



## CHAIN AND SPROCKET TECHNICAL COMPARISON



## TECHINICAL COMPARISON - HOBGING v/s TAAL FINE BLANKING

### Surface in Fine Blanking

Smooth surface finish



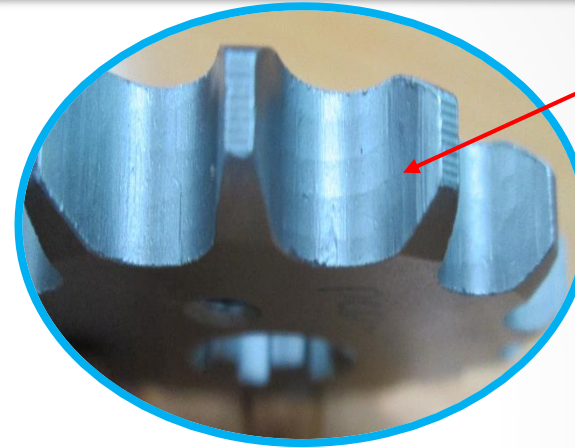
**Increase in Fuel Efficiency**

**Noiseless operation due to Consistency pitch, No taper, Good Surface Finish, Good Face Run Out & OD Run out in the part & No jumping of Chain because of Very Good Accuracy.**

**Provide More Life for Chain & Sprocket due to work hardened in teeth areas in fine blanking process.**

### Surface in Hobbing

Rugged surface finish



**Decrease the Fuel Efficiency**

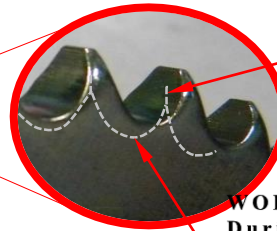
**Noisy operation due to inconsistency pitch & taper, Poor Surface Finish, & Jumping of chain.**

**Provide less Life for Chain & Sprocket due to Sharpe edges**

## TECHINICAL COMPARISON - HOBGING v/s TAAL FINE BLANKING



**TEETH SURFACE FINISH**

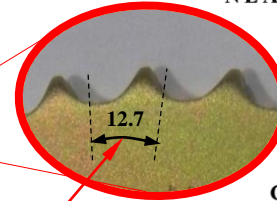


ONE SIDE

SMOOTH DIE  
ROLL RADIUS

WORK HARDENED 0.2-0.3 mm  
During F/B Stage

NEAR TEETH PROFILE AREA



CONSISTANCE IN  
PITCH - 0.003.004 mm

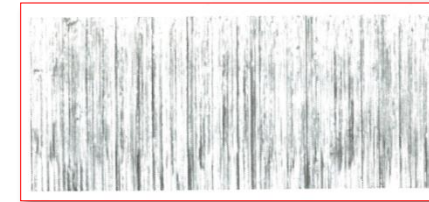
/ NO TAPER ON TEETH / GOOD SURFACE  
FINISH IN ALL TEETH/GOOD FACE  
RUNOUT AND OD RUN OUT IN THE PART

DIE ROLL RADIUS IN F/B PROCESS

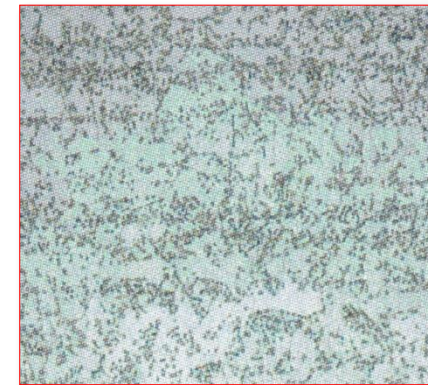
NO TEETH CHAMFER REQUIRED  
ONE SIDE

BURR SIDE TEETH CHAMFER  
DONE IN SECONDARY PROCESS

**CLEAN CUT  
SURFACE**

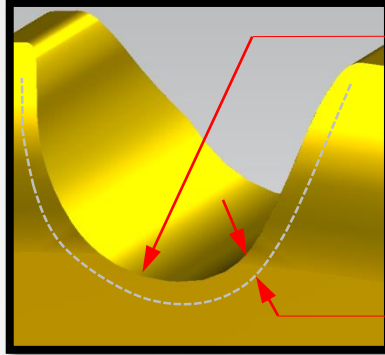


**Micro Structure  
F/B MATERIAL**



## TECHINICAL COMPARISON - HOBGING v/s TAAL FINE BLANKING

### FINE BLANKING SPROCKET



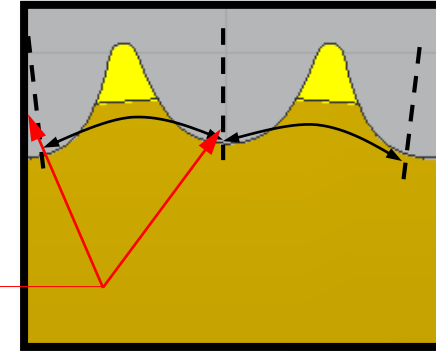
#### Bottom Root Radius

*Enhanced surface finish & surface hardness*  
The work hardening effect entire teeth profile induced by fine blanking process. Enhances the wear characteristics of fine blanked sprockets.

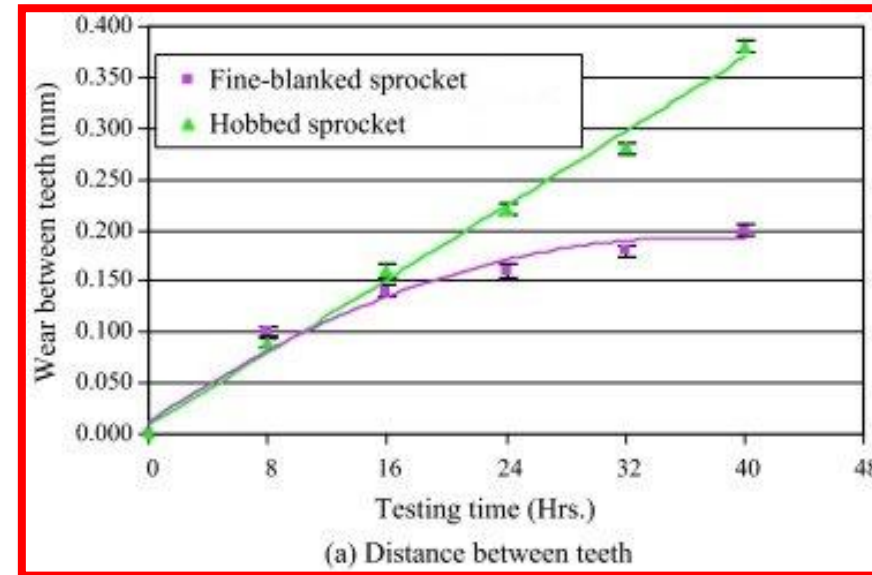
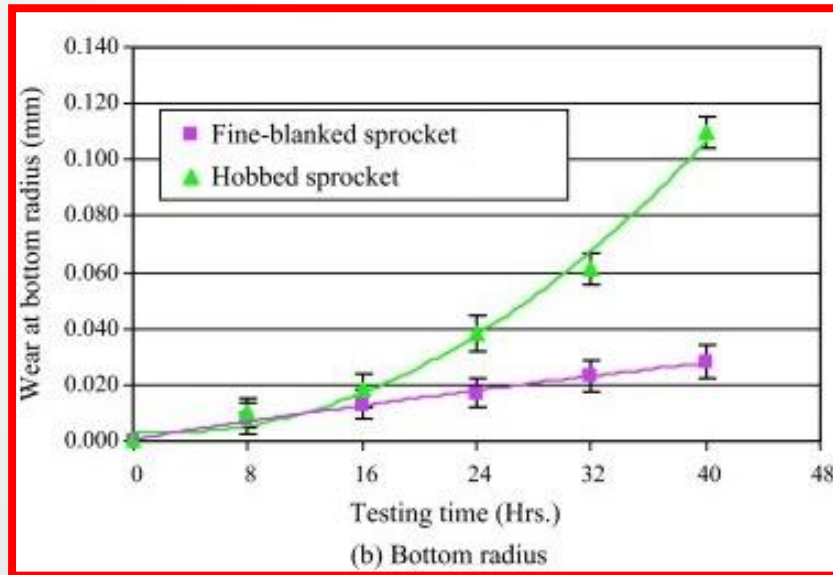
#### Work Hardened Depth

0.2 ~ 0.3 from cut band

### MACHINED SPROCKET



#### Distance B/W Teeth





## Chain Benchmarking

**TAAL**

**4 Point-Rivet**



**High grade alloy steel & Four point riveting provide higher shock load capacities**

**OTHER COMPETITORS**

**2 Point Rivet**



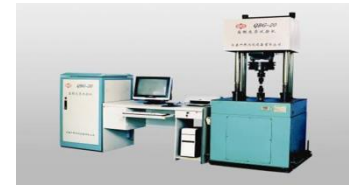
**Two point can withstand lesser shock Load capacities**

## Chain Elongation Curve

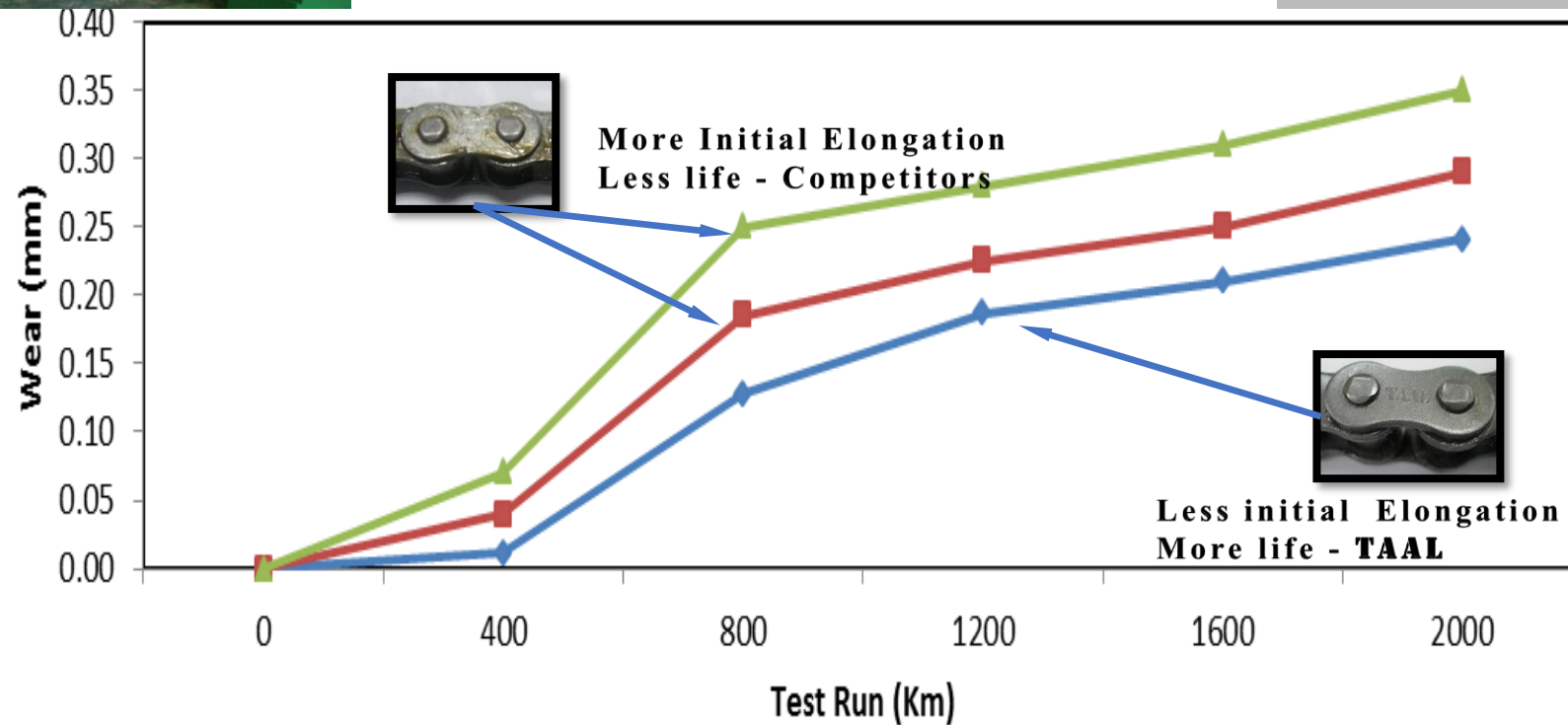
Weariness tester



Fatigue tester



### The Curves of Elongation of chain



## CSR MESSAGE TO MECHANICS & RETAILERS ON TAAL ULTRAMILES CHAIN & SPROCKET KIT:

TAAL ULTRAMILES SPROCKETS CHAIN KIT IS BEING MANUFACTURED/ SUPPLIED BY TAAL.

AN IFB GROUP COMPANY FROM INDIA.

SUPPLIER TO 2 WHEELER & 4WHEELER OEM'S /OTHERS

### **TAAL CHAINS**

4 POINT RIVETTED CHAIN FOR BETTER STRENGTH

WITHSTAND SHOCK LOAD

SMOOTH RUNNING

LESS ELONGATION-(SLACKNESS HENCE LESS NOISE)  
MORE LIFE



4-POINT RIVET

### **TAAL FINE BLANKED SPROCKETS [FRONT & REAR]**

ONE SHOT OPERATION

HIGH TEETH ACCURACY FOR BETTER GRIP WITH CHAIN

SPROCKETS TEETH PROFILE/ AREA HARDENED

SMOOTH TEETH FINISH

LESS NOISE

MORE MILEAGE (Increase in mileage due to Smooth engagement and less power loss, also continuous maintenance required)

OVERALL HIGH PERFORMANCE FOR THE END USER

