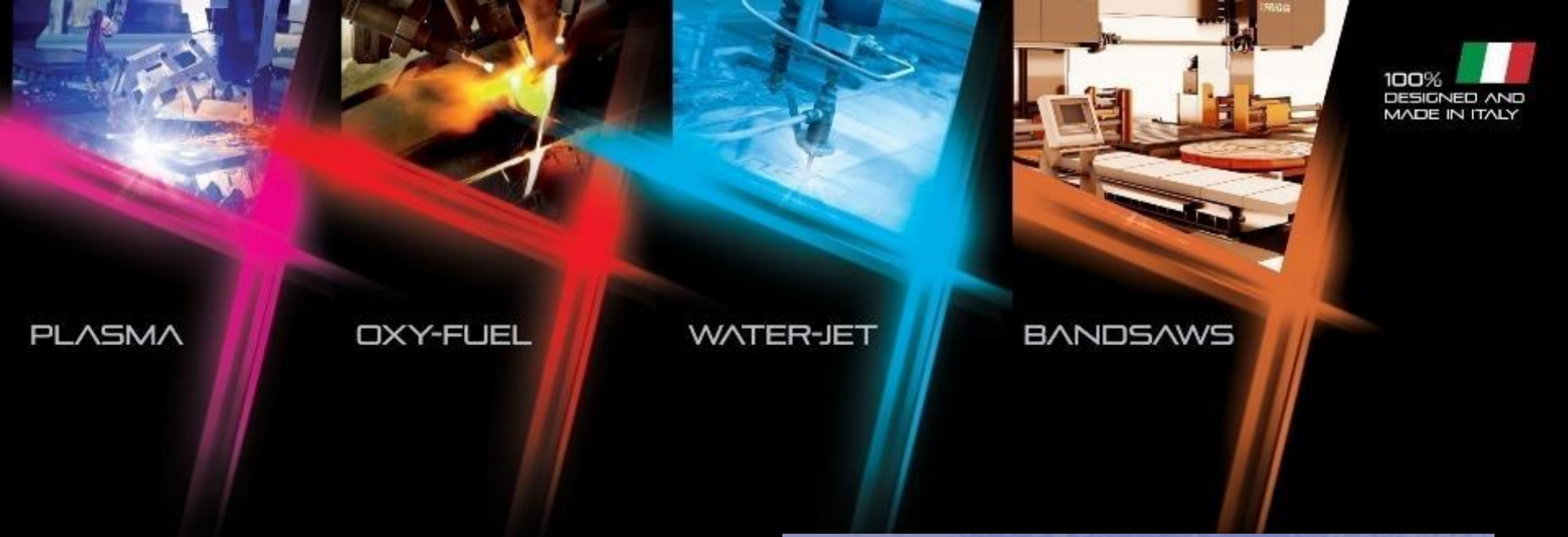


SOITAAB®

www.soitaabusa.com

80th Anniversary
1938-2018

Celebrating 80 years of excellence!

Since 1938, Soitaab has delivered the best cutting technology to customers worldwide

History

SOITAAB GROUP

100% DESIGNED AND MADE IN ITALY

Founded in 1938, Soitaab becomes a major supplier of CNC Cutting Machines and welding equipment for the metal plate industry

Soitaab quickly becomes a qualified supplier to the aerospace, military, shipyards, municipal, and power generation markets

1978 - Soitaab introduces the first CNC Cutting Machine

1983 - Soitaab produces its first laser cutting machine.

2014 – Soitaab moves into state of the art 187,000 sq. ft. manufacturing facility near Milan. ISO-9001 Certified 2008

2011 – Fiberline Laser Introduced. First combination plasma/laser machine built at Soitaab

2003 – First Band Saw Introduced. The world's largest Band Saw is produced by Soitaab

1990 – First Water Jet Introduced

SOITAAB GROUP

100% DESIGNED AND MADE IN ITALY

- 187,000 sq. ft. manufacturing facility
- ISO 9001 -2008 certified
- 43,000 sq. ft. Assembly Hall
- 75,000 sq. ft. of Machine Tools
- 65,000 sq. ft. of Sheet Metal Cutting/Welding

Soitaab is Expanding!

NEW 70,000 Sq.Ft
Assembly Hall
Completed in summer of 2023

www.soitaabusa.com

WATERLINE

The Water Jet cutting process offers extremely high precision cutting on the widest range and thicknesses of material

DUALINE

DUALINE **offers t**he ***best of both*** Plasma and Water Jet technology on one machine

WHICH IS BETTER WATER JET or PLASMA?

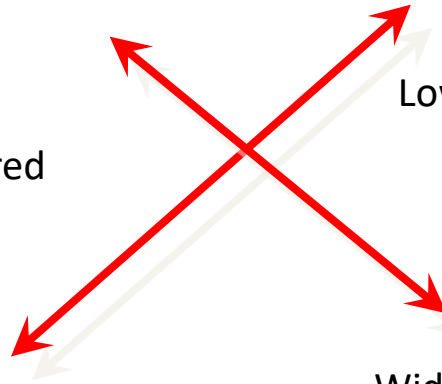
Waterjet

Pros

Cuts almost any material
Very accurate Cutting
Edge quality is exceptional
Can do common edge cutting
Cuts extremely thick material
Secondary operations not required
No Heat Affected Zone

Cons

Very Slow cutting speeds
High Cost per foot of cut
High Maintenance costs and time



Plasma

Pros

High cutting speeds on a variety of thicknesses
Smooth edge quality
Low operating cost
Low Maintenance and consumable costs

Cons

Less precise on small holes
Can only cut ferrous metals
Wide Kerf prevents common edge cutting
Heat Affected Zone

SOITAAB GROUP

100% DESIGNED AND MADE IN ITALY

WATERJET OR PLASMA?

Why not both? Get the best of *both* technologies on a single gantry.

- High speed and low cost with plasma cutting
- High precision and complex shapes with waterjet
- Gold medal service and support

SOITAAB®

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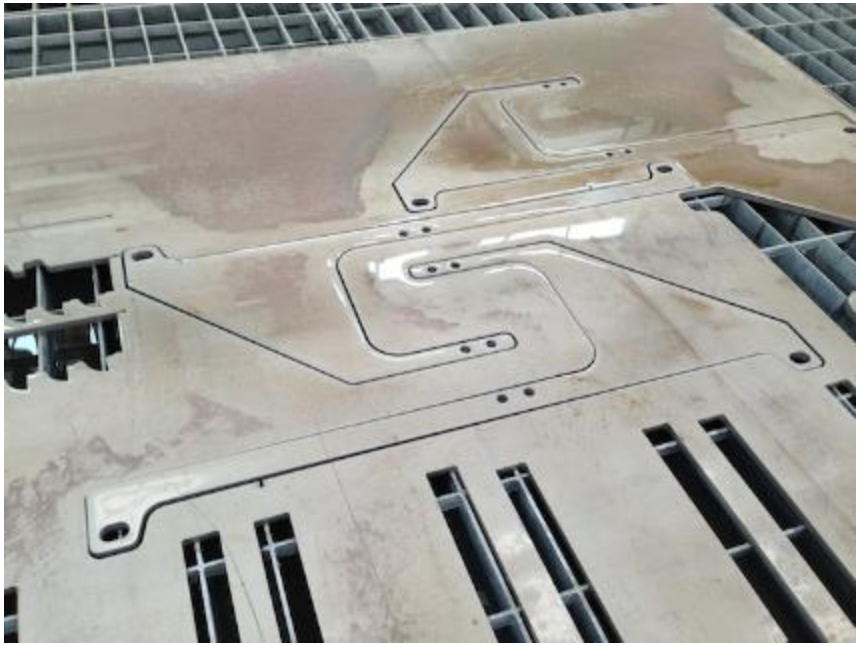
WATERLINE offers extremely precise cutting on the widest range of materials. It can cut very thin gauge materials as well as thick materials up to 12” depending on the pump pressure

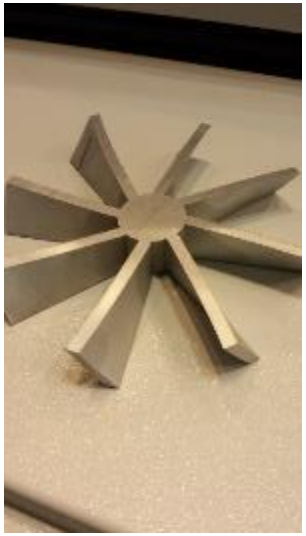
DUALINE allows the user to select the right process for the cut. Water Jet for precision cutting and fine details and thick materials and plasma cutting for speed and low cost cutting of large contours.



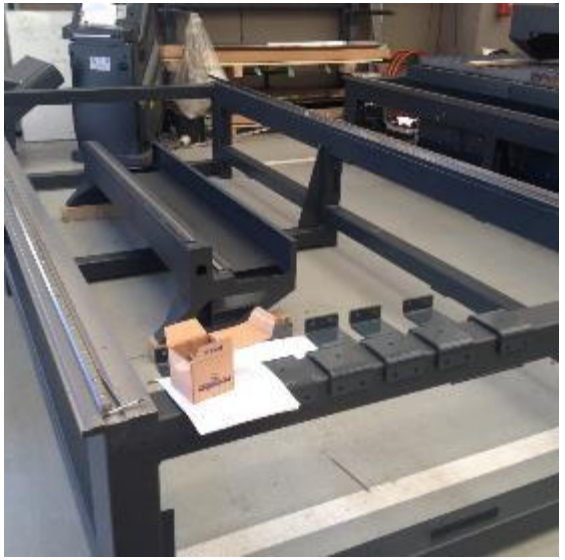
DUALINE

The ***best of both*** Plasma and Water Jet technology on one machine ***DUALINE*** offers the speed, and low cost of Plasma and the high precision, versatility and thick material cutting of Water Jet

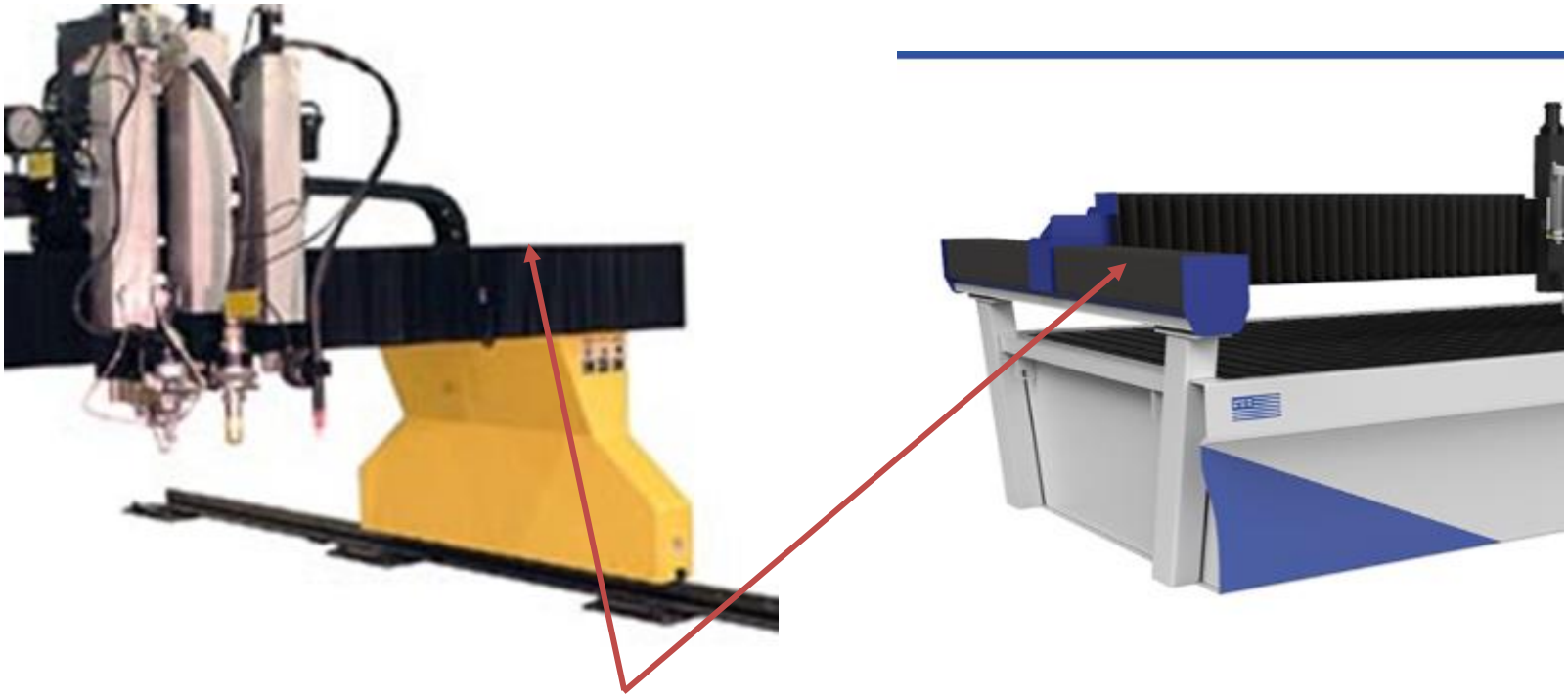
Multiple Cutting Heads Maximize Versatility



Soitaab builds every structural component of their machines in-house



Competitor's Protective Bellows System



Bellows all have flat top surfaces where water and abrasive sits and dries leaving abrasive to damage bellows.

Soitaab's Watertech Protective Bellows System

Bellows all have sloped surfaces so water and abrasive runs off.
Easy to hose off and water doesn't sit on bellows to dry out and leave abrasive to damage bellows.

Soitaab's Watertech Protective Bellows System

Dual Bellows Protection

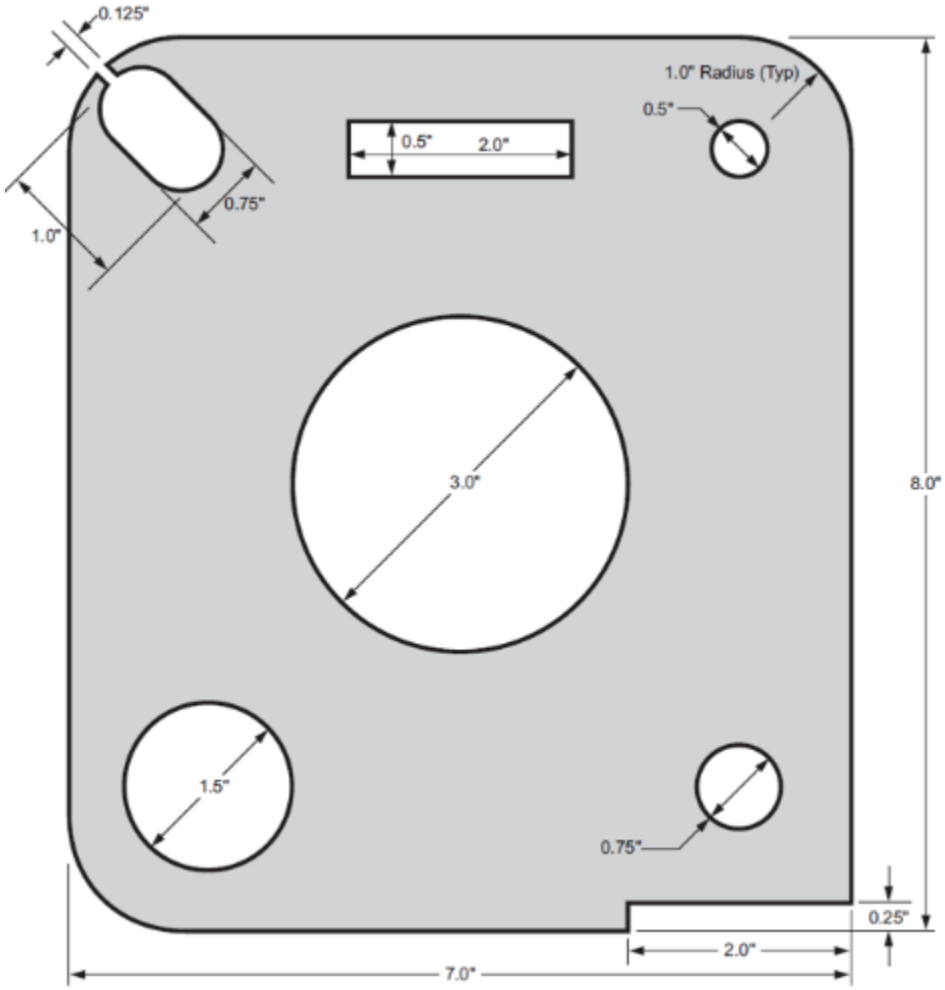
All moving components and linear guides are protected by a dual bellows system featuring an outer bellows and an inner bellows!

Both Plasma and Water Jet heads can be equipped with Bevel Cutting

Soitaab Dualine allows the user to pick the correct cutting process for each feature on a part directly in the software.

The system then moves seamlessly between processes, giving the lowest cutting cost, the highest cutting speed, the most versatility, the best quality and the lowest cost per part.

Take a look at the following
Real World Examples
That demonstrate the cost and time savings



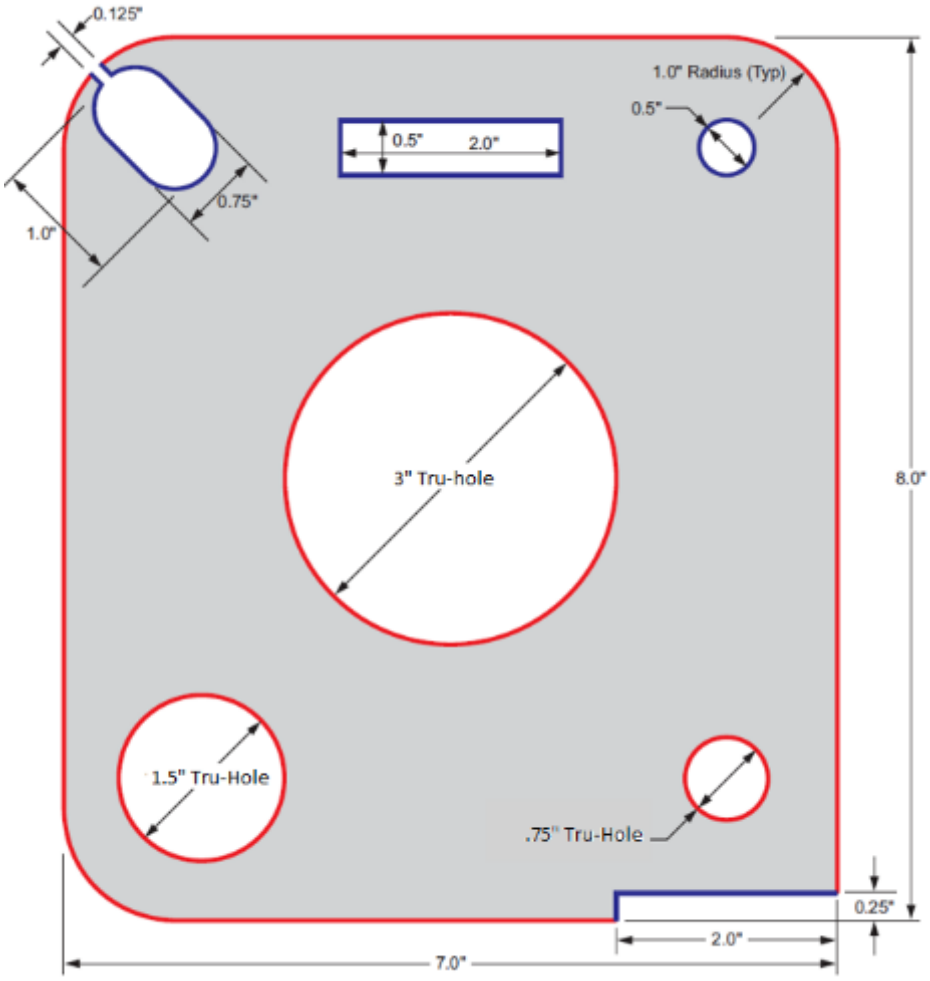
Water Jet Cut Part

Water Jet Specs

Pressure: 60,000psi
Orifice/Tube 0.010” / 0.030”
Speed: 5 in/min
Abrasive Rate: 0.87 lb/min
Pump: Hypertherm Accustream 50 S

Water Jet Cost

Water Jet Process $/hr.:	$32.72/hr
Typical Labor Rate:	$25/hr
Total Water Jet $/hr	$57.72/hr.
Cut Time:	12 min 30 sec
Total Cut Time:	**12.5 min.**
Total Cut Cost	**$12.02**



The Dualine Advantage

Waterjet-Plasma Combination Part

Material: 0.750 inch Hardox 500

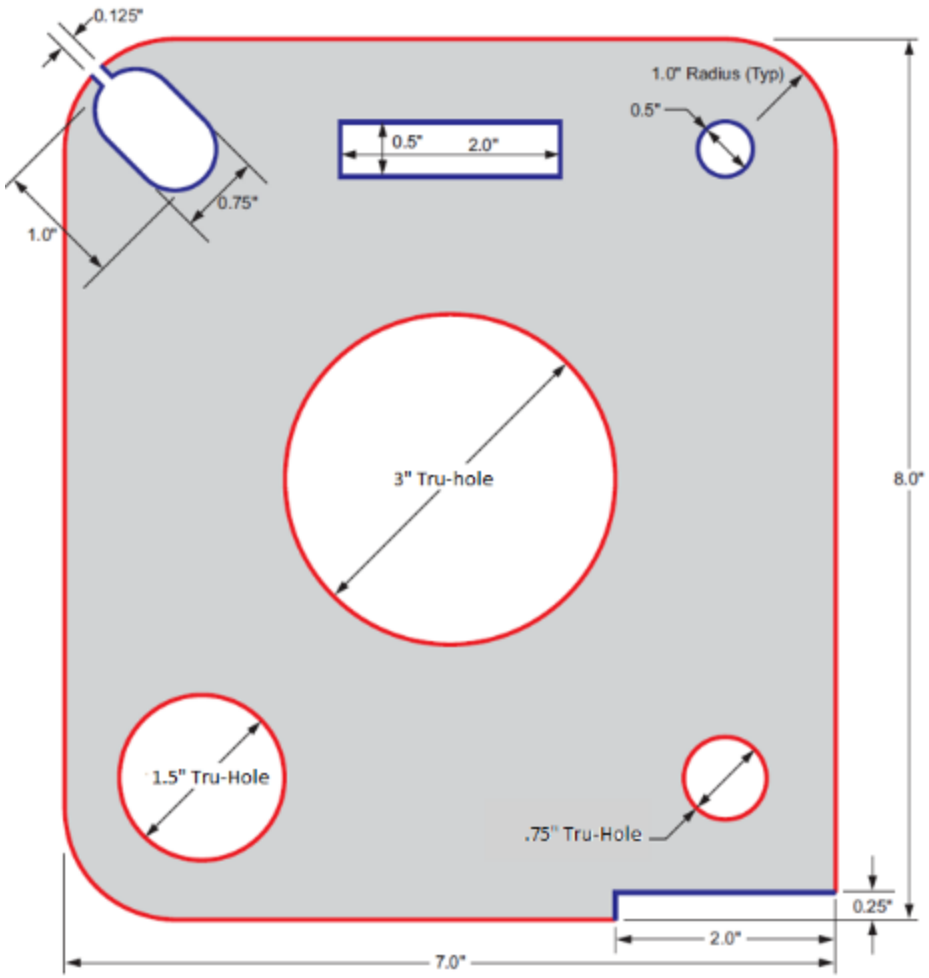
Waterjet Cuts **Marked in blue**

Waterjet Process $/Hour:	$ 32.72/hr.
Typical Labor Rate:	$ 25/hr.
Total Waterjet $/Hour:	$ 57.72/hr.
Cut Time:	3 min. 30 sec.
Total Waterjet Cost:	$ 3.37

Plasma Cuts **Marked in red**

Plasma Process $/Hour:	$ 11.98/hr.
Typical Labor Rate:	$ 25/hr
Total Plasma $/Hour:	$ 36.98/hr.
Cut Time:	1 min. 30 sec.
Total Plasma Cost:	$0.92

Total Cut Time:	**5 min.**
Total Part Cost:	**$4.29**



The Dualine Advantage

Water Jet Cut Part

- 12 min. 30 sec
- $12.02 Total Cost

Water Jet – Plasma Combination Cut Part

- 5 min.
- 4.29 Total Cost

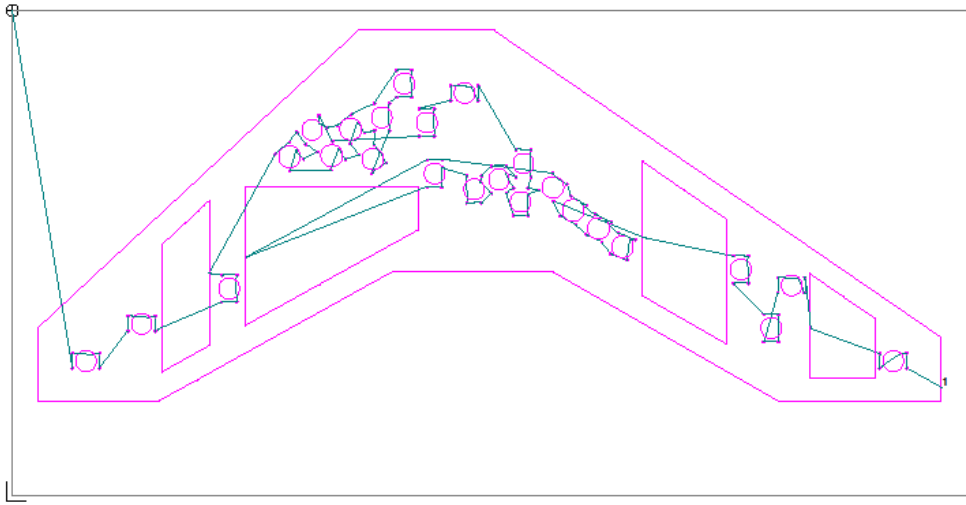
Total Savings:

- **$7.73/part**
- **7.5 min. Cut Time**

Soitaab Dualine Advantage

Cut entire part with water jet only because of small holes that need to be tapped

- Water Jet only process time
  - 290 minutes (4.83 hours)
- Cost/hr = $27.66 + $25/hr labor
- **Total cutting cost is $254.35**



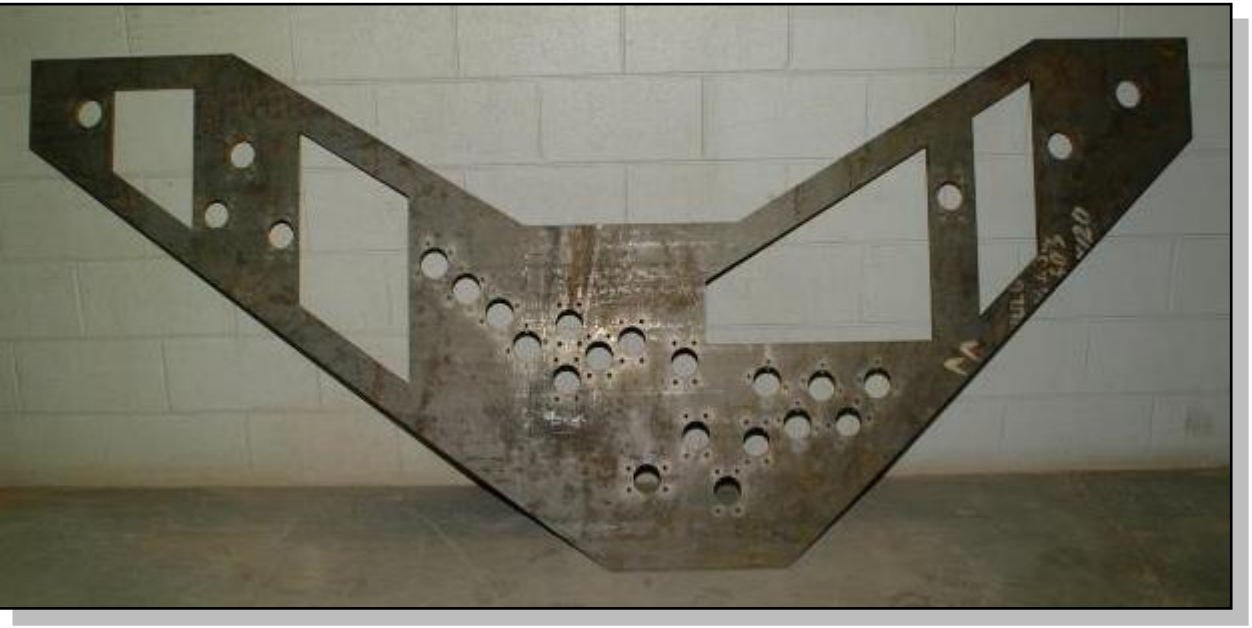
- ¾” mild steel
- 112” x 46”
- 100 ea. 0.3” dia. holes
- 25 ea. 2.5” dia. holes

Soitaab Dualine Advantage

Cut small pass through holes and bolt holes with waterjet

Cut exterior and large openings with plasma

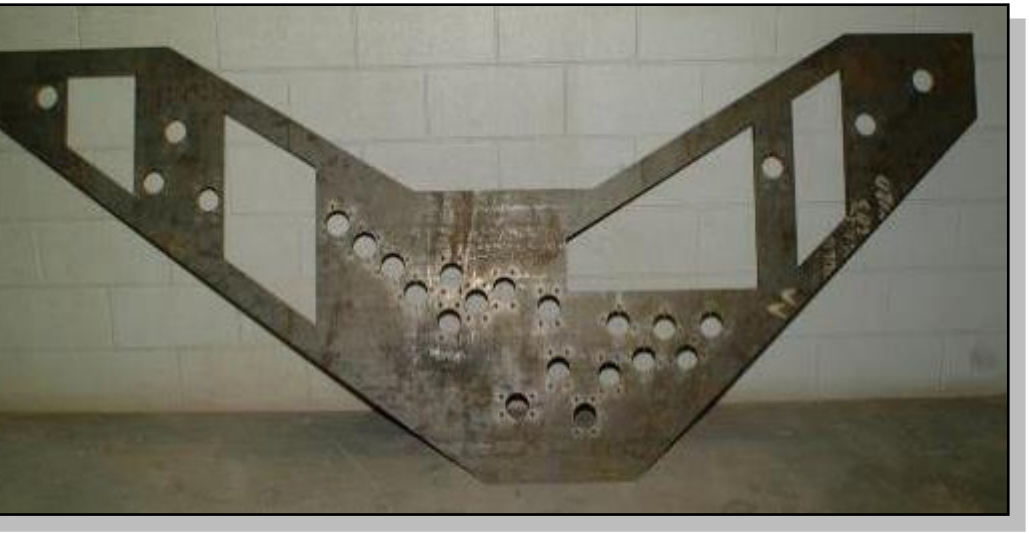
- Plasma processing time = 8 minutes!
- Time saved = 2.61 hrs



Soitaab Dualine Advantage

Waterjet / Plasma Combination Costs

- Plasma = $8.50/hr + $25/hr labor x .13 hrs = $4.47
- Waterjet = $27.66/hr + $25/hr labor x 2.22 hrs = $116.90
- Total cutting cost = $121.37 vs. $254.35
- ***SAVINGS = $132.98/part***



- **52% Cost reduction per part**

  $254.35 vs $121.37

- **87% More Parts-per-Day**

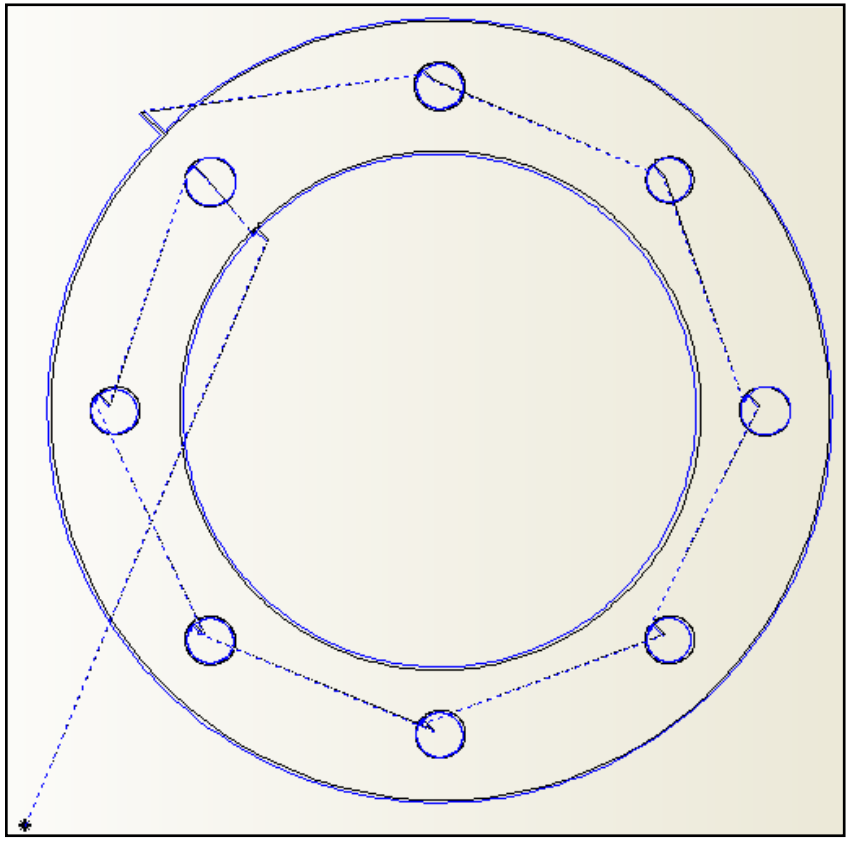
  Process time 290 min vs 155 min

Soitaab Dualine Advantage

Water Jet Only Cut Cost

Water Jet Process $/hr.:	$27.66/hr
Typical Labor Rate:	$25/hr
Total Water Jet $/hr	$52.66/hr.
Cut Time:	9 min 10 sec
Total Cut Time:	**9 min. 10 sec**
Total Cut Cost	**$8.06**

52 Parts /8 hr shift (at 100% efficiency)



Soitaab Dualine Advantage

Water Jet – Plasma Combination Cut

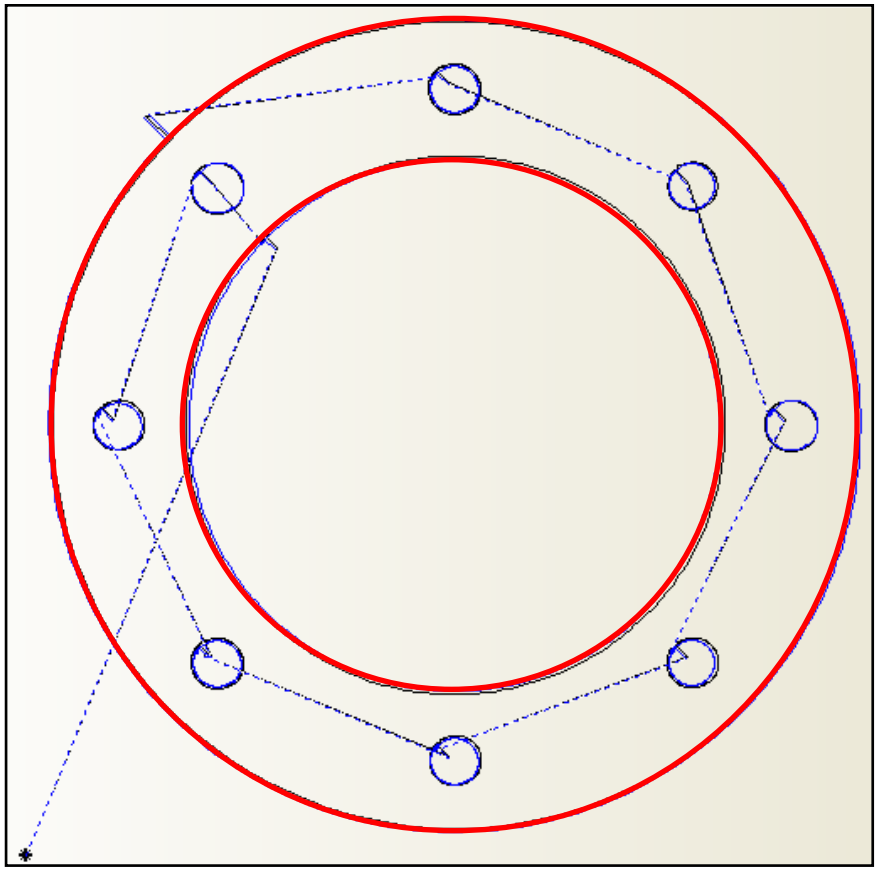
Water Jet Costs

Water Jet Process $/hr.:	$27.66/hr
Typical Labor Rate:	$25/hr
Total Water Jet $/hr	$52.66/hr.
Cut Time:	3 min 30 sec
Total Water Jet Cost	$3.07

Plasma Cut Costs

Plasma Process $/hr.:	$11.98/hr
Typical Labor Rate:	$25/hr
Total Plasma $/hr	$36.98/hr.
Cut Time:	1 min 30 sec
Total Plasma Cost	$0.92

Total Cut Time:	**5 min.**
Total Cut Cost	**$3.99**



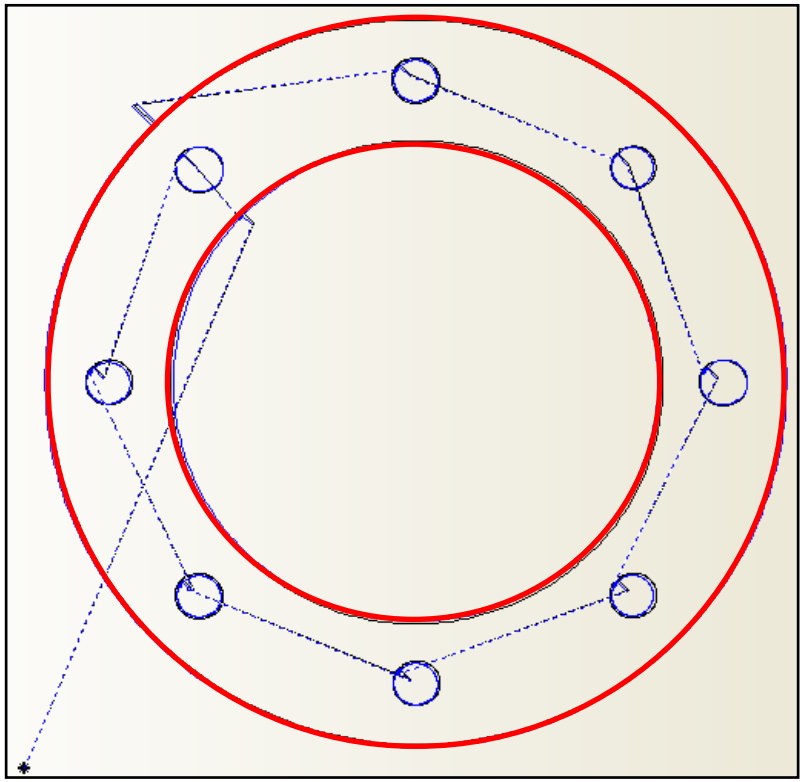
Soitaab Dualine Advantage

Water Jet Cut Part

- 9 min. 10 sec.
- $8.06 Total Cost

Water Jet – Plasma Combination Cut Part

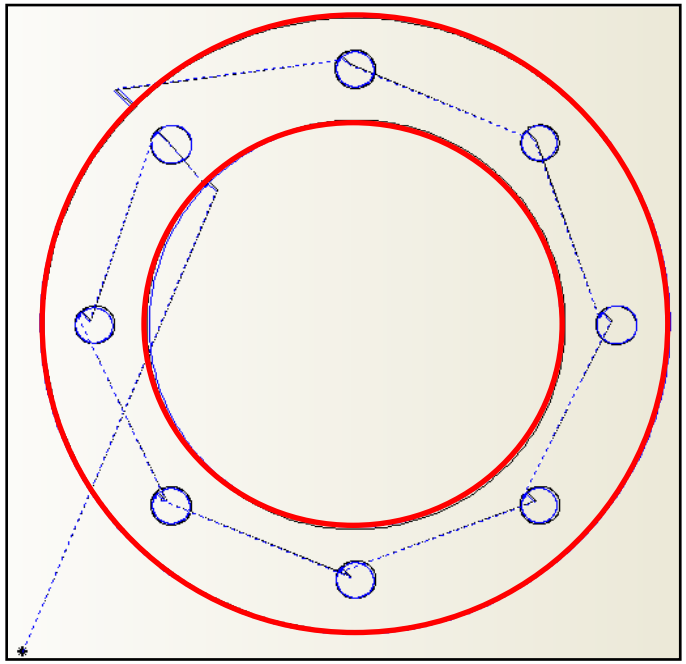
- 5 min.
- $3.99 Total Cost



Total Savings:

- $4.07/part in cut cost
- 4 min 10 sec in cut Time

Soitaab Dualine Advantage



Total Savings:

- $4.07/part (51% less cost)
  - $8.06 vs $3.99
- 4 min. 10 sec. Cut Time
  (60% time reduction)
  - 9 min. 10 sec. vs 5 min
- 93% increase in productivity
  (100 parts vs 52/shift)

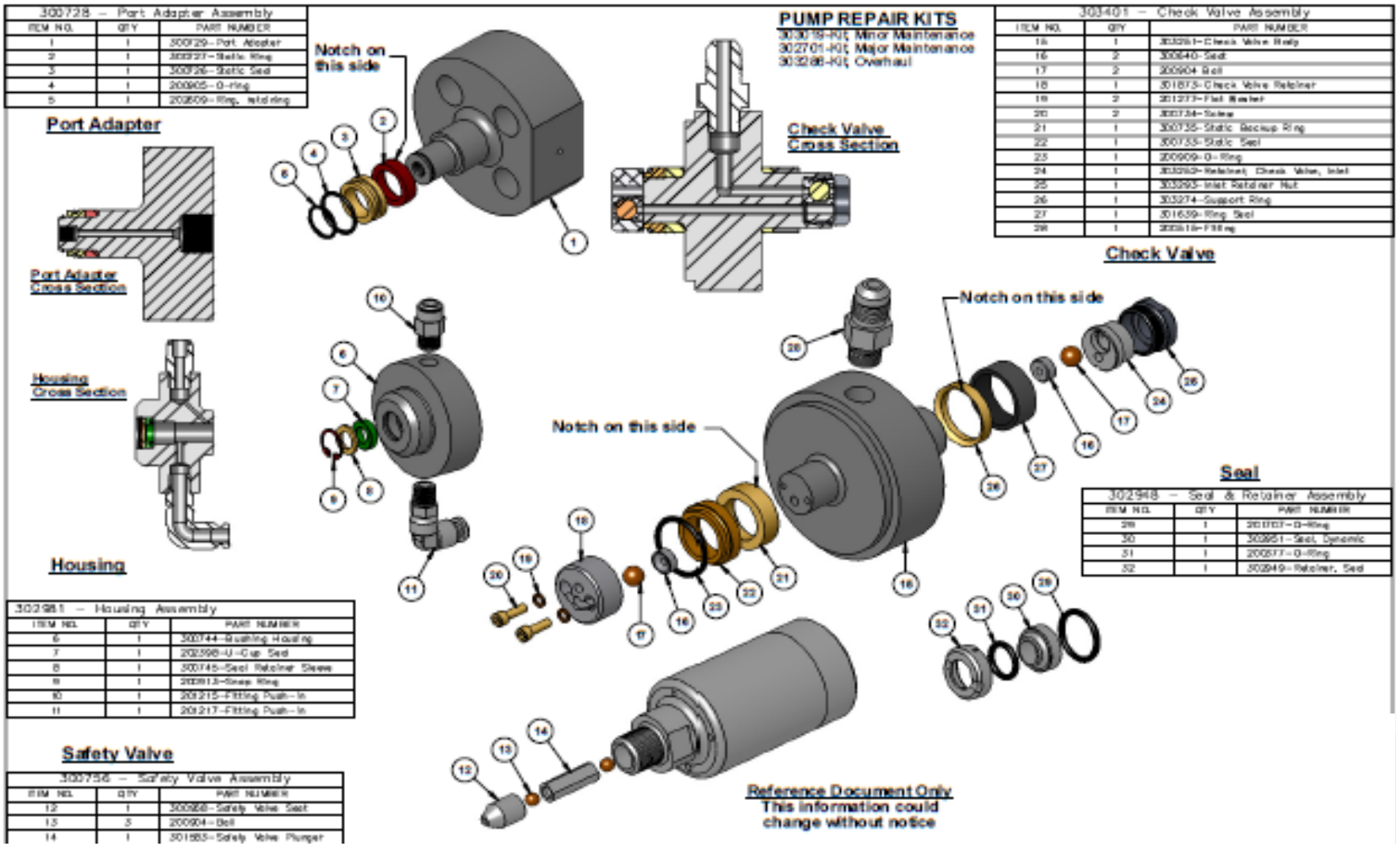
Assuming a Sales price of $11/part (36% margin)
Added sales volume of $528/day for 48 additional parts
200 day work year yields:

$105,600 added revenue above savings $$

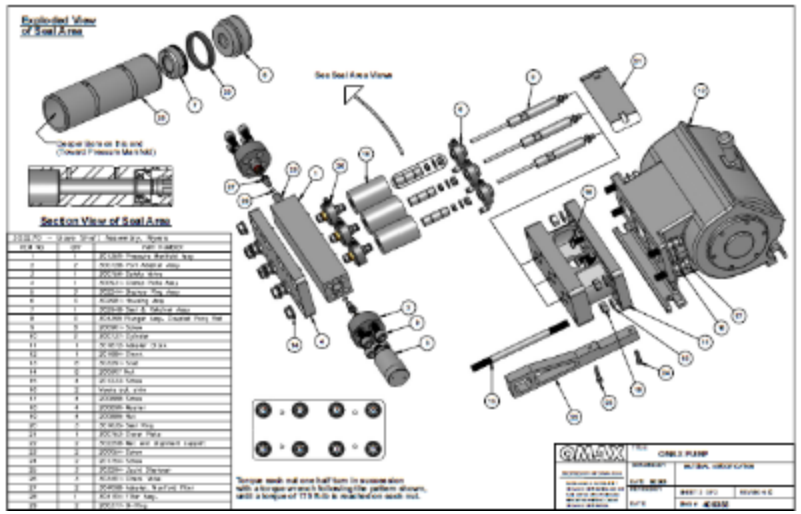
Soitaab Intensifier VS. Direct Drive Pump

Wear Parts

Direct Drive pump replacement parts



Direct Drive Pump: 4-8 hours to rebuild



Intensifier Pump: 35 minutes for total rebuild

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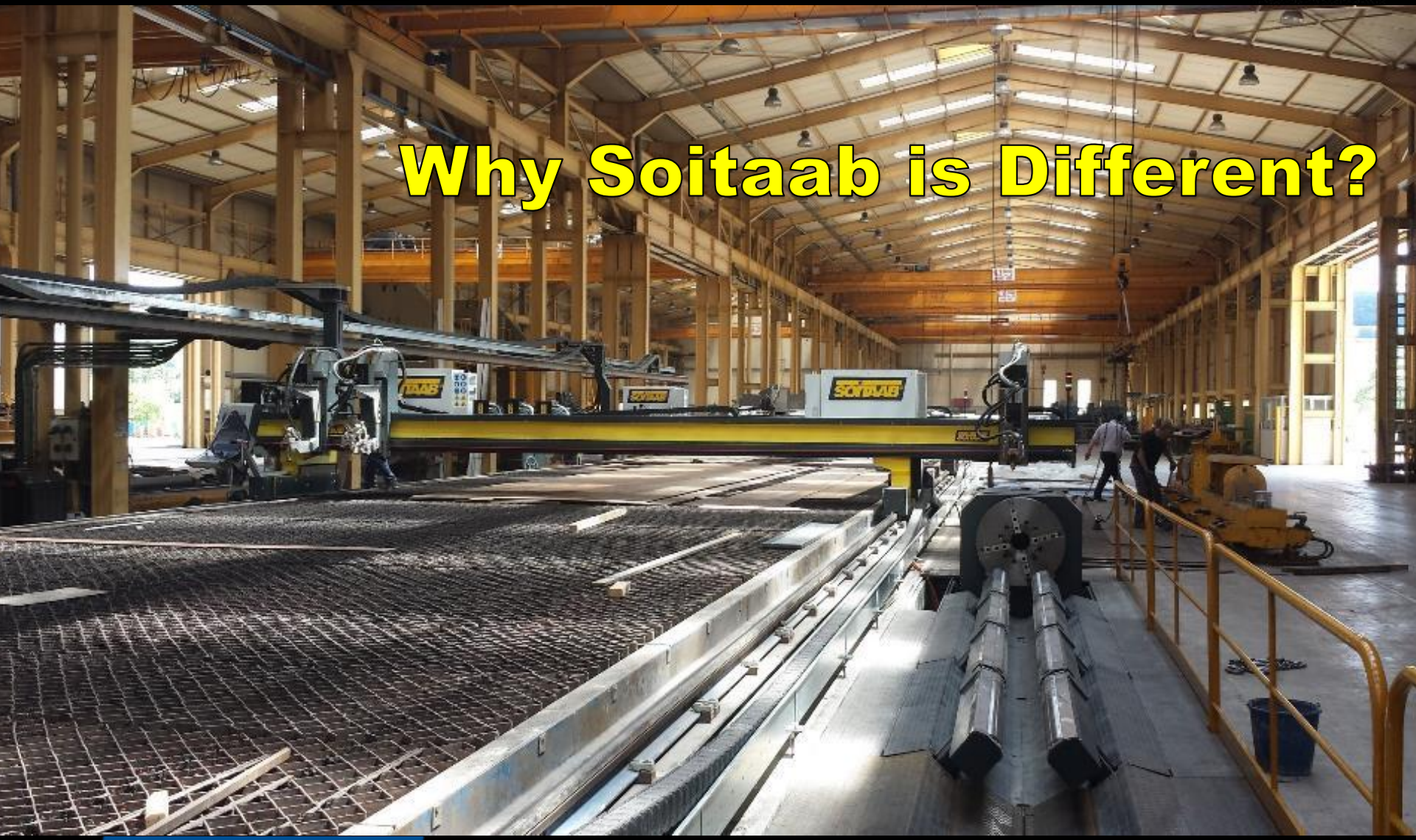
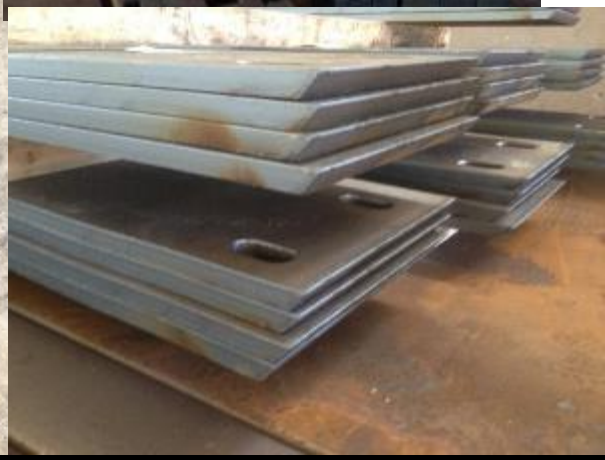


Why Soitaab is Different?

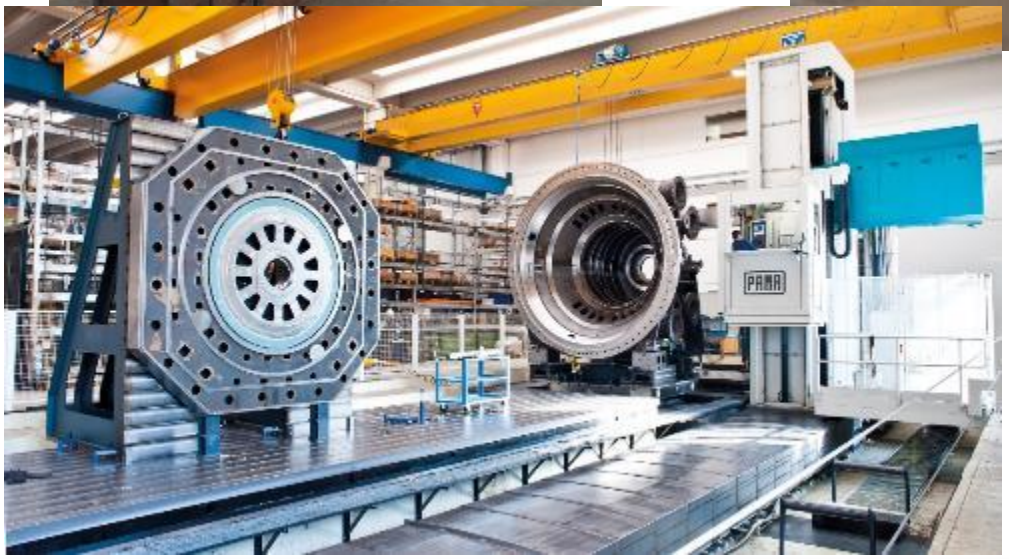
SOITAAB®

www.soitaabusa.com

Soitaab owns the largest Steel Service Center in Italy. Riva Steel produces parts for our needs and sells parts to European Manufacturers.



Soitaab's Rival Division is a complete machining and fabrication factory. They manufacture the massive frames for Soitaab Machines and the FRIGGI Band Saws. They also do machining work for other companies.



Soitaab has some of the largest machine tools made allowing them to machine enormous surfaces in a single set-up and pass.

SOITAAB GROUP

100% DESIGNED AND MADE IN ITALY

World Class technology coupled with <u>Gold Medal Service and Support</u> and a customer first philosophy sets Soitaab apart from the competition!

From the simplest cutting table to the most complex one of a kind systems only Soitaab delivers the best solutions, affordably priced, and backed by the best training, service and parts inventory.

SOITAAB®

www.soitaabusa.com

Welcome to Soitaab !

Thank You