



Packing Efficiently

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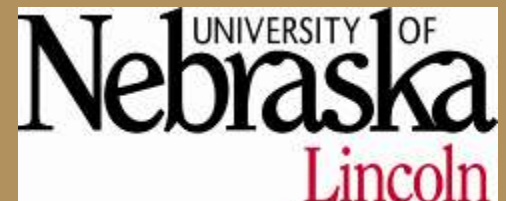
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Resources

- Univ. of Wisc. Healthy Farmers, Healthy Profits Project <http://bse.wisc.edu/hfhp/>
- Growing for Market <http://www.growingformarket.com/articles/Packing-Shed>
- Many growers, large and small, throughout the US

Why Worry About Efficiency?









Why Worry About Efficiency?

- Pleasant place to work
- Save time, money
- Minimize frustration
- Reduce accidents, fatigue, injuries
- Improved cleanliness
- Reduce potential contamination

Consider the situation....

- Do all crops need to be washed? Cooled?
- If washed, how? Spray? Dip? Some of both?
- Is there a clear entry or starting point?
End?
- Lighting?
- What happens to wash water? How is debris handled?

Consider the situation....

- Where is the hand washing station?
Drinking water?
- Where do workers put their “stuff”?
- Are work surfaces easy to sanitize?
- Where will sanitizers, cleaning supplies, etc. be stored?
- Where are boxes, rubber bands, etc. stored? Can you find it easily?

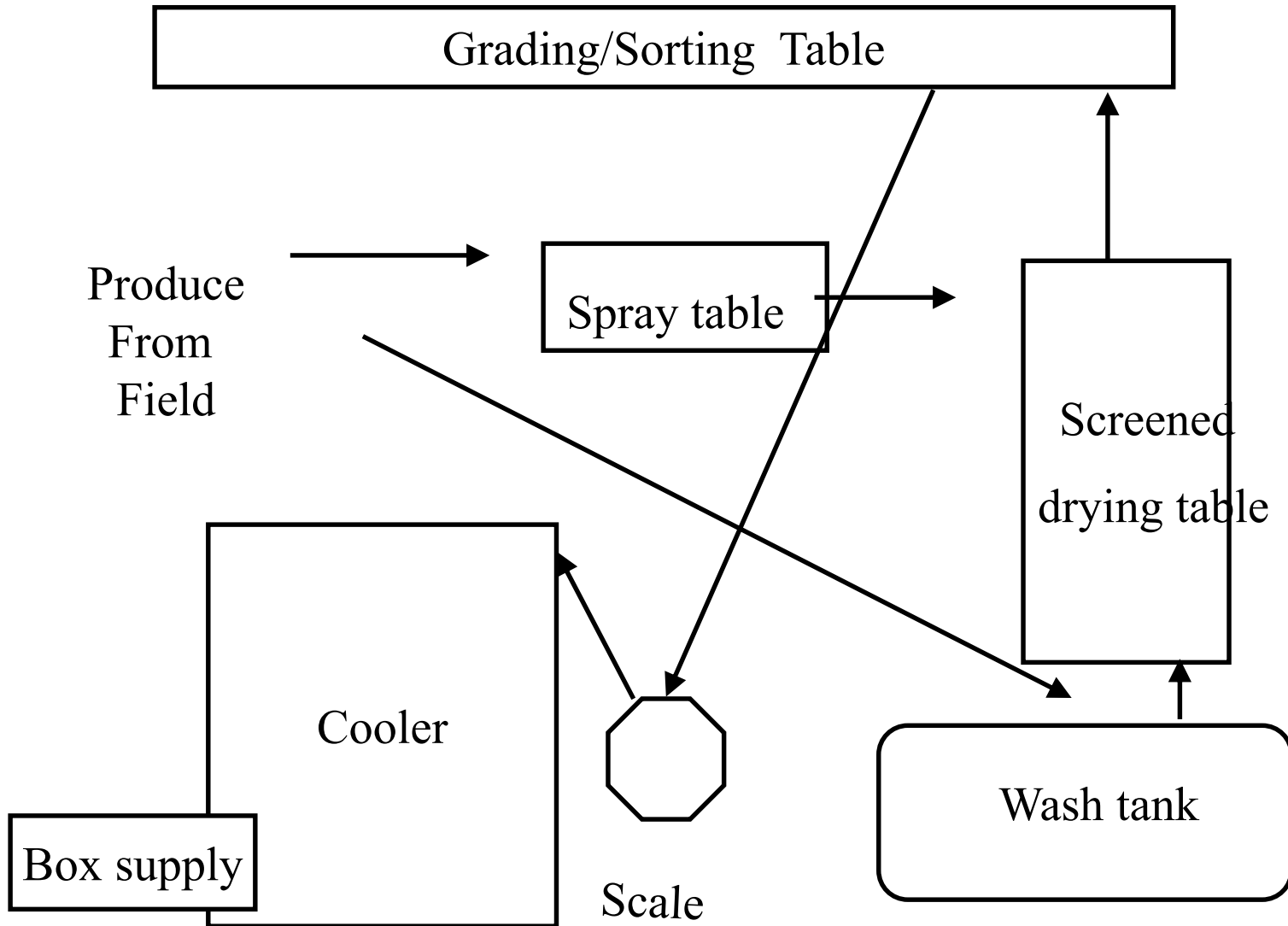
Consider the situation....

- Height of work surfaces? Could some jobs be done sitting?
- Rubber floor mats to reduce fatigue?
- Is there good ventilation? No insects?

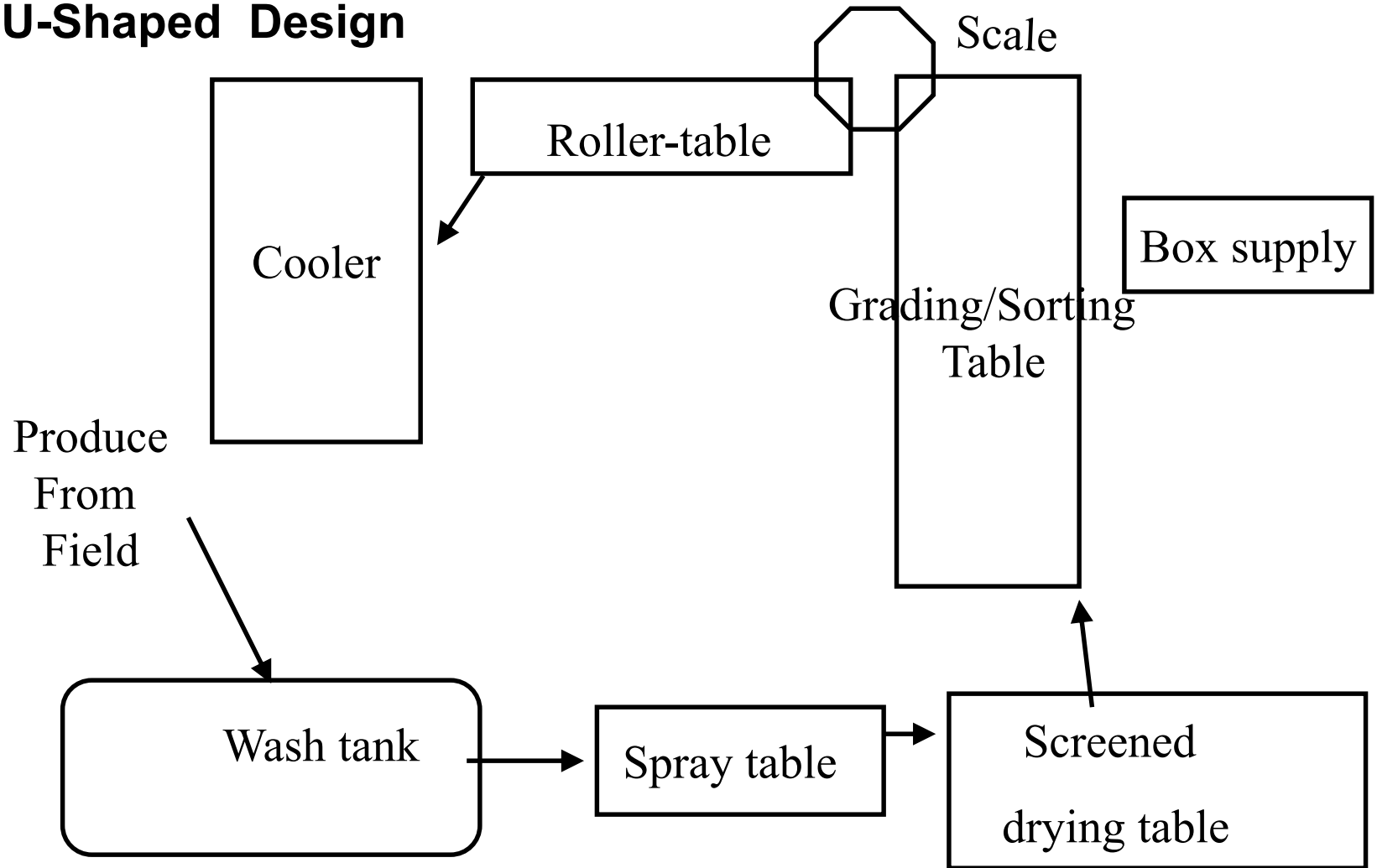
Consider the situation....

- Are supplies accessible but out of the way?
- Is the flow of produce toward your dominant hand? Left to right for right handed people...
- Look for physical safety hazards as well as points of potential cross contamination
- Is there a place to rest and relax?

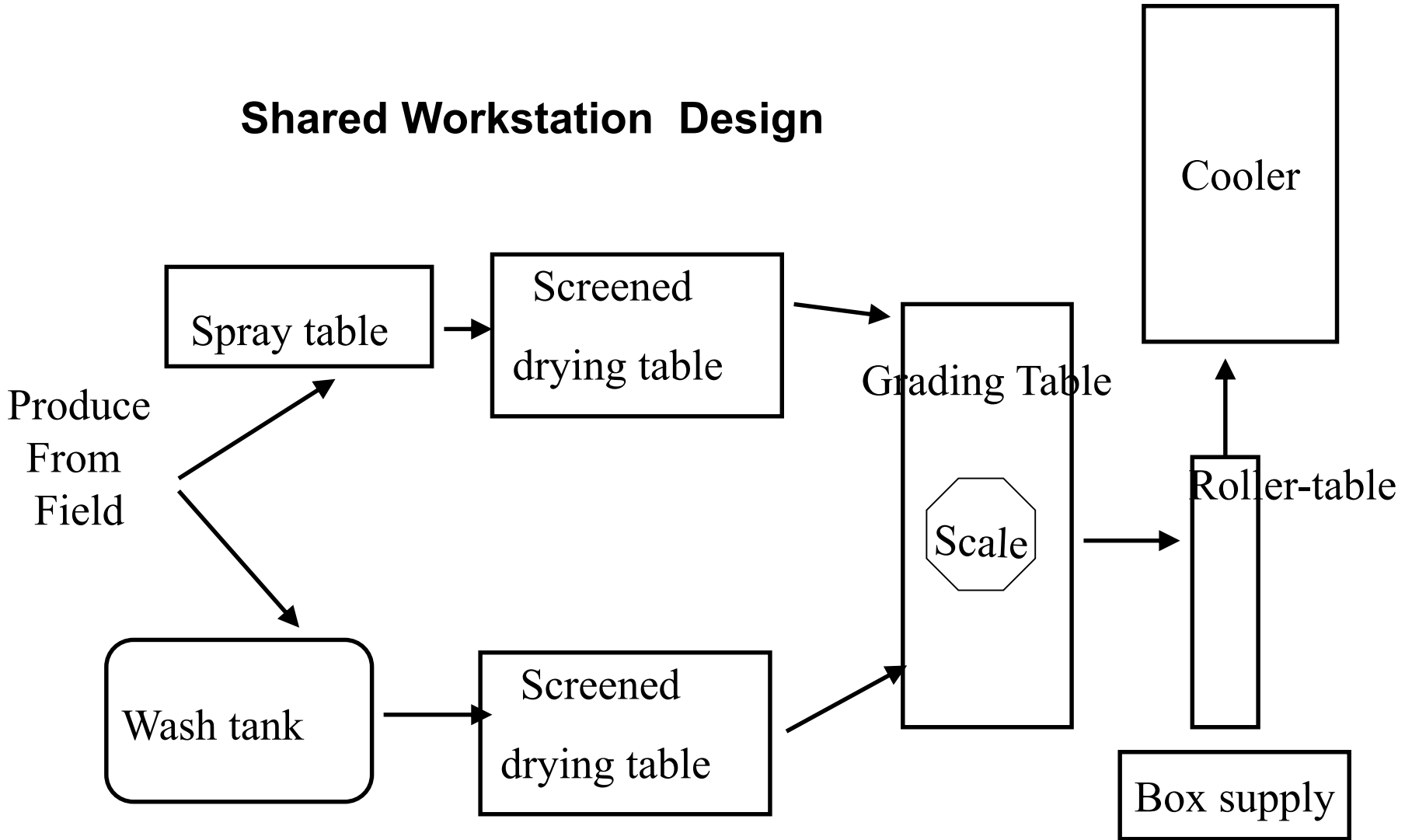
Inefficient Design



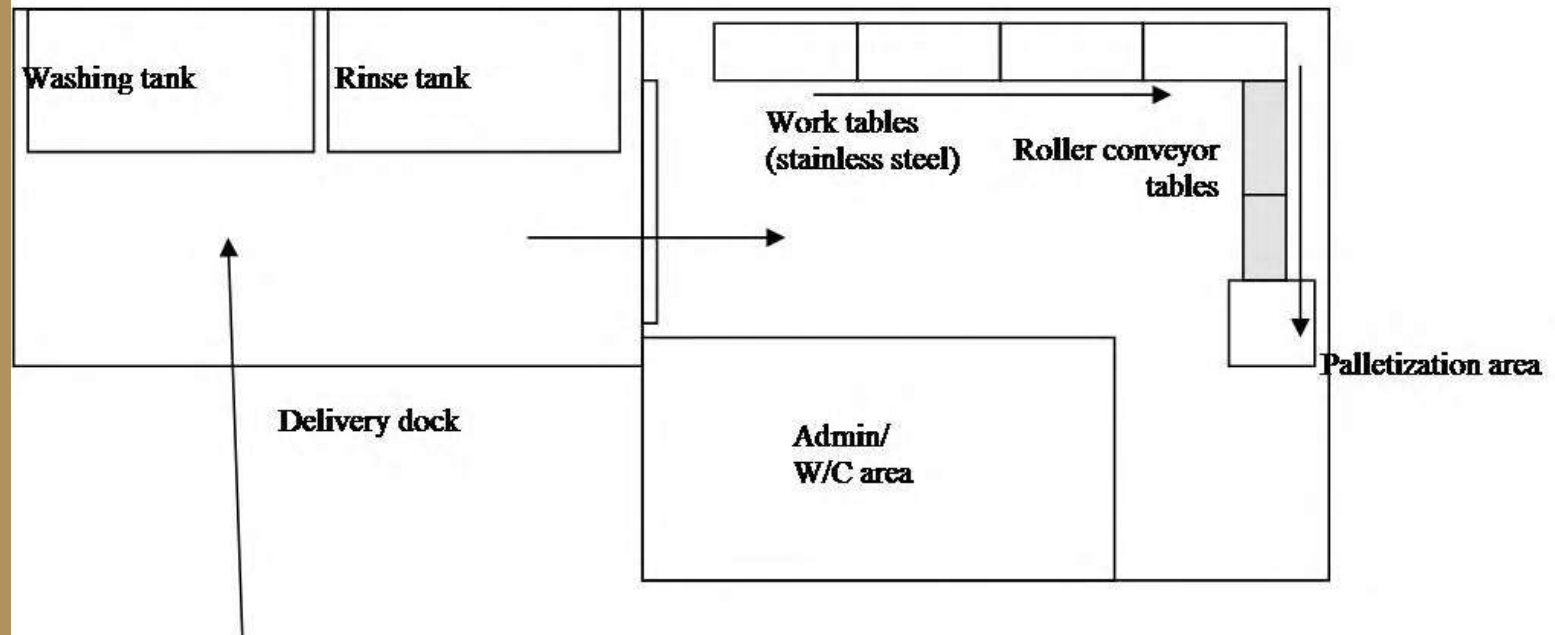
U-Shaped Design



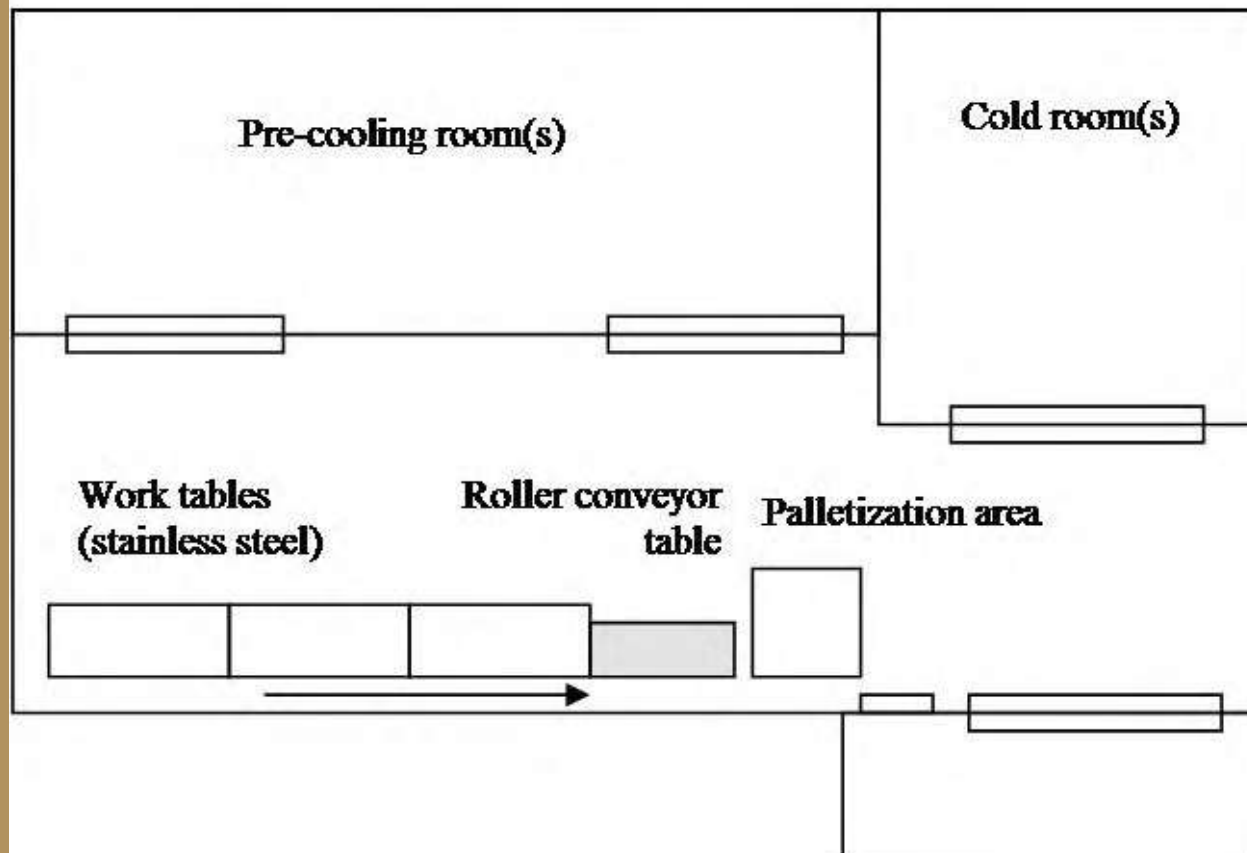
Shared Workstation Design

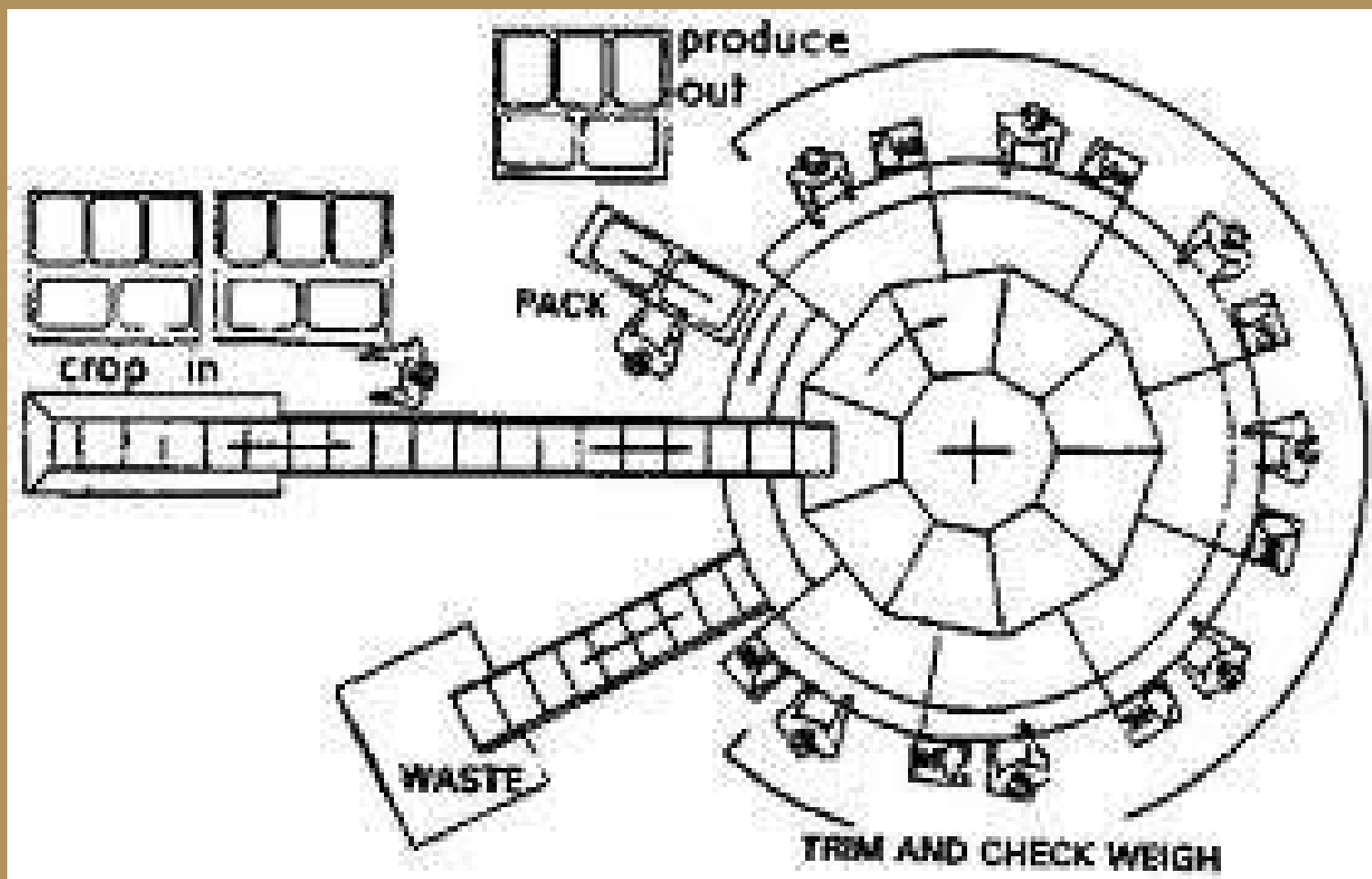


Packingline #1 layout



Packingline #2 layout





Fao.org

Check weighing Scale

- Place at end of packing line
- Confirm packed weight for uniformity
- Flowers, herbs, winter squashes, etc. can be grouped by weight and priced accordingly



Packing Station Tasks

- Wash or otherwise clean
- Trim as needed
- Grade
- Pack
- Specify for each major crop proper procedures, pictures of properly prepared and packed products so expectations are clear
- Set up markers for minimum/maximum length
- Disinfectant for knives, surfaces
- Storage area for grading tools,
- DEBRIS & CULL REMOVAL SYSTEM

Make Life Easier

- Look at equipment — used equipment is often available
- Get it up off the ground
- Discover the wheel
- Organize



Willsie.com



Roller Conveyor Tables





Harvest gently and neatly to
make packing easier and more
efficient





Willsie.com stainless steel conveyor

Narrow pallets and platform trucks ease transport



<http://www.growingformarket.com/articles/Packing-Shed>

Working height



Use a conveyor to move boxes; elevate to reduce fatigue and lifting



Let Light Shine



- Lights above eye level
- Hair nets
- Gloves
- Rollers and side tables at correct height

Tables as packing stations

- Removed or rearranged easily
- Stainless Steel preferred
- Height adjustable
- Sanitize frequently (document each time)





Lighting at eye level causes blinding and eye fatigue. Lighting fixtures should also be covered to prevent glass shattering over produce if broken.





Automatic bucket filler for cut flowers



Trimming station

Make Life Clean



The inspector comes



Simple record of
who, what, what
field, when

Bunched by:

Picked on:

Mon	Tues	Wed	
Thurs	Fri	Sat	Sun

Length cm:

40	50	60	70	80

Export | AKI H

Local | KAZE N

No of bunches



Graphic of where to
place rubber bands &
expectations for
grading. Could use a
photo.













Clean harvest buckets.
Uniform sizes of standard containers
Up off the ground



A place for everything
and everything in its
place



Coolers

- Sliding doors take less space than swinging doors
- Entrance should be level; no step up
- Doors covered with strip curtains to reduce loss of cold air and reduce flying insect access
- Walls, floors, ceilings covered with food grade material that can be sanitized
- Adjustable, rust-proof shelving that can be sanitized. Consider wheels.
- Floor drain

Inside a forced air precooling facility. Pallets are arranged to form an aisle. Tops are covered with a canvas leaving both sides exposed to the cold air. Air from the plenum tunnel is removed creating a negative pressure that forces cold air to pass through the load



<http://www.fao.org/docrep/008/y4893e/y4893e06.htm#TopOfPage>

Pulling air through boxes is more efficient & thorough than trying to push. Air circulation around boxes is critical.