



Precision Steel Bright Bars for Agricultural Machinery: Shafts, Spindles, and Gears

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Agricultural machinery demands high-strength, wear-resistant, and precisely machined components to ensure reliability in harsh working conditions. At Steelmet Industries, our cold drawn steel bright bars are the preferred choice for manufacturing shafts, spindles, and gears used in tractors and farm implements.

# Why Cold Drawn Bright Bars for Agricultural Machinery?

- Superior Strength & Durability Withstand heavy loads, impact, and fatigue stresses.
- 2. **High Dimensional Accuracy** Essential for tight-fitting components in power transmission systems.
- Smooth Surface Finish Reduces friction, improves efficiency, and minimizes wear.
- 4. **Enhanced Machinability** Allows for precision cutting, threading, and shaping without defects.
- Corrosion Resistance Suitable for outdoor exposure and harsh agricultural environments.

# **Applications in Agricultural Machinery**

## 1. Shafts for Tractors & Implements

Cold drawn steel bright bars are used in **power take-off (PTO) shafts**, **axle shafts**, **and transmission shafts** 



- . These components must endure continuous rotation, high torque, and heavy loads without failure.
  - **Example:** PTO shafts require **high-tensile steel grades like EN8D**, **42CrMo4**, **or C45** to handle torsional stress efficiently.

### 2. Spindles in Farm Equipment

Spindles are vital in plows, seeders, and harvesting machines, ensuring **stable rotation and precise movement**. They must have high **wear resistance** to withstand constant friction.

**Example:** Bright steel bars with **case-hardening grades like EN353 or 20MnCr5** provide excellent strength and long service life.

## 3. Gears for Agricultural Machines

Gears in tractors and farm machinery facilitate **power transmission**, **speed control**, **and motion precision**. Cold drawn bright bars ensure **tight tolerances**, **uniform hardness**, **and smooth meshing** of gear teeth.

**Example:** SAE 8620, 16MnCr5, and 20CrMnTi are commonly used steel grades for agricultural gears due to their hardness and shock resistance.

# Why Choose Steelmet Industries?

At **Steelmet Industries**, we manufacture **customized cold drawn bright bars** for the agricultural sector, ensuring:

- ? **Consistent Quality** Strict adherence to industry standards.
- ? Customized Solutions Bars available in rounds, squares, hexagons, and special profiles.
- ? **Reliable Supply Chain** Ensuring on-time delivery for OEMs and fabricators.
- ? Need precision-engineered steel bars for your agricultural machinery? Contact Steelmet Industries today!
- ? Visit us at www.steelmet.in

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Steelmet Industries Bright Bars, Alloy
Steels, Free Cutting Steels, Stainless Steels
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