

Report: Count of Tested Samples

This report provides an overview of ballistic tests amount categorized by client and project, using metrics like PBFS and V50. The report includes filters for date, project, and client. The report contains two pages: HB for hard ballistics and SB for soft ballistics.

Configured by: Anders Wien

Semantic model used: Count of Tested Samples

Pages available:

- HB
- SB

Filters available:

- Date
- Project
- Client

Graphs / Plots used:

- **Graph name:** Hard Ballistic Tested Count

Shows the total count of ballistic tests performed on hard ballistics divided to V50 and PBFS, categorized by client and project.

- **Graph name:** Soft Ballistic Tested Count

Shows the total count of ballistic tests performed on soft ballistics divided to V50 and PBFS, categorized by client and project.

Tables used in report:

- Account
- CostOfTest
- cr675_NBSConstruction
- cr675_NBSConstructionMaterialStacksStitchings
- cr675_NBSICWProducts
- cr675_NBSMaterial
- cr675_NBSMaterialstack
- cr675_NBSStitching
- cr675_Project
- cr675_TestCompounds
- cr675_TestDashboardAmmoTypeDictionary
- cr675_TestDashboardGeometries
- cr675_TestDashboardSample
- cr675_TestDashboardStandard
- cr675_TestDashboardTestProcedement
- cr675_TestOrder
- NBS Ballistic System
- NBS Product
- StandardDetails

Report: Pressed plates count

This report provides a detailed overview of pressed ceramic prototypes, categorized by project and product. It includes key metrics such as the count of raw material lists, vacuum bags, and total counts for each product under various projects. Users can filter the data by ordered and delivered dates, project, owner, and invoicing status. The report also includes a page for non-ceramic prototypes.

Configured by: Anders Wien

Semantic model used: Pressed plates count

Pages available:

- Ceramic
- Non-Ceramic

Filters available:

- Ordered Date
- Delivered Date
- Project
- Owner
- Invoicing Status

Graphs / Plots used:

- **Graph name:** Count of pressed prototypes | Ceramic

Shows the total number of pressed plates, categorized by project and product alongside raw materials list and pressing type.
- **Graph name:** Count of pressed prototypes | Non-ceramic

Shows the total number of pressed plates, categorized by project divided by pressing types such as helmet mould, uniaxial plate mould or vacuum bag.

Tables used in report:

- Account
- CostOfTest
- cr675_NBSConstruction
- cr675_NBSConstructionMaterialStacksStitchings
- cr675_nbsfrec2rndorderses
- cr675_NBSICWProducts
- cr675_NBSMaterial
- cr675_NBSMaterialstack
- cr675_NBSStitching
- cr675_Project
- cr675_TestCompounds
- cr675_TestDashboardAmmoTypeDictionary
- cr675_TestDashboardGeometries
- cr675_TestDashboardSample
- cr675_TestDashboardStandard
- cr675_TestDashboardTestProcedment
- cr675_TestOrder
- craab_nbstooltypes
- NBS Ballistic System
- NBS Product
- StandardDetails
- SystemUser

Report: NBS Report Test Range Monitor PL

This report is a detailed test log, capturing test parameters such as timestamp, project name, ballistic system, shot number, stop indicators, BFS depth, projectile details, angle, velocity, and drop test results. It is designed to track test results.

Configured by: Krzysztof Dzwoniarski

Semantic model used: NBS Report_Test Range Monitor

Graphs / Plots used:

- **Graph name:** Test log

Detailed test log, capturing test parameters such as timestamp, project name, ballistic system, shot number, stop indicators, BFS depth, projectile details, angle, velocity, and drop test results. It is designed to track test results.

Tables used in report:

- Account

- cr675_NBSConstruction
- cr675_NBSConstructionMaterialStacksStitchings
- cr675_NBSICWProducts
- cr675_NBSMaterial
- cr675_NBSMaterialstack
- cr675_NBSStitching
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- cr675_TestDashboardGeometries
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Report: NBS Report_Test Range Monitor

This report provides a comprehensive view of test range activities. It visualizes key metrics such as incoming orders, backlog, samples tested, and threats tested over time. The report includes various sections: Year to Date Overview displays incoming orders and samples categorized by their status (such as cancelled, received, or shipped) and visualizes the backlog and the oldest open orders. The Samples Tested section is a visual representation of the number of samples tested, categorized by client and project. The Threats Tested section provides a visual representation of the number of threats tested, broken down by threat type. The Last 2 Weeks Overview focuses on recent test activities, including the number of samples and threats tested. BFS Depth and Stanag V50 Measurements sections display graphs showing BFS depth measurements and V50 measurements for different ballistic systems and constructions. The Construction List section contains a detailed list of ballistic systems, constructions, and material stacks with associated weights and thicknesses. Finally, the Test Log provides a comprehensive log of individual test samples, including details such as timestamp, project name, ballistic system, BFS depth, projectile used, and other test parameters. The report is fully interactive.

Configured by: Anders Wien

Semantic model used: NBS Report_Test Range Monitor

Graphs / Plots used:

- **Graph name:** Year to Date Overview

| Visualizes incoming orders and samples by their status, along with backlog and oldest open orders.

- **Graph name:** Samples Tested

| Displays the number of samples tested, categorized by client and project.

- **Graph name:** Threats Tested

| Provides a visual representation of the number of threats tested, broken down by threat type.

- **Graph name:** BFS Depth Measurements

| Shows BFS depth measurements for different ballistic systems.

- **Graph name:** Stanag V50 Measurements

| Displays V50 measurements for various constructions.

- **Graph name:** Construction list

| A detailed list of ballistic systems, their constructions, and material stacks with associated weights and thicknesses

- **Graph name:** Test log

Detailed test log, capturing test parameters such as timestamp, project name, ballistic system, shot number, stop indicators, BFS depth, projectile details, angle, velocity, and drop test results. It is designed to track test results.

Tables used in report:

- Account
- cr675_NBSConstruction
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Report: NBS Report

This report provides a comprehensive overview of ballistic tests, including detailed information about ballistic systems, construction, material stacks, and individual test results. It includes filters for project name, test date, test institute, and ballistic system. The report is divided into several sections including: 1) A detailed breakdown of ballistic systems and their associated construction and material stacks, 2) A table of test results showing parameters like projectile type, angle, conditioning temperature, BFS depth, and V50 values, 3) Graphical representation of PBFS distribution by ballistic system with drill-down capabilities, 4) A history of Stanag V50 values, and 5) A log regression graph of speed versus probability.

Configured by: Anders Wien

Semantic model used: NBS Report

Pages available:

- Ballistic Systems Overview
- Test Results
- PBFS Distribution
- Stanag V50 History
- Log Regression

Filters available:

- Project Name
- Ballistic System
- Test Date
- Test Institute

Graphs / Plots used:

- **Graph name:** Test results

Detailed test log, capturing test parameters such as sample ID, serial number, shot number, if valid indicator, projectile details, angle, velocity, stop indicator, BFS depth, BFS diameter, test condition, clay temperature, drop test results, room temperature, humidity, projectile weight, type of cartridge, muzzle distance, powder type, powder weight, project name, ballistic system and timestamp.

- **Graph name:** PBFS Distribution

Displays PBFS distribution by ballistic system with drill-down capabilities.

- **Graph name:** Stanag V50 History
| Shows the history of Stanag V50 values.
- **Graph name:** Log Regression
| Graph of speed versus probability of V50.

Tables used in report:

- Account
- cr675_NBSConstruction
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Report: NBS BSR v1

This report provides comprehensive insights into the ballistic systems, materials, and test results. It includes sections for ballistic system overview, material stack details, test orders, and test samples. The report also features various charts such as PBFS distribution, Stanag V50 history, and density of PBFS. Additionally, there is a section for key influencers that analyzes the most important factors impacting V50 values.

Configured by: Bartłomiej Bielski
Semantic model used: NBS Report

- Pages available:**
- Key influencers
 - Ballistic system reports

- Filters available:**
- Ballistic System
 - Product
 - Construction
 - Order Status
 - Projectile
 - Test Order ID
 - Project Name
 - Date Range
 - Valid
 - Shot Number
 - V50 Value Increase/Decrease

- Graphs / Plots used:**
- **Graph name:** Material stack
| Table of material stacks with their price, weight and thickness.

- **Graph name:** Test orders
Detailed table of test orders.
- **Graph name:** Test samples
Table of test samples with parameters like serial number, sample weight, sample thickness and depth of cut.
- **Graph name:** Test results
Detailed test results table.
- **Graph name:** PBFS Distribution
Shows PBFS distribution by ballistic system with drill-down capabilities.
- **Graph name:** Stanag V50 History
Displays the historical values of Stanag V50.
- **Graph name:** Density of PBFS
Visualizes the density distribution of PBFS across different samples.
- **Graph name:** PBFS in mm (count of panels)
Visualizes the count of panels per milimeter.
- **Graph name:** Key Influencers
Analyzes the factors most influential in changing V50 values.

Tables used in report:

- Account
- cr675_NBSConstruction
- cr675_NBSConstructionMaterialStacksStitchings
- cr675_NBSICWProducts
- cr675_NBSMaterial
- cr675_NBSMaterialstack
- cr675_NBSStitching
- cr675_Project
- cr675_TestCompounds
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- cr675_TestDashboardGeometries
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Report: NBS Report_Eabs analysis

This report provides detailed analysis on the efficiency and performance of ballistic systems. It includes several visualizations such as cost efficiency vs thickness efficiency, Eabs(V50) vs thickness, and other relevant metrics like AD efficiency. It also features filtering options by projectile type to analyze the impact of different projectiles on the ballistic system performance.

Configured by: Anders Wien

Semantic model used: NBS Report

Filters available:

- Projectile Type

- Ballistic System

Graphs / Plots used:

- **Graph name:** Cost Efficiency vs Areal Density Efficiency
| Compares the cost efficiency with areal density efficiency across different ballistic systems.
- **Graph name:** Cost Efficiency vs Thickness Efficiency
| Compares the cost efficiency with thickness efficiency across different ballistic systems.
- **Graph name:** Eabs(V50) vs Thickness
| Plots Eabs(V50) against the thickness of the material for given projectile.
- **Graph name:** Eabs(V50) vs Material Cost
| Plots Eabs(V50) against the material cost of the material for given projectile.
- **Graph name:** Eabs(V50) vs Aerial Density
| Plots Eabs(V50) against the areal density of the material for given projectile.

Tables used in report:

- Account
- cr675_NBSConstruction
- cr675_NBSConstructionMaterialStacksStitchings
- cr675_NBSICWProducts
- cr675_NBSMaterial
- cr675_NBSMaterialstack
- cr675_NBSStitching
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Report: NBS Report_Eabs analysis_Terje_cleaned2

This report provides an in-depth analysis of ballistic systems by evaluating various metrics such as cost efficiency, thickness efficiency, and Eabs (V50) against factors like thickness, material cost, and AD efficiency. The report consists of multiple pages, each focusing on different aspects of ballistic performance. Key pages include 'E50 & V50 vs AD,' 'AD efficiency vs Ballistic system,' 'Cost efficiency vs Ballistic system,' 'BFS and bullet speed vs Material,' 'BFS and cost vs Material,' and 'BFS and Area density.' The visualizations allow for detailed comparisons across different ballistic systems, aiding in decision-making regarding materials and constructions.

Configured by: Grzegorz Huk

Semantic model used: NBS Report

Pages available:

- Page 1
- E50 & V50 vs AD
- AD Efficiency vs Ballistic System
- Cost Efficiency vs Ballistic System
- BFS and Bullet Speed vs Material

- BFS and Cost vs Material
- BFS and Area Density

Filters available:

- Projectile
- Ballistic System
- Bullet Weight
- Hit Angle
- Test Goal Type
- Conditioning Temperature
- Backing Type
- Depth of Cut

Graphs / Plots used:

- **Graph name:** Cost Efficiency vs AD2 Efficiency

Scatter plot showing the relationship between cost efficiency and AD2 efficiency for various ballistic systems, with a trend line indicating correlation.

- **Graph name:** Cost Efficiency vs Thickness Efficiency

Scatter plot showing the relationship between cost efficiency and thickness efficiency for various ballistic systems, with grid lines to indicate ranges.

- **Graph name:** Eabs(V50) vs Thickness

Scatter plot illustrating the relationship between absorbed energy at V50 and thickness for various ballistic systems, with a trend line showing correlation.

- **Graph name:** Eabs(V50) vs Material Cost

Scatter plot showing the relationship between absorbed energy at V50 and material cost for different ballistic systems using the PS Ball projectile, with a trend line.

- **Graph name:** Eabs(V50) vs Area Density (AD)

Scatter plot illustrating the relationship between absorbed energy at V50 and Area Density (AD) for various ballistic systems, with a trend line indicating correlation.

- **Graph name:** Area Density vs E50

Scatter plot showing the relationship between Area Density and E50 for various ballistic systems, with a trend line to show the correlation.

- **Graph name:** AD2 Efficiency by Ballistic System and Name

Bar chart displaying AD2 efficiency for various ballistic systems, color-coded by projectile name, showing performance in energy absorption.

- **Graph name:** Cost Efficiency vs V50 by Ballistic System

Bar chart showing cost efficiency of various ballistic systems with a line plot overlay for V50 value, allowing comparison of cost efficiency and ballistic performance.

- **Graph name:** BFS and Projectile Velocity for 7.62 Projectile

Graph visualizing Backface Signature (BFS) and projectile velocity for various ballistic systems using a 7.62 caliber projectile, comparing BFS depth and speed.

- **Graph name:** Area Weight vs. BFS for Various Ballistic Systems

Scatter plot showing the relationship between area weight and average BFS depth for different ballistic systems, with a trend line indicating the correlation.

- **Graph name:** Min BFS, Max BFS, and Bullet Speed by Ballistic System

Graph showing minimum and maximum BFS in millimeters and bullet speed for various ballistic systems, comparing BFS and bullet speed performance.

• **Graph name:** Min BFS, Max BFS, and Area Density by Ballistic System

Graph showing minimum and maximum BFS and area density for various ballistic systems, analyzing the relationship between BFS and area density.

Tables used in report:

- Account
- cr675_NBSConstruction
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- cr675_NBSMaterialstack
- cr675_NBSStitching
- cr675_Project
- cr675_TestCompounds
- cr675_TestDashboardAmmoTypeDictionary
- cr675_TestDashboardGeometries
- cr675_TestDashboardSample
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- NBS Ballistic System
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