



## REGULAR DUTY (MI-HUB) VS. HEAVY DUTY (MI-XHUB NO HUB COUPLINGS)

MIFAB's Series of MI-HUB and MI-XHUB no hub couplings are designed and engineered to connect cast iron pipe and fittings together. MIFAB's flexible stainless steel shield provides adjustability to the installing contractor when working with cast iron pipe and fittings that are over or undersized to ensure a quality system and labor savings.

MIFAB's MI-HUB Series is a "regular duty" no hub coupling tested and certified to the ASTM # #C1277-2018,, ASTM C564, CISPI 310-2010 and CSA B602-2016 Standards and are listed with IAPMO and NSF certified to CISPI 310. They are also tested by Intertek Testing Services to CAN / ULC S102.2-07 "smoke test".

Storm and Sanitary drainage systems are generally considered to be "low pressure" systems under normal conditions. This changes when a blockage in the line occurs and the resulting build up of water can greatly increase the pressure within the system.

High pressures can also occur in plumbing systems when lower level parking garages and multistory lobbies are built. Often, the design of these structures does not allow for relief in the sanitary systems for four floors or more. The condition known as "Hydraulic Jump" can lead to surges and pressure at any change of direction; especially at the base of the stack. Storm systems have even a greater risk of high line pressure occurrences since they are often not relieved for the total height of the structure.

Underground piping systems have different issues and risks not found above ground. Movement of the earth during back filling and settling of trench beddings is common. In addition, areas of seismic activity, unstable soil conditions caused by thermal effects (expansion and contraction), environments of high corrosion and high groundwater tables can lead to separation of joints without visibility to the installer.

Failure of the piping system due to high line pressures and faulty underground installations can lead to pipes leaking /breaking at their joints. The resulting water leaks can cause damage within the building, affecting equipment, furniture, machinery and the building structure. Plumbing Engineers should consider specifying MIFAB's "heavy duty" no hub couplings to minimize these risks.

MIFAB's MI-XHUB Series is a "heavy duty" no hub coupling tested and certified to the ASTM # C1540-2011, ASTM C564 and CSA B602-2016 Standards and listed with IAPMO. The MI-XHUB Series has also been tested by IAPMO to the FM1680-1989 Standard (except for markings).

The MI-XHUB Series provides a more rigid joint connection than the MI-HUB Series because it has a wider shield and a greater number of stainless steel clamps. These additional clamps, which need to be torqued to 80/100 inch pounds, make a more uniformly rigid joint with the load supported at the outer edges of the coupling and the centerline of the joint. The additional clamps also increase the surface bearing contact between the coupling and the pipe / fittings to reduce joint movement at high internal line pressures. In comparison, the industry's "regular duty" no hub couplings have two fewer clamps and are torqued only to 60 inch pounds.

MIFAB's MI-XHUB Series of heavy duty no hub couplings is the specifier's ideal choice for the most demanding conditions.

CALIFORNIA PROPOSITION 65 WARNING. This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.