



QUASAR CASE STUDY

Description

The part is a powder metal clutch plate manufactured at 600 parts per hour. The plant operates 3 shifts per day, 5 days per week and produces 3,000,000 of this type of clutch plate per year. The plant is located in Ontario, Canada but all costs prices are in US\$.

Quasar replaces MT (Magnetic Particle), which costs \$0.17 per part.

Case Study	1
Part	Clutch Plate
Method	Powder Metal
Part Numbers	4
Quasar NDT	3200
Loading	Automatic
Location	Canada
Amortization	2 years
Payback	11 months

The Quasar system consists of a Quasar 3200 Dual Nest NDT System plus an integrated material handling system. The total price was US\$220,000. The material handling system includes the following elements:

- Input conveyor that interfaces to customer coining press – 6 feet
- Camera for determining part orientation
- Robot for orienting part and loading onto Quasar nest
- Nest unloading actuator
- Part marking (red/green paint)
- Output conveyor

Four different types of clutch plates are tested and changeover requires changing the robot gripper. The remaining changeover tasks are handled automatically.

The cost savings are tabulated below.

Quasar Cost/part	\$ 0.05
MT Cost/part	\$ 0.17
Savings/part	\$ 0.12
Payback - Parts	1,895,270
Payback - Years	0.93
Payback - Months	11.1

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 QCS340104.