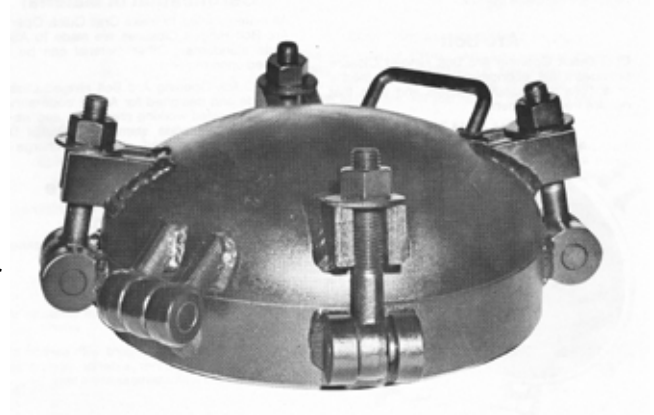


## Series 1000 Quick Opening Swing Bolt Hinged Closure

**Design** – Crall Products uses a proprietary computer program to design its Swing Bolt Closures to customer specifications. The Crall Quick Opening Wing Bolt Hinged Closure has an elliptical head hinged to its own hub. B7 high tensile, heat-treated eye bolts, are pinned to the lugs on the hub so the head will swing clear after the bolts are loosened. An O-ring is placed in a machined groove in the head so that it will provide a tight sealing fit between the head and the hub. Both head and hub are quality machined to provide self-alignment between the two.



**Swing Bolt** – Crall Quick Opening Swing Bolt Hinged Closure provides a fast, economical, yet simple means of access to pressure vessels and lines that require frequent opening.

**Safety Features** – The lugs on the head are positioned at a 10 degree angle so the bolts cannot move off the top lugs under pressure or in the process of tightening. Loosening the nut a few extra turns to clear the top lugs will permit the head to lift and relieve any residual pressure that might be present while the head remains securely retained.

**Certification of Material** – All material used to make Crall Quick Opening Swing Bolt Hinged Closures are made to ASME code standards. Other material can be furnished upon request. Crall Quick Opening Swing Bolt Hinged Closure is made and designed for ASME code service at various rated working pressures and we will supply ASME code stamp with Partial Data Report when specified at an extra charge per order.

**Stainless Steel** – 304, 304L, 316 & 316L grade stainless steel available. Prices on request. Standard with carbon steel bolts, lugs and other exterior components. Also available with stainless steel trim.

**Materials** – Head - ASME SA-516 GR. 70

Head Lugs - SA-36

Eye Bolts - B7

Nuts - SA-194 2H

Lug Pins - SA-193 B7

Hub lugs - SA-36