MOFFETT TRUCK MOUNTED FORKLIFT (TMF) BUYER'S GUIDE

CHOOSING THE RIGHT TMF

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You have material which needs to be moved and you need a TMF to move it. Where do you start? First we need to think of the TMF, the transport vehicle and your material as a complete package. Selecting the correct TMF package for your business involves more than clicking a box on an order form.

To begin, we must fully understand four main topics:

Your application (your material, where you operate, the correct forklift and other considerations)

Legal requirements

Transport vehicle

Mounting kit and installation review

Our experienced team is ready to help guide you through the selection process. To help sharpen the conversation with your Hiab representative, please think about these topics.

Your Application

What material are you moving, what does it weigh, and how is it shaped? At Hiab USA, we sell machines for applications. Visit our applications page to see which models we recommend for each application. We base our recommendations on years of experience and customer feedback. Very simply, we've taken the guesswork out of selecting the correct tool for the job. Visit our applications page by visiting (LINK?).

Your material

For those that appreciate more detail, we provide this additional information. Whether you're moving cubed loads, wide loads, or irregularly shaped loads, different materials lend themselves to specific forklift models, capacities, and even fork shapes in order to provide optimal load handling capabilities. Ultimately, Load Weight and Load Center (also known as CG, or the distance from the vertical fork shank to the balance point of the load) help guide the forklift's required lifting capacity. TMFs' capacities generally range from 4500-8000 lbs at a 24" load center.

5500 lb capacity is nearly the standard in the TMF industry, and these units are particularly well-suited to building supply, brick/block, lumber, and drywall. The 5500 lb rated units are known to be the most versatile and robust workhorses in the industry, as well as retaining the highest resale values. These are the MOFFETT M8 55 Model Range units.

4500 lb capacity machines are generally used for lighter loads and/or lower duty cycle applications, such as LPG, industrial gas, and beverage handling. These are the MOFFETT M4 45 Model Range units.

5000 lb capacity machines are used for general building supply and scrap paper. These are the MOFFETT M5 50 Model Range units.

7000/8000 lb capacity is for customers who handle heavier loads, or loads with extended load centers. Examples include handling wall panels, trusses, utilities, and storage containers. These are the MOFFETT M8 70 and M8 80 Model Range units.

2-Way machines, where only the rear wheel steers, are preferred for handling cubed loads, due to the unit's optimized weight, high floatation tires, and smartly-engineered design. These machines are best suited to challenging job sites because of the optimized weight and high floatation tires. These would

be the MOFFETT .3 Model Range units. Examples - M8 55.3 Nx, M9 55.3P, M4 45.3 Nx, M5 50.3 Nx, and M5 50.3P Nx. [insert image of Standard machine in deep mud or challenging job site]

However, if you're handling loads wider than 10', such as lumber, drywall, steel, etc., a 4-Way machine, where the front wheels have the ability to pivot 90° and provide steering, is preferred since it enables carrying the wide loads, sideways, through vehicle-lined streets, obstructed driveways, and through narrow fence or doorway openings. These would be the MOFFETT .4-Model Range units. Examples - M8 55.4 Nx, M8 55.4P Nx, M8 70.4 Nx, M8 80.4 Nx, M5 50.4 Nx, and M5 50.4P Nx. [insert 4-Way image, navigating a narrow opening]

Where you operate

When operating in densely populated urban settings more often than in subdivisions, or rural settings, the ability to offload both sides of the transport vehicle from a single side is invaluable. Even with advanced planning, reaching both sides of the delivery vehicle can require relocating the delivery vehicle, mid-delivery, in order to reach the load on the opposite side of the bed.

MOFFETT's patented-Lift Assist, and Pantograph function, allow operators to not only reach the load on the other side of the transport vehicle, but can do so with full capacity, at an 8' lifting height. These would be the MOFFETT P-Model Range units. Examples - M8 55.3P Nx, M8 55.4P Nx, M5 50.3P Nx, and M5 50.4P Nx.[insert image of single side offloading]

Other considerations

Mast Lifting Height

While a 12' mast is generally recommended for building supply, lumber, and drywall applications, having a 12' mast helps the resale value of machines sold outside of these applications as well.

Forks or Fork Attachments

Depending on the load and fork lift model chosen, fork width, fork thickness, and even length and shape may vary. For example, forks used to pick lumber will have a chisel-shaped tip and fully tapered blade - this allows the fork to slide easily under banded lumber. On the other hand, using a chisel-tipped fork with palletized material will often lead to damaged pallets. We also offer various fork attachments for your specialized load handling needs.Your Hiab USA representative can help ensure you chose the correct fork for your forklift.

Legal Requirements

Size and Weight

State regulations guide the overall allowable length, vehicle and overhanging load. In regards to additional overhang due to the TMF, the minimum overhang for each forklift model can be found in the specification sheet. Models with a shorter overhang provide more usable bedspace, while models which are lighter and/or have a shorter mounted Center of Gravity (CG), provide more usable payload. The specification sheets can be found here - LINK.

While a weight distribution should be completed on every TMF installation, it's especially important when changing to a heavier model and/or if the new forklift has a longer mounted CG than the forklift it is replacing. Think of the transport vehicle as a teeter-totter; counter weight may be required near the front of the transport vehicle in order to maintain the correct percentage of front axle (truck) or kingpin weight (trailer). Failure to maintain proper weight on the front axle or kingpin can lead to unexpected loss of vehicle control.

The US Department of Transportation (US DOT) and Federal Highway Administration (FHA) regulations guide width and weight requirements (per axle and Federal Bridge formula) which affect TMF installations. It's also important to consider that states, cities, and seasonal restrictions can be even more strict than the federal guidelines. For this reason, it is imperative to understand where the forklifts will be used and if any special permits apply.

Special Requirements

Other considerations to think about; underrun protection, forklift registration, and flags for an overhanging load. Our sales representatives can help you work through these details today.

Selecting the transport vehicle

Choosing the right transport vehicle requires as much thought as selecting the correct forklift. While a MOFFETT TMF is equally at home on a tractor-trailer or a straight truck, it should be noted that a tractor-trailer is generally more maneuverable than a straight truck, and affords larger payloads. The drawback to using a tractor-trailer is the national shortage of Class A CDL drivers.

If we were to start the selection process with an existing transport vehicle, the transport vehicle itself may unnecessarily limit payload or forklift selection and increase forklift mounting system installation costs due to overall vehicle length, weight, axle placement, or even axle ratings. For this reason, if given the opportunity, it's always better to start with a vehicle which is optimized for the material and the forklift.

Whether mounting on a new or an existing vehicle, your Hiab USA sales manager will work with our engineering team to create an installation package which balances payload expectations with legal requirements. Equipment lead times will vary for vehicles and forklifts, and therefore, order timing is important.

Mounting kit and installation review

The native and preferred mounting system for the MOFFETT TMF is the MOFFETT Smooth Ride mounting kit. The key design features of the MOFFETT Smooth Ride mounting kit are to allow mounting and dismounting the machine in less than 60 seconds, and to use the forklift's front tires to insulate the forklift from shock loading during transport. In addition to the Smooth Ride mounting kit, Hiab USA offers optional compatibility with other mounting systems, as well as universal mounting systems.

Installation Review:

As part of the sale, Hiab USA will consider your existing fleet, transport vehicle specifications, and legal requirements to recommend the most logical mounting kit solution. Even if the new forklift will be placed on an existing mounting kit, it is highly recommended to consult your Hiab USA representative to ensure proper weight distribution with the new forklift.

If you have an existing mounting system, and are purchasing a new machine, it's always best to have the installation verified to ensure correct weight distribution and that the new machine mounts correctly in the existing mounting kit.

Thank You

A journey begins with the first step. If interested in more information or want to purchase a MOFFETT TMF, contact the sales team at (800) 852-2331. Or if you want to be put in contact with your local sales representative, please submit an online inquiry here (LINK).

To find out more about Hiab Engineering, body solutions, and how to contact the team, click here (LINK), or to find contact details for your local sales executive, please click here (LINK).