

# MAX Out Your Rotary Broaching

**2X Tool Life** Compared to a T-15

**37% Decrease in Overall CPP (Cost Per Part)**

**Hassay MAX**



**Proprietary Alloy**



Manufactured from custom hardened alloys, these hex, square and punch rotary broaches are a **specialty formulated material** that combines high hardness with exceptional abrasion resistance and toughness.

**They're ideal for sockets where long tool life is required** and are intended for use on materials with tensile strengths exceeding 190 KSI and up to 50 Hrc, such as:

- Cobalt-Chrome
- Titanium
- Custom 455
- Inconel 718
- Biodur 108 & 22-13-15
- Monel
- 17-4 Stainless Steel
- Hardened A286/304
- Strain Hardened 316
- 303 Stainless Steel

Our rotary broaches offer many **advantages** over conventional coated & uncoated broaching tools, including:

- Edge Toughness for High Production Applications
- Better Heat Resistance
- 2x-10x Longer Tool Life

**To learn more, see p.25 of our Catalog at [catalog.pilotprecision.com](http://catalog.pilotprecision.com)**

## Ideal for Applications in These Industries



Fasteners



Automotive



Electronics



Medical/Dental



Aerospace



Defense

# Test Results Show **MAX Series Hex Rotary Broach** Offers Longer Tool Life & Lower Cost Per Part

Our MAX Series Hex Rotary Broach is 20% more than the current tool being used, but it machines **90% more parts for 38% less.**

The **MAX Series** Rotary Broach is a better value than the current tool and is ideal for work materials in these ISO classes:

- P (Steel)
- M (Stainless Steel)
- K (Cast Iron)
- N (Non-Ferrous Metal)
- S (Super-Alloys & Titanium)
- H (Hard Materials)

**COMPARE TO A  
T-15 ROTARY  
BROACH**

Test Information		
Pilot Precision Products being tested	<b>Hassay Rotary &amp; Index Broach</b>	
Tool EDP or Description	<b>66012-M 3/16 MAX Series Hex Rotary</b>	
Material Group - Reference Chart below	300 series	
Current Tool vs. Proposed Tool	Current Tool	Pilot Test Tool
Pre-hole diameter	0.1929	0.1929
Depth of Cut / Width of Cut	0.1700	0.1700
Speed - SFM or RPM	1800	1800
Shop/Machine Hr. Rate	<b>\$75.00</b>	
Parts per Month - or - Total parts on job	<b>18000</b>	
Months job will run (Enter 12 if longer than a Yr)	<b>12</b>	
Current Tool vs. Proposed Tool	Current Tool	Pilot Test Tool
Price per Tool	\$62.25	\$74.10
Parts Machined Per Tool	5000	9481
Calculated Cost per Part (CPP)	\$0.0125	\$0.0078
Cost Savings per Month		\$83.42
Cost Savings per Year/Job total		\$1001.02
Tool Change Time (minutes)	1.00	
Calculated tool change cost per Month	\$4.50	\$2.37
Lost Production hours per Month	0.06	0.03
Lost Production hours per Year/job	0.72	0.38
Cost Savings per Month		\$2.13
Cost Savings per Year/Job total		\$25.52
Cycle Time Reduction (if applicable)		
Tool Cycle Time / part (minutes)	0.06	0.06
Feedrate (IPM)	0.00	0.00
Additional machining hours avail. per Mo		0.00
Additional machining hours avail. per Yr/job		0.00
Cost Savings per Month		\$0.00
Cost Savings per Year/Job total		\$0.00
Overview		
Tool Cost per Piece (Savings per Year/job)	<b>\$1,001.02</b>	