

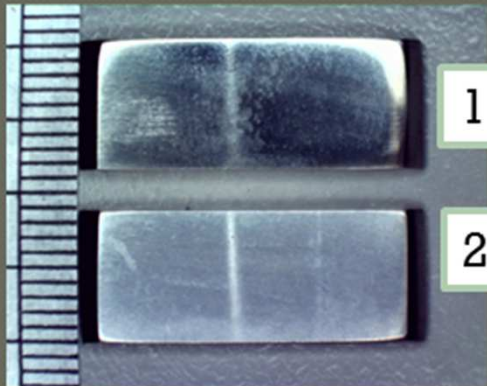
TiAl vs. Ti64

Erosion resistance test

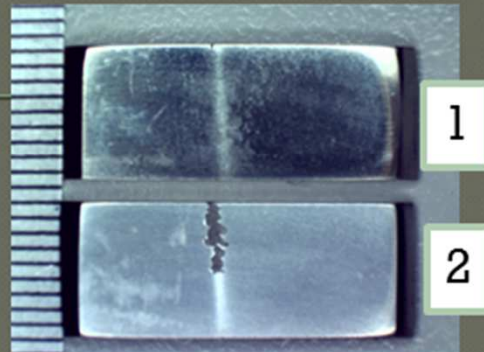
TiAl vs. Ti64

- Nozzle – 400 micron
- Speed - 350 m/s
- Water flow – 0.04 l/min

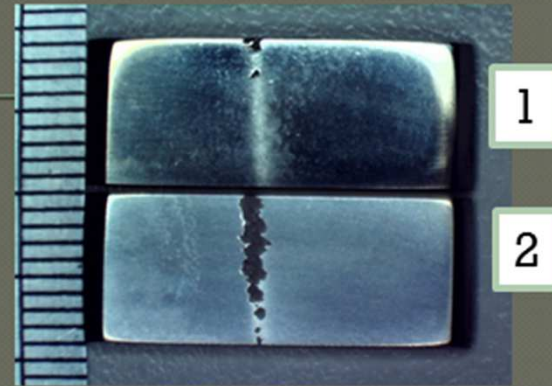
Samples after erosion cycles



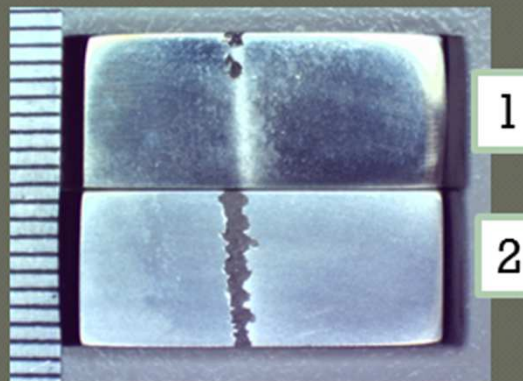
After 1 min



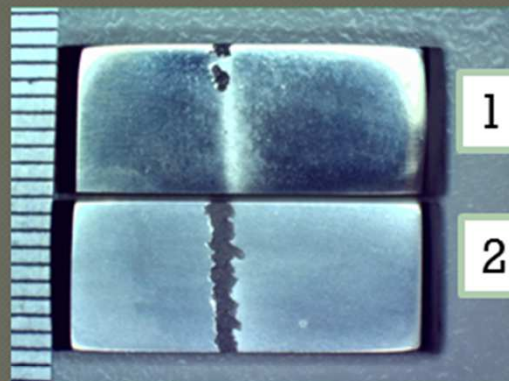
After 2 min



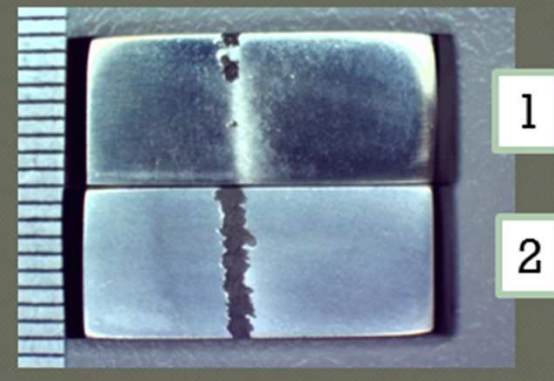
After 3 min



After 4 min



After 5 min



After 6 min

1 - TiAl

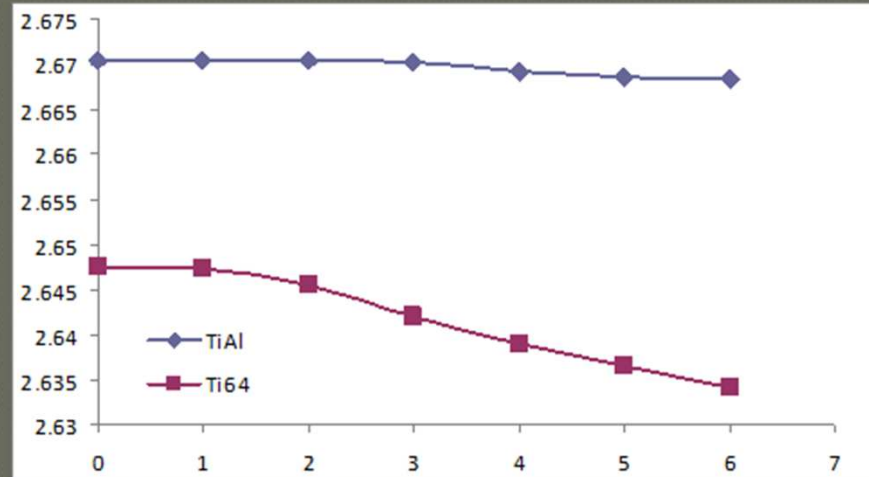
2 - Ti64

Conditions used:

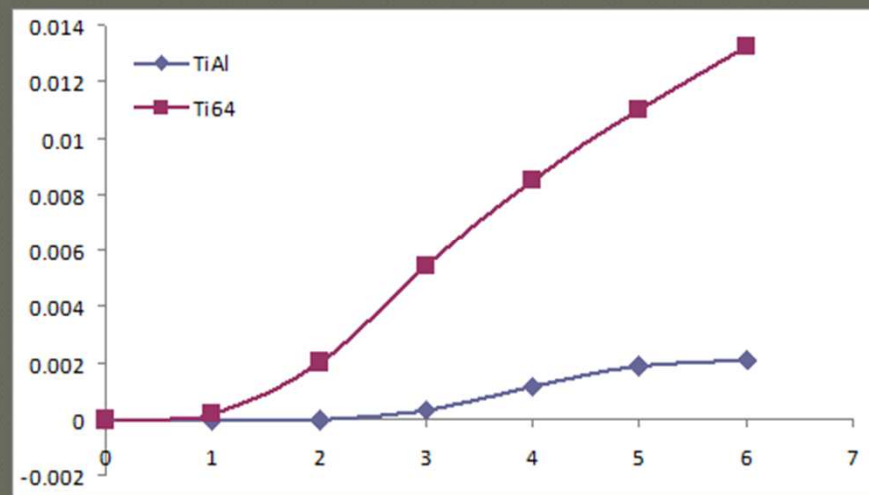
- ✓ One water stream
- ✓ Pressure of water = 30psi
- ✓ Flow rate of water = 0.04 L/min

Weight loss graphs

Sample weight
after each
cycle(grams)
vs. time(sec.)



Weight
Difference
from original
weight
(grams)vs. time
(sec.)

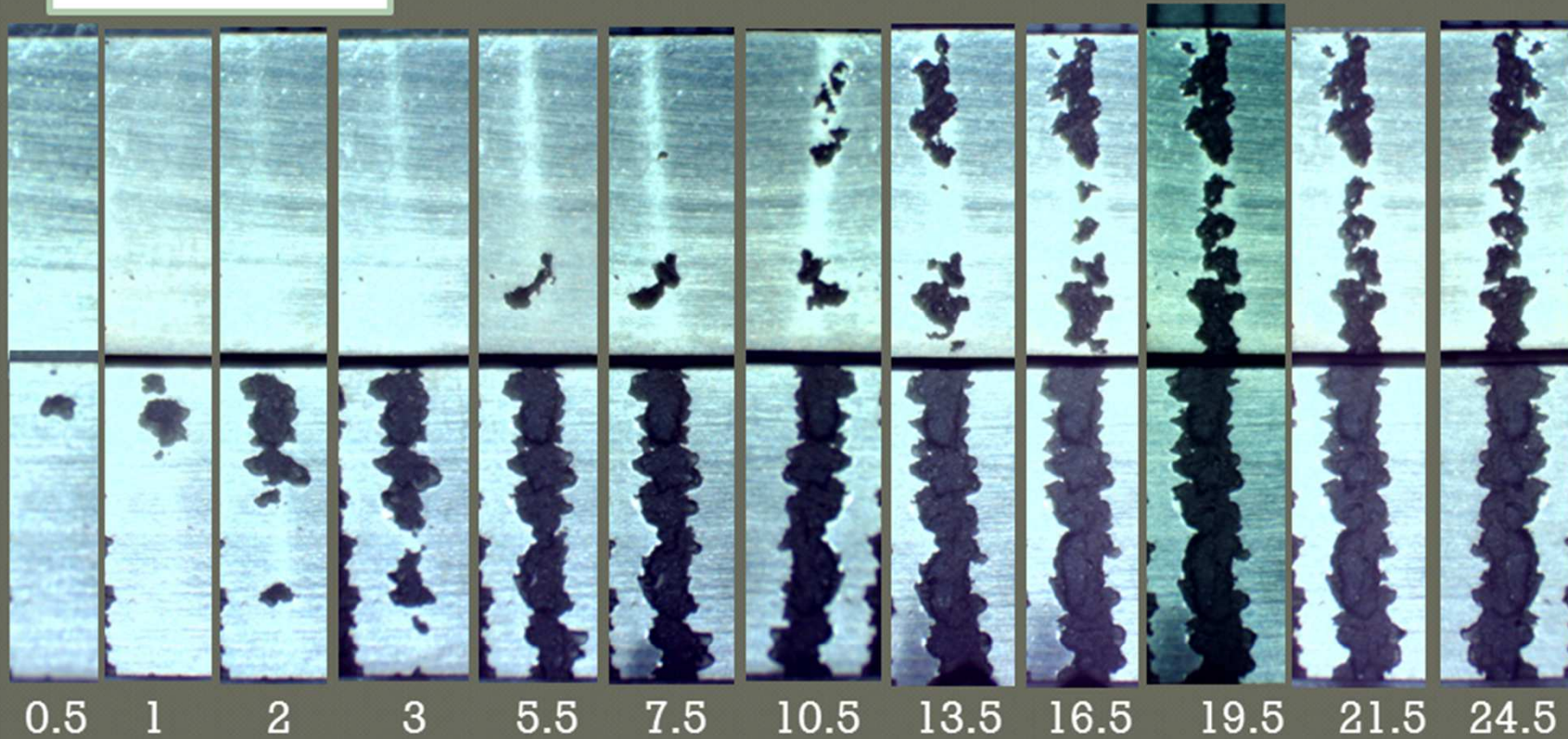


TiAl vs. Ti64

- Nozzle – 600micron
- Speed - 300 m/s
- Water flow – 0.105 l/min

Samples after erosion cycles

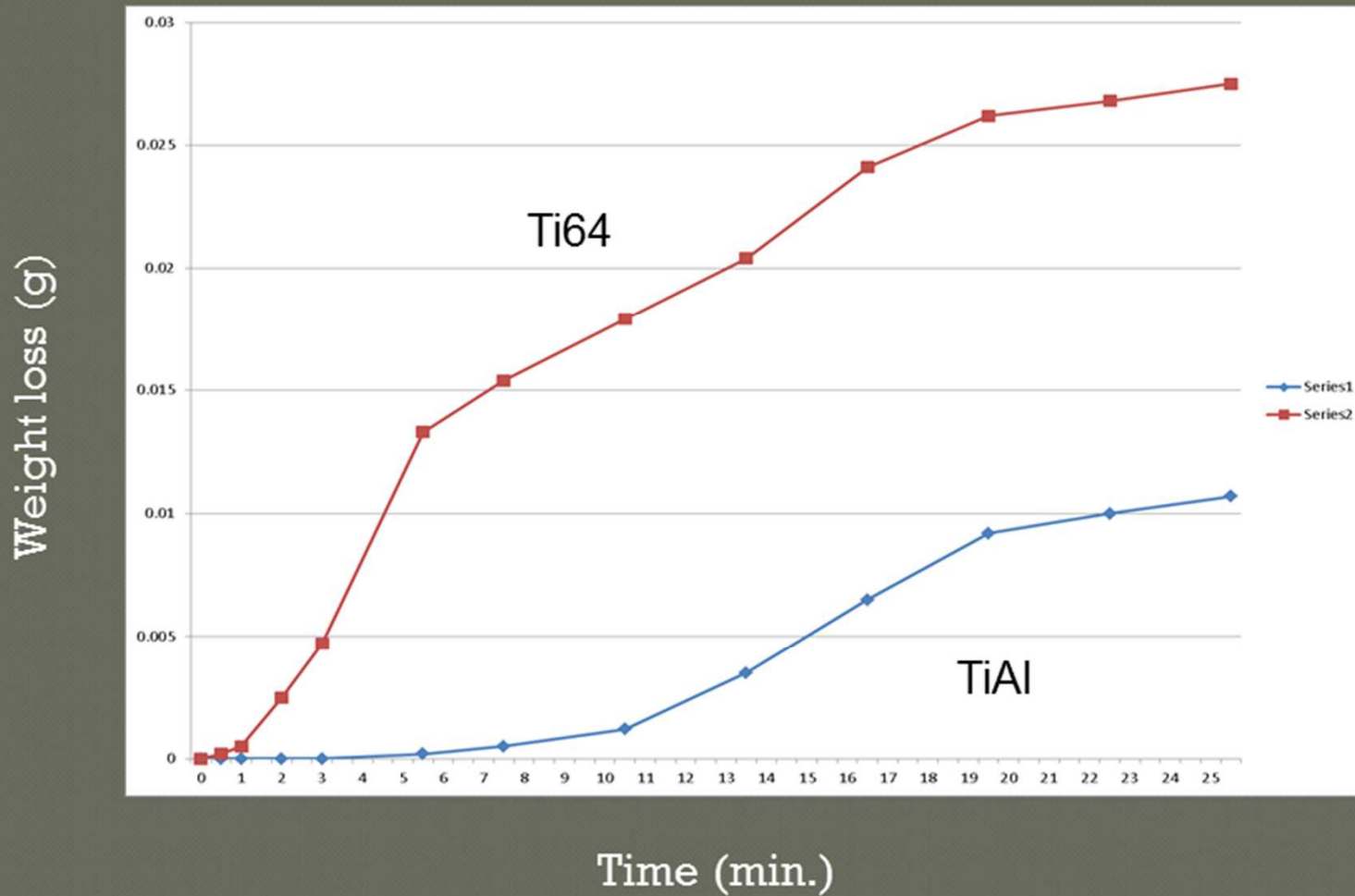
1 - TiAl



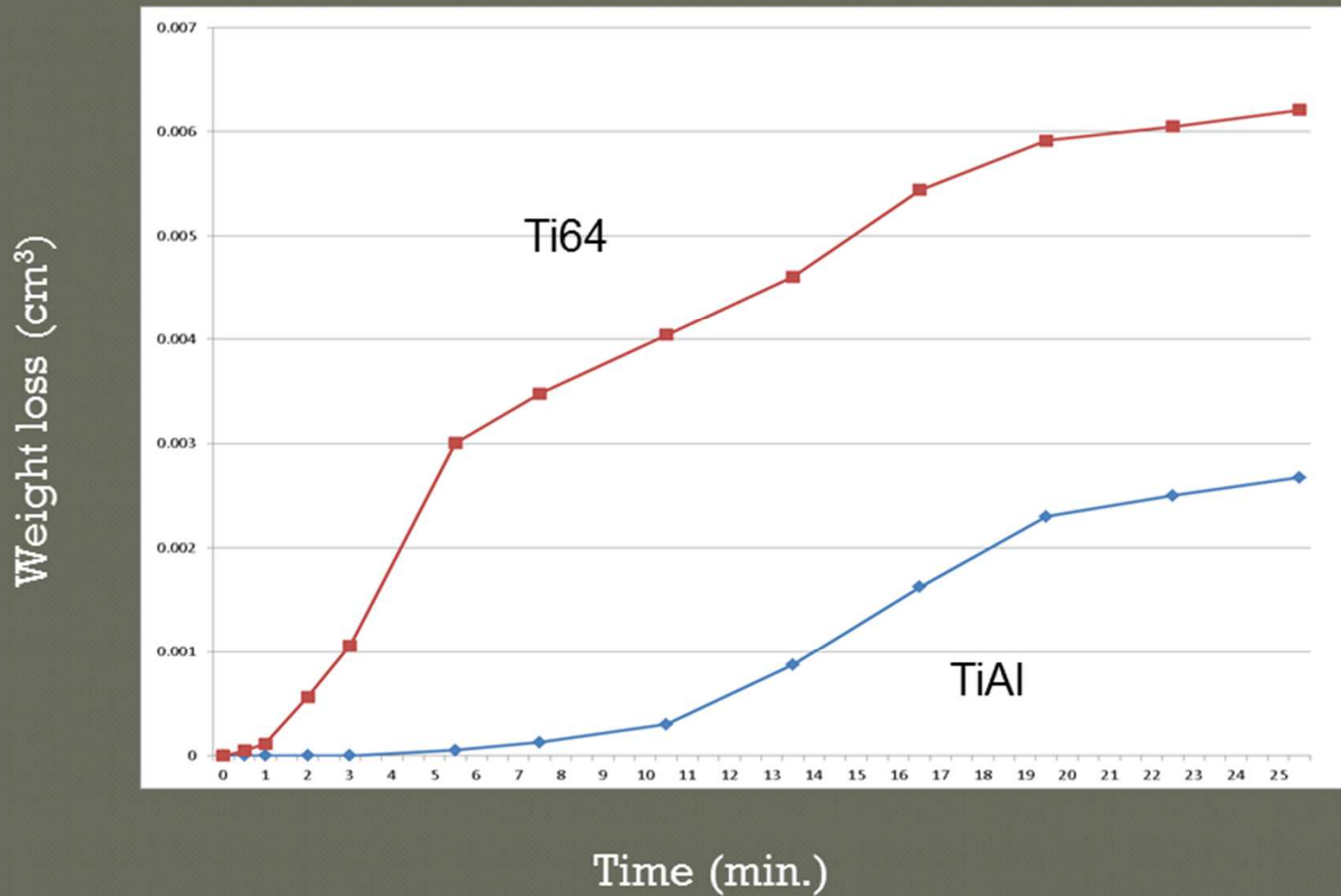
2 - Ti6Al4V

Min

Weight loss graph



Volume loss graph

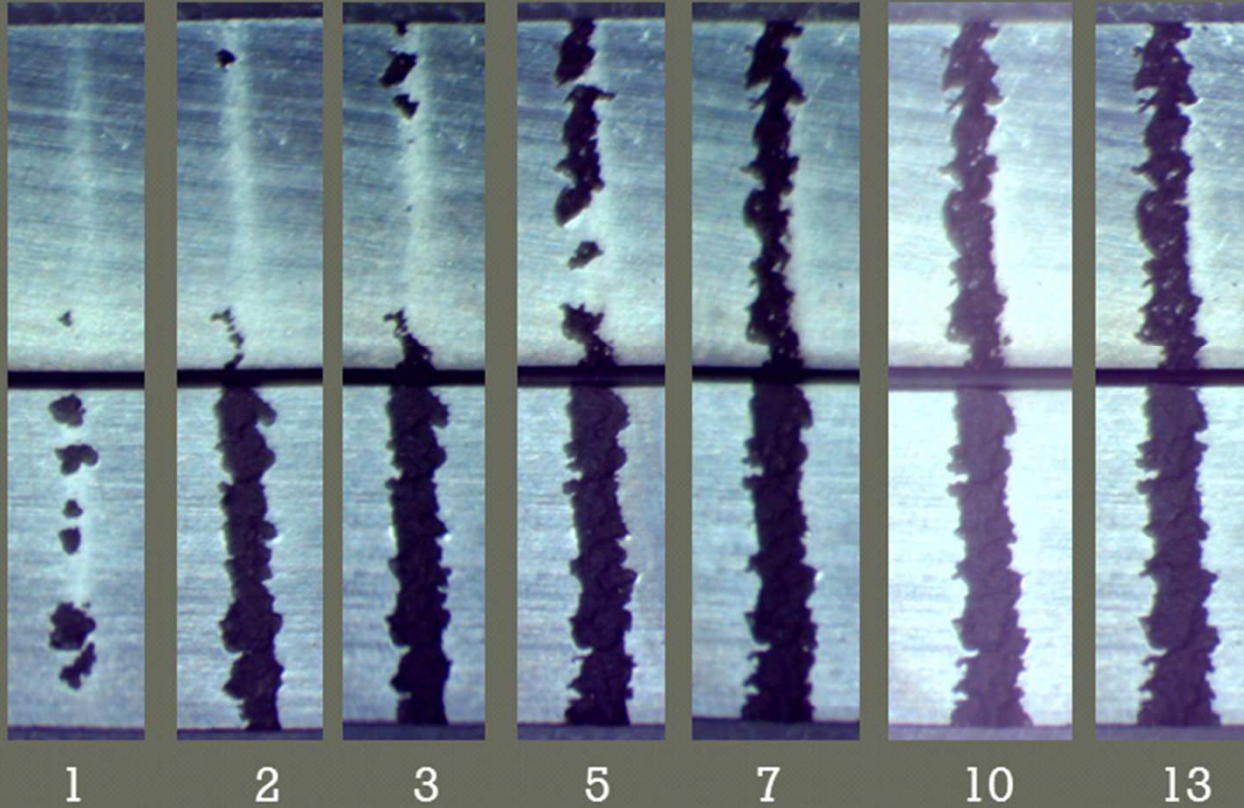


TiAl vs. Ti64

- Nozzle – 600micron
- Speed - 350 m/s
- Water flow – 0.105 l/min

Samples after erosion cycles

1 - TiAl

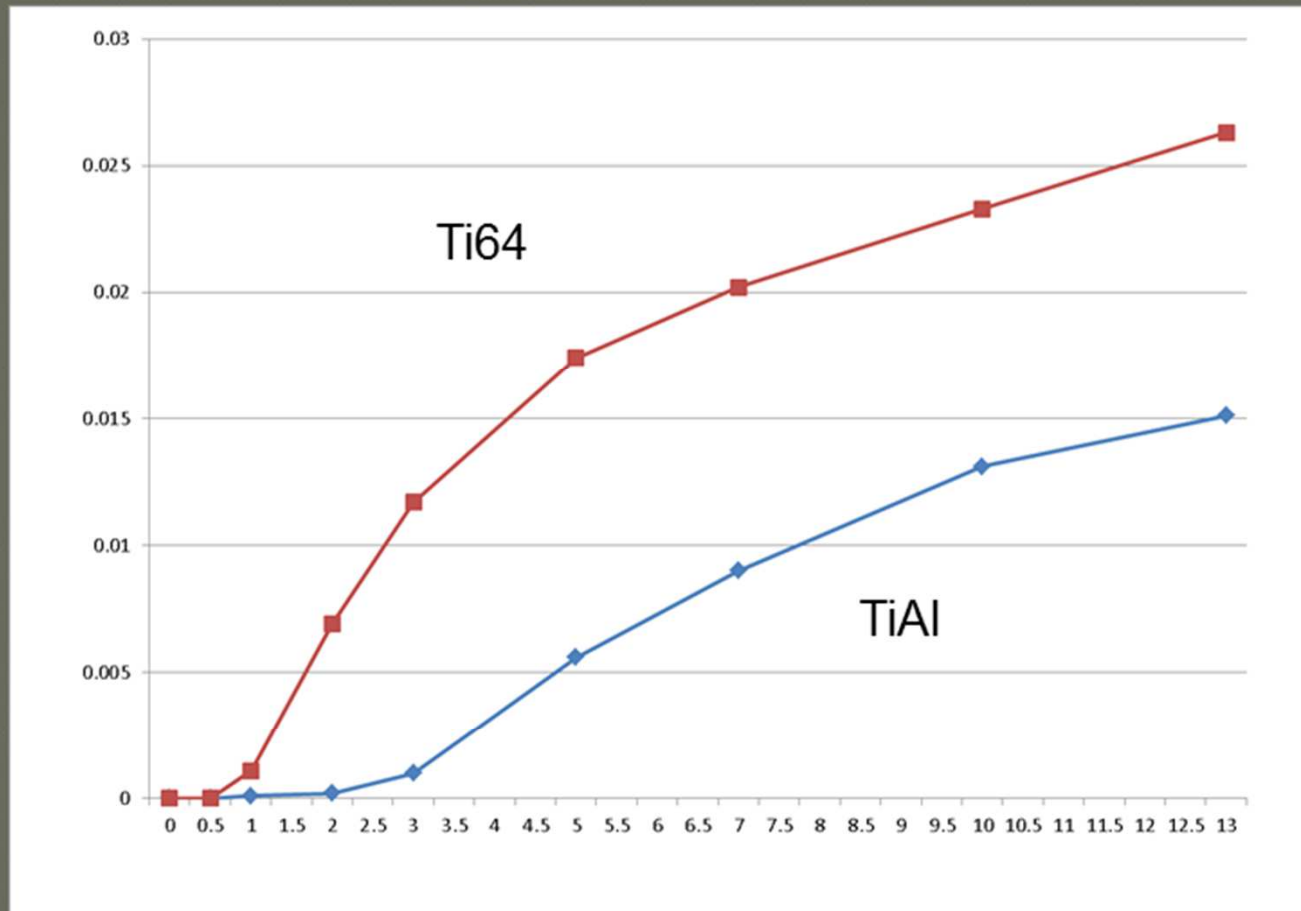


2 - Ti6Al4V

Min

Weight loss graph

Weight loss (g)



Time (min.)

Weight loss comparison

