

## TECH DATA

# ActivRAC® 7M

MOBILIZED STORAGE SYSTEM

### MOBILIZED STORAGE SYSTEM

Spacesaver® Industrial® ActivRAC® 7M mobilized storage systems, designed specifically for manufacturing, warehouse and distribution environments, provide the safest, most reliable, durable, and easiest user operation available today. Flexible system designs will meet the most demanding industrial requirements. Unique, innovative design allows you to mobilize your existing racking or industrial shelving and install the system on your existing floor. Flexible system design allows you to store more in less space, as well as free up revenue generating space and better organize your materials, resulting in improved operational efficiency.

### MECHANICAL ASSIST SYSTEM OPERATION

Spacesaver Industrial mechanical assist control uses an ergonomic three-spoke drive handle, with rotating knobs to provide an efficient method of moving mobile system carriages that features a user activated safety lock.

### BENEFITS

Spacesaver Industrial provides a convenient, easy to operate system that allows you to compact your materials stored on racking or shelving. ActivRAC 7M mechanical assisted mobilized storage systems are space efficient and easy to use. They are designed for continuous use in manufacturing, warehouse and distribution environments, and provide durable, reliable and low maintenance operation. They feature fully welded wheel assemblies that ride on either low profile beveled top mount rails or recessed mounted rails, which allow a flush/floor configuration.



ActivRAC® 7M mechanical assist mobilized storage systems are space efficient and easy to use. Designed for continuous use in manufacturing, warehouse and distribution environments, and to provide durable, reliable operation.

## DESIGN AND CAPABILITY



Mechanical assist control provides mechanical advantage for easy carriage operation, with an ergonomically designed three-spoked drive operator that transfers power to the carriage's drive axle through roller chains and sprockets concealed behind the stanchion.

A three-spoked handle, with rotating soft touch hand knobs, is mounted to each stanchion. Dual control systems provide a spoked operator on the front and rear of each carriage. Each spoke operator houses a safety lock control with a visual indicator. This alerts users to the lock's operational status.

To access a new aisle, first visually check the existing aisle to make sure it is clear of users and obstacles, including stored media protruding from storage shelves. When the aisle is clear, release the safety lock(s) on the spoke operator(s) closest to the opened aisle. (The lock's fluorescent green visual indicator will show the carriages' unlocked status.)

Then move the carriages by rotating their spoke operators in the desired direction of travel until the new aisle is fully opened. Finally, depress the safety lock control(s) on the spoke operator(s) adjacent to the new aisle, to lock the carriage(s) in place.

### A. Top Mount Rail Design Option

All rails are installed on top of concrete slab.

- 3/8" (9.5mm) tall x 4-1/2" (114mm) wide steel rails, with black zinc finish, with beveled edges. ADA compliant.
- Rail and carriage design allows concrete slab to be unlevel to following maximum variation:
  - 3/16" (4.8mm) maximum variation over any 2' (.6m) rail run
  - 1/4" (6.4mm) maximum variation over any 10' (3.04m) rail run
  - 1/4" (6.4mm) maximum variation between adjacent rails
- Provides minimal interruption of material handling equipment
- Top mounted on floor, supporting up to 7,000 lbs. (3,175kg) per wheel assembly
- Disperses heavy wheel point loads to floor.
- Designed to operate under heavy, long-term, cyclic stress loads.
- Provides the solid basic foundation required for heavy-duty mobilized storage systems, assuring low maintenance and easy operation.

### B. Recessed Rail Design Option

All rails are installed flush with concrete slab.

- 3/8" (9.5mm) tall x 3-1/2" (89mm) wide steel rails, with black zinc finish, designed to be installed flush into the concrete floor.
- Rail and carriage design allows concrete slab to be unlevel at the following maximum variation:
  - 3/16" (4.8mm) maximum variation over any 2' (.6m) rail run.
  - 1/4" (6.4mm) maximum variation over any 10' (3.04m) rail run.
  - 1/4" (6.4mm) maximum variation between adjacent rails.
- Provides the easiest housekeeping.
- Provides flush, non-interrupted transition for material handling equipment.
- Flush mounted in floor, supporting up to 7,000 lbs. (3,175 kg) per wheel assembly.
- Disperses heavy wheel point loads to floor.
- Designed to operate under heavy, long-term, cyclic stress loads.
- Provides the solid basic foundation required for heavy-duty mobilized storage systems assuring low maintenance and easy operation.

### C. Load Wheels

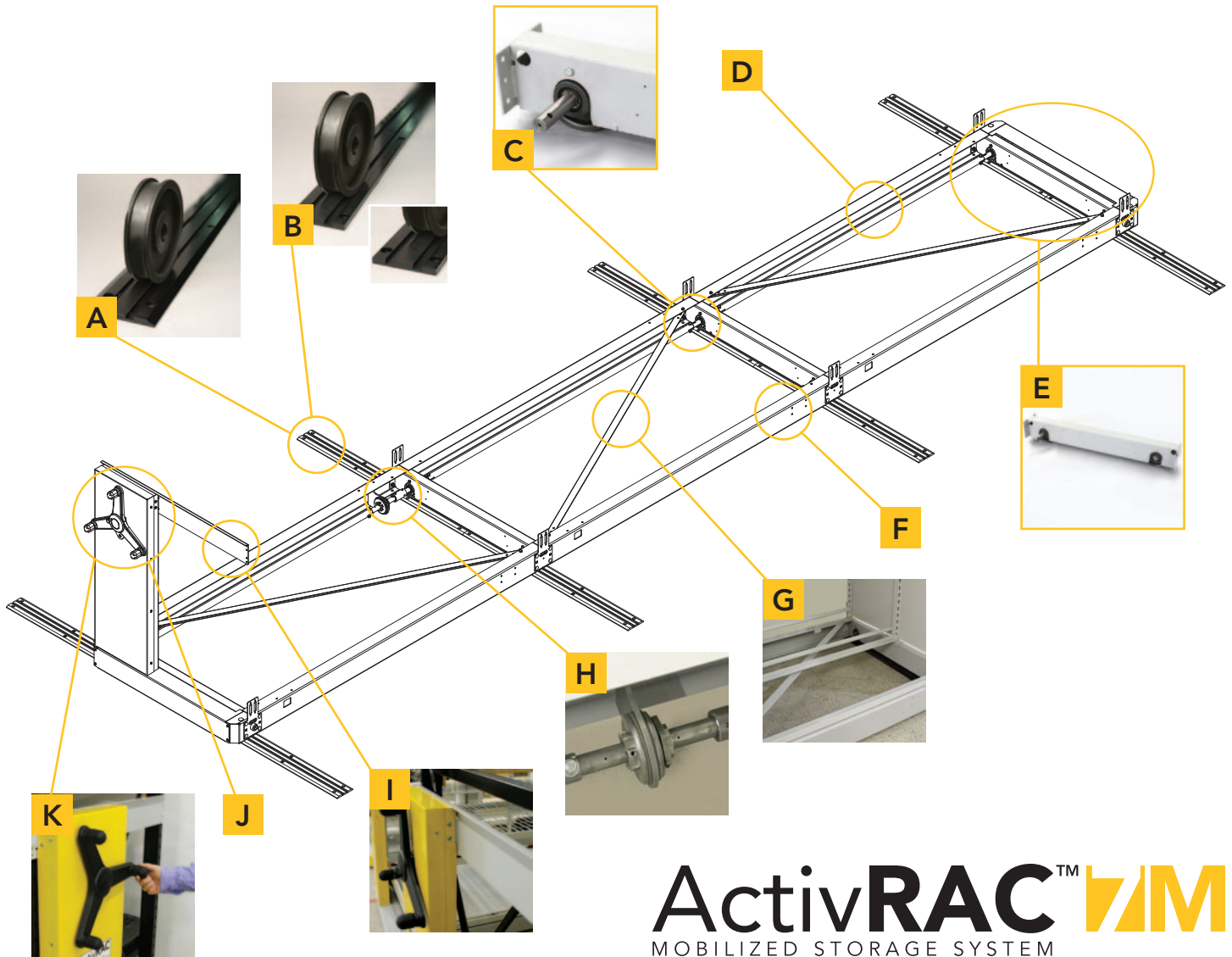
- 15"-20" carriage widths utilize 3" (76mm) diameter cast iron load wheels.
- 20" and over carriage widths utilize 5" (127mm) diameter cast iron load wheels.
- Wheels utilize 2" (52mm) O.D. heavy duty roller bearings.
- Ductile cast iron wheels, with machined rolling surface
  - Provide easy movement and prevent premature wear.

### D. Drive Wheels & Drive Shaft

- 5" (127mm) diameter cast iron drive wheels which are located in the wheel assemblies.
- Heavy duty 1-5/16" O.D. 11-gauge tubular drive shaft, with bolted ends that provide solid, maintenance free connection to the drive axles in each carriage section.

### E. Uniframe Wheel Assemblies & Carriage Base

- Fully welded 12-gauge uniframe wheel assemblies.
  - Provide maximum strength for the load and cyclic stress requirements of a mobile system.
  - One-piece construction assures wheel alignment.
- Assembled structural steel carriage base has a maximum capacity of 7,000 lbs. (3,175 kg) per carriage/wheel section.



# ActivRAC™

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## F. Carriage Side Profiles

- 5" (127mm) 10-gauge thick steel channel.
- Provides carriage framework and maintains wheel assembly alignment and squareness.
- Universal rack/shelving brackets provide attachment of racking/shelving to carriage base.

## G. Diagonal Bracing

- Keeps wheel assemblies in exact alignment.
- Provides rigid base for racking or shelving.

## H. Anti-Roll Mechanism

- Passive safety feature.
- Prevents carriage from rolling if anti-roll safety lock is not engaged.

## I. Stanchion Support Bracket

- Universal bracket provides attachment of existing racking/shelving to three-spoked drive operator.

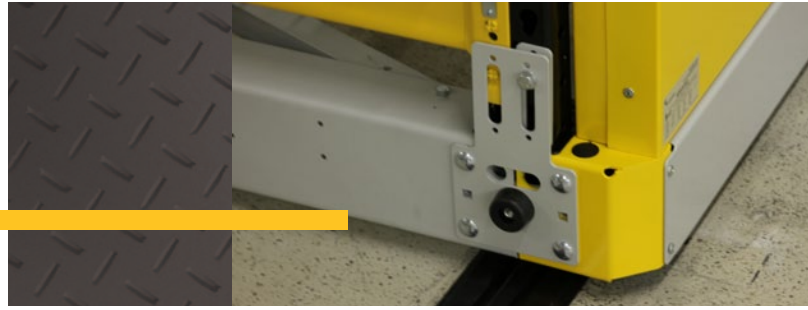
## J. Mechanical Assist Drive Systems

- Mobilized storage bases are moved by means of a mechanical assist chain and sprocket drive unit located in the front of each carriage.
- Allows users to easily move heavy loads
- Four gear ratios available.
- Optional dual controls for accessing a system module from both the front and rear.

## K. Three-Spoke Handle & Anti-Drift System

- Three-spoke handle and rotating knob provide smooth movement.
- Each mechanical operator shall have a positive on and off anti-roll safety lock, with a visual fluorescent green indicator in the unlocked state, located on the operator hub.

# SPECIFICATIONS



## Rail-Top Mount:

Rail shall be 1018 steel bar 4-1/2" (114mm) wide x 3/8" (9.5mm) high, with black zinc finish. Rail edges shall be beveled down to a maximum of 3/16" (4.8mm) to allow for the rail to be transversed by material handling equipment. Rail shall disperse the wheel point loads to structural slab. Rail shall have two permanently mounted floor anchors maximum 15" (381mm) on center. Rails shall be installed on top of concrete slab. Rail and carriage design allows concrete slab to be unlevel at the following maximum variations:

- 3/16" (4.8mm) maximum variation over any 2' (.6m) rail run.
- 1/4" (6.4mm) maximum variation over any 10' (3.04m) rail run.
- 1/4" (6.4mm) maximum variation between adjacent rails.

## Rail-Recessed Mount:

Rail shall be 1018 steel bar 3-1/2" (89mm) wide x 3/8" (9.5mm) high, with black zinc finish. Rail shall disperse the wheel point loads to structural slab. Rail shall have two permanently mounted floor anchors maximum 15" (381mm) on center. Rail shall be installed recessed into concrete slab and flush to top of concrete slab. Rail and carriage design allows concrete slab to be unlevel at the following maximum variations:

- 3/16" (4.8mm) maximum variation over any 2' (.6m) rail run.
- 1/4" (6.4mm) maximum variation over any 10' (3.04m) rail run.
- 1/4" (6.4mm) maximum variation between adjacent rails.

## Mobile Carriage Bases:

Assembled structural steel carriage base will have a minimum capacity of 7,000 lbs. (3,175 kg) per carriage section. Each wheel assembly shall be equipped with two steel wheels, minimum 5" (127mm) diameter steel wheels. Wheels are equipped with two permanently lubricated and shielded radial ball bearings. Wheel capacity 3,500 lbs. (1,587 kg) each. Wheels have solid steel axles of 1" in (25mm) diameter. Wheels shall be dual flange, all-wheel

guided. All carriage sections between wheel assemblies have integral diagonal bracing to maintain accepted tolerances for function of systems. Side profiles shall provide and maintain wheel assembly alignment and squareness. These profiles shall be pre-drilled at the factory, but are bolted, and assembled on the job site as integral carriage members. Structural steel side profiles shall be minimum 5.084" (129mm) high, 10-gauge (3.4mm). Finish shall be powder coat paint.

## Line Shaft Drive System:

Line shaft drive consists of a wheel section positioned at each rail location. Wheel section shall consist of a load wheel and a drive wheel. Each wheel shall be provided with two permanently shielded bearing assemblies. Wheels shall be ASTM A 536 specification 65/45/12 machined ductile iron. All wheels shall be 5" (127 mm) diameter. All wheels on one side of the carriage shall be driven by a continuous steel drive shaft 1-5/16" (33 mm) O.D. x 1" (25mm) I.D. connected to the 1" (25 mm) diameter wheel drive axles with bolted clamp connections.

## Mechanical Assist Housing and Operator:

Mobilized storage bases are moved by means of a mechanical assist chain and sprocket drive unit and operator located in the front of each carriage. Multiple drive ratios are available. A roller chain connects sprockets and adjustable chain idlers and is required to maintain proper chain tension. Carriage is moved by rotating a three spoke handle with rotating knobs. The anti-roll mechanism system is required to prevent carriage from drifting. Dual control housings and operators for accessing a system module from both the front and rear are optional.

Specifications are subject to change.  
Patent Pending.



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