



Air Inclusion: The ambient atmosphere forced into the system during the connection of the quick disconnect halves.

Break-Away: Automatic disconnection of a coupling when an axial separation force is applied.

Brinelling: Dimples or grooves worn into the shoulder of a male half by the locking balls in the female half.

Burst Pressure: The pressure at which a device loses the capability to retain pressure.

Case Hardening: Hardening the surface of low carbon steel..

Cold Flow: Continued deformation under load.

Connect Under Pressure: Ability to connect coupling halves with internal line pressure applied to either both sides or one side.

Coupling, Female Half: Other nomenclature “couple”, “socket”, “body”.

Coupling, Male Half: Other nomenclature “nipple”, “plug”, “adapter”.

Coupling, Quick Disconnect: A component which can quickly join or separate a fluid line without the use of tools or special devices.

Differential Pressure (ΔP): The difference in pressure between any two points of a system or a component.

Double-Acting Sleeve: Permits push-to-connect and pull-to-disconnect convenience on implement line when female half is clamp mounted and connected with a hose.

Dust Cap: Dust or dirt repelling enclosure for both halves.

Dust Plug: Dust or dirt repelling enclosure both halves.

Flow Checking: Occurs when a nipple valve closes during flow conditions, such as when quickly lowering a heavy implement. (Also called Check Off, Back Checking or Lock-up.)

Flush Position (Valve): When the coupler valve is fully open, allowing maximum oil flow.

Force to Connect: Axial and/or rotational force required to make a complete connection.

Force to Disconnect: The reverse of the above.

Induction Hardening: Localized hardening of medium carbon steel.

Peak Pressure: Maximum momentary pressure encountered in the operation of a component.

Pressure Cap: Cap which incorporates a seal capable of withstanding the rated pressures on the male half.

Pressure Impulse Test: Subjecting a component to a specified pressure at a specified rate of increase or decrease for a specified time limit.

Pressure Operating: The pressure at which a system is operated.

Pressure Plug: Plug which incorporates a seal capable of withstanding the rated pressures on the female half.

Proof Pressure: The non-destructive test pressure in excess of the maximum rated operating pressure.

Push To Connect (Auto Lock): Locking arrangement which permits one handed connection by pushing the nipple into the coupler.

Rated Pressure: The maximum pressure at which a product is designed to operate.

Single-Acting Sleeve: Permits pull-to-disconnect convenience on implement line when female body is clamp mounted. Making connection requires manually pulling female body forward, inserting male tip, then allowing body and tip to return to original position in the clamp.

Sleeve Lock: Arrangement which provides an additional lock which must be actuated before the locking sleeve can be retracted.

Spillage: The fluid removed from the system due to disconnection of a coupling assembly. This is the fluid trapped between the mating seal and the valve seal of the coupling halves.

Surge Pressure: The pressure existing from surge conditions.

Surge Flows: A rapid increase in fluid flow.

Thermal Build-Up: Hydraulic pressure caused by expansion of the fluid due to heat from an external source such as sunlight.

Trapped Pressure: Pressurized hydraulic fluid trapped behind closed coupling valve

Twist Lock: A locking arrangement which requires a rotational actuation to unlock the mating halves.

Types of Quick Disconnect Coupling Valves

Straight-Thru (ST): This provides straight through flow.

Double Shut-off Valve (DSO): A valve in the female half and a valve in the male half.

Single Shut-off Valve (SSO): Generally, a valve in the female half with no valve in the male half.

NOTE: Refer to Parker’s Publication No. 3800-B1.0: Safety Guide for Selecting and Using Quick Action Couplings and Related Accessories.