

PRODUCT INFORMATION**316L STAINLESS STEEL SOCKET DISCOLORATION
OF 4½" DIAL SIZE & LARGER PRESSURE GAUGES**

This product information page replaces DU/PI-48 dated 1/1/2004, titled "Duragauge® Systems Socket Discoloration on 316L stainless steel."

Background

All Ashcroft® gauges with a 316L stainless steel (S designation), carbon steel (B designation) and Monel (P designation) Bourdon tube and socket undergo a stress relief process. This process ensures long term tube stability and gauge accuracy.

Ashcroft® uses two methods when stress relieving:

-The process to stress relieve type 45 1259 as well as gauges with dial sizes of 3½" and smaller solely stress relieve the Bourdon tube.

-The process to stress relieve all other gauges with dial sizes of 4½" and larger, involves stress relieving the Bourdon tube and socket assembly, also called the gauge system.

This Product Information page addresses stress relief of 4½" and larger dial size gauges with a 316L stainless steel Bourdon tube and socket assembly or system.

The Bourdon tube and socket assembly, also called the gauge system, with a 4½" and larger dial size are stress relieved to a temperature of 750 degrees F for a minimum of one hour. Exposure of a 316L stainless steel socket to this elevated temperature for an extended period of time causes the 316L stainless steel socket to discolor. After stress relief, the gauge socket takes on a straw color similar to the color of brass. For this reason, at times, customers that have ordered a gauge with a 316L stainless steel Bourdon tube and socket may believe they have received a gauge with the incorrect wetted parts material, namely, a bronze Bourdon tube with a brass socket.

For safety and quality reasons, the socket of all Ashcroft® gauges are stamped with the Bourdon tube material designation as described in paragraph one above. All gauges ordered with a 316L stainless steel Bourdon tube and socket are stamped on the socket wrench flat with the letter 'S' designation. Additionally, the dial of all 4½" and larger Ashcroft® gauges references the bourdon tube and socket material. If any doubt remains, a file touched to the socket will reveal the underlying silver color. Do not file the threads.

Being aware of the stress relief process described above and the added assurance of the wetted parts material designation on the gauge socket ensures the customer receives the wetted parts material of the gauge as ordered.