This is an article that may help
The Pros and Cons of Waterjet

Abrasive waterjet cutting is becoming increasingly popular with many companies of recent years, this popularity is due to a number of reasons, some of which are listed below.

The ability to cut a wide range of material types, metals, plastics, stone and ceramics, wood, etc.

The absence of a heat affected zone means material properties are unaffected and parts are not subject to heat distortion.

Low cutting forces virtually eliminate stresses due to cutting and permit low cost jigs and fixtures to be used.

Lower capital cost than a laser cutting machine.

The ability to cut reflective materials that present problems for laser, such as copper.

Maximum cutting capacity of around 160mm thickness for most materials, but don't be in any sort of a hurry, unless you are cutting a soft material.

These are some of the reasons that abrasive waterjet may seem like the ideal machine tool to solve your production problems, but before you adopt this technology, these are a few questions you should consider.

1. Does your production program include a wide range of materials only cut by waterjet?

2. Is it essential that the parts do not have a heat affected zone?

3. Are the parts intricate, delicate and likely to be deformed by cutting tool pressure?

4. Is it essential that stresses are not introduced during cutting?

5. Do you cut large quantities of copper or other reflective materials?

6. is the majority of your production aluminum and thicker than 6mm?

7. Is the majority of your production stainless steel and thicker 16mm

If the answer to any of the above is yes, then waterjet is likely to be an ideal solution to your production problems.
However, if the answer is no to some of the above, then possibly other technologies may be a better solution e.g. plasma, laser, thermal cutting, wire cut, guillotine, punch press, sawing, router etc.

1. If the range of materials you cut only has a small component that requires waterjet cutting consider using a waterjet job shop for these and employ a more appropriate technology for the balance.

2. If the absence of a heat affected zone is essential, wire cutting, router, punch press, guillotine, sawing may be an alternative.

3. Laser and wire cutting will give similar or better cutting capabilities to waterjet in suitable applications.

4. Waterjet and wire cutting would produce the lowest levels of stresses in a component due to the machining process.

5. Copper or other reflective materials are not suited to cutting by laser, but other mechanical processes or wire cutting may be suitable.

6. Below 6mm other technologies may be faster on aluminum, but components can be stack cut on a waterjet, which may appropriate in some instances.

7. Below 16mm other technologies may be faster on stainless steel, but components can be stack cut on a waterjet, which may appropriate in some instances.

Assuming you have reached the conclusion that waterjet is the technology that is best suited to your production problem, what other points should be considered when selecting a machine.

1. The pump operating pressure, the higher the pump pressure, the faster the cutting rate.

2. The pump delivery capacity, a high pump delivery rate allows a larger combination of mixing tube to orifice to be used, resulting in a faster cutting rate.

3. Fitting multiple heads does not guarantee a faster cycle time.

4. What level of accuracy do you require? Do not expect the accuracy of a jig borer or a wire cut from a standard machine and be skeptical of those who claim these levels of accuracy for their machines.

5. What experience does the manufacturer of the machine of your choice have in the area of waterjet cutting technology?

6. What restrictions are there on water consumption in your area, do you require a closed circuit system?

7. How do you intend to dispose of the spent garnet from the catcher tank?

8. What level of accuracy and edge square ness is required?

If the above points are taken into consideration then the correct solution to your production problems should be arrived at.