

*The Cutting Edge of Pelletizing*  
***ROTORS***



# HISTORY OF BAY PLASTICS MACHINERY

- 1961 JETRO Corp. introduced it's first Strand Pelletizer .
- 1974 Conair purchases the company and the division is known as **Conair JETRO**.
- 1997 Conair centralizes all remote manufacturing facilities to Franklin, PA.
- 1997 Bay Plastics Machinery was formed by the son of JETRO's founder and a core team of individuals.
- 1998 Joint Venture created between German pelletizer manufacture Scheer and Bay Plastics Machinery. The New Company is known as Scheer-Bay Company.
- 1999 Developed BT 25 Lab Pelletizer
- 2002 Developed Pultrusion Pelletizers
- 2004 Developed AX Series Pelletizers
- 2006 Developed SB Series Pelletizers
- 2008 Scheer declared insolvent in Germany, ending 10 year relationship
- 2009 Re-named Bay Plastics Machinery Corporation
- 2011 Celebrating 50 year of Pelletizer Manufacturing in Bay City, MI
- 2012 Developed XVAK Vacuum Air Knife
- 2014 Developed Strand Puller for "LFT" Pultrusion Industry
- 2015 Developed BP Series Pelletizers
- 2016 Developed Pellet Evacuation System (patent pending)
- 2017 Developed AXM Series Micro-Pelletizers (patent pending)
- 2017 Developed EVAK Series Low Noise Vacuum Air Knives

Plant 1 – Lab & Machining Center



26,000 Sq. Ft of Production Space  
In Bay City Michigan

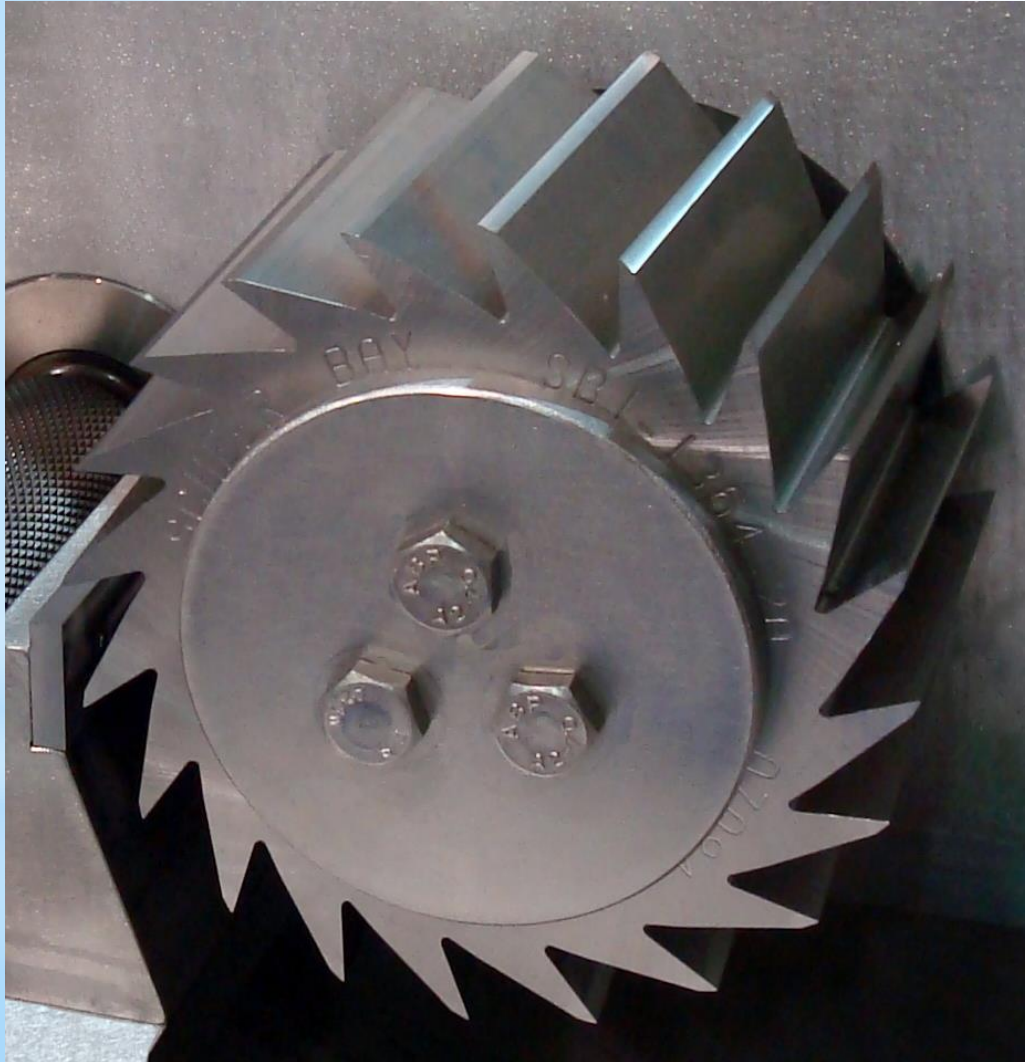
BPM Plant 2

Office & Manufacturing Facility



# STELLITE ROTORS

## BPM'S STANDARD ROTOR

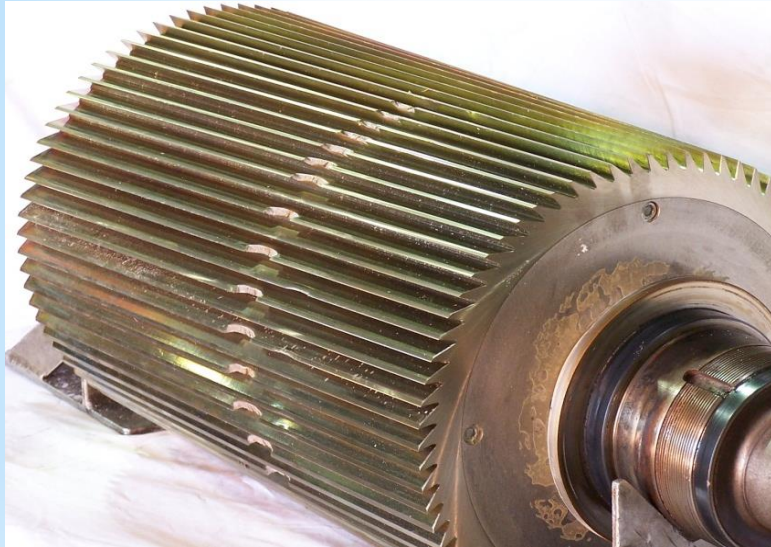


- \* Base material 303 stainless steel with stellite #12 welded on the tips of the teeth. Stellite rotors are used on any unfilled material, very repairable including putting whole teeth back on.

# REPAIRABLE STELLITE ROTORS

## BPM'S Stellite Rotor Design

Damaged Rotor



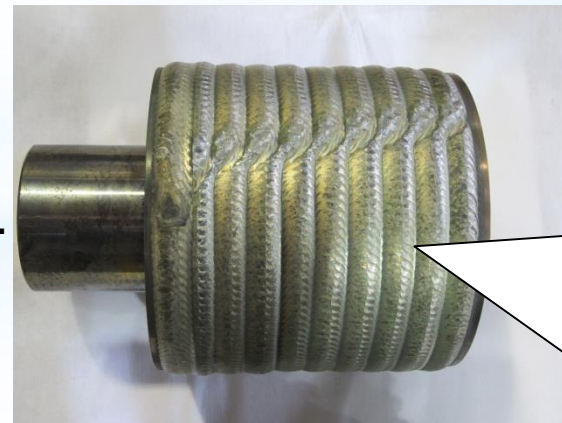
Repaired Rotor



**Proprietary Method of Welding Stellite that allows the rotors to be easily repaired if damaged.**

**Competitive Stellite rotors cannot be repaired without cracking & failure.**

4



Wrap welded stellite Rotors.

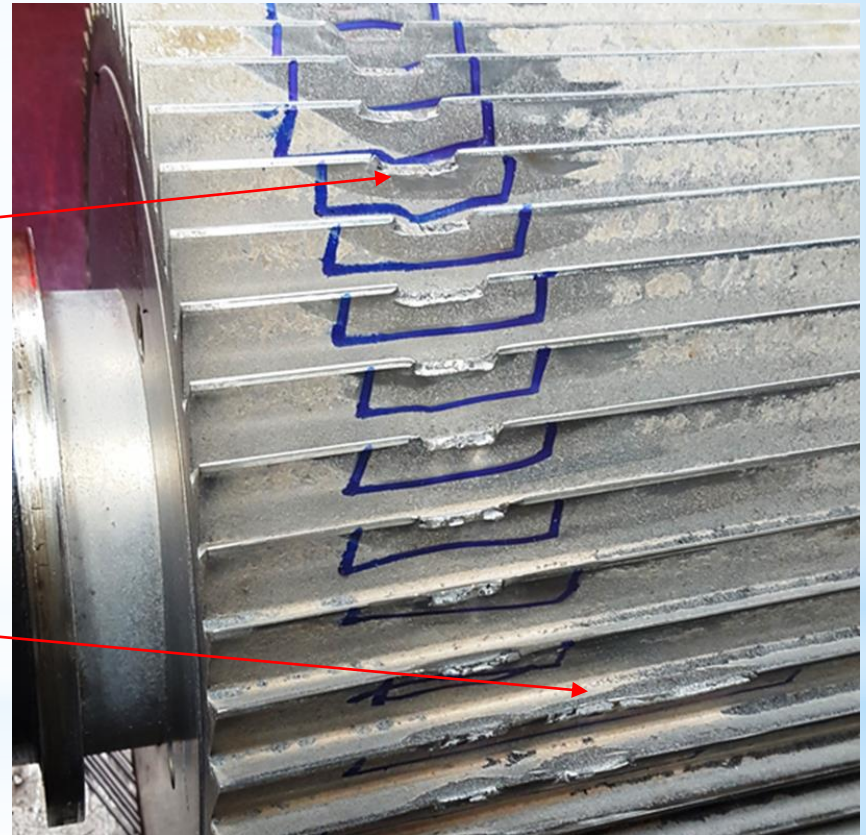
- teeth are cut out of the stellite
- has a layer effect between stellite & stainless steel
- repairs to damaged rotors will crack and chip off

# Damaged BPM Stellite Rotor




Damage to  
Teeth Extends  
past Stellite and  
into the  
Stainless Steel

Tooth Broken To  
Base Of Rotor




multiple Teeth Broken

# Repair of Damaged BPM Stellite Rotor



The BPM Stellite Rotor is repaired by re-welding the damaged section of the rotor using the same method as the stellite was originally applied.



Because competitive Stellite rotors have the Stellite 12 applied by wrap welding, they cannot be repaired without cracking & failure.

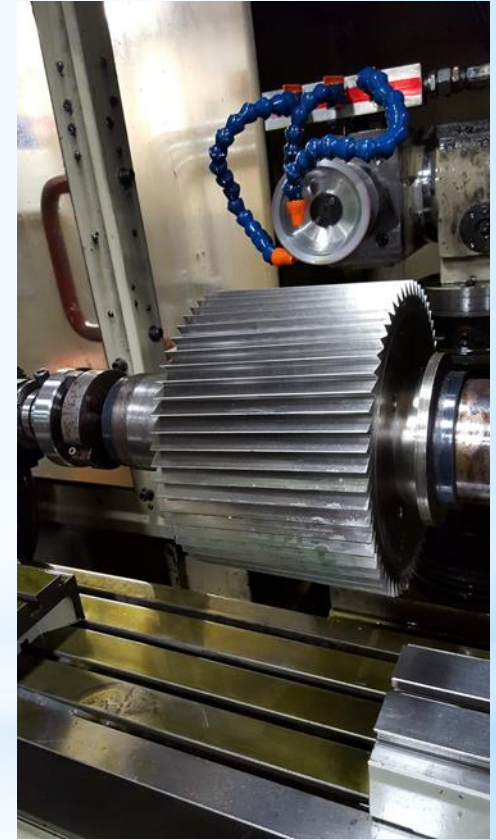
# Machining and sharpening of Rotor



Rotor is OD Ground

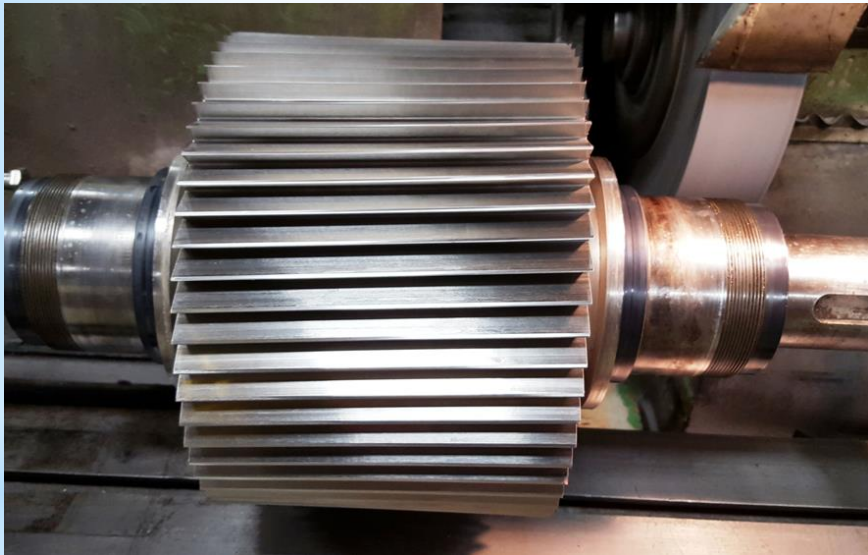


CNC Milling of the Teeth



CNC Grinder  
Sharpening

# Repaired BPM Stellite Rotor





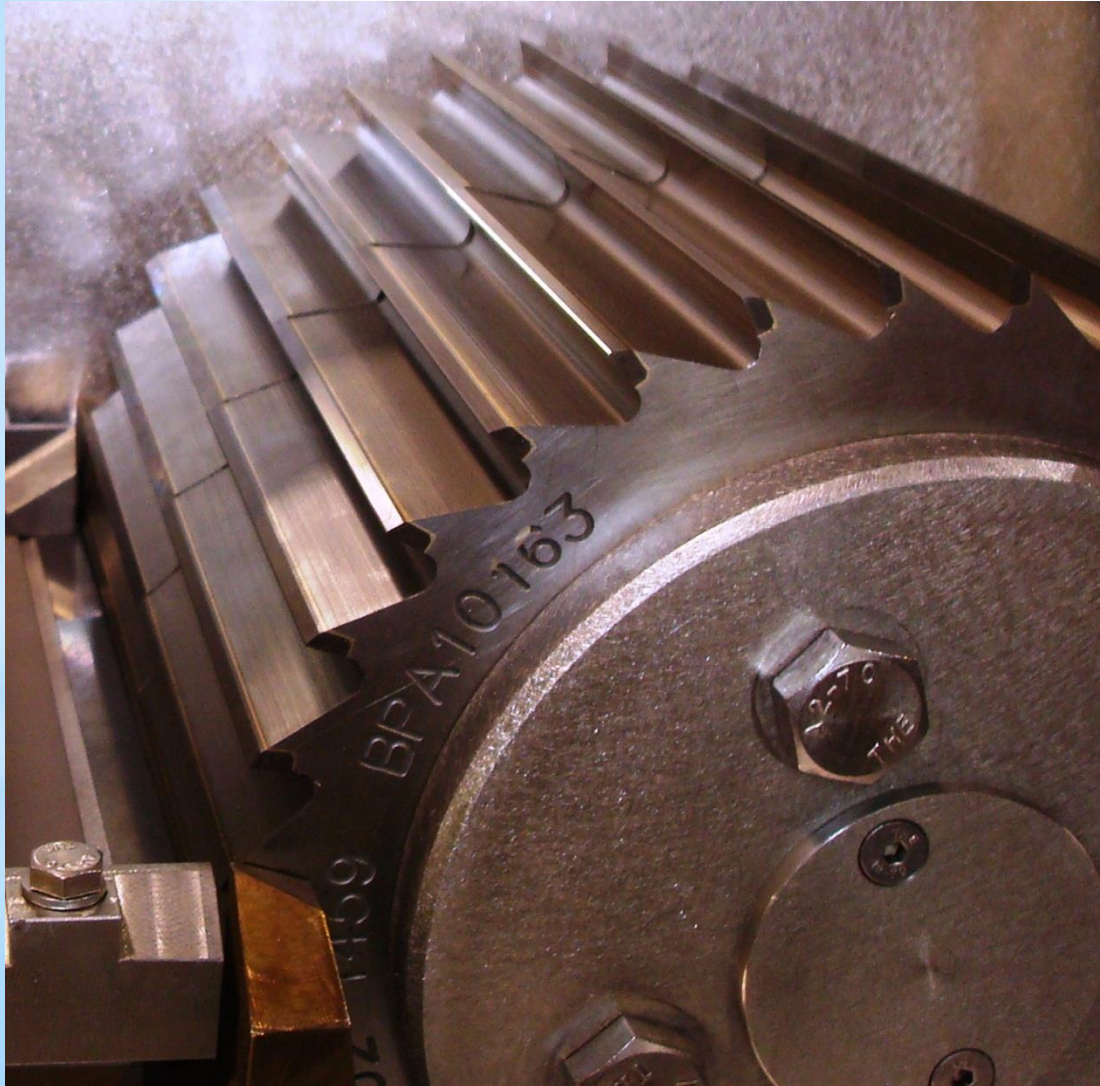
# PM - TOOL STEEL ROTOR



Classified between stellite and carbide. These rotors are made out of Z420PM tool steel, they are designed to cut some lightly filled and unfilled material, this rotor is not repairable.

\* Approximately a 15-20% premium from our standard Stellite rotors.

# CARBIDE TIPPED ROTOR



Cemented carbide blades can be changed for repair, but they have to be re-soldered and ground in. These rotors are mainly used in smaller machines 100mm (4") and down. If requested in a larger pelletizer, the rotor will be manufactured in 100mm sections that are capped together on a rotor shaft.

- They can have up to 32 teeth.
- Cost approximately 25% less than a Wedge Lock rotor.

# CARBIDE BOLT-ON ROTOR

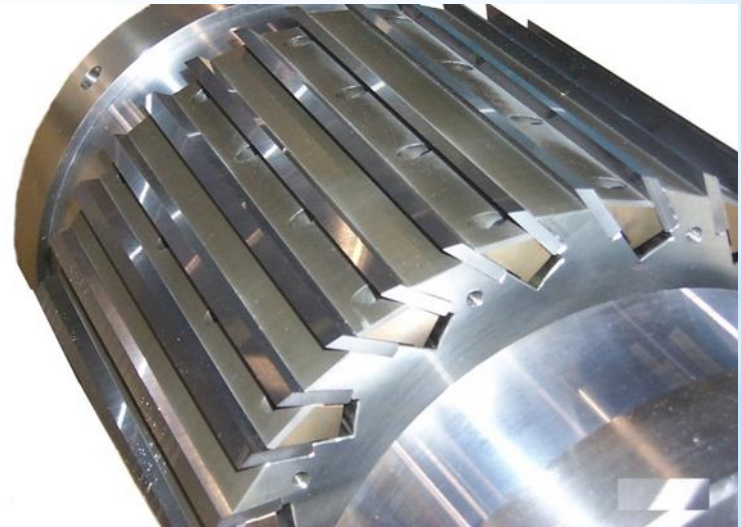


Bolt on blade rotors also have changeable blades for ease of repair. Bolt-on rotors can be configured to have between 2 to 16 teeth. These are BPM'S standard rotors for the Pultrusion Pelletizers.

- Cost approximately 25% less than a Wedge Lock rotor.

# CARBIDE Wedge Lock Rotors

- \* Base material 17-4 PH stainless steel that is carbide coated. This rotor is used on all filled material. All wedge lock rotors have carbide blades of our own specifications that outlast the competition and are changeable.
- \* Approximately a 60% premium from our standard Stellite rotors.



# Basic Information Required for Quotation

- 1) Number of Strands
- 2) Materials to be Processed
- 3) Additives or Fillers
  - a) Percentage
- 4) Specific Gravity of Material
- 5) Maximum Rate & Minimum Rate
- 6) Design Rate if Different from Maximum
- 7) Diameter of Strands
- 8) Length of Pellet
- 9) Strand Die Specification - What is the distance from the first strand to the last strand
- 10) Any Other Special Requests (Feed Heights, Discharge Chute Configuration etc..)

For Additional Information  
Please contact:



3494 North Euclid Ave.  
Bay City, MI 48706  
989-671-9630  
<http://bayplasticsmachinery.com>

