

Technical News Bulletin

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TAKE-OUT TONG HOLDER 191-9535

This document supersedes TNB026



1. Introduction

In certain operating situations involving high operating speed or heavy take-out tongs required for large finishes, premature closing of tongs may occur due to deceleration forces encountered at the end of the Take-out IN motion.

To prevent this from happening, the so-called antiwink tong holder had been introduced in 1994, featuring a linkage geometry which interlocks the tongs in the OPEN position.

This tong holder has now undergone a complete redesign to further enhance its operation reliability. The most striking design change being the more rigid, reversible tong holder and the novel piston ring.

2. Description

The new cartridge type Take-out Tong Holder 191-9535 is pneumatically operated for tong CLOSE and spring-actuated for tong OPEN. During tong OPEN, the individual members of the linkage, which connects the piston rod with the tong holders, are in the extended position. This effectively prevents premature tong closing caused by the moment of inertia of the tongs. The cylinder and tong support are both made of light alloy to minimize weight. Both parts are surface-hardened by a special electro-chemical process which yields a hard, wear-resistant and low friction surface coating.

The low friction piston rod guide bushing and the carbon reinforced PTFE type piston ring permit operation with non-lubricated compressed air.

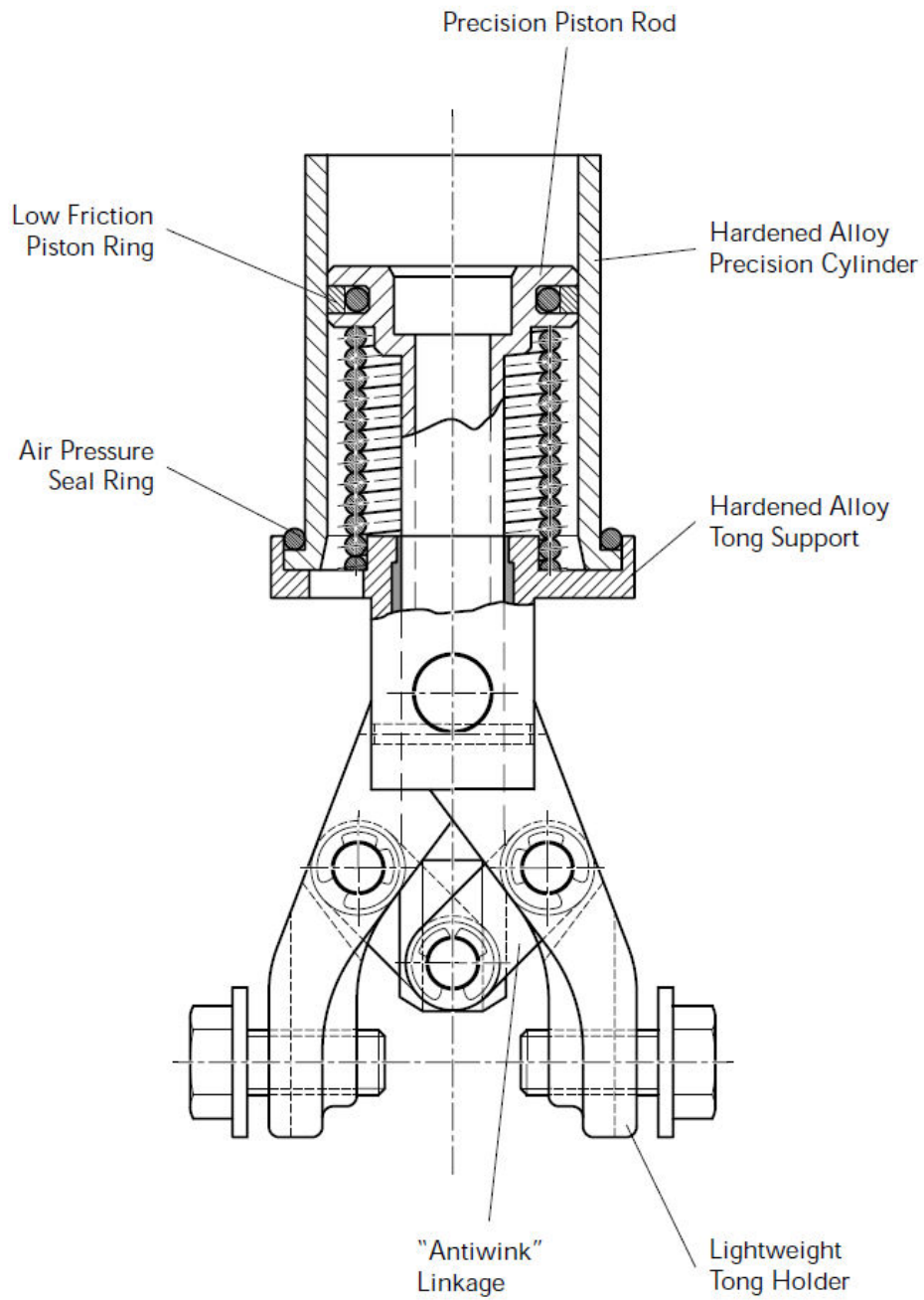
The tong holders are designed for minimum weight.

The tong holder cartridge is connected to the tong head by 4 screws and is sealed in the receiving bore by an O-ring.

3. Application

In keeping with modular standardization, the new tong holder 191-9535-1 is fully compatible with the previous cartridge type tong holders 191-8319 and 191-9528. No modifications are required for exchange.

The new Take-out Tong Holder is used with all take-out tong heads and covers all center distances.



Take-out Tong Holder 191-9535

4. Availability / Specification

The new Take-out Tong Holder 191-9535-1 will be available for delivery by April 1997. From this date on it is also delivered as an integrated part of the Quick Change Take-out Tong Heads 210-275.

Non-QC Take-out Tong Heads 23-2525 can be equipped with the Tong Holder 191-9535-1 and will be delivered in this configuration on request.

The Take-out Tong Holder 191-9535-1 replaces the previous model 191-9528 which will no longer be manufactured. Spare parts for the previous model will be available until the end of 1998.

The Take-out Tong Holder 191-8319 will be delivered on special request only until the end of 1998.

The Take-out Tong Heads 210-275 equipped with the new tong holder 191-9535-1 are identified by new group numbers according to the chart below.

Take-out Tong Head 210-275		
New Group No.	Superseded Group No.	Center Distance
11	1	SG 4 1/4
12	2	SG 5"
13	3	SG 5 1/2
14	4	DG 4 1/8
15	5	DG 4 1/4
16	6	DG 5"
17	7	DG 5 1/2
18	8	DG 6 1/4
19	9	TG 3"
20	10	TG 4 1/4
23	-	TG 85mm
24	-	DG 6 1/4" WITH ADJUSTABLE TONG HEAD BODY
25	-	TG 4-1/4 WITH ADJUSTABLE TONG HEAD BODY

5. Features and Benefits

Features

- New linkage geometry prevents premature tong closing.
- Lightweight design.
- Low friction piston rod guide and piston ring for non-lubricated operation.

Benefits

- Higher speed for Take-out IN.
- No container defects due to tong impact.
- Reduced load on Take-out arm and mechanism.
- Less wear.
- Reduced risk of container contamination by lubrication oil.