

easy tourné



petit robert bistro

petit robert bistro
boston, ma

468

468

*Petit Robert
Bistro
Break • Lunch • Dinner*

product contract

customer need	product attribute(s)	engineering specifications
faster than cutting by hand	cutting time	<40% of average hand cutting time
easy to use	ease of cut	develop cutting path which requires <5 lbs of force
	automatic potato rotation	develop turning mechanism automatic which uses <5 lbs of force
fits in kitchen constraints	size	comparable to large pot, <18"x18"
	weight	easily moved, <15 lbs
cleanliness	easily sterilized	excess can be removed and internal cavities easily cleaned
FDA approved	uses FDA approved materials	uses stainless steel, delrin, etc...

in the kitchen

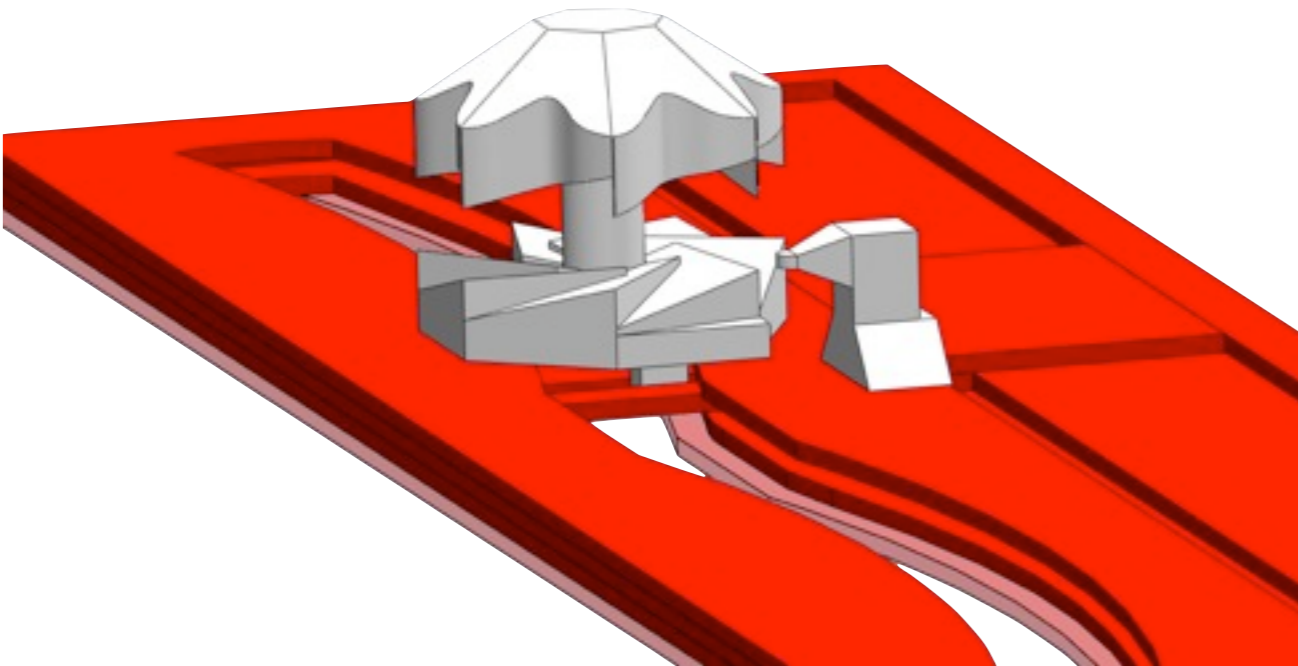


fits in kitchen constraints

size
weight

comparable to large pot, <18"x18"
easily moved, <15 lbs

in the kitchen



concept 1

automated industrial mechanism

large counter top presence

high cost and complexity

industrial outputs

concept 2

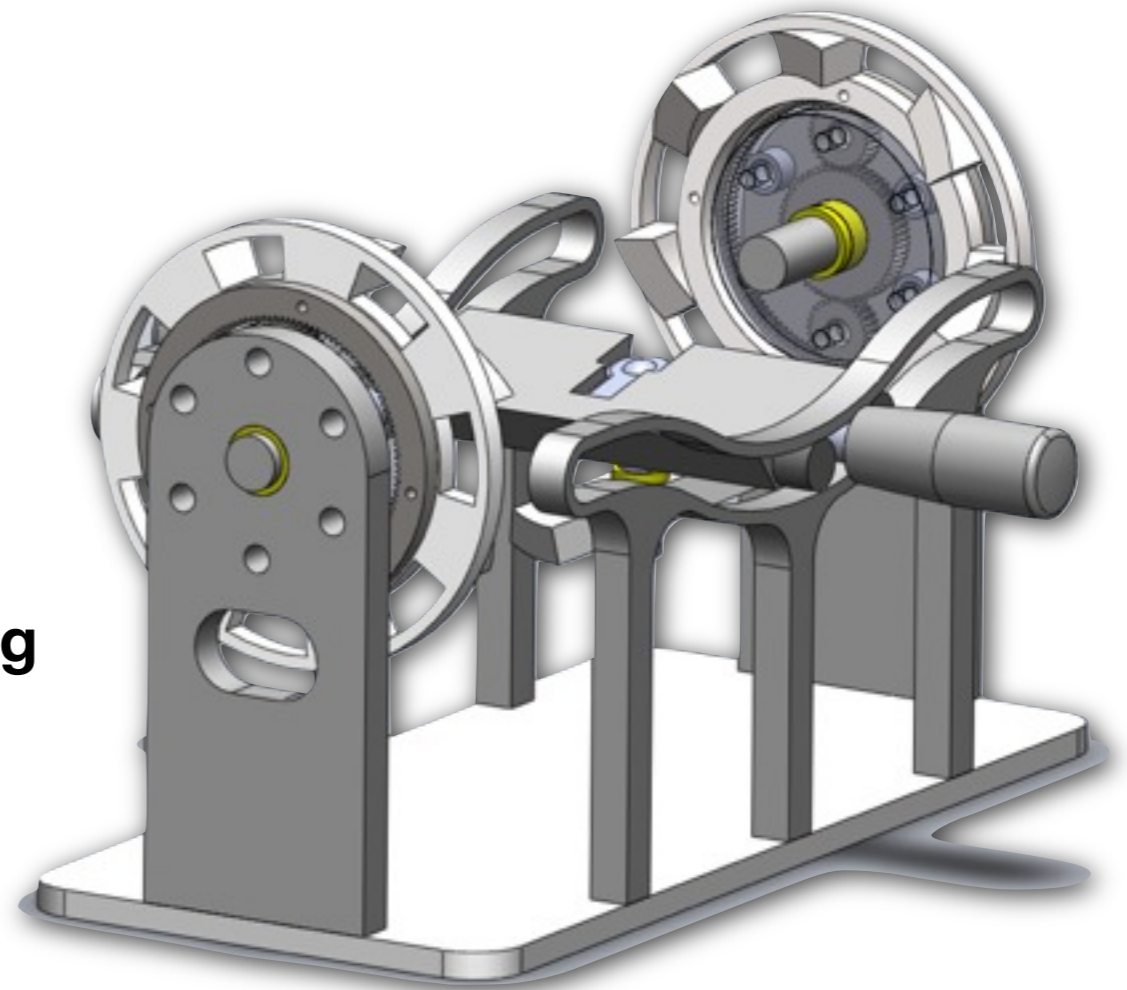
human powered mechanism

easily fits in any kitchen

considerably faster than hand cutting

lower cost

human powered



fits in kitchen constraints

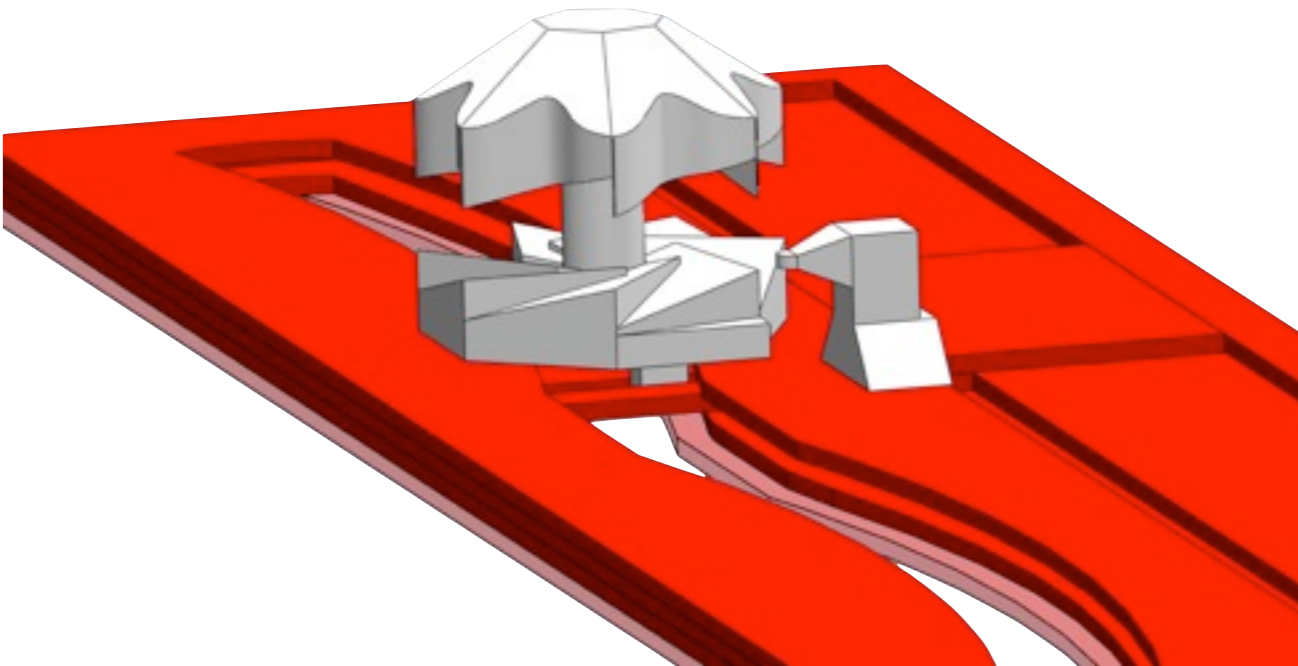
size

comparable to large pot, <18"x18"

weight

easily moved, <15 lbs

in the kitchen



concept 1

automated industrial mechanism

large counter top presence

high cost and complexity

industrial outputs

concept 2

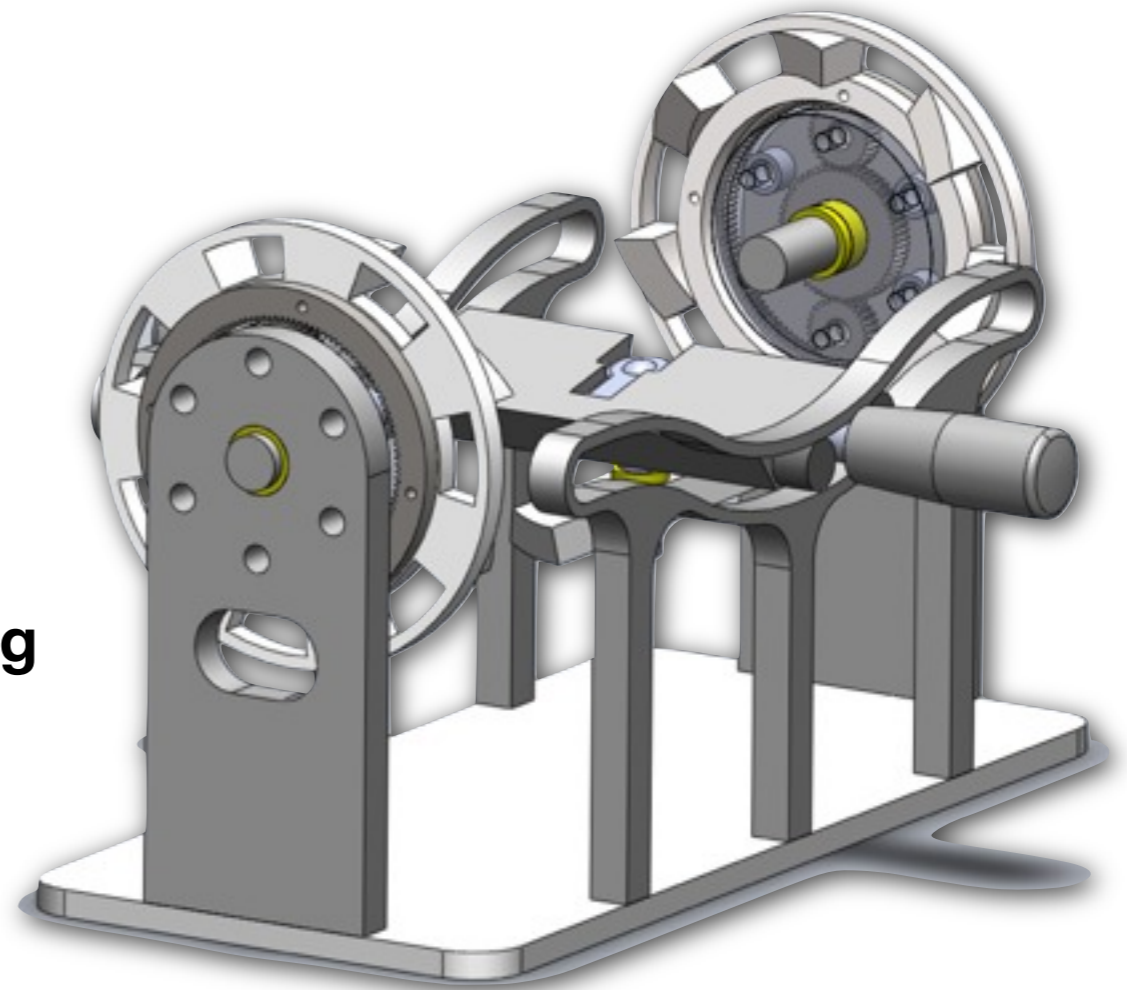
human powered mechanism

easily fits in any kitchen

considerably faster than hand cutting

lower cost

human powered



fits in kitchen constraints

size
weight

comparable to large pot, <18"x18"
easily moved, <15 lbs

ease of use

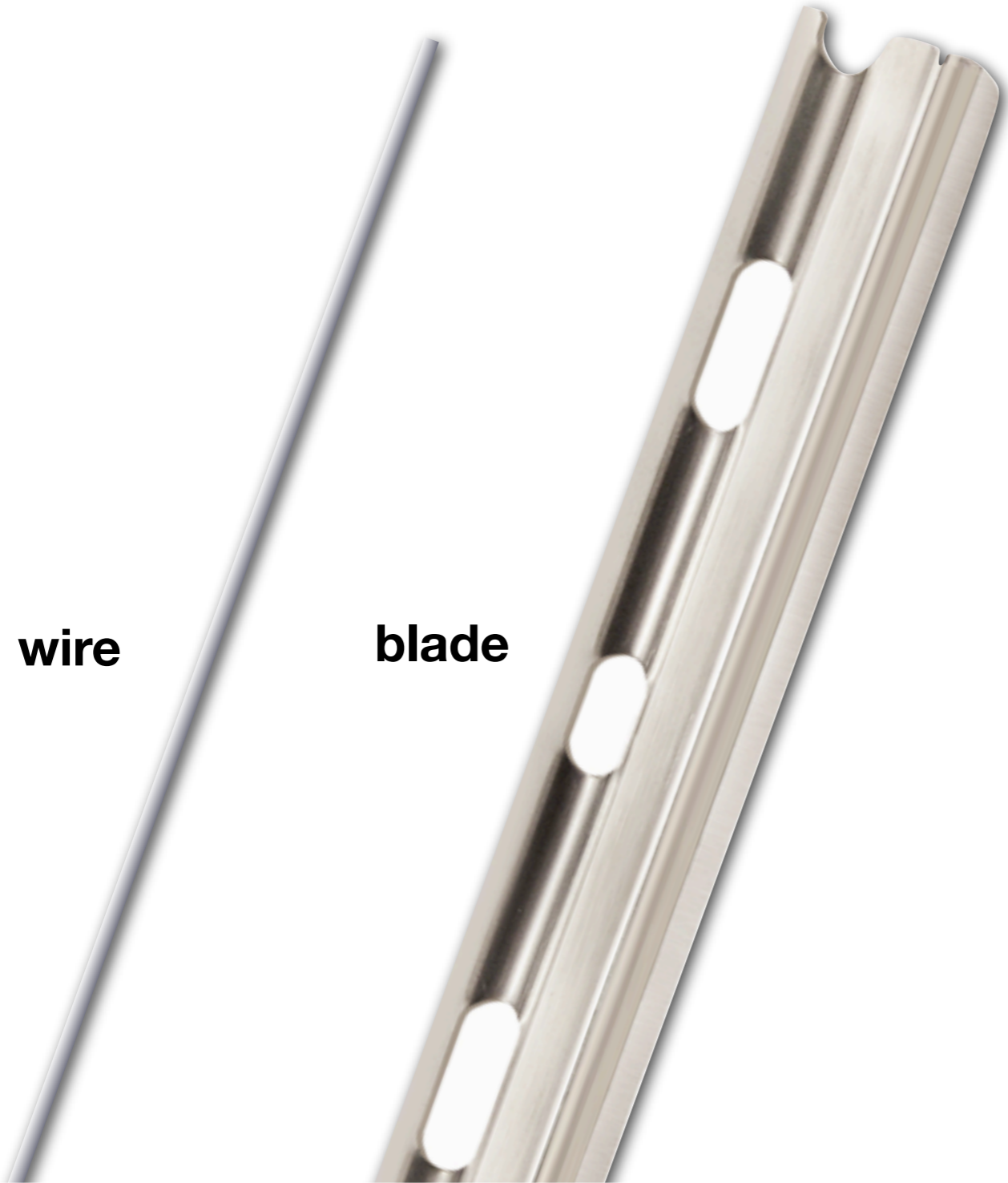


easy to use

ease of cut

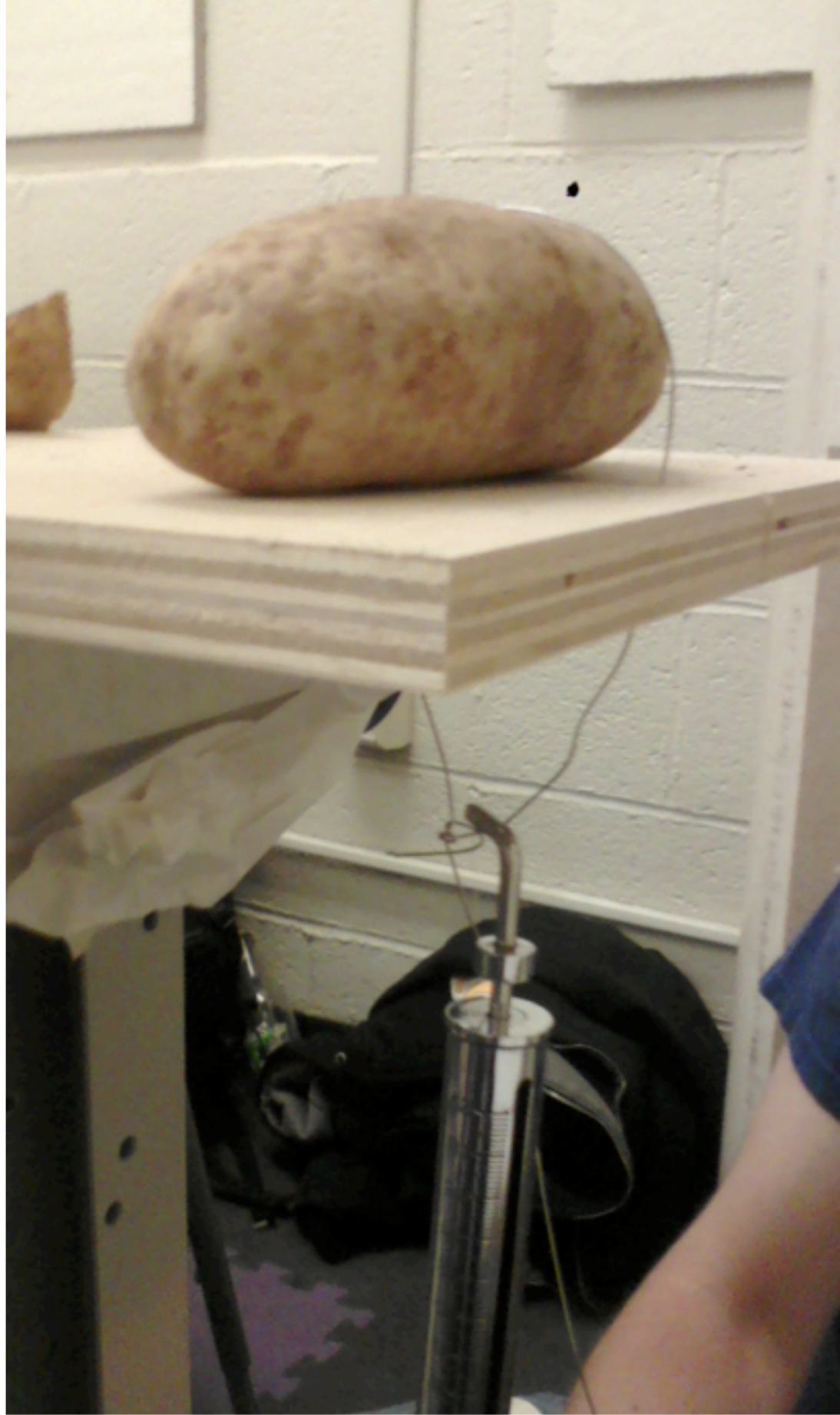
develop cutting path which requires <5 lbs of force

ease of use



wire

blade

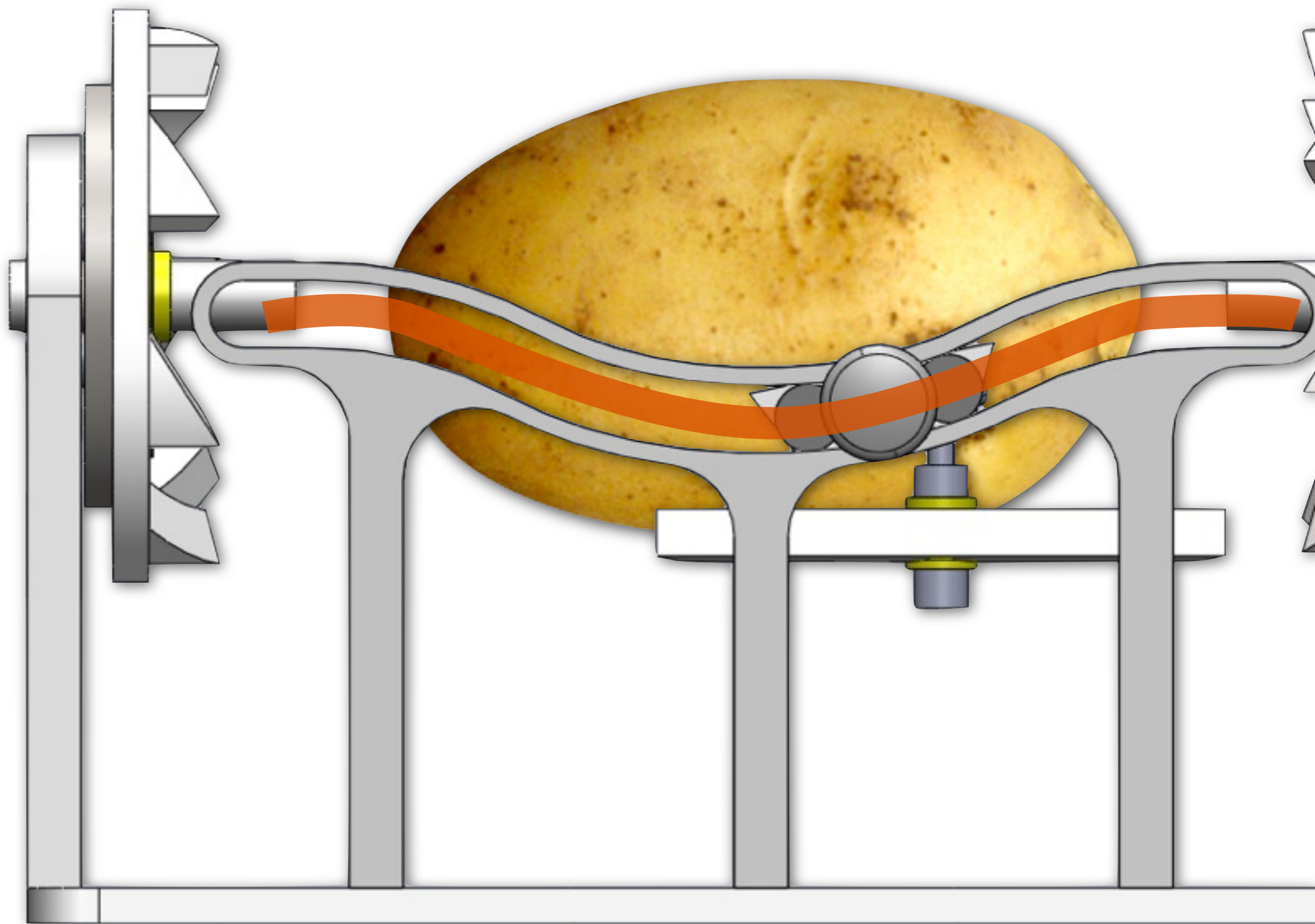


easy to use

ease of cut

develop cutting path which requires <5 lbs of force

ease of use

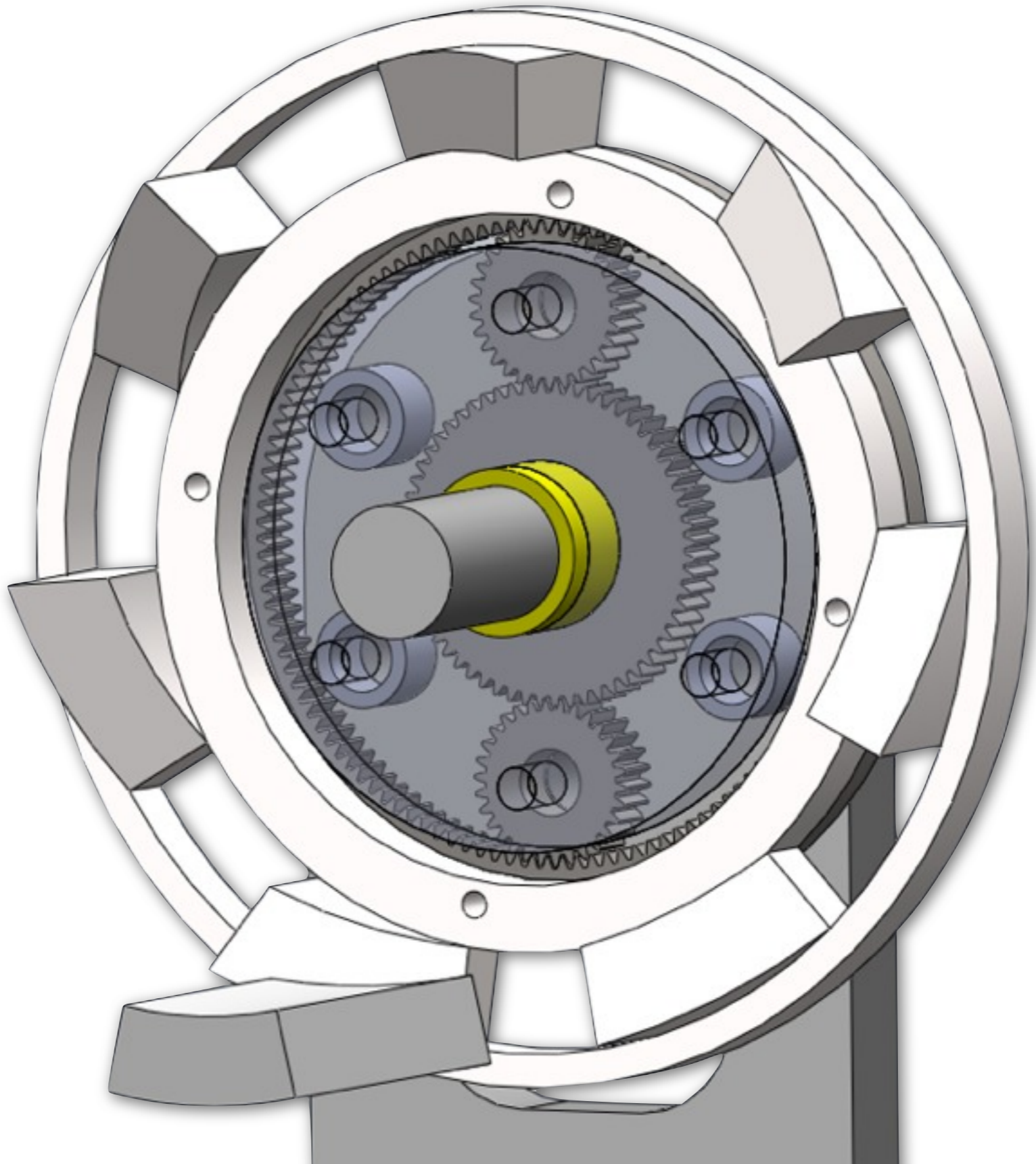


easy to use

ease of cut

develop cutting path which requires <5 lbs of force

ease of use



easy to use

auto potato rotation

develop turning mechanism automatic which uses <5 lbs of force

time



L'ESPALIER

AQUITAINE
BOSTON

50%

BISTRO du Midi



faster than cutting by hand	cutting time	<40% of average hand cutting time
-----------------------------	--------------	-----------------------------------

time



**~60 seconds/cut with prep
\$0.13-0.30 per tourne**



**~20 seconds per cut with prep
about 1/3 cost per tourne**

faster than cutting by hand

cutting time

<40% of average hand cutting time

moving forward

cleanliness

scrap potato removal
interior contours easily washable

FDA compliant

use food safe materials

potato constraint

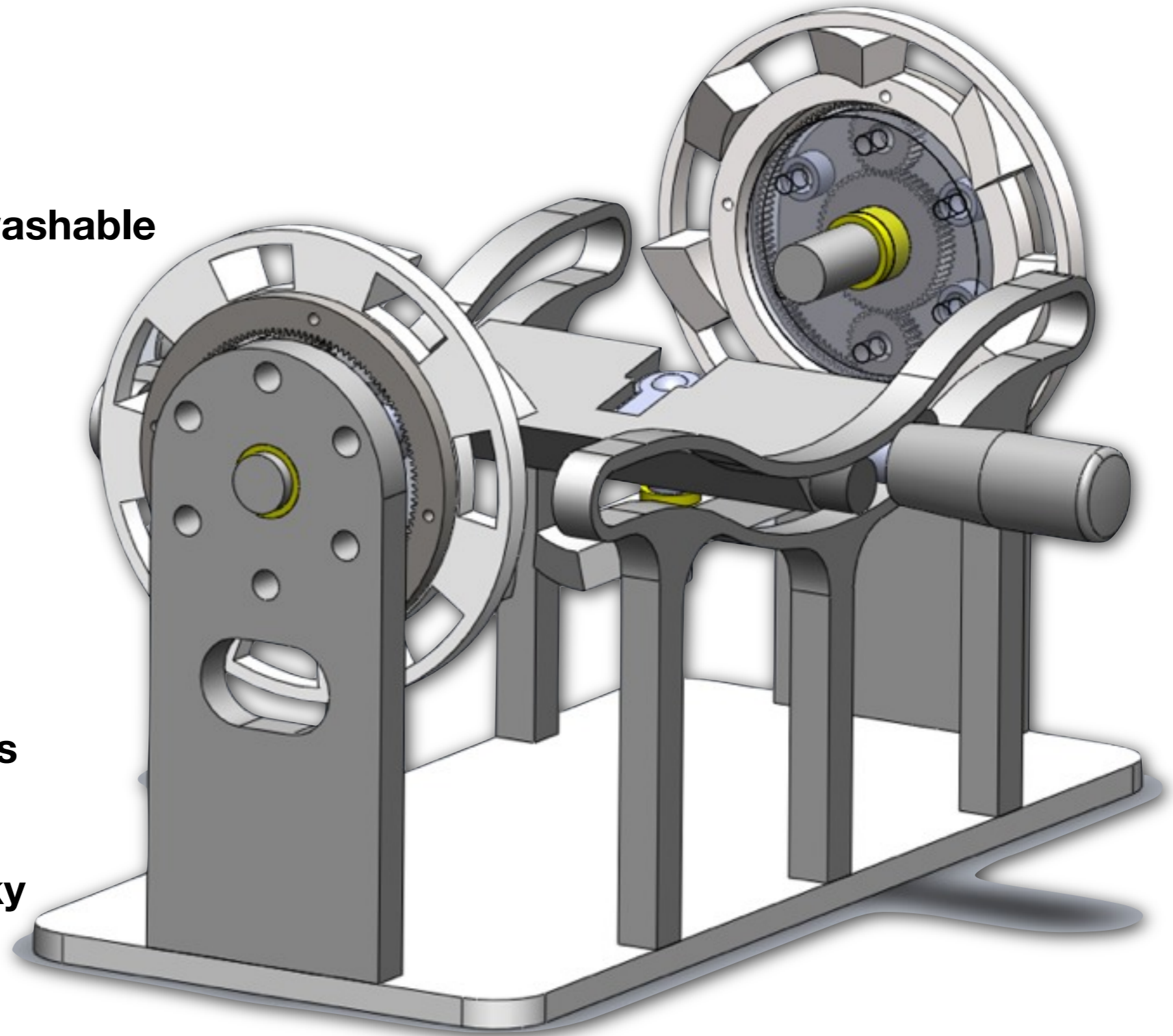
hold steady during cuts
easy removal/change

cost

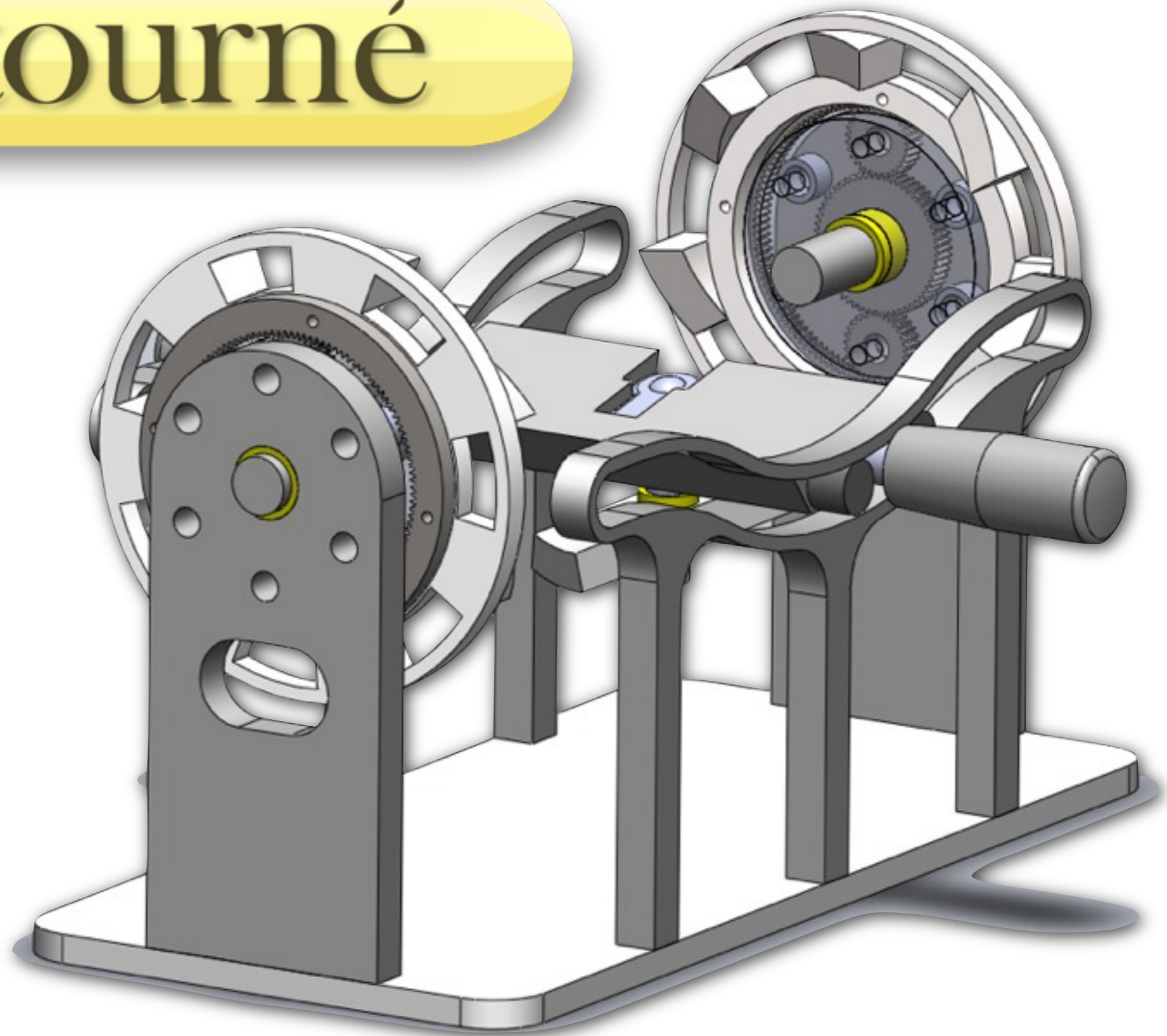
manufacturability
bringing it to home cooks

customer interaction

interview with Chef Jacky



easy tourné



yellow b