



## A BRAND ADO (40D)



### SNAPSHOT

#### BACKGROUND

A large job shop specializing in subsea components was drilling deep holes by traditional gun drills, leading to long cycle times and short tool life.

#### GOALS

The customer wished to reduce cycle time and increase their productivity.

#### DETAILS

##### INDUSTRY

Energy

##### PART

Hot Stab

##### MATERIAL

Nitronic 60

##### MACHINE

MAZAK Integrex E420

##### SPINDLE

HSK-A/E100

#### ORIGINAL TOOLING

Carbide Gun Drill  
0.25" | 1 Flute | TiAlN

#### NEW TOOLING

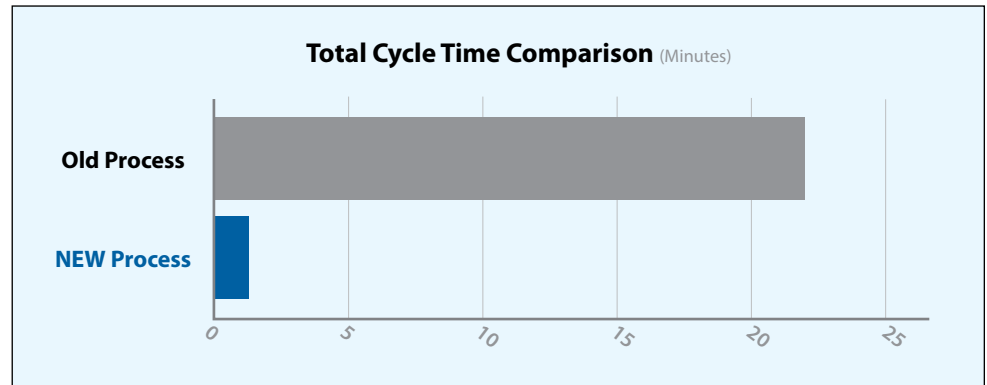
A Brand ADO 40D  
0.25" | 2 Flute | EgiAs

## NEARLY \$7,000 IN ANNUAL SAVINGS!

### THE STRATEGY

Our recommendation was to introduce our ADO 40D drill. The ADO long drill series allows for efficient chip evacuation for deep holes. Being a twist drill, coupled with new point geometry and the wear resistant EgiAs coating, this tool can perform at higher speed and feed rates while maintaining long tool life.

	Original Process	NEW Process
Tool Diameter (Inch)	.25"	.25"
Cutting Speed (RPM • SFM)	1,528 • 100	1,986 • 130
Feed (IPM)	0.4584	8
Hole Depth (In)	10.12"	10.12"
Metal Removal Rate	0.02 in <sup>3</sup> min	0.39 in <sup>3</sup> min
Cycle Time (Minutes)	22.0768	1.2739
Tool Life (# of Holes)	14	66





## THE RESULTS

By increasing the drilling feed rates from 0.45 to 8 IPM, the ADO 40D drill was able to reduce cycle time by over 20 minutes per part, which totaled over 100 hours a year of machine time. Couple that with a significant tool life increase from 14 to 66 parts per drill, the ADO 40D was the distinct winner.

- Reduced cycle time by **over 20 minutes per part**.
- Saved over **100 hours per year!**
- Increased from **14 to 66 parts per drill**.
- **A total savings of \$6,864!**

## SNAPSHOT

### BACKGROUND

A large job shop specializing in subsea components was drilling deep holes by traditional gun drills, leading to long cycle times and short tool life.

### GOALS

The customer wished to reduce cycle time and increase their productivity.

### DETAILS

#### INDUSTRY

Energy

#### PART

Hot Stab

#### MATERIAL

Nitronic 60

#### MACHINE

MAZAK Integrex E420

#### SPINDLE

HSK-A/E100

#### ORIGINAL TOOLING

Carbide Gun Drill  
0.25" | 1 Flute | TiAlN

#### NEW TOOLING

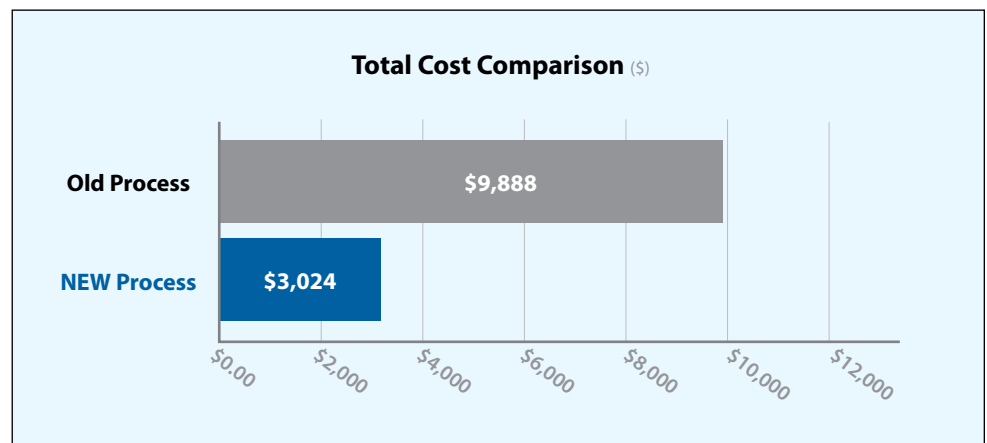
A Brand ADO 40D  
0.25" | 2 Flute | EgiAs

### Results Overview

<b>Cycle Time Saved Per Part</b> (Minutes)	<b>20.80</b>
<b>Number of Parts Per Year</b>	<b>300</b>
<b>Annual Cycle Time Saved</b> (Minutes)	<b>6,241</b>
<b>Annual Machine Cost Savings</b>	<b>\$7,801</b>
<b>Tool Life Productivity Improvement</b> (%)	<b>371%</b>
<b>Annual Tool Change Cost Savings</b>	<b>\$63.31</b>
<b>Total Machining Cost Saved Annually</b>	<b>\$6,864</b>

## THE CONCLUSION

With **nearly \$7,000 in savings**, the customer was not only extremely happy, but impressed to see new drill technology really show a significant advantage over traditional gun drilling methods.



## NEARLY \$7,000 IN ANNUAL SAVINGS!



#### FIND OUT MORE

Click or scan for stock, features & benefits, videos and more! [osgtool.com/a-brand-ado](https://osgtool.com/a-brand-ado)

