

TECHNOLOGY TO IMPROVE VESSEL TURNAROUND TIMES



Tandem vs Single – Vessel Turnaround

Vessel turnaround time
is governed by the concentrated stowage point



TIME HOURS



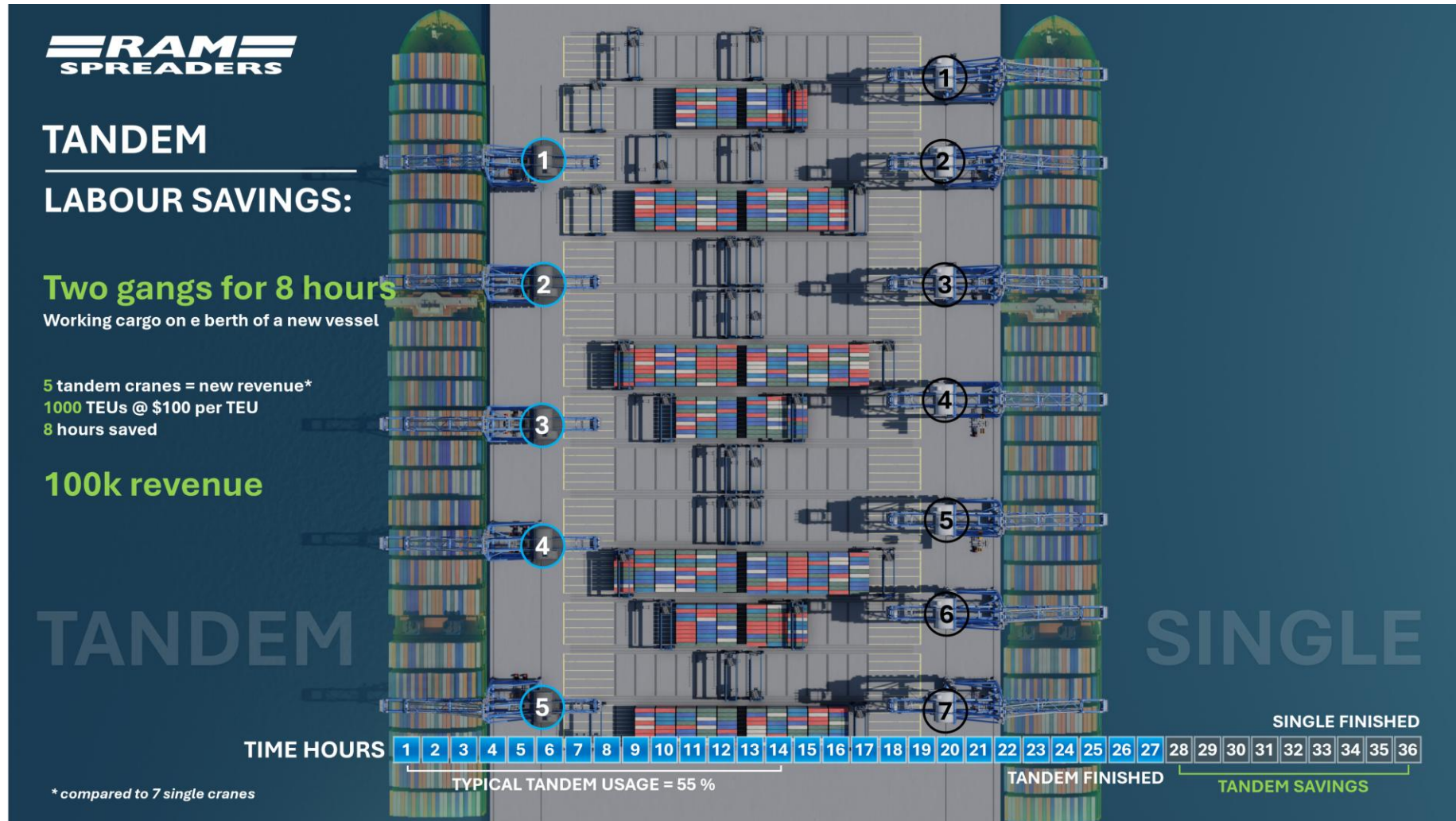
TANDEM 186/900

SINGLE 138/900

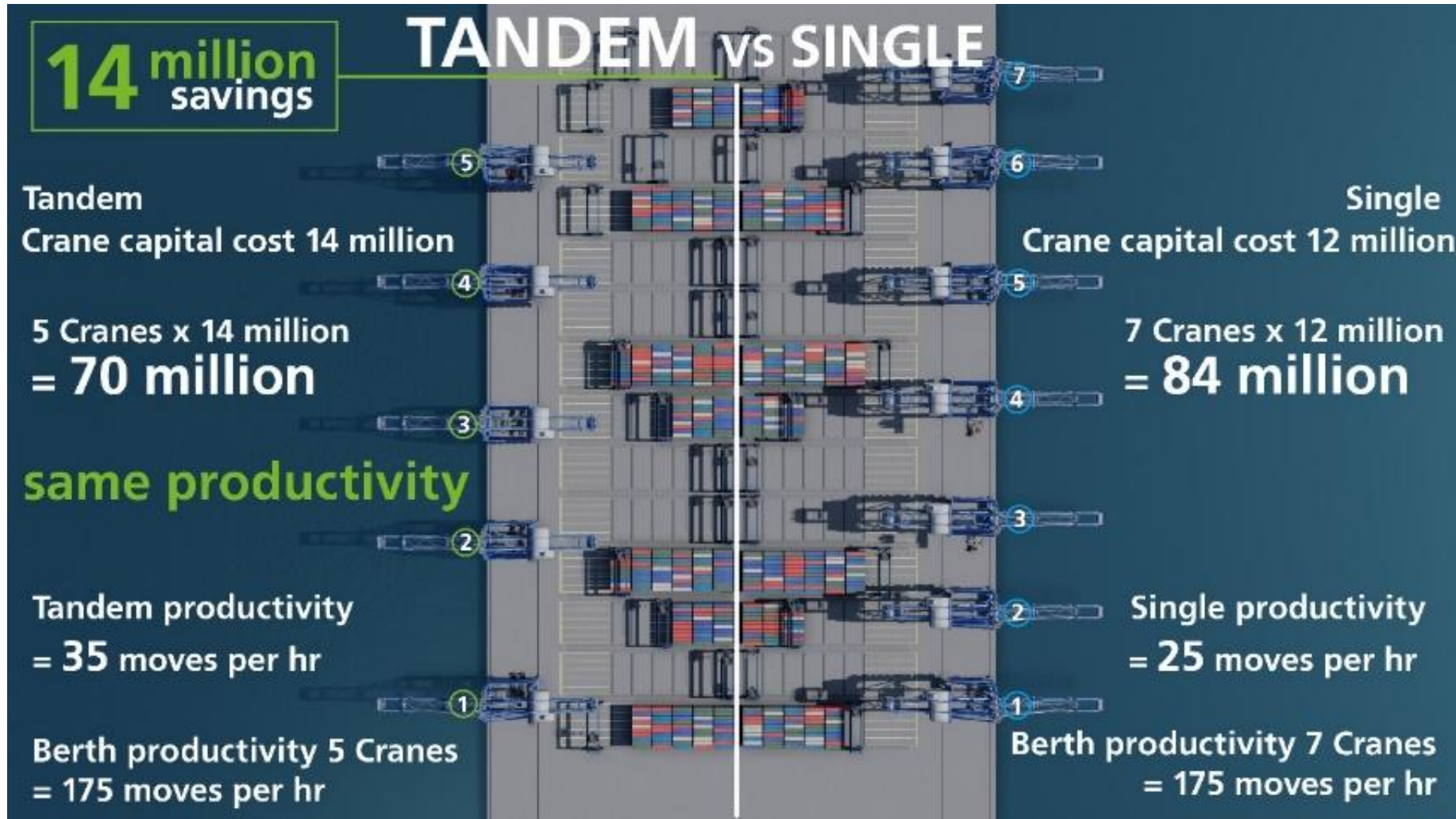
TANDEM vs SINGLE



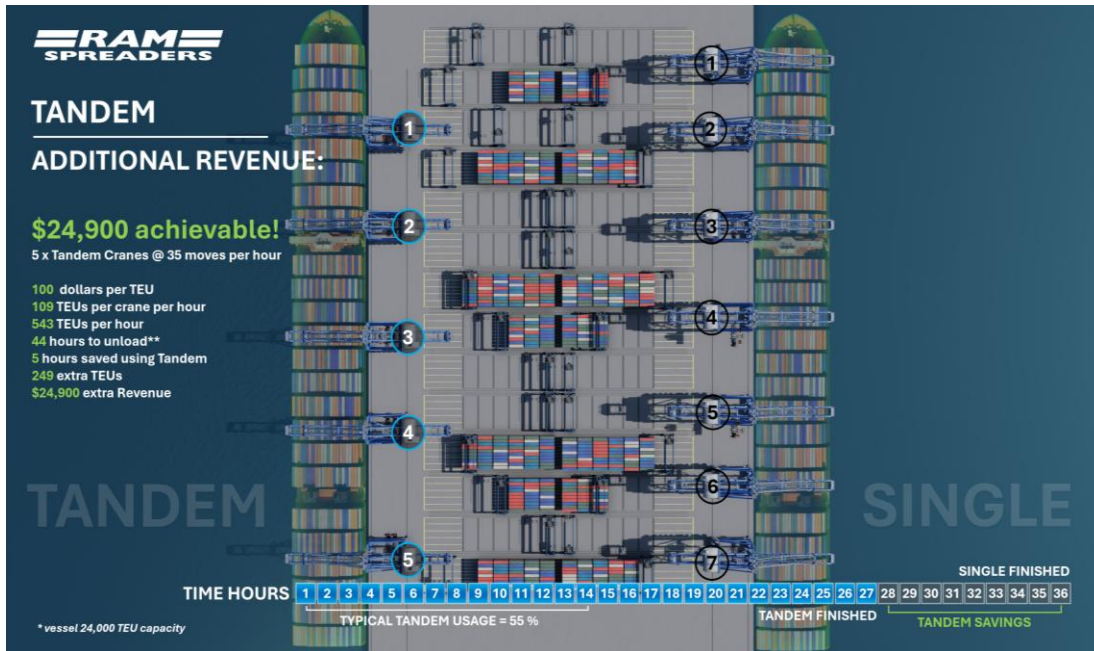
Tandem vs Single – Increase Revenue!



Tandem vs Single – Capital Cost



Tandem vs Single – Increase Revenue!



REVENUE

Tandem operations enable vessels to complete their tasks more quickly, thereby freeing up the berth for new vessels to come alongside. Handling more containers on the same berth enables a terminal to generate more revenue!

Turnaround Simulation Example:

Tandem crane vessel turnaround, with the second vessel arriving while a single crane operation continues on its first vessel!

Benefits of Tandem:

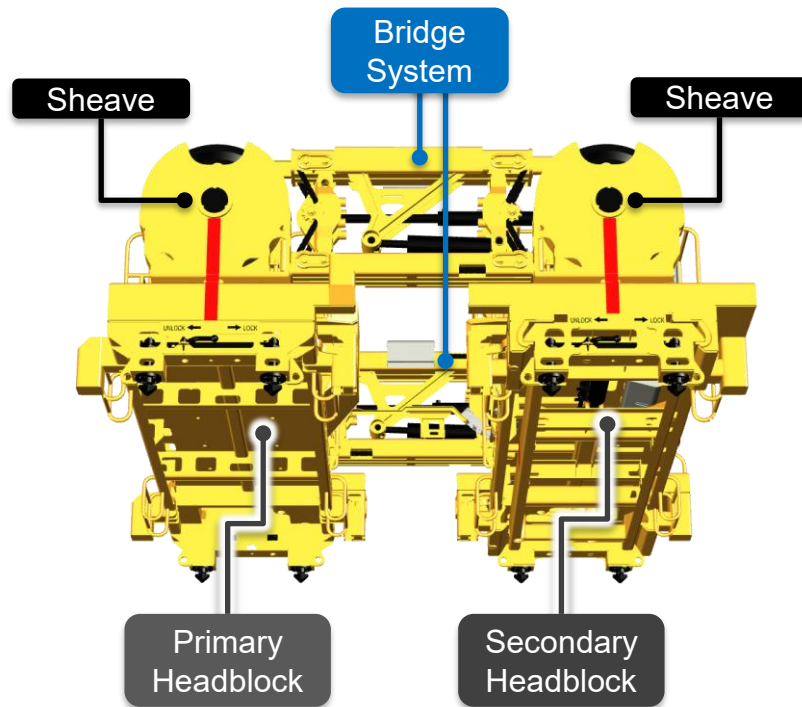
- A terminal can generate an additional \$ 25,000 in revenue when unloading a 24,000 TEU mega-vessel.
- It is possible that a terminal can work an extra 1,272 TEUs in 24 hours, generating an additional \$127.2k.

“If waiting ships and more cargo can generate additional revenue, then terminals can quickly generate an extra €87.3k per week (€4.5 million per annum) with the same capital”

Tandem – What's Needed

The Headblock

- Primary & secondary headblock
- Bridge system with sheaves



Spreaders

2 x twin lift spreaders with centre gap separation



Tandem – Lifting Configurations

Single Spreader:

1 x 20 | 40 | 45*
2 x 20

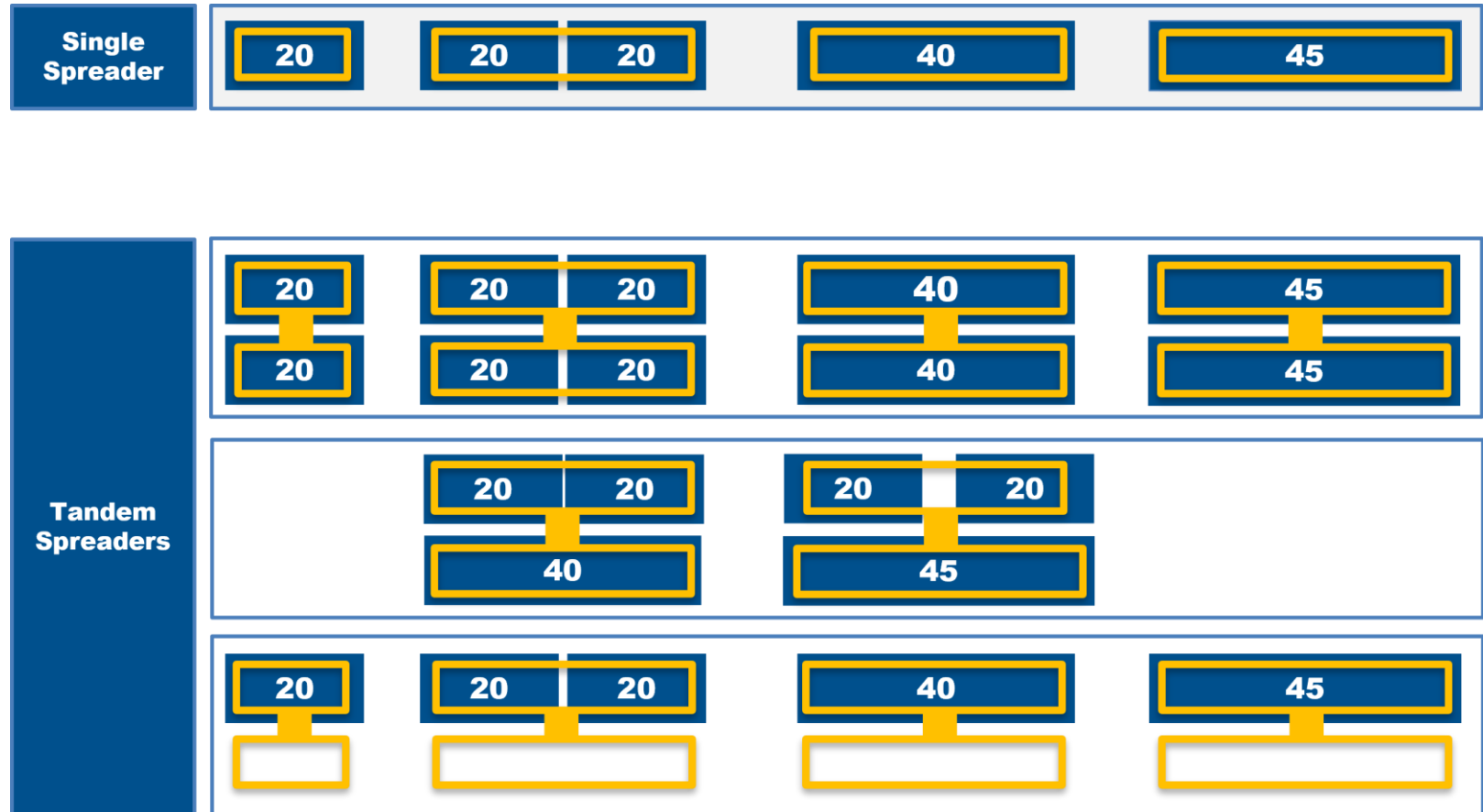
Tandem Spreaders

1 x 20 | 40 | 45*
2 x 20 | 40 | 45*
4 x 20

Combinations:

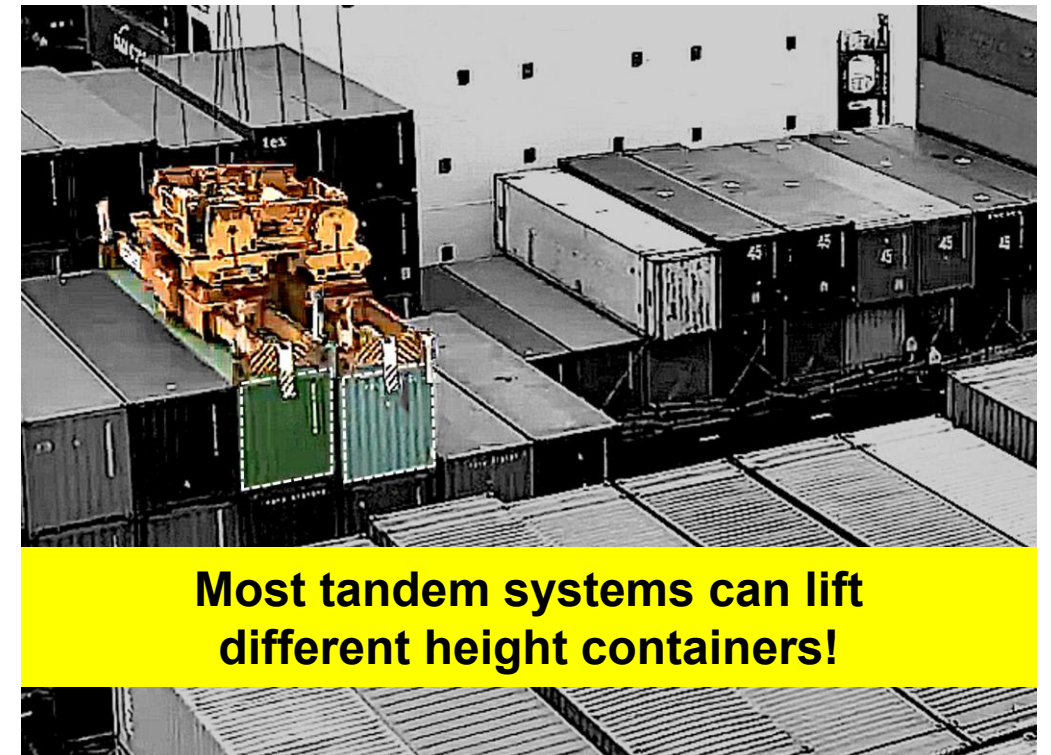
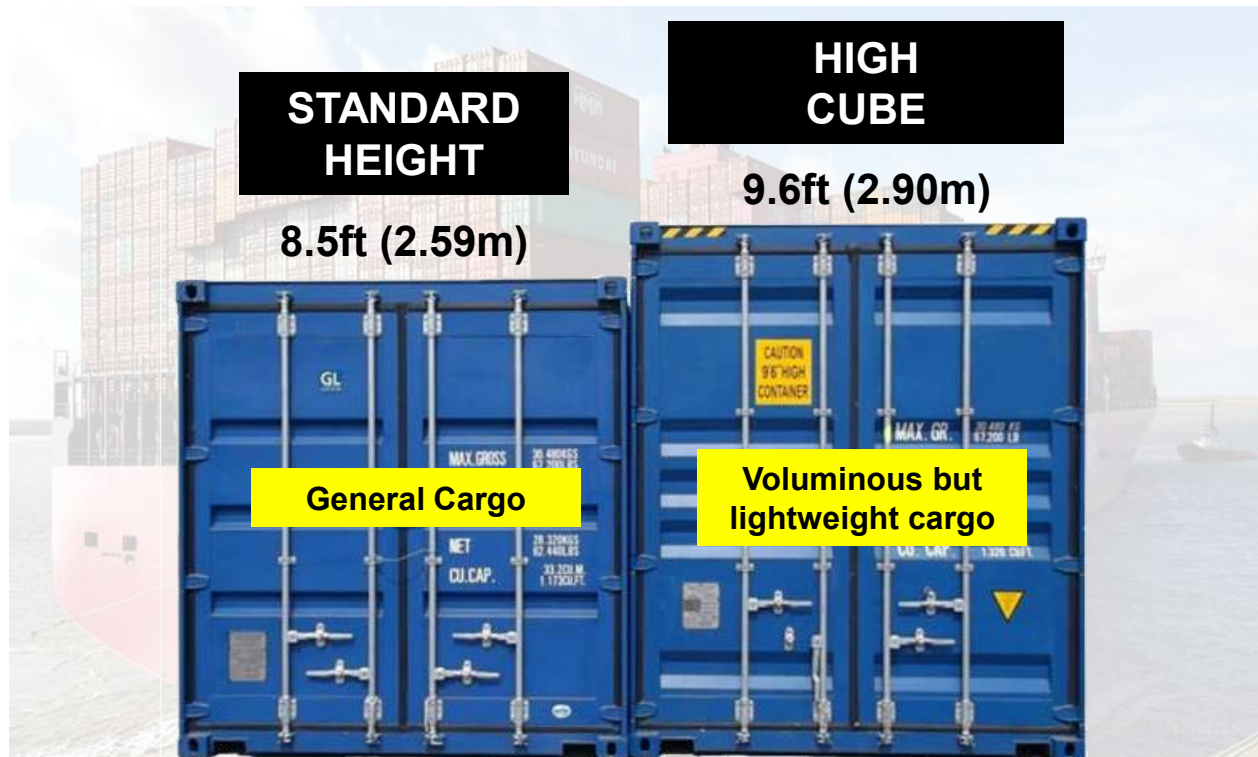
1 x 40 | 45* + 2 x 20ft

** subject to spreader specifications*



Tandem – Container Height Differences

With varying cargo needs, the two most common types of 40ft ISO shipping containers are:



Tandem – Utilization

The key to successful tandem operations comes from three factors:

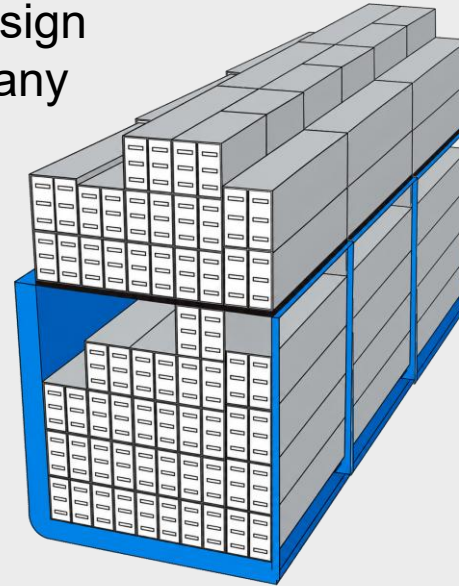
1

Using a tandem system that can switch fast between tandem and single



2

Flexible design to cover many stowage conditions



3

Good yard support to ensure containers are moved to the yard quickly





TANDEM HEADBLOCK SYSTEM

*The new norm in
container handling*