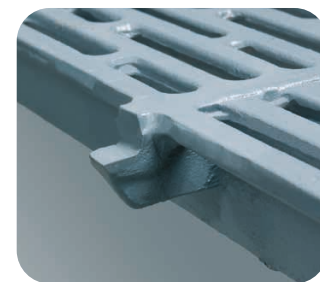
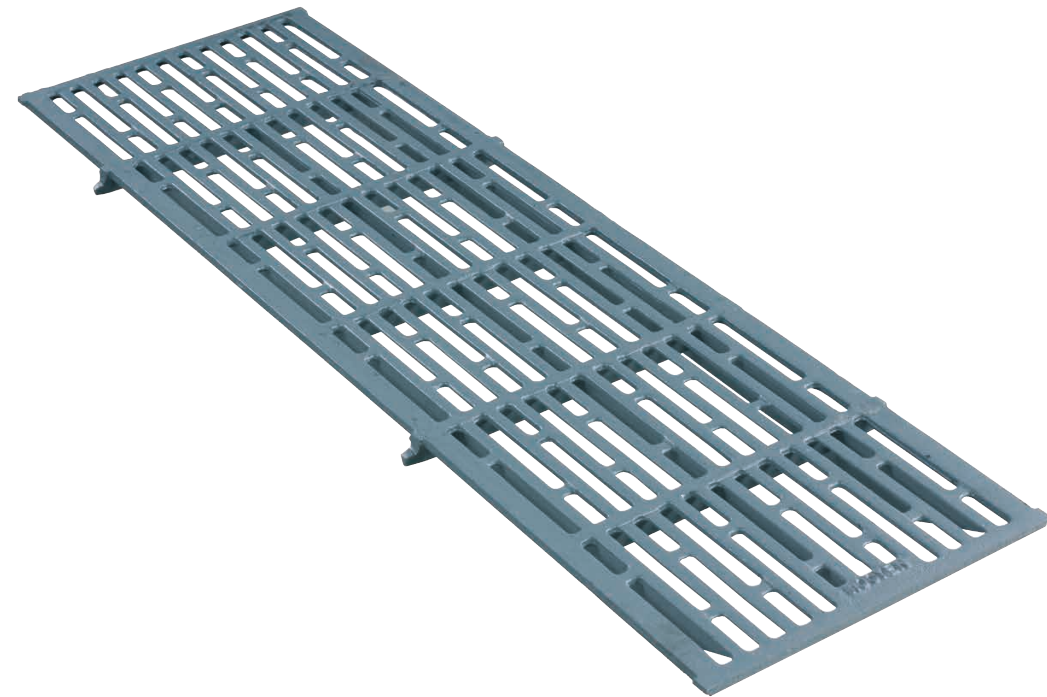
Tri-Cast slats are a reliable cast-iron floor system for fatteners. The Tri-Cast slats are made of high-quality Australian cast-iron and are **strong, ductile** and, especially, **durable**. The V-shaped bars in the Tri-Cast slat give excellent **manure drainage** and therefore reduction of ammonia. Moreover, the surface is **easy to clean**. These factors ensure excellent hygiene. The alternating high-low profile creates a **perfect anti slip standing surface** for the fatteners. Tri-Cast slats offer **optimal lying comfort**.

Tri-Cast slats for fatteners have standard 15 mm width bar and slot. The slats are available in various standard lengths up to 2,000 mm. self supporting. The slatted floor is **easy to install** in a standard position or a combined position (parallel to the passage) with a steel support. The optimal standard seating is 25 mm. For deviating pit dimensions, slatted floors can be customised lengthwise and widthwise.

Like Tri-Bar slatted floors, Tri-Cast slatted floor systems can be combined perfectly with solid concrete areas.



▶ Anti-slip standing surface thanks to alternate high-low profile and optimal manure drainage thanks to the V-shaped bars.



▶ Side lips ensure a good connection of the slatted floors.

SECOND FLOOR

For weaned piglets and fatteners



SECOND FLOOR BY NOOYEN



The pig pen with second-floor is one of the ways to improve the welfare of pigs. It increases the living area of the pigs by 25-40% and also offers room for all kinds of pen enrichments. The pigs have two living levels: one on the ground floor and one on the second floor. The pigs can easily walk up to and down from the second floor via a ramp.

BENEFITS

- ▶ Increasing animal welfare by choice of living and playing area.
- ▶ Easy to clean thanks to folding second floor & ramp.
- ▶ Economically profitable and quickly implemented, also in existing sections.

APPLICATION

- ▶ Weaned piglets.
- ▶ Fatteners.

VERSIONS

- ▶ Complete slat made of steel or plastic.
- ▶ Closed section option
- ▶ Manure slit on the wall side to prevent manure accumulation
- ▶ Completely self-supporting or supported by pen walling.

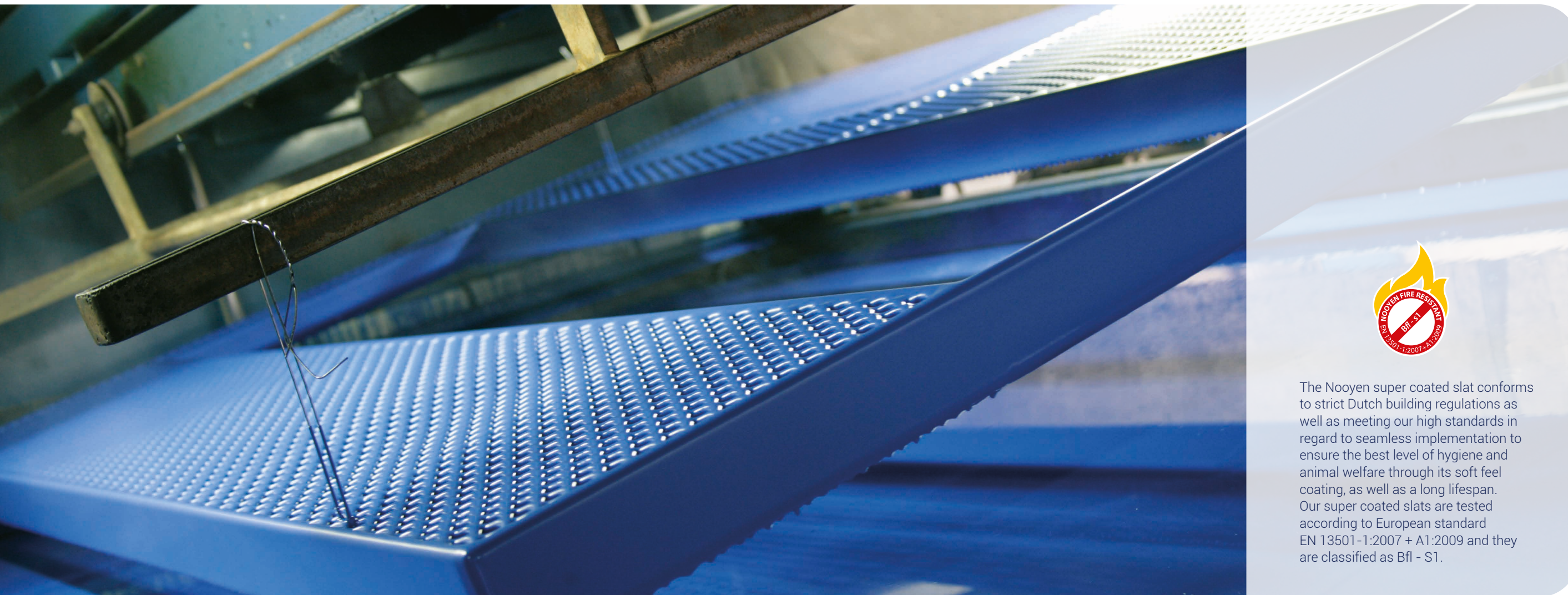
Animal welfare

Animal welfare takes central stage with the second-floor pen, where the greater available living area per pig is the focal point for animal-friendly produced pork and it complies with the 'Better Life' quality mark' requirements.

Efficiency

In practice, the fatteners are making good use of the second floor. Piglets and fatteners learn quickly and in average 95% of the pigs go to the second floor. There is no effect on health and technical results. There are, however, indications of less aggression (for example tail biting).





The Nooyen super coated slat conforms to strict Dutch building regulations as well as meeting our high standards in regard to seamless implementation to ensure the best level of hygiene and animal welfare through its soft feel coating, as well as a long lifespan. Our super coated slats are tested according to European standard EN 13501-1:2007 + A1:2009 and they are classified as Bfl - S1.

NOOYEN SUPER COATED FOR MORE COMFORT

The Nooyen super coated slat offers optimum comfort and hygiene. This high quality coating feels soft and warm, and it prevents leg and feet injuries. This ensures that the Nooyen super coated grid offers improved animal welfare and leads to better results.

NOOYEN PIG FLOORING

Quality guaranteed

Quality is the number one priority with Nooyen. Many years of experience in the field of slatted floor systems enables Nooyen to continually improve their product range. This is an important condition to be able to optimal anticipate the requirements of pig farmers and further consolidate the market position.

In addition to quality, Nooyen naturally attaches great value to sharp price levels. This is partly achieved by a great extent of standardisation of products and dimensions. Additionally, custom-made equipment remains important.

SUPER COATED

Prior to and during the coating process, various quality inspections are conducted in order to guarantee optimal quality and a long life span of the coated slats. For instance, the pH-value of the primer is measured and the viscosity – or the degree of fluidity – of the coating is determined. A coating hardness tester is used to determine the hardness of the coating. This measurement is conducted before treating the slatted floor with a salt solution.

Finally, testing samples are used to carry out a mechanical tensile test. Via this test, the flexibility of the coating is tested. After the tensile test, the sample is checked using a microscope, so that optimal adhesion of the coating to the steel can be guaranteed.

TRI-BAR

Nooyen aims for a long, durable life of its Tri-Bar slatted floor by using high resistant steel instead of standard reinforcing steel (FeB 500) High resistant steel is a high quality alloy with a high nickel, chromium and copper content and a specific amount of silicon. Compared with standard reinforcing steel, high resistant steel has a high accurate, and therefore consistent, composition. The steel is cold formed and thermally galvanised. The zinc coating has an average thickness of 100 to 130 micron. As high resistant steel can be coated with more zinc than standard reinforced steel, it has a longer lifetime. Thanks to the use of high resistant steel, the quality of the slatted floors marketed by Nooyen far exceeds NEN-EN-ISO 1461 standards.

TRI-CAST

Nooyen Tri-Cast slats are made of a qualitatively excellent casting mixture: Ductile casting (EN-GJS-400-15). Thanks to the lamellar structure of the iron molecules and the high viscosity of this mixture, the material is impact-resistant and highly ductile. This means that Tri-Cast can withstand a 5 percent bend without any problems.

BLUE DECK

The Blue Deck slats are made of environmental-friendly⁽¹⁾ and recyclable first-generation cadmium-free polypropylene. Polypropylene is a thermoplastic polymer with a very wide range of applications. This material group consists of linear macromolecules without cross links. The application of thermoplasts has big advantages because softened materials can easily be formed into the required shape and can also easily be reused. Blue Deck slatted floors are also highly resistant to chemical solutions, bases and acids.

(1) Knowledge 2019





INNOV△TORS BY TR△DITION

Nooyen Pig Flooring

T +31 (0)493 31 68 60
F +31 (0)493 31 10 07

E sales@nooyen.com
I www.nooyenpigflooring.com

