

Performance Delivered



Made in
England



The 8 Reasons Why A Dudson
Plate Is Made To Last

Intro

The Dudson ceramic body is industrially tough, we blend centuries of experience with cutting edge technology and design innovation to produce one of the strongest ceramic bodies in the world.

Dudson is a heritage brand dating back to 1800, and to this day is still made by renowned potters in Stoke on Trent, the world capital of ceramics. Every step in the process is practised and refined. From the sourcing of raw materials and unique formulation of the clay body, to shape engineering and numerous quality checks ensuring that Dudson products work as hard as you do. This brochure outlines the many reasons why Dudson products are made to last.

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8 REASONS WHY A DUDSON PLATE IS MADE TO LAST



SCIENCE, ENGINEERING, EXPERTISE

01

Performance Materials

Our unique clay recipe is essential in creating a strong and durable product for the hospitality industry. Our raw materials are selected to deliver the optimum balance of strength and whiteness.

UK Clay Source

Our clay comes from Devon and Cornwall in the UK and we work closely with our suppliers to ensure continuity of supply. Geologically there is over 100 years worth of supply at our clay source.



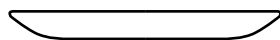
DID YOU KNOW?

Six tests are performed on our raw materials giving us a thorough understanding of the clay, this ensures predictability, consistency and performance.

Added Alumina

Alumina or Aluminium Oxide is the chemical compound of aluminium and oxygen with the chemical formula Al_2O_3 . Alumina adds superior strength and whiteness and has shock absorbent qualities that combined with other components improves the products performance in use.

TECHNICAL FACTS



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Classifications of Raw Materials

Alumina

Adds Strength, Shock Absorbency and Whiteness

China Clay

Adds Whiteness

Ball Clay

Adds Elasticity and Flexibility

Fillers & Fluxes

Occupies the Space Between Particles, Aiding Vitrification



Alumina Strength

The Alumina that goes into our clay body to add strength and shock absorbency comes from Bauxite Rock, the mineral used to make aluminium.

02

Engineered Shape & Form

Every piece of Dudson's ceramic is designed with performance in mind. Through expert shape engineering, we reinforce strength and durability while continual investment in technology guarantees functionality and consistent quality.



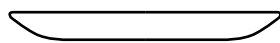
Engineered Balance

A combination of extensive industry knowledge and continual investment in leading manufacturing technology ensures the product is kept at an optimum weight for both functionality and durability.

Weight is reduced where possible.

Weight added to potential impact areas provides greater strength.

TECHNICAL FACTS



Less than 10cm

The average height of key tableware coupe shapes when 12 are stacked.

ASTM
C368

International
Standard
Impact resistance of
ceramic tableware

BS EN
12980

British Standard
European Approved
Determination of Impact
Resistance



DID YOU KNOW?

100% of unused
clay is recovered
and recycled



Innovation & Robots

Innovation in machinery and robotics gives us the capability to create innovative shapes and large pieces.

Consistency

The technology used to form our products ensures consistency in size and weight allowing pieces to be stacked back of house using less space and reducing breakages.

Finishing

Edges are sponged to create a round, smooth finish which is less vulnerable to chipping.



03

Vitrification & Firing

100% of Dudson's ceramics are vitrified which is essential to the hospitality industry. Vitrification is a process where we physically change the clay, melting it to make our ceramics impervious to water, which also means that bacteria has less opportunity to penetrate into the ceramics and grow.

Controlled Environment

Controlling the oxygen levels in our kilns, ensures a consistent colour and glaze surface.

High Strength Firing

Combining a firing temperature of upto 1200°C with a unique recipe of performance materials ensures vitrification.

TECHNICAL FACTS

10,000

The number of times we test vitrification a year.

DID YOU KNOW?

Our investments in fast fire kilns reduces energy consumption by up to 40%

Vitrification Testing

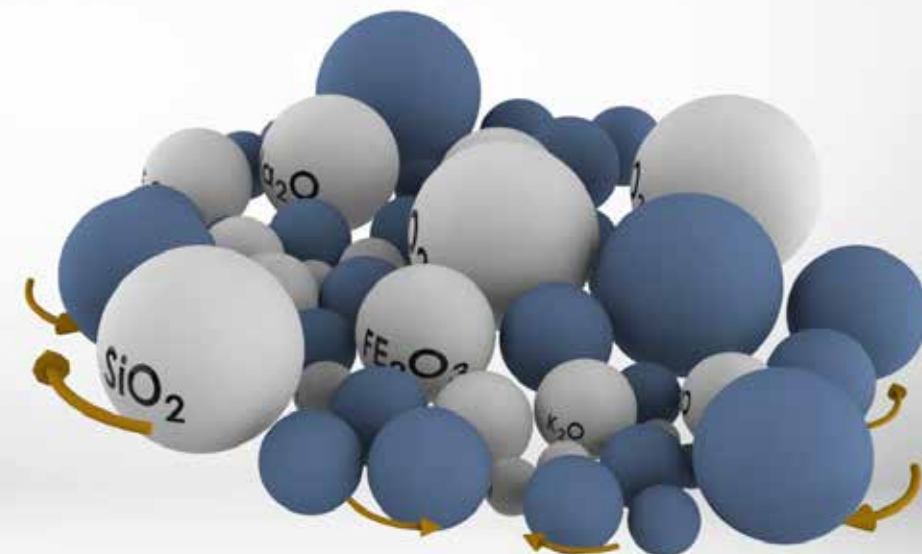
We test the vitrification of our product everyday, both in the kilns during firing and in our laboratory when the manufacturing process is complete.

BS EN
4034

British Standard
European Approved
Vitrified hotelware

BS EN
12980

British Standard
European Approved
Water absorption



Vitrification

Breakages in ceramics are generally related to porosity, or how much water a piece can absorb. Water absorption weakens the chemical structure affecting its durability over time. Through the process of vitrification, the particle structure of our ceramic body becomes strong, dense and watertight.

Strength Testing

On average, our UK made vitrified ceramic bodies can withstand the weight of 19500psi. This is the equivalent to the weight of an elephant.



04

Glazing

Our glaze is hard wearing and designed specifically for the hospitality environment. The durability is a combination of the glaze recipe, the firing temperature and substrate.

DID YOU KNOW?

Our glazing system is carefully formulated to allow oversprayed glaze to be collected, go through a lengthy cleaning process and then be reused, minimising our impact on the environment.



Fritted Glaze

The components in our glaze are carefully selected to maximise clarity and resilience. Our glaze is fritted, creating a smooth finish and added durability.

Semi-matte Glaze

Evo Origins and The Maker's Collection are finished in a semi-matte durable glaze. Traditional matte glazes are not as durable as gloss, however we have specially formulated our semi-matte to perform in line with our gloss glaze.

Hand Glazing

Harvest and The Maker's Collection designs are hand dipped, this enhances the artisan look of the products, creating original 'maker's marks' on the reverse of each piece.



EN
13258

European Standard
Crazing resistance of
ceramic articles

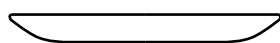
Thermal Stability

During the critical stages of firing we ensure that the glaze contracts at an optimum level with the clay body. This prevents failure in use called crazing. The relationship between the Glaze and the Body is determined using the coefficients of thermal expansion.

Underglaze & Inglaze Decoration

Decoration is applied underglaze or inglaze, this provides a protective layer so that colour and pattern does not fade or become damaged.

TECHNICAL FACTS



Tested to 5000

Dishwasher cycles

10x

The domestic standard for
products used in the home

BS
12875

British Standard
Mechanical dishwasher
resistance

Glazed Base

Although glazing the base of our ceramics adds complexity, it increases functional benefits to the customer. Glazing the base requires 'pin-firing'. This is when the piece sits on a crank to ensure the glaze coats the full base. The crank leaves small marks behind called 'maker's marks' signifying that the piece has a glazed base. Our fully glazed base can reduce surface scratching when the product is stacked, limiting the potential to become an entrypoint for bacteria.



05

Quality & Conformance

Dudson ceramics are continuously tested and quality checked, from the stage of raw materials, throughout the manufacturing process to the final fired piece.



Impact & Edge Chip Resistance

We understand the importance of edge chip resistance and engineer our products to perform in the busiest environments. Strengthening impact areas and adding a rolled edge improves edge chip resistance.

TECHNICAL FACTS

11

We test our portfolio to 11 British, European and Global standards

ASTM
C368

International
Standard
Impact resistance of
ceramic tableware

BS EN
12980

British Standard
European Approved
Determination of impact
resistance

DID YOU KNOW?

We are a member of the BCC (British Ceramic Confederation), one of the leading bodies in ceramics.

BS EN
8654:2015

British Standard
European Approved
Hospitality ceramic tableware
intended contact with food

BS EN
15284

British Standard
European Approved
Resistance to microwave
heating

BS EN
1183:1997

British Standard
European Approved
Thermalshock and thermal
shock endurance

ASTM
C927-80

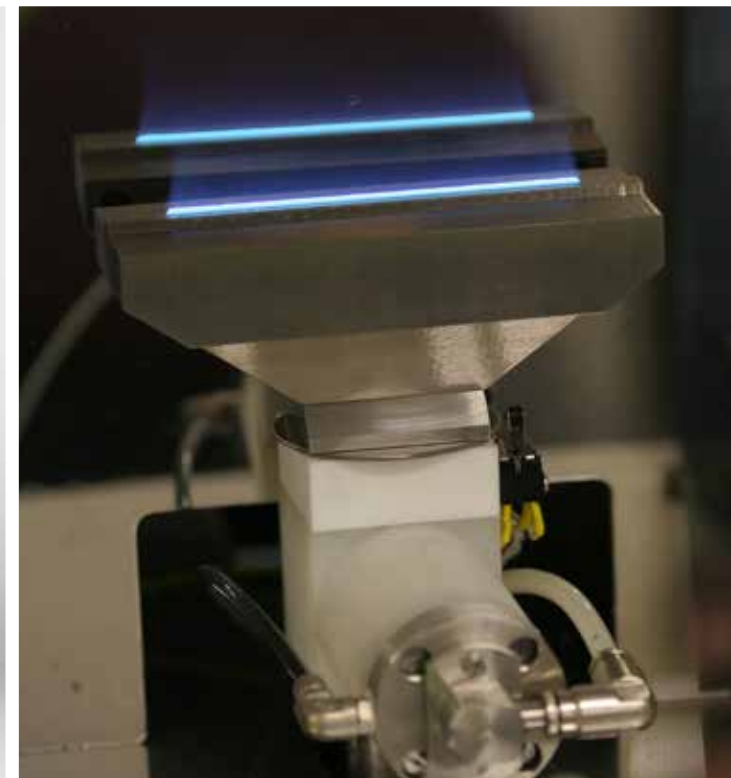
International
Standard
Lip and rim metal release

BS EN
12980

British Standard
European Approved
Lip and rim metal release
from ceramic

BS
12875

British Standard
Mechanical dishwasher
resistance



Dishwasher Durability

We test dishwasher durability to British Hospitality Standard BS 12875. In service testing has demonstrated that under hospitality use, this is the equal to 5000 dishwasher cycles. The equivalent of putting the same plate in the dishwasher everyday for 13 years.

Continuous Improvement

Our continuous improvement program ensures we aim to constantly improve the quality of our products.

In House Laboratory

We test daily in our inhouse UKAS accredited lab:

- 01 Our Performance Materials - China Clay, Alumina, Ball Clay, Fillers and Fluxes
- 02 Engineered Shape and Form - Size, Shape and Stackability Size and Shape Consistency
- 03 Vitrification - Water Absorption
- 04 Glazing - Dishwasher, Glazing and Thermal Stability
- 05 Quality and Conformance - Edge Chip Resistance

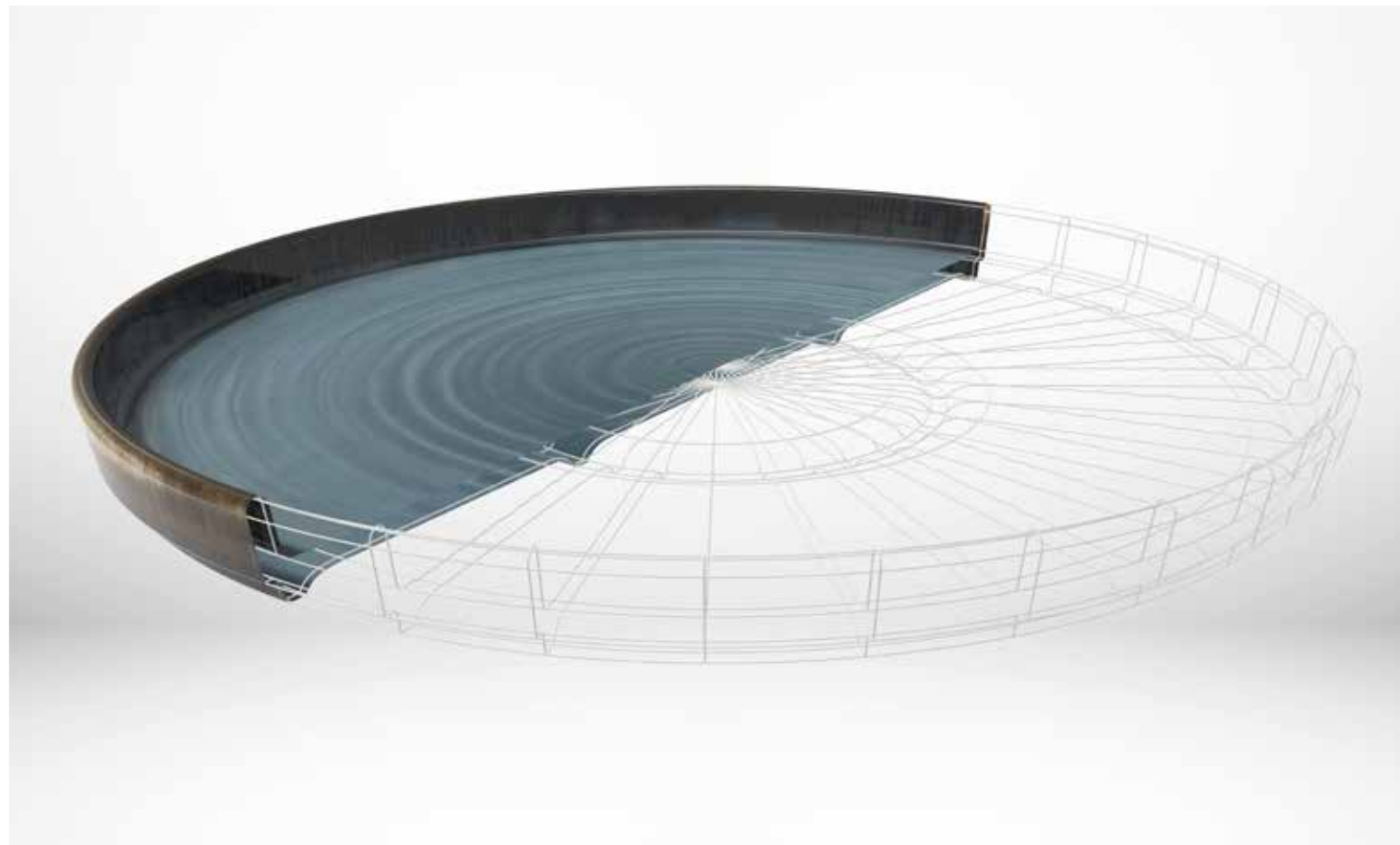
06

Design Innovation

Dudson are experts in ceramic design and at the forefront of innovation. Our entire product portfolio is designed in the UK by our experienced and talented design team. We work with chefs from around the world ensuring we understand the needs of our customers.

Industry Knowledge

We invest in gathering extensive market knowledge. Our research team identifies and tracks new and existing trends in interior and product design, as well as the hospitality and food industries.



Research and Development

We are continually developing materials that bring colour, texture and pattern to the tabletop without compromising on the durability that the hospitality industry demands.



DID YOU KNOW?

Dudson have launched over 400 products since 2019.

Leading Capabilities

Investment in the latest manufacturing technology, including the biggest installation of pressure cast machines in the UK and amongst the largest in Europe, allows us to combine original techniques with innovative shapes and larger pieces.



Machinery & People

A perfect balance of machinery and people. We combine up to date manufacturing technologies with historical ceramic techniques in order to innovate with design.

07

Service & Stock

At Dudson we are dedicated to reliability, ensuring our product is in stock and delivered on time. We pride ourselves on our stock levels and ability to deliver on time, all around the world.



Dynamic Warehouses

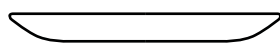
Our 130,000sq ft warehouse stores over seven million products. We process 44,000 cartons of product weekly across multiple brands, that's an average of 72,000 pieces everyday.

We have warehouses located in:

Stoke-on-Trent, UK
Rotterdam, Netherlands



TECHNICAL FACTS



130,000ft

Warehouse

99.4%

of orders delivered
complete on time.



Global Distribution Network

We supply to over 40 countries around the world via a network of 190 distributors.

08

History & Heritage

A heritage brand dating back to 1800, Dudson is made by renowned potters in the heart of Stoke on Trent, the world capital of ceramics.



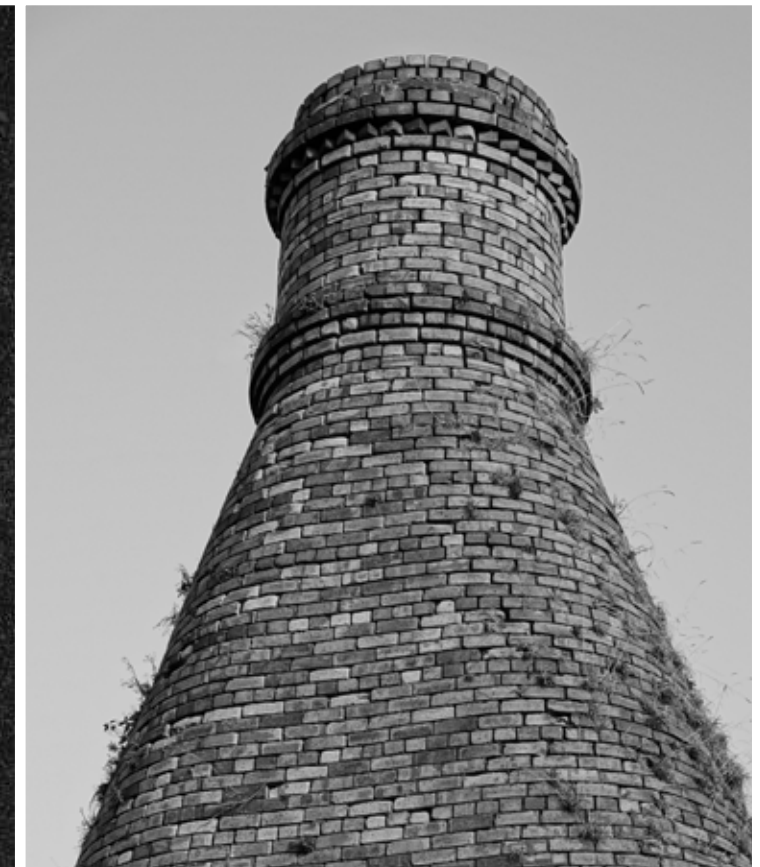
Centuries of Manufacturing Knowledge

Dudson is made by expert potters in Stoke on Trent with over 225 years ceramics experience, since Sampson Bridgwood first manufactured earthenware in 1795, Longton, Stoke on Trent.



The World Capital of Ceramics

Our home Stoke on Trent is the world capital of ceramics. The city is known globally as 'The Potteries'.



A Blend of Science & Skill

Our past has shaped our future, established in 1800, the Dudson brand continues to grow and innovate. We have evolved and adapted to changes in the marketplace, introducing multiple manufacturing routes to produce colour and texture as well as investing in new technology to create differentiated shapes.



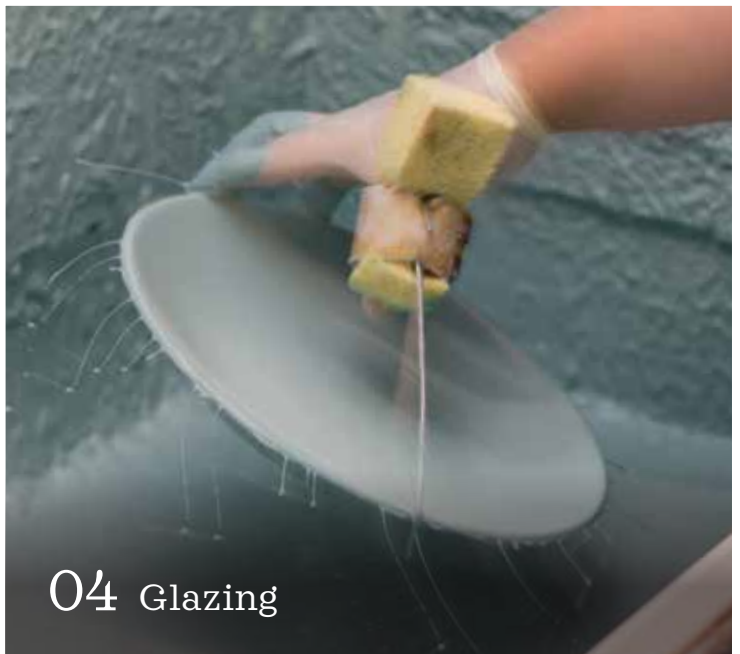
01 Performance Materials



02 Engineered Shape & Form



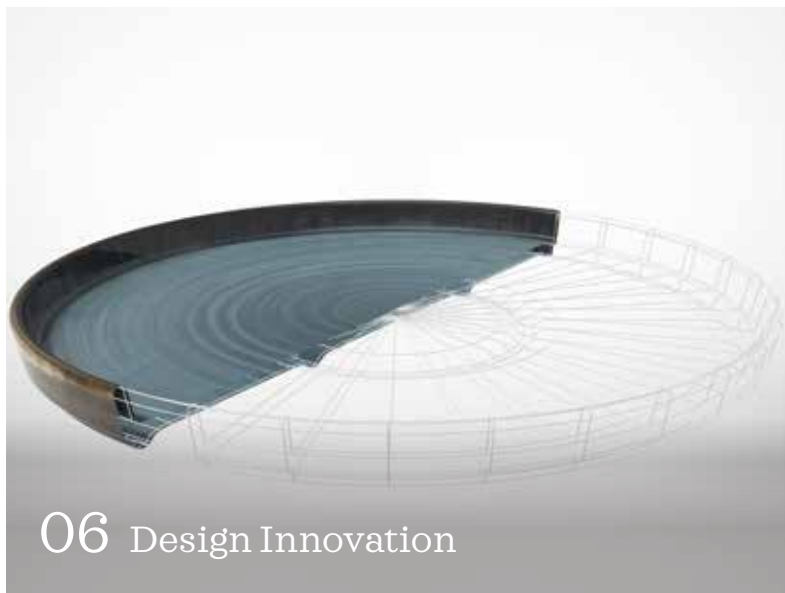
03 Vitrification & Firing



04 Glazing



05 Quality & Conformance



06 Design Innovation



07 Service & Stock



08 History & Heritage

8 Reasons Why A Dudson Plate Is Made To Last

We blend centuries of experience with the latest technology and design innovation to ensure our products work as hard as you do.

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