What is a rim?
The outer edge of a wheel onto which the tire is mounted. In our case it is rims that are clamped or fastened to a tractor or machine.

What is a wheel?
A rim with a fixated or welded in center, revolves on an axle, and is fixed below tractor or machine.
Rims

Rims that are clamped or fastened to the tractor by casting.
Correct way to measure the rim width and diameter

The **width** of the rim is not measured by the overall width but instead from the **bead to the opposite bead**.

The same goes for measuring the **diameter** of the rim. It is not measured by overall flange height but to the **first drop of the bead**.
Double bevel rims vary in size from 24” to 42” in diameter. The rims are embossed to accommodate 8, 9, 10, 12, & 16 lugs.

A. Represents diameter of rim
B. Represents width of rim
C. Inside diameter of rim
D. The casting diameter
Single Bevel Style Rim

One bevel is made into the rim instead of two. Instead of lugs punched into the rims, **single bevel rims are formed with a drive lug stop** on the rim to clamp to the casting. It is lined up parallel to the valve stem hole of the rim.

*Common on older Oliver tractors.*
Deep Well Style Rims

Deep well rims have a drop inside the rim to make it a smaller inside diameter.

A formed block is welded on the rim as a drive lug stop, parallel with the valve stem hole.

Sizes vary from 26”, 30”, 32”, 34” and 38” rim diameters
Deep Well Style Rims

A. Rim diameter
B. Rim width
C. Inside diameter of rim
D. Casting diameter
Power Shift Rims

Power shift rims have rails welded throughout the rim that clamp onto the casting.

Rims vary from 4, 5, 6, 7, & 8 power adjust rails.

Rim sizes range from 24” to 42” in diameter.
Wheels
A rim with a fixated or welded in center that revolves on an axle and is fixed below tractor or machine.
Identifying the different style of wheels

Adjustable Wheels

Centers Welded In
There are many different styles of wheels with bolt in center disc. To the right are some of the more common options we run across. The adjustability of the rims allows for row crop scenario’s and wider or narrower stance of the machine depending on use.
BOLT CIRCLE - MEASURED FROM HOLES 180 DEGREES FROM ONE ANOTHER
BOLT TO BOLT - MEASURED FROM CENTER OF HOLE TO CENTER OF HOLE
**CONVERSION WHEEL SPECIFICATION SHEET**

### Four Groups of 2 Clamp

<table>
<thead>
<tr>
<th>Number of Bolts</th>
<th>Outside Diameter</th>
<th>Bolt Circle</th>
<th>Bolt to Bolt</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</tbody>
</table>

**Current Rim Size:**

**Desired Rim Size:**

**Bolt Size:**

**Paint Color:**

### 4-2 Hole Formed Bracket

<table>
<thead>
<tr>
<th>Number of Bolts</th>
<th>Outside Diameter</th>
<th>Bolt Circle</th>
<th>Bolt to Bolt</th>
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</table>

**Current Rim Size:**

**Desired Rim Size:**

**Bolt Size:**

**Paint Color:**

### Rim and Clamp Evenly Spaced

<table>
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</table>

**Current Rim Size:**

**Desired Rim Size:**

**Bolt Size:**

**Paint Color:**

### Four Groups of 2 Hole Stub Disc

<table>
<thead>
<tr>
<th>Number of Bolts</th>
<th>Outside Diameter</th>
<th>Bolt Circle</th>
<th>Bolt to Bolt</th>
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</thead>
<tbody>
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</tr>
</tbody>
</table>

**Current Rim Size:**

**Desired Rim Size:**

**Bolt Size:**

**Paint Color:**

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I have verified and agree with the information presented above.

**Signature**  
**Date**
Pressed Center

Pressed Center with Rering

- Welded in at 50% contact.
- Commonly found on the rear of combine and different implements around the farm.
- Rerings are often added to reinforce the bolt holes.
RIM & WHEEL TRAINING

Formed Center

Straight Plate
RIM & WHEEL TRAINING

Spun Plate

Bubble Center
Bolt circle: as if you were looking at a clock. 12 o’clock to 6 o’clock center to center of bolt holes.

Pilot hole: the overall diameter of the center hub hole.

Bolt hole size: the diameter of bolt hole. Also note if hole has a countersink to it.
Odd number of bolt holes

*** Pilot hole and bolt hole diameter are measured the same as even # of holes.
Frontside and backside measurements

**Backside:** measure from the backside of the mounting face to the back outer edge of rim.

**Frontside:** measure from the frontside of the mounting face to the front outer edge of rim.

*Using a strait edge of any sort is a helpful way to get an accurate measurement of frontisde or backside*
Wheel Offset

POSITIVE OFFSET (A) - DISTANCE BETWEEN MOUNTING FACE OF THE DISC AND THE RIM CENTERLINE. THE DISTANCE IS POSITIVE WHEN THE MOUNTING FACE IS OUTSET FROM THE RIM CENTERLINE.

NEGATIVE OFFSET (B) - DISTANCE BETWEEN MOUNTING FACE OF THE DISC AND THE RIM CENTERLINE. THE DISTANCE IS NEGATIVE WHEN THE MOUNTING FACE IS INSET FROM THE RIM CENTERLINE.