



QUASAR CASE STUDY

Description

The part is a cast aluminum control arm tested at 200 parts (100 pairs) per hour. The plant operates 3 shifts per day, 5 days per week and produces 1,000,000 of this type of control arm per line per year. The plant is located in the United States and all costs and prices are in US\$.

Case Study	4
Part	Control Arm
Method	Aluminum Cast
Part Numbers	2
Quasar NDT	3100
Loading	Automatic
Location	USA
Amortization	2 years
Payback	6 months

Quasar replaces:

- PT (Liquid Penetrant Testing), which costs \$0.80 per part, including the cost of transporting the parts for off-site PT testing
- ADR (Automatic Defect Recognition) X-ray, which costs \$1.04 per part based on a 2-year capital amortization plus prorated cost for supervisory labor.

The Quasar system consists of two automatically loaded Quasar 3100 Single Nest NDT Systems, each loaded and unloaded by a separate robot. The total price was \$500,000.

The cost savings are tabulated below.

Quasar Cost/part	\$ 0.29
PT Cost/part	\$ 0.80
X-ray Cost/part	\$ 1.04
Total Cost/part	\$ 1.84
Savings/part	\$ 1.59
Payback - Parts	314465
Payback - Years	0.46
Payback - Months	5.55

The Quasar Cost per part is based on capital amortization over 2 years. It includes half-time cost allocation for a Level 2 NDT Tech to supervise system operation and maintenance. In summary, the payback for the system is less than one year.

For more information about this application, contact RHeld@QuasarIntl.com, referencing Quasar Case Study QCS340404.