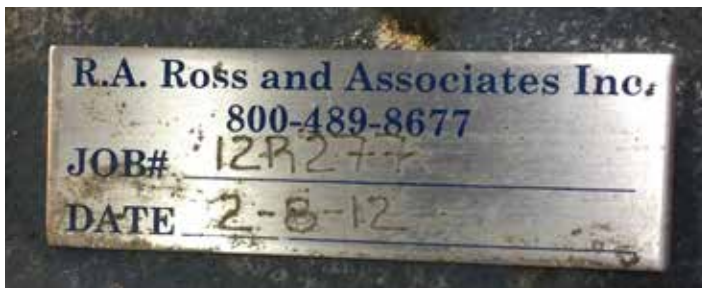


Our repairs last,
saving you downtime
and money.



R. A. ROSS & ASSOCIATES, INC.
2231-A Ampere Drive, Louisville, KY 40299

*Solutions like this are what we
do every day at R. A. Ross.*



2012. That's the last time we repaired this pump.

***"These guys go above and
beyond!"***

*Gary Morrison
Maintenance Planner
Catalyst Division
Clariant Corporation*

This little tag tells an incredibly
valuable story.

2012.

That's the last time we repaired this pump.

Our repairs normally last years, even with
the abuse some of these pumps have to take day
in and day out. And the 5 year example in this
case is pretty typical.

Case in point

In February of 2012, a customer needed their
Dean ANSI pump repaired. Our repaired pump
made it 5 years before needing work!

To see what we do differently, see page 2 of this
story.

What do we do differently?

Look at the check list (below). Upon receipt, the problem pump is checked and each dimension and value is documented. This gives us a baseline as to the extent of repairs needed. Any component that is not within specification is recommended to be replaced or repaired. Then after authorization to repair, the replaced or repaired components (and finished complete assembly) is rechecked to verify all meet factory recommended specifications.

Not everyone or every repair needs this level of detail, but we can provide it if you desire.

We not only can bring pumps and parts up to OEM specs, we often surpass those specs, including dealing with tolerances within 1/10,000 of an inch.

Dean Pump specification and tolerances check sheet			
1/9/17			
R. A. Ross Associates, Inc.			
Pump model	PH2111	SIN 169056	PH2110 Factory spec
Tolerances		At arrival	After repair
Impeller to backhead measurement	0.1200	0.1200	0.1000
Impeller diameter	0.0000	0.0020	0.0000
Max Shaft Runout	0.0020	0.0060	0.0000
Allowable shaft end play	0.0030	0.0060	0.0000
Impeller vane runout	NA	NA	20.0000
Impeller vane runout	NA	NA	40.0000
Impeller vane runout	NA	NA	20.0000
Torque Values			
Casing bolts	-	-	6207.00
Big end cover	-	-	1.3782
Impeller	1.3784	1.3780	1.3780 / 1.3775
Gland nuts (mechanical seal only)	1.3780	0.0000	0.0010 / 0.0101
Bearings			
Radial	0.0000	2.8345	2.8342 / 2.8341
Shaft O.D.	2.8345	2.8345	2.8346 / 2.8341
Bearing I.D.	0.0000	0.0000	0.0131 / 0.0041
Fit	1.1818	1.1818	1.1818 / 1.1812
Housing I.D.	1.1808	1.1809	1.1811 / 1.1807
Bearing O.D.	0.0000	2.8343	0.0011 / 0.0091
Fit	2.8343	2.8342	2.8346 / 2.8341
Thrust	2.8342	2.8342	2.8346 / 2.8341
Shaft O.D.	0.0000	0.0000	0.0121 / 0.0000
Bearing I.D.	0.0000	0.0000	0.0121 / 0.0000
Housing I.D.	0.0000	0.0000	0.0121 / 0.0000
Bearing O.D.	0.0000	0.0000	0.0121 / 0.0000
Fit	0.0000	0.0000	0.0121 / 0.0000

If a customer desires or something non-typical occurs, pictures of the subject part or parts are taken and furnished to the customer.

We've even gone so far as to make duplicates of hard to find parts.

Attention to detail

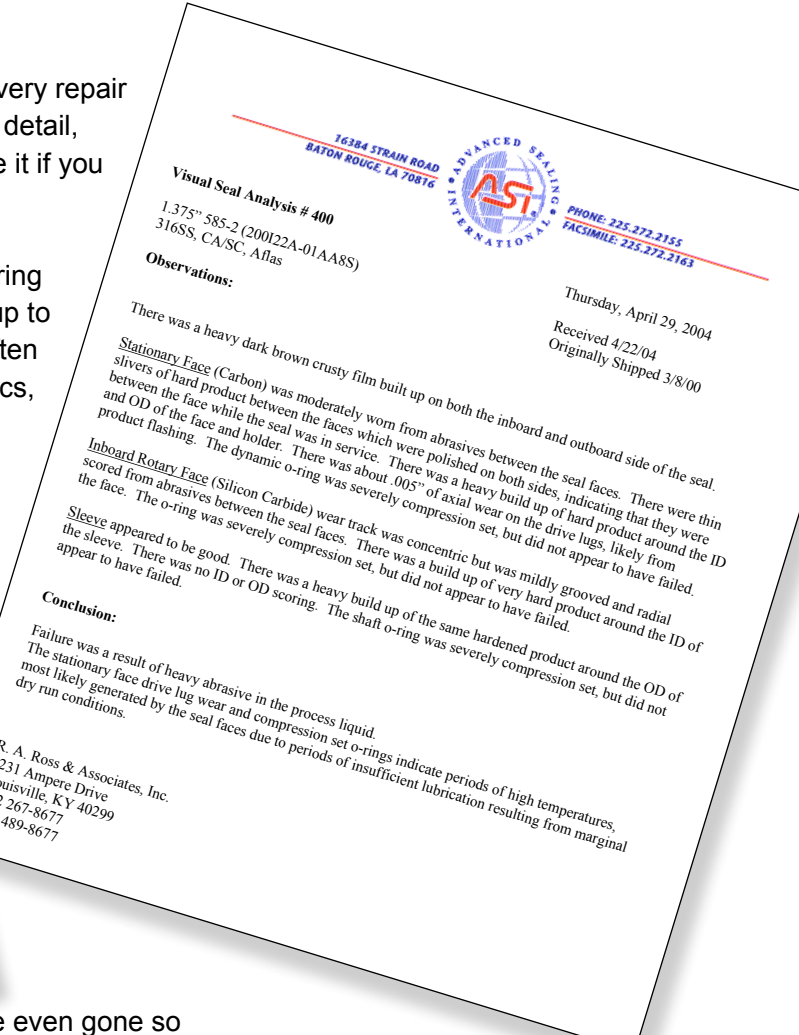
No repair leaves our shop without passing a rigorous checklist. This attention to detail will save you valuable downtime and money.

If you want it repaired right, call us. We'll arrange shipping, work up estimates and turnaround time, and call you with any concerns about future issues or why your pump or pump parts failed (see evaluation at upper right).

CONTACT US

Call us for information on how we can help solve your problems in any of the following areas:

- ▶ Pumps
- ▶ Blowers
- ▶ Filters
- ▶ Mixers
- ▶ Tanks
- ▶ Vacuum Pumps
- ▶ Mechanical Seals
- ▶ Heat Exchangers
- ▶ Repairs




R. A. ROSS & ASSOCIATES, INC.
Keeping process flowing since 1985

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Watch our company story video at RARoss on YouTube!