

WHEN AND WHERE TO USE WHEELED HANDLING EQUIPMENT...

Non-powered 4-wheel platform and 2-wheel hand trucks—and their close relatives, power-towed trailers—are today's biggest bargains in material handling equipment. They can be invaluable for short-term storage and short-distance, intermittent moves.

But like all equipment, trucks and trailers work best when selected thoughtfully. Here are typical criteria for applications where non-powered trucks have been found to perform most successfully and economically.

A. Materials and loads with these characteristics...

1. Relatively light
2. Variety of needs
3. Awkward shapes
4. Relatively small quantity
5. Relatively limited volume

B. Processes or situations with these characteristics...

1. Complex paths
2. Intermittent moves
3. Limited area
4. Minimum noise
5. Job shop
6. In-process handling
7. In-process storage
8. Relatively low volume
9. Relatively low production rate
10. Limited floor loading
11. Narrow aisles
12. Narrow doorways
13. Columns or obstructions
14. Departmental ownership

C. Desiring these advantages...

1. Low cost
2. Durability
3. Minimum maintenance
4. Light weight
5. Economy
6. Maneuverability
7. Versatility
8. Safety

(Adapted from notes of the late Professor James M. Apple, Georgia Institute of Technology)

VALUE: LOWEST COST IN THE LONG RUN

Floor Trucks and Trailers that are going to perform best and last longest may sometimes cost a little more to buy. But they almost always provide the *lowest cost in the long run*. Longer life, less downtime, lower maintenance and repair cost, and greater productivity far outweigh initial cost savings.

While Hamilton products have long been respected for the quality materials and

skilled workmanship they exhibit, their success begins with design expertise. Unprofessional designs, on the other hand, often result in trucks that are inefficient, awkward, or even unsafe. Perhaps the most penny-wise, pound-foolish mistake of all is seen in trucks that have been equipped with casters and wheels of inferior quality; for how can a vehicle be any better than the running gear that gives it mobility?

"JOB-BUILT" SPECIALS

The most efficient answer to your material handling problem could be a unit somewhat different in configuration, size or capacity from the many standard models shown in this catalog. Hamilton excels in the design and manufacture of custom-engineered trucks and trailers. Our complete machine shop, metalworking department, woodworking facilities, and contiguous caster and wheel plant enable us to produce exactly what you need, and at competitive prices. Catalog pages 112 and 113 show just a few of the many "Job-Built" Trucks we've built over the years.

CAPACITY RATINGS

Except where otherwise indicated, capacity ratings shown in this catalog reflect wheel and caster ratings established by the Institute of Caster Manufacturers for 3 m.p.h. intermittent operation over relatively smooth floors. Although ratings include a safety factor for normal applications, you should choose extra capacity if shock loading, overloading, powered movement, rough surfaces, or unfavorable conditions are apt to be encountered. Remember, too: capacity ratings are often established

differently by different manufacturers, so ratings should never be used in place of specifications for making comparisons.

SELECTING THE RIGHT WHEEL AND BEARINGS

You are frequently offered a choice of wheel and bearing types on trucks in this catalog—not to confuse you, but because different conditions are best answered by different kinds of wheel treads, hubs, or bearings. As a manufacturer of its own comprehensive line of industrial casters and wheels, Hamilton can let you "customize" your truck's running gear from its vast inventory at no penalty in price.

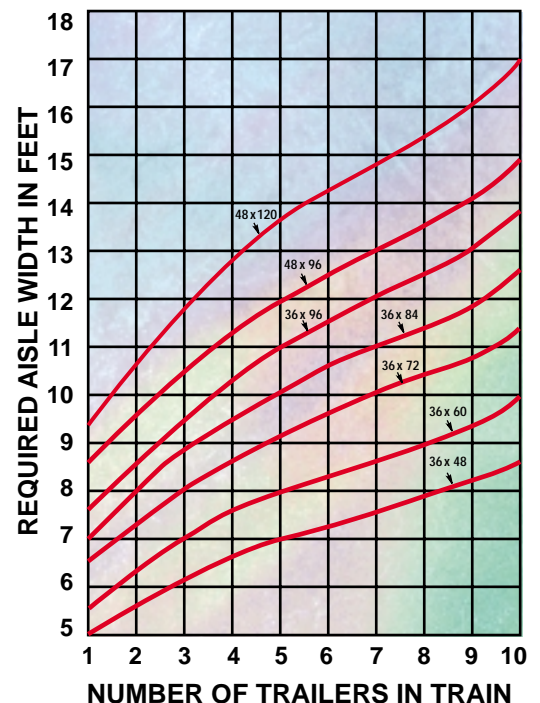
ROLLABILITY

Before using the selection chart on page 13, we have one suggestion for the specifier or buyer of wheeled equipment. This is awareness of the importance of rollability, which can be defined as the ease of starting and moving a loaded vehicle. Rollability will be affected by weight of the load, floor conditions, size and type of wheels and bearings, and of course, whether movement is to be manual or power-assisted. All other things being equal, a larger diameter wheel will generally roll more easily. Soft rubber treads—the quietest and the kind needed when floors are rough and littered—unfortunately produce the poorest rollability. So, oftentimes the wheel selected must represent a compromise: the phenolic "Plastex" Wheel, for example, rolls easily and is economical, but may be too hard or too noisy for some applications. Polyurethane wheels combine certain advantages of both...but at a higher price.

AISLE WIDTH GRAPH

This graph shows 90° intersecting aisle requirements for selected sizes of caster-steer trailers. Included is a safety factor of 10% or 6" (whichever is greater), to allow for wall clearance and driver error.

The findings herein result from a technical report entitled, "How To Know They'll Trail," sponsored by Hamilton in 1971. This report details a nomograph method for quickly determining aisle requirements for any number of caster-steer trailers of any size.





SEALED WHEEL BEARINGS

Most trucks equipped with straight roller bearings or precision tapered bearings can be furnished with sealed bearings at modest extra cost. Seals prolong equipment life by keeping lubricant in, dirt out. See page 69 for more detailed information.



SWIVEL LOCK

Provides fingertip conversion of swivel caster into rigid caster when lock is engaged, and full-swiveling maneuverability when disengaged. See page 69 for more detailed information.



FLOOR TRUCK LOCK

Step on pedal to lock, opposite pedal to unlock. Neoprene friction base, under pressure from compression spring, keeps truck from moving. Suitable for use on non-tilt trucks only.

All steel construction, with fully protected enclosed springs. Bolts onto truck frame. Normal installation is to mount between front swivel casters; for severe applications may dual mount one lock on each side of truck. Not intended as a dynamic brake or for use on inclines. See page 72 for more detailed information.

RUNNING GEAR ARRANGEMENTS



4-Wheel Caster Steer

(2 swivel, 2 rigid). Most popular; easily turned or pushed straight, trails well.



4-Wheel Diamond Pattern

(all rigid). Tilt-type, turns on center wheels. Lowest cost, suitable for light loads.



6-Wheel Tilt or Non-Tilt

(4 swivel, 2 rigid). Recommended for heavy loads and extra long trucks. Turns in own length.



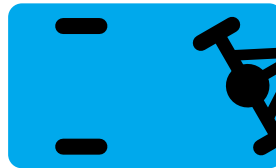
4-Wheel Non-Tilt

(all swivel). Can be maneuvered in any direction. Ideal for confined areas, but needs swivel lock for straight-line steering.



4-Wheel Diamond Pattern

(2 swivel, 2 rigid). Highly maneuverable. Usually tilt-type, can be non-tilt. Not recommended for ramps.



Wagon (Fifth Wheel Steer)

Features large axle mounted wheels for heavy loads. Usually powered towed.

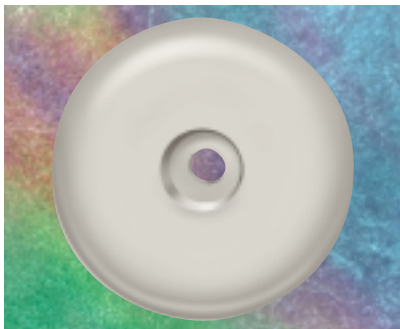
MATERIALS AND FINISHES

Besides the steel, wood and aluminum trucks shown in this catalog, Hamilton can also produce trucks of stainless steel or with special finishes. Standard colors for painted steelwork, unless otherwise indicated in specifications, are Hamilton Red for steel two-wheel trucks and drum handling equipment, and Hammertone Blue for others except as noted. Safety Orange is a no-extra-cost option on caster-steer trailers, if specified. Wood tops are sanded and varnished, unless quoted otherwise. For special colors or finishes, consult factory for extra cost.

RUBBER BUMPERS

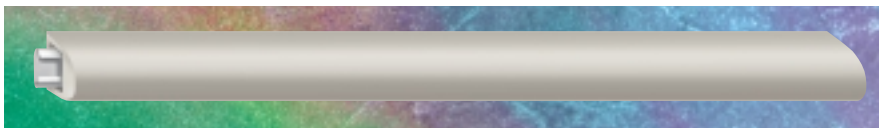
Doughnut Bumper

For use on ends of push handles (Styles D or E only). Size 3/4" diameter.



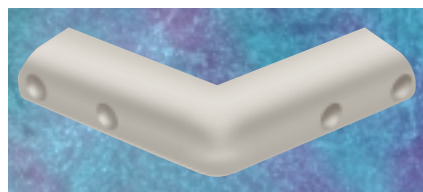
Strip Bumper

Reinforced with durable steel insert and fastened to edges of truck frame. Size 1" wide x 7/8" thick to match corner bumpers.



Corner Bumper

Fastened securely to truck corners through steel insert. Measures 3" long x 1" wide x 7/8" thick to match strip bumper for continuous installation.



REPLACEMENT CASTERS, WHEELS AND PARTS

When you purchase a Hamilton Truck or Trailer, you do so with assurance a permanent record exists of its construction and specifications including exact model of caster, wheel and bearing supplied. This is true whether the product was standard or a "special" created just for you. As a result, it will be easy for you to order replacement parts at any time directly from the Hamilton Distributor nearest you.