



Belvac Production Machinery Technical Bulletin

Information for Customers Operating & Maintaining Belvac Machines

ISSUE 04 VOL. 9 MARCH 2006

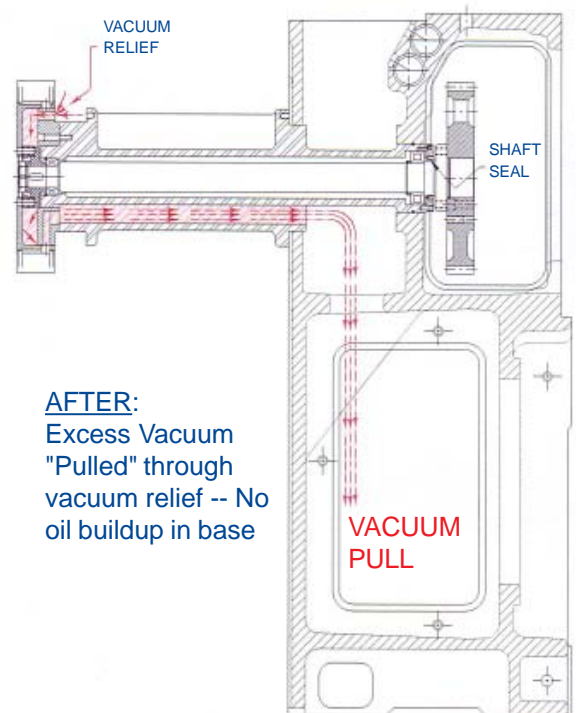
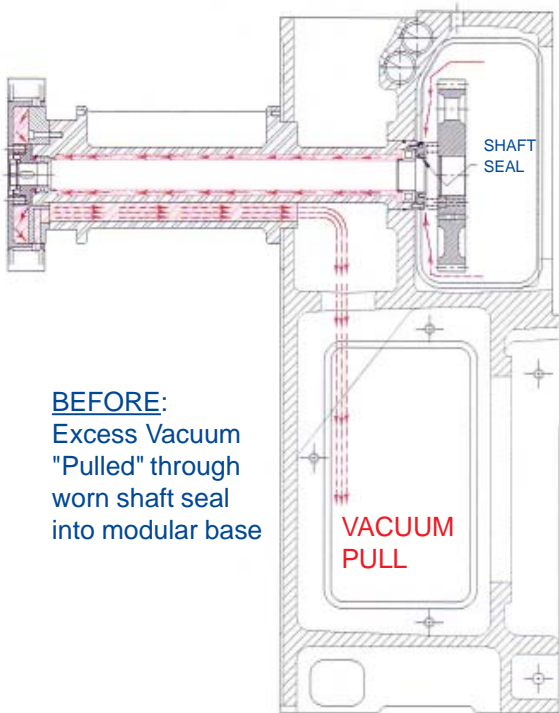
595 Modular Base: Oil Leakage

Worn shaft seal allows base casting to draw oil from gearcase:

Some customers have informed Belvac of an unusual amount of oil found in their rear base modular machine castings.



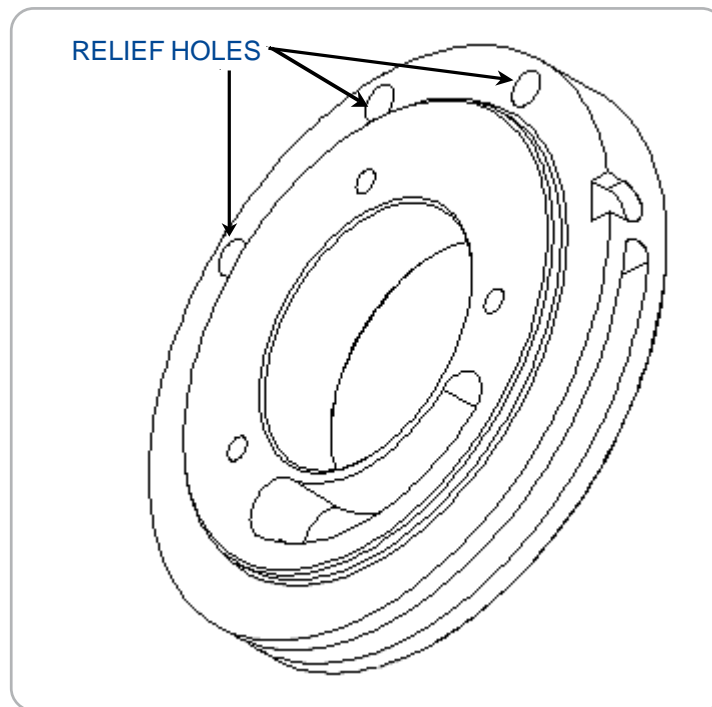
Belvac investigated the causes of this, and determined oil in the gearcase could be pulled by a sufficiently high source of vacuum in the base casting, past a worn-in shaft seal. The diagrams below illustrate the vacuum path from the gear case, before and after valve modification for vacuum relief.



Recommended Vacuum Relief action:

As indicated in the "After" illustration (previous page), excess vacuum is relieved through vacuum relief holes in the non-working portion of the vacuum valve. The relief to atmosphere of residual vacuum prevents a draw from the gearcase via the transfer housing and past the oil seal.

The rework to existing vacuum valves generally involves the addition of Qty (3) 0.62" (16 mm) diameter holes as indicated:



The following rework drawings are available to create the suggested vacuum relief feature:

Drawing No.

2754272

2754273

Necker Models

595K and 595SK

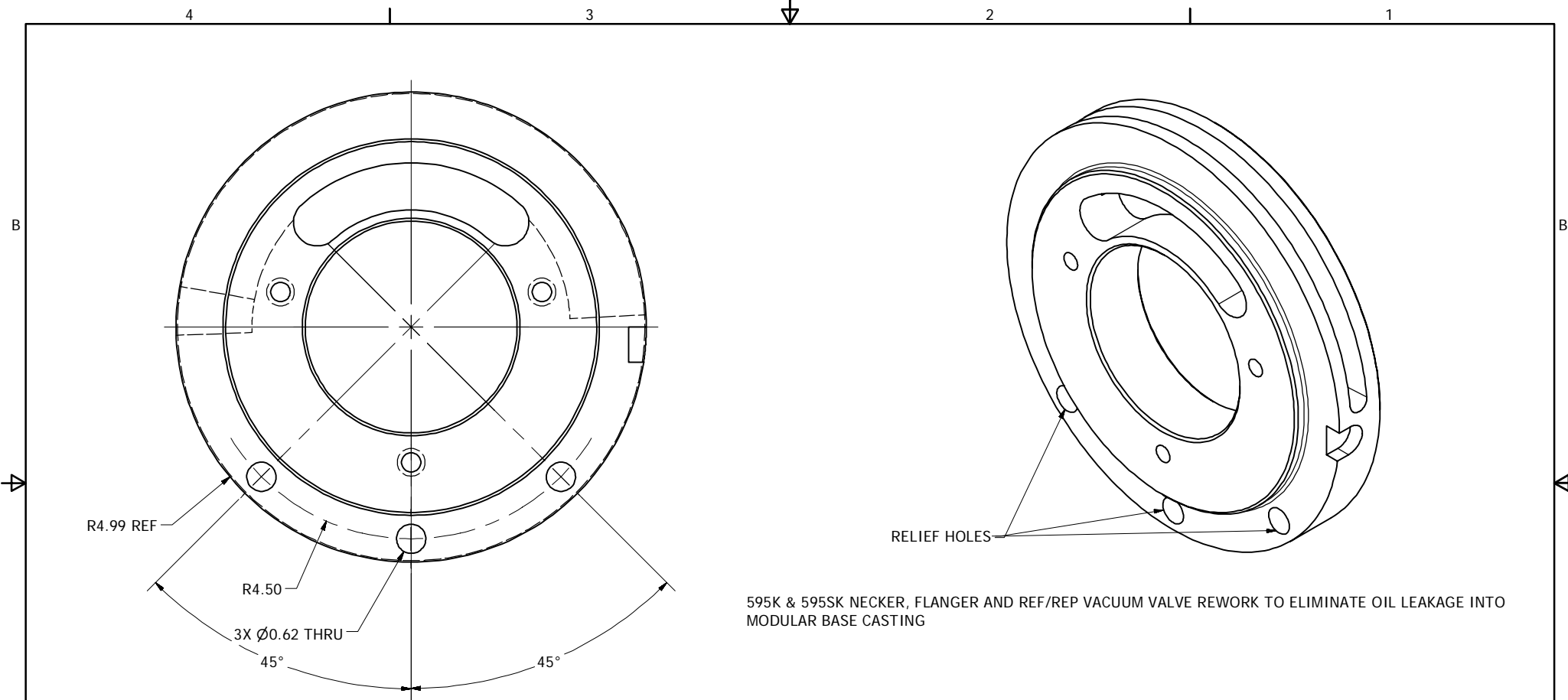
810K and Quick Change "QC" machinery

These rework drawings are attached to this bulletin.

NOTE: Special vacuum valves will require different vacuum relief features: contact Belvac Engineering accordingly.

Belvac will supply this feature as standard on all modular machinery effective January 1, 2006.

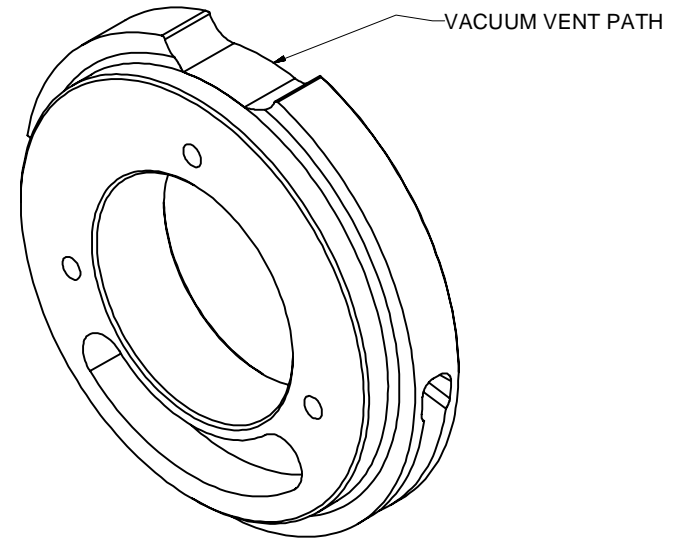
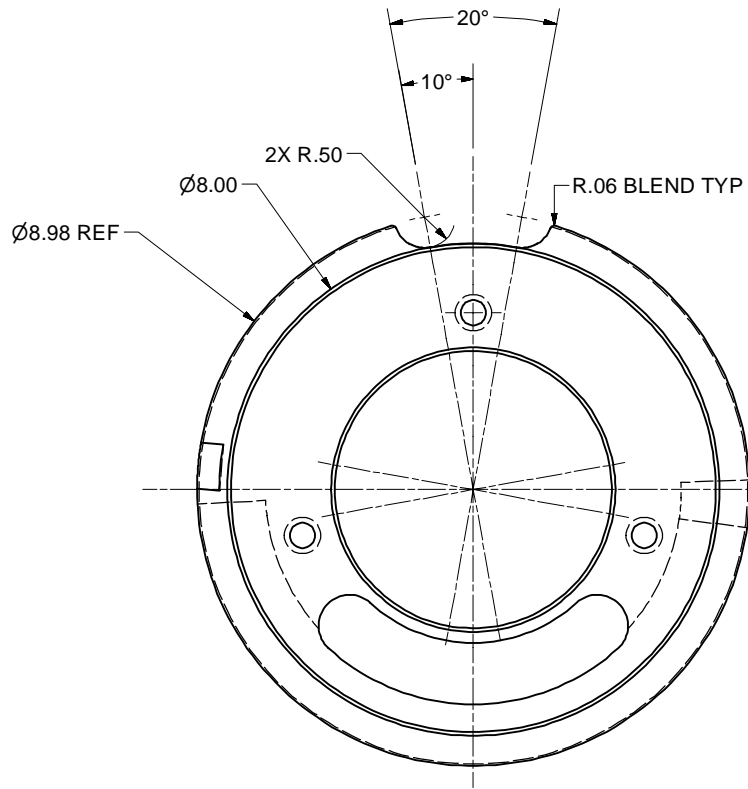
Contact Belvac Sales and Service for a quotation.



595K & 595SK NECKER, FLANGER AND REF/REP VACUUM VALVE REWORK TO ELIMINATE OIL LEAKAGE INTO MODULAR BASE CASTING

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	THIRD ANGLE PROJECTION	ALL SURFACE FINISHES TO COMMERCIAL TOLERANCES UNLESS OTHERWISE SPECIFIED	BELVAC BELVAC PRODUCTION MACHINERY A DOVER COMPANY LYNCHBURG, VA 24502 (434) 239-0358	SCALE:	SHEET: 1 of 1 SIZE B
	DO NOT SCALE PRINT	DWG. TITLE: VACUUM VALVE REWORK 595K	DWG NUMBER: 2754272	REV: 0	

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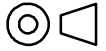


810K AND QC NECKER, FLANGER AND REF/REP VACUUM VALVE REWORK TO ELIMINATE OIL LEAKAGE INTO MODULAR BASE CASTING

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TOLERANCES UNLESS OTHERWISE SPECIFIED
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 2 PLC DEC ± 0.010
 3 PLC DEC ± 0.005
 ANGLES ± 15 MIN
 SURFACE FINISH (MICRO INCHES) ✓
 THIRD ANGLE PROJECTION
 ALL SURFACE FINISHES TO COMMERCIAL TOLERANCES UNLESS OTHERWISE SPECIFIED
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PRIME ONLY (PER CUST SPECS)
 PRIME & PAINT (PER CUST SPECS)
 DEBURR HOLES, BREAK ALL EDGES
 BELVAC
 DWG. TITLE
 REWORK - VACUUM VALVE QC

MATERIAL: Aluminum-6061
 HEAT TREAT:
 FINISH:
 BELVAC PRODUCTION MACHINERY
 A DOVER COMPANY
 LYNCHBURG, VA 24502 (434) 239-0358
 DWG NUMBER
 2754273

DRAWN: J. SCHILL
 DATE: 11/18/2005
 ENG CHK:
 MFG CHK:
 APPD:
 SCALE: (1:2)
 SHEET: 1 of 1
 SIZE B
 REV 0

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