

## INDUSTRIAL APPLICATION: SCRAP SHEARING MACHINERY

### Customer Challenge

*Equipment Damage,  
Downtime & Safety*

- Scrap shears are a major investment; therefore, frequent downtime and costly servicing create an operational nightmare.
- Linear and radial plain bearings do protect equipment to keep them running. If the right bearing is not installed, this could create an even bigger issue, resulting in a short service life, messy lubrication and contamination.

### Our Solution

*WearComp® Carbon Fiber  
Composite Bearings*

- Changing cycle of 3 to 4 years
- Grease-free guiding of the knife
- Less wear & longer service life of material
- No contamination of end product



WEARCOMP® LINERS

**Saint-Gobain HyComp, LLC**

Patrick.McSweeney@saint-gobain.com

www.hycompinc.com

BST-6002-WCACs-0819

© 2019 Saint-Gobain HyComp, LLC

**Critical parts  
making THE difference**



PRECISE FIT • LIFETIME CONFIDENCE

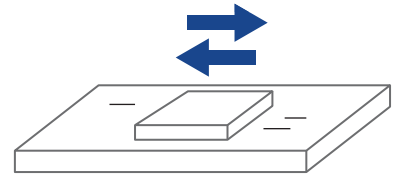
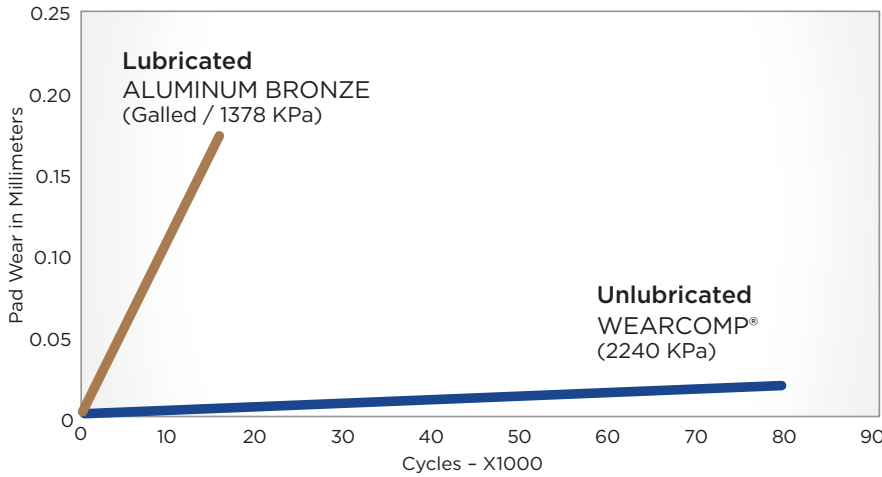
**SAINT-GOBAIN**

# WearComp® Material: Wear and Mechanical Test Data



Testing results prove our material outperforms lubricated bronze and metallic plain bearing materials.

## RECIPROCATING WEAR TESTING

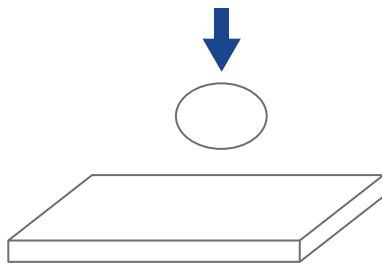


Reciprocating wear tester (50mm stroke, load 1378-2240 KPa)

### DYNAMIC COEFFICIENT OF FRICTION

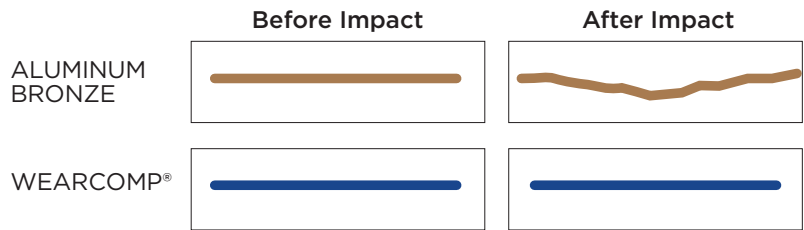
Material	Value
ALUMINUM BRONZE	.44
WEARCOMP®	.15 - .25

## Impact Data



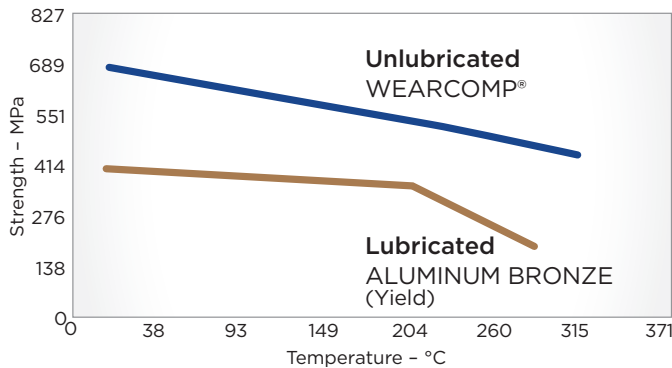
Falling ball impact test (1.36 Kgs ball dropped from 2.28 Mtrs)

## SURFACE PROFILE

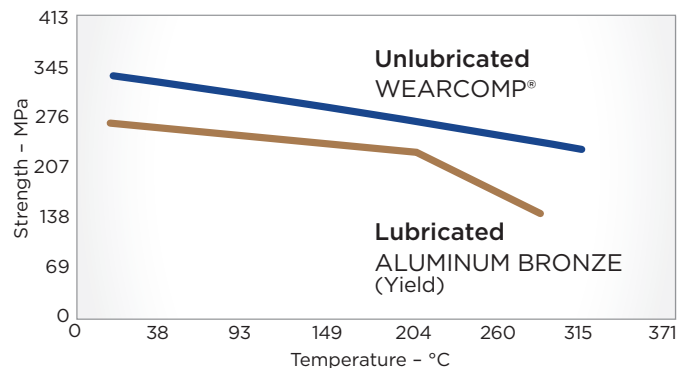


Material	Impact Energy (Mtrs Kgs)	Rebound (Mtrs)
ALUMINUM BRONZE	3.10	0.45
WEARCOMP®	3.10	1.37

## COMPRESSIVE STRENGTH



## TENSILE STRENGTH COMPARISON



### CREEP UNDER LOAD

WearComp®	Pressure (MPa)	Disformation %
23°C	103.42	.38
204°C	103.42	1.16



Patrick.McSweeney@saint-gobain.com  
www.hycompinc.com