

Your Independent Testing Lab



FIRE PROTECTION LABS

DYNETM

TESTING SERVICES & PRODUCT CATALOG



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DYNE FIRE PROTECTION LABS



Dyne Fire Protection Labs an NFPA Global Solutions™ Company is an independent testing laboratory, serving customers throughout the world. We provide quick, easy, and accurate testing with our proven quality management system, outstanding customer service, and free sample kits. Shipping is also included in the contiguous US. Our test reports are in your inbox in 5-business days or less.

If your sample fails, we will contact you and help you determine the cause of this failure. Your customer experience is very important to us, and we are confident that our lab testing service and customer service is the best. See what our customers are saying about us by visiting our Customer Testimonials section on our website.

Customer Portal:

By registering on the Dyne website, you will be able to access your test reports, order kits, and keep track of the your orders. Visit us at www.dyneusa.com to register!

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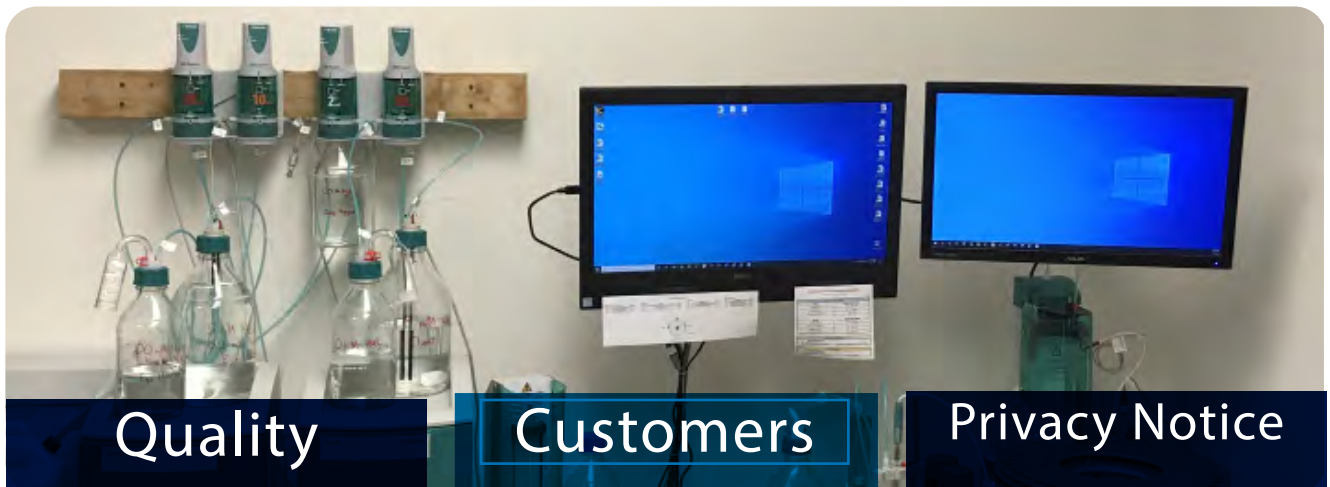
About Dyne

Dyne Fire Protection Labs, LLC, an NFPA Global Solutions™ company, is an independent testing laboratory providing quick, reliable, and independent analysis of fire sprinklers, firefighting foams, antifreeze solutions, and dry chemical agents to help inspection, testing, and maintenance (ITM) providers and building owners fulfill various requirements to stay compliant with critical fire protection and safety codes.

Dyne offers unparalleled customer service and technical expertise. Most types of testing and test reports are available in 5-business days or less, customers benefit from free sample kits and shipping within the contiguous United States, online test results, and laminated tank or system tags.

Dyne was acquired by NFPA Global Solutions™ in 2024. NFPA Global Solutions is a separate company fully owned by the National Fire Protection Association® (NFPA®). NFPA Global Solutions is dedicated to advancing safety by offering compliance solutions, digital products, and advisory services that are designed to advance fire, life, and electrical safety across the globe. For more information and the full list of businesses, visit nfpaglobalsolutions.com.

Founded in 1896, NFPA is a global self-funded nonprofit organization devoted to eliminating death, injury, property, and economic loss due to fire, electrical, and related hazards. The association delivers information and knowledge through more than 300 consensus codes and standards, research, training, education, outreach, and advocacy; and by partnering with others to strengthen the NFPA Fire and Life Safety Ecosystem™.



Quality

Dyne Fire Protection Labs is committed to developing our compliance testing business in the fire protection industry. Dyne will establish and follow good laboratory practices and continuously improve our processes to meet customer expectations. Quality will be demonstrated by accurate and reliable test results.

Customers

- Results in 5-business days or less
- Free sample kits and free shipping within the contiguous US states (limited free shipping to Alaska, Hawaii, Puerto Rico, and Canada, inquire for details) (excludes dry sprinkler kits)
- Online test results
- Laminated foam tank or sprinkler tags
- Direct communication with our technical staff
- Unparalleled customer service

Privacy Notice

Dyne Fire Protection Labs considers customer information as confidential and will not disclose or sell your information to any other entity. Dyne also considers the test results to be the property of the customer who paid for the tests to be conducted. Dyne will not share these results with any other persons or companies without the written permission of the customer.

Our Testing Services



Firefighting Foam

NFPA states and firefighting professionals agree that foam inventory should be tested annually. Dyne's annual testing reminder service ensures you are on schedule in case disaster strikes.



Sprinklers

NFPA states installed sprinklers shall be replaced or submitted to a recognized testing lab acceptable to the authority having jurisdiction for field service testing at predetermined intervals. Dyne performs a plunge oven test to determine the release time and corresponding response time index (RTI).



Antifreeze

NFPA states antifreeze solution shall be tested annually before the onset of freezing weather. Dyne can verify whether or not the sample chemical composition matches a known listed product.



Dry Chemical

NFPA requires dry chemical agent be thoroughly checked for proper type, contamination, and condition prior to reuse and topping off. IMO 1432 also has strict moisture requirements and requires testing



**Dyne Fire Protection Labs is
ISO 9001 Certified and
ISO/IEC 17025 Accredited**

Firefighting Foam

Quick, Easy, Accurate & Independent

Introduction

NFPA states and firefighting professionals agree that foam inventory should be tested annually. Testing is crucial to maintaining the highest possible level of emergency preparedness.

With Dyne's annual testing reminder service, you now have an easy, convenient way to ensure that your foam will be ready in case disaster strikes.

Laboratory

Our laboratory uses industry standards to test your foam to make sure it will perform effectively in a fire situation. We can test the foam concentrate in its raw, pre-diluted state or we can test a foam solution where the concentrate is already mixed with water.

Certifications

Dyne Fire Protection Labs has been certified by the International Standards Organization ISO 9001 "Standards for Quality Management System".

Standards

- NFPA 11
- NFPA 18
- NFPA 25
- IMO 1312
- IMO 670
- USCG - 46 CFR



Dyne Fire Protection Labs offers a wide range of tests for your fire protection and safety compliance needs:

- Low Expansion
- High Expansion
- Marine Compliance
- Foam Solution
- Bladder Water

If you are looking to stay in compliance with any of the above tests, a representative sample must be taken. We have articles in our article archives online regarding sampling. If you are not comfortable taking samples, there are many well established foam system service representatives that can assist you with the process. Contact Dyne for more information.



Free 4-bottle sample kit
(250 ml)
2-bottle also available

Free IMO sample kit
(500 ml)

National Fire Protection Association (NFPA)	Types of Samples	Physical Property Tests	Performance Property Tests
NFPA 11 – Standard for Low-, Medium and High-Expansion Foam	Foam Concentrate - Aqueous Film Forming Foam (AFFF) - Alcohol Resistant Foam (AR-AFFF) - Protein/Fluoroprotein - Film Forming Fluoroprotein (FFFP, AR-FFFP) - High Expansion	- Appearance - Refractive Index - Density - pH - Viscosity¹	Sample mixed with fresh water - Expansion - Drain Time - Film Confirmation²
	Foam Solution <u>Performance testing ONLY</u> Foam and water mixture stored in solution form	- Appearance - Refractive Index - Density - pH	Sample tested with no additional water dilution - Expansion - Film Confirmation²
	Foam Solution <u>Proportioning testing ONLY</u> Made from concentrates listed above already mixed with water*	- Appearance - Refractive Index - Density - pH	Sample tested with no additional water dilution Percent Concentration
	Foam Solution <u>Performance & Proportioning testing</u> Made from concentrates listed above already mixed with water*	- Appearance - Refractive Index - Density - pH	Sample tested with no additional water dilution - Expansion - Film Confirmation² - Percent Concentration
*Customer must provide 250 ml of concentrate and water in addition to sample.			
NFPA 18 – Standard on Wetting Agents	Foam Concentrate - Wetting Agents - Class A Foams	- Appearance - Refractive Index - Density	Sample mixed with fresh water - pH - Surface Tension - Expansion (on select products only) - Drain Time (on select products only)
International Maritime Organization (IMO)			
MSC.1/Circ.1312 and USCG CFR Title 46	Foam Concentrate - Aqueous Film Forming Foam (AFFF) - Alcohol Resistant Foam (AR-AFFF) - Protein/Fluoroprotein - Film Forming Fluoroprotein (FFFP, AR-FFFP) - High Expansion	- Appearance - Refractive Index - Density - Viscosity¹	Sample mixed with sea water - pH % Sediment - Sediment Dispersion - Expansion - Drain Time - Film Confirmation² - Estimated % Dilution - Acetone (AR protein based foams only) - Burnback (AR protein based foams only)

¹ Alcohol resistant foams only ² Film forming foams only such as aqueous film forming foam and film forming fluoroprotein foam. Film formation and film sealability or surface tension, interfacial tension and spreading coefficient used to determine film formation.

Sprinklers

Quick, Easy, Accurate & Independent

Introduction

Our goal at Dyne is to provide you with a worry-free system for meeting your sprinkler testing needs. NFPA 25 requires building owners to sample test installed sprinklers by a recognized testing lab. NFPA 25 states a representative sample of sprinklers for testing shall consist of a minimum of not less than four sprinklers or 1 percent of the number of sprinklers per individual sprinkler sample area, whichever is greater.

Dyne performs a plunge oven test to determine the release time. These tests are designed to ensure the sprinkler will release in a specified time when exposed to specific temperatures. Pictures of the sprinklers are also taken before and after testing.

Laboratory

Our laboratory uses industry standards to test your sprinklers to make sure they will perform effectively in a fire situation.

Certifications

Dyne Fire Protection Labs has been certified by the International Standards Organization ISO 9001 "Standards for Quality Management Systems" and ISO/IEC 17025 Accredited "General Requirements for the Competence of Testing and Calibration Laboratories".

Free
standard
sprinkler
sample
kit



NFPA 25 - Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems

Standards

- Procedure based on UL 199, Edition 13, Section 33.2 and NFPA 25 2023 Edition 5.3.1.1.
- Testing fulfills NFPA 25 2023 Edition 5.3.1.1.



Dyne Fire Protection Labs tests all types of fire sprinklers:

- Standard
- Fast Response
- Dry

Response Time

Dyne tests the response time of the sprinklers to ensure the sprinklers will release in a specified amount of time when exposed to a defined temperature and air flow. The acceptable response time is based on a response time index (RTI). The RTI requirements are listed below. Note that a sprinkler coated with a material for corrosion resistance (wax for example) is allowed extra time as defined in UL 199. The response time of coated standard response sprinkler is 180 seconds or the maximum response time (whichever is greater).

NFPA 25 2026 Edition Sprinkler Field Service Test Requirements		Scenario	Initial Test	Subsequent Test*
NFPA 25 section 5.3.1.2 states "a representative sample of sprinklers for testing in accordance with 5.3.1.1 shall consist of either a minimum of 4 sprinklers or 1 percent of the number of sprinklers per sample area, whichever is greater." Where multiple scenarios apply, most stringent testing interval shall be followed.		Sprinklers manufactured prior to 1920	Not Applicable – Replace	Not Applicable
		Sprinklers used for protecting commercial-type cooking equipment and ventilating systems	Not Applicable – Replace annually (unless annual exam shows no build-up of grease or other material on bulb-type sprinklers)	Not Applicable
		Sprinklers exposed to harsh environments (examples can be found in NFPA 25 A.5.3.1.1.2)	5 years after install (10 years if sprinkler listed as corrosion resistant)	Every 5 years thereafter
		Solder type sprinklers with a temperature classification of extra high (325 °F, 163 °C) or greater that are exposed to semi continuous to continuous maximum allowable ambient temperature conditions (maximum allowable ambient conditions can be found in NFPA 25 Table 5.4.1.6.2)	5 years after install	Every 5 years thereafter
		Dry Sprinklers	20 years after install	Every 10 years thereafter**
		ESFR and CMSA Sprinklers (using fast response elements)	20 years after install	Every 10 years thereafter**
		Sprinklers with Fast Response Elements	25 years after install	Every 10 years thereafter**
		Sprinklers that have been installed for 50 years in dwelling units	Replace with fast-response sprinklers	Representative samples of sprinklers shall be tested for RTI that does not exceed 65 (m/s) ^{1/2}
		All other sprinklers	50 years after install	Every 10 years thereafter**
Sprinkler Testing Services	Response Time	Sensitivity Test, Plunge Oven Test	Validation of sprinkler operation to ensure the sprinkler will release in a specified time when exposed to a defined temperature and air flow. The acceptable response time is based on the following response time index (RTI) values: • Early suppression fast response (ESFR) sprinklers require RTI value less than 50 (meters-seconds)^{1/2} • Fast response sprinklers requires RTI value less than 65 (meters-seconds)^{1/2} • Standard response sprinklers requires RTI value less than 350 (meters-seconds)^{1/2}	

*Only applies if all samples in initial/previous subsequent test sample pass and remaining sprinklers represented by that sample set remained in service.

**If the sprinklers ever reach 75 years of age, subsequent testing shall be every 5 years, regardless of scenario.

Antifreeze

Quick, Easy, Accurate & Independent

Introduction

Remove the liability of field testing errors by allowing a certified independent laboratory to test your antifreeze solutions. Field refractometers can work for field testing but only if you are absolutely sure of the type of antifreeze chemical that has been added to the system. Each antifreeze solution has specific refractometers calibrated for them. If an improper refractometer is used, accurate and precise results cannot be obtained.

Our goal at Dyne is to provide you with a worry-free system for meeting your antifreeze solution testing requirements.

Laboratory

Our laboratory uses industry standards to test your antifreeze solution to make sure it will perform effectively in a fire situation. We will test your antifreeze solution in accordance with NFPA 25 - Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems.

Certifications

Dyne Fire Protection Labs is certified by the International Standards Organization ISO 9001 Standards for Quality Management System.

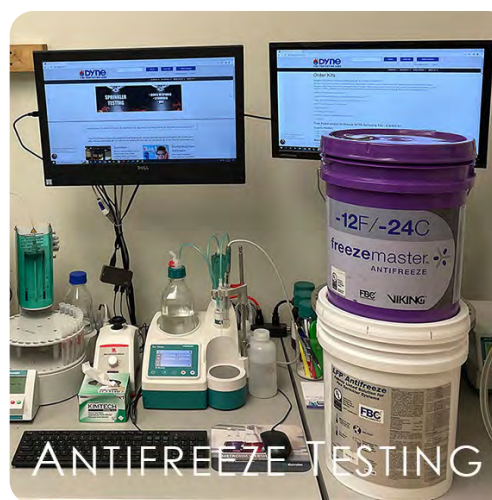


Free foam/antifreeze solution sample kit

NFPA 25 - Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems

Standards

- NFPA 25



Listed Antifreeze Verification

We can verify whether the chemical composition of your antifreeze solution matches a known listed product.

Ion chromatography is used to quantify the concentration of a variety of unique components that distinguish listed solutions apart and from legacy solutions. Due to nondisclosure agreements, the exact chemical composition of listed antifreeze samples cannot be reported. Therefore, Dyne Fire Protection Labs simply reports (PASS or FAIL) whether the chemical composition matches the chemical composition of the antifreeze specified on the report.

Tests Conducted	Test Type	Purpose
Appearance	Physical Property	Analyzed for color, apparent thickness, and any sediment, rust or particulates.
Refractive Index	Physical Property	Provides an indication of the concentration of listed antifreeze solutions described in NFPA 25.
Density (Specific Gravity) (g/cm ³)	Physical Property	Provides an indication of the concentration of listed antifreeze solutions described in NFPA 25.
pH	Physical Property	Indicates the degree of degradation of the solution and its likelihood to degrade the piping.
Percent Concentration (% by volume)	Performance	A calculated value based upon the refractive index and density of a sample. This value will be reported as percent by volume.
Estim ¹ ated Freeze Point (°F/°C)	Performance	A calculated value based upon the percent concentration. This value is determined by chemical studies with specific types of antifreeze. Values will be reported in degrees Fahrenheit and Celsius.
Listed Antifreeze Verification*	Performance	Verify whether or not the sample chemical composition matches a known listed product
Overall Pass/Fail Result	Overall Result	The overall result will be determined with a clear recommendation for continued use or replacement.

1

When the antifreeze type is not known, Dyne can help verify if the solution contains propylene glycol or glycerine but contamination, extreme dilution, and mixing of antifreeze types can make accurate determination difficult in some cases. Samples that cannot reliably be determined to be one of the accepted antifreeze solutions will need to be replaced. Dyne will be unable to estimate the percent concentration (% by volume) and freeze point (°F/°C) of unknown samples.

*Available upon request only. Additional fees apply.

Dry Chemical

Quick, Easy, Accurate & Independent

Introduction

NFPA requires dry chemical agent be thoroughly checked for property type, contamination, and condition prior to reuse and topping off. IMO 1432 also has strict moisture requirements and requires testing every 2 years.

Laboratory

Our laboratory uses a variety of analytical techniques to test your dry chemicals to make sure they will perform effectively in a fire situation. The testing is designed to help you meet various inspection, testing, and maintenance requirements in one or more of the standards listed to the right.

Certifications

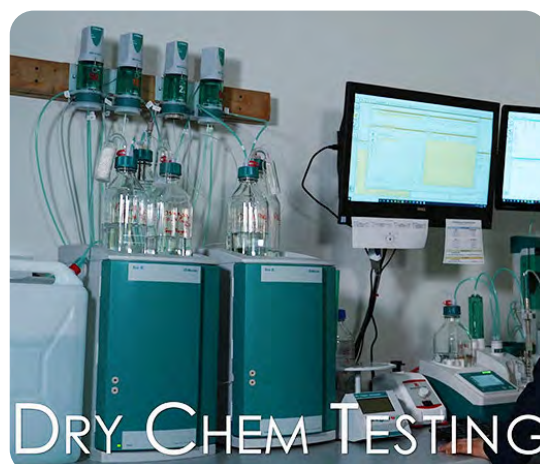
Dyne Fire Protection Labs is certified by the International Standards Organization ISO 9001 Standards for Quality Management System.



Dry Chemical sample kit

Standards

- NFPA 10 for Portable Fire Extinguishers
- NFPA 17 for Fixed Dry Chemical Systems
- IMO 1432 for Fire Protection Systems
- OSHA 29 CFR 1910.161(b)(4)



Dyne Fire Protection Labs offers the following analysis for dry chemical agents:

Moisture Content

High moisture content can lead to caking of the agent, resulting in inadequate flow of the agent through the equipment, and/or corrosion of the storage vessel, potentially compromising its integrity.

Chemical Composition

A chemical composition other than that listed with the equipment and hazard may not work as designed. Mixing of different types of agents can lead to a chemical reaction that produces byproducts of water (increasing agent moisture content) and carbon dioxide (increases vessel pressure to dangerous levels).

Customers First

- Test reports in 5-business days
- Free sample kits and free shipping within the contiguous US states
(limited 1-way free shipping to Alaska, Hawaii, Puerto Rico, & Canada,
inquire for details)
(excludes dry sprinkler kits)
- Online test results
- Laminated foam tank tags or sprinkler test tags
- Direct communication with our chemists or technical staff
- Unparalleled customer service

CUSTOMER PORTAL

- Order kits
- View previous kit orders
- Submit online return forms
- Access reports
(registration and waiver required)



How It Works

1 Complete a New Customer Form

Fill out your logistics including the shipping address, billing address, company contacts, and preferred payment method(s). Use purchase orders, credit cards, ACH payments, or a combination and we will set up your account accordingly. Dyne's payment terms are net-30 days.

2 Register Online

By creating an online registration you will be able to submit online sample return forms, order kits, view previous orders, and more.

To access your test reports online, we also ask you to complete a Web Access Waiver form.

3 Request Sample Kits

Dyne offers free sample kits* in the contiguous US (limited free 1-way shipping to Alaska, Hawaii, Puerto Rico, and Canada, inquire for details.) Order kits online, call, email, or start a chat on our website.

*dry sprinklers kits have a small handling fee and do not include return shipping

4 Submit Samples for Testing

Carefully pack the samples according to the directions on the form in the box. Submit the job information on the paper form or the online return form (our preferred method). Online forms help you step by step and the data is sent directly to our database which ensures data-entry accuracy.

5 Receive a Confirmation

When your samples arrive we will get them in line for testing and send you a confirmation email including the details you submitted for each sample.

Look the email confirmation over carefully to make sure everything (job name, job location, contact person, sample details, pricing) is correct before your report is issued.

6 Receive Your Results

Dyne guarantees reports will be in your email box in 5-business days or less. Need them sooner? Request rush testing for an additional fee.

Need something to hang on the system? Mark the mail category on your sample return form and we will send you a laminated tag.

If your sample fails, we will contact you and help you determine the cause of the failure.

CUSTOMERS FIRST

- Test reports in 5-business days
- Free sample kits and free shipping within the contiguous US states
(limited 1-way free shipping to Alaska, Hawaii, Puerto Rico, and Canada, inquire for details)
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dyne.lab@nfpaglobal.com
www.dynusa.com

Monday - Thursday:
8:00 AM to 5:00 PM CST
Friday
8:00 AM to 3:00 PM CST



FREE KITS & SHIPPING*
see page 15 for details

*Dyne offers free sample kits and shipping in the contiguous US (limited free 1-way shipping to Alaska, Hawaii, Puerto Rico, and Canada, inquire for details.)

DYNE SUPPORTS OR PARTNERS WITH MANY ORGANIZATIONS



FIREFIGHTERS
— FOR HEALING —

Kits



Foam/Antifreeze

- 2 or 4 (250 mL) bottles
- plastic bag
- marker
- return form
- USPS and UPS Ground return label (contiguous US only)



Standard

- foam packing
- 4 sprinkler tags
- return form
- USPS and UPS Ground return label (contiguous US only)



Foam IMO/CG

- 2 (500 mL) bottles
- plastic bag
- marker
- return form
- USPS and UPS Ground return label (contiguous US only)



Dry Sprinkler

- foam packing
- 1 sprinkler tag
- return form
- handling fee (\$20)



Dry Chemical

- foam packing
- airtight bottle
- return form
- USPS and UPS Ground return label (contiguous US only)



PREPAID Dry Sprinkler

Testing is prepaid with the kit

- foam packing
- 1 sprinkler tag
- return form
- handling fee (\$20 plus the current cost of sprinkler testing)

Foam, Antifreeze, Dry Chemical, and Standard Sprinkler kits are free. UPS Ground Shipping is free in the contiguous US. There is a small handling charge for dry sprinkler kits. All kits include free return shipping in the contiguous US (except dry sprinkler kits).

Limited free 1-way shipping to Alaska, Hawaii, Puerto Rico, and Canada, inquire for details.

What else does Dyne offer?

Newsletters

Subscribe to our newsletter for technical articles, industry news, webinar information, tips, and more! Visit us at dyneusa.com/subscribe.

Webinars

Free webinars on topics such as firefighting foam, antifreeze, sprinkler, and dry chemical periodic testing requirements are offered a few times a year. Visit our website at dyneusa.com/webinars for upcoming dates and topics.

Videos

Visit our page at dyneusa.com/videos for promo videos on our services. We also have testing videos including a view of a sprinkler activating inside of the test tunnel.



Q: Is Dyne a recognized testing lab?

Dyne Fire Protection Labs has been in the fire service laboratory testing business since 1999. During this time, Dyne has tested for a variety of business and currently tests for over 34 of the top 100 fortune 500 companies.

FAQs

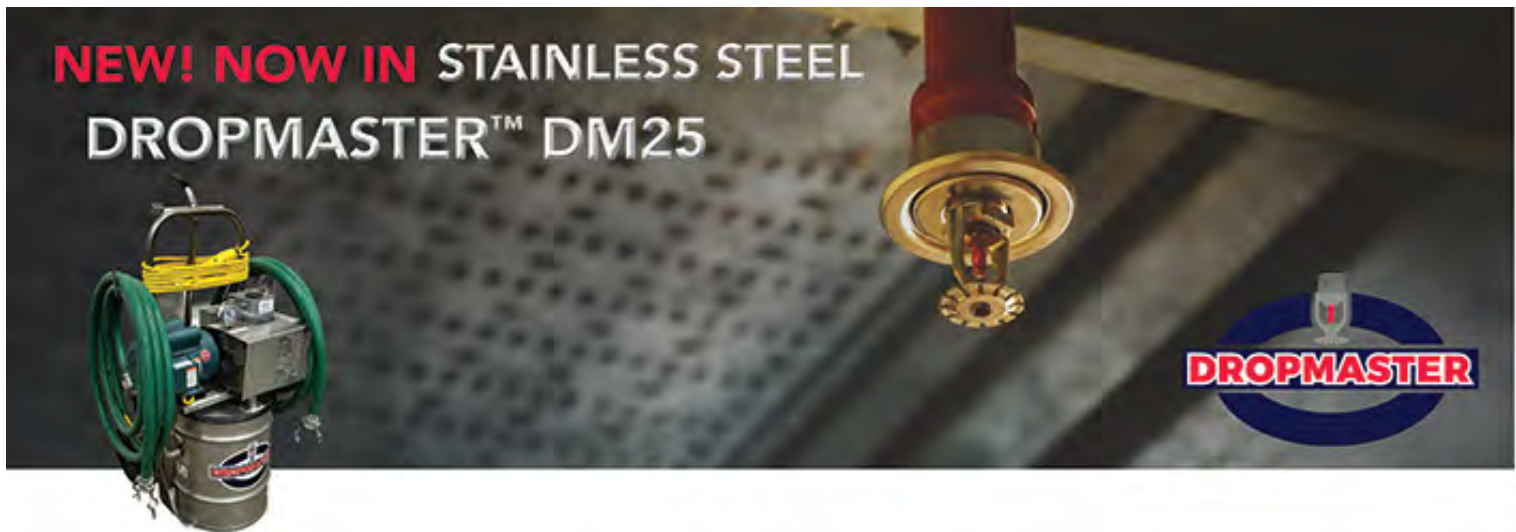
Have a question? We also have FAQs on all types of topics from what to sample to how to order kits at dyneusa.com/faqs.



Q: How is Dyne committed to high quality?

Our lab is ISO 9001 certified since 2004 and ISO/IEC 17025 accredited since 2020. Dyne uses NIST traceable calibrated lab equipment and technicians with strong chemistry and/or science backgrounds.





Dropmaster™ DM25 - NEW! Stainless Steel Model

Easily replace sprinklers with the Dropmaster™ DM25's siphoning system that removes trapped water in drops, improving productivity and profitability.

Benefits:

- Replace sprinklers without using buckets and tarps
- Designed and built for 24/7 operation
- Can be used on a variety of closed loop piping systems
- Can be used on all types of piping including PFC and CPVC
- Safe for use with most antifreeze solutions
- Mounted on wheels to be 100% portable

Tech Specs:

- **NEW!** Stainless Steel Drum for improved durability
- **NEW!** Stainless Steel parts including cart, muffler, manifold, elbows, nipples, etc.
- Powered by a 3/4 hp, high torque, low amp motor
- 1/2 hp discharge pump, capable of pumping 38 gpm
- 1" suction and discharge hoses
- Includes a 20' 12 gauge power cord
- Factory set tamper-proof relief valve, maintains a 10" Hg vacuum
- 10" tires
- One-year warranty - The motor and compressor are warranted One Year (1) from the date of delivery from the manufacturer
- Custom made in the USA



Also available, drop-in replacement stainless steel drum.

CALL OR EMAIL TO PLACE AN ORDER

800-632-2304 (7-3 pm M-F)

dropmaster.sales@nfpaglobal.com

Contact us for pricing.

We can provide an estimate including shipping.

DM25 Hitch Mounted Carrier

Designed to be used exclusively with the portable Dropmaster™, the hitch mounted carrier provides an easy method of loading and unloading your Dropmaster™ and saves valuable space in your service vehicle.

- **NEW!** Black powder-coated design
- **NEW!** Includes a UV and water-resistant canvas cover (also available separately)
- Saves valuable space in your service vehicle
- Includes ramp and locking mechanism to secure the unit during transportation
- Fits into any 2" standard hitch receiver
- Custom made in the USA



For more info

<https://dropmaster.dyneusa.com>

